

The 6th International Nursing Research Conference of World Academy of Nursing Science

February 28-29, 2020 JAPAN



“ Knowledge Development in Nursing for
Better Health and Life of the People in the World :
Sharing the Local Knowledge for Universal Knowledge ”

Venue

Osaka International Convention Center

Chairperson

Noriko Katada, RN, DNSc

(Kansai Medical University, Dean, Faculty of Nursing and Graduate School of Nursing)

Host Organization

Japan Academy of Nursing Science

Abstracts

PS



Development of Nursing Scholarship in Japan

Noriko Katada

Faculty of Nursing, Kansai Medical University, Japan

This presentation gives you an account of nursing scholarship in Japan, after the second world war. It is classified on the basis of four distinct objectives: First, establishment of college/university level nursing education; second, development of academic organizations; third, attainment of Academic Status within the national science community; and fourth, expansion of worldwide academia. These overlapping objectives were implemented by farsighted, and committed leaders of the nursing community.

The first objective: nursing programs offered at the formal education systems are increased to 283 Baccalaureate programs, 183 Master programs, and 101 Doctorate programs. Japan Association of Nursing Programs in Universities (JANPU) is representing the voice of those programs. In 2018, the Japan Accreditation Board for Nursing Education (JABNE) was instituted to monitor the quality of nursing education. On the second account, the number of academic organizations rose to 48, and those organizations are members of the Japan Association of Nursing Academies(JANA). The third objective; around the same time of developing JANPU & JANA, the Nursing Science was recognized as a scientific discipline by the Japan Scientific Council (JSC) and having Nurse members in the JSC. The fourth objectives: we are now gathering for the 6th International Nursing Research Conference of World Academy of Nursing Science.

Each organization of the nursing scholarship independently develops their functionality. The four objectives of nursing scholarship are closely intertwined, complement each other, and combine to achieve sustainable academic growth in the nursing arena.

However, we anticipate rapid demographic changes in the future. There is already considerable diversity in the life style, health, habits, culture, religion, and nationality of people. Population projections predict a rise in aging population, and a sharp fall in overall population by 2040 or earlier. Hence, the demands on nursing education, practice, and research will change and should be accordingly addressed. Nursing is a vital discipline which facilitates a comfortable, secure, and safe environment for individual and community; by practice, research, and education, it is directed toward the betterment of society.

BIBLIOGRAPHY

Noriko Katada had born in Japan, and crossed Pacific Ocean at the age of Seventeen to Texas, USA. She had completed High school, and proceeded to Texas Women's University (TWU). Upon graduation (BSN), she seek to work at the Texas Children's Hospital as staff nurse. Also worked at Detar hospital to open children's ward in small general hospital in small town of Texas. After she had finished Master Program in Pediatric Clinical Nurse

Specialist course at TWU, decided to come back to Japan to try out nursing practice skill. She wrote many application to get the working positions, and receive kind rejection letters back except one from the St. Luke International Hospital in Tokyo. She thought she had already hired, but first day at St. Luke Hospital, but needed to take the written entrance exam. Worked at Nursery unit and later at Pediatric ward, second year at In-service education unit with Number of two. In USA and Japan, nursing practice was challenge but had every moment were rich experiences.

She was asked work as a lecturer at St. Luke College of Nursing Child Health Nursing and giving the opportunity to go to University of California, San Francisco, Graduate of Nursing School and got Doctor of Nursing Science Degree. After working sixteen years at St. Luke, she had started to work at College of Nursing Art & Science, Hyogo which later become University of Hyogo, School of Nursing. She taught both undergraduate and Graduate School, Master and Doctorate Courses.

Mean while, she took a lots of committee works, some secretariat and committee members, in Japanese Association of Nursing (Nursing Professional Committee), International Council of Nurses (Board member, and vice president), Sigma Theta Tau, Japan Academy of Nursing Science (Board member, and President), Japan Association of Nursing Programs in Universities (Board member, and President), Japan Association of Nursing Academies (Board members and President), Presently a Member of Japan Council of Science.

She had /has always had a good mentor and colleague working together and enjoyed wokin with.

KS-1



Valued and Enabled Nurses: A Gendered Vision for 2030

Afaf Ibrahim Meleis^{1,2}

¹Dean Emerita and Professor of Nursing and Sociology, University of Pennsylvania, United States of America

²Professor Emerita, University of California, San Francisco, United States of America

At the turn of the decade, as we welcomed 2020, the year declared by WHO as the year of nurses and midwives, we looked forward to showing the world what nurses actually do and to demonstrate their impact on the health and wellbeing of populations. We also looked forward to accomplishing NURSINGNOW Goals, as well as, sustainable development Goals (SDG's). With 20 million nurses globally, we wanted to have a collective voice in developing and providing appropriate policies to deal with the challenges in health care that populations face globally. Two such challenges were providing quality care for older populations and ameliorating the effects of global environmental changes within an equity and justice framework.

We considered that since Nurses are globally 90% women, the issues and the challenges that women face are also similar to those that nurses encounter in their practice as well as in the scholarship they produce. Therefore, to have a voice and presence in making a global and a local impact on population's health, nurses must acknowledge and own historical gender and sex differentials that have created marginalization, oppression and subjugation of nurses and women. These in turn have contributed to nurse's and women's limited presence and participation in affecting policies that support women, their work conditions, and wellbeing. These issues may also have constrained nurses from working up to their full capacity in their advocacy and caring roles for patients and families, and in ensuring policies for the delivery of quality care driven by a nursing perspective and evidence.

It is now 2030 and we are looking at what we have accomplished in the previous decade. We have a strong collective voice that is contributing to the continuity of care and wellbeing for the elderly and for the vulnerable populations. Nurses now work in an environment that is healthy and supportive of leadership and impact on the quality of health care. Equity for women, allowing them to function and integrate all their multiple roles through appropriate resources, benefits, compensation and flexibility, is monitored globally by United Nations and WHO.

We achieved all that through integrating our practice with academia, leading interprofessional education, supporting nurse's innovations for health care, enhancing representations on policy tables, and insuring the development, implementation of systems for accountability that support equity, safety and civility where women / nurses live and work. We adopted an equity and justice framework, advocated, and demanded gender equity at all organizational and societal levels. Our "different voices" for change were valued and made a difference.

Incredible changes and achievements to celebrate the turn of the decade in 2030!

BIBLIOGRAPHY

Over the course of more than five decades, Dr. Afaf I. Meleis has demonstrated a profound passion for pushing the boundaries of nursing science, cultivating the next generation of health care leaders and improving women's health. As the vibrant and forward thinking Dean of the University of Pennsylvania's School of Nursing (2002-2014), she was known as the "Energizer Dean," a nickname coined in her 2009 *Pennsylvania Gazette* profile, which conveyed her can-do attitude and approach to her life's work. A leading expert in global health and immigrant and women's health, Dr. Meleis has dedicated her career to ensuring vulnerable populations are given a voice, particularly women who are burdened by societal inequities, multiplicity of roles, differential compensation and rewards and the gender divide. She used this knowledge to redefine women's work and to develop Transitions Theory, which is translated globally in education, policy, research and evidence-based practice.

In addition to her research and writings in over 200 publications on these topics, as well as on topics related to culturally competent practice, interprofessional education and the epistemological analysis of the discipline of nursing, her impact on advancing global health is evident through her empowering mentorship of nursing scholars, scientists, clinicians, administrators and students around the world. As an internationally renowned nurse scientist and medical sociologist, her scholarly contributions have informed generations of nurses, influencing their education, practice and research programs.

A reflection of the international impact of her work is evident in her worldwide (in over 40 countries) consultations and invited keynotes. Her leadership in the International Council on Women's Health Issues played a central role in inspiring scholarship in women's health and in bringing together world leaders to form partnerships to improve the lives of women. Her leadership is also evident in the many boards and committees she actively participates in, including her current roles as a board trustee of Aga Khan University and a board trustee of The Buck Institute for Research on Aging. Her books continue to be used nationally and internationally, chief among them, *Transitions Theory: Middle Range and Situation Specific Theories in Research and Practice* and six editions of the ground breaking *Theoretical Nursing: Development and Progress*. Her co-edited book, Women's Health and the World's Cities, innovatively examines the relationship between global urbanization and women's health and is just one example of her far-reaching research, as it was widely disseminated through international networks, conferences and launches, which in turn inspired collaboration and change. She also co-chaired the Harvard-Penn-Lancet Commission on Women and Health, the results of which were published in a full *Lancet* issue in 2015.

Dr. Meleis is the recipient of numerous honors and awards, as well as honorary professorships and doctorates. Among them is an Honorary Doctorate of Medicine from Linköping University, Sweden; a Doctor Honoris Causa from the University of Alicante, Spain; and the distinguished Honorary Citizenship of Oporto, Portugal. In 2015 she received the American Academy of Nursing Living Legend Award and the Sigma Theta Tau International Nell J. Watts Lifetime Achievement in Nursing Award, and she was inducted as an Honorary Fellow in the National League for Nursing's Academy of Nursing Education. Most recently, she was honored with the 2018 Princess Srinagarindra Award in Thailand, and inducted into Marin Women's Hall of Fame.

Dr. Meleis graduated Magna Cum Laude from the University of Alexandria (1961), earned an M.S. in nursing (1964), an M.A. in sociology (1966) and a Ph.D. in medical and social psychology (1968) from the University of California, Los Angeles.

KS-2



Leadership for Nursing Development : My Personal Work Experience

Tassana Boontong

Thailand Nursing and Midwifery Council, Thailand

Nurses today are facing with many challenges of disruptive health systems. The demographic, epidemiological and socio-economic-cultural transition, the advancement in medical technology; the emergence of artificial intelligence; the unexpected emerging diseases and disasters; and the high demands of public for equity, quality and safety create complicated working environment. Strong and effective leadership is critical for nurses to make practical and workable solutions. Every nurse may not be in leader positions but all can be educated and trained to have leadership capacity. Nursing leadership can influence the changes needed to improve health of people and contribute to the Universal Health Coverage and Sustainable Development Goals. Leadership requires vision, knowledge of health care systems and profession, and certain characteristics, skills and attitude. The 9 essential qualities of leadership are emotional intelligence, integrity, critical thinking, dedication to excellence, communication skills, professional socialization, respect and mentorship.

Today at the age of 78 years old, I am still very much active in self development, management of educational institution as well as in advancing nursing and midwifery professional development. Working with others as full partners in a context of mutual respect and collaboration and networking with other fields including politics are well recognized as important factors in my work. In this conference I would share three examples of my work, namely, the collaborative PhD programme in nursing, the 20-year plan for nursing and midwifery development, and a pilot project for nursing and midwifery clinic as a service unit in the health insurance system under the National Health Security Office. My vision, aspects of leadership used to achieve the desired goals or targets and factors contributing to the success would be analyzed. Also key reasons that still drive me to continue to juggle many diverse tasks simultaneously with commitment, passion, enthusiasm and happiness will be also presented.

BIBLIOGRAPHY

President of Thailand Nursing and Midwifery Council (2018-present, 2014-2018, 2002-2006, 1998-2002, 5 terms) Dean of Faculty of Nursing, HRH Princess Chulabhorn College of Medical Science, Chulabhorn Royal Academy (2017-present) Vice -President (2000-2006, 2014-present) and Secretary-General (2011-present), The Princess Srinagarindra Award Foundation under the Royal Patronage Member, National Health Security Office Board (2014-present, 2003-2006) Member, University Council Board, Srisavarindhira Thai Red Cross Institute of Nursing College (2018-present) and Sukhothai thammathiraj Open University (2018-present) Vice-Chairperson of National Reform Council (2014-2015) Vice-President of the Senate (2008-2011) Senator 3 terms (2011-2014, 2008-2011, 1992-1996) Member, National Legislative Assembly (1991) Committee, National Commission on Women Affairs and Family, Office of the Prime Minister (2006-2008, 2002-2004, 1997-2000) President of The Nurses' Association of Thailand (1995-1998 and 2007-2009) Committee, The National Health System Reform Commission (2000-2006) Committee, The Higher Education Commission (2004-2008) Board Member, The Health Service Standard and Quality Control Board (2007 - 2008) Founder Dean of Faculty of Nursing, Mae Fah Luang University (2007-2008), Suan Dusit University (2006-2009), Srinakharinwirot University (2002-2006) and Thammasat University (1994-1995) Chairperson ASEAN Mutual Recognition Agreement on Nursing Services (2005-2006) Dean of Faculty of Nursing, Mahidol University (1987-1999, 3 terms)

[Session for Knowledge Development and Practice by WANS members organization]

Young Scientists Committee, Japan Academy of Nursing Science

SKD-1

Next-generation knowledge development approach through team science

Hiromi Sanada^{1,2}

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New technologies and concepts such as medical big data, artificial intelligence, robotics, personal health record, real-time data collection, and personal optimization are flowing into the world of medical services, and the society is entering a phase of major change. To enhance the process of knowledge development to tackle the challenges nurses face, team science is a good strategy to integrate wide varieties of disciplines that can help build up new theory and practice.

This Information Exchange session includes 1. introduction, 2. research idea sharing, 3. group discussion, and 4. wrap-up.

In the introduction session, we will provide general ideas regarding what "team science" is, and how and why it is so important in current times. In the research idea sharing session, some new ideas from young researchers to support next-generation knowledge development will be shared. The keywords of the talks will include sociology, psychology, information and communication technology, molecular biology, microbiology, global health, transcultural research, etc. In the group discussion session, participants will form several groups to discuss the "Possibility of Team Science." During this session, group members will discuss with each other about what they do to solve the clinical problems they are currently working on with the help of team science research framework. All attendees will participate in the discussion. Finally, we will hear some expectations for young nursing researchers from senior nursing research scientists.

This session will guide you towards a new frontier to promote your research to a higher level and make a greater impact.

[Session for Knowledge Development and Practice by WANS members organization]

Alice Lee Centre for Nursing Studies, National University of Singapore

SKD-2



e-learning in Nursing Education: Trends and opportunities (e-NET)

Shefaly Shorey, Emily Ang

Alice Lee Centre for Nursing Studies, National University of Singapore, Singapore

To enhance students' learning outcomes, use of information technology has been on the rise, specifically in higher education. Many resources have been invested worldwide to incorporate information technology in the curriculum. One such example is the use of blended e-learning in the curriculum. In nursing education, blended learning has become part of curriculum to deliver core contents in both theory and clinical skills to nursing students. E-learning allows students to study at their own pace and time and achieve learning outcomes similar to face-to-face learning. However, the development and design of e-learning must be based on the course objectives and expected students' learning outcomes. Through this workshop the facilitators will share their experiences in successfully implementing e-learning in teaching core module entitled, "Effective communication among healthcare professionals" to nursing undergraduates. The 60 minutes' workshop will involve interactive sessions and hands on experiences in developing and incorporating e-learning in nursing undergraduate curriculum. Both faculty members and clinical educators will gain more understanding of trends and strategies in developing effective e-learning in nursing education to achieve the optimal students learning outcomes after attending this workshop.

[Session for Knowledge Development and Practice by WANS members organization]

Asian American Pacific Islander Nurses Association

SKD-3



Technology and Knowledge Development

Eun-Ok Im¹, Wonshik Chee², Angelina Nguyen³

¹School of Nursing, Emory University, United States of America

²School of Nursing, Duke University, United States of America

³Asian American Pacific Islander Nurses Association, United States of America

Advances in computer and mobile technologies and data science have brought drastic changes in nursing research, education, and practice. The use of technology has become an essential part of nursing across fields and globe, which has subsequently influenced knowledge development in nursing. In contrast to conventional methods, the use of technologies allows nurses to efficiently approach specific populations and effectively provide information, education, and coaching mainly due to easy access without time or cost constraints. However, little is still known about the impact of technology use on nursing knowledge development. This symposium aims to provide an open forum to discuss the use of technology specifically in nursing research and its influences on nursing knowledge development. First, an introduction on technology use and knowledge development in nursing will be presented while explaining how the session is structured. Then, a systematic literature review on technology use in nursing research will follow. Third, an actual research study using technology as an intervention medium will be presented. The actual research study aimed to determine the effects of a technology-based cancer support group on enhancing social supports among 94 Asian American breast cancer survivors. The findings supported significant decreases in uncertainty, needs for support, and perceived isolation, and increases in personal resources only among the intervention group ($F=6.612\sim9.937$, $p<0.05$). Through this session, implications for future use of technology and nursing knowledge development will be proposed.

[Session for Knowledge Development and Practice by WANS members organization]

Sigma Theta tau International Honor Society of Nursing

SKD-4



How Sigma Supports Scholarship and Research

Elizabeth Madigan

Sigma Theta Tau International Honor Society of Nursing, United States of America

Sigma Theta Tau International Honor Society of Nursing offers programs and services for scholarship and leadership. For Sigma, scholarship includes research as well as evidence based practice initiatives. Many of the programs and services are open to non-Sigma members. In this presentation, Dr. Madigan will discuss scholarship opportunities for nurses including research grants, journals, the nursing repository, the annual International Nursing Research Congress, and opportunities for virtual networking with other researchers. For leadership, Dr. Madigan will discuss the leadership academies offered by Sigma for faculty development at all levels and for nurses in practice settings. Finally, she will discuss Sigma's new initiatives, global regional councils, that identify how Sigma can better serve members within each of the regions.

[Session for Knowledge Development and Practice by WANS members organization]

Japan Academy of Nursing Education

SKD-5



Survey on the educational environment of the nursing education in Japan for the quality improvement --Interim report--by the survey committee of the Japan Academy of Nursing Education (JANE)

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[Purpose]

The purpose of the survey is to describe the current situation and to clarify the issues of the various school of nursing system in Japan to make future vision of nursing education. Those are baccalaureate degree program in college and/or university, associate degree program in junior college, and 5 year programs in high school under ministry of education. Under ministry of health and welfare, there are 4 year college education program, and general diploma school of nursing program.

[Method]

Survey was carried out on Web bases, from May and June, 2019. The survey had two parts; first part is to get the data from organizational point of view and asked organizational head to respond, second part is from three faculties and/or staff teachers selected by responsible head to get their views. The contents of the survey are 1 Institutional attributes and individual attributes of faculty/teacher, 2 Faculty/teachers qualification and ability, 3 Support for Research and Faculty development, 4 Students support system, 5 Educational facilities and resources, 6 Institutional management, and 7 Free statement. This survey was approved by the ethics committee of JANE.

[Result and Discussion]

Before the survey was put on website, explanatory letter were send to one thousands nursing schools. 487 schools had responded to participate on survey. However, actual web based survey, there were response rate of 264 organizational head and from faculties/teachers 645. The responses from organizational head and faculties/teachers were compared. Responses in all are similar, however, content No.2 and No.4, some perceptual differences were observed between organizational head and faculties/teachers. The ratio of having Doctoral Degree and Master Degree is higher in university than diploma school. However, in diploma schools, member having Master Degree had increased when compared with the survey done 10 years ago. More details will be presented in the session.

[Session for Knowledge Development and Practice by WANS members organization]

Japan Academy of Community Health Nursing

SKD-6



Nursing strategy of the community-based integrated care system in a super-aging society

Ayumi Kono¹, Kaoru Konishi², Masako Kageyama³, Miyuki Ishibashi⁴, Ryoko Kawasaki⁵

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³School of Medicine, Dept. of Public Health Nursing, Osaka University, Japan

⁴School of Nursing, Dept. of Gerontological Nursing, Chiba University, Japan

⁵School of Nursing, Dept. of Public Health Nursing, Oita University of Nursing and Health Sciences, Japan

This session is hosted by the Japan Academy of Community Health Nursing. Japan, with 27.7% of its total national adult population aged 65 years and over – 13.8% of which were aged 75 years and over in 2017 – is the front runner of super-aging societies in the world. Last decade, the community-based integrated care system, which is defined as a care system to ensure the provision of health, long-term and residential care, and livelihood support, was advocated to sustain our limited health or long-term care resources in Japanese national policy.

In the session, three topics are presented, by Dr. Masako Kageyama, PhD & RN (Osaka University), Dr. Miyuki Ishibashi, PhD & RN (Chiba University), and Dr. Ryoko Kawasaki, PhD & RN (Oita University of Nursing and Health Sciences), respectively, and the session is moderated by Dr. Kaoru Konishi (Osaka University) and Dr. Ayumi Kono (Osaka City University, Dept. of Home Health Nursing). Dr. Kageyama's presentation discusses community diagnosis to identify care needs in the community; Dr. Ishibashi reports on continuity nursing care between hospitals and community strategies focusing on health and long-term care for older people; and Dr. Kawasaki addresses optimal and adequate utilization of community-based resources for the well-being of older adults in a depopulating society.

Thus, in this session a community health nursing strategy will be identified and discussed as the basis to formulate a community-based integrated care system to function efficiently in a super-aging society.

[Message from Japan]

Department of Evidence-Based Clinical Nursing, Division of Health Sciences, Graduate School of Medicine, Osaka University/Asakayama General Hospital

MJ-1



Gerontological nursing in super-aging society encouraging respect for decision-making and supporting personal autonomy

Miyae Yamakawa¹

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³*the Japan Centre for Evidence Based Practice, the Affiliated Centre for Joanna Briggs Institutes, Japan*

We are in a super-aging society, and the aging rate in 2018 was 27.87%. In the last 20 years, our lifestyle with some health problems has changed under the influence of Japan's healthcare and care policies. On the surface, the elderly can receive robust support from a multidisciplinary team built by public care insurance in 2000. However, despite the diversity of services, there is stereotypy life among the elderly. In order to survive such a super-aged society, it is good for each person to be able to control their own future. I would like to talk about the role of nurses in such.

MJ-2



Creation of Care Science: Towards a Person-Centered Society

Hiroko Komatsu¹, Yumi Nishimura²

¹Faculty of Nursing and Medical Care, Keio University, Japan

²Faculty of Health Science, Tokyo Metropolitan University, Japan

The number of deaths in Japan is increasing while the population is shrinking at an unprecedented speed. It is estimated that about one out of 2.5 persons will be aged 65 or older by 2060. Furthermore, global environmental changes and uncertain socioeconomic situations generate diverse, complex health issues. Now is the time to prioritize "care" in terms of ensuring a better quality of life for people living in society; however, health issues are often so complex that they cannot be covered by one scientific discipline and conventional knowledge related to care thus faces a challenge. In order to respond to diverse and complex health issues, a new framework of care and science is required.

In recent years, the nursing working group of Science Council of Japan has discussed theories and concepts related to care and the possibility of creating a new science for future study beyond the conventional academic boundaries, using the concept of "Care Science." In this lecture, the background of "Care Science" will be presented, and a proposal will be made for related academic activities, organizations, and social engagement.

"Care Science" has been confirmed as interdisciplinary care research arising from relationships in biological, living, social, and global contexts in the nursing working group. Care Science eventually may change attitudes toward and perspectives about care among members of society, suggesting that it may lead towards the realization of a person-centered society. Hopefully, this lecture will be the beginning of a breakthrough in active discussion on the creation of Care Science.

[Symposium]

Japan Society of Disaster Nursing & Health Emergency and Disaster Nursing

SY



Strategy for Disaster Nursing Research to Address Sendai Framework for Disaster Risk Reduction 2015-2030

Hiroko Minami

President, Vice Chair of Japanese Society of Disaster Nursing, Japan

Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted at the 3rd UN World Conference on Disaster Reduction held in 2015. Under this framework, seven global targets were agreed, clearly showing the direction the world should aim for by 2030. Under these directions, four priority areas were identified including 1)Understanding disaster risk; 2)Strengthening disaster risk governance to manage disaster risk; 3)Investing in disaster risk reduction for resilience; 4)Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery , rehabilitation ;and reconstruction.

Following the framework, disaster nursing practice, research and education must be linked to contribute to the achievement of the goals, At this symposium, disaster nursing research will be focused on and discuss research strategies to realize the framework.

Topics and Speakers;

1. Challenges of research to address Sendai Framework

By Dr. Ogcheol Lee, The Chairperson of the World Society of Disaster Nursing

2. Nursing Challenges in Taiwan

By Dr. Fu-Chih Lai, Associate Professor, College of Nursing, Taipei Medical University

3. Nursing Challenges in Japan

By Dr. Aiko Yamamoto, The Head of International Committee, Japanese Society of Disaster Nursing

4. Cutting Edge of Disaster Nursing Research

By Dr. Barbra Mann Wall, Editor-in-Chief, Health Emergency & Disaster Nursing

[Information Exchange: Doctoral Student Session]

Kansai Medical University graduate school of nursing University of Kochi graduate school of nursing, Disaster Nursing Global Leader Degree Program

IE

Exchange meeting of graduate students: Sharing information about various research field and collaboration in doctoral nursing research

Chikoto Suzuki¹, Hastoro Dwinantoaji¹, Ryutaro Kase², Mami Nojima¹, Maki Nakajima², Noyuri Yamaji³

¹Doctoral program in Nursing, Kansai Medical University graduate school of nursing, Japan

²Chiba University graduate school of nursing, Japan

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As a practical science, the nursing discipline has a mission to develop research and evidence based practice within the context of the society where people live. Doctoral students in nursing are motivated to contribute to societal welfare with the development of nursing knowledge. We, as graduate students, are expected to be professionals in knowledge and science and lead the society beyond our nursing discipline and own country. For future development of nursing, the graduate students need cultivate collaborative skills to emancipate our nursing knowledge in the way for nurses to raise contributions to society.

This meeting aims to understand each other's cultural backgrounds and academic environment, to discuss of ideas in various collaboration for future, and to build networks that necessary for fulfillment of effective research collaboration work in the society.

[Program]

1. Challenges of interdisciplinary collaboration (Presented by Ryutaro Kase)

-the process to nursing engineering conducted by nursing researchers with no engineering knowledge -

Based on my experience, the presentation will be told what I started from and what I am doing now for interdisciplinary collaboration. Additionally, the differences between the view of nursing researchers and other researchers will be presented.

Let's start the inter disciplinary collaboration and connect with new partners!

2. Issues and Challenges in International Collaborative Research

(Presented by Hastoro Dwinantoaji)

-Collaborating with counterparts in host country-

Researchers must address the ethical and cultural barriers to conduct research in host country. Protection of human rights, additional time and budget, and language differences should be also considered for international partnerships in research. We hope that sharing of these issues and challenges can minimize the potential risks and barriers in realizing the scientific goals of international collaborative research project.

CIE-1

Participatory approach in "a training program for enhancing nurses' capability of responding multicultural situations"

Ariko Noji¹, Mari Kondo², Sachiko Iijima³, Sayaka Kotera⁴, Akiko Mizobe⁵, Akiko Nosaki¹, Hikaru Matsuoka⁶, Judith Heepe⁷, Koji Kobayashi⁸, Yoshiko Hamasaki⁹

¹*Graduate School of Nursing, Chiba University, Japan*

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⁸*Japan Nursing Association, Japan*

⁹*Takeda Hospital, Japan*

[Background]

Our research group conducts training courses for improving nurses' ability to deal with multicultural situations at a number of places, which has been developed based on the data from about 10,000 Japanese nurses. We believe that our training program and the materials developed for the program can significantly improve the quality of nursing care for people of diverse cultures in Japan.

[Objectives]

We investigate whether our training program and the material "Nursing care for foreigners" we have developed are applicable in countries other than Japan. The study is performed through collaboration with participants of Information Exchange.

[Outline]

First, we explain our training program, and then participants actually experience a shorter version of the program using our original materials. After completion of the mini-course, we encourage the participants to discuss in groups whether the program can actually be helpful in their countries. Finally, comments and suggestions from each group are presented to share points to be improved. We welcome diverse participants from various countries and regions, including from Japan.

[Point of Discussions]

We discuss: for example, how seriously training programs for improving nurses' multicultural skills are required in other countries and even in Japan; whether the training program and materials we have developed are universally applicable or only limited to Japan.

[Style of Discussion]

This study relies on active group discussion among participants of Information Exchange after brief explanation of our training program followed by actual experience of the training.

CIE-2

Effective Uses and Challenges on Simulation based Nursing Education utilizing INACSL Standards of Best Practice: Simulation

Yumi Iwamoto¹, Norimi Okawa², Keiko Okaya³, Shiah-Lian Chen⁴

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²*Graduate School of Nursing, University of Kochi, Japan*

³*Japan Association of Nursing Programs in Universities, Japan*

⁴*Department of Nursing & Master Program, National Taichung University of Science and Technology, Taiwan*

[Background]

Simulation-based learning is utilized in undergraduate nursing programs and on-the-job training programs in Japan. In Nov. 2018, Japanese Nursing Society for Simulation and Learning (JaNSSL) was established to contribute advancement of nursing education, to improve people's health and quality of life through developing and disseminating simulation learning as a new method of learning in nursing education. For that purpose, with the collaboration of International Nursing Association for Clinical Simulation and Learning(INACSL) and INACSL International Regional Interest Group, JaNSSL has a mission to disseminate the INACSL Standards of Best Practice (SoBP): Simulation in Japan. INACSL SoBP:Simulation has been translated into several languages including Japanese.

[Objectives]to discuss the effective uses and challenges of simulation-based learning in nursing education utilizing INACSL SoBP:Simulation as foundation to support learning students around the world.

[Outline]1. Introducing INACSL Standards of Best Practice:Simulation, 2. Utilization of INACSL SoBP:Simulation in JaNSSL facilitators course in Japan. 3. Utilization of INACSL SoBP:Simulation in education programs.4.Effective uses and challenges of utilizing INACSL SoBP:Simulation in other countries around the world.

[Point of Discussions]With participation of audiences, we will learn the effective uses and challenges in utilizing simulation-based learning through discussion.

[Style of Discussion]Symposium, video conferencing

Oral Presentation**Innovations in Nursing Education 1****O-1****Predictive Model for Students' Nursing Competency in Clinical Practicum:
A Structural Equation Modeling Approach**OShiah-Lian Chen¹, Jui-Yu Jao²¹*Nursing, National Taichung University of Science and Technology, Taiwan*²*Nursing, Chung Kang Branch, Cheng Ching Hospital, Taiwan*

[Objectives] The purpose of this study was to analyze path relationships affecting students' learning outcomes in clinical practicum using the LISREL.

Methods: This study design was a cross-sectional questionnaire survey. A total of 392 senior students who have completed their last internship were recruited from two nursing programs in central Taiwan. Structured questionnaires, including the Competency Inventory of Nursing Students, the Teaching Competence of Nursing Instructor, the Student Evaluation of Clinical Education Environment, the Level of Reflective Thinking, Metacognitive Inventory for Nursing Students were used for data collection.

[Ethics] The study was approved by the institutional review board of xx general hospital human research ethics committee (HP170015/CCGH-HTU-106-001), and the students' right to participate was protected.

[Results] The study results showed that teaching competence had no direct effect on nursing competency, but indirectly affected nursing competency through reflection and metacognition. Clinical education environment may directly affect nursing competency, and indirectly affect nursing competency via metacognition. Level of reflection showed a direct effect on nursing competency, and may indirectly affect nursing competency through metacognition. After adding the control variable of pursuing a nursing career, no change of initial path relationships was found. This variable could affect nursing competency via clinical education environment, reflection, and metacognition.

[Discussions] The path relationships of the study revealed factors affecting the development of students' nursing competency in clinical settings. Clinical instructors may design the teaching plan fostering development of metacognition and reflection skills to bring favorable learning outcomes in clinical teaching.

O-2**Flipped classroom combined mobile technology to improve calculating total body surface area and fluid resuscitation recovery skill of nursing staffs who receiving cross-training in a burn care units**OHSiangChun Chen^{1,2}, PeyFang Hwang¹, YiHsiang Chuan¹, FungYu Chang¹, ShiahLian Chen²¹*Department of Nursing, Taichung Veterans General Hospital, Taichung, Taiwan*²*Department of Nursing, National Taichung University of Science and Technology, Taichung, Taiwan*

[Objectives]: The innovative teaching strategy can be used to improve calculation accuracy rate of total body surface area (TBSA) and the amount of fluid resuscitation recovery of the burn patients.

[Background & Significance]: Accurate calculation of the TBSA and the fluid resuscitation for burn patients is the key to avoid pulmonary edema in acute stage. To improve nursing staffs' ability of calculation and judgment on patients' fluid resuscitation is necessary to ensure quality of patients care.

[Methods]:

Use Flipped classroom combined mobile technology for teaching activities on June 21 & August 21, 2017. Hold a monthly online test with two burn situational problems. Establish calculation table formula. Hold monthly symposiums. Use Burn Med APP to calculate TBSA and fluid resuscitation. Upload the course content to learning network to provide opportunities to learn or review.

[Ethics]: Under the principle of autonomy, non-maleficence and justice, we designed this nursing education course.

[Results]: From October 2017 to October 2018, the calculation accuracy rate of TBSA had been rose from 35% up to 97.5% and fluid resuscitation recovery skill had been rose from 20% up to 97.5%.

[Discussions]: In June 2018, there were two critical burn patients who had pulmonary edema before admission. After daily judgment and calculation of TBSA and fluid resuscitation by nursing staffs, the pulmonary edema had been gradually improved and the respirator treatment time was shortened to 30.5~47.5 hours. The innovative teaching strategy can effectively improve nursing staffs's calculation accuracy rate and then improve patient's safety.

Oral Presentation

Innovations in Nursing Education 1

O-3

Nursing students' motivation and needs for studying English in a university in Japan

OMayuka Isoda¹, Akiko Kondo²

¹*Nursing Department, National Center for Global Health and Medicine, Japan*

²*International Nursing Development, Graduate School of Health Care Sciences, Tokyo Medical and Dental University, Japan*

[Objectives] This study examined factors related to Japanese nursing students' motivation and needs for studying English in a university in Japan.

[Methods] This is a cross sectional study. An online survey was conducted with all nursing students in a university in Tokyo in 2018. Students chose one out of six intentions (fulfillment, discipline, practical, relationship, self-esteem, rewards) as a motivation to study English. Data were statistically analyzed.

[Ethics] This study was approved by the Institutional Review Board of the university.

[Results] The survey was completed by 167 out of 224 students (response rate of 74.6%). The higher subjective English ability was significantly related to positive attitude toward foreign people and studying English. The most frequently selected motivation was a practical use (40.7%), and students who had past opportunities to talk with foreign people tended to choose it. Students with a high subjective English ability, who had positive attitudes toward communicating with foreign people tended to choose a fulfillment intention. Students had higher needs to study English for traveling abroad, general listening, reading, and communicating with patients. Students with high English ability, frequent opportunities to talk with foreign people, and who had fewer years at university had more needs to study English.

[Discussions] It is important to teach useful English for work and to provide motivation for students to study English. Students may increase motivation to study English by increasing opportunities to communicate with foreign people. Students should be classified into different classes based on English ability, motivations, and needs.

Oral Presentation**Innovations in Nursing Education 2****O-4****Senior nurses' perspectives of newly graduated nurses' proactive behavior in Japanese hospitals**○ Misuzu F. Gregg¹, Chifuyu Hayashi¹, Toyomi Wakisaka²¹*Nursing, Kobe City College of Nursing, Japan*²*Faculty of Nursing and Rehabilitation, Konan Women's University, Japan*

[Objectives] Proactive behaviors represent a newcomer's active approach to becoming socialized in their new environment. This study aimed to identify how senior nurses assess and support newly graduated nurses' (NGNs) proactive behaviors.

[Methods] Study participants were 14 nurses who were teaching NGNs. Data were generated through semi-structured interviews. Data analysis was conducted using a qualitative content analysis method.

[Ethics] This study was approved by the Institutional Review Board of the first author's school. A signed consent form was obtained from each study participant.

[Results] Study participants in 5 hospitals were all women aged between 24 and 51 years, with a mean age of 32.9 years. The assessment points for proactive behaviors of NGNs were "trying to fit in with people in their ward," "following unspoken roles of their ward," "having attitudes compatible with learning," "addressing their work situations using their own initiative," "showing willingness to learn," and "obtaining necessary information by themselves." Senior nurses tried to support NGNs' proactive behavior by "watching over and speaking to them," "trying to create a good working environment," "encouraging them to have an attitude compatible with learning," "teaching them how to learn," and "considering how to teach."

[Discussions] Senior nurses had 2 clear assessment points regarding NGNs' proactive behavior, namely the enthusiasm to work as a nurse and desirable attitudes to be a member of the ward; these assessments considered 6 categories of behavior. Senior nurses facilitated NGNs' proactive behavior by providing a friendly work environment to help NGNs learn as nurses.

O-5**The relationships among nursing students' oral health knowledge, interest, self-care, and clinical practice experiences: Comparison with three-year study results**

○ Yumi Kuwamura, Sachi Kishida

Department of Nursing, Tokushima University Graduate School of Biomedical Sciences, Japan

[Objectives] To determine the relationships among nursing students' oral health-related characteristics (knowledge, interest, self-care, and clinical practice experiences) and compare them with three-year study results.

[Methods] In total, 185 fourth grade nursing students were recruited by convenience sampling. The students responded to self-administered questionnaire about oral health, self-care, interests, knowledge, and clinical practice experiences regarding patients' oral care. Data were collected after their last clinical practice in July (from 2016 to 2018; 2016(n=61), 2017(n=61), 2018 (n=63)) and from the same university in Japan. Statistical strategies of Spearman's correlation coefficient, Fisher's exact test, and multiple regression analysis were used.

[Ethics] This study was conducted with the approval of the Clinical Research Ethics Committee of T Hospital.

[Results] Students' self-evaluation of their clinical practices was significantly related to scores of clinical experiences of oral care (2016: questioning careful toothbrushing and denture cleaning; 2017:mouth moisturizing; 2018: toothbrushing). Regarding "counting the total number of patients' teeth," most students could not experience or observe the nurses' practice, however, it was significantly correlated with "careful toothbrushing," "knowledge of oral care," "clinical experiences of toothbrushing," and "clinical experiences of brushing the tongue." Self-care ("observation of oral cavities," "careful toothbrushing," "awareness of bleeding during toothbrushing") and "knowledge of cleaning dentures" were significantly different among the three-year study. However, there were no differences between other items.

[Discussions] It is suggested that students who completely understand the importance of oral care could experience oral care in clinical practices. Education to utilize and apply knowledge to clinical practice is important.

Oral Presentation

Innovations in Nursing Education 2

O-6

Analysis of the Factors Predictor Influence the Achievement Nursing Licensure Examination in Indonesia

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¹School of Nursing, Universitas Muhammadiyah Yogyakarta, Indonesia

²Departement of Healthcare Administration, Asia University, Taiwan

[Objectives]

The scope of this study is to analyze the factors that influence the achievement of the nursing students' competency test. Age, gender, majoring high school, GPA academy, GPA profession were examined.

[Methods]

The design of this research was retrospective. Logistic regression was utilized to analyse the data of 232 respondents.

[Ethics]

Approval

[Results]

Much students (94.4%) passed the licensure examinations in the first trial.

GPA ($p=0,000$) had strong positive relationship with performance in licensure examinations.

[Discussions]

Clinical environment remains an important aspect in the development of student's competence, confidence and fulfillment of their expected learning outcomes. The results of nursing licensure examination reflect the quality and the performance the quality and performance of the nursing education institution. Performance in the nursing licensure examination (NLE) becomes very important both for students and nursing education institutions. This performance is influenced by many factors, final GPA (Grade Point Average) was the strongest predictor of NCLEX success (Fortier, 2010). Students Clinical GPA could be a good predictor of their performance in the licensure examinations.

Oral Presentation

Safety Management / Quality Improvement 1

O-8

The effect of safety needles on prevention of needlestick injury in Taiwan

OU-Yu-Shan Ou¹, Judith S.C. Shiao¹, Hsueh-Ching Wu², Yue-Liang Leon Guo³

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²Department of Nursing, Hsin Sheng Junior College of Medical Care and Management, Taiwan

³Department of Environmental and Occupational Medicine, College of medicine, National Taiwan University, Taiwan

[Objectives]

Estimate the needlestick injury (NSI) rate between 2011~2016 to understand the effect of safety needles on NSI reduction in Taiwan.

[Methods]

We choose 37 hospitals which reported NSI events to the EPINet Traditional Chinese version continuously in 2011~2018. The NSI rate gotten from numbers of NSI event divided by usage amount of hollow needles, and calculated the safety needles ratio from usage amount of safety needles divided by ordinary needles' to understand the replacement of safety needles.

[Ethics]

This study was approved by the Research of Ethical Committee of National Taiwan University Hospital (No.201612249RINC)

[Results]

(1) The NSI rate of safety needles was significantly lower than ordinary needles

(2) The NSI rate of intravascular catheter in 2016 are significantly lower than 2011

(3) During 2011 to 2016, the safety needle ratio of intravascular catheters is the highest and increased the most. However, there were some events injured by safety needles, some because the users didn't operate them correctly, some because the safety device didn't cover the tip completely although the users operate correctly.

[Discussions]

We might be inferred from the lower NSI rate of intravascular catheter and its high ratio of safety needles that safety needles have a certain effect on the prevention of NSI rate. However, the effect of safety needles may not as our expected if the users not be trained well. Moreover, we should keep analyze the NSI events of safety needles to improve the design of them.

Oral Presentation

Safety Management / Quality Improvement 2

O-10

The Current Situation of Nursing in Terminal Care and Death Conferences using Nursing Self-Assessment Sheet

○Yuko Harding¹, Yoshiko Ishibashi², Mikiko Mori², Masako Yano¹, Michiyo Ando¹

¹Department of Nursing, MS program in Nursing, St.Mary's College, Japan

²Department of Nursing, St. Mary's Hospital, Japan

[Objectives]

To clarify the current situation of nursing in terminal care and death conferences (DC) by creating a nursing self-assessment sheet for nurses who have experienced terminal care. The DC is a place where doctors and nurses who face the death of the patient lead and reflect on the care of the deceased patient to improve the quality of future care.

[Methods]

The questionnaire was conducted for 144 nurses in ER, ICU, and hospice wards in general hospitals in Japan. The major items of the questionnaire are cooperation, reflection, future direction of nursing, response to patients and families, feelings of the nurse, and specific measures for nursing. For analysis, JMP ver.14.2 was used to perform a Chi-square test, and Wilcoxon/ Mann Whitney test.

[Ethics]

The study was approved by the Ethics Review Board of St. Mary's College and the Hospital being surveyed.

[Results]

One hundred and thirty-nine were included in the final analysis. Forty-three nurses who had experience in DCs showed a significantly high difference in reviewing nursing care ($p < .0001$), strengthening cooperation with other professions about patient care ($p < .0001$), and supporting decision-making of the dying patients and their family ($p < .0001$). The more that nurses participate in DC, the more they gain mental stability ($p = .03$) and enhance self-efficacy ($p = .02$).

[Discussions]

The DC using this self-assessment has significance as an opportunity to consider the method and direction of future care. It is also required to raise the quality of the DC itself.

O-11

Construction of crisis management practice program in first aid treatment of nursing teacher

○Meguru Minami, Taeko Oka, Kanae Otubo, Noriko Hatou

Faculty of Nursing at Matsuyama, University of Human Environment, Japan

[Objectives] School nursing teachers are required to be highly qualified in the emergency care to keep children's lives. This presentation is designed to consider the establishment of risk management practice program, related to school nurse emergency medical care.

[Methods] The focus group interviews were conducted with five school nurses from A prefecture compulsory education school.

Survey questionnaire items: Anxiety in the first aid treatment and determination and response of severity, anxiety for multiple task correspondence

Analysis method: Using K-J Method and analyzing qualitative data of the study

[Ethics] Explained both in oral and written form on research purpose and ethical considerations

Ensured research ethics and compliance and received the agreement.

[Results] In the field, focusing on visual inspections, "The number of people with mild illness can be sorted out instantly in large numbers" but "Concerns anxiety constantly when there are resters" "It is required to cope with serious injuries outside the school" "Professional emergency response like hospital" is required. "Emergency response to multiple tasks" was a central theme that I would like to learn at workshops etc. as "everyday preparation", while having "heavy anxieties that make him dread" for sudden unexpected sickness correspondence.

[Discussions] In order to construct a crisis management practice program in the first aid treatment of a school nurse, first aid for multiple taskers is required, and it is important to give concrete simulation education that can be used on the site.

Oral Presentation

Safety Management / Quality Improvement 2

O-12

Quality and use of measurements for antenatal care in Vientiane Capital, Lao PDR: preliminary findings from the provider side

Michiyo Higuchi¹, Kyoko Sasaki¹, Yukari Bito¹, Souksavanh Sysamay², Panome Sayamoungkhoun²

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²Mother and Child Health Center, Ministry of Health, Laos

[Objectives] To assess quality and use of measurements for antenatal care (ANC) from the provider side in primary health care facilities, in Vientiane Capital, Lao PDR

[Methods] All nine district hospitals in Vientiane Capital were visited for one to two weeks per hospital from June to August, 2018. Self-administered structured questionnaire were distributed to healthcare providers who were involved in ANC. Non-participatory structured observations were conducted by a researcher during the same visit in each hospital.

[Ethics] Ethical approval was obtained from the Ministry of Health, Lao PDR and from Nagoya City University School of Nursing, Japan.

[Results] The mean age of 74 healthcare workers was 39.5 years old with 17.1-year experience on average. The definition of hypertension and the correct timing to diagnose it were suggested by 24 (32.4%) and 20 (28.6%) of them, respectively. Sixty-three (85%) answered at least one point which should be advised about pre-eclampsia. Eighteen (24.3%) and 21 (28.4%) answered that they advised on control of gestational hypertension and weight on the survey day. Among 88 observations, weight and blood pressure were measured for 85 and 87 cases, respectively. Not all measuring was, however, done in recommended manners. Twenty-six cases (29.5%) were given advice after measurements.

[Discussions] We conducted another research from user's side in the same project. From both sides, quality of weighing and measuring blood pressure was not found ideal and measured results were underutilized for advice to users. Real ANC coverage can be increased by improving them.

O-13

Nurses' Perceptions About Disaster Risk Management in Indonesia

Achir Yani Syuhaimie Hamid¹, Yudi Ariesta Chandra¹, Herni Susanti¹, Sigit Mulyono², Kumboyono Kumboyono³

¹Mental Health-Psychiatric Nursing, Faculty of Nursing, Universitas Indonesia, Indonesia

²Community Health Nursing, Faculty of Nursing, Universitas Indonesia, Indonesia

³School of Nursing, Universitas Brawijaya, Indonesia

[Objectives]

To examine nurses' perceptions about nursing practice in managing disaster risk in Indonesia.

[Methods]

A descriptive qualitative approach was used to interview 12 disaster experts (9 local; 3 national) from national nursing societies in Indonesia. Data collected were analyzed by the thematic method.

[Ethics]

The study acquired ethical clearance with reference number 278/UN2.F12.D/HKP.02.04/2017 from the Ethical Committee of Faculty of Nursing Universitas Indonesia.

[Results]

Participants reported five themes as indicators of nursing practices in disaster risk management: 1) Improve the feelings of safety and comfort; 2) Advocacy to the government; 3) Coordinate with stakeholders in the management of resources needed by disaster casualties; 4) provision of integrated mental health on physical care; 5) facilitating family functioning through strengthening community resilience.

[Discussions]

Immediately after the disaster, the survivors needed guidance on safe evacuation sites and who could help with their needs. Therefore, nurses advocate and coordinate with front line local governments and other stakeholders to ensure the availability of evacuation sites and meeting the basic needs of the survivors. Nurses must also understand the complex consequences of disasters that bring physical, psychological, sociocultural, and spiritual changes among the affected people. This situation requires nurses to provide integrating physical-mental services and problem-solving skills to restore family functions as part of building community resilience. Further research needs to be conducted to explore perspectives of disaster casualties and stakeholders about health care needs during the disaster cycle for the development of comprehensive disaster risk management.

Oral Presentation

Safety Management / Quality Improvement 2

O-14

Development of Nursing Activity Based Costing Mira (N-ABC Mira) System

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²Medical, Universitas Indonesia, Indonesia

[Objectives] Nurses are professional health workers who are continuously available for 24 hours in the hospital. Nurses must be competent, alert and quick in providing nursing care in all conditions, including disaster patients, with due regard to patient safety and quality of care. The results of research in RSDK and RSP found that the provision of nursing care was not optimal. An information system for working nurses is needed. The purpose of this study is to develop a nursing activity based costing (N-ABC) system Mira.

[Methods] Analyzing and concluding the first stage of research data results that is not yet optimal nursing process and has not been used as a basis for rewarding; a large amount of nurse documentation; have not used clinical pathway. Literature review, establish and develop appropriate information systems for nurses.

[Ethics] Ethical clearance had been granted to authors prior to the study by the Research Ethics Committee of the Faculty of Nursing at the Universitas Indonesia (No: 2513/UN2.F12.D/HKP.02.04/2016).

[Results] Nursing activity based costing Mira (N-ABC Mira) system as an internet-based system that helps nurses in working and is equipped with authorization for each user. This system is an information technology system that help nurses record their activity and also acts as basis for calculating awards

[Discussions] Nursing activity based costing Mira (N-ABC Mira) system was developed to facilitate nurses in carrying out their activities, increasing professionalism and appreciation for nurses. It is hoped that this system can be used in all hospitals.

Oral Presentation

Research Methodology

O-16

The Ferrans and Powers Quality of Life Index: Adaptation and Validation Study of the Indonesian Version

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[Objectives]

The Ferrans and Powers Quality of Life Index (QLI) is a unique instrument as it measures how satisfied someone is with the things in life that they value most. The objective of this study is to examine the cultural appropriateness and psychometric properties of the Indonesian version of QLI (QLI-Id)

[Methods]

The original QLI was translated from English into Indonesian and was tested with cognitive interviews involving 15 cancer patients. Using the QLI-Id, a questionnaire survey of 236 cancer patients was conducted at a single time, and the following survey of 62 patients was conducted 3 weeks later.

[Ethics]

Participant's right for privacy and confidentiality were protected.

[Results]

Internal consistency reliability for the QLI-Id was supported by high Cronbach's alpha value (0.91). A Test-retest of 0.86 provided evidence of stability reliability over a 3-week period. The QLI-Id correlated strongly with a measure of life satisfaction ($r=0.76$), provided evidence of convergent validity. However, ceiling effect was identified in the item "faith in God".

[Discussions]

The QLI-Id captured the Intended meaning of the original version and was understood by cancer Indonesian cancer patients. Evidence of its reliability and validity supports the use in research and clinical practice to evaluate the impact of cancer. However, the tendency of Indonesian patients to provide high satisfaction response on the item "faith in God" should be borne in mind.

O-17

The process of creating questionnaires on foot care with validy and reliablity for main survey

OKashiko Fujii^{1,2}

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²Nursing, Nagoya University, Japan

[Objectives]

To create questionnaires with validity and reliability to measure foot knowledge and technique of nurses and nurse care workers working for home-based services.

[Methods] 288 selected literature on foot were thoroughly reviewed. Two authors of overseas literature and a foot care expert in Japan were contacted. Conceptual domain, dimensions, items were created, and draft was made. After experts reviewed the draft, adjusted questionnaires were reviewed by 9 experts with content validity index method by mail. Then, a panel consisting of six experts were held to discuss on each item of questionnaires. Questionnaires were examined at a pilot study targeting on 100 nurses and nurse care workers .

[Ethics]

Ethical committee of Human Environment University approved the study.

[Results]

Initially the number of knowledge and practice questions were 52 and 45 respectively. However, after CVI evaluation and expert panel discussion, the number of them were reduced to 33 and 25. The statistical analyze of pilot test yielded the final version of questionnaires to prepare for main survey. The questionnaires consisted of 30 knowledge and 20 practice questions. Three knowledge questions with 90% above correct answer and five practice questions with ceiling effect were deleted. Cronbach's α for questions were 0.5 to 0.7.

[Discussions]

To make questionnarries, time ,money and full preparation were needed. Expert panel was significant to adjust the direction and content of the research. Pilot test also was necessary before main test to know difficulty on the interpretation of the items or and easiness to answer .

Oral Presentation

Health Emergency / Disaster Nursing

O-18

Contextualizing Nursing Disasters Beyond Whiteness

Barbra Mann Wall

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[Objectives]

Examine a case study of the 1921 Tulsa, Oklahoma, Race Riot within the context of white supremacy and economic displacement, when 300 people died.

Consider what history would look like if Black nurses and disaster responders are centered in our analysis.

Challenge causal frameworks that see disaster responses as "noble."

[Methods]

Historical methodology involved examining primary sources of disaster responders located in local and national archives, newspapers, journals, advertisements, and postcards. Black nurses are present in these works, but "hidden." Secondary sources include histories of urban disorder.

[Results/Ethics]

We cannot separate disaster responses from the social and economic contexts of which they are a part. Whites responded to an event that appeared to be unplanned. Their ethical response was to bring order out of chaos. Blacks fought against an event that, to them, was not random at all, and the disaster response was not noble. Maintaining control and order is not always a good thing.

[Discussions] The paper rethinks disaster responses by considering context and a broad cast of characters. Centering black health care workers means thoroughly reckoning with our history beyond merely acknowledging it.

O-19

Ethical issues encountered by municipal public health nurses during natural disasters: a qualitative analysis based on individual descriptions

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²Community Health Nursing, Chiba University Graduate School of Nursing, Japan

[Objectives]

This study sought to identify ethical issues encountered by municipal public health nurses (PHN) during natural disasters using a qualitative analysis of the contents of municipal PHNs' descriptions.

[Methods]

A search of the Japan Medical Abstract Society yielded documents that included detailed descriptions of PHNs' experiences during disasters. Data analysis identified experiences including conflicts associated with various difficult ethical situations in PHNs' decision-making. Next, conflict structures in these data were rephrased as "Ethical issues." Some additional related factors were included as "Influence factors." All data were categorized by nature and similarity.

[Ethics]

All unique nouns and regional information in the data were anonymized.

[Results]

Thirty-three review documents were selected. Ethical issues were classified as follows: 1) Inner conflicts between PHNs' own values and professional ethics; 2) Mismatch between community needs and public services impartial delivery; 3) Disparity between community needs assessment and those by external support organizations; 4) Confusion because of an unclear chain of command; 5) Disparities among communities because of diversity in the reconstructed livelihoods of disaster victims; 6) Directions for reconstruction based on unclear evidence. Influence factors were classified into four categories: (1) Individual; (2) Community; (3) Organization; (4) Social environment.

[Discussions]

Ethical issues were experienced in the following areas: "Internal individual issues," "Constructing support systems," "Process in reconstructing livelihoods," and "Considering directions for community reconstruction." During disasters, PHNs encountered these issues in many ways and found decision-making difficult. Additional research is needed to explore PHNs' competencies for ethical decision-making process during disasters.

Oral Presentation

Health Emergency / Disaster Nursing

O-20

Relationships of demographic factors and social capital with mental health and life satisfaction in refugees and internally displaced people in Iraq

○Takako Ito¹, Jiro Takagi², Maki Sato³

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²Graduate School of Nursing, Sanyo Gakuen University, Japan

³Executive Office, JIM-NET, Japan

[Objectives]The purpose of this study is to assess relationships of demographic factors and social capital with mental health and life satisfaction in Syrian refugees and Yazidi internally displaced people(IDP) in Iraq.

[Methods]In a cross-sectional study with the refugees in Darashakran and IDP in Dihok, 73 answered a self-administered questionnaire on paper. Social capital was assessed based on the ways used in the Japan Gerontological Evaluation Study (JAGES) project. Psychological distress was assessed using the 12-Item General Health Questionnaire. Daily life satisfaction was assessed using a five-point Likert scale. Mann-Whitney U tests and Spearman's correlations were used. All p-values were two-tailed, and the significance level was set at $p < 0.05$. N varied due to missing data.

[Ethics]The study was approved by the Ethics Committee of Graduate School of Nursing, Chiba University.

[Results]All the participants were more than 20 years old. Of these participants, 50.7% were males, 80.3% were married, and 23.0% were employed. Those who started the family's nursing were significantly more psychologically distressed than others. Those married were significantly more satisfied with daily life than others. Those employed were also significantly more satisfied with daily life than others. The levels of associations with Iraqis in neighborhood were significantly positively correlated with daily life satisfaction.

[Discussions]In Syrian refugees and Yazidi IDP, starting the family's nursing was associated with poor mental health. Marriage, employment, and associations with Iraqis in neighborhood were positively associated with daily life satisfaction.

O-21

Applying the global standards into practice: Focusing on shelter environment

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²Secretariat of Japan Disaster Medical Assistance Team, Japan

³Disaster Nursing Global Leadership Program, University of Kochi, Japan

Objectives : As Nightingale stated environment influences on health and recovery from sickness and injury which shelter environment under humanitarian condition is not an exception. The aim was to build capacity among disaster responders about shelter environment quality through applying the global standards.

Methods : The training was designed based on the Sphere Standards. NH and KC are certified trainers of the standards. To familiarize participants with good practices based on the Sphere Standards, case scenarios were made by field experiences such as Kumamoto earthquake in 2016 by KC and NH, Western and Japan heavy rain in 2018 by SK. The evaluation was collected after each training.

Ethics : Obtained IRB approval from University of Miyazaki, No. O-0245.

Results : The training was held five times in Miyazaki, Tokushima, and Kagoshima between August 2018 and July 2019. Background of 129 participants included health, protection, WaSH, education, food security and nutrition, shelter and camp management, and tele-communication, and representatives of local governments participated. The evaluation indicates 95% evaluated this training program was extremely satisfied on program, contents, knowledge and skill and attitude of trainers, and modes of training. The free writing evaluation reveals that participants learned how to apply the global standards to real situation besides to periodize challenges to be solved and to find collaborators and stakeholders.

Discussions : The training provided knowledge about global standards and its applicability to the real disaster. Further challenges include the ways of evaluation if participants implement knowledge and skill during humanitarian work.

Oral Presentation

Health Emergency / Disaster Nursing

O-22

The Integration of Sendai Framework for Disaster Risk Reduction into the Revision of Taiwan Disaster Nursing Framework

OFu-Chih Lai^{1,2}

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²Disaster Nursing Committee/Taiwan Nurses Association, Vice Chair, Taiwan

[Objectives]

Taiwan face high risks of disasters. Taiwan disaster nursing framework that incorporated nursing process into ICN framework of disaster nursing was developed in 2012, the continuous revision that link to updated global trend embarked in 2017. Sendai Framework for Disaster Risk Reeducation (SFDRR) has rarely been integrated into disaster nursing framework. This project is to share Taiwanese experience of integrating SFDRR into the revision of Taiwan Disaster Nursing Framework that is accomplished in 2019.

[Methods]

Literature reviews regarding the use of SFDRR in nursing and disaster-related fields and opinions obtained from seven rounds of panel discussions of Taiwanese disaster nursing experts were used.

[Ethics]

No ethical conflict was noted. Experts who joined panel discussions refer to their willingness to participate in this project.

[Results]

Information of SFDRR including "scope and meaning", "expected outcomes", "sequence of actions" were integrated into "implementation actions" of pre-during-post disaster phases following nursing process of "assessment", "planning", "implementation", and "evaluation". Four SFRDD priorities for action is parallel with "sequence of actions" as well as seven targets were merged into three aims that reflect the values of nursing paradigm: person, nursing, health, and environment.

[Discussions]

The revision and integration with SFDRR extend disaster nursing connection with other disaster-related disciplinary while team work is highlighted in disaster care. Details of SFDRR including guiding principles, role of stakeholders, and international cooperation and global partnerships along with sustainable development goals (SDGS) that were not integrated into this project should be considered for future revision.

Oral Presentation**Health Promotion / Disease Prevention 1****O-23****Barriers to uptake of modern family planning methods among female youth of Temeke District in Dar Es Salaam, Tanzania: A qualitative study**

Stella Emmanuel Mushy¹, Edith Tarimo¹, Agnes Fredrick Massae¹, Eri Shishido²,
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[Objectives] Despite the accessibility of modern family planning (FP) methods, a high risk of unwanted pregnancies remains a serious problem in Tanzania. This study aimed to identify the barriers to the uptake of modern FP methods among female youth in Temeke District, Tanzania.

[Methods] Qualitative study conducted in March 2017 involving 15 female youths aged 18-24 years. The participants and their characteristics were identified from the Commcare database. Participants received contraceptive counseling from community health mobilizers and agreed to visit a nearby health facility for FP services. However, not everyone visited despite several phone call follow-ups. Researchers collected data regarding the reasons for no visitation using a pre-tested interview guide. Data were transcribed and analyzed following qualitative content analysis.

[Ethics] National Institute of Medical Research and MDH offered ethical clearance and permission for data collection.

[Results] Three categories [and their subcategories] were identified as hindering FP uptake: (1) individual perception factor [(a) myths and misconceptions, (b) fear of side effects, (c) fear of the possibility of being pregnant at the time of FP counseling], (2) community perception factors [disclosure from an intimate partner and closest friends], and (3) health facility system factors [unavailability of the preferred method and absence of the trained personnel for the FP method].

[Discussions] Barriers to FP uptake were myths and misconceptions, and fear of side effects. The intimate partners or close friends were significant decision influencers on contraceptive use, implying that FP campaigns should focus beyond the individual level.

O-24**Risk behavior and Self-esteem among Adolescents of Urban High Schools in Nepal**

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Adolescence is an important period of life that forms the foundation for adulthood. Risky behaviors (substance abuse, suicidal behavior, and sexual behavior) during adolescence has many negative consequences. Given the lack of such studies among Nepalese adolescents, this cross-sectional study aimed to identify risk behaviors and the role of self-esteem, perceived social support (PSS) (support from family, friends and significant others), and social capital (SC) (through family, school, and neighbors). A multistage cluster random sampling technique was used and 943 (88%) of the 1070 adolescents (classes 9-11) in 8 schools from 3 Provinces of Nepal completed the self-administered questionnaire. Multivariate logistic regression analysis was performed.

Findings (at 95% significance) revealed that self-esteem (OR= 0.47), PSS from family (OR= 0.31) and family-SC (OR= 0.15) were negatively associated with substance abuse. Self-esteem (OR= 0.42), Family PSS (OR= 0.37), and PSS from friends adjusted for demographics and family factors (OR = 0.50) were protective against suicidal risk. Those who perceived good support from friends adjusted for socio-economic status (SES) and family factors (OR= 0.50 & 0.51), having high family-SC adjusting for demographics and SES (OR= 0.12 & 0.27), and those attaining high school-SC adjusting for SES (OR= 0.39) were less likely to be at risk of inappropriate sexual behaviors. Some demographic, family, and school-related factors were also associated with risky behavior.

To conclude, interventions at family and school level to enhance self-esteem, PSS, and SC for adolescents are helpful in protecting them against risky behaviors resulting in improved likelihood of becoming healthy adults.

Oral Presentation

Health Promotion / Disease Prevention 1

O-25

Effectiveness of an intervention program to support benefit finding in people with chronic mental illnesses in Japan: a randomized controlled trial

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[Objectives]

“Benefit finding” is defined as the identification of benefits from negative experiences in adversities. We developed an intervention program to support benefit finding in people with chronic mental illnesses, which mainly focused on stress management and consideration of one's own experiences of benefit finding. This study aimed to examine the effectiveness of the program using randomized controlled trial design.

[Methods]

Participants with chronic mental illnesses were recruited from four facilities in the Kansai region community, Japan. Thereafter, 24 participants were randomly allocated to the intervention group ($n = 15$) or the control group ($n = 9$). The intervention group attended eight 90 minutes group sessions over a period of two months, whereas the control group received care as usual. Benefit finding and personal recovery were assessed at baseline and post-intervention. Participants who did not answer the questionnaires were excluded from the analyses.

[Ethics]

The study was approved by the Ethical Committees of University of Hyogo (# Teacher 5) and Kobe University (# 826). Informed consent was obtained from the participants before allocation to different groups.

[Results and Discussion]

Although the repeated measures analysis of variance did not show significant improvement in benefit finding or recovery (time \times group), medium to large effect sizes in personal recovery were revealed. Future research with larger sample sizes are needed to examine its effectiveness rigorously.

This study was supported by JSPS KAKENHI under Grant Numbers 17K17513 and 19K11216. And it was also supported by AMED under Grant Number 18dk0307066h0003.

Oral Presentation**Health Promotion / Disease Prevention 2****O-26****Identification of caregiving activities and factors of depression among family caregivers of stroke patients**OWahyuni Fauziah¹, Mayumi Kato³, Miho Shogenji³, Yoshimi Taniguchi³, Hiromasa Tsujiguchi⁴¹*Gerontological Rehabilitation Nursing Department, Division of Health Sciences, Graduate School of Medical Science, Kanazawa University, Japan*²*Dr. H Koesnadi Regional Hospital of Bondowoso, Indonesia*³*Division of Health Sciences, Graduate School of Medical Science, Kanazawa University, Japan*⁴*Graduate School of Medical Sciences, Kanazawa University, Japan*

[Objectives] The purpose of this study was to identify the caregiving activities and factors of depression among family caregivers of stroke patients.

[Methods] This study had a cross-sectional study design. In total, 157 family caregivers who were the main caregivers of stroke patients at home were recruited to complete a questionnaire through a face-to-face interview. Multiple logistic regression analysis was used to obtain the odds ratio.

[Ethics] This study was conducted after being granted approval by the kanazawa University Medical Ethics committee (permission number 825-1).

[Results] A total of 65.6% of family caregivers were female. The mean age of family caregivers was 43.5 years old, and 70.1% of family caregivers did not receive education on stroke care. The depression prevalence rate of family caregivers was 56.7%. The back pain, caregiving hour, self-efficacy for obtaining respite, self-efficacy for controlling upsetting thoughts, sex of patients, and time of stroke attack were found as factors of depression among family caregivers.

[Discussions] Family caregivers were providing high-level ADL assistance to stroke patients with long durations of caregiving (>12 h/day). We considered that the early identification of risk factors may help identify and prevent depression among caregivers. Initial education on stroke care, environmental management, and caregiver health status monitoring should be provided by health professionals to reduce depression and increase the quality of life among family caregivers.

O-27**Time from roll-over completion to return to sleep in frequently occurring roll-overs during sleep**OFumiko Furukawa¹, Akiko Hagimoto², Masayo Tome²¹*Graduate School of Health Sciences (Nursing), Kagawa Prefectural University of Health Sciences, Japan*²*Faculty of Nursing, Doshisha Women's College of Liberal Arts, Japan*

[Objectives] Roll-over is a factor which alters sleep stages from deeper to lighter, but motion and time sequences of roll-overs during sleep are unclear. This study aimed to identify frequent occurrences of roll-overs, and the time to return to sleep following roll-overs, which affects sleep quality.

[Methods] An observational 4-day-study was conducted at a sleep laboratory. Polysomnography, electromyogram, and video-recordings were used to measure sequences in motion and time of roll-over during sleep. Focusing on supine-to-left and supine-to-right motion, time sequences were defined as I: duration of sleep stage before roll-over; II: time required for the motion; and III: period from end of the motion to onset of returning to sleep. A cutoff on I was halfway through a 30-s epoch period to distinguish sleep stage from arousal triggered by roll-over-onsets.

[Ethics] This study was approved by two Institutional Review Boards.

[Results] In six women aged 43-65 years, mean sleep period time was 6.72 ± 0.77 hours with 83 % sleep efficiency. Sixty-eight roll-overs were classified into three types based on motion sequences. Among the three types (11 in A, 56 in B, 1 in C), type B (sliding waist without pause before turning body) appeared most frequently: 20 roll-over-onsets at sleep and 36 at arousal. Means of III in those at sleep and arousal stages were 80.40 ± 101.04 and 119.86 ± 102.87 seconds, respectively ($p=0.040$).

[Discussions] Time for returning to sleep in roll-over-onsets appeared at sleep stage was shorter than that at arousal, so such roll-overs might contribute to sleep continuation.

Oral Presentation

Health Promotion / Disease Prevention 2

O-28

A belly band with tiny beads reduces menstrual pain: A preliminary study

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[Objectives] This study aimed to examine whether a belly band with tiny beads reduces menstrual pain in young women.

[Methods] One group pre- and post-test design was adopted. Menstrual pain was assessed multi-dimensionally during the follicular and menstrual phases. Pain indices included VAS, pain degree (Pain Vision, NIPRO, Osaka), SF-MPQ, and the Face Scale. The belly band was a 20-cm-wide tubular belt of elastic chemical fiber. Tiny beads (10 mg, 1.5 mm in diameter) were embedded on the inside (a beaded band). The subject wore the belly band with the beaded surface against the abdominal skin. After the experiment, subjects recorded pain VAS during two consecutive menstrual phases (the first with the belly band, and the second without it).

[Ethics] This study was approved by the Nursing Science Ethical Review Committee of the Okayama University Graduate School of Health Sciences (D18-12).

[Results and Discussion] Of the 12 candidates, all data were collected from seven. Wearing a belly band reduced menstrual pain in all subjects (VAS, from 28 to 14; pain degree, from 120 to 60). Other subjective indicators were also reduced by the belly band. Parasympathetic nervous activity increased while wearing it. Without the belly band, menstrual pain intensity did not change during the first three days of the menstrual phase, but while wearing it, the pain was reduced by 20% on the first day and 50% on the second and third days. This analgesia might be explained by the gate control theory proposed by Melzack and Wall (1968).

Oral Presentation

Interprofessional Collaborations

O-29

Supports for pediatric patients to cope with their medical treatments- case study of preparation and distraction provided by a Child Life Specialist

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[Objectives]

Children can be anxious and stressed in a hospital setting because they are often unprepared for their procedures. It is necessary for patients to prepare and have distractions in order to cope with them. Case studies of IV starts intervened by a child life specialist (CLS) will be reported.

[Methods]

A CLS prepares and distracts patients who are anxious and angry for their IV start. Patients' reactions and how they cope with the procedure will be reported and analyze inductively by comparing them with previous research.

[Ethics]

This research was accepted by an ethics committee at the researcher's hospital. Researchers obtained informed consent from patients and their caregivers. Participants could stop participating in this research study anytime. Results will be reported at a conference without participant's personal information.

[Results]

A patient refused hospitalization and IV start. A CLS explained how the procedure went on by utilizing medical equipment. After familiarizing himself with the equipment, he was able to go to the treatment room. He watched YouTube during treatment. This allow him to sit by himself, let a doctor check his arm, and hold his arm still.

[Discussions]

This patient could deal with his procedure because he felt more prepared after being explained what happened and what kind of medical equipment was used. Also, he was distracted by YouTube during treatment, so he did not need to focus on his fear and pain during procedure. Therefore, preparation and distraction are important to help patients to cope with hospital experiences positively.

O-30

Creating awareness of successful seating in the home life of a wheelchair user: an interview with a spinal cord injury sufferer

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[Objectives]

Proper seating improves the quality of life of wheelchair users by physically optimizing how they sit in their wheel-/chairs.

This study aims to create

awareness of proper seating and its importance to wheelchair users' home life and to share lessons learned from user experience.

[Methods]

A qualitative inductive study through semi-structured interviews was used.

[Ethics]

The Dokkyo Medical University Nursing Research Ethics Committee (Approval No. 29045) approved this research.

[Results]

The study's subjects, 3 males and 3 females, were interviewed. The average age was 68.3, with average wheelchair usage of 23.8 years. 5 out of 6 experienced pressure ulcers.

157 codes, 46 subcategories and 14 categories were extracted from comments on their seating.

[Discussions]

Our analysis indicates that seating awareness by a wheelchair person living at home can be roughly divided into four topics: "living with seating (both wheelchairs and cushions)", "aging", "medical personnel and friends", and "the social welfare system". It was revealed that wheelchair residents living at home recognized seating through wheelchair use following an injury. They wanted more comfortable seating for spending time with family and friends. It is clear that wheelchair users are strongly aware of seating, particularly after acupuncture treatments. Non-users do not recognize it, suggesting medical staff should support it. In future, we must share information and support the whole field, because safer, more comfortable wheelchair life will be found in a collaborative integration of administration, welfare and medical care.

Oral Presentation

Interprofessional Collaborations

O-31

Interprofessional collaboration in home-visit nursing in Japan: a case study

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[Objectives] Interprofessional collaboration is a challenging issue for home-visit nursing agencies in Japan. Nursing agencies need to work with a range of other healthcare organisations because they are usually small businesses and cannot provide all the necessary care themselves. However, interprofessional collaboration is complex and may affect quality of care and effective use of healthcare resources. This study investigated the interprofessional collaboration in a home-visit nursing agency in Japan.

[Methods] The first 18 months of administration data from a newly-established home-visit nursing agency was collected. The concentration ratios (CR) and the Herfindahl–Hirschman Index were analysed to investigate levels of interprofessional collaboration.

[Ethics] The agency agreed to participate and for the findings to be published.

[Results] The agency had 136 clients from April 2017 to September 2018. In that period, it had 3 to 4.7 nurses (full-time equivalent) and collaborated with 79 physicians in 29 healthcare facilities, and 67 care managers in 40 institutions. The number of healthcare professionals per client ranged from 2 to 10. Clients were referred from 46 individual professionals. CR3 was 75% in 6 months, CR5 was 74.5% in 12 months, and CR6 was 74.3% in 18 months. The Herfindahl–Hirschman Index was 2769.89, 1932.69, and 1538.48 in 6, 12 and 18 months.

[Discussions] Interprofessional collaboration increased over time. Agency nurses have to manage protocols, medical equipment and communication with different organisations. Agencies therefore need to develop effective, efficient interprofessional communication and collaboration so clients receive safe, high quality care.

Oral Presentation

Innovations in Practice 1

O-32

Ethical beliefs in nurses working in intensive care units

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[Objectives] To clarify the ethical beliefs potentially relevant to the moral distress of nurses working in Japanese intensive care units.

[Methods] Data were collected through a literature review and interviews. Eleven articles related to ethics, morals, or moral dilemmas were included in the literature review, while eight nurses working in intensive care were interviewed. The average number of years of nursing experience among the interviewees was nine years, ranging from 4–15 years. Participants were asked about a case where they were faced by a moral or ethical dilemma, resulting in feelings of distress, as well as their ethical beliefs in nursing. Data were organized inductively based on their similarity.

[Ethics] Institutional review board approval was obtained prior to the commencement of the study.

[Results] The literature review and interviews yielded 28 items about ethical beliefs relevant to moral distress, including beliefs stemming from wide range of aspects related to nursing care, from patient-focused services to management of the work environment. The items were divided into six categories: <Respect for patient>, <Respect for surrogate decision-maker>, <Medical decision>, <Nursing professionalism>, <Teamwork and staff communication>, and <Medical resource management>. In the interviews, nurses reported the occurrence of moral distress in cases where these elements conflicted with patient care.

[Discussions] A better understanding of the ethical beliefs of Japanese nurses working in intensive care related to their moral distress could be helpful for all healthcare providers improve clinical practice. It can also provide guidance in the resolution of moral distress among nurses.

O-33

Providing comfort care in decision making for terminally ill older adult patients in the ICU: Assessing content and face validity of a nursing practical guide

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[Objectives]

This study proposes a new practical decision-making guide for the care of terminally ill older adult patients in the ICU and assesses its content and face validity.

[Methods]

This practical guide was developed through a two-step process. At first, domain determination, item generation, and practical guide formation were completed by reviewing past literature and interviewing eight ICU nurses in Japan. Subsequently, content validity was assessed by a panel of eight experts and a validity index was calculated for each 106 items as well as for the whole guide using the average approach.

[Ethics]

The study was approved by the Institutional Review Board of Chiba University School of Nursing.

[Results]

From a set of 106 items, the content validity process confirmed five domains of comfort care before, during and after decisions such as: physical comfort (25 items), psychospiritual comfort (19 items), sociocultural comfort (30 items), environmental comfort (10 items), and involvement of health care team (22 items). For 86 items, the item content validity index (I-CVI) was 0.78 or higher while the S-CVI was equal to 0.91. A total of 18 items was revised based on comments from the expert panel.

[Discussions]

Our results suggest that this practical guide is appropriate for assessing comfort care in the ICU. The broad range of expert opinions about the “involvement of health care team” domain reflects the necessity to clarify the role of nurses in the health care team in the process of decision making.

Oral Presentation

Innovations in Practice 1

O-34

Developing Disposable Hair Washing Pad for Bedridden Patients Using Mixed Methods Research

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[Objectives] In Japan, diapers are often used to wash bedridden patients' hair by placing the diaper under the patient's head for ease of use and efficiency. However, it is an ethical problem. Developing better equipment to wash hair is necessary to comfort patients and reduce nurses' workload. Our industry-academia-clinical collaboration team developed a disposable absorbent pad particularly for washing patients' hair in bed. This study aimed to evaluate this pad developed for bedridden patients.

[Methods] The trial was conducted in five departments at a university hospital between May and August 2016. The post-trial cross-sectional survey for nurses contained demographic data, evaluation of the pad with rating score as quantitative data, free comments as qualitative data, and comparison with diaper used experience. As this study involved development of an equipment and thus to facilitate data triangulation, mixed methods were used.

[Ethics] This study was ethically approved and registered as a clinical trial.

[Results] 36 nurses participated (90% response rate). Most were in their 20s (69%). The overall evaluation was "good" (91%). Good water absorption, no water leakage, and easy usage were reported. In a comparison with diapers using experience, the majority preferred the developed pad (81%). Better structure, usage, and resolution of ethical issues were also confirmed in a comparison with diapers using experience.

[Discussions] The developed disposable hair washing pad is an efficient tool for nurses to wash bedridden patients' hair. As it is disposable, infections are also controlled well. Further manufacturing aspects need to be considered for mega production.

O-35

The Potential of Open Dialogue in Child Abuse Prevention in Japan: A Case Study of a Mother Who Lost Temporary Custody of Her Child

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[Objectives] Open Dialogue was introduced to Japan from Finland to provide better therapy for mental illness. This study aims to describe the experience of a mother whose child was taken by the authorities because of suspected child abuse. We describe this via multiple voices in her narrative and suggest what would help her parenting while referring to Open Dialogue.

[Methods] We conducted an 18-month study that included successive interviews with and participant observation of a mother. The analysis of her experiences, the relationship between her and her child, and the interactions among people related to her childcare was conducted using polyphony by Bakhtin.

[Ethics] We respected her freedom to choose whether to cooperate with us or not, considered her schedule and health condition, and protected her privacy. This research was approved by the first author's institutional research ethics committee.

[Results] The mother's narrative included voicing complaints about childcare difficulties; conflicting voices over temporary protection; voices of mediation, advocacy, explanation, and encouragement that resulted from reflecting on temporary protection; the mother's trial-and-error approach toward childcare; and voices of support.

[Discussions] Some concrete approaches were suggested: a) immediate access to listening to her feelings and struggles concerning childcare, b) direct feedback for the family from care workers about their impressions of the family, and c) listening to multiple voices in one's narrative. In the basic principles of Open Dialogue, the three points of "immediate help," "reflecting by multiple therapists," and "eliciting multiple viewpoints" are particularly important for child abuse prevention.

Oral Presentation**Innovations in Practice 2****O-36****Care in Hansen's Disease Sanatorium: Life Story Interview with a Nurse**

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[Background] I had interviews with some ex-patients several times since 2010 in the Hansen's disease sanatorium in an island of Sanyo district, and found that they had a feeling of "gratitude", not "anger" and "grudge" against "discrimination" and "prejudice", although they had been forced to be in segregation under the Leprosy Prevention Law (1907-1996). Years later, I understood their gratitude came from the relationship with their family and the medical staffs there. [Objectives] I practiced the life story interview with a nurse who had been working there from the 1960s to her retirement in the early 2000s. She is in her seventies now, and still has a good connection with some of ex-patients, attending their visit home and so on. In order to clarify the essence of nursing care, I asked her how she tried to care for them, and what she thought was important in caring for them. [Methods] Qualitative descriptive research (Life story interview) [Ethics] This research was supported by JSPS KAKENHI Grant No. 17K12077 and approved by the Ethics Committee, University of Toyama. [Results] The interviews revealed that she felt the need of "ingenuity for each individual's disability". Furthermore she had a consciousness she was brought up with ex-patients in "the island". [Conclusion] She recognized them as not only patients but also "living people" in the sanatorium. She nestled close to their feeling, listened to their talk, and always thinking what was necessary for each person to have more comfortable time.

O-37**Factors of burden among family caregivers of older adults with diabetes**OHuong Thi Thu Pham^{1,2}, Mayumi Kato¹, Miho Shogenji¹, Yoshimi Taniguchi¹¹*Gerontology and rehabilitation nursing department, Kanazawa University, Japan*²*Nursing Faculty, Haiphong University of Medicine and Pharmacy, Vietnam*

[Objectives] The study aims to examine the factors of burden among family caregivers of older adults with diabetes and develop of burden model to determine the correlation among burden, caregiving self-efficacy and diabetes caregiver activities support (DCAS) and socio-demographic factors.

[Methods] This a cross-sectional study was conducted through the analysis of data selected from questionnaires and from face to face interviews. Linear regression and path analyses were employed to explore the burden factors and indicate the correlation among these factors.

[Ethics] This study was approved by the Kanazawa University Medical Ethics committee, Japan (Approval No.832-1) dated on 15th of March 2018.

[Results] A total of 151 family caregivers from an aggregate of 66.9% adults and 33.1% older adults were found to be female (74.2%). It was found that 64.9% of the caregiver with low diabetes knowledge and 54.3 % of limitation of DCAS. The model variables presented five factors influencing the caregiving burden: caregiver's age, chronic diseases status, hours of investment, relationship to the patient, DCASS. Path analysis showed that the care burden was a link of the relationship among the caregiver's behavior toward diabetes, their perception of the burden, and self-efficacy and socio-demographics.

[Discussions] The results indicated that the care burden was influenced by the caregiver's behavior toward diabetes and its influence on self-efficacy. Therefore, it is advised that the caregiving burden should be controlled and that the behavior of caregivers toward diabetes should be ameliorated to improve self-efficacy.

Oral Presentation

Innovations in Practice 2

O-38

Nursing Experience of a Patient with Thyroid Cancer Receive Radioiodine Therapy after Surgery: A Case Report

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[Objectives] To share a caring experience of a patient with thyroid cancer and who has been treated with oral radioiodine therapy after total thyroidectomy.

[Methods] The patient was interviewed and collected data from September 28-30, 2018, and the Roy's adaptation model was used to guide a holistic assessment and the patient's health problems were determined, including nausea, potentially dangerous injuries, knowledge deficit, and anxiety.

[Ethics] Under the principle of autonomy, beneficence, non-maleficence and justice, I provided an individual care during patients' hospitalization.

[Results] By drinking lemonade or mouthing with lemon slices, and acupressure, the patients' nausea was reduced. Providing the patient a massage and chewing gum can promote salivary secretion and prevent salivary gland damage. Knowledge deficit was solved by giving health education pamphlet related to treatment, health education related to hospitalization and drug precautions face to face. I used the Hospital Anxiety Scale to assess the degree of anxiety. The strategies including breathing relaxation techniques, ear acupuncture massage, and the slow rhythm of music were effective in reducing patient's anxiety. Patient discharged from the hospital without a hitch through tailored care.

[Discussions] Anxiety problem cannot be completely solved in hospitalization, but it has effectively improved anxiety through continuous care and follow-up after discharge. It is recommended that patients can be referred to the case manager in the future when they are discharged from the hospital and provide information on the thyroid cancer association to enhance the effectiveness of care.

O-39

Factors affecting implementation of eHealth in the Philippines

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This study aims to determine the factors associated with the implementation of eHealth solutions in the Philippines.

Key informant interviews were conducted for the eHealth programs in selected health facilities nationwide. The results of the interviews were summarized and coded for thematic analysis. Ethics approval was provided by the National Ethics Committee. The classic model of strategic management of change by Pettigrew and Whipp (1991) provided a framework in the clustering of the themes into context, process, and content.

The contextual factors: (1) individual characteristics, resources, and capabilities, (2) need for eHealth, and (3) third-party adoption. Having ICT experience and commitment to organization facilitate adoption and implementation. Inhibiting factors include age, lack of ICT skills and readiness for change. An existing policy, management commitment, and support to change facilitate adoption; whereas regulatory issues are inhibitors. Stakeholder engagement including their financial and technical support also facilitates.

The process factors included six categories: (1) implementation, (2) bottom-up approach, (3) top-down approach, (4) resource management, (5) conflict management, and (6) people and organizational issues. Some management activities were found to motivate staff: providing implementation guidelines, technical support, monitoring, and field visits. Leadership engagement and a sense of shared project ownership and the availability of sufficient resources (ICT equipment and a stable internet connection and power supply) also influence adoption.

The third cluster of factors relates to: (1) eHealth content use as intended (project design), (2) the technological aspect (eHealth design), and (3) continuity of the program in terms of funding and support (sustainability).

Oral Presentation

Innovations in Practice 2

O-40

Rebuilding and guiding a care community: A grounded theory of end-of-life nursing care practice in long-term care settings

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[Objectives]

Studies on end-of-life nursing care in long-term care settings have only provided short-term and partial explanations of nurses' involvement in residents' dying processes. This study aimed to explore end-of-life nursing care practice in long-term care settings for older adults in Japan.

[Methods]

This study was conducted using grounded theory methodology. Semi-structured interviews were conducted from March 2015 to March 2019 with 22 nurses from eight long-term care settings. Analysis was performed using coding, constant comparison, and emerging categories.

[Ethics]

This study was approved by the ethics committee of the institution to which the first author belonged.

[Results]

The core category, "guiding the rebuilt care community to assist the dying resident" comprised five categories: "assessing the resident's stage in the dying process," "harmonizing care with the resident's stage in the dying process," "rebuilding a care community around the resident," "helping community members care for the resident during his/her final days," and "encouraging community members to give meaning to the resident's life and death." The participants described themselves as guides, like "traditional village elders" who helped the dying person to be cared for by a community.

[Discussions]

This study revealed the holistic process and structure of end-of-life nursing care practice in Japan. The nurses aimed to allow long-term care residents to die as social human beings. Such practice requires nursing expertise, health-care skills, and the leadership qualities to build and serve care communities. Nurses must also consider residents' uncertainties and vulnerabilities as well as cultural backgrounds.

Oral Presentation

Diversity and Health Management

O-41

Comparative study on the intercultural sensitivity of Japanese and Korean nursing students

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[Objectives]

The objective of this study was to clarify the characteristic of Japanese nursing students' intercultural sensitivity (IS) which is important when they provide culturally competent care for patients with diverse cultural background in the future as a nurse comparing with Korean nursing students' IS.

[Methods]

Participants were junior and senior nursing students at the university registered in Japan and Korea. The intercultural sensitivity scale (ISS) was administered to 379 students in both countries. Chi-square test and t-test were used to analyze differences in the mean scores for each country's students.

[Ethics]

The study was approved by a university institutional review board.

[Results]

The total number of questionnaires collected (ratio) 252 (66.5%) including Japan 144 (90.6%), Korea 108 (49.1%). With the total possible score of 120, the average ISS score of Japanese nursing students was 78.5 (\pm 8.7) and Korean was 81.5 (\pm 10.4). After analyzed the mean score in each subscale of ISS, significant difference was examined in "Interaction confidence" and "Interaction attentiveness" between two countries. The nursing students who had experienced interaction with non-Japanese/non-Korean patients in their clinical practice, and with better English speaking level showed the significantly higher ($p < .005$) ISS sore in both countries.

[Discussions]

In this study, the total score of ISS of Japanese nursing students was found to be lower than Korean nursing students, and significantly lower in two subcategories. To enhance the intercultural sensitivity of Japanese nursing students, opportunities to practice cross-cultural communication with non-Japanese patients for clinical and volunteer experiences might be useful.

O-42

A Mixed Methods Approach to Investigate Risk Perception of Developing Diabetes in Vietnamese Americans with Prediabetes

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Objectives: A QUAL+quant mixed method design was used to describe the perceived risk of developing T2DM among Vietnamese American (VnA) adults with prediabetes. VnA are a vulnerable population who are initially diagnosed with type 2 diabetes mellitus (T2DM) at an earlier mean age and have higher T2DM prevalence compared to Non-Hispanic Whites, despite having lower mean body mass index.

Methods: A non-random, multiple purposive sampling scheme was used to obtain a sample size of 10 VnA adults with prediabetes in the southwestern United States. Data collection techniques included interviews and questionnaires. Qualitative descriptive, quantitative descriptive, and data transformation techniques were used for data analyses.

Ethics: Ethical approval was received from the University of Arizona Institutional Review Board.

Results: The two risk perception domains were risk factors and disease severity. The main T2DM risk factors reported were eating habits (including the cultural influences on eating habits), sedentary lifestyle, and family history of T2DM. The mean composite *Risk Perception Survey for Developing Diabetes* score was 2.15 ($SD=0.31$) with mean scores of 3.30 and 3.10, respectively for the personal control and worry subscales. The meta-inference concluded that most VnA in this sample have a low perceived T2DM risk.

Discussions: VnA with prediabetes perceive they are at low risk for T2DM. Strategies to promote accurate risk perception for T2DM risk that is more congruent to actual risk may be needed to supplement T2DM prevention efforts. With high levels of perceived personal control and worry, this population that may be amenable to T2DM prevention interventions.

Oral Presentation

Diversity and Health Management

O-44

Relationship between Nurses' Personality and Attitude Toward Patients with Schizophrenia

○Junko Kurihara, Akiko Kondo

International Nursing Development, Tokyo Medical and Dental University, Japan

[Objectives]

The purpose of this study was to clarify the relationship between nurses' personality and attitude toward patients with schizophrenia.

[Methods]

This was a cross-sectional study. Participants were all nurses working in a university hospital in Tokyo. The self-administered questionnaire included nurses' demographics, study experience of stigmatization toward patients with mental illness, the number of friends or relatives with mental illness who live in the community, along with personality and attitude toward patients with schizophrenia. Personality was measured using the Ten Item Personality Inventory, based on Big Five Theory (Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience). Attitude toward patients with schizophrenia was measured using an 18-item scale. Logistic regression was used to analyze the relationship between personality and attitude toward patients with schizophrenia after adjusting for confounders.

[Ethics]

Ethical Committee of Tokyo Medical and Dental University approved this study.

[Results]

Among 868 nurses, 643 nurses replied (effective response rate 75%). The average level of nursing experience was 9.8 years. Twenty (2.3%) nurses were working in the psychiatric ward. Nurses who had higher Neuroticism showed a significantly negative attitude toward patients with schizophrenia ($OR=1.134$, 95% CI [1.023–1.256]). No other personality types showed a significant relationship with attitude toward schizophrenic patients.

[Discussions]

Individuals with neuroticism are more likely to feel angry, anxious and depressed, which can lead to stigma. Knowing their personality can help nurses minimize their stigma. Educational program that decreases stigma may need to include knowing their personality.

O-45

Primary Health Care Outcome Program -Consideration on organization creation from Nepal side-

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Objective

The purpose of this project was to establish a model of health care system in rural Nepal to protect people from increasing lifestyle-related diseases.

In this model, we present the issues related to creating organization based on volunteer spirit and health awareness in Nepalese society.

Methodology

This project was conducted from August 2017 to August 2019.

Participants were 100 households in the target area, selected using purposive sampling by 25 program leaders. Baseline and End-line surveys were conducted to measure the impact of the intervention activities using questionnaires and direct observations. This study was supported by JICA grassroots technical cooperation project and approved by the committees of Kaski district and the Social Welfare Council in Nepal.

Result

Villagers with adequate BMI increased by 5.4% after the intervention. Villagers with hypertension decreased drastically; stage1 from 36.5 to 7.7%, stage2 from 13.6 to 2.3% respectively. Villagers with normal blood pressure increased by 18.3%. 9 people who showed hypertension stage 1 or 2 were referred to hospitals and started medication.

The health workers and volunteers transferred the health intervention further on a regular basis.

Conclusion

Primary Health Care is the most important approach in rural Nepal where no medical doctor is available. There is a necessity of an organization consisting of representatives of villagers to sustain activities. Volunteer spirits of them are the driving force and the key for success of such a program. This project demonstrated a model of primary health care system by utilizing local volunteer spirit.

Poster

Interprofessional Collaborations

P1-1

Effects of a fall intervention program for older adults with dementia among care staff in geriatric facilities

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[Objectives] This study aimed to clarify the effects of a fall prevention intervention focused on the characteristics of falls of older adults with dementia, based on person-centered care. [Methods] This study was conducted between May 2016 and January 2017 with an intervention group that participated in a 3-month education training program and a control group that received usual care. [Ethics] Research ethics clearance was obtained from the Clinical Research Review Board of Hamamatsu University School of Medicine. [Results] There were 50 and 69 care staff participants in the intervention and control groups, respectively. Analysis of covariance found that the following had significant effects on the intervention: Nursing Quality Indicator for Preventing Falls (NQIPFD), deficiency of knowledge and experience with fall prevention care for older adults with dementia, dementia knowledge scale scores, self-efficacy regarding dementia care, and the level of awareness of fall prevention care for older adults with dementia. [Discussion] A fall intervention program to support older adults with dementia based on person-centered care significantly improved NQIPFD and other measured factors. Findings suggest that the program fostered positive effects among the care staff.

P1-2

Physicians' experiences in interprofessional collaboration during the pregnancy, childbirth, and postnatal period in women of very advanced maternal age

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[Objectives]

The objective was to explore perinatal physicians' experiences in interprofessional collaboration during the pregnancy, childbirth, and postnatal period in women aged 45 years old or older.

[Methods]

This inductive, qualitative study collected data from physicians who agreed to participate in a 2nd survey following the "Nationwide Survey on Interprofessional Collaboration/Cooperation in Perinatal Care for Women of Very Advanced Maternal Age" (1st survey). Semi-structured interviews were conducted in person or via Skype with 7 physicians who agreed to participate.

[Ethics]

This study received approval from the ethics committee at our affiliated institution. A written request was made and consent to participate obtained orally and in writing.

[Results]

The physicians' experiences were compiled into 5 themes: "interprofessional collaboration based on partnerships, reliance, and intercommunication", "interprofessional collaboration through an existing, successfully functioning perinatal team", "regional collaboration that is problematic following discharge from the childbirth facility", "a sense of responsibility toward optimum care tailored to women of a very advanced maternal age", and "confidence in providing medical care using interprofessional collaboration responsive to the diversity of women of a very advanced maternal age".

[Discussions]

Physicians undertaking perinatal care feel a responsibility to provide optimum care even to highly diverse women of a very advanced maternal age. They practice regular interprofessional collaboration based on partnerships within a perinatal medical team, but have encountered problems with regional collaboration following discharge from the childbirth facility. This suggests the necessity of collaboration between physicians at childbirth facilities, regional public health nurses/postnatal care facilities, and pediatricians.

Poster**Interprofessional Collaborations****P1-5****Investigation of the number and types of occupations and facilities that implement return to work programs**ODaisuke Sato^{1,3}, Hiroaki Ambo²¹*Psychiatric Day Hospital ESPOIR, Yamagata Sakuracho Hospital, Japan*²*Department of Nursing, Yamagata Prefectural University of Health Sciences, Japan*³*Doctoral Course, Graduate School of Yamagata Prefectural University of Health Sciences, Japan*

[Objectives] The purpose of this study was to investigate the implementation of return to work support programs at medical institutions as well as the number and types of occupations and facilities that conduct such programs.

[Methods] A questionnaire survey on implementation of return to work support programs in medical institutions was conducted. Target medical institutions were selected from the Japanese Association of Re-work for Depression database. The survey period was from December 20, 2016 to January 23, 2017.

[Ethics] This study was approved by the Research Ethics Board of Yamagata Prefectural University of Health Sciences.

[Results] The questionnaire was distributed to 163 facilities and responses were received from 89 (response rate, 54.6%). As for the types of facilities, psychiatric day hospitals operated by 45 clinics, 32 psychiatric hospitals, 6 general hospitals, and six others. Program capacity ranged from four to 70 patients, and the average capacity was 20.6 (standard deviation [SD]=14.7) patients. The kinds of occupations involved in the operation of return to work programs were psychiatrists (n=1.6 [SD=1.3]), nurses (n=1.9 [SD=1.2]), psychiatric social workers (n=1.9 [SD=1.3]), occupational therapists (n=1.7 [SD=1.0]) and clinical psychologists (n=2.3 [SD=1.8]).

[Discussions] The return to work program successfully placed many occupational therapists and clinical psychologists. Staff assignment is thought to reflect the characteristics of the return to work programs at these facilities. A multidisciplinary approach provides effective reinstatement support. An increase in the number of health care institutions that provide return to work support programs is desired.

P1-6**Achieving optimal coordination for livelihood support of patients with cancer treatment living in their communities by medical and nursing care workers in Japan: A qualitative study**OYasuyo Sugiura¹, Harue Arao¹, Miwa Aoki¹, Erina Mashiro¹, Kaori Ichihara¹, Yoshihisa Matsumoto²¹*Division of Health Sciences, Osaka University Graduate School of Medicine, Japan*²*National Cancer Center Hospital East, Japan*

[Objective] The aim of this study was to describe optimal coordination for livelihood support of community-living patients with cancer treatment by medical and nursing care workers in community-based integrated care systems (CICS).

[Methods] Participants were 88 medical and nursing care workers working in CICS. We conducted semi-structured interviews regarding optimal coordination for livelihood support of patients with cancer treatment living in CICS. We recorded interviews and performed content analysis using MAXQDA.

[Ethics] After receiving an explanation that participation in the study was voluntary, participants provided informed consent before the interview.

[Results] Participants comprised 24 doctors (27.2%), 17 nurses (20.5%), eight care managers (9.1%) and others. Contributors to optimal coordination for livelihood support patients with cancer treatment by medical and nursing care workers were grouped into five categories: medical and nursing care workers required "Use of social resources to support for patients' and families' livelihoods", "Physical support for patients by local medical and nursing care workers continuously from the start of cancer treatment", "Psychological support as necessary at the cancer treatment stage of patients"; to achieve these goals, participants required "Coordination systems among medical and nursing care workers for high quality in end-of-life care" and "Service of new social resources".

[Discussion] Achieving optimal coordination for livelihood support among local medical and nursing care workers is important for patients during cancer treatment, enabling safe and comfortable care. The current results suggest that continuous support from cancer treatment enables a smooth transition to end-of-life care, enabling relief of cancer therapy-related psychological pain.

Poster

Interprofessional Collaborations

P1-7

Coordination system requirements for in-home care of patients with terminal cancer, from the perspective of health care providers: a qualitative study

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²National Cancer Center Hospital East, Japan

[Objectives]The purpose of this study was to describe requirements for a coordination system between cancer hospitals and local medical and nursing care facilities for in-home care of patients with terminal cancer (PTCs), from the perspective of health care providers.

[Methods]We conducted semi-structured interviews regarding the requirements of a coordination system among 42 health care providers working in cancer hospitals. We transcribed verbatim records and analyzed the contents using the Krippendorff method.

[Ethics]We conducted this study after obtaining the consent of all participants.

[Results]Participants comprised 16 doctors, 11 nurses, and 15 other health care providers working at 9 hospitals in the H secondary care area, T Prefecture. Four "categories" were identified relating to a coordination system. First, it was necessary to make "decisions and adjustments regarding where PTCs would live via early implementation of advance care planning (ACP)" in end-of-life, as well as to establish "a system of coordination with local area medical providers from the start of treatment". "A coordinated system to share information in a timely manner according to the patient's situation" and to "support PTCs remaining at home while receiving medical care until their death" was deemed necessary.

[Discussions]We discovered that it was important to implement ACP early and to establish a coordination system of medical and nursing care in local area. We also found that health care providers thought that it needed a coordination system to share information in a timely manner and to help PTCs remain at home until they die.

P1-8

Medical coordination for palliative care during cancer treatment by community-based health and nursing care providers in Japan: a qualitative study

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²National Cancer Center Hospital East, Japan

[Objectives]This study aimed to describe how to coordinate for palliative care during cancer treatment by community-based health and nursing care providers.

[Methods]Participants comprised 88 health and nursing care providers. We conducted semi-structured interviews regarding medical coordination for palliative care during cancer treatment by community-based health and nursing care providers. The interview contents were coded and categorized, and MAXQDA was used for the analysis.

[Ethics]Participation in the study was voluntary. We explained the purpose of the research and obtained informed consent from each participant.

[Results]Participants comprised 24 doctors (27.2%), 17 nurses (20.5%), and other providers. Medical coordination during cancer treatment was based on "Integration of palliative care into treatment by cooperation with cancer care hospitals". To support this foundation, the identified needs were as follows: "role sharing of cancer care between the hospital and community", "mutual sharing of information with the hospital to support cancer treatment", and "construction of a system for timely cancer medical treatment of patients with physical changes". Participants reported that to support patients, it is important "for health and nursing care providers to treat side effect symptoms in cooperation with cancer physicians and to take over advance care planning (ACP) from the hospital".

[Discussions]Community-based health and nursing care providers in the community must manage side effects and take over ACP from cancer treatment hospitals, to provide proper palliative care during treatment in the community. Development of a system to provide palliative care in the community is needed, as well as improved coordination with cancer care hospitals.

Poster

Interprofessional Collaborations

P1-9

Challenges of support of public health and welfare administration staff to low-income families

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Background and purpose: It is clear that there are differences in academic ability, health, and abuse risk in poor families. Therefore, the purpose of this study is to identify the status quo as well as problems in the support from public health and welfare administrative staff toward poor families.

Methods: Qualitative descriptive design. Semi-structured interviews were conducted in a private room.

Ethics: The study was conducted with the approval of the affiliated university's ethics review committee.

Results: Semi-structured interviews were conducted with four public health and welfare officials in City A. The results revealed six categories including the following three categories; 1) the gap between administration staff and the target population leads to a lack of support; 2) it is necessary for the administration to have a system that can provide support continuously, even under compulsory education; and 3) children need to be educated making their own life choices.

Discussion: The system is able to support the needs of the target population. However, there are cases that do not lead to support because of differences between the awareness of the target person and those giving support, also due to legal restrictions. Therefore, each support staffer must ensure cooperation based on the participants' awareness of their roles. Moreover, to correct the various disparities that poverty brings, it is necessary to learn concretely how to live, and to be able to take appropriate action based on one's life choices.

P1-10

Perceptions regarding ease of collaboration with nurses from the viewpoint of non-nursing professionals in intensive care units in Japan

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²National College of Nursing, Japan

[Objectives]

By exploring the perceptions of non-nursing professionals working in intensive care units (ICUs) regarding collaboration efforts with nurses in Japan, we identified challenges for improving care coordination.

[Methods]

In this cross-sectional observational study, the Japanese version of the Relational Coordination Scale (J-RCS) was distributed to 1,030 non-nursing professionals from 73 ICUs in Japan from February to March 2016. The J-RCS is a seven-item, self-administered questionnaire evaluating participants' communication and colleague relationships in the workplace; we asked non-nursing professionals working with nurses in the ICU to evaluate the ease of collaborating with nurses. The Kruskal-Wallis test was used for analyses.

[Ethics]

The Faculty of Medicine of Tokyo Dental and Medical University Ethics Committee approved this study.

[Results]

Valid responses were collected from 424 non-nursing professionals from 53 ICUs. Participants' attributes were as follows: physicians (n=159, 37.5%), clinical engineers (n=123, 29.0%), physical therapists (n=107, 25.2%), and others (n=35, 8.3%). The mean J-RCS score was 23.3 (SD=5.7). Besides problem-solving communication, all item scores of clinical engineers and physical therapists were significantly lower than physician scores. A noticeable difference was detected for shared role perceptions.

[Discussions]

Participants other than physicians reported that their role in the workplace was not sufficiently recognized by ICU nurses and there was a lack of information-sharing. Nurses must recognize other professionals as team members. Information should be aggregated and disseminated in response to each professional's needs and in accordance with the competencies of the profession and team care policies.

Poster

Interprofessional Collaborations

P1-11

Attempt of Construction of Cooperative Education System with Other Facilities for Diabetic Patients

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[Objectives] To clarify conditions for constructing a cooperative education system with other facilities based on a survey for primary care doctor and diabetes certified nurse specialist (CN).

[Methods] We asked physicians belonging to S city Medical Association by mailing method about demands and conditions for accepting CNs as well as contents of education required to be provided. A questionnaire survey slip asking about possibility and conditions for visiting other facilities and contents of education to be provided was distributed to CNs and collected on a workshop in 2018.

[Ethics] The current survey was conducted upon obtaining an approval of Ethical Review Committee of Okayama Prefectural University.

[Results] Of 65 physicians belonging to S city Medical Association to whom survey slip was sent by mail, 19 physicians responded they treated diabetic patients. Eight of them (42%) desired cooperation with CN indicating dietary approach, method of exercise and hypoglycemia prevention in order as preferable contents of education. Conditions for visiting other facilities required by 14 CNs in Okayama prefecture participated in the workshop included permission of hospital, understanding by their department and recognition as a professional activity. Contents of education they can provide included insulin injection, hypoglycemia and diabetes in order.

[Discussions] In order to realize cooperative education in a region beyond the border of facilities, it is required to construct a small scale but diverse system in consideration of conditions of both primary care doctors and CNs.

P1-12

Characteristics of home visiting nurses in different types of multidisciplinary collaboration in the community

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²Institute of Gerontology, Academic Support Specialist, Japan

[Objectives]

To elucidate the characteristics of home visiting nurses' participation in different types of multidisciplinary collaboration situations between medical and nursing care professionals in the community.

[Methods]

Self-administered questionnaires were mailed to 1365 home visiting nursing service agencies nationwide in Japan in 2018. Survey items included 1) characteristics of the home visiting nurses, and 2) participation in six different collaboration situations (home medical care promoting councils, face-to-face meetings, multidisciplinary case conferences, community care conferences, inter-professional education, public awareness-raising events). six collaboration situations were first grouped into three types of collaboration, and then univariate analysis was conducted to compare the characteristics of the home visiting nurses among the three different types of collaboration using SPSS Statistics Ver. 25.

[Ethics]

The University of Tokyo approved this study.

[Results]

In total, 269 valid survey responses were analyzed and the characteristics of home visiting nurses' participation in each of the three types of collaboration had significantly higher scores ($P<0.05$) for: 1) "community", including average years of experience as a nurse; 2) "professionals", including average years of experience as a nurse and as an administrator, experience as a board member of a local home visiting nursing association, and number of terminal stage patients at the agency; and 3) "citizens", including experience as a board member of a local home visiting nursing association.

[Discussions]

Home visiting nurses and home visiting nursing service agencies with a larger number of patients and patient types were found to participate in different types of multidisciplinary collaboration situations.

Poster**Interprofessional Collaborations****P1-13****Relationship between regional multi-professional discussion and regional collaboration of visiting nursing stations about violence toward visiting nurses by clients**○Yukari Take¹, Ayumi Kono²¹*Homecare Nursing, Kansai Medical University, Japan*²*Homecare Nursing, Osaka University, Japan*

[Objectives] There were some reports of violence (physical, mental and sexual harassment) by clients against visiting nurses (VN). Since support for home-care workers involves various types of jobs in the area, it is important to discuss with the various types of jobs in the area when considering the prevention and response to outbreaks of violence. To examine relationship between regional multi-professional discussion and regional collaboration of visiting nursing stations (VNST) about violence by clients.

[Methods] We conducted an anonymous self-administered questionnaire mail survey for VNST administrator. The survey items were personal attributes, affiliation, experiences of discussing about by clients violence in Service Providers Meetings (SPM) and Multi-professional Collaboration Conference (MCC), evaluation of regional collaboration. Logistic regression analysis was performed using regional collaboration as an independent variable and experience of discussing violence as a dependent variable.

[Ethics] Approved by the Ethics Review Board of the Graduate School of Nursing, Osaka City University.

[Results] A total of 805 responses were collected (response rate 27.3%). There were about experience in discussing violence "Yes" 177 (22.0%), and "No" 612 (76.2%), in SPM, "Yes" 113 (14.0%) and "No" 467(58.0%) in MCC. SPM was associated with personal attributes and affiliation, and MCC was associated with personal attributes. Rather than the low score group, the high score group had significantly higher experiences with discussion about violence by clients.

[Discussions] Good regional collaboration is considered important as creating an environment to be able to discuss about violence by clients.

P1-14**Review for interprofessional collaboration for Enhanced Recovery After Surgery practice**

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[Objectives]

Enhanced Recovery After Surgery (ERAS), a multidisciplinary treatment, is considered to be effective for patients' recovery and is widely recognized in current surgical practices. The purpose of this review is to clarify the issues related to interprofessional collaborations in practice.

[Methods]

This search was conducted on electronic databases for collecting literatures published all these years. These databases include the following: PUBMED and CINAHL. The keywords are: "enhanced recovery after surgery," "interprofessional," and "team." Inclusion criteria for this review were: (1)Studies focused upon interprofessional collaboration in ERAS protocol (2)Publications in English all these years. The search found 133 articles without duplication in June 2019.

[Ethics]

A review study implies the reliability and fidelity of information contained in the original documents.

[Results]

The 12 articles published from 2015 to 2019 satisfied this inclusion criteria. Of these articles, two were quantitative studies; eight were qualitative; and the other two were mixed methods. Factors associated with interprofessional collaboration were included as both facilitators and barriers in practicing the ERAS protocol. Facilitators indicated leadership, team collaboration, multidisciplinary communication, and multidisciplinary training. Barriers were lack of coordination among different departments and of communication with the care team. These factors are also reported at small-scale community hospitals and safety net hospitals.

[Discussions]

It is important to improve communication and coordination among departments in order to practice ERAS protocol effectively. Especially in small community hospitals with limited human resources, it is necessary to devise how to distribute leaders and conduct training for effective interdisciplinary collaboration.

Poster

Interprofessional Collaborations

P1-15

Effectiveness of a one-year school support program for medical care at a special needs education school where teachers provide medical care to children

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[Objectives]

This study aimed to clarify the changes on perceptions and behaviors of nurses, teachers, and school nurse teachers at a special needs education school through a one-year school support program for medical care.

[Methods]

This study is an intervention study using action research techniques. The participants were six nurses, fourteen teachers, and three school nurse teachers. They were asked to complete questionnaires, and nurses conducted focus group semi-structured interviews on the medical care enforcement and support system in the school before and after the program. The school staff and the researcher developed and implemented the action plan for the program during every term. Data were statistically and descriptively analyzed.

[Ethics]

Approval was obtained from the institutional review board at A College.

[Results]

As compared to before the program, after the program, 100% of nurses, 64.3% of teachers, and 100% of school nurse teachers reported that the medical care situation in the school had improved. The participants could understand the role of each staff member in the school and reported that there was a decrease in difficult feelings regarding communication. Nurses recognized that opportunities to talk with teachers and the motivation for enforcement of medical care had increased. Teachers recognized their role in judging the health condition of children, and their sense of togetherness increased significantly.

[Discussions]

These results suggest that the support program promoted the understanding of each staff member's role in the care of children who require medical care as well as the collaboration between nurses and teachers.

P1-16

Effective support for practice research by researchers in the field of public health nursing

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²School of Nursing, Community Health Nursing, Tokyo Women's Medical University, Japan

[Objectives]

The purpose of this study was to examine the way of effective support for practice research by researchers.

[Methods] The subjects were three public health nurses who were supported by researchers in 2018. One month after the end of the research, we conducted a group focused interview using interview guide that consisted of the support process review, the research achievements etc. The interviews were recorded with the consent of the subjects, and analyzed qualitatively.

[Ethics] This study was approved by Ryotokuji University Ethics Committee. Written informed consent was obtained from subjects and facilities manager.

[Results] The research achievements stated by the subjects were "Utilizing for work was helpful in how to approach the residents effectively, how to transmit the research results to the relevant organizations, etc." "The expertise was improved by having been able to put PDCA cycle into practice over time, and to reconsider the work as a third-year deliverable." "Good points were being able to evaluate the previous work, and acquire the data analysis and presentation skills, as well as the latest information and approach."

[Discussions] Practice research has become the basis to further enhance the quality of practitioner's activity, and also led to the practitioner's growth. Researchers can provide effective support by giving advice from an academic point of view, such as analyzing data and sharing the latest research and policy trends. It is necessary to build a system that can improve the quality of practice, research and education in an integrated manner.

Poster

Innovations in Nursing Education

P1-17

The development and evaluation of a class program designed to improve the critical thinking capabilities of undergraduate nursing students

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²Tottori College of Nursing Graduate School, Japan

[Objectives] This study validated the effects of a class program designed to improve the clinical thinking capabilities of undergraduate nursing students. The program consisted of a total of five classes, each of which lasted for 90 minutes.

[Methods] The subjects were 83 second-year students in a nursing program who took Self-management Nursing Theory. The study period was from October 29, 2018, to December 3, 2018. Case study-based practical exercises were conducted using educational materials that showed the physiological recovery process of type 2 diabetes. Data were collected before and after the program using self-administered questionnaire surveys. The critical thinking measurement scale developed by Ishibashi et al., was used for evaluation indices. A corresponding t-test was used in the analysis.

[Ethics] This study was approved by the research ethics review committee of the university to which the researchers belongs.

[Results] Fifty-four students responded to the survey. The intervention program significantly increased students' overall scores in clinical thinking ($p < 0.05$). Among the six subscales, a significant increase was observed only in logical thinking ($p < 0.01$). No changes were observed for the other subscales.

[Discussions] The results of this study suggest that a class program using the educational materials improves students' critical thinking capabilities. It is necessary to refine the program by using various education materials and further validating the effects of the program.

P1-18

Creation of a Sheet for Self-Recording of Nursing Technology Attainment Level Using a WEB Entry System

○Seita Kuzuhara, Kumiko Furukawa, Masashi Tokoshima, Masuyo Morimoto, Sanae Muraoka,

Miyuki Miyazaki, Kiyako Takai

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[Objectives] At institutions for nursing education, the "Attainment Level at Graduation of Technical Items of Nursing Education" proposed by the Ministry of Health, Labour and Welfare, has been utilized as an evaluation indicator. However summarizing and analyzing results manually requires significant effort. Therefore, we have created an attainment sheet using a WEB entry system. [Methods] Using the questionnaire function loaded on the portal site system, the students click the option tag for their own level of attainment in response to each respective item, and this creates an input form that can be used for the response. [Results] Only clicking the tag could be a graph. Additionally, it was possible to download a summary graph in PDF format and the response data in CSV format. [Discussions] Due to using the WEB input system, the effort required for results summary and graphing has been eliminated.

Poster

Innovations in Nursing Education

P1-19

Nursing students' competency to develop public policies using evaluation indices of the Ministry of Health, Labour and Welfare in Japan

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[Objectives] Public health nurses are experts in public health and nursing science, who identify health issues in the community and engage in policymaking that have a direct impact on people's health. This study investigated nursing students' competency to develop public policies, in order to obtain suggestions for basic public health nursing education.

[Methods] Subjects were 26 fourth-year students studying public health nursing in the faculty of nursing of a university. Of the evaluation indices of the Ministry of Health, Labour and Welfare, 7 items related to public policies development were used. A self-administered questionnaire survey was conducted to measure the attainment level (recovery rate: 100%).

[Ethics] This study was conducted with the approval of the ethics committee of the university.

[Results] Attainment levels ranged between 50.0 and 84.6% (mean, median: 65.4%). The item which showed the highest level of attainment was "understanding of the underlying laws". Items with approximately 60-70% levels of attainment were "planning of public policies", "explanation of the importance of public policies development", and "information collection necessary for public policies development". Items that showed an approximately 50% level of attainment were "documentaion of reasons" and "discussion and negotiation to develop public policies".

[Discussions] With regard to competency to develop public policies, nursing students showed a high level of understanding of the underlying laws but low-level abilities to visualize reasons and discuss / negotiate to develop public policies. Faculty members need to recognize and keep doing support individual competencies of nursing students.

P1-20

Evaluation of the planed nursing training for post-operative patients in nursing

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[Objectives]

To examine the effects of the planned nursing training and to improve the nursing training that is easier to image post-operative patients in nursing education.

[Methods]

The participants were third-year nursing students at the university in Japan. We conducted the planned nursing training for post-operative patients. The students practiced the post-operative care based on their learning, and then the lecturer demonstrated the post-operative care. The students discussed how and why there were the differences in the post-operative care methods between the students and the lecturer. This discussion was the distinctive part of the planned nursing training. After the training, the self-evaluation lists of the students who agreed to this study were collected. The data was the written part in the self-evaluation lists and we focused on what the students learned through the the planned nursing training. We analyzed the data qualitatively.

[Ethics]

This study was approved by the research ethics at the institution.

[Results]

The qualitative data analysis led to 7 sub-categories and 3 categories such as "Recognizing lack of their imaginations", "Recognizing lack of their learning", "Suggestion discovered from the demonstration"

[Discussions]

The differences in the post-operative care methods between the students and the lecturer remarkably impacted on the students. The impacts reminded students that their imaginations and lerning were lacking. Moreover, we consider that it significantly influenced the acquisition of correct knowledge and independent learning behavior in the future.

Poster

Innovations in Nursing Education

P1-21

What do nursing students at college know about Alzheimer's disease? Investigation in China and in Japan

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[Objectives] The purpose of this study was to assess knowledge of nursing students at college in China and in Japan about Alzheimer's disease. [Methods] Participants were recruited from all the juniors specializing nursing at three colleges in China (n=600) and those in Japan (n=224) and 279 in China and 189 in Japan participated. Knowledge about Alzheimer's disease was assessed using each language version of the Alzheimer's Disease Knowledge Scale (ADKS). Psychometric properties of both language versions have been confirmed. A higher score means the student has better knowledge. Unpaired t-tests and a chi-square test were used. [Ethics] The study was approved by the Ethics Committee of Sanyo Gakuen University. [Results] The mean age (years) of the participants was 22.8 in China and 20.6 in Japan ($p<0.001$). In China, 12.2% were males, while in Japan, 6.4% were males ($p=0.056$). The mean (standard deviation) total ADKS score in China was 18.7 (3.2), while that in Japan was 20.7 (2.5) ($p<0.001$). The scores of Risk factors, Course, and Treatment and management were significantly ($p<0.001$) higher in China than in Japan, while the scores of Assessment and diagnosis, Symptoms, and Caregiving were significantly ($p<0.004$) lower in China than in Japan. [Discussions] These may be because in China there were few teachers with nurse qualification and medical doctors often took charge of teaching. They can be due to the contents of the nurse state examination in China.

P1-22

Effectiveness and Issues of adult nursing practice methods to promote students' thinking: Teaching patients how to practice on self-monitoring of blood glucose (SMBG)

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[Title]

Effectiveness and Issues of adult nursing practice methods of promote students' thinking: The teaching for the patients who needs self-monitoring of blood glucose (SMBG).

[Objectives]

The purpose of this study is to report the effectiveness and suggestions of adult nursing practice to promote students' thinking.

[Methods]

We examined the literature regarding the effectiveness and suggestions of adult nursing practice for the patients who needs SMBG with type two diabetes.

This exercise has the following features. First, students will conduct basic SMBG instruction. Next, students give instruction to simulated patients who need high skills and knowledge to give proper instruction. In addition, in order to promote students' thinking, group work will be established during the exercise, and self-evaluation will be conducted after the exercise.

[Ethics]

The researchers examined the ethical issues in this research report, and conducted an accurate understanding of relevant literature.

[Result]

The review of the literature showed the effectiveness of the simulated patient setting in this exercise and we found out there are three suggestions.

[Discussions]

The setting of simulated patient guidance requires high knowledge and skills we need to consider the effective method of nursing practice to promote students' thinking. Moreover, we found out the following three suggestions; 1) to set of effective group work method, 2) to create of self-assessment items for students to grasp the learning situation correctly by themselves, 3) to exam of tricks for forming voluntary learning behavior.

Poster

Innovations in Nursing Education

P1-23

Maintenance of cardiopulmonary resuscitation skills in nursing students

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[Objectives] Acquiring the cardiopulmonary resuscitation (CPR) skills is important in the education of nursing students. Nowadays, the use of a feedback system using quality cardiopulmonary resuscitation CPR (QCPR) is spreading to worldwide. However, there have been no studies whether nursing students who have been trained by QCPR can maintain their skills. Therefore, we assessed the temporal change in CPR skills in nursing students.

[Methods] Thirty-six nursing students were enrolled in this study. A Little Anne® QCPR simulation manikin was used for the CPR training. The performance data were recorded using the QCPR Instructor application. At first, the nursing students were paired. They took turns alternately performing chest compressions and providing positive pressure ventilations. One month after training, they underwent a 2-minutes skill examination. They did not perform the practice during the period between training and skill examination. The evaluation points of chest compression were rate, depth, and tempo of compression. To examine the skills of positive pressure ventilation, the frequency, volume, and rate of hyperventilation were checked. The t-test was used for statistical analysis and $P < 0.05$ was considered significant.

[Ethics] This presentation was approved by all nursing students.

[Discussions] The frequencies of chest compressions were 188.8 ± 12.1 at training and 176.4 ± 13.1 at skill examination ($P < 0.05$). The tempo of compression were 118.9 ± 5.2 at training and 110.2 ± 8.4 at skill examination ($P < 0.05$). However, these data were within the recommended value range. There was no significant difference in the other data including final scores. Nursing students maintained CPR skills for one month. We will examine skills maintenance over longer periods.

P1-24

Relationship between Key Competencies and Personal Characteristics of Nursing Managers in Japan

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[Objectives]

To provide safe and high quality care, improving the management ability of nursing managers is an urgent issue; however, no relationship has been found between nursing managers' personal characteristics and improvements in competency. This study examined the relationship between the key competencies and personal characteristics of nurse managers in Japan.

[Methods]

In this cross-sectional study, we investigated 102 facilities and 4410 managers. We evaluated five factors and 30 items of the Key Competence of Nurse Manager Scale and 10 items on personal characteristics. We analyzed five key competencies as dependent variables and personal characteristics as independent variables using linear multiple regression analysis.

[Ethics]

A questionnaire was administered to nurse managers who consented to participate in the study. This study was conducted with the approval of the institutional ethics committee.

[Results]

The Situation Awareness of key competencies was related to educational background and years of nursing management experience; Meta-Recognition was related to age and educational background; Self-Control was related to age, educational background, and existence of children; Career Support was related to educational background, years of nursing management experience, and position (middle manager or lower manager); and Decision-Making was related to age, educational background, and Certified Nurse Administrator training level.

[Discussions]

It is necessary to provide systematic and academic education and facilitate increased management experience to improve the competence of nursing managers.

Poster

Innovations in Nursing Education

P1-25

Relationship between nursing student's ethical competence and learning support provided in nursing practice

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[Objectives]

This study aimed to clarify the relationship between nursing students' ethical competence and learning support, to facilitate improvement of their ethical competence.

[Methods]

We surveyed 4930 final-year nursing students from 109 schools, from February to March 2019. The survey contained 72 items on ethical competence, learning support in nursing practice (teachers, clinical lecturers, students), and personal attributes. For analysis, five aspects of ethical competence; 1)provide safety care , 2) respect the patient's self-determination, 3)protection of personal information, 4)best care, and 5)respect for human rights, were dependent variables and learning support was the independent variable. We obtained standard regression coefficients.

[Ethics]

This study was approved by an institutional ethics committee.

[Results]

The response rate was 30.5% (1505 responses). The teacher-provided [an opportunity to think about the ethical issues experienced before practice] was related to ethical competence 1), 2), 3), and 4) ($\beta = .08$, $\beta = .10$, $\beta = .11$, $\beta = .09$, $p < .05$). Furthermore, [providing the opportunity to attend conferences taking place in the hospital] was related to ethical competence 3),5) ($\beta = .07$, $\beta = .11$, $p < .05$). The clinical lecturers-provided [prompt responses according to the support requested by the student] were related to ethical competence 2) ($\beta = .10$, $p < .05$).

[Discussions]

As a specific learning support, teachers should provide a place for students to reflect on ethical issues as well as appropriate advice. On the other hand, clinical lecturers should solve the students' ethical problems in a timely manner according to the situation.

P1-26

Changes of Interests, Knowledge, and Self-efficacy of Nurses at Accident and Emergency Department by small lecture sessions

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[Objectives]

The aim of the current study was to clarify whether sessions of small lecture focused on emergency nursing and nosocomial triage towards nurses at Accident and Emergency (A&E) department could improve their interests, knowledge, and self-efficacy in the A&E department.

[Methods]

The small study sessions focused on emergency nursing and nosocomial triage respectively were performed 3 times for each 15 minutes towards 24 nurses working at A&E department. The effect of these sessions on their interest, knowledge, and self-efficacy was evaluated by results of paper test given before and after the sessions.

[Ethics]

This study was performed under an agreement of Ethics committee of Heisei Memorial Hospital. Informed consent written in a paper was taken from all the nurses enrolled in this study.

[Results]

The mean experiences of the nurses at the A&E department was 8 years. Two-thirds of nurses have not experienced mini-lectures of neither emergency nursing nor nosocomial triage. Each result about interest and knowledge in the questionnaires was improved significantly after lecture sessions, however, parameters about self-efficacy were not improved after the lectures.

[Discussions]

Our results indicate that mini-lecture sessions would be effective in increasing interest and knowledge in nurses, however, in case of self-efficacy, other approaches might be required in addition with the current trials.

Poster

Innovations in Nursing Education

P1-27

Evaluation of an Educational Program Encouraging Nursing Communication Skills in New Students

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[Objectives]The aim of this study was to identify the effects of a “program encouraging nursing communication skills,” which incorporated simulated patient (SP) participatory learning and Nursing Skills Japan® (e-learning), in new students.

[Methods]One hundred and three first-year nursing students were asked to self-evaluate before and after the program using the “79-item Communication Techniques for Nursing Interviews in Undergraduate Nursing Studies (Ueda et al., 2012).” A “can do” response was scored as one point for each item. Scores were compared before and after the course using t-testing (ethical review approval No. 30-17).

[Results]Mean scores increased significantly, from 39.3 points ($SD \pm 15.2$) before to 61.4 points ($SD \pm 10.4$) after the program ($p < 0.001$). Before the program, there were 47 items which less than 60% of students “could do”; this fell to 20 after the program. Similarly, before the course, there were 32 items which 60% or more of students “could do”; this increased to 59 after the course.

[Discussions]That self-evaluations improved after the course is thought to reflect the effect of review and reinforcement from clinical practice after the one-time SP participatory seminar, mutual vicarious experiences through in-class exercises and clinical practice, and e-learning performed on their own. The 20 items which students did not acquire can be considered skills which can be learned sequentially as their schooling progresses. The program encouraging nursing communication skills in new students improved self-evaluation as the course progressed and was effective for the acquisition of fundamental communication techniques.

P1-28

Nursing management competence: A comparison study

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[Objectives]

This study aimed to examine effective human development methods for improving nursing managers' management competence by comparing such competencies of middle and lower managers.

[Methods]

Data were collected through a questionnaire survey from October–December 2017, targeting 4410 nursing managers (middle and lower managers working at 42 special function hospitals and 60 regional medical support hospitals. Survey items covered nursing management competence (Coping Behaviors, Human Relationships, Goal Setting, Information Gathering, Situational Awareness, Meta-Recognition, Self-Control, Career Support, and Decision-Making), internal factors (e.g., problem awareness and reflection), external factors (e.g., support from superiors and colleagues), personal attributes, and workplace characteristics. The competence of middle and lower managers was compared using a t-test.

[Ethics]

A questionnaire was posted to nurse managers who agreed to participate in study. This study was approved by an institutional ethics committee.

[Results]

The recovery rate was 56.2% (1025 middle managers and 1003 lower managers). The competence of middle managers was significantly higher than that of lower managers in all nine competencies. Particular differences were found in the areas of Goal-Setting (middle manager $M=3.3 \pm 0.6$, lower manager $M=3.0 \pm 0.6$, $p < 0.01$), Information-Gathering ($M=3.3 \pm 0.7$, $M=3.0 \pm 0.8$, $p < 0.01$), Career Support ($M=18.0 \pm 2.7$, $M=15.8 \pm 2.8$, $p < 0.01$), and Decision-Making ($M=17.3 \pm 2.7$, $M=16.4 \pm 2.5$, $p < 0.01$).

[Discussions]

The difference in nursing management competence may be due to differences in roles depending on the post. Middle managers think that they are more capable than lower managers because part of their role is to bear the responsibility of their subordinates.

Poster

Innovations in Nursing Education

P1-29

Subjective evaluation by nursing teachers on the effects of using a rubric on their delivery of practical training

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[Objectives]

The purpose of this study was to clarify the subjective evaluation of nursing teachers of the effects on practical training of using a rubric.

[Methods]

The subjects were nursing teachers who conducted educational practice by using a rubric in practical training. A survey was performed using a self-completed anonymous questionnaire. The questionnaire presented 16 items on the effects on practical training of using a rubric, and asked for subjects' selections.

[Ethics]

The study was conducted after obtaining approval from the Ethical Review Board of the affiliated institution.

[Results]

Responses were obtained from 63 subjects (response rate 17.0%). The average length of teaching experience was 11 years. The most frequently selected effect of the rubric felt by nursing teachers was the "clarification of the content of instruction", chosen by 55 subjects (91.7%). As a result of a cluster analysis of 16 items, items such as "confidence in teaching and evaluation" and "sharing of goals" were extracted.

[Discussions]

Among the effects related to practical training using an educational rubric, "clarification of the content of instruction" was the item most frequently selected by subjects. This item was also associated with the practice of education and instruction based on "sharing of goals" with students, as extracted by cluster analysis. These intentional educational practices led to nursing teachers' "confidence in teaching and evaluation"; therefore, it was suggested that a rubric is effective in improving teachers' ability to educate.

P1-30

Educational needs of nurses and nursing students in preventing patient and family violence: text mining of free descriptions of a web survey

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[Objectives] This study aimed to determine the educational interventions for preventing patient and family violence that are needed by nurses and nursing students through text mining of free descriptions of a web survey

[Methods] A cross-sectional web survey was conducted in November 2018. Participants included 309 nurses and 103 undergraduate nursing students. Free descriptions of 275 nurses and 92 nursing students on their perceptions toward education for preventing patient and family violence were analyzed using text mining analysis with Text Mining Studio ver. 6.2. Expressions with high index (calculated using complementary similarity measure) were extracted.

[Ethics] This study was approved by the institutional review board of the first author's institution. Participants were assured of the voluntary nature of their participation and the confidentiality of their information.

[Results] Of all the participants, 86.1% of nurses and 7.8% of nursing students had experienced physical and/or psychological violence, and 39.2% of nurses and 35.0% of nursing students had received violence prevention education. Top-ranking expressions included "aware of the need," "need for education," "protect myself," and "communicating with the patient or family." Though positive expressions were the majority, some nurses, especially those who had experienced physical violence, used negative expressions in "handling violence."

[Discussions] Educational intervention is necessary not only to prevent violence but also to meet the needs of nurses and nursing students. It is also necessary to provide more individualized support to nurses with negative perceptions regarding violence prevention.

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Poster

Innovations in Nursing Education

P1-31

Essential radiation-disaster-nursing-related knowledge and experience for nursing teachers

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[Objectives] This study aimed to clarify the radiation-disaster-nursing-related knowledge and experience that is required by nursing teachers, using the experiences of radiation-disaster-nursing practitioners as source material.

[Methods] Using an interview guide, we conducted semi-structured interviews with 14 practitioners of radiation-disaster medicine and nursing regarding the radiation-disaster-related knowledge and experience necessary for nursing teachers. We analyzed the collected data through text-mining analysis using KH Coder. We then analyzed the relationships between extracted words and searched for text-part units and features of words/word linkages.

[Ethics] This study was approved by The Committee.

[Results] Through co-occurrence network analysis using extracted words that appeared at least 13 times in the interviews, the following five categories of knowledge and experience were identified as necessary for nursing teachers: (1) Basic knowledge of radiation, (2) Knowledge of how to care for displaced people, (3) Training in radiation-related medical care, (4) Training for nuclear-power-plant accidents, (5) Knowledge of the nursing demands during radiation-related disasters.

[Discussions] In Japan, which experiences frequent natural disasters, disaster nursing education, including preparation for radiation-related disasters, is being reviewed. A lack of knowledge regarding radiation-related disasters has been highlighted as a problem in disaster nursing education. Although radiation-related disasters are rare, it is important for nurses in Japan, which has nuclear power plants and experiences frequent radiation-related disasters, to acquire sufficient knowledge of radiation in order to improve their disaster preparedness. To this end, nursing teachers must have appropriate knowledge of radiation, and must undergo radiation-protection drills and receive continuous training in this regard.

P1-32

Development of a Process Model for the Achievement and Succession of Professional Identity among Proficient Nurses

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[Objectives] The process of achieving professional identity by an individual has been previously reported. However, professional identity cannot be spontaneously achieved by merely one person; it develops under the influence of an intimate relationship with colleagues and the manager at workplace. Thus, the present study aimed to develop a process model for the achievement and succession of the professional identities of nurses from the viewpoint of "generativity" by E. H. Erikson.

[Methods] Semi-structured interviews were conducted with 24 proficient nurses working at hospitals in Japan. The transcribed data were interpreted and analyzed in accordance with the Modified Grounded Theory Approach.

[Ethics] Ethical approval was obtained from the ethics committee of the university where the researcher belongs.

[Results] Seven categories, as well as a storyline and a process chart, were derived from the analysis. In the early career stage, nurses had "formed self-esteem for self-proficiency" from two experiences; namely, "assigning a positive meaning to the training received" and "continuous self-improvement." Furthermore, nurses had "formed preparedness as a senior" through "overcoming specific conflicts as a trainer"; these categories are influenced by prior experiences. After the experience represented in these categories, the categories "repayment of obligations that transcend generations" and "conflicts associated with the repayment of obligations that transcend generations" followed.

[Discussions] Therefore, senior nurses influence the next generation to successfully develop their professional identity, with spontaneous motives in "obligations that transcend generations." Meanwhile, further research is necessary to develop process models for expert nurses in the mid-to-late career stages.

Poster**Innovations in Nursing Education****P1-33****Development of Nursing Clinical Competency Acquisition Process Using Interpretive Structural Modeling**○Hiroyuki Nakamura¹, Daisuke Kushida², Mika Fukada³¹*Graduate School of Sustainability Science, Tottori University, Japan*²*Graduate School of Engineering, Tottori University, Japan*³*Faculty of Medicine, School of Health Science, Department of Fundamental Nursing, Tottori University, Japan*

[Objectives] At clinical sites, education of nursing clinical competency is conducted using the clinical ladder proposed by the Japanese Nursing Association. Although the clinical ladder classifies nursing clinical competency, it does not specify the acquisition order of clinical competency. To develop a training method for clinical competency according to the nurse's years of experience, this study sought to quantify the content of nursing clinical competency and its acquisition timing.

[Methods] A self-assessment questionnaire was administered to 363 nurses working at Tottori University Hospital. The questionnaire was classified into "frequency of implementation" and "degree of achievement." These were further divided into "practical skills on nursing basics," "nursing care development skills," and "skills in nursing practice," there were 64 questions in total. Interrelation of each item was graphed using Interpretive Structural Modeling (ISM) to derive the nursing clinical competency acquisition process.

[Ethics] This study was conducted with approval from the Ethics Review Board of the Faculty of Medicine at Tottori University (No. 17A055).

[Results] Regarding "frequency of implementation," continuous learning ability was acquired before other abilities, and finally supportive interpersonal ability was acquired. Concerning "degree of achievement," ethical practical ability was acquired before other abilities, and finally specialization ability was acquired.

[Discussions] More than 60% of the respondents had less than 10 years of experience. Young nurses are usually instructed on goal setting; so they are more aware of continuing learning ability. Moreover, younger nurses tend to have lower self-assessment; so their awareness of specialization ability is delayed.

P1-34**Awareness of assisted reproductive technology in Japanese nursing students**○Yasuko Kishida¹, Masako Yamaguchi², Ikuharu Morioka², Kyoko Kubo³¹*Faculty of Nursing, Kyoritsu Women's University, Japan*²*School of Health and Nursing Science, Wakayama Medical University, Japan*³*Faculty of higashigaoka.tachikawa nursing, Tokyo Health Care University, Japan*

[Objectives] This study aimed to clarify the awareness of assisted reproductive technology in Japanese nursing students, and to obtain suggestions for nursing education on the ART causing ethical issues.

[Methods] Participants were nursing students in third and fourth grade at four universities in Japan. A survey was conducted using an anonymous, self-administered questionnaire. The question items were the experience of learning the ART and the awareness about ART.

[Ethics] This study was approved by the ethical committee of the affiliated organization.

[Results] Total of 659 questionnaire sheets were distributed, and 454 returned (valid response rate: 69%). The percentage of nursing students who would accept the ART involving third parties from the nurses' view was 60% and more. Forty-one percent of the nursing students had never learned nursing care for patients who used ART involving third parties. The percentage of those who answered "I do not know" about their future own use of ART involving third parties were 52%. More than 95% of them believed that the ART involving third parties, and nursing education on it would become more necessary than the current situation.

[Discussions] Japanese nursing students felt the necessity of the ART involving third parties, but many of them had no experience of learning the nursing related to it. Education that a nurse respects the position of the couples is necessary regardless of whether he/she will use the ART himself/herself or not.

P1-35

Study on factors comprising the mentoring function of nursing college faculty members required by new nurse graduates

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[Purpose]

To determine possible factors comprising the mentoring function of nursing college faculty members.

[Method]

A 40-item questionnaire was developed after it was pre-tested in 270 nursing college students. The survey was conducted in 255 nurses who recently graduated from nursing college/university between March and April, 2016. In analysis, the maximum-likelihood method and promax rotation were used for factor analysis.

[Ethical consideration]

The study was approved by the Ethics Committee of Fukuoka Prefectural University and the target institution before the conduct.

[Results]

Eight items with a factor loading less than 0.5 were deleted. Out of the remaining 32 items five factors were extracted: the first factor was listening and approval function; the second was learning support function; the third was career support function; the fourth was guide function; and the fifth was private life counseling function. Cronbach's α coefficient was 0.971, 0.958, 0.978, 0.918, and 0.944 from the first to fifth factors, respectively. The α coefficient for all items was 0.979.

[Discussion]

The internal consistency of these factors tested was highly reliable with Cronbach's α coefficients of 0.918 to 0.979. In particular, the two extracted factors of career support and guidance functions suggest faculty mentors are expected to become involved in counseling about career change or further schooling and to give advice to solve problems

P1-36

Determine the reliability and validity of a clinical decision-making scale for nurses

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[Objectives]

To determine the reliability and validity of a clinical judgment scale for nurses.

[Methods]

Nurses were interviewed regarding clinical judgment based on a clinical judgment model ¹⁾. A 44-item clinical judgment scale was created and mailed to nurses at 28 hospitals. Questions were evaluated, and the factor structure was determined using exploratory factor analysis. Construct validity was evaluated using confirmatory factor analysis, and the goodness of fit of the model was determined.

[Ethics]

This study was approved by the epidemiological research ethics review committee of Hiroshima University.

[Results]

In total, 1,444 questionnaires were distributed, 633 responses were received (response rate: 44%). Six hundred and ten complete responses were analyzed. Items with a ceiling effect or a correlation coefficient of 0.7 or less were eliminated, leaving 23 items. Factor analysis using the maximum likelihood method and promax rotation identified 2 factors: "the ability to make inferences" (13 items) and "the ability to initially grasp conditions via observation" (10 items). Cronbach's α was 0.943 for the first factor, 0.924 for the second, and 0.965 overall. Confirmatory factor analysis indicated a good fit, with a GFI of 0.874, an AGFI of 0.849, a CFI of 0.933, and an RMSEA of 0.07.

[Discussions]

Goodness-of-fit indices were acceptable, and values for Cronbach's α were adequate. Thus, a clinical judgment scale consisting of 23 items representing 2 factors has been created.

Reference 1) Tanner, Christine (2006): Thinking like a nurse: A research-based model of clinical judgment in nursing, Journal of Nursing Education,45(6),204 - 211.

Poster**Innovations in Nursing Education****P1-37****Training content and issues required of end-of-life care for nurses at group homes in JAPAN**

○Naomi Yamasaki¹, Yumiko Momose², Nobuko Amaki², Keiko Tusboi³, Masayo Shimaoka¹, Hisashi Uenaka¹, Sachiko Ono⁴

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[Objectives]

In Japan, there are presently 11,000 group homes (GH). Approximately 50 % of which provide end-of-life (EOL) care. Furthermore, the rate of EOL care has increased since 2018 by stationing additional nurses at GH. It has been pointed out that one reason underlying this is to improve the quality of EOL care. The purpose of the present study is to elucidate the content and related issues of EOL care training perceived by nurses working in GH.

[Method]

A questionnaire was distributed to 1910 GHs nationwide, and responses were obtained from 325 nurses (17.0%). We conducted a qualitative content analysis of free descriptions regarding ① the implementation of advanced care planning (ACP), ② the necessary training content, and ③ necessary examination tasks during EOL care by nurses at GH.

[Ethics]

The present study was conducted with the approval of the ethical review board of Kio University. Completion and returning of the questionnaire implied consent.

[Result]

ACP was conducted at 147 GH (45.1%). Training content was found to be highly necessary for family support with 182 cases (55.8%), and for multidisciplinary collaboration with 179 cases (54.9%). As future issues for consideration, we extracted the following categories: the approach to death conferences, improvement of care staff skills, and the establishment of a multidisciplinary collaboration system.

[Discussion]

It was suggested that, in future, training sessions should be planned to provide information regarding the approach to death conferences, and multidisciplinary collaboration.

P1-38**Study for the development of educational program for nurses to use the Instrument of the Diabetes Self-Care Agency (IDSCA)**

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[Objectives] In order to make it possible for nurses to use the Instrument of the Diabetes Self-Care Agency (IDSCA) developed by researchers, we implemented an educational program with questionnaires to clarify the responses of program participants.

[Methods] The program included an overview of the self-care agency, case studies of people with diabetes, and ways to use IDSCA. The contents of the survey questionnaire are demographic data of age and gender and responses after the educational program. Those surveyed obtained consent for research cooperation and participated in the educational program.

[Ethics] This study was approved by the ethics review board of Osaka University.

[Results] The educational program was conducted twice, and a total of 63 nurses answered the questionnaire. Participants averaged 43.4 years old. They were asked the question items on a 0 to 5 Likert scale after the program. The average score for the answer to "I was interested in the point of view of elements of the self-care agency" was 4.6. The average score for the answer to "the point of view of the element of self-care ability was difficult" was 3.1. The average score for the answer to "the point of view of the element also led to the clarification of the aid method" was 4.5.

[Discussions] Although the responses to the educational program were generally good, we think it is necessary to have a program that will help others to understand more about how to use it.

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Poster

Innovations in Nursing Education

How Students Determine Patient's Strengths in Clinical Educational Intervention

P1-39

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[Objectives]

The purpose of this study is to clarify contents of assessment that nursing students catch as the strengths of patients when students perform educational intervention in a nursing process for chronic adult patients.

[Methods & Ethics]

The collected data were contents of assessment in a nursing process, based on the reports submitted by 25 students who completed an adult nursing practice. Then, strengths-related descriptions were extracted from their reports, and categorized based on similarity in meaning. Research collaborator explained the ethical considerations in writing and verbally after the evaluation of clinical practice, and those who resubmitted clinical practice records were deemed to have given their consent.

[Results]

In total, 4 categories were extracted. Categories before invasive procedures were: The strengths of the patient were "getting a ready for health care", "having a positive attitude and words for treatment and life improvement", "accepted and prosecuted a treatment" and "continuing necessary self-management for treatment"

[Discussions]

Students catch as strengths from the patient's self-control and willingness for treatment prehospital in addition to patient's state in the hospital. And students understand the patients by strengths when performing educational interventions in [health promotion]. This perspective can be used for future student guidance.

Relationship between Learning Methods and Personal Background of Educational Instructors' Design of a Clinical Learning Environment

P1-40

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[Objectives] To clarify the relationship between the learning methods and personal background of design of a clinical learning environment (CLE).

[Methods] 1,153 educational instructors were surveyed on CLE design about learning methods and personal background from November 2017 through March 2018. Data analysis was conducted using a chi-square test.

[Ethics] Ethics approval was granted by the Ethical Review Board for Nursing Research of Osaka Prefecture University.

[Results] 621 respondents provided valid responses. Regarding the "structure of the nursing education system," the percentage of nurses with nursing experience of who answered "learning from" was significantly higher compared with those who had ≤ 18 years of nursing experience. For "forming interpersonal relationships," the percentage of nurses with ≤ 18 years of nursing experience who answered "learning through other means" was significantly higher compared with those who had ≥ 19 years of nursing experience. Regarding "the way on-the-job training ought to be" and "networking," a significantly higher percentage of "people who hold a managerial position" answered "learning through other means" compared with "staff." For "utilization of learning theories," a significantly higher percentage of "people who hold a managerial position" answered "learning from an expert" compared with those in "staff" positions.

[Discussions] The aspects of personal background that seem to be associated with learning methods were years of nursing experience and the managerial position held by the person. It is necessary to conduct research on training programs based on these findings.

Poster

Innovations in Nursing Education

P1-41

The effectiveness of drawing blood by utilizing visualization technology with second-year undergraduate nursing students

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[Objectives] This study aimed to clarify the effectiveness of drawing blood after utilizing of visualization technology in the skills labs for undergraduate nursing students.

[Methods] Students practiced drawing blood for a total of nine hours over a three-week period. The first week they confirmed the movement, size and depth of blood vessels with the use of AccuVein and ultrasound. They practiced drawing blood utilizing simulation in the second week and drew blood from another student with the student's permission in the third week. A survey was distributed after the third class in June, 2019. The survey had Likert scale and free comments to obtain their thoughts regarding the use of visualization technology for practicing drawing blood.

[Ethics] The protocol of this study was approved by the ethics committee of author's college.

[Results] A total of 81 students participated in the classes and 37 (46%) students responded to the survey. Over 90 % of all students answered that utilizing AccuVein and ultrasound was "very good" or "good". They also indicated that AccuVein and ultrasound were helpful to understand the movement, size and depth of blood vessels.

[Discussions] We found some effectiveness in utilizing visualization technology before students practiced drawing blood using simulation. However, we did not use visualization technology when the students practiced drawing blood with simulation and on each other. As novices, students are not comfortable in assessing blood vessels so it will be helpful to use the technology for safety in these practice sessions in the future.

P1-42

Metacognitive Development in Nursing Universities in Japan and Abroad: Literature Review

Yukiko Suzuki

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[Objectives] The objectives of this study were to clarify the current situation and identify future issues by analysis of research on the metacognition of nursing students from Japan and abroad.

[Methods] A literature search for years 2009 to 2019 was performed between 20 June and 10 July using search engines CINAHL, MEDLINE, PubMed and the Journal of the Center of Medicine. Analysis was conducted using content analysis.

[Ethics] Since this study did not include human subjects, ethical approval was not required.

[Results] When the contents of the effective literature were identified, 87 studies were analyzed; Japanese literature included many substantive investigations of metacognition, and the literature outside the country showed a trend toward many strategies for metacognitive development. Both in Japan and abroad, there was much content related to training in metacognitive knowledge, and there was little content on active metacognition. Metacognitive knowledge important to nurses' competency may include reflection and critical thinking; however, the range was ambiguous.

[Discussions] It has been suggested that the education of nursing competency at Japanese nursing universities affects the formation of metacognition, but Japanese literature has few strategies for metacognitive development. For this reason, it is a challenge for future research to examine the strategy for developing metacognitive knowledge at nursing universities in Japan. In addition, it is necessary to research the range of metacognitive knowledge that affects nurses' competency, and the relationship between metacognitive activity and nurses' competency.

Poster

Innovations in Nursing Education

P1-43 Clarification of the Barriers to Prevent Nursing Students from Studying Abroad

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[Objectives]

The purpose of this study is to clarify the barriers to prevent students in department of nursing at universities, from studying abroad.

[Methods]

In order to clarify the barriers to prevent students from studying abroad, free description type questionnaires were distributed to students in department of nursing at universities, where have not provide active learning program of nursing in abroad. Based on information obtained from the questionnaires, word frequency analysis and dependency frequency analysis were performed utilizing computer-based software, Text Mining Studio .

[Ethics]

This research was approved by the Research Ethics Committee of Yokohama Soei University

[Results]

As a result of exploratory data analysis, the most frequently appearing word is “anxious”, and followed by “public security”, “language”, “budget” and “studying abroad”. Based analysis focusing on dependency relationships between phrases, the most frequently appearing phrase was “anxiety – public security”, and followed by “language – communicable + not”, “budget – requirement – expensive”, “public security – scary”, and “budget – anxiety”.

[Discussions]

Recently, progress of globalization, in terms of social, economy and culture, gains momentum. Globalization in terms of nursing field is no exception. Development of nurses having global view points and skills is required. However, the inclination to study abroad among the younger generation of Japanese, including nursing students, are declining. This study clarifies barriers to prevent nursing students from studying abroad are “anxiety about public security”, “anxiety about communication”, “anxiety about budgeting”. In order to accelerate globalization of nursing sector, active supports to remove barriers for nursing students are required.

P1-44 Ethical learning in gross anatomy training and connection to clinical practice

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[Objectives]

The purpose is to clarify the connection to ethical learning and clinical training in gross anatomy training.

[Methods]

Research design is qualitative descriptive research. Participants are third year nursing students. The survey period is from February to March 2019. The data collection method was a semi-structured interview method using an interview guide. The interview time was 30 minutes. The analysis method used content analysis. We made a verbatim record of the interview recordings and carefully read and made codes among the researchers. After that, researchers classified based on the similarity of the semantic content, and generated subcategory and category.

[Ethics]

Approved by the Research Ethics Review Committee of the College of Nursing, Aichi Medical University (No. 175). The participants were free to participate in the research and explained that they would not be disadvantaged by their participation.

[Results]

There were five research participants. The average interview time was about 32 minutes. As a result of analysis, 61 codes, 18 sub-categories, 4 categories “Opportunity to review the essence of life and death” “Respect the noble intentions and be sincere ” “Connection to nursing attitude in practice” “Nursing based on individuality of patients”

[Discussions]

The first year academic study in gross anatomy training was the basis of the dignity of life and the respect for human beings after the third year clinical practice. Furthermore, based on that, it led to practicing nursing attitude and individualized nursing in practice.

Poster

Innovations in Nursing Education

P1-45

An Analysis of Learning Conditions of Nursing Students for Supporting Their Active Learning

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[Objectives]

The development of active learning attitude in nursing basic education is an important challenge. In this context, for the purpose of obtaining the suggestions concerning the supports for active learning, a survey was conducted regarding the learning conditions of nursing students and the factors that had made an impact on their learning.

[Methods]

About one-hour semi-structured interviews about nursing school days were given to seven nurses. Next, a qualitative, descriptive analysis was used for extracting and coding "Actions and Mindsets Regarding Learning" and "Factors Making Impact on Learning" and then categorizing them according to their similarities.

[Ethics]

This study was conducted with the approval of the research ethics committee of A College.

[Results]

187 codes were extracted; 16 categories and 49 subcategories were found; and they were classified into 4 large categories. The followings are the large categories and examples of categories.

1. Learning Method: Exchange with Faculties and Mutual Tutoring with Friends.

2. Learning Outcome: Acquisition of Knowledge and Skills and Attitude towards Learning.

3. Improvement in Motivation for Learning: Stimulus/Support from Others and Rewards Obtained through Engagement with Patients.

4. Difficulty in Learning: Environment Demotivating Students to Learn and Learning for Unclear Purpose.

[Discussions]

Regarding the learning methods including the mutual tutoring with friends and the exchanges with faculties, it was revealed that not only the acquirement of knowledge and skills but also the existence of friends learning together, faculties providing advices and others with the similar functions made positive impacts on their motivation for learning.

P1-46

Development of a comprehensive education program for professional involved in psychiatric outreach services

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[Background] A major issue in Japanese psychiatric is that a large proportion of hospitalized patients are hospitalized for a long time. One of the reasons for this is the lack of services to support community life after discharge from hospital, which is attributed to the lack of education for professionals responsible for community services.

[Purpose] This study is develop an education program to improve the specialized knowledge and experience for community support to nurses who may be responsible for outreach services of psychiatry who are effective for supporting the life of mental patients.

[Method] We interviewed the purpose and method the Open Dialogue Practice educator who achieved effective results , and considered the concrete measures of the education method in Japan based on domestic practice and research.

[Ethics] Study participants provided informed consent. Research is ethically approved.

[Results&Discussions] The following four contents were considered effective. (1) Participating in a safe atmosphere, (2) Practicing role play using reflecting process, (3) Reflecting after training, and (4) Share the latest systems and practices for community support. However, timekeeping and coordination, strong leadership, and awareness of issues are considered essential to practice these training content. It is the future task to practice and verify these for Japanese psychiatric nurses.

Poster

Innovations in Nursing Education

P1-47

Knowledge of sexually transmitted diseases and prophylactic behavior of nursing students

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[Objectives] This study aimed to determine nursing students' knowledge regarding sexually transmitted diseases (STDs) and their prophylactic behavior.[Method] We distributed a paper questionnaire to first to fourth year students at X University School of Nursing, comprising a 10-items quiz on STDs knowledge and some questions about prophylactic behavior. We conducted a chi-square test and Mann-Whitney U test and compared responses by school years (1–4) and sexual intercourse experience.

[Ethics] This study was granted approval from the ethical review board of the study institution.

[Results] All respondents were female and were age distributed as follows: 88 first years, 81 second years, 57 third years, and 79 fourth years (total n = 305, 88.7% response rate). The distribution of respondents who indicated they had experience with sexual intercourse were as follows: 16(18.2%), 35(43.2%), 32(57.1%) and 49(62.0%). In each grade level, 95%–100% of respondents were conscious about contraception. However, in those who had sexual intercourse, 73.5% used a condom. The mean number of correct answers out of the 10-items quiz was 8.0, 8.3, 8.5, and 9.1.

[Discussion] Our data shows the number of respondents with sexual intercourse experience increases with grade. The increase in STDs knowledge with grade year is likely due to the progression of students through the curriculum. This suggests that knowledge of STDs prevention can be self-applied as it is taught in classes. However, there should be greater emphasis on STDs and preventative behavior to ensure that younger students are taking prophylactic measures during intercourse.

P1-48

Support received and sought in the workplace by novice nurses with working experience

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[Objectives]

The objective of the study was to clarify the support received and sought in the workplace by new nurses with work experience.

[Methods]

Using a questionnaire, the subjects were asked about the support they had received from head nurses, senior nurses, and other nurses who started to work at the same time, respectively, as well as the support they were seeking when they were new nurses. There were 18 questions about the support. In 2018, questionnaires were mailed to 209 nurses in Japan.

[Ethics]

This study was conducted with approval from the Independent Ethics Committee of A University.

[Results]

Valid responses were obtained from 105 subjects. For support from head nurses and senior nurses, 17 items showed significantly higher scores for support sought than support received ($p < 0.01$). For support from other nurses who started to work at the same time, all items other than support that respects work experience showed significantly higher scores for support sought than support received ($p < 0.05$). The items that showed higher scores for support sought were support items related to emotional support.

[Discussions]

It is considered that head nurses and senior nurses need to provide more support to novice nurses than they are now, while respecting their work experience, to help them learn their new work and make a successful start as nurses. It also became clear that the novice nurses felt that there was a lack of emotional support from other nurses who started to work at the same time.

Poster

Innovations in Nursing Education

P1-49

Experience in practical training instruction during role transition from nurse to nursing teacher

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[Objectives]

The aim of this study was to clarify the kind of experiences new nursing teachers have in practical training instruction during the role transition from nurse to nursing teacher.

[Methods]

In 2018, a semi-structured interview was conducted for Japanese nursing teachers. The subjects were asked to talk about their experiences in practical training instruction when they were new nursing teachers. The analysis was conducted using a modified grounded theory approach.

[Ethics]

This study was conducted with approval from the Independent Ethics Committee of A University.

[Results]

The subjects were eight individuals who agreed to cooperate with the research. As their roles shifted from nurse to nursing teacher, two categories of experiences present continuously for about a year among new nursing teachers were extracted. The category "interchange between clinical and educational standpoints" indicated that although the subjects often taught from a clinical standpoint after they had just become teachers, they gradually taught from an educational standpoint while moving back and forth between the two standpoints. The category "nurturing a person as an individual through nursing" indicated that students were seen and taught as individuals rather than as nursing students.

[Discussions]

In their early days as teachers, the subjects experienced a lot of dilemmas from clinical and educational standpoints; however, they gradually became able to make up for this. In addition, it became clear that they fostered the ability to cultivate students as individuals while setting their thoughts on nursing as the foundation for training instruction.

P1-50

Learning methods for scrub nurse tasks for scrub nurses in Japan

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[Objectives]

The aim of this study was to clarify the learning methods for scrub nurse tasks for scrub nurses in Japan.

[Methods]

The extents to which 13 learning methods for scrub nurse tasks were used was examined in 2016.

[Ethics]

This study was conducted with approval from the Independent Ethics Committee of A University.

[Results]

The questionnaire was distributed to 1224 of operating room nurses and submitted by 851 of them. As a result of a factor analysis of responses regarding the learning methods, three factors were extracted, which were interpreted as learning by imitation, expansive learning, and manual-based learning. There were no significant differences in factor scores when comparing between the sexes or the sizes of the hospital the nurses belonged to. Regarding years of experience as a scrub nurse, nurses with shorter years of experience had significantly higher factor scores for learning by imitation compared with nurses with longer years of experience. Nurses with longer years of experience had significantly higher factor scores for expansive learning compared with nurses with shorter years of experience.

[Discussions]

It was clarified that nurses with shorter years of experience as a scrub nurse learned daily scrub nurse tasks by imitating the techniques of senior nurses. Nurses with longer years of experience learned more advanced skills by participating in academic conferences. There were no differences in learning methods depending on gender or size of hospital, suggesting that learning methods were selected according to years of experience.

Poster

Innovations in Nursing Education

P1-51 Relevance of Health, Medical, Welfare, Education Program by Active Learning

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[Objectives] Consider Relevance of Health, Medical, Welfare, Education Program by Active Learning.

[Methods] Active Learning has been introduced in the "Public Health and Nursing Practice" course for university students who aim at public health nurses, nursing teachers, nurses, social workers, high school teachers, etc. Research, we examined Program's Relevance.

[Ethics] The student complied with the research ethics by explaining the outline of the research and securing the anonymity etc. and obtaining consent.

[Results] Students take one step as "subjects who learn from objects of learning" in "confirmation of syllabus by explanation and consent" and "interactive learning in a group organized independently", "Active Learning within and outside the university and "Development of learning through communication skills and leadership" in "Reporting / Feedback", "Visualization of formative evaluation" by "Creating evaluation criteria for student participation", "Intermediateness to" presence with disease and life problems "It has been found.

[Discussions] Through Active Learning, students converted various subjects with issues into one's own, and changed from "learning objects" to "learning parties", suggesting a rise in Relevance. The remaining research topics are the empirical research on the relationship with the curriculum improvement of Active Learning and the class improvement by the teaching portfolio. ※ Received funding from JSPS research grants JP17K04276.

P1-52 Teaching about Children's Rights - Student learning for human rights violations against children -

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[Objectives]

Provide a course entitled "Children's Rights" and consider the future of children's rights from students' understanding of the rights.

[Methods]

Conduct a lecture about the Convention on the Rights of the Child with speeches given by a Filipino nurse currently working in Japan, and a Japanese nurse who has experience of working in a developing country. Watch the DVD "Slumdog Millionaire" (2008), fill out a survey and write their thoughts on the movie. The design of the study is a qualitative descriptive method and is analyzed by first grouping all the collected surveys into Categories, Sub-Categories and Code, and then extracting concepts which correspond to each article of the Convention on the Rights of the Child.

[Ethics]

Approved by Kawasaki Nursing Junior College Ethics Committee (Approved No. R70-1).

[Results]

Explanations of 3 concepts fall into 9 categories derived from 17 Sub-Categories that branch from 56 codes.

Concept 1 'Initial feeling' is derived from C[impacts of the lecture and movie] and [anger towards parents or others], and SC and and Co{disturbing}, {shocking} and {cruel}. Concept 2 'deepening knowledge and learning' is generated from C[the harsh reality], [importance of knowing the reality] from the SC, that branch from Co{poverty that's preventing children from being protected} and {appreciation for being raised in Japan}. Concept 3 'challenge and action for the future' from C[importance of action] and [protection of children's rights] from SC and from Co{hope for children in a harsh environment} and {every child should be protected and treated equally}.

[Discussions]

As the concepts represent that each child is brought up in a completely different environment and not necessarily protected with the right, the lecture including the movie brought an opportunity for students to evolve their roles and values of nursing in the society.

Poster**Innovations in Nursing Education****P1-53**
Implementation of the Hospital Elder Life Program to promote nursing education: difference between older adult inpatients' vitality index score and students' perception
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The Hospital Elder Life Program (HELP) provides older adult patients with a comfortable hospital stay, during which they are visited by student volunteers to prevent patient delirium and loss of functions. In 2015, we contracted the HELP center in St. Luke's (HELP in SL) which was developed by the faculty of Gerontological Nursing at SLIU in collaboration with the St. Luke's International Hospital. The study aims to assess correlations between nursing students' reflections on the program and elder's vitality index (VI) scores to compare those relations.

[Methods]

In total, 27 inpatients and 26 nursing students participated in the program from 2015 to 2018. A survey was conducted as follows: 1) a 0-10 rating of the VI of older adults' and 2) reflections about the program from nursing students in programs with inpatients' VI scores in the lower and higher tertiles. Descriptive statistics were performed on the VI scores, while inductive qualitative analysis was conducted on the students perspectives and compared with older adults' groups.

[Ethics]

The Ethics Committee of A University approved the present study.

[Results]

The mean score for inpatients' VI was 6.48 ($SD=2.216$) points. The comments of students with inpatients' VI in the lower tertiles revealed a theme of "observe the state of the inpatient." Analysis of comments from students with higher inpatients' VI score group revealed "learning how to develop skills and knowledge by older adults."

[Discussions]

Results suggest that nursing student's perception differed depending on the older adult inpatients' vitality.

P1-54
Learning from Leader Experiences of Nursing Students and Examination of the Teaching Method
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To clarify how nursing students reflect their leader experience, based on learning in lectures, and to get suggestions for constructing a teaching method for leadership education.

[Methods]

We conducted a descriptive study of 92 Japanese nursing students using a self-reflection sheet in 2018. The coded and analyzed data included their prior leader experiences, impressions from the lectures, and the knowledge and skills required to perform as leaders.

[Ethics]

The study protocol was approved by the institutional review boards of the participating institution.

[Results]

85 participants had four patterns of leader experience (school/class management, school events, club activities, and others) over the period from primary school to university.

It was suggested that learning from the leader experience was divided into two axes of time: learning from their acts as leaders, and comprehension after acquiring basic knowledge and skills of nursing management.

Using the reflection sheet, they were able to connect their experiences with theory and knowledge of management and find ways to improve their performance as leaders. Furthermore, some students changed their behavior as candidates for leadership, since learning that leadership was an essential ability for nurses.

[Discussions]

These results indicate three points: having knowledge of leadership behavior eliminates their resistance to be the leader and leads to behavioral change ; group leader experiences at clinical practice deepen their learning; support for reflection is needed to clarify the situation and awareness.

The curriculum formation to combine practice with knowledge of leadership is needed to provide better insight into effective education.

Poster

Innovations in Nursing Education

P1-55

Nurse Manager Training with Competency-based approach

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Background

Nurse managers execute their job duties by modeling their methods after those of nurse managers they have previously encountered and through trial and error, taking the experience-based advice of senior nurse managers into account. In our hospital we have been conducting workshops for applying competency.

Aims

To show that the capacity development in assistant head nurses is accelerated when head nurses train assistant head nurses with competency-based approach.

Methods

Executed after obtaining consent from the subject. Assistant head nurses participated in monthly one-hour workshops for discussing their tasks, expected roles and competency, and goals for fulfilment of roles (expected outcomes). Head nurses shared their opinions on actions for solving tasks in monthly one-hour workshops, shared these opinions with the assistant head nurses, and practiced them.

Results

Assistant head nurses understood the intentions behind the head nurses' instructions more easily when the competency required to meet the goals was shared. Furthermore, this increased the number of situations in which the assistant head nurse made attempts to resolve one's own problems. Shared understanding of tasks through study groups enabled the participants to receive effective approaches from other head nurses as well. Many of the assistant head nurses' competency improved. Higher awareness of competency for solving tasks in head nurses promoted instruction of assistant head nurses.

Conclusion

Capacity development in assistant head nurses by using a competency-based approach promoted "learning from experience" not only in assistant head nurses but in head nurses as well.

P1-56

Current Realities and Challenges for Cancer Education in Japanese Schools

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[Objectives] We analyzed the results of an interview survey of teachers in elementary, junior high, and high schools to clarify current realities and challenges for cancer education in Japanese schools. The importance of cancer education has been recognized, and schools provide opportunities to learn together with children suffering from cancer. However, as objectives and methods are left to individual teachers, confusion has arisen.

[Methods] Semi-structured interviews were conducted with four teachers at elementary, junior high, and high schools in Osaka and Hyogo prefectures between December 2017 and May 2018. The collected data were analyzed qualitatively and descriptively.

[Ethics] This study was approved by the ethics committee of Hiroshima University, Japan.

[Results] Interview contents were classified into 18 contexts and 12 categories, then grouped into the following 5 higher-order categories: "time and specific methods for education are unclear," "background psychological considerations," "differences in teachers' awareness and values," "positioning education about cancer as a lifestyle disease," and "lack of information about cancer education."

[Discussions] The results of interviews concerning the current state of guidance on cancer education revealed the necessity of establishing more time and formulating concrete teaching methods for cancer education and the importance of training teachers to share information and knowledge. Furthermore, since children may be pessimistic due to their own or their family members' medical conditions, the difficulty of classroom-based cancer education remains a challenge. Therefore, it is necessary to create educational activities that aim to build follow-up structures and mental supports for children mental.

Poster

Innovations in Nursing Education

P1-57

Current trends and issues of research dealing with overseas study and training for Japanese nursing students

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[Objectives]

This study aimed to investigate the trends and issues of overseas study and training for nursing students.

[Methods]

We retrieved the articles from the database (Igaku Chuo Zasshi), using the keywords "nursing student" and "overseas study." We chose 29 articles for analysis.

[Ethics]

This study was approved by the ethics committee of the institution one author belonged to.

[Results]

Zero to five relevant articles were published every year from 2004 to 2018. As for the students visiting countries, seven articles dealt with Asian countries; six articles, Western countries; two articles, African countries; and one article, one Oceanian country. Sixteen articles aimed to evaluate the overseas study programs individually designed; eight articles aimed to investigate the students' consciousness of overseas study; and three articles aimed to examine the effects of overseas study on the students' will to study.

[Discussion]

By the introduction of international nursing science education into the nursing education, the overseas study program is supposed to be a practical training of the international nursing science education, with the aim of understanding the factors influencing the human's health over the world and the different cultures.

The overseas study programs for nursing students are designed by individual institutions because the goal is not particularly determined. We consider it important to gather the reports of the overseas study from the viewpoint of international nursing science education. This study suggested the necessity for deeper understanding of the fact of overseas study by quantitative survey in addition to discussion of the individual reports.

P1-58

Attitude toward Elderly People of Adolescents : comparison amongst nursing students and other field students

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[Objectives]To consider and understand how the attitude toward elderly people among the adolescents, based on experience of interacting with or receiving assistance from elderly individuals.The study aims to analyze the defferencies in attitudes toward elderly people between nursing students and other field students in Japan.

[Methods]The subjects were first-year students from four universities in Japan.This survey was distributed to university nursing students and other feild students.The model used in this study concerns effect of experience interacting with the elderly on the attitude toward elderly people,based on the concept of the "attitude toward old people"(Kogan)model.Statistical evaluation of the data was included in percentage,mean,qui-test,t-test,one-way variance analysis.

[Ethics]The survey was conducted after obtaining appropriate consent from the participants,using verbal adb written communication to the participants,explaining the purpose,method,protection of privacy,coluntary cooperation,anonymous participation.This survey was approved by research ethics committe of the Kobe University Graduate School of Health Sciences.

[Results]Overall,358 participants were surveyed,125 males(34.9%) and 233 female(65.1%).The mean score Kogan for total participants 131.2 ± 16.2 ,nursing students were 135.5 ± 13.3 ,medical science students were 132.5 ± 16.2 ,non-medical health students were 123.8 ± 17.6 ,respectively.The attitudes of nursing students towards elderly people were better than students in other field disciplines($p<0.05$),and there were differences in the attitudes of nursing students experienced of interacting with or receiving assistance from elderly person.

[Discussions]The Attitudes of the nursing proffesionalsof tomorrow towards elderly people should be evaluated currently to be able to improve the provision of care for elderly people and to prevent possible negative beliefs and perceptions.

Poster

Innovations in Nursing Education

P1-59

Effectiveness of the Dementia Education Program for the staff at dementia wards: A pre-post evaluation study

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[Objectives]The purpose of this study was to evaluate the effects of the Dementia Education Program developed to prevent violence from patients with dementia towards the staff.

[Methods]This is a pre-post intervention study, participants included the staff employed at three dementia wards in Japan. The education program included a video consisting of five themes (disease, excretion, diet, humanitude, and violence). Participants completed questionnaires on dementia care and experiences of violence, both before and after watching the video. They also completed a test evaluating their knowledge of each theme. Data analysis was conducted to compare pre-and-post intervention responses.

[Ethics]The Ethics Committees approved this study. First and second author explained the purpose of the study to the participants and obtained informed consent.

[Results]A total of 23 and 12 staff members completed the pre-intervention and post-intervention questionnaires, respectively. The rate of violent experiences decreased significantly after the intervention from 65.2% to 25.0% ($p=0.0024$). However, there were no significant differences in other violent experiences (mental or sexual violence). The excretion and diet scores increased significantly from the pre-intervention mean of 18.2 to 20.4 ($p=0.0004$) and 21.1 to 23.7 ($p=0.01$), respectively. The scores on the other three themes also increased but no significant differences were found.

[Discussions]This dementia education program may improve knowledge and decrease experience of violence. To prevent violence, it may be important to understand not only the technical training but also the disease and care methods.

P1-60

Study on The Development of a Scale to Assess the Frequency of Education Experiences for Preceptors of Newly Graduated Nurses in a Hospital Setting

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[Objectives]

This study aimed to develop a scale to assess the frequency of education experiences for preceptors of newly graduated nurses in a hospital setting in Japan.

[Methods]

A cross-sectional survey was conducted to verify the factors included for a scale of experiences among nurse educators at hospitals in Japan. The sample was randomly divided into 2 groups; for group A, exploratory factor analysis was used to reveal factor structure, and for group B, confirmatory factor analysis was used to validate goodness of fit.

[Ethics]

This study was conducted with the approval of the ethics committee of the facility to which the authors belong.

[Results]

Based on the result of the exploratory factor analysis with group A ($n=81$), 28 items and five factors were extracted: experiences of receiving support, feeling rewarded from educating new nurses, struggling to achieve the goals, self-disclosure and empathy, feeling that one lacks the ability as a nurse. Cronbach's α was .717 - .955 (all items: .938). Confirmatory factor analysis with this result applied to group B ($n=82$), revealed that GFI = .630, AGFI = .563, CFI = .722, and RMSEA = .118, respectively. Internal consistency was verified; however, external validity was not.

[Discussions]

As these five factors have not been demonstrated in previous research, there is a possibility of utilizing this scale to inform future nurse education programs in Japan. Although the value of RMSEA (.118) was higher than .100, the difference was small. There is room for reexamination of this scale.

P1-61

Characteristics of the abilities of nurses and general members of society in the evaluation of basic skills in society

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[Background] In professional nursing, when an indicator is available to confirm the skills implemented objectively, this leads to effective learning one by one and improvements nursing.

(Purpose) Comparing the general skills necessary for members of society with the model members of society (junior members of society that use their skills within Japan), the differences and skills that nurses and general members of society have in common are made clear.

(Methods) Based on a target of 1,741 nurses at hospitals around the country, [basic skill evaluation list for members of society] PROG test (251 problems based on multiple choice, evaluated on 7 levels) was implemented.

Ethical Considerations: The present study was approved by the institutional review board of the affiliated facility and consent to participate was obtained from all subjects.

(Results) From the result, the skill level of all entries for nurses was low compared to the model members of society. In particular, a poor level in "ability to lead" and "ability to plan" was notable. Among the factors for the ability to lead, the scores for "assertion of opinion" and "constructive and creative discussion" were low. Among the factors for the ability to plan, the scores for "goal setting" and "scenario building" were low.

(Discussion) It is thought that the reason for this is due to the many stereotypes in the everyday nursing service that exist, the use of a simple clinical path due to the introduction of the electronic entry system and the existence of a culture whereby the opinions of newcomers and young people are not reflected.

Poster

Research Methodology

P1-62

Pain associated with heel lance in newborns by measuring evoked potentials in electroencephalography: A basic research study involving adults

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[Objectives] This was a basic research study aimed to advance the development of pain relief during heel lance in newborns. We characterized noxious stimuli caused by a lancet, commonly used for heel lance in newborns, by measuring the evoked potential in electroencephalography (EEG).

[Methods] Nine healthy adults (25.78 ± 3.31 years, 1 female) were stimulated 10 times each in random order with a lancet (Japan Becton Dickinson, BD Microtainer Quickheel TM Lancet 368103) (test) and a cotton tip (control, tap lightly) to the dorsum of the foot. For stimulation with a lancet, the tip of the lancet was placed within 0.2 mm of the epidermis where A δ nociceptive fiber terminals are found.

[Ethics] The study was approved by the Ethics Committee of Hiroshima University (approval number: C-263-1), and registered with umin (UMIN000035621).

[Results] There was no significant difference between the latency of negative waveform (N2) and subsequent positive waveform (P2) potentials following the lancet stimulation (124.67 ± 13.36 and 276.11 ± 50.29 ms, respectively) and control stimulation (141.63 ± 29.65 and 277.00 ± 28.67 ms, respectively).

[Discussions] A previous study measured the evoked potential to evaluate noxious stimuli associated with lancet stimulation and demonstrated that A δ nociceptive fibers were activated. Based on the examination of latency, our findings suggest that A β fibers, which are associated with tactile sensation, may be activated by a lancet if placed within 0.2 mm of the epidermis. Future studies with detailed methodologies are needed to examine noxious stimuli associated with the use of a lancet.

P1-64

A meta-synthesis of fathers' postpartum depression

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[Introduction] It is well-known that mothers' psychological well-being can change after delivery, with a high prevalence of postpartum depression diagnoses. Conversely, little is known about postpartum depression in fathers. In fact, around 10% of Japanese fathers have been reported to suffer from the various symptoms of postpartum depression after childbirth. Thus, the purpose of this study is to explore support requirements for paternal depression by using a meta-synthesis approach to identify more specific future research questions.

[Methods] Relevant articles were identified by using the following databases: CINAHL, MEDLINE, PsycARTICLES, and PsycINFO. Seven phases of meta-ethnography were utilized to analyze papers (Noblit and Hare, 1988). All analyzed papers were scored and guaranteed by the Critical Appraisal Skills Program as valuable qualitative studies.

[Findings] There were 50 qualitative articles retrieved from the database, of which 7 articles reported postnatal depression in fathers. As a result of the meta-synthesis of the targeted papers, the following themes were extracted: "interaction with partners," "postpartum depression and resilience," "obstructing factors for fathers' support," "out of service for paternal depression," and "support needs for depressed fathers."

[Discussion] The history of qualitative research on paternity depression is shallow, and no qualitative study conducted in Japan has been published. These findings show that fathers who suffer from postnatal depression have been neglected by professionals, and thus there is an unmet need for professional mental support after childbirth for fathers as well as mothers. This further supports the idea that qualitative research for paternal depression is urgently required in Japan.

Poster

Research Methodology

P1-65

The Examination of Reliability and Validity of a Japanese Version of the Oldenburg Burnout Inventory

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[Objectives] The purpose of this research is to develop a Japanese version of the Oldenburg Burnout Inventory (OLBI) and to examine the reliability and validity of its scales in the case of nurses. This study is expected to demonstrate the usefulness of OLBI in nursing research.

[Methods] An anonymous, self-administered questionnaire survey was performed on 396 nurses, and 207 responses were used for analysis. We calculated Cronbach's alpha reliability coefficient for checking the internal consistency of the scale and Pearson's product moment correlation coefficient between OLBI and subjective health, job satisfaction, and self-efficacy for checking concurrent validity. Factor validity was evaluated from the factor attribution and the goodness of fit of each item by confirmatory factor analysis.

[Ethics] This research was conducted with the approval of Ethical Review Board of Juntendo University Graduate School of Health Care and Nursing.

[Results] The mean OLBI score was 41.6 (± 6.4). Cronbach's alpha reliability coefficient was found to be .848, and Pearson's product moment correlation coefficients between OLBI and subjective health, job satisfaction, and self-efficacy were $r = -.416$, $r = -.513$, and $r = -.377$, respectively. On the factor validity, the factor load path coefficient of 16 items was over 0.35, and the model suitability was GFI = .887, AGFI = .857, and RMSEA = .063.

[Discussions] The reliability, criterion-related validity, construct validity of the Japanese version of OLBI were verified, and the factor validity was also within the acceptable range.

This work was supported by JPSS KAKENHI Grant Number 17K12130.

P1-66

Development of satisfaction and burden scales for foster parents activity

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[Objectives] The purpose of this study was to develop scales measuring satisfaction and burden for foster parents activity.

[Methods] In order to examine the reliability and validity of the scales, we conducted an anonymous self-administered questionnaire survey involved 2,142 foster parents who are in foster currently or had experience of fostering in the past. Ten items for satisfaction scale and 11 items for burden scale were prepared referring to the satisfaction and burden scales for health promotion volunteers in community activities.

[Ethics] This study was approved by the ethics board of the author's institution.

[Results] A total of 874 questionnaires were analyzed (valid response rate: 40.8%). As a result of confirmatory factor analysis, the satisfaction scale was consisted of 2 factors and 8 items, the model fit was RMSEA = 0.096, CFI = 0.988, SRMR = 0.028. The burden scale was consisted of 2 factors and 7 items, the model fit was RMSEA = 0.098, CFI = 0.993, SRMR = 0.025. A Cronbach's alpha index were 0.890 for the satisfaction scale and 0.825 for the burden scale.

[Discussions] Our results suggest that both scales in this study demonstrate an acceptable level of statistical reliability and validity. Our future task is to clarify related factors to the satisfaction and burden of foster parents by using these scales in order to get suggestion for supporting foster parents.

Poster

Research Methodology

P1-67

Health-related Quality of Life and stoma complications in patients with an ileostomy

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[Objectives]

The purpose of this study was to evaluate the relationship between health-related quality of life (HRQOL) and stoma complications in patients with an ileostomy.

[Methods]

The target populations of 92 patients with an ileostomy cared for a stoma outpatients clinic of a single acute care facility in Osaka, Japan, for at least 1 month before study participation. HRQOL was measured via the Japanese language version of the World Health Organization Quality of Life 26 (WHOQOL). This instrument consists of 26 items: physical health, psychological health, social relationships, and environment. Two additional items measure overall QOL and general health. Higher scores indicate better HRQOL. Stoma complications included retraction, separation, prolapse, recessed, granuloma, and laceration. All analyses were completed using the Statistical Package for the Sciences 25.0. P values $<.05$ were considered statistically significant.

[Ethics]

Study procedures were reviewed and approved by the Ethical Committee of Yokkaichi Nursing and Medical Care University; all participants provided informed consent.

[Results]

Sixty-seven percent were male and their median age was seventy-one years. Domain-specific scores for HRQOL were significantly lower than mean scores from community-dwelling Japanese individuals aged 60 to 79 years ($P<.005$). WHOQOL were significantly lower among participants with peristomal hernia and wrinkling around stoma ($p=.005$, $p=.024$).

[Discussions]

It is necessary for patients with an ileostomy to prevent stoma complications and provide appropriate care guidance according to their circumstances, since the stoma complications among patients with an ileostomy decrease their quality of life.

P1-68

Validity and Reliability of Indonesian Public Health Nursing Competencies for Achievement of Indonesian Healthy Program Through Family Approach

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[Objectives] To identify the validity and reliability of Core Competencies for Indonesian Public Health Nurses (IPHN) standard in practice setting by Public Health Professional (PHP) for achievement of Indonesian Healthy Program through Family approach (IHP-FA).

[Methods] A descriptive correlational study was conducted among 55 of PHP who accessed their implementation of IPHN. PHP practices was measured using five core IPHN competencies (including activities in public health centers and nursing care for follow-up patients, family, special needs groups in community, and community). IHP-FA was measured using 12 indicators (including family planning, safety birth delivery, immunization, exclusive breast feeding, growth and development, management of tuberculosis, hypertension, rehabilitation mental illness, smoking control, coverage health insurance, access clean water, and healthy sanitary).

[Ethics] This study approved Institutional Review Boards (IRB) of Indonesia.

[Results] The content validity index indicated adequate content validity (0.8-1.0) and high reliability (Cronbach alpha coefficient = 0.81). There was a significant correlation between five core IPHN competencies and achievement of IHP-FA (safety birth delivery, immunization, growth and development, management tuberculosis, smoking, and access clean water).

[Discussions] IPHN competencies contains valid, reliable, and psychometrically robust measures. However, some program in IHP-FA could not achievement with five core competencies of IPHN, demonstrating the need for developing the IPHN competencies in the future.

Poster

Research Methodology

P1-69

A survey on the awareness among nurses regarding cardiac rehabilitation

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[Objectives] To investigate the nurses' awareness regarding cardiac rehabilitation. [Methods] The question items included, presence or absence of cardiac rehabilitation experience, and awareness of nursing care for conditions subject to cardiac rehabilitation. Two groups were created as per the presence or absence of cardiac rehabilitation experience, and evaluation was performed. [Ethics] Approved by the Ethics Committee. [Results] A 130 participants had an experience of cardiac rehabilitation and 433 participants had a non-experience of cardiac rehabilitation. A significant difference was found for all 11 items regarding the awareness regarding nursing care for conditions subject. Nurses with cardiac rehabilitation experience were more motivated to learn. But 14.6% had not learned sufficiently, And 64.4% of had no experience of cardiac rehabilitation, but believed this experience to be necessary. [Discussions] Among nurses with cardiac rehabilitation experience, some nurses had not learned sufficiently.

P1-70

Literature Review of the Father's Psychological Characteristics and Coping Behaviors in the Case of Children with Chronic Illnesses

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[Objectives]

This study focuses on the fathers of children with chronic illnesses and aims to provide an overview of research trends based on a literature review and clarify the fathers' psychological characteristics and coping behavior.

[Methods]

A search was performed using PubMed (web version) and ICHUSHI (web version) and 23 papers from Japan and overseas were analyzed.

[Ethics]

We respect the author's point of view and used the expressive content faithfully.

[Results]

As a result, it became clear that despite having great anxiety and disappointment as psychological characteristics, they are trying hard to support their children and wives as fathers and husbands. Also, it became clear that while fathers use coping behaviors that focus positively on the problems of the child with the chronic illness and the family, they also use these behaviors to escape from their own negative thoughts and reality.

[Discussions]

Based on these psychological characteristics, it has been suggested that it is necessary to create "story-telling spaces" where fathers can express their feelings; provide information that leads to problem-solving; and work actively to incorporate fathers into the circle of support.

Poster

Research Methodology

P1-71

Juvenile Dementia Feelings about working for a young person with dementia and their families

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[Objectives] Sent sentences and questionnaires to 100 locations related to young people with dementia in the Kanto district. We surveyed young people with dementia who could participate in the study and their families using questionnaires.

[Methods] About free description about thought to work after suffering dementia I tried to categorize by KJ method.

[Ethics] It was possible to easily answer so that it would not be a burden for young people with dementia and their co-operation was voluntary and explained in writing that there would be no disadvantage from participation. When a direct request was requested from the facility manager, he explained directly. It was judged that the questionnaire was sent back and consent was obtained from the facility manager, the person and the family.

[Results] There were 35 study participants. Based on the questionnaire that I received an answer, I analyzed the contents of my thoughts extracted 9 categories. The core category is a place of employment support that can be connected with the society.

[Discussions] The situation that suffers from the suffering of the parties and the family is larger than imagined, and it is difficult to say that the way of working society and the decisions of the parties are respected at present. We think that comprehensive support including support system of supporting side about needs and feelings to work of the party and family is important.

P1-72

Decision-making and transformation for female cancer survivors

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[Objectives]

Women treated for breast, uterine, and ovarian cancers face the possibility of losing fertility as well as life. This study examines female cancer survivors' decision-making function and transformation in their experiences.

[Methods]

In this qualitative research, we had 18 female survivors of breast, uterine, and ovarian cancers as participants, who were contributors of M, a magazine for cancer survivors. Analysis was conducted based on Newman's nursing theory to extract the decision-making function and transformation of the female cancer survivors.

[Ethics]

The study was conducted with permission by the publisher and was approved by the authors' institute's ethics committee. The authors declare no conflicts of interest associated with this manuscript.

[Results]

With self-reflection as an essential element, inspiration and realizations through meeting others, messages of books and media, and the nature offered them opportunities for decision-making. Such realizations included 1) recognizing the body's message; 2) remembering to focus on self (reflection on self/taking care of self); and 3) choosing joy. Examples of transformation included "The cancer disappeared," "Cancer was my teacher," "The cancer liberated me," "I treasure my experience," "Nature keeps me alive," and "I'm fine just as I am."

[Discussions]

Survivors of breast, uterine, and ovarian cancers experience transformation of consciousness beyond their sense of femininity. Power of transformation lies within the individual. Experiencing cancer can offer an opportunity to rediscover self and lead to the survivor living an authentic life.

Poster

Research Methodology

P1-73

Status Survey of Recognition among Care Workers concerning End-of-Life Care to Elderly People with Dementia in Their Daily Lives

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[Purpose]

This study was aimed at collecting basic materials for preparing training programs designed to develop practical skills among human resources engaged in end-of-life care of elderly people with dementia and targeting care workers who often support elderly people with dementia to live the last part of their lives in familiar places where they would like in collaboration with nurses.

[Methods]

We conducted a questionnaire sheet survey targeting 965 members who belong to the association of certified care workers in a prefecture. The questions asked about the profiles of the respondents, recognition of dementia care, recognition of end-of-life care, and other matters.

[Ethics]

We obtained approval from the Ethical Review Board of the researcher's university.

[Results]

Responses were collected from 110 respondents with the collection rate standing at 11.4%.

Regarding the recognition of difficulty in dementia care, respondents pointed out the difficulty in handling the conditions of dementia, difficulty caused by inadequate knowledge, and difficulty related to the workplace environment, including collaboration with other professionals.

When requested to freely describe their views concerning dementia and end-of-life care, many respondents described their views of life, death, and other matters, as well as their questions and struggles concerning decision-making support and preservation of dignity.

[Discussions]

It was suggested that a program was required that not only provides basic knowledge, but also enables the acquisition of ethical knowledge and practice. One of the requirements was collaboration with other professionals. Ethical issues may lead to mutual understanding through joint reviews with nurses.

Poster

Professional Issues

P1-74

Investigating the relationship between an improvement in experience of ethical issues and competency of public health nurses in Japan

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[Objectives] In order to develop proper activities, this study aims to identify the relationship between an improvement in experience of ethical issues and three necessary competencies of PHNs.

[Methods] An anonymous self-completed nationwide postal questionnaire survey was conducted for PHNs in Japan. The PHNs' experience in ethical issues were measured as the number of experiences and improvement in those experiences across the predetermined 10 types of ethical issues, including among others, conflict between the patient and his/her family; intervention refusal; limitation of the respect of the patient's will; misunderstanding and conflict among neighborhoods; protection of personal information; inequality and disparity; and necessary support beyond rule or guideline. The PHNs were divided into an experienced group (more experienced group and less experienced group) and a non-experienced group. Results were analyzed using the differences on competencies scales including Reflective Practice Skill Scale (RPS), Professional Development Scale for Public Health Nurse (PDS), and Research Utilization Competency Scale (RUC).

[Ethics] The research plan was approved by the Ethical Committee at the belonging university (No.17302).

[Results] The 526 questionnaires were valid (33.2%). The experienced group scored significantly higher in RPS, PDS, and PDS than the non-experienced group. Within the experienced group, the more experienced group was significantly higher in PDS and RUC than the less experienced group.

[Discussions] Those findings suggest that an improvement in experience of ethical issues and many other encounters lead to make PHNs developing requisite competencies.

P1-75

Relationship between Competencies and External Factors of Nurse Managers in Japan -Comparison of the middle and lower managers-

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[Objectives]

This study examined the relationship between competencies and external factors of nurse managers in Japan.

[Methods]

We investigated 102 facilities and 4410 nurse managers from October to December 2017. In the analysis, five competencies (Situation Awareness, Decision Making, Metacognition, Career Support, Self-Control) were used as dependent variables, 20 items of external factors were used as independent variables, and coefficients were calculated using the stepwise method.

[Ethics]

A questionnaire was posted to nurse managers who agreed to participate in the study. This study was conducted with the approval of the institutional ethics committee.

[Results]

We received 2330 responses (52.8%; 1227 middle managers and 1103 lower managers). Regular progress confirmation by superiors in authority delegation was related to the middle managers in all five competencies; however, the lower managers were give only one competency. For the middle managers, expanding behavioral choices through dialogue with superiors was found to be related to three competencies, whereas no competency was found to be related among the lower managers. Finally, expanding behavioral choices through dialogue with colleagues was found in all five competencies for the lower managers, but in only two competencies for the middle managers.

[Discussions]

For the middle managers, it is effective to expand the choice of behavior through dialogue with superiors and confirm progress regularly by superiors in authority delegation. For the lower managers, it is effective to expand the choice of behavior through dialogue with colleagues.

Poster

Professional Issues

P1-76

Development of an assessment scale of clinical competency in child and adolescent mental health nursing

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[Objectives] The present study aims to develop an assessment scale of clinical competency in child and adolescent mental health nursing.

[Methods] The items of the scale were derived from previous studies and wording was determined through cognitive interviews with five experts in child and adolescent mental health nursing. A total of 505 nurses in the child and adolescent mental health field across 29 hospitals in Japan participated in the self-administered survey. Construct validity was analyzed by exploratory and confirmatory factor analysis. Criterion-related validity was tested by comparison with the variables of nursing practice and mental health status. Internal consistency was assessed using Cronbach's alpha coefficient. Test-retest reliability was established using bivariate correlations and paired sample t-tests between the scores at two-time points for a subsample of 102 participants.

[Ethics] Informed consent was obtained from all participants. A university ethics committee approved the research protocol before starting the study.

[Results] An assessment scale with two structures was established and corresponded to direct care for children and their family members and an approach to the care environment. A secondary structural model showed that a two-factor model fit best ($GFI = 0.845$, $AGFI = 0.813$, $RMSEA = 0.083$). The total score was significantly and positively correlated with excellence in nursing practice, amount of clinical experience, and mental health status. For the overall scale, Cronbach's alpha coefficient was 0.976 and the reliability coefficient in the retest method was 0.63.

[Discussions] The results suggest that the newly developed scale is reliable and valid.

P1-77

Ability for nurses in care of Sexual Assault of Obstetrics and Gynecology medical care in Japan

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Objectives: This study aims to clarify the nursing practice ability required to support sexual violence victims in the acute phase.

Methods: The four-step Delphi method was used for this qualitative descriptive study. The first step was to interview 21 people who were sexual violence victims, obstetrics and gynecology physicians, support workers, or nurses who were in a position to support sexual violence victims. Categories related to this ability were extracted by analyzing interview data qualitatively against related literature. The developed questionnaire included 95 items on sexual violence support abilities within 12 areas. In the second step, 15 experts on support for sexual violence victims responded to the questionnaire. The third and fourth steps were completed by experts in sexual violence victim support (nurses, obstetrics and gynecologists, psychologists, etc.). There were 98 people in the third step and 66 people in the fourth step. In the fourth step, 5 dummy items were added to the questionnaire and 102 questionnaires were completed. Statistical analysis was done to confirm consensus and agreement.

Results and Discussion: In the first-step questionnaire, 72 of the 95 items met the consensus criteria and 88 items met the agreement criteria. The nursing practice ability required for supporting sexual violence victims in the acute phase was considered to be represented in these 88 items and 12 areas. Support for sexual violence victims in the acute phase should include care centered on victimized women and highly specialized nursing practice.

Poster

Professional Issues

P1-78

A Study on the Problems that family caregivers experience in End-of-Life Care at Home in the Hilly and Mountainous area in Japan

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[Objectives]

In the hilly and mountainous areas in Japan where depopulation and aging are progressing, there is a task to establish a system to support stable home visits. However, the problems that family caregivers experience in end-of-life care at home has not been clear in the hilly and mountainous areas.

This study was to clarify the problems that family caregivers experience in End-of-Life Care at Home in the Hilly and Mountainous area in Japan.

[Methods]

Interview survey was conducted on 10 bereaved families who lived in the hilly and mountainous area, used visiting nursing, and experienced end-of-life care at home. I asked the interviews about problems that family caregivers experience. The data was analyzed by qualitative descriptive study design.

[Ethics]

This study was approved by 2017 University of hyogo.

[Results]

The problems experienced by families caregivers were "to decide to do home care", "to accumulate care burden", "to affect by family condition", "inadequate medical support", "exacerbation of home care patient's health conditions", "economic burden", and "characteristics of hilly and mountainous area".

[Discussions]

Family caregivers were taking care while suffering until home care patient died. It was revealed in this study that there were problems in medical support in end-of-life care at home in the hilly and mountainous area.

P1-79

Current Situation and Issues in Japan Regarding Truth Telling in Children with Terminal Cancer

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[Objectives]

This study aimed to investigate the current situation and issues regarding truth telling in children with terminal cancer, their families, and medical professionals.

[Methods]

We searched for literature from the Ichushi Web using the terms "Children with Cancer," "End of life," and "Telling Truth." Of the 18 reports found, 7 were excluded because they focused on truth telling to parents with terminal cancer instead of children. The reports were analyzed and synthesized using the matrix method and Berelson's content analysis.

[Results]

In total, 123 context units were extracted as data. Ultimately, ten categories about the current situation and issues regarding truth telling to children with terminal cancer were created. Of these, five discuss "Feelings on Truth Telling," and are as follows: Criteria for Truth Telling, Emotional Difference between Medical Staff and Family, Children's Own Emotions after Truth Telling, Difficulty Encountered by the Medical Professional in Providing Support to the Patient's Family, and Family's Own Emotions after Truth Telling. Four of the categories focus on the "Current Situation of Truth Telling," and they are Truth Telling Limited to the Possible Range, Requirements for not Telling the Truth, Requirements that Enable Truth Telling, and Actual Situation about Truth Telling. With regard to the "Problem of Truth Telling," one category was created, i.e., Necessary Tasks to Realize Consideration of Truth Telling.

[Discussions]

Although many issues are involved, medical professionals need to help strengthen the relationship between children and their families and overcome such issues.

Poster**Professional Issues****P1-80****Clinical judgement toward seclusion among Japanese Psychiatric Nurses**OShinichiro Ishii¹, Setsuko Hanzawa¹, Yuko Nagai¹, Junko Miyagi², Katsuko Sakai³, Kayomi Yatabe⁴¹School of Nursing, Jichi Medical University, Japan²Faculty of Medical Sciences, Teikyo University of Science, Japan³Graduate School of Nursing, ex. Jichi Medical University, Japan⁴Department of Nursing, International University of Health and Welfare, Japan

The number of Seclusion in Japanese psychiatric hospitals is more than on the countries, about 10,000 among about 300,000 inpatients in 2014, and it is the most number in the world. And the duration of seclusion is the most extended period compared with other economically developed countries. However, there is a lack of knowledge of patients' secluded period and psychiatric nursing experiences. Therefore, we investigated Japanese psychiatric nurse's clinical judgement toward seclusion.

They completed a questionnaire with respect to an acute schizophrenia's vignette. This questionnaire included sociodemographic features, recognition about seclusion toward vignette, and moral distress items.

This study was approved by the Ethics Committee of the Jichi Medical University.

The subjects were 283 nurses employed in 6 psychiatric hospitals in Japan. "Necessity to seclusion" was "yes" is 81%. "Period of seclusion is 3days" was 18%, 7days; 38%, 1month; 48%. "Plan of releasing seclusion is nurses' role" was 67%. On the other side, "Work with levels of nurse staffing that I consider unsafe" was "yes" is 75%. And "Observe without taking action when patients continue to be hospitalized even though their condition is stable and they are ready to be discharge" is 76%. Analysis revealed that "Period of seclusion is 7days" was positively correlated with higher "suggestion to medical doctor a plan toward release seclusion by nurses" ($p<0.05$).

It is necessary to not only support system at the workplace for psychiatric nurses' moral distress, but also willingness to suggestion of release seclusion among Japanese psychiatric nurses.

P1-81**Characteristics of the case discussed at case study meetings by public health nurses in Japan**

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[Objectives] In Japan, the problems of the cases in which public health nurses (PHNs) provide support are becoming complicated. We developed the method of case study meetings to help solve the problems of the cases more effectively and also increase participants' self-efficacy. This study aimed to identify the characteristics of the cases discussed at case study meetings by PHNs.

[Methods] We analyzed 12 cases that were discussed in case study meetings from June 2016 to March 2019 in A city in Japan. The 12 cases were classified as having biological, psychological, and sociological characteristics.

[Ethics] This study was approved by the Independent Ethics Committee of the author's affiliated institution (Approval No. 2017-161).

[Results] We analyzed 12 cases: 3 on elderly patients, 4 on mother-child, and 5 mental disorder cases. The characteristics of the cases of elderly patients included biological problems of dementia and sociological problems concerning the lack of relationships with the family and neighborhood. The mother-child cases were characterized by sociological problems concerning the lack of mothers' childcare capability, abuse by a relative, and economic matters of the family. The mental disorder cases included sociological problems concerning trouble with the family and neighborhood.

[Discussions] Each case discussed in the case study meetings had many sociological problems that had accumulated and had become complicated for PHNs to provide to support. Therefore, to provide support for these cases, it is important to discuss and resolve the problems in the case study meetings itself rather than prolong it.

Poster

Professional Issues

P1-82

Changes in Subjective QOL in Breast Cancer Patients Receiving Outpatient Radiotherapy

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[Objectives] In Japan, the number of breast cancer patients is increasing rapidly among elderly (65–74) populations. Outpatient treatment and nursing care are crucially important for performing domestic roles and for participating in society. We clarify changes in subjective quality of life (QOL) in breast cancer patients before and after they receive outpatient radiation treatment.

[Methods] Using responses to semi-structured interviews administered at the start and at the end of radiation treatment, we evaluated changes in index values of SEIQoL-DW and changes in cues. Ten people (45–75 years old) were studied during January and June 2019. All gave informed consent to participation.

[Ethics] After a university ethical committee approved this study, participants were screened for inclusion. We explained the study in writing and received written consent from each participant.

[Results] All participants experienced redness in irradiated parts and pain caused by skin dryness after receiving radiation treatment. The average index values of SEIQoL-DW were 63.0 (SD24.8) before radiation and 64.7 (SD26.0) after radiation. The values increased for five people and decreased for four people, whereas those of one person were unchanged. The cues extracted before and after radiation were the same: "family," "friend," and "health." We did not observe cues related to the conditions of breast cancer and radiation treatment.

[Discussions] After elucidating factors influencing changes in index values and extracted cues, we consider support for breast cancer patients who receive outpatient radiotherapy.

P1-83

Trends and Issues on Studies Regarding Insomnia in Cancer Patients

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The purpose of this study is to reveal trends and issues on studies regarding insomnia in cancer patients published during the past 10 years between 2008 and 2018. For this study, twelve original articles were extracted from Igaku Chuo Zasshi (Ichushi) using keywords including "cancer" and "insomnia". As for study designs and methods, descriptive statistics were calculated, and analyses were made on the study contents.

According to the results, it was revealed that more than 60% of the studies had been using quantitative descriptive design and hypothesis-testing design; 83.3% of the studies had been made qualitatively. For the disease stage, 58.3% of the studies were conducted in cancer patients in the treatment phase. For the contents, 4 categories were extracted: "Factors associated with insomnia in cancer patients", "Efficacy of care for insomnia in cancer patients", "Current circumstances of insomnia in cancer patients", and "Nurses' recognition on sleep for cancer patients". There were only a few articles available for insomnia in cancer patients, and in particular the "studies on nurses' recognition on sleep for cancer patients" were very rare. These findings suggested that further studies would be needed on insomnia experiences of cancer patients as well as studies to develop scales to evaluate insomnia of cancer patients in accurate and well-balanced manner.

Keywords: Cancer, Insomnia

Poster**Professional Issues****P1-84****Qualitative study of the psychosocial work environment that discourages professional caregivers from leaving nursing homes**○Maki Tei Tominaga¹, Miharu Nakanishi²¹*Faculty of Nursing, Setsunan University, Japan*²*Mental Health and Nursing Research Team, Tokyo Metropolitan Institute of Medical Science, Japan*

[Objectives] Retention of professional caregivers is a critical issue in Japan's aging society. This study aimed to examine the psychosocial work environment that discourages professional caregivers from leaving nursing homes.

[Methods] A qualitative design, based on a content analysis approach, was used in this study. From August to November 2018, semi-structured interviews were conducted with 14 experienced professional caregivers in 11 special-care nursing homes for the elderly in Japan. Participants were paired and interviews carried out in accordance with the interview guide. The main interview question related to the psychosocial work environment that encourages or discourages them from leaving nursing homes. The interviews, recorded with participant approval and transcribed in their entirety, were used for data analysis. The researchers identified and categorized common themes emerging from the subjects' responses to each question.

[Ethics] Approval was obtained from the institutional ethics committee at Setsunan University (No.: 2018-018).

[Results] The participants' average age was 35.0 years. Two main themes emerged from the data: "workplace and organizational resources" and "attachment to care work for older adults". The former consisted of six sub-themes, including 'psychological rewards from superiors and colleagues', and the latter consisted of three sub-themes, including 'feelings about the final stage of life in the elderly'.

[Discussions] These findings suggest that supportive work and organizational environments, as well as positive feelings toward the elderly, may contribute toward discouraging professional caregivers from leaving nursing homes. However, further research is required to examine effects of supportive work and organizational environments.

P1-85**Literature review of nurse-specific compassion fatigue**○Yoshimi Taniguchi¹, Mutsumi Nogami²¹*Faculty of Health Sciences, Institute of Medical, Pharmaceutical and Health Sciences, National University Corporation Kanazawa University, Japan*²*Department of Nursing, Kinjo University, Japan*

[Objectives] Compassion fatigue is the main factor of professional QOL (Stamm, 2009) and has been reported to threaten the health of professionals engaged in emotional labor, as in interpersonal services. The purpose of this study was to review and clarify the nature of compassion fatigue specific to nurses.

[Methods] A literature search was performed on CINAHL, MEDLINE, and Ichushi-Web with the keywords "compassion fatigue" and "nurse," and descriptions of compassion fatigue were extracted and grouped.

[Ethics] Not applicable in this study.

[Results] The subjects were 35 documents published in 2004–2019 comprising 9 qualitative studies and 22 conceptual analyses in English and 4 Japanese publications. The studies concerned oncology, pediatric, emergency, and gerontological nursing. We carefully read and analyzed the literature and determined that. The antecedent of compassion fatigue was nurses' empathy and compassion skills. Negative effects of empathy on fatigue and of physical and psychological exhaustion were mentioned when assisting patients strongly stressed due to illness or disaster.

[Discussions] As a consequence of compassion fatigue, it was shown that not only did the performance of nurses fall but physical and psychological symptoms made it irreversibly difficult to return to work, leading to retirement. The professional QOL scale assesses the balance of professional compassion satisfaction, compassion fatigue, and burnout. Further research is needed to identify measures of compassion fatigue specific to nurses.

Poster

Professional Issues

P1-86

Narrative analysis of visiting nurses regarding close relationships between patients with amyotrophic lateral sclerosis (ALS) and their family caregivers

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[Objectives] Because 80% of patients with ALS receive in-home care and are highly dependent on medical support, advanced techniques are required to care for them. Consequently, because close relationships develop between patients and their family caregivers, there is a risk that family life may be disrupted. This study aims to elucidate how visiting nurses came to understand the development of these extremely close relationships and their own involvement in them.

[Methods] Continuous comparative analysis was performed, employing a grounded theory approach. Nine visiting nurses were the subjects.

[Ethics] This study was approved by the Research Ethics Review Committee of Juntendo University.

[Results] The visiting nurses (hereinafter, nurses) had approximately 8.4 years (mean) of experience. Four categories were extracted from the nurses' narrative data: "to keep an appropriate distance," "to sympathetically support the care methods of caregivers," "to follow or copy caregivers' methods," and "to make time in their schedules to visit the patients and caregivers." These categories showed that nurses did not interfere directly with the close relationships they observed but attempted to implement approaches that took the passage of time into account. The results showed that nurses were able to maintain a balance between caregiver fatigue and time-out for caregivers, rescheduling their short-term stay programs and frequency of nursing visits accordingly.

[Discussions] It is crucial to assess the circumstances of ALS patients and their families and to initiate supportive care at an early stage while respecting the approaches of family caregivers.

P1-87

Mastery of adapting to daily life in older patients undergoing Hemodialysis (HD)

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[Objectives]

To identify the mastery established by Younger in older patients undergoing HD.

[Methods]

In this qualitative study, dates were collected through semi-structured interviews of three older patients were over 65 years old and had been undergoing HD for at least three years and their families. Data analysis was used content analysis, using four elements of mastery; Certainty, Change, Acceptance, and Growth.

[Ethics]

The ethics committee of the Graduate school of Nursing Chiba University approved the study.

[Results]

Our finding showed that mastery in older patients with HD was associated with four main themes.

i . These patients based the decision to start HD depending on their perspective, and determined the value of HD for themselves based on changes they found their own bodies post their treatment.

ii . They had a variety of past experiences that influenced them to start HD treatment, and they coped with the experiences related HD with the help of their families.

iii . They could not continue working in the same capacity as before on starting HD, but they were able to get work in a new role.

iv . They had a positive outlook about their daily life with HD, while also having complex feeling about their death over time.

[Discussions]

Attaining mastery to adapt to a daily life with HD needs a lot of time, and family support, which then leads to the promotion and maintenance of QOL. Therefore it is recommended that nurses should support older patients in attaining this mastery.

Poster

Professional Issues

P1-88

Postoperative urinary dysfunctions in patients with prostate cancer and the associated changes in Quality of Life: A review of the literature

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[Objectives] We aimed to evaluate the relationship between postoperative urinary dysfunctions and the changes in Quality Of Life (QOL) among patients with prostate cancer.

[Methods] A systematic literature search of the Japan Medical Abstracts Society and PubMed was performed.

[Results] This study included 8 Japanese and 20 English articles. The most commonly used scales among postoperative prostate cancer patients were the International Prostate Symptom Score (IPSS) and the UCLA Prostate Cancer Index (UCLA PCI) for Urinary Dysfunction, and the IPSS-QOL for QOL. Urinary incontinence was the most frequently reported dysfunction, although the definition varied among papers. At the three- and twelve-month postoperative follow-ups, 17% and 29% patients, respectively, reported no occurrence whatsoever of urinary incontinence, whereas 94% and 100% patients, respectively, reported using less than 2 pads per day. Other highly reported urinary dysfunctions included frequent urination, nocturia and urgency, which were worst during the first three months post-surgery and improved steadily over time. However, functional decline, involving frequent urination, nocturia, and urgency, persisted 12-month post-surgery. QOL was the lowest during the first-month post-surgery and slowly regressed to pre-surgery levels after three months, being significantly improved 12 months post-surgery. The postoperative QOL was related to the severity of urinary dysfunction.

[Discussions] Given that most patients in this study experienced urinary dysfunction, early patient education on self-management is necessary. Moreover, to reduce the psychological impact on patients, medical professionals should support them by sharing their medical perspective regarding urinary dysfunctions, thereby aiding patients to realize their improvement over time.

P1-89

Spiritual pain of patients with end-stage pediatric cancer as perceived by nurses

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[Objectives]

This study aims to clarify the spiritual pain of patients with end-stage pediatric cancer perceived by nurses.

[Methods]

Overall, 23 nurses, who had experience in pediatric cancer nursing, were included in this study. Data were collected via semi-structured interviews and analyzed using content analysis.

[Ethics]

This study was approved by the Medical Ethics Review board of the Kyoto Prefectural University of Medicine.

[Results]

All participants were women aged 24-52 years (mean age, 38 ± 10 years). The analysis of interview data identified the following eight categories: immaturity because of being a child, resistance to the loss of one's usual life, fear and anger toward the approaching death, awareness about the reality in current appearance following treatment being distant from one's own ideal, remorse toward one's previous lifestyle and influence on surrounding individuals, fluctuations during periods of loneliness with regard to the approaching death, sense of discomfort and resigning experienced with living in their parents' thoughts, and limitations in communicating about these thoughts.

[Discussions]

Spiritual pain of patients with end-stage pediatric cancer included the continuous resistance to the loss of one's usual life while experiencing immaturity because of being a child. In addition, the pain included experiencing fear and anger toward the approaching death as well as thoughts about their own appearance that occurs during the periods of loneliness, which was something that they were unable to completely communicate with someone. The results suggested that nurses should intervene to help these patients to face death and adequately express their thoughts.

Poster

Professional Issues

P1-90

Factual Investigation on Intention of Visiting Nursing Station Users -From Two Visiting Nursing Stations in Tohoku Region, Japan

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[objective]

This research aims to clarify the current situation of decision making regarding medical treatment place in terminal stages of visiting nursing station users and get suggestions for what Advance Care Planning (ACP) should be.

[methods]

The dead cases in two years from January 2017 to December 2018 were extracted from the clinical records of visiting nursing station users. Survey items were basic information including age, sex and diagnosis, his/her preference for the place of End-of-Life, his/her place of death and so on.

[Ethics]

This study was conducted with ethics board approval by each institution.

[Results]

The number of target cases was 154. The average age was 87, between 47 and 103 years. Sex ratio was 42%men and 58%women. Main diseases were cancer,51(32%), dementia,57(37%), heart diseases, 42(27%). The number of the users whose intentions regarding the place of End-of-Life could be confirmed at the start of visiting nursing was 148 of users(96%),147 of their families(95%). For preference for the place of End-of-Life, 105 users(68%)preferred a hospital, 34 (22%)preferred home. The number of users whose hopes came true was 39 who had preferred a hospital (25%), 32 who had preferred home (21%), one that had preferred a Heath Care Facility for the Elderly (1%), totally 72 users (47%).

[Discussion]

ACP in Japan lags behind that in developed countries. This study shows that the indication of users' and their families' intentions in advance would lead to contribute their trust relationship.

P1-91

Relationship between Competencies and Internal Factors of Nurse Managers in Japan

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[Objectives]

This study examined the relationship between competencies and internal factors of nurse managers in Japan.

[Methods]

We investigated 102 facilities and 4410 nurse managers. In the analysis, five key competencies were used as dependent variables, 20 items of internal factors were used as independent variables, and coefficients were calculated using the stepwise method.

[Ethics]

A questionnaire was administered to nurse managers who consented to participate in the study. This study was conducted with the approval of the institutional ethics committee.

[Results]

We got 2330 answers (52.8%), there were 1227 middle managers and 1103 lower managers. We found 4 items for middle managers, 2 items for lower managers and 4 common items. For middle managers, "review of achievements and processes", "image of the role and the work", "work reward" and "request of support to superiors and colleagues" were found and those are related to 5 competencies (Situation Awareness, Decision Making, Meta-Recognition, Career Support, Self-Control). For lower managers, "consciousness of the success principle" and "act of learning from a role model" were found and those are related 3 competencies (Situation Awareness, Decision Making and Meta-Recognition). Common items were "integration of knowledge and practice", "Clarification of behavior towards self-realization", "current improvement" and "participation in organizational activities".

[Discussions]

We found characteristic items of internal factors for middle managers and lower managers. Also those internal factors impact on different competencies in middle managers and lower managers. And those internal factors are different when improving the same competences between middle managers and lower managers.

Poster**Professional Issues****P1-92****A literature review on stress of patients in post-operative acute phase at Intensive Care Unit: Focus on stress related to nursing care**○Takanori Kawano¹, Kaori Hatanaka², Koji Umehita¹¹*Division of Health Sciences, Osaka University Graduate School of Medicine, Japan*²*Faculty of Nursing, Kansai Medical University, Japan*

[Purpose] The purpose of this study is to clarify the stress of patients experienced in post-operative acute phase at intensive care unit (ICU). In particular, this study focuses on stress related to nursing care provided in ICU.

[Methods] We conducted a literature search of three databases to clarify the stress of patients in post-operative acute phase using the following keywords: ICU, intensive care unit, stress (Stress, Psychological) (Stress, Physiological), and nursing care. Analyzed the articles met the criteria and included these in the review.

[Ethics] Literature review was conducted with ethical considerations.

[Results] We found 314 articles which distinguished in three types of ICU stress: physical stress, psychological stress, and ICU physical environmental stress. Physical stresses include "being in pain" and "being tied down by tubes"; psychological stresses include "fear of death" and "being unable to sleep"; ICU environmental stresses include "having the lights on constantly" and "Hearing the machine alarms." It was revealed that not only post-operative physical invasion, but patients experienced stresses related to nursing care provided in ICU.

[Discussion] This literature review indicated that stress related to nursing care is among many stresses that patients experience in ICU. Therefore, it will be necessary to improve the quality of care provided to ICU patients and reduce the stresses.

P1-93**Temperament and Empathy in Japanese Clinical Nurses**OKOJI Tanaka¹, Keiko Teranishi¹, Satomi Ikeuchi¹, Masato Oe², Yuko Morikawa¹, Chizuko Konya³¹*Department of Nursing, Kanazawa Medical University, Japan*²*Department of Nursing, Mie University, Japan*³*Department of Nursing, Ishikawa Prefectural Nursing University, Japan*

[Objectives]

This cross-sectional survey explored the relationship between temperament and empathy in Japanese nurses.

[Methods]

Between December 2018 and January 2019, 1,259 Japanese nurses answered a questionnaire that included the Temperament Evaluation of Memphis, Pisa and San Diego Auto questionnaire (TEMPS-A) and the Multidimensional Empathy Scale (MES).

Analysis of covariance adjusted for age, gender, years of nursing experience, department, education, employment position, and experience of family death as covariates was conducted to compare each TEMPS-A temperament (depressive, cyclothymic, hyperthymic, irritable, anxious) with average values of the MES subscales (emotional susceptibility, other-oriented emotional reactivity, fantasy, perspective-taking, and self-oriented emotional reactivity).

[Ethics]

This study was approved by the institutional review board at the author's home institution (#1216).

[Results]

Emotional susceptibility was significantly lower in the hyperthymic group than in the other groups ($p < 0.01$). Other-oriented emotional reactivity was significantly higher in the hyperthymic group and significantly lower in the irritable group ($p < 0.01$). Fantasy was significantly higher in the depressive, cyclothymic, hyperthymic, irritable, and anxious groups ($p < 0.01$). Perspective-taking was significantly higher in the hyperthymic group and significantly lower in the irritable group ($p < 0.01$). Self-oriented emotional reactivity was significantly lower in the hyperthymic group than in the other groups ($p < 0.01$).

[Discussions]

Empathetic nurses were found to have temperaments (e.g., depressive, cyclothymic, anxious, hyperthymic) that are correlated with susceptibility to burnout. Temperament is important in nursing and support is needed to prevent burnout.

Poster

Professional Issues

P1-94

Elements necessary for developing social resources related to health and welfare in the community: a literature review

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[Objectives] As society changes, people's needs diversify. Social resources must therefore be developed to meet this widening range of needs. The aim of this research was to identify elements necessary for developing social resources related to health and welfare and to explore how these can be used to transform community and public health nursing.

[Methods] We searched electronic databases (Ichu-shi web, Cinii, PsycINFO, CINAHL, MEDLINE) using the following terms: 'resources or support or programs', or 'health resources', and 'community', 'development' and 'Japan or Japanese'. Eligibility criteria were studies published in Japanese or English within the last ten years that described the resource development process.

[Ethics] There are no ethical issues due to literature review

[Results] Based on 30 reports (26 in Japanese, 4 in English) the review revealed that a diverse array of people develop resources, including public health nurses, doctors, care workers, peer supporters, and university staff. Elements necessary for developing social resources were grouped into eight categories, including 'assessing gaps between needs and existing services', 'collaborating with stakeholders', 'coordinating with users before and after service introduction', and 'support that respects personal autonomy'.

[Discussions] In the last 10 years, social resources that support community health and welfare have been developed not only by health professionals but also educators, citizen volunteers, and others. Nursing professionals should be aware that they can both be a social resource and collaborate with stakeholders to develop social resources focused on person-centered care.

P1-95

A literature review on obstetric factors during labor related to fatigue

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[Objectives]

The aim of this review is to examine the literature on measuring methods of fatigue and obstetric factors during labor related to its fatigue.

[Methods]

We used two electronic databases, MEDLINE and CINAHL, with the following keywords: 'pregnancy', 'labor', 'childbirth' and 'fatigue'. This review involved researching 350 English papers published between 2000 and 2019.

[Ethics]

To maintain the quality of our review, we selected only papers that included ethical considerations as a part of study.

[Results]

Of 350 studies, 21 measured both fatigue and obstetric factors during labor. All of studies measured fatigue by unidimensional Visual Analog Scales or multidimensional fatigue questionnaires. They reported the following obstetric factors: parity, mode of delivery, preterm birth, anxiety, labor pain, uterine contraction pattern, augmentation, epidural analgesia, perineal pain, long duration of labor, pushing during second stage of labor, and dissatisfaction with childbirth. Five papers reported fatigue in real time during labor. One paper reported that fatigue was related to labor pain and anxiety in real time in vaginal delivery without pharmacological pain relief, and the other showed that it was related to the pattern of uterine contractions in labor.

[Discussions]

There are a limited number of studies on the relationship between fatigue and obstetric factors during labor, and its relationship remains unknown. To clarify the association, we should conduct further research using appropriate measurement methods. This work was supported by JSPS KAKENHI Grant Number JP 19K19654.

Poster**Professional Issues****P1-96****Experience of Mid-level ICU Nurses in Detecting Post-surgical Subsyndromal Delirium in Elderly Patients**OAki Iriyama¹, Koko Muraoka^{2,3}, Masako Nagase^{2,3}¹*Department of ICU, Juntendo University Hospital, Japan*²*Graduate of Health Care and Nursing, Juntendo University, Japan*³*Faculty Health Care and Nursing, Juntendo University, Japan*

[Objectives] The purpose of this study was to explore how mid-level nurses in intensive care units (ICU) perceived subsyndromal delirium which was recognized in elderly postoperative patients and to elucidate their experiences.

[Methods] The present study was conducted with a total of eight mid-level nurses working in ICUs and data were analyzed using ground theory approach (GTA).

[Ethics] This study was conducted with approval by the Research Ethics Review Committee of Juntendo University.

[Results] Research participants had an average nursing experience of 7.6 years in ICU. The mid-level nurses' experiences of detecting delirium were categorized into two elements: "to have something in their mind — perception of signs using their filters" and "to be vigilant about investigating suspicious signs." From the category of "to have something in mind — perception of signs using their filters," six subcategories were extracted. From the category of "to be vigilant about investigating suspicious signs," three subcategories were extracted. The nurses detected subsyndromal delirium, screening the following with the filters: degree of invasion, pains, anaerobic condition, repetition of words or gestures, atmosphere or emotions and characters or personalities. To reduce inducers of delirium, nurses in ICU identified "suspicious states" and verbalized them to examine nursing care as a team.

[Discussions] Concerning prevention and progression of subsyndromal delirium, the ICU nurses felt bewildered and conflicted in decision-making and in the nursing care process. Further examinations are required to develop a screening sheet for the establishment of preventive caring measures for delirium, identifying subsyndromal delirium symptoms before delirium onset.

P1-97**Survey of nurses' observation techniques and evaluation of light reflex**OHideki Yano¹, Kiyoko Fukai²¹*Operating Room, Sakaide City Hospital, Japan*²*School of Nursing, The Jikei University, Japan*

[Objectives] The aim of this study was to survey how nurses observe and evaluate the light reflex in the clinical setting.

[Methods] The survey was conducted in the intensive and emergency care units and neurosurgery wards of four mid-sized hospitals in two local cities of Japan from June to July, 2018. We asked the department managers about the environmental conditions of the rooms where nurses observe the light reflex. The individual nurses answered the questionnaire on performing the light reflex. A total of 12 nurse managers representing each of the 3 departments in the 4 hospitals were interviewed, and 179 (37.2%) nurses answered the questionnaire.

[Ethics] This study was approved by the Nursing Science Ethical Review Committee of the Okayama University Graduate School of Health Sciences (D18-01).

[Results and Discussions] No hospitals had a manual for observing the light reflex. The average number of patients on which a nurse observed light reflexes was two per week. Most patients' consciousness level was JCS1. All nurses used penlights to observe the light reflex. The illuminance in the room was 80 to 200 lux and the background noise was 40 to 60 dB, but neither of these parameters was consistent. Among the nurses, 65% observed the light reflex alone, and only 7.3% were confident in their evaluation. Since the light reflex is greatly influenced by the pathophysiological condition of the patient's pupil, we propose that it is necessary to create a standard procedure manual for observing and evaluating the light reflex.

Poster

Professional Issues

P1-98

Capabilities required of nurses as viewed by nurse managers

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(Purpose) The aims of the present study were to elucidate what qualities of human resources are desired by nurse managers and the characteristics of capabilities required of nurses.

(Methods) We conducted interview surveys with six nursing department managers in hospitals with 400 or more beds. The content of the interviews was analyzed by text mining.

Ethical Considerations: The present study was approved by the institutional review board of the affiliated facility and consent to participate was obtained from all subjects.

(Results) Based on "utilization of basic academic ability", "situation comprehension ability", "ability to act with the aim of reaching goals", and "dialogue ability" are required, and finally, "plan execution ability" is required.

(Discussion) Many general capabilities such as "ability to discover issues on one's own" and "ability to work cooperatively" were noted. These findings revealed the capabilities required of nursing human resources as well as the educational support required of organizations for human resource development.

Poster

Innovations in Practice

P1-99

Practical wisdom of oncology nurses who integrate cancer nursing and gerontological nursing

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[Objectives]

To clarify the practical wisdom of oncology nurses who integrate cancer nursing and gerontological nursing, in order to establish cross-sectional care strategies for elderly patients with cancer.

[Methods]

Four certified nurse specialists and seven certified nurses specializing in cancer nursing with an average clinical experience of 22 years were included in this study. They also had experience in caring for elderly patients with cancer. Semi-structured interviews were conducted for collection of data, which were analyzed using the qualitative synthesis method (KJ method) within and across cases.

[Ethics]

The study protocol was approved by the Institutional Review Board of Nagoya City University.

[Results]

Participants thought that they could predict the potential capacity of elderly patients with cancer based on their expertise. Moreover, the nurses believed that the initiative approach to the illness trajectory experience could help elderly patients with cancer maintain their independence. Eventually, the nurses reached the conclusion that enhancing self-affirmation and self-efficacy allows elderly patients to overcome the loss experienced with living with cancer. Additionally, they focused on coordinating comfortable environment for elderly patients with cancer and promoting collaborations, such as multilateral evaluation.

[Discussions]

The practical wisdom of oncology nurses who integrate cancer nursing and gerontological nursing was associated with maintaining the independence of elderly patients with cancer and overcoming the loss experienced with living with cancer. This study confirmed the care perspective that supports the integration of living with cancer in old age, regardless of the complicated physical conditions and psychosocial situations.

P1-100

Survey on how patients with diabetic nephropathy understand their body condition at the dialysis induction phase

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[Background]

Patients with diabetic nephropathy are said to have difficulty feeling subjective symptoms at the dialysis induction phase.

[Objectives]

The present study aims to clarify how patients with diabetic nephropathy understand their present body condition at the dialysis induction phase.

[Methods]

We conducted an unsigned self-administered questionnaire survey on 95 patients with diabetic nephropathy who started hemodialysis at a blood purification center. After five years, a new questionnaire based on the previous research was created. We then confirmed its content and expression validity. Thereafter, we conducted another survey, and the answers were analyzed using simple aggregation.

[Ethics]

This research was approved by the Kanazawa University Medical Ethics Review Board.

[Results]

A total of 91 subjects were analyzed. 51.7% observed as follows: "My body does not need dialysis yet before introducing dialysis." 58.3% thought the following: "I do not feel the subjective symptoms of kidney failure even after starting dialysis." Meanwhile, 16.5% deemed the following: "I feel my body that does not need dialysis," and 53.9% answered that they were different.

[Discussion]

Clearly, the present body status of patients with diabetic nephropathy did not conform to their body perception. In the future, the number of subjects should be increased, and the findings should be proven statistically. Furthermore, our study stressed that patients who do not feel the subjective symptoms of kidney failure need to undergo a suitable intervention to realize the benefits of dialysis, so that they will continue to adhere to the procedure.

Poster

Innovations in Practice

P1-101

Development of a competency list for public health nurses working at community general support centers

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Objective: To develop a competency list for public health nurses working at community general support centers and verify its validity and reliability.

Method: An expert panel was formed to examine the content validity of a competency list developed in a previous study. 50% of nationwide community general support centers were randomly extracted to conduct a questionnaire survey to public health nurses by post. An exploratory and confirmatory factor analysis were performed. Correlation between the list and a self-esteem scale as well as a job satisfaction scale were conducted to examine criterion-related validity. Test-retest was conducted to check stability.

Ethics: This study was conducted with the approval of the Aichi Prefectural University Research Ethics Review Board.

Results: After examination by the expert panel, a draft list with 79 items was eventually developed. A questionnaire survey was requested to 2,448 facilities and sent to 876 people at 559 facilities that gave consent. 567 (64.7%) were collected with 473 effective responses (83.4%). A confirmatory factor analysis came up with five factors. They were "individual support to the elderly and family members: 19 items," "coordination among care teams: 10 items," "community development: 24 items," "team work of three professionals at community general support centers: 11 items," and "job/self-management: 15 items." Correlation coefficient between the competency list and the Rosenberg Self Esteem Scale was $r=0.32$, and job satisfaction was $r=0.34$. Cronbach's α was 0.970 and temporal stability was $r=0.88$.

Discussions: A competency list consisting of five factors was developed to confirm its validity and reliability.

P1-102

Establishment of a Make-up Appearance Care Improvement Mental State for Adult Female Patients with Chronic Disease

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[Objectives]We aimed at establishing the make-up appearance care for adult female patients with chronic disease to improve mental state, then evaluating the care's effectiveness.

[Methods]1. Subjects:Subjects were patients who were diagnosed as chronic disease;2. The Make-up Appearance Care:We set up the make-up appearance care sessions for each subject to actualize through make-up the "self-image" described.3. Data Accumulation and Assessment:We gathered relevant data through a questionnaire survey using the scale of Profile of Mood States (POMS) before- and- after the Make-up Appearance Care. We performed a before-and-after study on the scores of the scale($p<0.05$).

[Ethics]The project was conducted under the ethical committee approval program of the practicing research institute.

[Results]Twenty-nine patients in their early 20s to early 80s received the make-up appearance care. The POMS scale showed significantly improvement in scores in tension/anxiety, anger/hostility, vigor/vitality, confusion/perplexity($p<0.05$)

[Discussions]Program participants could successfully realize the desired self-image through make-up and could share their opinions or feelings with nurses, which probably led to the score increase in POMS scales. This finding suggests that the make-up appearance care is useful in the treatment of patients with chronic diseases in mental state improvement.

Poster

Innovations in Practice

P1-103

Initial grasp for child abuse prevention by neonatal intensive care certified nurses

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[Objectives]

The purpose of this study is to analyze contents of the initial grasp that neonatal intensive care certified nurses perform in the clinical judgment and extract risk factors of child abuse in Neonatal Intensive Care Unit (NICU).

[Methods]

The participants were neonatal intensive care certified nurses. The method was a semi-structured interview. Interview data were analyzed using content analysis techniques. Contents of initial grasp, which is one component of the clinical judgment model (Tanner, C., 2006), were identified.

[Ethics]

The research plan was approved by the research ethics review board of the authors' affiliated institution.

[Results]

The number of participants was six. The number of cases told by them was twelve. According to outcomes after NICU discharge, there were seven in the abuse avoidance group and five in the abuse group. The number of items identified as initial grasp was 61. There were 26 items from the abuse avoidance group, 38 items from the abuse group, and 3 items in common: "Father-centered childcare," "Mother and father are co-dependent," and "Parents do not come to visit."

[Discussions]

Japan's "Guide to dealing with child abuse (2009)" lists 79 risk factors for child abuse. Although they cover the period from infancy to adolescence, they are partially unsuitable for use in the NICU. However, these 61 items can be used for risk assessment of child abuse immediately after NICU admission.

P1-104

Modification of a study program on a culturally sensitive recovery-oriented nursing care model in community psychiatric nursing after a pretest and interview survey

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[Objectives]

To modify a study program on a culturally sensitive recovery-oriented nursing care model in community psychiatric nursing.

[Methods] A study program on a culturally sensitive recovery-oriented nursing care model was created and a pretest was conducted with three community psychiatric nurses. Upon completion of the program, the nurses were asked about their impressions of the program in a group interview. Interview data were analyzed qualitatively, and the study program was refined based on the results of the analysis.

[Ethics] This study was approved by the research ethics committee of the authors' institution.

[Results] The study program was composed of an explanation of the model and how to use it. Through the interview data analysis, the following five categories were extracted: 1. Understanding the model through the study program; 2. Reconfirming the necessity to reflect on the nurses' own practice and values; 3. Reconfirming the clients' rights and initiative in their relationship and dialogue with nurses; 4. Experiencing conflict between respecting clients' autonomy and asking about medicine to avoid hospital admission; and 5. Becoming aware of future tasks to collaborate with professionals in other institutions. When responding to most of the interview questions, nurses talked about their experiences and awareness in daily practice and how these compared with the contents of the model, which indicated that nurses needed an opportunity to share their thoughts. Therefore, discussion time was added to the study program.

[Discussions] Having a discussion after explaining the model helps nurses to prepare to use the model.

Poster

Innovations in Practice

P1-105

Autonomous nursing judgment by young home healthcare nurses during nursing practice in Japan

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[Objectives]

The objectives of this study were to identify the structure of autonomous nursing judgment by young home healthcare nurses during nursing practice in Japan and to investigate their strategy for improving judgment.

[Methods]

A semi-structured interview survey was conducted individually in 9 young home healthcare nurses from August 2018 to March 2019. The interview results were recorded, followed by a verbatim transcript to prepare data. For analysis of the data, information that indicated autonomous judgment by young home healthcare nurses was extracted and coded. Results were categorized according to semantic similarity to increase the level of abstraction.

[Ethics]

The willingness of participants to participate in this research was confirmed by signing an informed consent form after they received both written and oral explanation. This research was conducted after receiving approval from the Tottori University Faculty of Medicine Ethics Committee (No.18A060).

[Results]

It was found that young home healthcare nurses were "aware of their roles" and they performed the following activities at patients' homes based on their "belief in their work as a nurse": "understanding the situation", "physical assessment", "understanding the characteristics of the patients and family", and "respecting the wishes of the patients and family". After home visits, "discussion", "information sharing" was performed with nursing station staff and other healthcare professionals, followed by "reflection" about their judgments.

[Discussions]

The present findings suggested that the key to improving the nursing judgment of young home healthcare nurses is to increase their ability to perform physical assessment, information sharing, and reflection.

P1-106

Effects and clinical application of Miyajima's abdominal pressing technique on defecation in constipated women

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Objective: To study the effect of Miyajima's abdominal pressing technique on defecation in constipated women.

Methods: Research subjects were thirty constipated women, divided 30 subjects into two groups of pressure group and the control group. Miyajima's abdominal pressing method involved pressing different sites a number of times. The subjects were placed in a supine position with their right feet kneel up and left feet make a knee. In the abdominal pressing technique, we used the right hand to press the abdomen of the subject from the navel to the pelvis. With the left hand, we pressed the abdomen from the side of the body, 16 times every minute, amounting to 80 times for 5 minutes. The pressure was equivalent to 110 mmHg of blood pressure. We compared the two groups using bowel sound wave using section analysis. The sections were 0-1, 1-2, 2-3, 3-4, and 4-5 minutes following Miyajima's abdominal pressing. The data from each section was converted into a ratio in relation to the baseline data.

Ethics: Approved by the ethics committee of the relevant institution.

Results: We observed that the standard deviation in the pressure group was significantly higher than that in the control group in section 0-1 ($p<0.05$) 1-2 ($p<0.05$), 2-3 ($p<0.01$), 3-4 ($p<0.05$) and 4-5 ($p<0.01$).

Discussion: Miyajima's abdominal pressure technique improved defecation. We will continue to verify this method for clinical application.

Poster

Innovations in Practice

P1-107

Patterns of staff medical care in promoting recuperation for patients with Unilateral Spatial Neglect

○Akira Someya, Makoto Tanaka

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[Objectives] This study aimed to clarify the pattern of involvement of medical staff in the recuperation of patients with unilateral spatial neglect (USN).

[Methods] An ethnographic study was conducted from July 2017 to May 2019. Participants comprised eight patients admitted to neurosurgery wards and the nurses and therapists who care for them. Data on patients' daily care were collected through observations and interviews.

[Ethics] This study was approved by an institutional review board.

[Results] Medical staff confirmed the perception of the stimulus on the left side of the patients with USN and took two approaches based on the awareness of neglect. The first was to promote the patient's awareness of the USN, while the second helped with the accomplishment of activities of daily living by patients themselves when they did not recognize their neglect. In the first approach, the staff briefed the patient to turn the gaze to the left side and to take action on the left. When the patient was unable to cope on the left, the staff member informed the patient about the situation that was overlooked. As the next step, the staff member indicated the situation that was overlooked by pointing at it.

[Discussions] Modifying care according to patients' perception of USN could be important for their recovery. In addition, medical staff should make their patients aware of recognition on the left side by patients themselves.

P1-108

Intervention Model to Help Family Members Cope with Changes in the Conditions of End-of-Life Cancer Patients Receiving Home Care

○Aya Yoshida

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[Objectives] The objective is to design an intervention model to help family members cope with changes in the conditions of end-of-life cancer patients receiving home care.

[Methods] I designed a theoretical explanatory model based on my prior descriptive study, "The Process by Which Family Members Cope with Changes in Conditions of End-of-Life Cancer Patients Receiving Home Care." Based on this explanatory model, I designed an intervention model to help family members provide home care to cancer patients. I then discussed the model at a specialist meeting and evaluated its adequacy and the possibility of its implementation.

[Ethics] Aichi Prefectural University's research ethics committee granted approval for this research.

[Results] Based on the results of the descriptive study, I specified that the way in which family members maintain psychological distance from nursing determines whether they can make sense of the process of end-of-life care for the patient. Based on commitment theory, I designed an intervention model to help family members optimize their levels of commitment. This model is intended to help family members in coping with changes in end-of-life patients' conditions while also maintaining their own mental and physical wellbeing.

[Discussions] Future confirmation of the effectiveness of the intervention model is necessary.

Poster

Innovations in Practice

P1-109

Skin conditions worsen following tyrosine kinase inhibitor treatment: a case report of two patients

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Objectives: Hand-foot skin reaction (HFSR) is an adverse event (AE) of tyrosine kinase inhibitor (TKI) treatment and presents as skin symptoms, such as erythema and pain, in the extremities. However, there are no reports of skin changes focusing on patients with pre-existing skin conditions prior to treatment. Therefore, we report on skin changes in patients with hepatocellular carcinoma before and during TKI treatment.

Methods: The patients were males aged 81 (A) and 70 (B) years. Prior to TKI treatment, redness and tinea pedis were observed on the feet of patients A and B, respectively. They were asked to describe their symptoms, and their feet were photographed.

Ethics: This study was approved by the Ethical Committee of the Graduate School of Nursing, Chiba University, Japan.

Results: During TKI treatment, bleeding wounds developed in patient A in the areas where redness was previously observed. This was diagnosed as a grade 3 AE according to the Common Terminology Criteria for Adverse Events, and treatment was interrupted. Tinea pedis in patient B worsened; HFSR developed. This was diagnosed as a grade 2 AE; the TKI dose was reduced.

Discussions: Because the patients were easily tired by AEs of the TKI treatment, bathing was difficult, which could have contributed to the worsening of the patients' skin conditions. Patient B wore mountaineering boots to prevent HFSR. The enclosed environment aggravated tinea pedis. These findings suggest that patients with pre-existing skin conditions need increased attention toward skin care during TKI treatment.

P1-110

Fathers' experience about living with children with profound intellectual and multiple disabilities

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Children with severe or profound intellectual and multiple disabilities (PIMD), who have high medical care needs, are under constant pressure of survival and their growth processes are difficult to predict. Parents taking care of such children have significant psychological and social burden on. This study aimed to clarify fathers' experiences living with a preschool PIMD child.

Semi-structured interviews with eight fathers based on an interview guide were conducted to collect the data. Verbatim records were analyzed based on the Modified Grounded Theory Approach.

This study was approved by the Ryukyus University Ethics Committee for Clinical Studies (Authorization No. 850). Twenty-eight concepts were generated along with the following four categories: (i) fear for the child's life and a feeling of being left out of information sharing, (ii) struggle to continue home care, (iii) acquisition of nursing skills and collaboration with wife, and (iv) response to the child's precious growth.

Father experienced fear for the child's life and a feeling of being left out of information sharing during hospitalization after PIMD child birth. Through the accumulation of experiences of living with the PIMD child, father got caregiving skills by mimicking wife's ways and taken a system to acquisition of nursing skills and collaboration with wife. Among them, he found the significance of living as a parent of a PIMD child. These findings highlight the relationship between fathers of PIMD children and healthcare workers, who can provide support for fathers as dignified caregivers.

Poster**Innovations in Practice**
P1-111 How outpatients who might develop liver cancer live their daily lives while continuing medical checkups

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[Objectives] This study aimed to describe how outpatients who might develop liver cancer and continued their medical checkups lived their daily lives.

[Methods] Semi-structured interviews were conducted with 11 outpatients who had been diagnosed with chronic hepatitis or liver cirrhosis. The interviews were audiotaped, transcribed, and qualitatively analyzed to focus on how the participants lived with their disease while undergoing medical checkups.

[Ethics] The institutional review board approved this study.

[Results] The participants developed characteristic routine daily lives based on their medical checkups by shifting their attention to the possibility of getting worse. First, they perceived death from liver disease as a personal problem, and, then, they attended to their bodies when medical checkups were imminent. At their medical checkups, they had opportunities to reflect on their recuperative actions through feedback from medical professionals and, then, they resumed their daily lives. They keenly understood that their diseases were beyond their and the medical professionals' control, and they reconsidered the way they allocated their time and their future priorities. There was circularity in these patterns, and they continued to draw inferences about their diseases.

[Discussions] Outpatients who might develop liver cancer lived routine daily lives while seeking personal compromises that balanced responding to liver disease and life satisfaction by continuing medical checkups. We should consider nursing support for these patients so that they use their medical checkups to their benefit based on what they expect to derive from the medical checkups and how they live their daily lives.

Quantitative index of bowel preparation for colonoscopy using stool color

P1-112 OErina Matsushima¹, Erina Matsushima¹, Ayumi Amemiya¹, Ryutaro Kase¹, Keiko Saito²,

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Objectives: Most nurses subjectively judge the completion timing of bowel preparation for colonoscopy, causing criterion variations among nurses. Therefore, quantitative indexes are necessary for the judgement. This study aims to determine whether stool color can be used as a quantitative index for the completion of bowel preparation.

Methods: We collected 428 stool samples from 70 patients at later stages of bowel preparation. Two experienced nurses classified routinely the samples into two groups adequate and inadequate to colonoscopy. The samples were then photographed and color quantified in terms of hue (H), saturation (S), and value (V) using image analysis. H, S, and V values were statistically compared between the two groups. Receiver operating characteristic curve was obtained for each color parameter, and the area under the curve (AUC), which represents, was calculated.

Ethics: This study was approved by the ethics committee of Graduate School of Nursing, Chiba University (#29-102).

Results: In the adequate group, the median values of H and V were 67.6 (64.4–70.9) and 119.1 (106.5–127.4), respectively, whereas those in the inadequate group were 56.1 (46.8–64.7) and 83.5 (65.5–103.7), respectively, indicating significant difference between the two groups ($p = 0.001$). The AUC showed high accuracies of 0.86 and 0.88 for H and V, respectively.

Discussions: The results show that H and V were significantly higher in the adequate group than in the inadequate group, with high accuracy. Therefore, H and V can be used as quantitative indexes for the completion of bowel preparation.

Poster

Innovations in Practice

P1-114

Dependence-support for self-care of older people with dementia and chronic heart failure in nursing homes

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[Objectives]

In nursing homes, caregivers sometimes provide support to older people with dementia when self-care deficit happen. Thus, the purpose of this study is to clarify the state of dependence-support for self-care of older people with dementia and chronic heart failure.

[Methods]

Participants were five older people with dementia and chronic heart failure residing in a nursing home. Between April and September 2018, we conducted observations and semi-structured interviews of the participants and collected their behavioral and narrative data regarding self-care. We used the deficit theory of nursing by Dorothea Orem as a framework to analyze the data qualitatively.

[Ethics]

This study was approved by the Chiba University Graduate School of Nursing Ethics Committee.

[Results]

Three types of dependence-support for self-care were identified representing caregivers' interactions with older people with dementia and chronic heart failure in nursing homes: (a) watching over achievable self-care, (b) facilitating self-care initiated by caregivers, and (c) participating in self-care upon receiving requests.

[Discussions]

This study identified different self-care capabilities requiring different levels of dependence-support. Caregivers should recognize the ability of older people with dementia and chronic heart failure to conduct self-care and assess these self-care capabilities appropriately. Furthermore, we think that caregivers can increase autonomy and satisfactions in older people with dementia and chronic heart if they can support self-care capabilities. Consequently, further research is needed to develop model for caregivers to facilitate self-care capabilities of older people with dementia and chronic heart failure.

P1-115

A systematic review of research on postoperative delirium onset prevention from the viewpoint of circadian rhythm in the world

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[Objectives]

The purpose of this study is to analyze the relationship between circadian rhythm and delirium onset from previous research in the world, and to analyze the current state of delirium onset prevention.

[Methods]

The search database used PubMed and Cochrane Library. The search keywords were Postoperative delirium, prevention, circadian rhythm, nursing. Result, 53 articles were extracted. Result of comparing with the research purpose, in this research, 4 articles were analyzed.

[Ethics]

Regarding the 4 articles used in this study, we have dealt with articles whose individuals were not identified and whose institution names were not known.

[Results]

The first was study comparing preoperative cerebrospinal fluid and melatonin concentrations in hip fracture patients. As result, there was no significant difference.

The second was clarify the predictors of postoperative delirium after dexamethasone administration. Results Dexamethasone treatment significantly reduced the risk of postoperative delirium.

The third was verify the usefulness of high-intensity light exposure for postoperative patients. Result, it was revealed that high intensity light exposure after surgery alleviated postoperative delirium.

Fourth, we compared the relationship between intraoperative and postoperative cortisol stress response and delirium in patients undergoing cardiac surgery. As a result, it became clear that surgery related stress factors may disturb circadian rhythm.

[Discussions]

The prevention of the onset of delirium is very important issue in perioperative nursing. Delirium is characterized by disturbance of circadian rhythm. Melatonin regulates circadian rhythm. It became clear from the 4 articles that melatonin production regulates circadian rhythm and indicated the possibility of preventing the onset of postoperative delirium.

Poster

Innovations in Practice

P1-116 Analysis of nursing research on CPR in gender: a 10-year study in the world

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[Objectives]

The purpose of this study is to clarify the analysis and issues of research on sex during CPR in the world.

[Methods]

The search database used PubMed and Cochrane Library. The search keywords were nursing, CPR, gender. The retrospective period is 10 years from 2009 to 2019. As a result, 47 articles were extracted. Result, As a result of comparing with the purpose of this research, 36 articles were analyzed. The text mining software KH coder analyzed the research purpose of 36 articles.

[Ethics]

Regarding the 36 articles used in this study, we have dealt with articles whose individuals were not identified and whose institution names were not known.

[Results]

The total number of extracted words was 547. n=298. SD1.64. In order of appearance, the order was CPR, patient, resuscitation, arrest, cardiopulmonary, student, cardiac, determine, perform, assess, associate, evaluate, factor, performance, receive. From hierarchical cluster analysis, it was classified into four clusters of practical performance, student CPR education, cardiac arrest, and acceptance care promotion factors. The results of co-occurrence network classification revealed that CPR has a correlation with student, resuscitation, cardiopulmonary, performance, perform, evaluate, and associate. The word with the highest correlation with CPR (0.36) was perform.

[Discussions]

From the results of hierarchical cluster, it became clear that implementation of CPR without fail by gender difference, reflection and debriefing after implementation are important in CPR education of students.

It was suggested that reliable lifesaving techniques and debriefing sessions are necessary during CPR education of students.

P1-117 Analysis and problem of research on dialysis nursing at disaster time in the world

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[Objectives]

The purpose of this study is to clarify the analysis and issues of research on dialysis nursing in disasters in the world.

[Methods]

The search database used PubMed and Cochrane Library. The search keywords were searched by Nursing, disaster Dialysis. As a result, 40 articles were extracted. According to the purpose of this study, 16 articles were analyzed. The text mining software KH coder analyzed the research purpose of 16 articles.

[Ethics]

Regarding the 16 articles used in this study, we have dealt with articles whose individuals were not identified and whose institution names were not known.

[Results]

The total number of extracted words was 535. The difference was 247 words. It was n = 247. In order of appearance, the order was patient, team, disaster, hospital, diagnosis, nephrologist, nurse, rapid, and study. From hierarchical cluster analysis, it was divided into four clusters: program development, team behavior at the time of disaster occurrence, dialysis nurses, and patient health. From the results of co-occurrence network classification, it became clear that disasters are correlated with team, health, nephrologist and renal. The word with the highest correlation to disasters (0.4) was research.

[Discussions]

From the results, it is important that the development of a program that can respond promptly to the health of dialysis patients prior to disasters, and that the medical professions cooperate in a team. It is important for the hospital medical team to take action and to consider the health of the dialysis patient.

Poster

Innovations in Practice

P1-119

Values related to treatment selection by patients with recurrent or advanced cancer

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[Objectives] To clarify the values related to treatment selection by patients with recurrent or advanced cancer and their family members.

[Methods] A written questionnaire was administered to nurses frequently involved in supporting decision-making in collaboration with other professionals. The identification of values involved the content analysis method.

[Ethics] This study was conducted after receiving approval from the ethics committee of the institution.

[Results] 1. Research collaborators: 7nurses. 2. Subjects: 7patients diagnosed with stage IV cancer. 3. Patients' values. There were four categories: 1) life prolongation, 2) avoiding a painful experience, 3) minimizing family burden, and 4) securing time to spend with family. 4. Families' values. There were four categories: 1) prolongation of the patient's life, 2) minimizing the patient's distress, 3) respecting the patient's will, and 4) maintaining the family member's living situation. Maintaining these values has been a trigger when cancer patients make treatment decisions.

[Discussions] The results showed the importance of nurses affording patients and their family members opportunities to communicate about differences in values when making decisions on treatment. When nurses are involved in decision support in treatment choice for patients with recurrent or advanced cancer, the nurse needs to draw out the patient's and family's sense of values and propose ways to maintain a life based on that value. We plan to utilize the results as the basis of a decision-making support system.

P1-120

Nocturnal sleep characteristics in hospitalized elderly patients using a sensor placed under a mattress

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⁴Department of Nursing, Kansai Medical University, Japan

[Objectives] The aim of the present study was to investigate the sleep characteristics during nighttime in elderly patients who were hospitalized for medical therapy.

[Methods] Twenty elderly patients (9 males and 11 females), admitted to the respiratory medicine ward of a general hospital, were recruited. A mat-type sleep sensor (Tanita, Inc, Japan), which a high-sensitivity sensor is internally equipped with, was used to measure their sleep efficacy and activity time during the nighttime for two days.

[Ethics] Approved by Research Ethics Committee of Fukui Prefectural University.

[Results] Twelve of all participants had cognitive dysfunction, and eight of them were under restrained condition in bed for their safety. Of all participants, six patients were able to walk by oneself, eight patients used a wheelchair during mealtimes, and the remaining were placed at bed rest all day. The mean sleep efficiency of patients with cognitive dysfunction ($83.6 \pm 6.7\%$) was significantly lower than that of those with normal cognition ($90.0 \pm 3.9\%$). Nocturnal activity times of patients group with physical restraint (44.7 ± 9.4 times) higher than that of patients group without physical restraint (29.7 ± 10.6 times, $p < 0.05$). There were significant differences in nocturnal activity times between walking by oneself (21.3 ± 5.5 times) and using wheelchair (41.4 ± 7.2 times, $p < 0.05$).

[Discussions] This study suggests that cognitive function, physical restraint and physical function appeared to affect sleep in elderly patients with respiratory disease.

Poster**Innovations in Practice****P1-121****Development of a person-centered care model for elderly patients with type 2 diabetes living alone**ONaoko Yamagishi¹, Towako Katsuno²¹*Faculty of Health Sciences, Department of Nursing, Saitama Prefectural University, Japan*²*Faculty of Nursing, Iwate University of Health and Medical Sciences, Japan***[Objectives]**

Although the number of elderly people living alone is increasing annually, only a few studies have focused on elderly diabetes patients who live alone. Those who live alone experience increased difficulty in self-management of their treatment and are at high risk of emergency re-hospitalization and death. The present study aimed to develop a person-centered care model for elderly patients with type 2 diabetes who are living alone.

[Methods]

The model was based on the results of a concept analysis, qualitative research related to expert nursing care as well as on research related to elderly patients with type 2 diabetes living alone.

[Ethics]

This study was approved by the appropriate institutional ethics committee.

[Results]

Our person-centered care model was based on the concept of "Building a trusting relationship enabling honest discussions" and it included elements such as "holistic assessment" and "sharing the patient's desired life and goals." In addition, having "supportive promotion of self-management" and "support for improving life" were included as a means to promote a safe and secure life and prevent patient complications. Further, "support for maintaining and promoting the patient's enjoyment of life" was another critical factor for improving elderly patients' subjective QOL and, when necessary, it included elements of "family support and adjustment of social resources."

[Discussions]

We were able to develop a multifaceted, realistic nursing model that integrated both patient and nurse perspectives. The validity of the developed model needs further evaluation.

P1-122**Effects of "manual micro vibration therapy" on disuse syndrome in Japan: A literature review**OMari Azuma¹, Teppei Yamashita², Katsuko Kamiya³¹*Doshisha Women's College of Liberal Arts/Faculty of Nursing, Japan*²*Himeji Dokkyo University/Department of Nursing, Faculty of Nursing, Japan*³*Kyoto College of Nursing, Japan*

[Objectives] This purpose of this study explored the research trends and results of "manual micro vibration therapy," which is used with patients suffering from disuse syndrome in Japan, to sort out related concepts and to discuss the prevention of disuse syndrome in the motor system.

[Methods] The literature survey involved several databases in Japan. The keyword was "YOUZYUBISINDOU," which translates to a kind of hands-on micro vibration therapy). The search period was not set, though it was set from 1986 to 2018 in the first year of recording. In the foreign literature search, the databases of "PubMed" and "CINAHL" were used, and the keywords were "micro vibration and muscles."

[Ethics] Not applicable.

[Results] A total of 33 cases were reviewed. The oldest one was in 2009. The most reports between 2009 and 2018 were published in 2012. Type of literature: Six original papers, 22 conference proceedings, three commentaries, and two commercial journals were reviewed. There were two studies of frequency in "manual micro vibration therapy", 18 studies have shown improved constipation, six studies have improved joint contracture. And five studies were recovery programs for patients with persistent consciousness disorders and disuse syndrome.

[Discussions] "Manual micro vibration therapy" is a new concept in nursing. And it was not used outside of the nursing literature. It was not used outside Japan. The related concept was a type of massage, myofascial release. Because it is used as a treatment of disuse syndrome, research on preventive care is needed in the future.

P1-123

Understandings of decision making for elderly patients with cancer and their family members during the transitional period from hospital to home care: differences in using a decision making intervention aid called the Communication Note with my Dearest Person

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[Objectives]

To identify the changes that occur in their thoughts after the first cancer treatment, by using the Communication Note with my Dearest Person (the Note) during the decision-making process. The Ministry of Health, Labor and Welfare termed a discussion between the patients and their family at the final stage of life as the 'Life meeting' (Advanced Care Planning : ACP).

[Methods]

Elderly patients diagnosed with cancer and their families were approached after the first treatment. Semi-structured interviews ($n=7$) in regard to post discharge plans were held with a focus on selecting suitable accommodation for the patients following the first cancer treatment. The Interviews were analyzed.

[Ethics]

The study has been approved by the Seirei Christopher University ethics committee (No. 16078) and the hospital ethics committee.

[Results]

A total of six categories were found such as 'believing there will be no further deterioration', 'they will think about it only when it happens', 'unable to discuss the issue with the family' and 'they are getting ready to think about inheritance'. Overall, Japanese were reluctant to have open discussion about their end of life plan.

[Discussions]

An optimal timing to commence ACP is around six months after the prognosis is given. In this study, the commencement of ACP was immediately after the first treatment, while patients are generally holding high hopes for the prognosis. Such a circumstance may have affected how the patients and their family perceived the reality of the prognosis.

P1-124

Effectiveness of Autobiographical Reminiscence Therapy on the Cognition of Elderly People with Dementia-A Literature Review

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[Objectives]

This review aims to determine whether reminiscence therapy is effective in improving the cognition of elderly people with dementia, and verify that autobiographical reminiscence therapy is a valid intervention to enhance their abilities and preserve their cognitive functions.

[Methods]

The literature review sourced eligible articles from PubMed, Web of Science, and Japan Medical Abstracts Society by using the following key words: autobiography, reminiscence therapy, Dementia. In total, 34 articles were selected. For the purpose of the review, articles were classified into those that stimulate recall by using specific tools (such as a life story book) and those that analyze the effectiveness of individual reminiscence programs.

[Ethics]

There were no ethical issues that we encountered.

[Results]

It was found that most of the subjects that were studied suffered from mild to moderate dementia and were admitted in either community residencies or long-term care facilities. Among the tools that were examined, life story book significantly improved the recall of autobiographical memory.

[Discussions]

An individual autobiographical program is considered crucial for the construction and maintenance of personal identity. However, few studies revealed whether reminiscence therapy is effective in elderly patients hospitalized for short-term care. These interventions are essential for enabling decision-making in elderly patients with dementia, such as choosing their living place and receiving care. Further research will help in evaluating these health care interventions.

Poster

Innovations in Practice

P1-125

Information necessary for the discharge summary written by visiting nurses for patients who wish to have end-of-life care at home

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²Kou Group, Co. Ltd, Japan

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[Objectives]

It is necessary for visiting nurses at the first visit to provide information based on a discharge summary for patients who wish to have end-of-life care at home. This study aims to identify the information specifically important in assisting patients to live as they wish till the end of life.

[Methods]

We conducted group interviews with six managers of agencies for visiting nurses who had experience in assisting end-of-life care at home. Assigning one code to individual statements, the interview data were integrated into categories according to the similarity and relevance of the contents.

[Ethics]

We paid careful attention to ensure that individuals could not be identified in the presentation. (Approved by the Institutional Review Board: No. 19-03)

[Results]

Three categories were found: [Awareness of patients and their family about the disease] including and , [Wishes related to life during treatment] including and , and [Will and anxiety of family and care givers about providing the end-of-life care] including and .

[Discussions]

In providing support for patients who wish to have the end-of-life care provided at home, it is important for visiting nurses to understand how patients, their families, and care givers perceive and think of the end-of-life at home. To provide better support in the limited time available, providing information based on the discharge summary is very significant.

P1-126

Effects of father-premature infant skin-to-skin contact on biological and psychosocial responses of the fathers: A systematic review

○Yuri Inaba, Mie Shiraishi

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[Objectives] Skin-to-skin contact (SSC) for premature infants has been conducted worldwide as promoting proper development of the infants, and mother-infant interaction. However, there is a lack of knowledge on fathers' perspective. The aim of this systematic review was to investigate the effects of father-premature infant SSC on biological and psychosocial responses of the fathers.

[Methods] We conducted a database search (Ichushi-Web, CiNii, MEDLINE, CINAHL, PsycINFO, Cochrane Central Register of Controlled Trials, SocIndex, and Scopus) and hand search for relevant publications in English and Japanese, using the following keywords: skin-to-skin contact, kangaroo care, and father. The search included all studies from the inception of each database to June 2019. According to inclusion and exclusion criteria, two researchers reviewed titles, abstracts, and full articles and then selected articles including in this review.

[Ethics] A systematic review does not require ethics review.

[Results] Nine articles (5 quantitative studies and 4 qualitative studies) were included. During or after father-infant SSC, salivary oxytocin levels of fathers significantly increased in 2 out of 2 articles, salivary cortisol levels significantly decreased in 1 out of 3 articles, and anxiety levels (visual analog scale) significantly decreased in 1 article. In qualitative studies, fathers who experienced SSC reported that SSC made the following common changes; acquiring paternal roles and promoting father-infant attachment.

[Discussions] This review suggests the possibility that father-premature infant SSC has biological and psychosocial benefits for fathers, especially father-infant attachment and stress reduction. However, further research regarding father-premature infant SSC are required to confirm the effects.

Poster

Innovations in Practice

P1-127

Research Method to Contribute to Improving Lives of Children Whose Movements Were Not Easy to Be Read by Caregivers Due to Their Severe Disabilities: Collaboration with a 12-Year Old Child with Severe Cerebral Palsy and Caregivers of a Facility

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²Faculty of Liberal arts education, Tohoku Medical and Pharmaceutical University, Japan

[Objectives]

To discuss our method, our research processes were described by focusing on interpretation of movements of a 12-year old child with severe cerebral palsy.

[Methods]

Qualitative descriptive research.

[Ethics]

Approved by committee of ethics, head of the facility and families of the child. (Supported by JSPS KAKENHI No.17K12381)

[Result]

A 12-year old child (Child-A) with severe cerebral palsy and caregivers of a daycare facility for disabled children in Osaka participated in our research. We conducted a free-comment questionnaire for and group interviews with caregivers, and observation sessions in the facility from May to July 2019. The number of the observation sessions and the timing of the group interviews were arranged depending on the situation as follows: 1) distribution of a questionnaire for all caregivers 2) the first observation session (84-min with 6 caregivers) 3) collecting information about Child-A from collected 21 questionnaire (70%) 4) the second observation session (160-min with 6 caregivers) 5) the first group interview (90-min with 7 caregivers) 6) the third observation session (83-min with 6 caregivers) 7) the second group interview (80-min with 6 caregivers).

In addition to the caregivers' common recognitions that Child-A called caregivers by coughing and fell asleep during unfavored activities, to follow the method led caregivers to notice Child-A's some developments and to suggest the possibility of another way to call caregivers by Child-A.

[Discussion]

By promoting collaborative interpretation, our methods contributed to understanding Child-A more deeply.

P1-128

A Review of Communication Skills Training for Nurses' Addiction Interventions

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[Objectives]

The number of people suffering from addiction is increasing worldwide, and the types of addiction widely vary. It is important that nurses gain basic communication skills for addiction interventions. This study reviewed the literature about the contents of communication skills training for nurses' addiction interventions.

[Methods]

The systematic review was conducted on original articles in English published between July 2009 and June 2019. The search strategy queried the CINAHL (EBSCO) and MEDLINE databases. Search terms were based on the following concepts: "addiction" (or related terms), "nurses" (or healthcare professional terms), "communication" (or counseling terms), and "skills training."

[Results]

Sixty-five studies were retrieved, and, after removing duplicates, an abstract, and applying the inclusion criteria, eight articles were selected for the review. One of the eight articles was the Cochrane Review titled "Training Health Professionals in Smoking Cessation." The addictive substances targeted for counseling skill training were tobacco (four) and alcohol (three). One article was a mixture of the two. The theories underlying communication skills were 5A, Motivational Interviewing, and SBIRT.

[Discussions]

Currently, various health problems relate to many types of addiction, but skill training for nurses has been limited to alcohol and tobacco addictions. In the future, nurses who respond to all health problems in various situations might need to have communication skills that are broadly common to people across types of addiction.

Poster

Innovations in Practice

P1-129

Holistic care for patients with risk of delirium in acute care hospitals in Japan

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[Objectives] The aim of this study was to describe the nursing approach to holistic care performed by nurses in acute care hospitals for patients at risk of delirium.

[Methods] The study subjects included nine nurses working at two acute care hospitals. Data were collected by participant observation while the nurses cared for patients with risk of delirium and semi-structured interviews were conducted with the individual nurses. Interview transcripts and field notes of the participant observers were analyzed using Spradley's framework for ethnographic data analysis.

[Ethics] This study was approved by the ethics review boards of the authors' affiliated institution and participating hospitals. The authors have no conflicts of interest to disclose.

[Results] The holistic care for patients with risk of delirium included the following seven nursing behaviors: "gaining acceptance from patients," "adopting an attitude of ordinariness," "establishing natural bodily rhythms," "coping with stress," "anticipating predictive risk," "pulling out of delirium and back to reality," and "providing support as a team." The central theme of delirium care underlying these behaviors was "working to allow patients to live safely and relaxed."

[Discussions] This study found that nurses treated patients as ordinary persons, assessed the risk of delirium, and provided care based on a careful consideration of each patient's personality. Acute nursing care for delirium patients has long prioritized assisting disease treatment. The results of the holistic human care observed in this study suggest a potentially different approach to the long-established approach to delirium care.

P1-130

Chinese mothers' experiences and feelings about pregnancy, childbirth and childcare in Japan, from conception through their children's first 4 months of life

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[Objectives]The aim of this study was to reveal Chinese mothers' experiences, attitudes, and beliefs about pregnancy, childbirth, and childcare in Japan, from conception through their children's first 4 months of life.

[Methods] Semi-structured interviews were conducted with two Chinese mothers who were rearing their children in Japan. Data were analyzed using a qualitative inductive approach.

[Ethics]I started this study with approval from ethics committee of university I belonged to. I explained the object, method, ethical consideration, protection of personal information and freedom of participation about this study to participants in detail.

[Results]Seven core categories, 28 categories, 86 subcategories, and 278 codes were extracted from the data obtained from the interviews. The core categories were 'enthusiasm for natural childbirth and breastfeeding', 'experience of childbirth versus expectations', 'conditions in Japanese hospitals', 'fusion of Chinese and Japanese culture in childbirth and parenting' 'domestic help after childbirth that incorporates the mother's own childcare customs', 'isolation of mother and child after childbirth and influences on the mother's childcare practices', and 'use of social resources and support to extend the range of childcare options'.

[Discussions]The results of the study suggest that midwives should help couples recognize that they grew up in different cultures with different practices regarding childbirth and parenting, using their professional knowledge, advice from their colleagues, their communication skills, and their understanding of the couple's relationship. Furthermore, midwives should serve as mediators for these couples so that these couples can resolve their differences and create compromises.

Poster

Innovations in Practice

P1-131

Effects of relaxation on control of pain for chronic pain patients

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[Objectives] To clarify the effect of using relaxation method for pain relief as self-management of chronic pain.
[Methods] Cooperation was obtained from the 10 patients (average age 45 ± 6.2 years; 2 males, 8 females) with pain in multiple parts of the body due to fibromyalgia. The lecture to experience relaxation methods like breathing and muscle relaxation was held 24 times in 6 months. Before each lecture, impact of pain on ADL and Pain Catastrophizing Scale (PCS) were measured. Also, Wong-Baker Faces Pain Rating Scale (face scale), body parts on pain, blood pressure, pulse, and relax scale were measured before and after the lecture.

[Ethics] This study was approved by Research Ethics Review Board of the organization.

[Results] The frequency of participating in the lecture was 1-10 times. Compared to the beginning of the lecture, blood pressure decreased by 3.1 mmHg and the pulse decreased by 2.4 bpm after the lecture. Additionally, the face scale decreased by 3.9. The sense of pain in each part was decreased, but the pain itself did not disappear. Relax scale increased by 12 points after the experience. There was no improvement in Impact of pain on ADL, but the PCS score increased, some negative thoughts and emotions improved.

[Discussions] The experience of relaxation has effect of reducing the pain, relaxing muscle, and enhancing the relaxed state. It also brought a feeling of calmness and security. Even if the pain recurs, it may make the patient feel positive.

P1-133

A systematic review on biological and psychosocial effects on the father after skin-to-skin contact with premature infant

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[Objectives] Skin-to-skin contact (SSC) for premature infants is encouraged across the world to promote proper development of infants and mother-infant interaction. However, there is a lack of knowledge about the effect of SSC of premature infants with the father. The aim of this systematic review was to investigate the biological and psychosocial effects on the father after SSC with premature infant.

[Methods] We conducted a database search (Ichushi-Web, CiNii, MEDLINE, CINAHL, PsycINFO, Cochrane Library, SocIndex, and Scopus) and hand search for relevant publications in English and Japanese, using the following keywords: skin-to-skin contact and fathers. The search included studies from the inception of each database to June 2019. Based on the inclusion and exclusion criteria, two researchers selected the articles to be included in this review.

[Ethics] A systematic review does not require ethics review.

[Results] Nine articles (five quantitative studies and four qualitative studies) were selected. In two articles, salivary oxytocin levels of the fathers significantly increased during or after father-premature infant SSC. The salivary cortisol levels significantly decreased according to one of the three relevant articles. The anxiety levels significantly decreased according to one article. In qualitative studies, fathers reported that with SSC they noticed the following common changes: awareness of the paternal role and promotion of father-infant attachment.

[Discussions] This review suggests the possibility that father-premature infant SSC has biological and psychosocial benefits for fathers, especially in terms of attachment and stress reduction. However, further research regarding the effects is required to confirm the findings.

Poster

Innovations in Practice

P1-134

What is the required Echo Probe Manipulation for Success of Peripherally Inserted Central Catheter Placement?

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[Objective] To clarify the technical issues in the successful placement of peripherally inserted central catheter (PICC) to Japanese nurses, using echo imaging.

[Methods] Twenty-eight nurses, certified in Cancer Chemotherapy Nursing, participated in PICC placement practice. Following a lecture on PICC by experts, they practiced PICC placement using a catheter simulator. Echo monitoring and echo probe manipulation were performed during the practice. Subsequently, PICC placement issues were debriefed. Specific issues concerning the operation of the echo probe were extracted from the recorded data, and the debriefing was recorded verbatim.

[Ethics] The Seirei Christopher University Ethical Review Board approved the study.

[Results] An analysis of the recorded data revealed that the echo probe could not be moved in three dimensions. In addition to "horizontally moving" the echo probe to the distal or proximal, and left or right directions, operations such as "tilting," "tightening," and "rotating" were required. In addition, the verbatim record of the debriefing revealed that the nurses lacked anatomic knowledge on visualizing the vein on the monitor.

[Discussions] PICC placement is prominent in Japan as one of the 38 nursing-designated cares. Therefore, inexperienced nurses need to be trained thoroughly to understand the anatomical structures and the techniques involved in the operation and manipulation of these specific echo probes.

P1-135

The care for elderly with dry skin trouble based on the results of previous studies

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[Objectives] The purpose of this study is to clarify the trend of research on care for dry skin of the elderly and to give suggestions for future studies.

[Methods] Relevant literature from Pub Med, Japan Medical Abstracts Society (ICHUSHI) web version, was searched using the keywords "the elderly", "dry skin" and "nursing". We identified 31 Japanese reports and 15 international reports which had been published between 2008 and 2018.

[Ethics] This study was conducted based on ethical considerations.

[Results] The subjects of the survey varied, including elderly living in the community, elderly entering nursing homes, and elderly hospitalized for illness. These are research studies such as the prevalence of dry skin and the morbidity of skin diseases and empirical research on the effectiveness of care. On the other hand, there are few studies on skin condition assessment and care criteria.

[Discussions] Chronic skin dryness in elderly people is likely to cause skin problems.

The current care for dry skin remains a uniform care approach mainly for replenishing lipids and reduce water loss. It is considered to require the assessment tool for the care according to the individual skin condition.

Poster

Innovations in Practice

P1-136

District nurses' support for people with cancer and their families, in relation to decision-making for their end-of-life care plan in UK: a qualitative study

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²Health Research, Lancaster University, United Kingdom

³Palliative care team, Lancashire Teaching Hospitals NHS Foundation Trust, United Kingdom

[Objectives]

The Palliative care developed country, UK, actively supports the decision-making of cancer patients and families based on Gold Standards Framework, unlike Japan.

This research's objective is to understand the UK' district nurses' support for people with cancer and their families towards the end-of-life receiving home based care.

[Methods]

Qualitative research design, with data collected using single semi-structured interviews. District nurse participants were recruited from one NHS setting in North West England. Qualitative content analysis was facilitated using NVivo12.

[Ethics]

The research project had been approved by the ethics committee of the Graduate School of Nursing, A University and the Health Research Authority (HRA) in UK.

[Results]

District nurses (n=10) had 3 to 20 years of experience as visiting nurses for end-of-life cancer patients at home. All participants were female, ranging in age from 29 to 58 years. As to the district nurses' support of decision-making for people with cancer and their families, ten categories were identified including: "gauging", "asking", "explaining", "talking", "waiting", "respecting", "supporting", "collaborating", "objective" and "internal". In gauging, the timing to ask about end-of-life care was the first visit, early, after building relationships, and so on. They asked for disease understanding and needs without fear by having tools.

[Discussions]

Decision making was conscious and emphasized from early in their care. Our results suggest, that providing internal, tools and interdisciplinary support for nurses is important.

P1-137

Feasibility Study of Wellness Recovery Action Planning(WRAP) for depressive absenteeism patient

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²Yamagata Sakura-cho Hospital, Japan

[Objectives]Clarification of the feasibility of implementing the Wellness Recovery Action Planning as part of the support for returning to work for depression.

[Methods]At the psychiatric medical institution in the Tohoku district, two facilitators who had experience of mental illness and received appropriate training and one nurse who assisted the operation carried out a program of three months (10 times). Evaluation of feasibility was based on Bowen's proposal based on user's satisfaction and usefulness, degree of integration into existing programs, the burden imposed on medical institutions and staff members to be implemented, and the degree of reinstatement of program participants.

[Ethics]This research has had informed consent and the other ethical considerations for participants with ethical approval (2612-01).

[Results] Eleven of the 14 participants who participated in the program for the purpose of reinstatement during that period participated in the WRAP class. The average of the satisfaction and the usefulness of the participants was 7.98, 8.01 with a score of 10 points respectively. All of the participants completed their reinstatement during the subsequent six months, and none of the 11 participants had to leave work within 6 months. [Discussions] From these facts, it can be considered that the program is highly likely to be integrated into medical institutions with programs aiming for reinstatement. From the above, it can be said that WRAP classes are highly feasible in medical institutions that support reinstatement for workers with depression due to depression.

Poster

Innovations in Practice

P1-138 Oral Cavity Condition of Acute-phase Stroke Patients: Evaluation Based on Amount of Moisture in Oral Mucosa

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School of Human Nursing, THE UNIVERSITY OF SHIGA PREFECTURE, Japan

[Objective]:

To evaluate oral cavity condition for 14 days of acute-phase stroke patients based on amount of moisture in the oral mucosa.

[Methods]:

Subjects: 10 stroke patients from whom consent was obtained.

Study period: October 2013-June 2014.

Evaluation index: The Oral moisture-checking device(Mucus[®]).

Method: Measure amount of moisture in the oral mucosa of each patient at 10:00 a.m. for 14 days. Examine the results by dividing the 14 days into 7 periods.

[Ethics]:

This study was approved by the institutional review boards of University (250-1-4) and Hospital (24-14).

[Result]:

The subjects comprised of 5 men and 5 women. Their age of 77.0 ± 15.3 (median \pm interquartile range). Amount of moisture in the oral mucosa during the first, second, third, fourth, fifth, sixth and seventh periods were 19.8 ± 16.3 , 22.4 ± 9.0 , 25.0 ± 6.0 , 21.1 ± 6.4 , 24.5 ± 13.4 , 23.7 ± 4.7 and 18.7 ± 10.6 , respectively. As a result of analysis of variance on the amount of moisture in the oral mucosa in seven periods during 14 days, significant difference was observed in the seventh period ($p < 0.05$). In addition, significant difference was also observed at four time points between second and third terms, second and seventh terms, third and seventh terms, and fourth and seventh terms ($p < 0.05$).

[Discussion]:

It is considered that the severe cases remain in stage 7 and many medicines are used and the oral cavity is dry.

This study was conducted with assistance in part from a 2011 Grant-in-Aid for Young Scientists (B) (subject code: 23792609).

Poster

Health Promotion / Disease Prevention

P1-139

Physiological and Subjective Evaluation of Passive Muscle Relaxation for Stress

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[Objectives] The purpose is to clarify how passive muscle relaxation affects stress using physiological and subjective indicators.

[Methods] 1. Healthy women in their twenties underwent the following in the order in which consent was obtained:(1)Day 1:passive muscle relaxation experiment, Day 2:control experiment, and (2)Day 1:control experiment, Day 2:passive muscle relaxation experiment. 2. Mental arithmetic stress tests (10 minutes) followed resting (10 minutes), which was then followed by a 14-minute intervention. 3. Salivary alpha-amylase activity (sAA) and Visual Analogue Scale were collected three times (prior to the experiments, following stress tests, and immediately after interventions). 4. The Wilcoxon signed-rank test was performed to evaluate changes over time in each group. The Mann-Whitney U test was performed for intergroup comparison. The significance level was set at 5%.

[Ethics] This study was conducted with the approval of the Research Ethics Committee of our affiliated facility.

[Results] A total of 40 subjects, whose average age was 22.1(SD, 3.5) years. sAA values:With regard to changes over time following stress tests and immediately after interventions, a significant decline ($p=0.008$) was observed in the passive muscle relaxation experiment, while no significant decline was observed ($p=0.502$) in the control experiment. There was a significant difference in the intergroup comparison of the passive muscle relaxation and control experiments ($p=0.026$). Visual Analogue Scale:There were significant differences with regard to intergroup comparison of the passive muscle relaxation and the control experiments ($p=0.017$).

[Discussions] It is surmised that passive muscle relaxation alleviates sympathetic nervous tension caused by acute stress and activates the parasympathetic nervous system.

P1-140

The Parenting Processes led by Feelings of Mothers with Depressed Mood toward their Children

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²Department of Nursing, Faculty of Health Sciences, Komatsu University, Japan

[Objectives] The aim of this study was to investigate parenting processes led by feelings of mothers with depressed mood toward their children.

[Methods] Semi-structured interviews were conducted with 12 mothers: six mothers who scored 9 or higher on the Edinburgh Postnatal Depression Scale at a 1-month postpartum checkup at their hospital or during a newborn baby home visit; other six mothers who exhibited high levels of anxiety about childrearing and who had received childrearing guidance. A grounded theory approach was used for analysis.

[Ethics] This study was approved by the Medical Ethics Committee of Kanaawa University.

[Results] These mothers, on a daily basis, "Did not understand their children and were irritated and distressed about them," and over time experienced a variety of feelings while caring for their children. These feelings and behavioral processes resulted in the following consequences: "Impulsively resorting to violence," "Neglecting or being incapable of attending to their child," or, "Being thankful to their child."

[Discussions] Findings of this study suggest that having face-to-face meetings with mothers at risk of postnatal depression is crucial in effectively understanding and supporting them. To avoid worst-case scenarios where new mothers are driven to extreme behaviors or isolation, supporters should visit these mothers, understand their circumstances, provide appropriate and effective support, and build relationships to foster and facilitate additional support if needed.

Poster**Health Promotion / Disease Prevention****P1-141****Literature Review, Critical Appraisal, and Study Synthesis on Prevention of Childhood Obesity**

OAi Ogata

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[Objectives] Objectives of the study was to critique, synthesize, and discuss the interventions for a child obesity prevention programme targeting children 0 to 18 years of age in middle-income countries in order to plan better effective interventions in middle-income countries in order to prevent noncommunicable diseases (NCDs) in future. [Methods] Researches in the period from 1990 to 2017, with the randomized controlled trials for preventing obesity in children, and implemented in the middle-income countries were included. Studies for the children who already have severe disease or medication were excluded. [Ethics] There are no conflicts of interest. [Results] Three articles met the criteria. None of them had theoretical framework. All 3 studies led significant results such as reduction of body mass index (BMI), insulin, and soda intake; and increment of stepcounts. Two studies yielded lower BMI than a control group in girls because of better behaviors and followed the exercise program more strictly. Another evidence was the importance of target population assessment for better intervention. All articles assessed the child behaviors and characteristics in each country. Study in Mexico focused on walking because it was simple, inexpensive, and accessible way for everyone. Another study in Brazil targeted reducing soda intake because the previous study had found children's soda friendly lifestyles. [Discussions] More studies on child obesity prevention are needed in accordance with increment of NCDs deaths in middle-income countries. Assessing target population's characteristics, interventions for girls could be one of options for child obesity prevention programme in middle-income countries.

P1-142**A prediction model of community commitment and self-efficacy for preventing social isolation among community-dwelling older people, using machine-learning**OYoko Tanaka^{1,2}, Ayumi Kono²¹*Faculty of Nursing, Kio University, Japan*²*Graduate School of Nursing, Osaka City University, Japan*

[Objective] We use machine-learning to investigate age-related differences among respondents of a community welfare-planning survey, concerning their community commitment and self-efficacy for preventing social isolation among community-dwelling older people.

[Method] The survey's respondents, aged 20 years and over, were randomly selected from the local residents of A city. The survey included questions on personal attributes, the Community Commitment Scale and the Self-Efficacy Scale for preventing social isolation among the elderly. An anonymous self-administered questionnaire has been mailed in 2013, 2016 and 2018; the number of respondents with complete age and gender data were 528, 888 and 810, respectively. In the first phase (training-phase), several machine learning algorithms, implemented in R's Caret-package, were applied to the answers of "under 60-year-olds" and "60-year-olds and over" groups, for the 2013 and 2016 data, to detect potential differences between the two age-categories. In the second phase, the best-performing algorithm was applied to the 2018 data, attempting to predict the age-group of the respondent from his answers to scales' questions.

[Ethics] The study was conducted with the approval of the Ethics Review Board at authors' university.

[Results] The first-phase analysis indicated an accuracy for the best-performing machine-learning algorithm of about 0.6 and a Kappa-value of about 0.2 (random chance corresponds to a Kappa-value of 0.0).

[Discussion] The second-phase analysis confirmed that based on respondent's answers one could fairly predict his age-group; moreover, the answers of the elderly group showed a higher degree of uniformity.

Poster

Health Promotion / Disease Prevention

P1-143 The characteristics of dementia-related nursing research in Japan: Title analysis through text mining

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[Objectives]

The number of countries that have a rapidly aging population and the number of older adults with dementia are rising. Since treatments are available only for the suppression of dementia's progression, finding appropriate care is a pressing issue globally. Therefore, we aimed to examine the characteristics of nursing research on dementia in Japan, which has quickly emerged as a super-aged society.

[Methods]

We conducted a literature search using the Japan Medical Abstracts Society's database and the following criteria: 1) titles that have the key word "dementia," 2) belong to the nursing literature, and 3) are original papers. The titles of the selected papers were analyzed using KH Coder text mining software. Frequency of words in the titles was extracted, as was their co-occurrence with other words that frequently appear when a word appears in sentences.

[Ethics]

The literature that was to be used in the present study was compliant with the terms of copyright and theft.

[Results]

A total of 3,937 papers that were published from 1982 to 2019 were included. Through text mining, 40,648 words were extracted. Based on the co-occurrence network diagram, "reminiscence" and "group" (Jaccard ≥ 0.26), and "music" and "therapy" (Jaccard ≥ 0.35) were identified as the words that are indicative of dementia care.

[Discussions]

A preference for group reminiscence therapy and music therapy emerged as the characteristic features of dementia-related nursing research. Therefore, these can be considered to be effective forms of care despite the availability of various other non-pharmacological therapies.

P1-144 Expressive Behaviors Demonstrating "Well Done" in Young Children who underwent Vaccination as Perceived by Parents

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[Objectives]

This study aimed to clarify expressive behaviors demonstrating "Ganbatta" in children immediately post-vaccination and later at home, which were perceived by parents. "Ganbatta" means "well done" in Japanese, and reflects the traditional virtue of patience.

[Methods]

Semi-structured interviews were conducted with parents of children aged 3-7 years with normal development to obtain data. The participants were asked to recall the vaccination of their children and describe the child's words and actions expressing "Ganbatta" after leaving the procedure room and at home. The study applied qualitative and inductive analysis.

[Ethics]

The research was approved by the ethics committee of the authors' institution.

[Results]

The participants comprised of 10 mothers and 1 father. The obtained data were divided into 3 categories, 20 subcategories, and 68 codes. The 3 categories were: 1) Expressing satisfaction, including children's expression of satisfaction such as pleasure and pride; 2) Moving on from the vaccination, including children's behaviors related to being aware of the end of vaccination and transitioning to the next behavior or reward; and 3) Reflection of vaccination, including children's reflection of vaccination such as negative self-evaluation of feeling a pain or crying.

[Discussions]

Characteristic "Ganbatta" behaviors after the vaccination were "Reflection of the vaccination." Nurses cannot observe these behaviors because they occur outside the procedure room. However, the behaviors correspond to an important process called "post-procedure play" in preparation. Therefore, nurses can contribute to enhancing children's self-esteem and self-efficacy by instructing parents to praise their children when these "Ganbatta" behaviors are noted in them.

Poster

Health Promotion / Disease Prevention

P1-145

Association Between Salivary Brain-derived Neurotrophic factor (BDNF) and Skeletal Muscle Index (SMI) of Extremities and Psychosocial Status in Healthy Elderly People in the Local Community

OMari Sanai, Katsuya Morita, Toshihiro Dohi, Kazue Tamura, Takanori Ishikawa, Osamu Hiraoka, Masashi Hiraoka, Masako Shinkawa, Yumi Iwamoto, Yumi Maenobu

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[Objectives] Preventative nursing care is an urgent issue in Japan. BDNF is attracting attention as a key factor in the higher brain functions such as memory, learning, and cognitive functions. In this study, we evaluated the association between salivary BDNF and psychosocial aspects of elderly individuals.

[Methods] Salivary BDNF was measured by Human BDNF ELISA kit (abcam UK) according to the instruction manual. The survey included questions about patient attributes, body composition, grip strength, cognitive function, and mental health patterns.

[Ethics] This study was approved by the institutional review board of our affiliated university. There are no conflicts of interest to disclose.

[Results and Discussion] The group with high salivary BDNF showed a higher grip strength and brain activity, and the group with high psychological stress had higher SMI and total muscle mass. The group with lower social stress showed higher brain activity and high upper and lower extremity muscle mass. Salivary BDNF was positively associated with brain activity and SMI, and negatively associated with psychosocial stress with age as a control variable. These data suggest that salivary BDNF is an indicator of preventative care to "train muscles and foster the brain".

P1-146

Evaluation of Preventative Care Support through Changes in the Body Muscle Mass and Changes in the Center of Gravity in Healthy Elderly People in the Local Community

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[Objectives] Health support towards preventive nursing care for Japan's super-aging society is one of the most important social challenges. The aim of this study was to analyze changes in the muscle mass of the extremities and trunk as well as body balance status in elderly subjects during a half-year period.

[Methods] Thirty individuals aged 65 years or older who participated health survey and who could be followed up in a physical survey after a 6-month interval were included in the study. The survey included basic attributes and body composition, forgetfulness score, awareness of forgetfulness, bone mineral density, and changes in the center of gravity of the body.

[Ethics] This study was approved by the institutional review board of our affiliated university. There are no conflicts of interest to disclose.

[Results and Discussions] There were no significant differences in the total muscle mass and forgetfulness scores after 6 months. Upper extremity and trunk muscle mass, and bone density tended to decrease. Muscle mass and grip strength were significantly lower in patients who were aware of their forgetfulness compared with not aware. These data suggest that activities to promote upper extremity and trunk muscles are also necessary.

Poster

Health Promotion / Disease Prevention

P1-148

Questionnaire survey for suitability assessment of educational comic booklet for preventing second-hand smoke for pregnant women at home

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[Objectives]

This study aimed to assess suitability in a draft of educational comic booklet for preventing second-hand smoke at home for pregnant women living in Indonesia. Evaluated and revised the educational comic booklet will be used in future experimental research in Indonesia.

[Methods]

Questionnaire survey was used for this evaluation. Suitability was measured using the Suitability Assessment of Materials (SAM) including 22 questions about six factors which was created by Doak was used to assess health-related educational resources in a short amount of time. SAM has six factors including content, literacy demand, graphics, layout and typography, learning stimulation, motivation, and cultural appropriateness. The total possible score is 44. The reviewers who met all criteria were recruited using respondent-driven sampling through their social networks from the population of Indonesians who live in Japan and can read and understand English.

[Ethics] Ethical approval (18-A066) was issued by ethical committee in St'Lukes International University.

[Results]

Seventeen Indonesian couples living in Japan have evaluated the comic material. Total average score was (mean \pm SD, 37 ± 6.1) points. The highest suitability scores were for factors related to content (mean \pm SD, 1.79 ± 0.4), and cultural appropriateness (mean \pm SD, 1.73 ± 0.4). The lowest suitability scores were for factor related to Literacy Demand (mean \pm SD, 1.58 ± 0.6).

[Discussions]

Key findings from this analysis include (1) The draft of educational comic booklet had a superior score on the SAM. (2) Contents items (purpose, content topics, and scope) were evaluated as superior. (3) Score of Literacy Demand was affected by an items of Reading Grade Level.

P1-149

Evaluation of health education seminar for education of preconception care for female workers of reproductive age in Japan

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²Faculty of Nursing, Setsunan University, Japan

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[Objectives]

The aim of the study was to implement a health education seminar for education of preconception care (PCC) for Japanese female workers of productive age to clarify changes in knowledge regarding PCC before and after the seminar.

[Methods]

Small-group PCC health education seminars using a leaflet (28 times, average of 3 participants per seminar) were provided for 84 female workers of productive age, aged 20 to 35 years in Japan, and the study period was from July 2018 to December 2018. questionnaire surveys were conducted before and after the seminars. Outcomes were obtained for 9 items concerning PCC knowledge based on two response options, I know and I do not know, and the results were compared between before and after the seminars.

[Ethics]

We obtained approval from the A and B University Research Ethics Committees.

[Results]

Eight of the 9 items concerning PCC knowledge showed significant increases in the number of respondents who responded with I know after the seminars.

Items for which the number of respondents who responded with I know before the seminars was small included low birth weight infants and future lifestyle-related diseases (18 persons, 21.4%), folic acid and fetal neural tube closure disorder (20 persons, 23.8%), underweight pregnant women and low birth weight children (33 persons, 39.3%) and sexually transmitted diseases and infertility (37 persons, 44.0%).

[Discussions]

It was suggested that PCC knowledge was enhanced by the health education seminars. Connecting knowledge to actual behavior changes would be a future task.

Poster

Health Promotion / Disease Prevention

P1-150

Functioning of psychiatric daycare center users in Japan based on the Functioning Scale

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³Kyoto Prefectural University of Medicine, Japan

⁴Shoin University, Japan

[Objectives]

This study aimed to clarify the state of functioning of psychiatric daycare center users based on the Functioning Scale.

[Methods]

The subjects were Japanese individuals aged ≥ 20 years who had been diagnosed with schizophrenia and were attending psychiatric daycare centers (users; n=476). A self-administered questionnaire survey was conducted from February to July, 2013. All questionnaires were sent and returned by postal mail. The questionnaire included the Functioning Scale, the Japanese version of the Rathus Assertiveness Schedule (J-RAS) and items on users' lifestyle and background. Spearman's rank correlation and Mann-Whitney U tests were used for the statistical analysis.

[Ethics]

This study was approved by the ethics committee of the author's institution.

[Results]

The mean age of the users was 48.1 ± 11.5 years, and the mean duration of center use was 68.1 ± 60.5 months. The mean functioning score was 90.2 ± 20.0 points and the mean assertiveness score was -8.1 ± 20.7 points. There was a significant positive correlation between user functioning scores and assertiveness score ($r=0.23$, $p<0.01$), number of goals of daycare use ($r=0.14$, $p<0.05$) and achievement of all goals ($r=0.18-0.55$, $p<0.01$). There were no significant differences in functioning scores for all goals of use.

[Discussions]

This study clarified that users of psychiatric daycare centers maintain a certain level functioning. Lifestyle background characteristics related to functioning were goals of daycare use, achievement of goals, and communication abilities.

P1-151

An Education Program for Local Community Residents on How to Cultivate a Community Supporting Spirit in the Face of Bereavement

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Objectives

This study aimed to evaluate an education program for local community residents on how to cultivate a community supporting spirit in the face of bereavement in a large city in Japan.

Methods

We used a longitudinal one-group pretest-posttest study design. The education program was a single session of a lecture and group work conducted in two hours. It was evaluated at three different times before and after the program using anonymous self-reporting questionnaires and group interviews. Qualitative data were statistically analyzed in each variance. Quantitative data were obtained by content analysis using verbatim data.

Ethics

This study was approved by the research ethics review committee of our university. Eligible participants were informed of their free will to participate in the study and the protection of their personal information.

Results

The participants were 30 women and eight men with an average age of 71.8 years (range, 46-91). Bereavement support for their neighborhood community had been experienced by 18 residents (47.4%). About 90% answered that they were "very satisfied" or "satisfied" with the overall program and exchanges among the participants. The group interviews allowed self-expression, such that "the community supporting spirit during bereavement was enhanced by stronger neighborhood relationships", and resulted in a realization that "formal support for bereavement requires local community cooperation".

Discussion

The participants found meaning in their community activities, and they shared experiences provided support during their bereavement. It is important to provide sharing opportunities within the local community to support each resident in the face of bereavement.

Poster

Health Promotion / Disease Prevention

P1-152

A community assessment of frailty prevention strategies using data on frailty checkups

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[Objectives] Frailty is considered an early stage of disability. The “frailty checkups” was developed based on the evidence of the Kashiwa cohort study. This study aimed to investigate frailty prevention strategies by community assessment using frailty checkup data.

[Methods] Data regarding frailty checkups conducted in Kashiwa city were analyzed. Data from 1529 participants (aged 65 years and older) who first had the checkup between 2016 and 2018 were divided by sex and into three district areas (north/central/south), and compared.

[Ethics] This study was approved by Ethical committee of The University of Tokyo.

[Results] The participants consisted of 414 males (27.1%) and 1115 females (72.9%). Male participation rate in the central area (21.1%) was significantly lower than in the north and south. Among males, participants in the central area significantly tended to eat alone (26%), report poor oral health, have poor balance, have decreased calf circumference, and not to participate in senior clubs and volunteer activities. Similarly, among females, participants in the central area significantly tended to have poor balance, have decreased calf circumference, and not to participate in senior clubs. Further, they did not tend to eat meals with vegetables twice or more per day.

[Discussions] Participants in the central area had more issues pertaining to all aspects (Nutrition/ physical activity/ social participation) of the frailty indexes than did participants in the other areas. These results suggest the need for a comprehensive frailty prevention strategy.

P1-153

Relationship between resilience and lifestyle of high school students

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Purpose: This study aimed to understand the relationship between resilience and lifestyle of high school students in a vocational high school in a mountainous area. Resilience is defined as the ability to overcome stress in everyday life.

Methods: A self-rating questionnaire survey was conducted with 771 students in June, 2019. The surveyed items include demographics, and items from a lifestyle and resilience scale (Resilience Scale (Oshio et al., 2002)).

Ethical considerations: This study was conducted with approval by the ethics committee of the university the researcher belongs to, after obtaining approval from the principal and faculty of the participating high school and school health committee for parents, under conditions that participation is voluntary and free from pressure to participate.

Results: Valid responses were collected from 768 students. Related to resilience, psychosocial factors including family type, living environment and lifestyle were examined. Results of a one-way analysis of variance showed relationships with gender, family type, and lifestyle factors. There was no relationship between resilience, gender, and family type. However, there was a significant difference between resilience and “awareness of weight control” among the lifestyle factors ($p < 0.05$). In the multiple regression analysis, weight control, sleep time, family type, and gender were selected as factors affecting resilience, but the degree of influence was low ($\beta = 0.09$ to 0.11).

Discussion: The findings suggest that awareness of weight control improves the resilience of high school students, and that it is necessary to further examine the factors that affect resilience.

Poster

Health Promotion / Disease Prevention

P1-154

Nursing Care for the Chronic Kidney Disease Stage G3 to G5 Patients by Certified Nurses in Dialysis Nursing

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[Objectives]

The purpose of this study is to clarify the practice of nursing care by Certified Nurses in Dialysis Nursing for Chronic Kidney Disease (CKD) stage G3 to G5 patients.

[Methods]

We conducted semi-structured interviews with three Certified Nurses in Dialysis Nursing (more than 5 years after qualification) with consent in 2017. They were asked about what kind of support they provided for the CKD Stage G3 to G5 patients. Interviews were recorded and analyzed using a qualitative approach and conventional procedures of content analysis.

[Ethics]

This study was conducted with the approval of the Kagawa Prefectural University of Health Sciences Research Ethics Review Board.

[Results]

Three themes were found about the practice of nursing care for CKD Stage G3 to G5 patients. The first one is to understand the life style and the value system of the patients and their family. The second is to collaborate with the health care team supporting to the patients. The third is to support for patients to be aware of symptoms and related laboratory data.

[Discussions]

Even though it is difficult for CKD Stage G3 to G5 patients to manage their life, they need to maintain the better disease condition. Not many Certified Nurses are working in clinical and the findings made by Certified Nurses should disseminate general nurses caring the CKD patients.

P1-155

Relationship between menstrual pain and coping strategies in Japanese high-school students and comparison with their mothers' and sisters' menstrual pain

OTomoko Fukuyama

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Objectives: This paper presents findings to clarify the relationship between the actual status of menstrual pain and strategies to cope with the pain in female high-school students in Japan and compares students' menstrual pain with their mothers' and sisters' menstrual pain.

Methods: A quantitative descriptive study was conducted with 167 female students at five high schools in Japan who had menstrual pain for at least one day every month or for two consecutive months. Consent was obtained from all participants and the survey was conducted from August 2017 to May 2018.

Ethical considerations: The study was approved by Setsunan University's Research Ethics Review Committee (2017-014)

Results: 74.9% of the students experienced menstrual pain every month and 9% had visited a gynaecologist. 26.3% took effective analgesics when the pain started, but the majority rubbed and warmed their abdomen. There was no significant difference in students' pain based on whether their mothers and sisters experienced menstrual pain. Students who talked with their mother regarding menstrual pain had significantly higher menstrual pain levels than those who did not ($p = 0.005$).

Discussion: Most of the students chose to warm their abdomen when they experienced menstrual pain, and the majority did not consult with a physician who prescribed effective analgesics. There was no significant difference between the students' menstrual pain and the pain levels of their relatives, yet the more intense the pain, the better they communicated with their mothers.

This work was supported by JSPS KAKENHI Grant Number JP16K12124.

Poster

Health Promotion / Disease Prevention

P1-156

Nursing Interventions That Facilitate Relocation of Older Adults: Focusing on Reconciling Hopes with Reality

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[Objectives] This study aimed at elucidating nursing interventions that may facilitate the relocation of older adults.

[Methods] Semi-structured interviews were conducted with 14 nurses and qualitative descriptive analysis was performed later.

[Ethics] The study was performed with the approval of the institutional review board of the authors' affiliated institution.

[Results] Nurses communicated with older adults and practiced nursing interventions aimed at "reconciling hopes with reality." The following nursing interventions addressed to "prevent communication gaps by having more conversations with older adults" were implemented by nurses: "finding a mutually agreeable point and reaching a compromise," "repeating a previous exchange of information to deepen mutual understanding," "always checking the other person's position and proceeding thereafter;" "confirming and sharing course of action with patients and their families;" "reconciling the suggestions of the patient and healthcare professional;" and "aiming to unify the content of training." Furthermore, results revealed that even when the desired way of life could not be achieved due to the impairment of physical function, nurses practiced care "that provided support to regain hope" by "compensating for the impaired physical function through alternative means," "making efforts to achieve a common goal," "supporting patients in the realization of their hopes," "increasing the possibility of recovery," and "using the desired goal as a driving force toward recovery."

[Discussions] Reconciliation of hopes and reality accomplished jointly with elderly patients transitioning from treatment to rehabilitation is expected to strengthen their progress leading to the present and contributing to the improvement of their desire to achieve recovery and will to live.

P1-157

Relationship between treatment satisfaction in patients with diabetes and will power for self-care

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[Objectives] In patients with diabetes, reduced treatment satisfaction leads to treatment interruption, eventually increasing the incidence of complications. Particularly, reduced treatment satisfaction in patients on self-injection therapy can be attributable to a sense of treatment burden, inhibition of daily life, and restriction on social activities. Thus, determining the index related to reduced treatment satisfaction is important. Therefore, we aimed to define the relationship between treatment satisfaction and will power for self-care in patients with diabetes.

[Method] This study was conducted in a general hospital in Japan. Data were obtained through an electronic medical records database and a questionnaire survey using the Diabetes Treatment Satisfaction Questionnaire (DTSQ) and Instrument of Diabetes Self-Care Agency (IDSCA) and analyzed using multiple regression analysis.

[Ethics] This study protocol was approved by the Research Ethics Committee.

[Results] Overall, 289 patients participated. Mean patient age was 64.7 ± 12.1 years, and mean HbA1c value was $7.65 \pm 1.19\%$. Decrease in the IDSCA score ($\beta = 0.51$; $p < 0.001$) and male sex ($\beta = -1.15$; $p < 0.05$) were significantly related to the decrease in the DTSQ score.

[Discussions] Reduced treatment satisfaction in patients with diabetes is associated with the decrease in will power for self-care. Therefore, to prevent interruption in diabetes treatment, assessing the treatment satisfaction as well as motivation and attitude toward self-care and providing the necessary support is important.

Poster**Health Promotion / Disease Prevention****P1-158****The caregiver burden in Japanese informal home care for severe disabilities: a comparative study of caregiving for spouse and child**○Miku Yamaguchi¹, Kiyomi Harada¹, Mihoko Ogita²¹*Pediatric Nursing/Nursing, Kyoto Prefectural University of Medicine, Japan*²*Geriatric Nursing/Nursing, Shiga University of Medical Science, Japan*

[Objectives] The number of people with severe disabilities living at home is increasing in Japan. The current study aimed to investigate primary caregiver burden by comparing it between those taking care of a spouse, and those caring for a child.

[Methods] We invited 3574 offices providing public visiting care for people with most severe disabilities to participate in our study; 446 offices agreed. We supplied them with an information sheet and questionnaire for distribution among family caregivers, and 316 caregivers indicated their willingness to participate. The questionnaires contained items on age, sexuality, and presence of another familial caregiver. Caregiver burden was assessed using the Japanese version of the Zarit Burden Interview (J-ZBI). We used descriptive statistics and Mann-Whitney U test to define and compare results between the two groups.

[Ethics] This study was approved by an institutional medical ethics committee.

[Results] We received completed questionnaires from 103 caregivers who cared for a spouse, and 144 who cared for a child. The mean age of caregivers who cared for spouse was 60.9 ± 10.7 years (male=47.6%); 56.3% had no other familial caregivers. The mean age of caregivers who cared for child was 65.4 ± 11.2 years (male=8.3%); 43.8% had no other familial caregivers. We found significant differences in J-ZBI scores between the two groups (spouse; 40.4 ± 17.2 vs child; 32.6 ± 17.5 , $p < 0.001$).

[Discussions] We found significant differences in J-ZBI scores related to the caregiver's relationship to the care receiver. Further prospective studies are required to evaluate the degree of the difference in caregiver burden.

P1-159**Public health nurse's recognition and support skills for child abuse borderline cases**○Yoshiko Ozasa¹, Chie Nagahiro², Yuko Toyama³, Chikako Hokama³, Hiroko Nakano⁴¹*School of Nursing, Faculty of Medicine, Shimane University, Japan*²*School of Nursing, Faculty of Health and Welfare, Tokushima Bunri University, Japan*³*School of Health Sciences, Faculty of Medicine, University of the Ryukyus, Japan*⁴*Nursing Science and Arts, University of Occupational and Environmental Health, Japan***[Objectives]**

The purpose is to clarify the support recognition and skills of public health nurses for child abuse borderline cases.

[Methods]

We conducted a self-administered anonymous questionnaire survey of 301 public health nurses working for 40 municipalities in five prefectures from April to October 2017, whose response rate was 65.4% (197). The contents of the survey were basic attributes, public health nurses' recognize and support skills to the child abuse by 4 response methods.

The two groups compared whether or not to accompany them when introducing to relevant organizations. Statistical significance level was $P < 0.05$.

[Ethics]

This study was conducted under the approval of the Ethical Review Board of Shimane University Faculty of Medicine (No.281).

[Results]

The subjects were 95% women and had 12.7 years of public health nurse experience.

Public health nurses had an average recognition of 2.9 points.

The public health nurse (32.1%) who accompanied me when introducing related institutions was highly recognized.

"Mother of the child care of mental illness tends to neglect." was accompanied by 2.97, but not with 2.70 ($p = 0.04$).

[Discussions]

Public health nurses to accompany at the time of introduction is considered to have recognized that it is necessary to support to the mother in order to support the children.

Poster

Health Promotion / Disease Prevention

P1-160

Pre-diabetes and Risk Factors in Japanese Workers on Long-term Overseas Assignments: A Retrospective Cohort Study

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³Health and Welfare Division, Japan International Cooperation Agency, Japan

[Objectives]

This research aims to investigate the incidence of diabetes or pre-diabetes during periods living abroad and risk factors for pre-diabetes during overseas assignment.

[Methods]

A retrospective cohort study was conducted using medical record and lifestyle data. 445 people who returned to Japan from overseas assignment in a total of 67 countries were enrolled. Kaplan-Meier survival curves were used to describe incident pre-diabetes. A Cox proportional hazards regression model was used to compare the risk of developing pre-diabetes by sex, age, region of assignment and BMI at follow up.

[Ethics]

This study was approved by St. Luke's International University ethics committee.

[Results]

The mean age at baseline was 37.9 ± 7.7 years. 15.1% of this cohort became pre-diabetic after going abroad. There were no significant differences in length of stay abroad and lifestyle habits in the pre-diabetes group and non-developed pre-diabetes group. The weight before and after going abroad did not change in either group. However, the pre-diabetes group were older and heavier. Relative to Asia and Oceania, the hazard ratio for those assigned to the Middle East and Europe was 2.1 times higher (95% CI 1.3-3.4), and the hazard ratio for those assigned to North, South, and Central America was 1.8 times higher (95% CI 1.2-2.8).

[Discussions]

Keeping standard body weight is important before going abroad, and regular health monitoring and advice is necessary for people over 35 years old, and especially for people assigned to work in the Middle East, Europe, North, South and Central America.

P1-161

The impact of marital satisfaction on a father's emotional response toward his child's cries

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[Objectives] This study aimed to reveal the impact of a father's level of marital satisfaction on his emotional response toward his crying child.

[Methods] Fathers with children aged 3 to 6 months were designated as the subjects of the study and were provided with a self-administered questionnaire. Survey items included attributes, emotional response toward the child's cries, feelings toward the child (closeness or avoidance), and level of marital satisfaction. These items were analyzed using multiple regression analysis and mediation analysis.

[Ethics] This study was conducted with the approval of the Seisen University Ethics Committee (24 April 2018, approval no. 018-005).

[Results] Valid responses were obtained from 51 fathers. The results of multiple regression analysis indicated that an emotional response toward a child's cries was most closely correlated with points scored on feelings of closeness, followed by points scored on feelings of avoidance. The results of mediation analysis indicated that the level of marital satisfaction was mediated by feelings of closeness toward the child, which influenced a father's emotional response toward his infant's cries.

[Discussions] Fathers who felt positive toward and accepting of their child acknowledged their own paternal role, and this is thought to lead to their acceptance of the crying child as a new member of the family. Since lessening an emotional response toward an infant's cries could be one method of preventing shaken baby syndrome, providing support by monitoring fathers' levels of marital satisfaction and affirming positive feelings toward their children may be effective.

Poster

Health Promotion / Disease Prevention

P1-162

Identified Stressors and Stress-coping Strategies of Mothers with Premenstrual Syndrome

Mayumi Hamasaki

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Objectives

The objectives of this study were to identify stressors of mothers rearing infants between 18 and 24 months old, and to conduct qualitative examination for how mothers coped with stress.

Methods

Ten mothers (age: 20–44) diagnosed with Premenstrual Syndrome who were rearing infants between 18 and 24 months old participated in the study. They participated in a semi-structured interview, after which a Berelson content analysis was used to conduct a qualitative inductive analysis.

Results

Eight categories were extracted as stressors: (1) concerns about the child: development, ailments, and potential involvement in bullying, (2) loneliness/isolation related to childcare, (3) childcare burden, (4) lack of confidence/concerns about her own health conditions, (5) traumatic experiences during the participants' own childhoods, (6) PMS-related symptoms, (7) having her husband nearby/husband is too busy working to provide support, and (8) intrusive relationships with participants' families and/or their in-laws. For how to cope with stress, five core categories were extracted as emotional coping strategies: (1) expression of negative feeling toward family, (2) emotional inhibition, (3) seclusion from family and friends, (4) consultation with medical facility, and (5) pastime and relaxation. And three core categories as problem-coping strategies: (1) motivation to cope with PMS, (2) review of daily living, and (3) behavior to restore self-confidence.

Conclusions

Among the above stressors, the following two were found to be characteristic for mothers who had been diagnosed with PMS: "traumatic experience during the participants' own childhoods" and "PMS-related symptoms."

[A1]

[A2]

P1-163

Revealing interfering factors of behavior change of NAFLD (non-alcoholic fatty liver disease) patients: An ethnographic study

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[Objectives]

It is not clear about the reason why behavior change does not occur even if medical treatment and education are provided. The purpose of this study was to describe daily life behavior and clarify the recognition and understand underlying factors of NAFLD patients about the process of causing disease progression.

[Methods]

Using an ethnographic design, data collection included participatory observation, field notes, and semi-structured interviewing with eight NAFLD patients in their daily life at their home and/or daily activity places by the researchers. Spradley's Developmental Research Sequence method was used for data analysis.

[Ethics]

This study was approved by the research ethics committee of researcher's institution. All interviewed informants provided written consent to participate in our study.

[Results]

Seven themes were generated. The participants held [the health belief built in the family] and [dependence on food] developed based on their eating habits from the early childhood. On this bases, [The difficulty of systematizing health knowledge], [presence and influence of significant others], [stressful environment], and [overtrust to medical treatment] were added, all of which interfering behavior change. In addition, [adverse social situations] such as financial difficulties and lower educational background influenced on their behavior.

[Discussions]

In order to resolve the interfering factors, nurses need to understand patients and provide education based on underlying beliefs and background. Nurses also need to aware of the disparities among social classes, and discuss the social measures to resolve the health disparities.

Poster

Health Promotion / Disease Prevention

P1-164

Possible stress-buffering effects of living a calling in workers in Japan

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[Objectives] The term calling originated from the religious belief that God has ordained them to their jobs. However, the use of this term is currently widespread all fields, not notwithstanding religion (Dik et al.). The purpose of this study was to confirm stress-buffering effects of living a calling (LC) in workers in Japan. [Methods] In a cross-sectional study with all the workers at 14 Japanese organizations, 2,223 answered a self-administered questionnaire on paper completely (response rate = 81.2%). LC was evaluated using the Living Calling Scale developed by Duffy. Psychosocial work environment was evaluated using the Effort–Reward Imbalance Questionnaire developed by Siegrist, which comprises two main scales, extrinsic effort and reward. Extrinsic reward refers to three subscales: financial remuneration, esteem, and career opportunities. Psychological distress was measured using the Kessler Psychological Distress Scale (K6). Psychometric properties of these scales have been confirmed to be adequate in Japan. Interaction effects of psychosocial work environment and LC on psychological distress were tested using hierarchical linear regression analyses. We constructed regression lines and predicted values illustrating significant ($p < 0.05$) interactions. [Ethics] This study was approved by the Ethics Committee of Department of Nursing, Okayama University Graduate School of Health Sciences (D17-04). [Results] Significant interactions showed that increase of psychological distress accompanied by increase of extrinsic effort, decrease of extrinsic reward, decrease of financial remuneration, or decrease of career opportunities was buffered by LC. [Discussions] The results demonstrated stress-buffering effects of LC in workers in Japan.

P1-165

The association between illness perception and care-seeking behavior in patients with chronic heart failure

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[Objectives]

This study investigated the association between illness perception and care-seeking behavior in Japanese patients with chronic heart failure (CHF).

[Methods]

Using the Common-Sense Model of Self-Regulation as reference frame, we collected data from medical records and a questionnaire on sociodemographic and medical factors, stimuli, heuristics, illness perceptions, and care-seeking behaviors related to patients' awareness of dyspnea at rest and on exertion, fatigue, edema, and weight gain. The Mann–Whitney U test was performed for the univariate analysis between illness perception and care-seeking behavior in addition to a logistic regression analysis.

[Ethics]

Approval was granted by the Ethics Committee of Osaka Prefecture University (30-09) and all participating hospitals.

[Results]

The participants comprised 160 outpatients with CHF, and an 87.0% effective response rate was achieved. The average age of patients was 73.8 ± 11.4 , 98 (61.3%) were male, and 138 (86.3%) were assigned NYHA classification of Class II or lower. Underlying diseases comprised ischemia (41.9%), hypertension (15.6%), arrhythmia (55.6%), valvular heart disease (33.8%), and cardiomyopathy (28.1%). The univariate analysis revealed illness perception is associated with care-seeking behavior only when patients were aware of dyspnea at rest. The multivariate analysis showed this association with regard to illness perception (treatment control)—the expected effectiveness of treatment—(OR = 1.27; 95% CI = 1.03–1.57).

[Discussions]

These results suggest fostering trust in medical treatment among patients to encourage care-seeking behavior when dyspneic symptoms worsen. However, this study does not address the factors associated with early care-seeking behavior, for which further research is required.

Poster**Health Promotion / Disease Prevention****P1-166****Nursing practice for the independence of children with chronic illness from infancy to adolescence**OKaori Nio¹, Chikaho Nomaguchi², Miyuki Nishida³, Ikuko Oikawa⁴, Ryo Hayashi⁵, Aki Aratake²¹*Course of Nursing Science, Graduate School of Medicine, Mie University, Japan*²*School of Nursing, Faculty of Medicine, University of Miyazaki, Japan*³*Faculty of Health Care and Nursing, Juntendo University, Japan*⁴*Faculty of Humanities and Life Sciences, Tokyo Kasei University, Japan*⁵*Faculty of Health Science and Nursing, Juntendo University, Japan*

[Objectives]The objective of the present study was to clarify the actual situation of nursing practice for the independence of children with chronic illness.

[Methods]The participants were nurses working in a pediatric ward and a pediatric outpatient clinic. All participants filled out an anonymous self-administered questionnaire, and data were collected at 67 hospitals in Japan. The question items included: the actual situation of nursing practice for the independence of children with chronic illness. The survey was composed of 37 items regarding the support model rated on a five-point Likert scale.

[Ethics]This study was approved by the Research Ethics Committee of the affiliated institution.

[Results]164 nurses participated (response rate: 39.4%). The percentages of those answering "Always" by developmental stage were as follows:[infants/toddlers] 38.1, [preschool children] 30.5%, [elementary school students (grades 1–3)] 32.0%, [elementary school students (grades 4–6)] 24.6%, and [adolescents] 23.7%. Regarding the support frameworks, the percentages were [Communication with health care professions] 26.6%, [Understanding of the illness] 28.0%, [Promotion of self-care], 33.2%, [Nurturing self-decision skills] 30.1%, and [Child socialization and cooperation with related agencies] 20.4%.

[Discussions]As the developmental stage progressed, the percentage of those answering "Always" tended to decrease. During adolescence, opportunities for social participation increased. However, support for [Child socialization and cooperation with related agencies] is difficult to obtain, and this could be a factor that limits support for adolescents. As [Promotion of self-care] was high, it could be considered the center of support at any stage from infancy to adolescence.

P1-167**Survey of Wellness Tools Identified in Wellness Recovery Action Plan Workshops in Japan**OSo Yayama¹, Shigeharu Fujita², Keitarou Abe³, Shinji Murao⁴, Yusuke Konari⁵, Yuji Hirokawa⁶, Shunji Suto⁷¹*Faculty of Nursing, Kansai Medical University, Japan*²*Home-visit nursing staiton Restart, Japan*³*Ibaraki Hospital, Japan*⁴*Home-visit nursing staiton Reaf Kurume, Japan*⁵*Miyakoyamaguchi Hospital, Japan*⁶*Reinan Hospital, Japan*⁷*Nara Medical university, Japan*

[Objectives]

The Wellness Recovery Action Plan (WRAP) is a tool that individuals can use to promote continued wellbeing and to prepare for difficult experiences. WRAP workshops, wherein participants create their own WRAP, have been recognized by the Substance Abuse and Mental Health Services Administration (USA) as an evidence-based practice. This study is aimed at analyzing the wellness tools created in WRAP workshops, and clarifying behaviors for daily living that promote recovery.

[Methods]

In Japan, WRAP workshops were held in March (Kyoto), July (Osaka), November (Saitama) 2018 and March (Fukuoka) 2019 and wellness tools of 59 participants were recorded. The recorded tools were divided into daily maintenance plans, plans corresponding to triggers, plans corresponding to warning signs, plans for when conditions are worsening, crisis plans, and plans for when exiting a crisis.

[Ethics]

This study was approved by the Ethics Committees of Kyoto Gakuen University.

[Results]

A total of 380 wellness tools were identified. The daily maintenance plans were 152 tools. The most common item in the daily maintenance plan was listening to music every day, followed by sleeping 7 hours or longer. The most common among plans corresponding to triggers was voicing complaints to a friend, among plans corresponding to warning signs was taking deep breaths, and among plans for when conditions were worsening was taking a day off from work.

[Discussions]

The behavior in everyday activities for maintaining a state of wellness were familiar tools that could be done at their home, and it could be practiced by anyone.

Poster

Health Promotion / Disease Prevention

P1-168

Nursing practice for parents for the independence of children with chronic illness from infancy to adolescence

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⁵Faculty of Health Sience and Nursing, Juntendo University, Japan

Objectives

The objective of the present study was to clarify the actual situation of nursing practice for parents for the independence of children with chronic illness.

Methods

The participants were nurses working in a pediatric ward and a pediatric outpatient clinic. All participants filled out an anonymous self-administered questionnaire, and data were collected at 67 hospitals in Japan. The question items included: the actual situation of nursing practice for parents for the independence of children with chronic illness. The survey was composed of 40 items regarding the support model rated on a five-point Likert scale.

Ethics

This study was approved by the Research Ethics Review Board of the affiliated institution.

Results

164 nurses participated (response rate: 39.4%). The percentages of those answering "Always" by developmental stage were as follows: [infants/toddlers] 38.2%, [preschool children] 27.2%, [elementary school students (grades 1–3)] 29.2%, [elementary school students (grades 4–6)] 26.1%, and [adolescents] 20.4%. High values for combinations of developmental stages and frameworks included 52.8% for "Understanding of the illness" and 58.9% for "Nurturing self-decision skills" in [infants /toddlers], 32.5% for "Understanding of the illness" in [preschool children], and 34.1% for "Promotion of self-care" in [elementary school students (grades 1- 3)].

Discussions

It became clear that parents were teaching children about their illnesses and that children were communicating with their parents in order to make decisions themselves. This suggests that nurses are making preparations for children to become self-reliant from early childhood.

P1-169

Efforts of healthcare professionals providing self-care support for patients with myocardial infarction

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[Objectives] To clarify the efforts of healthcare professionals who provide self-care support for patients with myocardial infarction.

[Methods] A semi-structured interview of 18 health care professionals who provide self-care support for patients with myocardial infarction at cooperating medical institutions was conducted. The data were analyzed using a qualitative inductive approach.

[Ethics] The study was conducted after being reviewed and approved by the ethics committee of the researchers' study institution.

[Results] The supporting efforts were classified into the following: (1) "Easy-to-understand explanation" such as [Changing the explanation according to patients' level of understanding and personality] (2) "Involvement that enhances the motivation for self-care" such as [Being involved while deepening the relationship with patients] (3) "Collection of information on self-care" such as [Confirming the responses and efforts of patients specifically] (4) "Multidisciplinary collaboration" such as [Being involved while consulting and cooperating with various healthcare workers].

[Discussions] The following were suggested as important for supporting self-care: explanation according to the interest and level of understanding of individual patients and explanation focusing on important points, proposal of methods that can be easily accepted by patients, collection of specific information to evaluate patients' actual implementation of self-care, and multidisciplinary collaboration.

Poster**Health Promotion / Disease Prevention****P1-170 Evaluation of a coaching program aimed at improving subjective QOL in healthy older people in Japan: A randomized controlled study**

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[Objectives] As the world's population ages, efforts to extend healthy life expectancy have been underway, focusing on support to improve subjective quality of life (QOL). Subjective QOL is a strong relationship between "loss of life goals" and "enhanced self-worth" in older people. In this study, we conducted a program for older people aimed at clarifying their life goals related to subjective QOL and the meaning of their existence, evaluating the effect of the program in improving their subjective QOL.

[Methods] Participants were randomly assigned to the intervention or control group after registration. The program was conducted once a month for 90 minutes over a period of 4 months by professional coaches. The primary outcome was the Philadelphia Geriatric Center Morale Scale (hereafter, PGC). The PGC was developed on psychological well-being to assess QOL of older people.

[Ethics] The study protocol was approved by the Ethics Committee of Kyoto Prefectural University of Medicine. Ethical processes were adhered to.

[Results] All 40 participants were randomly assigned to either the intervention or control groups ($n = 20$ each). The intervention group had significantly improved PGC scores ($P < 0.004$). The scores of PGC subscales, "Acceptance of one's own aging" and "Lonely dissatisfaction," showed significant improvement ($P < 0.003$).

[Discussions]

Through the coaching program, older people were able to gain higher satisfaction in life, especially in terms of accepting their own aging and reducing a feeling of loneliness. The developed group coaching program can contribute to health support measures for older people.

The association of bonding workplace social capital with work engagement in Japan**P1-171**○Yukae Shionoya¹, Jiro Takaki¹, Yuka Hayashi^{2,3}¹*Graduate School of Nursing, Sanyo Gakuen University, Japan*²*Department of Nursing, Okayama University Graduate School of Health Sciences, Japan*³*Faculty of Nursing, Sanyo Gakuen University, Japan*

[Objectives] The purpose of this study was to examine the association of bonding workplace social capital (WSC) with work engagement in Japan. [Methods] The subjects in this study were recruited from all the workers ($n = 2,738$) at 14 organizations in Japan. In all, 2,395 participated in this study. Owing to missing data, 2,083 were included in the analyses (response rate; 76.1%). Bonding WSC was evaluated using the WSC scale developed by Eguchi et al. (PLoS ONE 12(6): e0179461). Work engagement was measured using the Utrecht Work Engagement Scale. Psychosocial work environment was evaluated as covariates using the Job Content Questionnaire and the Effort–Reward Imbalance Questionnaire. These scales have been reported as reliable and valid in Japan. Hierarchical linear regression analyses were used. [Ethics] This study was approved by the Ethics Committee of Department of Nursing, Okayama University Graduate School of Health Sciences (D17-04). [Results] The mean (standard deviation) age of the participants was 45.5 (13.7) years. Of these participants, 57.9% were males, 57.5% were married, 61.1% were educated for more than 12 years, and 82.7% were full-time workers. After adjusting for demographic variables, bonding WSC was positively associated with work engagement (standardized regression coefficient = 0.37, $p < 0.0001$). The association remained significant after additionally adjusting for job demands, job control, workplace social support, and extrinsic reward (standardized regression coefficient = 0.24, $p < 0.0001$). [Discussions] Bonding WSC was associated with work engagement even after adjusting for several variables of psychosocial work environment in Japan.

Poster

Health Promotion / Disease Prevention

P1-172

A Literature Review on Factors Identified as “Specified Expectant Mothers (Tokutei-Ninpu)” in Japan

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[Objectives] The Japanese Ministry of Health, Labour and Welfare declared that, for child maltreatment prevention, measures will be introduced including the expansion of seamless support for mothers, from the period of pregnancy to that of child rearing. Measures are designed to identify “specified expectant mothers (Tokutei-Ninpu)” who are considered a high risk of child maltreatment. The purpose of this literature review was to explore the factors of mothers who were identified as specified expectant mothers in Japan.

[Methods] The ICHUSHI-web database was accessed using the combination of the following key words: child abuse, child maltreatment, prevention, and specified expectant mothers. The data from 136 articles were organized using the Matrix Method. The framework for early detection of child maltreatment by Osaka prefecture was used as a conceptual framework to analyze the data.

[Ethics] The study was approved by the Research Ethics Review Committee of principal author's university.

[Results] The data indicated five types of factors identified as specified expectant mothers as follows: 1) physical and mental condition; 2) pregnancy and childbirth; 3) social and economic status; 4) environment on child rearing; and 5) attitude to child rearing. Most cases that were reported identified that expectant mothers had duplicated factors and continued not only for the period of pregnancy but also that of child rearing.

[Discussions] The findings of the literature review indicate that specified expectant mothers have various vulnerabilities. Seamless support from the period of pregnancy to that of child rearing is required for preventing child maltreatment.

P1-173

Support needs of public health nurses working on tobacco control in local governments

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[Objectives] In tobacco control, public health nurses of local governments need to promote tobacco control while overcoming barriers that are different from other fields, and improvement in their education support system is a major issue. The objective of the present study was to identify support needs of public health nurses working on tobacco control in local governments.

[Methods] Twelve expert public health nurses from local governments were recruited. Data were collected between November 2016 and March 2017 using semi-structured interviews. Responses about support needs for promoting tobacco control were analyzed qualitatively and descriptively.

[Ethics] We obtained approval from the research ethics committee of the affiliated university.

[Results] As support needs of public health nurses, the following six categories were identified: “providing study findings that can be applied to the practice of tobacco control”, “acquiring of effective material for education and awareness”, “establishing a network with external lecturers and researchers who can be consulted”, “strengthening legal regulations on national tobacco control”, “support for increasing skills in networking and collaboration with schools”, and “support for increasing the knowledge of health effects of tobacco and advocacy skills”.

[Discussions] Improving the educational environment to implement evidence-based tobacco control is needed. Development of educational programs for improving collaboration skills with relevant agencies, knowledge of health effects of tobacco and advocacy skills are also necessary.

Poster

Health Promotion / Disease Prevention

P1-174

Assessment by public health nurses for identifying pregnant women in need of child abuse prevention during pregnancy

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[Objectives]

To identify the factors that public health nurses use to determine pregnant women's need for support to prevent child abuse, and to examine the relationship between each factor and the method of acquiring knowledge.

[Methods]

Self-administered questionnaires asking the degree of importance of 43 assessment items were mailed to 519 public health nurses who belonged to the Maternal and Child Health Divisions that agreed to participate in four prefectures and the municipalities of two prefectures in the Kansai region of Japan. Responses were obtained from 415 persons, of whom 315 (effective response rate: 60.6%) who answered all questions were included for analysis.

[Ethics]

This study was approved by the Hyogo Medical University Ethics Review Committee (accession no. 17013).

[Results]

Exploratory factor analysis (main factor method: promax rotation) was conducted to analyze the main factors of the assessment items, and as a result four factors were extracted: "bond formation of a pregnant woman/partner with the child," "birth/preparations for child rearing," "sociality of pregnant women," and "history of growth in pregnant women and partners." It became clear that the public health nurses who voluntarily participated in the workshop placed importance on all four of these factors.

[Discussions]

The factors that were emphasized in determining pregnant women's need for support to prevent child abuse were clarified, as well as the relationship between each factor and the method of acquiring knowledge.

P1-175

Relationship between part-time health nurses' difficulties encountered in health checkups for children and their background factors

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[Objectives]

The purpose of this study is to clarify the relationship between part-time public health nurses' difficulties encountered in health checkups for children as well as their background factors.

[Methods]

In December 2017, we asked public health nurses in charge of children's health checkups in all municipalities across Japan to distribute a questionnaire by mail to one part-time public health nurse who had worked in the municipality for less than 3 years (if there were multiple public health nurses who fit this criteria, or none, the one with the shortest number of years was engaged).

[Ethics]

The questionnaire was anonymous. We provided a written explanation and asked the respondents to return the questions directly to researchers only if they agreed to participate in this study.

[Results]

Part-time public health nurses working in large-scale municipalities experienced a wider variety of difficulties than did those in small-scale municipalities. In addition, at educational institutions that provided public health nurses' licenses, "University/Graduate School" felt more difficult. Public health nurses who frequently engaged in health check-ups for children's more often felt the following difficulties than those who less frequently engaged in the work: "individual health guidance," "how to connect to their primary public health nurse," and "complaint responses." Moreover, the part-time public health nurses who did not have a consultation system experienced more difficulties.

[Discussions]

The need for a consultation system and training for part-time public health nurses is considered, as the contents of consultation and background of parents and children are complicated and diversified.

Poster

Health Promotion / Disease Prevention

P1-176

A study of lifestyle disease from a viewpoint of students' medical checkup in Phnom Penh, Cambodia

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Background

Royal School of Administration (RSA) as a training institution for young executive candidates in Cambodia is recently facing an issue of lifestyle disease in addition to infective disease due to a change in life by economic development. The present research aims to clarify a relation between the medical checkup results and lifestyle disease for RSA students.

Method

The research targeted 336 persons for physical measurement (height, weight, blood pressure, waist, BMI, and urine test). In the urine test, we conducted blood glucose test for persons with urinary glucose 1+ or higher after determining presence or absence of urinary protein/urinary glucose.

Result

The research targeted 336 males/females in their 20s-60s. Weight \geq 70 kg: Male 49%, weight \geq 50 kg: Female 76%, and BMI \geq 25: Male 56%/Female 30%. Systolic blood pressure/diastolic blood pressure $>$ 140/80mmHg: Male 60%/Female 33%, Waist \geq 80cm: Male 88%, waist \geq 90 cm: Female 4%. With urinary glucose 1+ or higher, fasting blood glucose level $>$ 100 mg/dl : Male 56%/Female 60%.

Conclusion

Since the students living in the suburbs of Phnom Penh may easily be influenced by life-change with economic growth, often become aware of sickness after worsening condition due to few subjective symptoms, and have no health insurance or health guidance system in Cambodia, we consider they need to receive a regular health examination and individual health guidance.

P1-177

A literature review of studies on nurses with migraines

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[Objectives]

Migraine, commonly found in women in their 30s and 40s, occurs due to sleeping problems, stress, menstruation, etc. Because the factors of migraine are overlapped with effects of work contents or work arrangements on nurses' body and mind, migraine is present largely in female nurses and considered to affect nursing practice. We aimed to elucidate future research issues based on a review of studies on nurses with migraines in Japan.

[Methods]

Keyword researches, "Migraine" and "Nurse," were performed on the Ichushi-Web, and 8 out of the 10 original articles were chosen for this study.

[Ethics]

We did not infringe the copyright of the chosen articles.

[Results]

All 8 descriptive studies showed that 10-19% of nurses had a migraine and used self-medication with non-prescription drugs or nonsteroidal anti-inflammatory drugs (NSAIDs) when headache occurs. The reasons why they rarely used the triptans when having a migraine were the wide availability of NSAIDs in nurses and lack of knowledge on curatives. The migraine disability assessment questionnaire revealed that grade I or II nurses accounted for about 80% of the total, indicating low interference with daily activities. However, the number of nurses who experienced a decrease in work efficiency or minor incidents was more than the number of those without headache.

[Discussions]

Migraine affected nursing practice. Support for self-care is necessary regarding how to cope with migraine, use drugs, etc. when it strikes. Conducting intervention study and examining the relationship with factors of migraine are the issues of the future.

Poster**Health Promotion / Disease Prevention****P1-178****Association between oxygen desaturation during nocturnal sleep and the onset of gestational hypertension in late third trimester of uncomplicated pregnancy**○Minako Watanabe¹, Hitomi Shinohara², Hideya Kodama²¹Japanese Red Cross Akita College of Nursing, Japan²Akita University, Japan

[Objectives] This study aimed to investigate whether nocturnal oxygen desaturation measured in women with uncomplicated pregnancy about one month before the due date affects the development of late-onset gestational hypertension.

[Methods] We recruited 103 women with uncomplicated pregnancy between 34 and 36 weeks of gestation. The women then immediately completed the Pittsburgh Sleep Quality Index, Epworth Sleepiness Scale, and the General Health Questionnaire (GHQ28), and recorded their oxygen saturation (SaO_2) and physical acceleration profiles during nighttime sleep at home using a portable pulse oximeter and an actigraph, respectively. Thereafter, their blood pressure was monitored weekly until delivery.

[Ethics] It was approved by The Japanese Red Cross Akita Nursing University and the Japanese Red Cross Akita Junior College Research Ethics Review Committee (June 3, 2015; approval number 27-111).

[Results] Pulse oximetry data between 34 and 36 weeks of gestation revealed that three women had oxygen desaturation indices (ODI) of ≥ 5.0 and two of them had minimum $\text{SaO}_2 \leq 85\%$. The results of questionnaires and sleep variables determined by actigraphy were non-specific. During follow-up until delivery, the two women with both ODI ≥ 5.0 and a minimum $\text{SaO}_2 \leq 85\%$ developed gestational hypertension after 37 weeks of gestation. In pregnant women, even mild sleep disordered breathing can cause late-onset gestational hypertension.

[Discussions] There is possibility that screening SaO_2 profiles by pulse oximetry about one month before the due date can detect pregnant women with subclinical obstructive sleep apnea who are at high risk for developing late-onset gestational hypertension near parturition.

P1-179**Association between mothers' problematic internet use and their child injuries**○Aya Sakakihara¹, Chiyori Haga², Aya Kinjo³, Yoneatsu Osaki³¹Community Health Nursing, Faculty of Medicine, Shimane University, Japan²Community Health Nursing, Graduate School of Health Sciences, Okayama University, Japan³Division of Environmental and Preventive Medicine, Faculty of Medicine, Tottori University, Japan

[Objectives]

The present study was designed to clarify the association between mothers' problematic internet use (PIU) and their child injuries.

[Methods]

We analyzed the data collected in the health examination for young children at 4 months, 1.5, and 3 years old, carried out between April 2016 and March 2017. Subjects were 1,685 children of 4 months old, 1,729 children of 1.5 years old, and 1,674 children of 3 years old. We used logistic regression analysis to clarify the association between mothers' PIU (Young's Diagnostic Questionnaire for Internet Addiction score: ≥ 5) and their child injuries (selecting <Yes> for <Has your child ever been injured in an accident?> on a questionnaire survey), which was adjusted for covariates such as child sex.

[Ethics]

This study was approved by the Ethical Committee of the affiliated university.

[Results]

Based on multivariate logistic regression analysis, the mothers' PIU was significantly correlated with their child injuries for children aged 4 months, 1.5 years, and 3 years [odds ratio (OR): 6.15, 95% confidence interval (CI): 1.60 to 23.58, OR: 6.27, 95% CI: 1.65 to 23.83, and OR: 2.03, 0.21 to 20.00, respectively].

[Discussions]

Based on the results, the probability of a child being injured before reaching the age of 3 is approximately 6 times higher in the case of mothers with PIU compared with those without it. This may be explained by the former's difficulty in adopting sufficient measures to keep their children safe from injury due to being engrossed in the Internet.

Poster

Health Promotion / Disease Prevention

P1-180

Prevalence and characteristics of frailty among community-dwelling elderly adults with social activity

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²College of Nursing Art and Science, University of Hyogo, Japan

³Tajima Longevity Village of Tajima Inhabitants Bureau of Hyogo Prefectural Government, Japan

[Objectives] The proportion of Japanese adults aged 65 years or older is predicted to increase; thus, it is becoming more important to identify factors that influence health status among elderly in Japan. This study therefore aimed to identify prevalence and characteristics of frailty among community-dwelling elderly adults with social activity.

[Methods] We conducted a self-administered questionnaire survey, and the physical frailty phenotype was assessed according to the criteria of Shinkai et al. The subjects were 2706 community-dwelling elderly adults who were doing social activity in Tajima area, Hyogo Prefecture. The number returned was 1527 (56.4%). In this study, 1394 eligible cases were analyzed. All p-values were tested by Chi-square statistics.

[Ethics] The human subjects' approval was received from the institutional review board of the University.

[Results] The mean age [standard deviation (SD)] of the subjects was 74.0 [6.0] years, and 56.7% was female. The percentage of frailty was 11.6%. There was no significant difference in the prevalence of frailty between male and female. The frailty group suffered from more somatic diseases than the non-frailty group. The two groups significantly differed with cardiovascular, stroke, diabetes and ophthalmologic disease.

[Discussions] The percentage of frailty in this study subjects doing social activity was 11.6%. This percentage was not significantly lower than 7-30% in the previous study. The target of this study is doing some social activity, but the prevalence of frailty is not low. It is necessary to have an intervention to prevent frailty for those with cardiovascular, stroke and ophthalmologic disease.

P1-181

Mothers' quality of sleep at 1 month and maternal bonding at 4 months postpartum

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[Objectives] To investigate the relationship between mothers' quality of sleep at 1 month and maternal bonding at 4 months postpartum.

[Methods] Subjects were 149 mothers at 1 month postpartum. To those who agreed to cooperate with this study during the 1-month checkup, questionnaires were sent at 4 months postpartum, and were returned by post. The survey consisted of the basic attributes (including the age, family structure, career status, academic achievement, economic condition), birth history, child-raising status, the Japanese version of the Pittsburgh Sleep Quality Index (PSQI-J), the Postpartum Bonding Questionnaire (PBQ), and Edinburgh Postnatal Depression Scale (EPDS). Data were analyzed using descriptive statistics and multiple regression analysis.

[Ethics] This study was conducted with the approval of the ethics committee of Okayama Prefectural University (Approval number 17-11).

[Results] Responses from 59 mothers (40.9%) at 4 months postpartum were analyzed. The mean PSQI score and number of mothers with sleep disturbance were 7.6 and 48 (81.4%) and 5.8 and 27 (45.4%) at 1 month and 4 months postpartum, respectively. As the results of multiple regression analysis using maternal bonding at 4 months postpartum as a dependent variable, significance was observed in the number of children ($b=-.294$) and postpartum depression ($b=.311$).

[Discussions] Many mothers reported alleviation of sleep disturbance at 4 months postpartum. There were mothers with sleep disturbance at 1 month postpartum and attachment disorder at 4 months postpartum, but no significance was observed.

Poster**Health Promotion / Disease Prevention****P1-182****Antigen-avoidance behaviors of patients with hypersensitivity pneumonitis and the health promotion strategies of their medical providers: a scoping review**○Yuko Kawamoto¹, Sumika Oda², Makoto Tanaka¹¹*Graduate school of Health Care Sciences, Tokyo Medical and Dental University, Japan*²*Toranomon Hospital, Japan***[Objectives]**

Hypersensitivity pneumonitis (HP) caused by repeated inhalation of the causative antigen in the living environment has no long-term effective treatment, and antigen avoidance (AA) is currently the primary treatment. Little is known about care strategies for AA of HP patients. This study aimed to review papers on the AA performed by HP patients and the support given by medical providers to promote AA of HP patients.

[Methods]

During April 2019, a scoping review was conducted. PubMed, CINAHL, Web of Science, The Cochrane Library, ICHUSHI-web, and Google Scholar were searched using keywords such as "hypersensitivity pneumonitis," "antigen or allergen," and "avoidance or removal."

[Ethics]

This study did not utilize human subjects; therefore, it has not received an ethical approval.

[Results]

The initial search identified 346 papers of which 91 were duplicates and 51 were excluded based on the title and abstract. One hundred-nine papers, published during 1976–2018, were included after reviewing the full text, 84 of these contained case-reports. According to the literature, AA behaviors of patients with HP included: moving to another house, removing sources of the causative antigen (e.g., feather products, humidifiers), quitting a job, wearing masks, and having their home cleaned by professionals etc. Few papers reported in detail medical providers' promotion of AA.

[Discussions]

This review clarified some of the contents of AA performed by HP patients, and the lack of research on intervention methods to promote AA. In order to better manage this disease, medical providers should consider strategies to support patients' AA behaviors.

P1-183**Differences in the knowledge and skills recognized as necessary by grandparents for raising grandchildren in infancy and early childhood in Japan**○Yuko Fujimoto¹, Kaori Nagata², Chikage Tsuzuki³, Shogo Nakakita⁴, Kaoru Konishi⁵¹*Faculty of Nursing, Kobe City College of Nursing, Japan*²*General Affairs and Policy Planning Department, Minamiawaji City, Japan*³*College of Health and Human Sciences, Osaka Prefecture University, Japan*⁴*Graduate School of Engineering Science, Osaka University, Japan*⁵*Graduate School of Medicine, Osaka University, Japan***[Objectives]**

In Japan, childcare provided by kin, such as grandparents, is recognized as a significant resource. When helping with childcare, it is common for grandparents to raise grandchildren without official custody.

The study aimed to explore the differences in knowledge and skills recognized as necessary by grandparents for raising grandchildren in infancy (under 1 year) and early childhood (1 to 4 years).

[Methods]

Twenty questions concerning knowledge and skills for raising grandchildren, developed by Fujimoto based on the existing literature, were presented to grandparents. The grandmothers were asked to select one of the four alternatives depending on how much they wanted to know about helping with childcare.

[Ethics]

The Ethics Review Board of the affiliate university approved this study.

[Results]

The study included 222 participants (176 grandmothers, 43 grandfathers, 3 missing value). The mean scores of infancy were significantly higher than those of early childhood for the following categories: Hydration, Bathing, Skincare, Adjustment of Clothes and Room Temperature/Humidity, How to Communicate with Parents on Childcare, and The Child Rearing Services Available for Grandparents. There were no items whose mean scores in early childhood were significantly higher than infancy (Mann-Whitney U test, $p < .05$).

[Discussions]

During infancy, grandparents want knowledge and skills about the daily care of their grandchildren, their communication with their parents, and the services that grandparents could use in raising grandchildren.

Therefore, public health services need to provide support so that grandparents can learn and utilize these knowledge and skills in raising grandchildren during infancy.

Poster

Health Promotion / Disease Prevention

P1-184

Evaluation of a cancer education program for elementary school students

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²Department of Nursing, Faculty of Human Health Sciences, Meio University, Japan

[Objectives] This study aimed to evaluate the learning effects of a cancer education program for sixth-grade students.

[Methods] The program was conducted as part of a health class for students. The participants were 142 students who attended two 40-minute cancer prevention and palliative care classes. Following the classes, participants filled out worksheets to review their learning. Data were generated from worksheet responses and analyzed qualitatively.

[Ethics] This study was approved by the Ethics Committee of the University of the Ryukyus. Informed consent forms regarding use of the worksheets were distributed to the participants' parents. In total, 109 parents provided informed consent for their children to be included in the study.

[Results] Before undergoing the program, the participants thought that cancer was always fatal, but learned that it can be curable if detected early, and were reassured to learn about cancer prevention and screening methods. They also learned that they could offer encouragement and pain palliation to those with cancer through visiting and spending time with them, and could better understand cancer patients' experience by improving their knowledge of the disease. Further, participants felt motivated to undergo screening for early cancer detection, avoid smoking and excessive alcohol use as preventive measures for themselves and significant others.

[Discussions] Sixth-grade students learned about cancer and its prevention, and how they could better understand cancer patients' experience, despite the short duration of classes. Cancer education for elementary school children should therefore be provided to promote cancer prevention and improve understanding of cancer patients' experience.

P1-185

Literature review of current conditions of screening for postpartum depression in Japan

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[Objectives]

As a result of growing awareness of the importance of mothers' mental health, subsidization of medical examination expenses for one month and two weeks started from 2017 for prevention of postpartum depression. The Ministry of Health, Labour and Welfare recommend that the Edinburgh Postnatal Depression Scale (EPDS) be used to screen for postpartum depression, but no rules currently exist about the timing, and methods used. Screening conditions also differ depending on the facilities available. This study aimed to research and examine the current conditions of screening for postpartum depression in Japan.

[Methods]

A systematic literature search was conducted in Japan Medical Abstracts Society. The search words were "postpartum depression" and "screening", and only original articles published in the last 10 years were selected.

[Results]

EPDS was the most frequently used scale in screening for postpartum depression, demonstrating a high degree of usefulness. The most frequent screening periods observed in the literature were during pregnancy, one month after birth, and four months after birth. Screening during pregnancy was also important.

[Discussions]

Although screening for postpartum depression using EPDS has been conducted in many institutions, the timing and criteria for performing such screenings have not been sufficiently examined—this should be considered in the future. Current conditions for screening for postpartum depression in Japan suggest that some at-risk mothers should not be screened by EPDS alone. It is therefore necessary to have an indicator that can objectively evaluate postpartum depression.

Poster**Health Promotion / Disease Prevention****P1-186****Characteristics and correlates of family functioning among family members of patients in the intensive care unit: a cross-sectional study**○Miyuki Komachi^{1,2}, Kiyoko Kamibeppu²¹School of Nursing, Musashino University, Japan²Department of Family Nursing, Division of Health Sciences & Nursing, Graduate School of Medicine, The University of Tokyo, Japan

[Objectives] Families of patients in the intensive care unit (ICU) often experience severe stress. Understanding their experience is important for affecting family functioning during this difficult period. Little is known about the functioning of families of patients in the ICU. This study aimed to determine the characteristics and factors associated with family functioning in families of patients admitted to the ICU.

[Methods] In this cross-sectional study, all family members (N=144) of patients admitted to the ICU at two teaching and advanced treatment hospitals were recruited at admission, 77 (53.5%) of whom completed a questionnaire. Family members provided demographic and clinical characteristics of the patients and completed the Family Relation Index (FRI), the State-Trait Anxiety Inventory Form X (STAI) and the Connor Davidson Resilience Scale (CD-RISC).

[Ethics] This study was approved by the relevant ethics committees. Written informed consent was obtained from all participants.

[Results] Ten (13.0%) family members had the Hostile family functioning type, and 37 (48.1%) had the Unrest type. In multiple regression analysis, a significant negative relationship was observed between FRI and state as measured by the STAI ($B=-0.057$, $\beta=-0.36$; $p=0.001$), and the participants' CD-RISC scores were correlated with family functioning ($B=0.021$, $\beta=0.176$, $p=0.049$). Multiple regression analysis also showed that this model explained 23.9% of the variance in total FRI score as due to family functioning.

[Discussions] In total, 61% of family members had poor family functioning and needed support. Anxiety state predicted poor functioning, while resilience predicted good functioning in the family members of ICU patients.

P1-187**Extraction of target individuals for health guidance in specific health checkups among local residents living in heavy snowfall areas in Japan**○Tomoko Shimoda¹, Teppei Suzuki², Sadako Yoshimura¹, Katsuhiko Ogasawara¹¹Faculty of Health Sciences, Hokkaido University, Japan²Iwamizawa Campus, Hokkaido University of Education, Japan

[Objectives] The purpose of this study was to examine the extraction items of health guidance subjects based on objective and subjective data at specific health checkups of healthy residents living in heavy snowfall areas.

[Methods] The study design was a cohort study. The survey period was from April 2011 to March 2017. Targeted local residents were aged 40 to 74 years living in Iwamizawa, Hokkaido. We collected data on age, body mass index (BMI), abdominal circumference, blood pressure, blood test values, ??and questionnaire responses (weight change, exercise habits, dietary habits, alcohol consumption, willingness to improve lifestyle habits, hope for health guidance) at specific health checkups.

[Ethics] This research was conducted with the approval of Hokkaido University Graduate School of Health Science Ethics Review Board (17-118-3).

[Results] The subjects included 20677 individuals (8712 men and 11965 women), and the average age was 59 ± 8 years. The health guidance levels were active (652 individuals), motivational (1626 individuals), and no (18399 individuals) support. Among the subjective data obtained using the questionnaire, there were relationships among "weight change from 20 years old," "more than 30 minutes of exercise habit," "drinking habit," BMI, abdominal circumference, blood pressure, neutral fat, and glycated hemoglobin.

[Discussions] Subjects receiving health guidance were examined. The health guidance target was extracted by an interview of weight change, exercise habits, and alcohol consumption, in addition to the previous items.

Poster

Health Promotion / Disease Prevention

P1-188

Verification of the effects of passive movement on the amount of oxygenated hemoglobin in cerebral blood flow by near-infrared spectroscopy

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[Objective]

Range of motion (ROM) interventions are common methods for preventing declines in activities of daily living (ADL). On the other hands, in recent years, a new exercise that involves lifting the knee up and loading the lower leg, which applies the principles of cybernetics (load intervention) has been proposed. The aim of this study was to investigate the effect that ROM intervention and load intervention have on brain activity.

[Methods]

ROM intervention and load intervention were performed for 24 healthy adults. The dynamics of oxyHb concentration in cerebral blood flow were measured during each intervention using near-infrared spectroscopy (NIRS). The average maximum oxyHb concentration was calculated for each of the three regions, and which areas of the brain, supplementary motor area, primary motor area, and primary somatosensory area, were activated by each intervention was investigated.

[Ethics]

All subjects provided informed consent, and the present study was approved by the ethics committee of Yamagata University Faculty of Medicine.

[Results]

The ROM intervention increased the mean maximum oxyHb concentration in the supplementary motor area significantly more than the load intervention. The load intervention increased the mean maximum oxyHb concentration in the primary motor area and primary somatosensory area.

[Discussion]

An increase in mean maximal oxyHb concentration in cerebral blood flow indicates activation of brain activity, which suggests that both interventions may be effective rehabilitation from the neurological point of view. Both ROM by physical therapists and load intervention performed by nurses can produce more effective rehabilitation effects.

The relationship between fatigue and anger in child-rearing parents

P1-189

○Sae Nakaoka, Hiromi Kawasaki, Satoko Yamasaki, Rahman Md Moshiur
Hiroshima University, Japan

[Objectives]

Many mothers are sleep-deprived and feeling tired to their child rearing. The purpose of this study is to clarify the infants' life situations with mothers' anger when mothers feel sleepy.

[Methods]

We investigated the life scenes for 105 mothers who had children aged 0-3 years. We asked the nonprofit organization which they used for an investigation. As for sleepiness, we asked them whether they have awareness of fatigue, sleepy, poor motivation and complete physical tiredness or not. We selected 10 life scenes when mother became angry with her child. We analyzed the relationship between mother's sleepiness and her child's life circumstances by chi-square test.

[Ethics]

The Ethics Committee approved this study E-962.

[Results]

Mothers who want to sleep, do nothing, and lie were angry with children who didn't readily sleep at night ($p=0.028$, $p=0.010$, $p=0.048$). Many mothers who realized they were sleepy got angry when their child didn't go to bed easily ($p=0.049$). Many mothers who were tired became angry when their child didn't readily go home ($p=0.021$).

[Discussions]

The anger of mothers who are aware of sleepiness is caused by child's sleeplessness behavior even at night. We think when mothers continue to be unable to sleep enough, they feel dull and get angry as soon as their child acts on their own. When mothers are aware of sleepiness, it is necessary to change the child care and assign to someone to get sleep. This effort will prevent exhausted mothers from abusing their child.

Poster

Health Promotion / Disease Prevention

P1-190

Relationship between the contents of the meal menu self-chosen by using the food model and physical fatigue in Japanese adults

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²Faculty of Nursing, Kansai Medical University, Japan

[Objectives] According to the Global Burden of Diseases study 2017, it has become clear that unhealthy eating habits reduce the life span. To examine health guidance methods to improve lifestyle habits, we clarified the relationship between the contents of the meal and the feeling of fatigue and suggesting solutions.

[Methods] **Participants:** Health event participants who have experienced nutrition balance check over 20 years old. **Method and survey contents:** Individual attributes (sex, age), lifestyle (drinking, exercise), self-diagnosis physical fatigue (0 to 40 points), anonymous a self-administered survey was conducted. Furthermore, we had asked to select the food model of "dinner menu as you usually eat" using food model for nutrition education, "SAT" system and measured each nutrient. **Survey period:** From May 2016 to August 2017. **Analysis method:** Categorical variable performed a chi-square test. Significance level was 5% for this study.

[Ethics] Conducted with the approval of the researcher's university ethics committee (approval number 27-40).

[Results] We analyzed 254 people (96.6%) in 264 participants experienced "SAT" system. 173 females (68.1%), average age 51.8 years. 122 people had been careful about their diet, especially saltiness. Physical fatigue level averages 6.0 ± 4.6 . 175 people without fatigue (72.9%), who have exercise habits, eat a large percentage of dinner before 2 hours of bedtime, take vitamin C and calcium properly.

[Discussions] About 50% of participants cared about their diet, especially refrained from salt intake. Because of exercise and diet hour were related fatigue, regular lifestyle guidance and effective intake of nutrients supports are important.

P1-191

Literature review of nurses' own sleep management: -Extraction of predisposing, reinforcing, and enabling factors in the PRECEDE-PROCEED MODEL-

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[Objectives]:The Japan Ministry of Health, Labour and Welfare estimates a potential shortage of 40,000 to 200,000 nurses in 2025. Therefore, nurses are required to stay healthy and work. The American Nurses' Association has been promoting statewide measures to promote health and safety since 2015. The purpose of this study was to extract "predisposing," "reinforcing," and "enabling" factors from the literature using the PRECEDE-PROCEED MODEL in order to assess nurses' sleep management.

[Methods]:Literature published between 1989 and May 10, 2019, on the actual state of sleep management as a part of nurses' own health management was reviewed.The search terms used were "nurse," "sleep," and "self-care" on Ichushi-Web and CINAHL databases, excluding the literature on patient care.

[Ethics]:Only published literature was analyzed; hence, no ethical review was required.

[Results]:Increase in the number of critical-care patients and lack of sleep due to night-shift stress were extracted as predisposing factors. The reinforcing factor was that nurse managers provide information on healthy lifestyles to staff nurses. Enabling factors were avoiding caffeine intake before going to bed and listening to comfort-inducing music.

[Discussions]:It is suggested that nurses should manage their own health to enable safe continuity of their work. Health improvement (including sleep management) is an indispensable aspect of labor management. In view of the importance of sleep management, it is necessary to examine various elements affecting sleep among individual nurses and aid them accordingly in the self-management of sleep.

Poster

Health Promotion / Disease Prevention

P1-192

The mediating effect of spiritual care on social capital and physical and mental health

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[Objectives] This study proposes and examines a model in which social capital and spirituality increase feelings of happiness in older adults living in the community and ultimately improve their physical and mental health.

[Methods] Subjects were 114 older adults in senior citizen clubs in the Tokai region of Japan. Our model was verified through multivariate regression analysis of data from an intervention group that underwent three sessions of spiritual care to improve mental and physical health. The survey included the physical (PCS) and mental component summaries (MCS) from the SF-8™ health-related QOL survey, the 20-Item Sky Spirituality Scale (SS) for spirituality, and five items on cognitive social capital (SC).

[Ethics] This study was implemented after ethical review by the authors' institution university. (H30-07).

[Results] Analysis confirmed that SC influenced SS, SS influenced happiness ($\beta = .33, p < .01; R^2 = .22, p < .001$), and happiness influenced both PCS ($\beta = .27, p < .01; R^2 = .16, p < .05$) and MCS ($\beta = .30, p < .01; R^2 = .20, p < .01$). Furthermore, though SS did not directly affect PCS or MCS, it did affect them through happiness.

[Discussions] Some aspects of social capital influenced spirituality, which in turn influenced happiness, which influenced both mental health (MCS) and physical health (PCS). It was thus shown that spiritual care interventions improve physical and mental health through happiness.

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P1-193

The Lives of Elderly Couples Living Alone After a Spousal Renal Transplantation More Than Five Years On

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[Objectives]

This study aimed to clarify the characteristics of elderly couples living alone five or more years after a spousal renal transplantation, both in terms of their personal thoughts, feelings, and emotions as the donor or recipient during their daily lives, and in terms of how those thoughts, feelings, and emotions influenced their marital lifestyle.

[Methods]

Data was collected between June and November 2015 at medical institutions in A Prefecture, at a facility where transplant support groups were held in B Prefecture, at the university campus of the researchers, and in participants' homes.

Semi-structured interviews were conducted with donors and recipients in four households (eight interviewees in total), and the data analyzed using a qualitative descriptive research method.

[Ethics]

This study was conducted with the approval of the Ethics Review Committee of Osaka Medical College.

[Results]

While upon initial inspection, elderly couples in spouse-only households after a spousal renal transplantation seemed to be living peaceful lives, they still reported various difficulties, frustrations, and apprehensions, and their normal everyday lives were in danger of disruption by problems that could arise in the future.

[Discussions]

To ensure they do not succumb to such risks, society needs to provide assistance to this population based on the strengths and weaknesses of such individuals as identified in this investigation.

Poster**Health Promotion / Disease Prevention****P1-194****Parents/Guardians' Awareness of their School-aged Children's Smoking and Drinking Behaviors in Vanuatu**○Emi Nakaseko¹, Sayaka Kotera², Minato Nakazawa²¹*Department of Nursing, Himeji Dokkyo University, Japan*²*Graduate School of Health Sciences, Kobe University, Japan*

[Objectives] The purpose of this study was to identify current smoking and drinking behaviors, and to examine their relationships with socioeconomic status and awareness among parents/guardians with school-aged children in Vanuatu.

[Methods] We conducted a self-administrated questionnaire survey completed by 221 parents/guardians with children aged 13–14 who attended one of three public schools in Vanuatu. We assessed the relationships between socioeconomic status and smoking- and drinking-related behaviors and awareness using the chi-square test.

[Ethics] The Ethics Committee of Himeji Dokkyo University approved this research.

[Results] Among the participants, 30.4% of the fathers and 3.7% of the mothers were current smokers, and 22.0% of the fathers and 8.9% of the mothers were current drinkers. Among the 221 parents/guardians, 80% of the participants disapproved of the underage smoking and drinking by their children. However, 10% of the participants had made their children buy tobacco for them, despite the prohibition of the sale of tobacco to persons under 18 in Vanuatu. A chi-square test indicated that socioeconomic status was not significantly associated with smoking and drinking behaviors, but that the mother's educational background and the regular father's occupation were associated with approval of underage smoking and drinking.

[Discussions] Parents and guardians are sending mixed messages to their children. The results seem to suggest that better education for and by the parents might help reduce and prevent underage smoking and drinking, but further study of parents/guardians and their children is needed to clarify the root causes of harmful underage smoking and drinking in Vanuatu.

P1-195**Comparing mental health and daily life of employed women and housewives**○Hiromi Onbe¹, Hiroko Kobayashi¹, Risa Motono², Chiho Yamazaki³, Mikiko Shimada⁴,Isamu Sanaki⁵, Keisuke Nakanishi⁶¹*Graduate School of Health Sciences, Gunma university, Japan*²*Nursing, Kansai medical university, Japan*³*Rehabilitation, Nikko Noguchi Hospital, Japan*⁴*Nutrition devision, Kiryu university, Japan*⁵*Nursing, Gunma Prefectural College of Health Sciences, Japan*⁶*Nursing, Nagoya university, Japan*

[Objectives]

Mothers working outside of the home have multiple roles with work, childcare and housework, therefore facing more difficulties in managing their daily life and psychological wellbeing, especially those with very young children. The purpose of this study was to explore and compare daily life and mental health status of employed and unemployed mothers of preschoolers. The results may provide suggestion for the adequate support for working mothers at their workplace.

[Methods]

A cross-sectional study of 888 mothers (575 employed and 313 unemployed) with a child aged between 6 months to 6 years was conducted in Gunma, Japan. The daily life and childcare situation, physical health status (SF-36), and positive and negative affect of emotion (PANAS) were measured using self-administered questionnaire. Statistical analysis was conducted to compare employed and unemployed mothers.

[Ethics]

This study was approved by the research ethics committee of Gunma University.

[Results]

The mean age ($\pm SD$) of employed and unemployed women were 36.0 ± 5.9 years and 35.7 ± 5.0 years, respectively. The results showed that unemployed women had more difficulty for holding their children, and had lower emotional role functioning and positive emotion than working women.

[Discussions]

Our results illustrated that unemployed women feel more physical childcare stress and mental stress, and unable to have positive emotions in their daily life. As half of employed women were part-time or short time workers, it is suggested that even working in a short time, having a job and connecting with society may leads to the emotional well-being of mothers.

Poster

Health Promotion / Disease Prevention

P1-196

The Effectiveness of Social Skills Training (SST) in Family Associations of Schizophrenia Patients: From an Analysis of Focus Group Interview Data

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[Objectives] This study aims to clarify the effectiveness of Social Skills Training (SST) in the family associations for schizophrenia patients. [Methods] A total of two Focus Group Interviews (FGI) were conducted among family members with schizophrenia patients in Okinawa, Japan. Based on the first FGI results, an SST intervention was performed every two weeks from May to November 2017. Outcomes of those interventions were evaluated by conducting the second FGI. [Ethics] The ethical review board of University of the Ryukyus for clinical research approved this survey to be conducted. [Results] Eight family members participated in this study. After interventions, it was found that subjects experienced changes in their attitude: the family members felt themselves more coping and satisfied than before. They also felt that they have changed how they communicate with the patients and how they look at the patient's behaviors as a schizophrenia symptom. [Discussions] The study results supported the effectiveness of the SST intervention for family members with schizophrenia patients. These interventions might support the family members cognitive activities and provide the comfortable medical treatment environment for patients.

P1-197

The relationship between physical activity and common discomforts during the first half of a first pregnancy: A focus on moderate-to-vigorous intensity physical activity and sedentary behavior

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[Objective] Increasing physical activity (PA), defined as bodily exercise with daily activity, during pregnancy is believed to positively influence pregnant women's health, but recommendations regarding PA for pregnant women might be difficult to suggest without considering common discomforts during pregnancy. This study investigates the relationship between PA and pregnant women's discomforts to provide them with effective health guidance.

[Methods] The research subjects were 56 primiparous women 20 weeks before delivery. PA was measured using an accelerometer attached to the wrist, and the subjects completed a questionnaire about their discomforts during the pregnancy. The data were quantitatively analyzed.

[Ethics] The Tohoku University Graduate School of Medicine Ethics Committee approved this study.

[Results] The subjects' average time of moderate-to-vigorous intensity PA was 34.1 minutes/day, which met the PA criteria. However, the amount of time that they reported as sedentary was 576.8 minutes/day, which is longer than the average Japanese adult, who have been found to sit for the longest periods in the world. The item "the frequency and degree of coldness of hands and feet" had a significant negative correlation with sedentary behavior of 0 to 15 minutes and of 15 to 30 minutes, and it had a significant positive correlation with sedentary behavior of 45 to 60 minutes.

[Discussion] To promote PA in a way that avoids discomforts for pregnant women, these results suggest that it is appropriate to evaluate PA by focusing on sitting time.

Poster**Health Promotion / Disease Prevention**
P1-198 Body Composition Changes Pre- and Post-surgery in Patients Undergoing Lymphadenectomy Surgery for Gynecological Tumors

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[Objectives] To investigate the body composition changes pre- and post-surgery in patients undergoing lymphadenectomy for gynecological tumors and to elucidate indications of lower limb lymphedema. **[Methods]** The study enrolled 23 women who underwent surgery for gynecological tumors at university hospital 'A' between December 2018 and Jun 2019. Information regarding age, disease, disease duration, surgical procedure, and lymph node dissection was gathered from medical records. Body measurements (height, weight, BMI, limb composition) were taken prior to surgery, as well as one week post-surgery. As an indicator of lymphedema, a comparative cancer group investigation of age and left and right lower limb muscle mass values (BI) pre- and post-surgery was conducted. **[Ethics]** The study was approved by the university's ethics committee. The study was conducted only after a written explanation was provided to the participant, and written consent was obtained. **[Results]** Participants included 23 women; the mean age was 55.26 years. The disease types were as follows: 6 uterine cancer patients (26.1%), 9 cervical cancer patients (39.1%), 5 ovarian cancer patients (21.7%), and 3 double cancer patients (13%). No differences were found during pre-surgery analysis in the comparative cancer group investigation of BI by age. However, there was an increase ($p < 0.042$, F-value 3.33) in post-surgery left lower limb measurements in the ovarian cancer group. **[Discussions]** Investigation of pre-and post-surgery body composition changes in patients undergoing lymphadenectomy for gynecological tumors demonstrated indications of lower limb lymphedema, such as left lower limb BI increase in the ovarian cancer group and an increasing trend in the right lower limb BI measurements.

P1-199 Reasons for condom use or nonuse among individuals undergoing sexually transmitted infection examination in Japan

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[Objectives]

The principal aim of this study was to clarify the status of condom use to understand the current status of infection prevention behaviors of individuals undergoing sexually transmitted infections (STI) examination.

[Methods]

The study period ranged from December 2017 to June 2018. We mailed anonymous, self-administered questionnaires, to individuals who underwent human immunodeficiency virus (HIV)/STI examination. The questionnaire comprised attributes, status of condom usage, and reasons for condom nonuse etc. Descriptive statistics were calculated.

[Ethics]

The present study was approved by the institutional review board of the affiliated institution of the researchers.

[Results]

Of the number of valid responses was 789. The respondents comprised 62.9% men, 25.2% women. Regarding condom use, 23.8% of men and 18.6% of women used a condom during every sexual encounter. The most frequent reason for condom nonuse in descending order of number of responses obtained among men was "not wearing a condom increases the sense of closeness with the partner" followed by "I have been OK until now, so I will probably be OK in the future." The most common response for condom nonuse among women was "not wearing a condom increases the sense of closeness with the partner" followed by "I cannot tell my partner to use a condom, so I have no choice."

[Discussions]

The rate of condom use among individuals who underwent STI examinations is still too low to suppress the current STI/HIV infection. Education that aims to "increase awareness of the effectiveness of condom use in STI prevention" is essential.

Poster

Health Promotion / Disease Prevention

P1-200

The association between heart rate variability and salivary alpha-amylase activity of female college students

○Hiroe Washio

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[Objectives] The purpose of this study was to evaluate the responses of female university students to stress during the different phases of the menstrual cycle.

[Methods] We measured heart rate variability (HRV) and salivary alpha-amylase (sAMY) activity and examined their relationships with the phases of the menstrual cycle. The relationship between HRV and sAMY was also investigated. We used four frequency domain variables and the physical stress index (PSI) as indexes for HRV. Stress relief/fatigue was represented by LF; parasympathetic nervous activity was represented by HF; TP represented the ability to manage stress; LF/HF ratio represented the sympathetic nerve activity; and PSI represented the degree of fatigue.

[Ethics] This study was conducted in accordance with the revised version of the Helsinki declaration and was approved by Ethical Committee. All subjects gave written, informed consent and were informed of their right to discontinue participation at any time in the experiment.

[Results] In all phases of the menstrual cycle, no significant association between sAMY and HRV was found. However, sAMY had negative association with PSI. There were positive associations between LF, TP, and sAMY.

[Discussions] Increase in sAMY reduces fatigue, improves stress coping capability, and potentially relieves stress. Moderate stress may lead to healthy living of students.

P1-201

Oral health promotion during pregnancy: a systematic review

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[Objectives] Tooth caries and periodontal disease during pregnancy become risk factors of premature birth and baby. Therefore, tooth caries and periodontal disease prevention is important for pregnant women. This study aims to clarify study trend, systematically reviewing precedent studies.

[Methods] The authors performed surveys with Japan Medical Abstracts Society web version and PubMed with formulas "pregnant women or pregnancy" and "oral health or oral hygiene or dental health or dental hygiene or oral care or behavior", targeting original papers, with target period from 1980 to August, 2018.

[Ethics] The reference sources were clearly stated and they were used appropriately based on Copyright Act of Japan (amended in 2018).

[Results] 20 Japanese and 13 English papers were obtained. (1) Tooth caries morbidity was 50-80%. (2) Periodontal disease morbidity was 30-90.8%. (3) Intraoral subjective symptoms were thirst, hemorrhage during toothbrushing and halitosis. (4) Characteristics of pregnant women with morning sickness were increase in snack, nausea by toothbrushing and shortened toothbrushing time. (5) Inhibitors were uninsured, youth, accessibility, poverty, low education level and employee. There were insufficient studies that reported health behaviors to promote oral health during pregnancy and relationship with symptoms and severity of morning sickness.

[Discussions] Both tooth caries morbidity and periodontal disease morbidity were high. Intraoral subjective symptoms and characteristics of pregnant women clarified actual situation difficult for promoting oral health. In early pregnancy, they easily suffer tooth caries and periodontal disease caused particularly by morning sickness. Collecting detail evidence to maintain oral health promotion in early pregnancy is necessary.

Poster

Health Promotion / Disease Prevention

P1-202

Development and validation of the Effectiveness of Animal-Assisted Activity Scale among patients

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[Background] Although Animal-Assisted Activity (AAA) reportedly has a wide range of physical and psychosocial effects, evaluation criteria have not been developed.

[Objectives] To develop the Effectiveness of Animal-Assisted Activity Scale and to examine its reliability and validity among patients.

[Methods] We developed a total of 15 items based on expert meetings with veterinarians, medical team members, and nursing university educators who practiced AAA. The participants were inpatients aged over 20 years, with no fear of companion animals, no animal allergies, no disorientation, and in good physical and mental condition to participate in approximately 15 minutes of AAA.

[Results] A total of 74 valid responses was received (mean age=45.9 years, 46 males), for which item relevance, difficulty level, and duplication were verified. Consequently, 12 items were analyzed, yielding Guttman split-half and Cronbach's alpha coefficients of .90 and .84, respectively. Constructive factor analysis resulted in a three-factor model, explaining 68.4% of the total variance in the data. Additionally, a significant correlation with the shortened version of the Profile of Mood States ($r = -.66$, $p < .01$) was obtained. This scale had a three-factor structure, including "Happiness", "Psychological distress", and "Emotional stability."

[Discussions] Given the preliminary evidence supporting the reliability and validity of this scale, we anticipate its subsequent clinical application as an evaluation index that can be used simply and widely to evaluate the effects of AAA.

P1-203

Relationship between in-shoe external forces and step length in young healthy subjects

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[Objectives]

External forces (pressure and shear stress) are factors of diabetic foot ulcer and callus formation. It is thought that external forces are related to walking speed. If external forces could be altered by modifying walking speed, the prevention of foot ulcer and callus formation might become easy. However, this relationship has not been revealed. Walking speed depends on step length and walking efficiency. In the present study, we examined step length. The objective of this study was to clarify the relationship between in-shoe external forces and step length.

[Methods]

In-shoe external forces were measured at the first, second, and fifth metatarsal heads. Forty-seven young healthy subjects walked on fixed walking efficiency. As an alternative indicator of step length, the number of steps in 15 m was counted. A larger number of steps indicated a smaller step length. The correlations coefficient was determined.

[Ethics]

This study was approved by the Ethical Committee of the Graduate School of Nursing, Chiba University (#30-33).

[Results]

There were no significant correlations for most variables. Although some variables showed significant correlations, the correlation coefficients ranged from 0.3 to 0.4 (absolute value), indicating weak correlations.

[Discussions]

External forces and the number of steps showed almost no relation. As the measurement distance was fixed at 15 m, the number of steps was considered to reflect step length. Therefore, external forces and step length showed almost no relation. As the next step, the relationship between external forces and walking efficiency will be examined.

Poster

Health Promotion / Disease Prevention

P1-204

Text mining analysis of article titles about older workers in Japan

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[Objectives] The government of Japan plans to establish legislation that allows people to work until age 70 if they wish to do so. The number of older workers is expected to increase at a more rapid pace. Therefore, the purpose of this study was to clarify the trend of research about older workers in Japan.

[Methods] First, we conducted making articles search of "Ichushi" that is a bibliographic database about medical, nursing science published in Japan. Search terms included "older workers", "elderly workers", "older" and "employment", and so on. The search was limited to articles published by 2018. Second, we analyzed these article titles by free text mining software "KH-Coder".

[Results] Of the 227 articles initially identified, we analyzed the titles of 174 articles that met the inclusion criteria. By age, it was about 20 in 1980s and 1990s, 35 in the 2000s and 86 in the 2010s. In the article types, 19.5% were original article and 80.5% for others. The frequently used words were "older workers", "measures", "falls", "health management", "injury" etc. "Falls", "mental health", "health and safety" etc. were strongly associated with "measures".

[Discussions] In Japan, the studies about this topic have been increased around 2007, when Japan reached a super-aged society, and it is speculated that research will continue to increase. In the field of occupational health, it is necessary to strengthen measures against work-related injuries such as falls and prepare for new issues in the future.

P1-205

The Effects of a Parent Training Program for Parents with Infants Attending Kindergarten for Children with Disabilities

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[Objectives] The purpose of this study was to verify the effects of a parent training program (PT) which was developed independently.

[Methods] The subjects were parents with infants who are attending a kindergarten for children with disabilities in a city in Japan. The PT was held from 2015 to 2018. The PT was evaluated by the questions of the parenting attitudes for 17 items, the child's behavior that the parents felt as problems for 8 items, and their related opinions of the PT itself. Of the 74 participants, 55 participants who participated in the program (three or more times) responded to the first and last surveys included in the analysis.

[Ethics] Researchers informed the purpose of the survey to the participants, and how to manage the participant's ID numbers. The participants were then asked to sign a written consent form.

[Results] The parenting attitudes improved significantly in 12 items at the end of the PT. The children's problem behavior was improved significantly on one item. In the opinion of the PT, they described the effects of the PT experienced by the mothers in their real lives and the will to give effective child care.

[Discussions] In this study, the effects of the PT were evaluated at two points, at the start and at the end of three months. As the results, changes in parenting attitudes were observed. In addition, the participants indicated that this PT program has had a certain effect, as it is, the PT was positively evaluated.

Poster**Health Promotion / Disease Prevention****P1-206****Employment status and health-related quality of life in single and married mothers caring for school-aged children with disabilities in Japan**

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[Objectives] We investigated the employment status and health-related quality of life (HRQOL) of single and married mothers caring for school-aged children with disabilities in Japan.

[Methods] We performed secondary analysis of self-administered questionnaire data we had collected from 1,659 households that included school-aged children with disabilities 6-18 years of age. We explored the socio-demographic characteristics of families and children, including maternal employment status and HRQOL.

[Ethics] This study was approved by the Institutional Review Board of our University.

[Results] Of the 1,499 subjects, 14.0% were single mothers and 58.8% were unemployed. Compared to married mothers, single mothers exhibited a significantly higher unemployment rate, a lower annual household income, and a lower educational level. All subjects were divided into four groups by marital status and current employment status: Group 1: Single mothers in employment (n=120, 8.0%), Group 2: Single mothers who were unemployed (n=90, 6.0%), Group 3: Married mothers in employment (n=498, 33.2%), Group 4: Married mothers who were unemployed (n=791, 52.8%). We compared the HRQOLs of these four groups. Mothers in Group 1 and Group 2 exhibited significantly poorer mental health compared to Group 3. Physical health status did not differ significantly among the groups.

[Discussions] To improve maternal HRQOL, healthcare providers, researchers and policy makers should explore marital and employment status. Single mothers caring for children with disabilities require more healthcare and more economic support.

P1-207**Validity and reliability of the social capital scale in Japanese family caregivers of people with dementia**

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[Objectives] The objectives of this study were to develop the social capital scale for the caregivers of people with dementia and comprehensively assess the validity and reliability.

[Methods] 41 items were generated based on the results of previous studies on social capital and books about dementia using the three compartments of social capital: networks, reciprocity and trust. Psychometric properties were assessed using 178 responses of completed questionnaires on a draft social capital scale. Data analyses were performed using IBM SPSS version 24 and R version 3.6.0.

[Ethics] Kobe University Graduate School of Health Sciences Institutional Review Board permission (IRB No. 716) was obtained for this study.

[Results] 6 items out of 41 items were excluded because content validity indices were below .80. 27 items entered the exploratory factor analysis because 8 items were excluded due to ceiling effects. Factor analysis identified five factors in 20 items. Cronbach's alpha of 20 items was .87. The intra-class coefficient on 46 responses was .80. The correlation with positive aspects of a caregiving scale was .62 ($p < .001$). Confirmatory factor analysis showed somewhat low fit indices ($\chi^2 = 334.26$, $df = 160$, $p < .001$, GFI = .846, AGFI = .797, RMSEA = .078).

[Discussions] Results suggested that this scale would be valid and reliable despite fit indices being a little low.

Poster

Health Promotion / Disease Prevention

P1-208

Effect of Infant Injury Prevention Education for Expectant Mothers attending Maternity Class: A Quasi-Experimental Study

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[Objectives]

It is important to provide education for mothers in order to prevent infant injuries, however there have been few studies about the effects of education for expectant mothers. This study aimed to evaluate the effects of prenatal education on the implementation of these safety practices.

[Methods]

Study participants were recruited from a group of expectant mothers attending a maternity class in one municipality in Tokyo. Participants were assigned to either the intervention or the control group based on the month when they attended the class. Both groups received a leaflet on injury prevention, but only the intervention group received an additional 17-minute lecture. The implementation of each of the nine safety practices was assessed during home visits after childbirth.

[Ethics]

This study was approved by the Ethics Review Board of the University of Tokyo and conducted in accordance with the Declaration of Helsinki.

[Results]

Of 131 study participants (56 in the control group, 75 in the intervention group), 106 (80.9%) received home visits after birth. Mothers in the intervention group implemented three practices significantly more than those in the control group: "do not put anything around the baby's head" (38.3% vs 13.0%), "do not put the baby on a sofa" (74.6% vs 52.2%), and "use the baby carrier appropriately" (93.3% vs 76.1%).

[Discussions]

Education for expectant mothers helped improve some safety practices after birth, although the practices and intentions did not all change in the same manner. Behavioral control may be the key to whether practices are implemented.

P1-209

Low back pain and coping behavior during pregnancy in Japanese pregnant women: A longitudinal study

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[Objectives] It has been reported that the proportions of women with low back pain were approximately 70-80% at the third trimester in Japan. The aim of this study is to clarify the change of low back pain and coping behavior during pregnancy in the longitudinal study.

[Methods] We examined the presence of low back pain by using Visual Analog Scale for pain. One hundred and forty women completed a questionnaire documenting their low back pain during pregnancy. The data were analyzed by using SPSS Ver23. χ^2 test were used to examine the relationships between the proportion of low back pain and each stage of pregnancy.

[Ethics] The study protocol was reviewed and approved by the Ethics Review Board of Tokushima University Hospital (approval no. 2201).

[Results] The subjects included 53 primiparous women and 87 multiparous women. The proportions of women who complained low back pain were 66.4% at the first trimester, 83.6% at the second trimester and 90.0% at the third trimester. The proportion of coping behavior for low back pain were 33.6% at the first trimester of pregnancy, 44.3% at the second trimester and 48.6% at the third trimester. The coping for low back pain at the first trimester of pregnancy was significantly lower proportion than the second trimester and the third trimester.

[Discussions] In Japanese women, low back pain during pregnancy were in 60-90%, whereas only 30-40% of women were able to cope with it. Women with low back pain during pregnancy should be managed for improving the quality of their lives.

Poster**Health Promotion / Disease Prevention****P1-210****Relation between breastfeeding-related factors and mother-child bonding at 3 months postpartum: A longitudinal study in Japan**OMasayo Matsuzaki¹, Mie Shiraishi¹, Maki Iwamoto^{1,2}, Shoko Kurihara¹, Mieko Shimada^{1,3}¹*Department of Health sciences, Osaka University Graduate school of Medicine, Japan*²*Saiseikai Ibaraki Hospital, Japan*³*Dokkyo Medical University, Japan*

[Objectives] To strengthen mother-child bonding, we aimed to reveal the relation between breastfeeding-related factors and mother-child bonding at 3-months-postpartum.

[Methods]A longitudinal study was performed during postpartum hospitalization and at 3-months-postpartum in a hospital, 2017-2018. Data on demographics and breastfeeding-related factors were obtained using questionnaires, as were scores on the Postpartum Bonding Questionnaire (PBQ), and the Edinburgh Postnatal Depression Scale (EPDS). Multiple linear regression analysis adjusted for PBQ scores during hospitalization was used to examine the relationships between the breastfeeding-related factors and PBQ scores at 3-months-postpartum.

[Ethics] The study protocol was approved by the Ethics Committee of the hospital.

[Results] Of all 113 participants responding to the PBQ, the mean age was 34.1 ± 4.6 ($\pm SD$) years. Breastfeeding problems were reported for 27 mothers (23.9%), and 73(64.6%) breastfed exclusively. The factors related to weaker mother-child bonding were found to be breastfeeding problems ($\beta=0.16, p=0.03$) and an EPDS score >8 at 3-months-postpartum (0.29, <0.001). Feeding methods were not significantly related to PBQ scores.

[Discussions] A weak postpartum mother-child bonding is known to be a risk factor for child abuse. The child guidance offices across Japan reported a total of 80,252 notifications of suspected child abuse in 2018. Despite the fact that the Ministry of Labor and Welfare recommends exclusive breastfeeding during the first 6 months and mother-child bonding is associated with breastfeeding; however, the related factors had not been clarified. This study indicates that to strengthen mother-child bonding, health care providers need to provide effective approaches to prevent breastfeeding problems.

P1-211**Support of Working Mothers for Children who Adapt and Make Their Children's Lifestyles Healthy after Entering Elementary School**OMisato Ishii¹, Mikako Arakida²¹*School of Medicin Nursing Department, Tokai University, Japan*²*School of Nursing and Rehabilitation Science at Odawara, International University of Health and Welfare, Japan*

Objectives : The purpose of this study was to clarify how working mothers understood their children who entered elementary schools and their support of the child's adaptation to making a healthy lifestyle.

Methods: Three times, focus group interviews were conducted for 12 working mothers who lived in a medium-sized city in the Kanto area in 2018.

We asked the mothers about changes in their child's life and their adaptations when their first child entered elementary school.

Ethics: This study was conducted with the approval of the ethics committees of the related institutions.

Results: The following five categories were extracted as the child's adaptation to primary school: the attitude of not wanting to go to school, issues associated with changes in the living environment of the child, the social development of the child, the physical and mental fatigue of the child and the wavering of the relationship with the mother. In addition, the following four categories were created about the support for the mother's children: support for the child's lifestyle adjustments after admission, the support for the maintenance of the child's health, having a concrete image of the child's future and the mother's support while dealing with trouble associated with the child.

Discussions: The working mothers prioritized the supports needed for their child needed to adapt to primary school life, while feeling the conflicts associated with work-life balance. In addition, the mothers provided support in consideration of the future of children and support for achieving a healthy lifestyle.

Poster

Health Promotion / Disease Prevention

P1-212

Characteristics of maternal smoking during pregnancy: Analysis of 4-month health checkup data in A city

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[Objectives]

The aim of this study was to identify the characteristics of parents who smoke during pregnancy and raise babies who are approximately 4 months old.

[Methods]

This study used data obtained during a 4-month health check-up in A city. Data were assessed for approximately 3000 females who reported their pregnancy and completed a 4-month visit with their child in A city. The data was collected after an agreement was established between A city and the authors' affiliated university. We used cross-tabulation and statistical tests to determine relations between i) maternal smoking and other items and ii) family smoking and other items from the questionnaire for the 4-month old baby health check-up.

[Ethics]

This study was approved by the institutional review board at our affiliated university (approval No. 18420) on March 18, 2019.

[Results]

Our analysis identified significant differences between smoking mothers and nonsmoking mothers according to other items from the questionnaire for the 4-month old baby health check-up. Five items demonstrated statistically significant differences between smoking mothers and nonsmoking mothers ($p < 0.05$); these included the proportion of (1) family smoking; (2) mothers who feed their babies with formula; (3) mothers who consume alcohol; (4) mothers who need professional on-going support; and (5) mothers who slapped their children within the past months.

[Discussions]

Maternal smoking was related to behaviors such as consuming alcohol and feeding with formula. These results indicate the necessity to prevent smoking among pregnant and child-rearing mothers.

P1-213

A synergic affect of passive smoking and having dog on pediatric asthma in Japan

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Background: Passive smoking is well-known cause of incidence of asthma, but solid reference data for pediatric asthma related to synergic affection of passive smoking and having dog are lacking.

Aims: The aim of this study is to describe environmental factors, which affect on incidence of asthma, especially relationship between passive smoking and having dog.

Methods: The International Study of Asthma and Allergies in Childhood (ISSAC) questionnaire was performed at 6 elementary schools in Japan for a total of 474 subjects, aged from 6 to 12 years old. Pulmonary and blood examinations were obtained for patients who diagnosed pediatric asthma by the ISSAC questionnaire.

Results: The results showed passive smoking environment such as significance of number of smoking in the family, number of smoking cigarette per day by the family members, and smoking by parents significantly affected increasing IgE on the samples ($p = <.0001$). The group of children who have a dog demonstrated significantly high dog dander data in passive smoking environment ($F = 6.70$, $p = 0.04$) with no relationships to years of having dog and deference of inside or outside of raising the dog. The group of existing passive smoking also showed significantly high incidence of asthma by having dog ($OR = 1.07$, $IC = 0.27 - 4.54$, $p = <.0001$).

Conclusion: Environmental factors are critical to prevent asthma fro children. Passive smoking and having dog may have a synergism to worsen incidence of asthma.

Poster

Health Promotion / Disease Prevention

P1-214

Coparenting and marital relationship in parents who have their first child under one year old in Japan

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[Objectives] Coparenting and marital relationship change dramatically after childbirth. However, these relationships have never been evaluated quantitatively in Japan. The purpose of this study is to evaluate these relationships in parents who have their first child under one year old in Japan.

[Methods] Cross-sectional observational study was conducted with an online questionnaire survey among mothers (n=100) and fathers (n=100) who had their first child under one year old. Data was collected evenly from parents with a 0 to 3 months old child (T1), a 4 to 6 months old child (T2), and a 7 to 11 months old child (T3). The Japanese version of the Coparenting Relational Scale (CRS) and the Japanese version of the Marital Adjustment Scale (MAT) were used to evaluate coparenting and marital relationship, respectively. Demographics were also included in the questionnaire. One-way analysis of variance was used in analysis.

[Ethics] Approved by the Ethics Review Board.

[Results] Both the CRS ($F=4.113$, $p=.019$) and MAT ($F=6.575$, $p=.002$) scores significantly declined from T1 to T3 in mothers. In fathers, both scores showed as same as in mothers but not significantly. In addition, double-income mothers and father reported highest scores in T2 and lowest scores in T3 on the CRS. By contrast, single-income mothers and fathers reported low scores in order of T3, T2, and T1 on the CRS.

[Discussions] Coparenting and marital relationship were assumed to be getting worse during one year after childbirth. It is needed to prevent these relationships from getting worse for new parents.

P1-215

Comparison of Quality of Life among Shift Work Nurses in Japan based on Age and Gender

○Mio Hosona

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[Objectives] To compare quality of life among shift work nurses in Japan based on age and gender.

[Methods] The study employed a descriptive correlation design. Excluding head nurses, self-administered survey questionnaires were administered to 653 nurses who worked in shifts in an advanced treatment hospital in Japan. Data were collected from January to February 2015. The questionnaire sought information on age and gender, and assessed Health Related Quality of Life on the 8-Item Short Form Health Survey (SF-8), and level of health on a visual analog scale (VAS).

[Ethics] This study was approved by the Institutional Review Board, Kobe University Graduate School of Health Sciences, Japan.

[Results] A total of 405 questionnaires (62.0%) were completed . Mean age of participants was 29.3 ± 6.8 years; 335 nurses were under 35 years of age and 66 nurses were 35 years and over . Among the participants, 34 were men and 368 were women. Nurses aged 35 years and over showed significantly lower scores in Bodily Pain (BP) and Social Function (SF) of SF-8 than nurses under 35 years of age. In addition, male nurses had significantly higher Mental Health (MH) scores of SF-8 than female nurses.

[Discussions] In Japan, women nurses aged 35 years and over may have inferior quality of life relating to physical pain or mental health. This may be associated with housework and childcare among other factors . Therefore, these results imply that they needed adequate rest and regeneration.

Poster

Health Promotion / Disease Prevention

P1-216

Follow-up Survey of Obesity for 2 Years from Elementary school to Junior high school

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[Objectives] In this study, we examined changes in physique and lifestyle habits associated with the growth of children from elementary to junior high school. The primary aim was to obtain suggestions about preventive measures against obesity starting in childhood.

[Methods] The participants were 6th grade elementary school students who received a health check-up for lifestyle diseases between 2015 and 2019. During the investigation, data on height, weight, body fat and lifestyle habits were obtained. The changes in these measures between when the participants were 6th grade elementary school students and when they were 2nd grade junior high school students were analysed.

[Ethics] This study was approved by the Ethics Committee.

[Results] This study enrolled 188 healthy junior high school students from Hiranai town located in northern Japan. Sixteen were obese, 25 were still obese, and 7 were obese. Those who were aware of their lifestyle after medical checkup did not find any significant difference with or without obesity. As a result of multiple regression analysis which made the change of the degree of obesity a portal variable, as a result of making a change of exercise time and body fat rate into a target variable, girls were related to the time of television.

[Discussions] The improvement in obesity was associated with exercise time only for girls and television time. There may be differences in lifestyle habits due to gender differences and other factors.

P1-217

Follow-up Survey of HbA1C for 2 Years from Elementary school to Junior high school

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[Objectives] It is necessary to take measures to prevent lifestyle diseases during childhood.

In this study, we examined changes in blood glucose level and lifestyle habits associated with the growth of children from elementary to junior high school. The primary aim was to obtain suggestions about preventive measures against obesity starting in childhood.

[Methods] The participants were 6th grade elementary school students and 2nd grade junior high school students who received a health check-up for lifestyle diseases between 2015 and 2019. During the investigation, HbA1c and lifestyle habits were obtained. We conducted multiple logistic regression analysis for the changes degree of HbA1c as an objective variable, using the other changes in lifestyle as independent variables, and examined factors influencing HbA1c.

[Ethics] This study was approved by the Ethics Committee.

[Results] This study enrolled 185 healthy junior high school students from Hiranai town located in northern Japan. Those who were aware of their lifestyle after medical checkup did not find any significant difference with or without HbA1c changes. As a result of multiple logistic regression analysis which made the change of the degree of HbA1c changes a portal variable, as a result of there was no significant difference.

[Discussions] No factors affecting HbA1c levels were identified. There may be differences in lifestyle habits due to gender differences and other factors.

Poster**Health Promotion / Disease Prevention****P1-218****Sources of information on appropriate paternal responses to infant crying**

○Emi Ito, Hiroko Watanabe

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[Objectives] The purpose of this study was to investigate the association between appropriate paternal responses to infant crying and sources of information on responses to infant crying.

[Methods] In this cross-sectional study, self-administered questionnaires were completed by Japanese fathers and mothers with four-month-old infants between May and July 2018. We investigated the fathers' appropriate responses to infant crying during the past month and whether fathers had received explanations for responses to infant crying from health-care professionals or if mothers had shared information with their partners. The appropriate responses to infant crying is putting infant down in a safe place and leaving when the crying becomes frustrating. This response is recommended by the Ministry of Health, Labor and Welfare.

[Ethics] This study was approved by the Osaka University Clinical Research Review Committee (approval number 17401).

[Results] We enrolled 161 fathers and 161 partners. Fifty (31.1%) fathers demonstrated the appropriate responses to infant crying, and 58 (36.0%) fathers received explanations for responses to infant crying from health-care professionals. Seventy-eight mothers shared information on their responses to infant crying. Fathers whose partner shared information on response to infant crying responded more appropriately than fathers whose partner did not share information ($p < 0.05$). The appropriate paternal responses to infant crying were not associated with explanations from health-care professionals.

[Discussions] For fathers, the most valuable sources on appropriate responses to infant crying are their partner's information. In order to save infants, it is suggested that mothers should share information on responses to infant crying with fathers.

P1-219**Status of hand hygiene among home care patients with high medical dependence**○Yoshie Matsumoto¹, Junko Okada², Akiyo Nakamura³¹Adult Health Nursing, Japanese Red Cross Hiroshima College of Nursing, Japan²Nursing / Health and Welfare, Prefectural University of Hiroshima, Japan³Mihara Red Cross Hospital, Japan

[Objectives] Hand hygiene is placed as one of the most important measures to prevent the spread of healthcare-associated infections. For this reason, this study aims at understanding the actual status of bacterial contamination of patients under home medical care.

[Methods] Nine patients of home care needing assistance in daily life were selected as subjects. Bacterial samples were collected from fingers of both hands as well as from environmental surfaces surrounding the subjects. The test kit used was ESwab™. Bacterial species and amounts as well as the way to keep their hands clean were studied.

[Ethics] This research was conducted with the approval (No. 1802) of the Research Ethics Committee of the university to which the researcher belongs.

[Results and Discussion] Between 900 and 148,060,000 cfu/mL of bacteria was detected per hand. A total of 17 bacterial species were detected on all of their hands. Bacterial species detected on the hands and environmental surfaces of the same subject were roughly consistent. Bacteria detected from the patients' hands included Enterococcus faecalis, E. coli, and Staphylococcus aureus. Many of the subjects performed hand hygiene during bathing assistance but there was difference in frequency from every day to once a week, depending on the patient. Two of them had washed their hands using running water. The total number of bacteria detected on these subjects was very low. This suggested the importance for patients of home care to wash their hands with running water.

This study was supported in part by a Grant-in-Aid for Scientific Research, No. 18K10223 (2018-2020).

Poster

Health Promotion / Disease Prevention

P1-220

Toxoplasmosis-related Knowledge and Preventive Practices Among Japanese University Students

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[Objectives] The aim of this study was to determine toxoplasmosis knowledge and preventive practices of young childbearing age women and men in Japan.

[Methods] A descriptive cross-sectional study recruited a random sample of 226 university students. The data were collected using a self-report questionnaire, which consisted of demographic factors, knowledge about toxoplasmosis and their preventive practices. Analysis utilized SPSSVer.22J software.

[Ethics] This research was approved by the university's ethics committee and all participants signed a release.

[Results] Of 185 students (valid responses 81.9%) responding to the survey, 125 were men, 60 were women, and the average age was 21.3 ± 1.7 . Based on this survey, only 25.3 % of these students had read, heard, or seen information regarding toxoplasmosis and 74.7% of students reported "unknown" about toxoplasmosis. Overall, there was a lack of awareness about toxoplasmosis. Participants were least aware of the acquired risk factors, symptoms, and treatment of toxoplasmosis. Yet, a high percentage (89.7%) of students reported that they hope to learn about preventing toxoplasmosis. In addition, participants reported wanting to learn about toxoplasmosis in high school (28.3%), before pregnancy (26.2%), and in university (15.7%). If they become pregnant, 78.1% of students reported wanting to "be screened for and receive counseling on toxoplasmosis during pregnancy."

[Discussions] This study established a baseline for the awareness levels about toxoplasmosis among university students in Japan. These findings highlight the urgent need for toxoplasmosis awareness and preventive education for young people of childbearing age.

P1-221

Relationship between Serum Lipids and Lifestyle Habits in Healthy Junior High School Students

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[Objectives] Obesity in childhood is associated with atherosclerosis in adulthood. In this study, we examined the association between serum lipids and lifestyle habits of junior high school students. The primary aim was to obtain suggestions on preventive measures against obesity starting in childhood.

[Methods] The participants were Japanese 1st and 2nd grade junior high school students who received a health check-up for lifestyle diseases in 2019. Survey items were serum total cholesterol (TC), triglyceride (TG), low-density lipoprotein cholesterol (LDL), high-density lipoprotein cholesterol (HDL), and lifestyle habits. Multiple regression analysis was performed for the serum lipids as an objective variable, using sleeping time, studying time, number of time without breakfast, degree of obesity, age as independent variables.

[Ethics] This study was approved by the Ethics Committee.

[Results] Subjects were 313 healthy junior high school students (159 boys and 154 girls). Girls had significantly the shorter sleeping times, longer studying times than boys. Multiple regression analysis showed that the degree of obesity was significantly different with all serum lipids in boys. So does serum TG and HDL-cholesterol in girls. The number of time without breakfast correlated significantly to girl's serum TC, TG, and LDL-cholesterol.

[Discussions] These results suggest that the degree of obesity indicates the status of serum lipids in healthy junior high school students. Especially girls, sleeping time, breakfast, and studying time were related to obesity, and improvement of life rhythm was effective for prevention of obesity.

Poster**Health Promotion / Disease Prevention****P1-222****The influence of coparenting and marital relationship on parental depressive symptoms**

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[Objectives] Depressive symptoms are a significant problem for parents during raising children. This study aimed to clarify whether coparenting or marital relationship greatly influences depressive symptoms for parents in Japan.

[Methods] This study was a cross-sectional observational study conducted with an online questionnaire survey among mothers (n=100) and fathers (n=100) with children under 2 to 3 years old. The questionnaire included the Center for Epidemiologic Studies Depression Scale (CES-D), the Coparenting Relationship Scale (CRS), the Quality Marriage Index (QMI), and demographics. We used the multivariable logistic regression analysis with CES-D as a dependent variable.

[Ethics] Approved by the Ethics Review Board.

[Results] Depressive symptoms in fathers were significantly influenced only by the CRS (AOR = 0.325, 95% CI: 0.147-0.716, p = 0.005). In contrast, depressive symptoms in mothers were significantly influenced by the QMI (AOR = 0.858, 95% CI: 0.746-0.987, p = 0.032). There were significant positive correlations between coparenting and marital relationship in both parents (Fathers: r = 0.692, p < 0.01, Mothers: r = 0.643, p < 0.01).

[Discussions] Coparenting significantly influenced depressive symptoms in fathers. As their children grow up to under 3 years old, the play between fathers and children is increasing. Thereby, it may be considered that relationships including children become important for fathers. Depressive symptoms in mothers were significantly influenced by marital relationship. We also found there were significant positive correlations between coparenting and marital relationship. Hence, supporting coparenting earlier than at the time of this study could prevent depressive symptoms for both parents in Japan.

P1-223**Literature review of content of social networks and social support related to health behavior of middle-aged men**○Shuji Takahashi¹, Mina Ishimaru²¹Faculty of Nursing, Miyazaki Prefectural Nursing University, Japan²Graduate School Of Nursing, Chiba University, Japan**Background**

Men have fewer social networks and less social support to improve lifestyle than women. Studies on lifestyle intervention for middle-aged men are not sufficient because middle-aged men access lifestyle improvement support less. Therefore, the contents of lifestyle improvement support utilizing social networks for middle-aged men are unclear.

Objective

To clarify what kind of social networks/support content is included in lifestyle improvement programs for middle-aged men and how effective such content is.

Methods

We searched papers by the key words "Social networking", "Social support", "Health behavior", "Health promotion" and "Men" for the past ten years in PubMed, CINAHL, PsycINFO and Ichushi-Web. Eligibility criteria were studies describing relationship between lifestyle and social networks of men aged 40 to 59, and studies published in Japanese or English.

Results

Nine studies were screened in this review. All of them were quantitative research; among them, there were four programs targeting only men. The contents of social networks/support included educating those seeking support through individual support/group support by experts, communicating with experts and participants on the Internet, and forming teams including reporting/encouragement within those teams and competition between the teams.

Discussion

There were lifestyle improvement programs related to social networks and support that considered culture and environment in various countries but none in Japan targeting only men. It is necessary to develop a lifestyle improvement program that utilizes social networks and support for Japanese middle-aged men.

Poster

Health Promotion / Disease Prevention

P1-225 Effects of visual, auditory, and olfactory interventions on the relaxation response with the first experience of Guided imagery

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[Objectives] The purpose of this study was to prove that the effects of visual, auditory, and olfactory interventions help individuals to relax easier.

[Methods] The targets were 48 workers ages 20 to 65 years, and the participants were randomly assigned to two groups. The two groups had two different conditions: the group with the environment with sensory intervention (experimental group) and the group without it (controlled group). The differences in physiological and psychological responses before and after Guided imagery experience were investigated. Blood pressure, heart rate variability, and mood conditions were measured. For the experimental group, Guided imagery was implemented under the following adjusted environments: video of the forest, sounds of nature from the forest, and the fragrance of trees.

[Ethics] This study was conducted in accordance with the Declaration of Helsinki and was reviewed and approved by the Research Ethics Review Board of the organization in which the study was conducted.

[Results] In both groups, a decrease in blood pressure and heart rate and an improvement in mood were observed after execution. Moreover, 95.8% of the experimental group and 75.0% of the controlled group answered that they could image the landscape. Opinions of "difficult" and "impossible to concentrate" after implementation were confirmed only in the controlled group. The experimental group had significantly higher levels of stability (relaxed and calm) and comfort than the controlled group.

[Discussions] The experience of Guided imagery in an environment that works on senses was rated as more relaxing.

P1-226 The stage of change model and nutritional dietary states among nursing students in Japan

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[Objectives] To clarify the stage of change model and nutritional dietary states among nursing students in Japan.

[Methods] The study employed a descriptive correlation design using a self-administered survey. The survey was conducted from July to October 2018 on 255 nursing students at a university in Japan. The questionnaire assessed basic characteristics, and frequency of food intake over one week.

[Ethics] The survey was conducted after ensuring that the ethical considerations were in accordance with the regulations governing graduation research of the affiliated university.

[Results] The stage of change model in dietary states was 5.9% for the precontemplation period, 41.2% for the contemplation period, 35.3% for the preparation period, 11.0% for the action period, and 6.7% for the maintenance period. Students who eat potatoes and mushrooms four times or more a week had significantly higher scores in the preparation, action, and maintenance periods. On the other hand, students of the precontemplation and contemplation periods consumed a significantly greater amount of confectionery items and their favorite beverages.

[Discussions] Most of the nursing students belonged to the contemplation, preparation, action, and maintenance periods, and they were interested in their own eating habits. Additionally, among students of the precontemplation and contemplation period s, the intake frequency of potatoes, mushrooms, and seaweed was low while that of confectionery items and their favorite beverages was high. Therefore, because of these dietary habits, they need to seriously consider consuming a more balanced diet.

Poster

Diversity and Health

P1-227

An International Comparison of Factors Related to Nurse Burnout and Turnover (Canada, Malaysia and Japan)

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Purpose: The purpose of this research is to compare and consider the various factors related to nurse burnout and turnover in different countries (Canada, Malaysia and Japan).

Methods: The participants in the study included registered nurses working at acute-care hospitals in the Canada, Malaysia and Japan (200 from each country). The Maslach Burnout inventory, Intent to Leave, Utrecht Work Engagement Scale (UWES), and Nursing Stress Scale were used to evaluate the variables of interest.

Ethics: This Study was carried out after obtaining the approval of the Research Ethics Committee of Hyogo University, KPJ Healthcare University College and Kwantlen Polytechnic University.

Results: An examination of the comparison of Factors Related to Nurse Burnout in each country by the one-way ANOVA indicated that a significant difference was confirmed by "exhaustion", "Cynicism" and "Professional Efficacy" of the burnout. There was a significant difference in the Work Engagement scores among the three countries "Vigor", "Dedication", "Absorption" in Work Engagement. Factors contributing to stress were different in the three countries, with the following stressor being significantly different "inadequate preparation", "death and dying", "workload", "lack of support", "conflict with physicians", "uncertainty concerning treatment" in the stressor. "Inadequate preparation", "workload", "conflict with physicians", "uncertainty concerning treatment" were the highest in JAPAN, "lack of support" was highest in Thailand, and "death and dying" was highest in Canada.

Conclusion: The nurse in Japan experience a higher burnout level and turnover when compared to the nurses in Canada and Malaysia.

P1-228

Factors for Continuity of Driving by Elderly Men Living Alone in Villages at Risk of Disappearing

○Kimie Fujikawa, Ayako Fujita

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[Objectives]

The purpose was to clarify factors of continuity of driving by elderly men living alone in depopulated villages designated by Ministry of Internal Affairs and Communications.

[Methods]

Participants: 15 elderly men living alone over 80. Period: from February, 2018 to September, 2018. Methods: semi-structured interview. Only remarks of participants were extracted and made into the data. Text-mining analysis (frequency analysis, co-occurrence network analysis, hierarchical cluster analysis) was done via KH-Coder.

[Ethics]

The approval from Ethical Review Board in Nihon Institute of Medical Science was obtained (receipt number, 2017013). [Results]

[Discussions]

Consequently, the study clarified "driving is necessary for the elderly to keep their life because of living in depopulated areas"; considered it is necessary for the local community to discuss how the elderly can live without hindrance without the driver's license.

Poster

Diversity and Health

P1-229

The Psychological, Social Adaptation of Women with Primary Amenorrhea Accompanying DSD in Japan

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[Aim]

This study aims to elucidate the process of psychological, social adaptation of women with primary amenorrhea accompanying DSD.

[Methods]

Subjects were women aged 25 years or older who have been informed that they have primary amenorrhea accompanying DSD. A semi-structured interview was held with these women, and the researcher asked them about their experience to date. Data were transcribed and categorized by recognition and behavior. Categories were compared against the structural factors of the Roy Adaptation Model.

[Ethics]

This study was approved by the research ethics review committees of the university to which the researcher belongs and a collaborative research organization.

[Results]

Eleven categories were extracted. Four categories were related to social support, three to self-concept, two to role function, one between self-concept and social support, and one to physiological response. All the categories matched the Roy Adaptation Model. It is notable that the development of self-concept strongly related to sexual self-consciousness supported adaptation in subject women.

[Discussions]

Sexual self-consciousness is self-verification which can be achieved through coherent sexual identity. This study suggested that, in order to help women with primary amenorrhea accompanying DSD who have ambivalent sexual identity to promote establishing their self-concept and improve the level of social adaptation.

[Conclusion]

In order for women with primary amenorrhea accompanying DSD to achieve psychological, social adaptation, it is important for them to be able to not only fulfill general roles as women but also individualized roles according to their age.

P1-230

Long-term Hospitalized Patients' Process of Recovering their Sense of Self-worth as Members of Society and Factors that Help them Achieve Peace of Mind

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[Objectives] To clarify long-term hospitalized patients' process of recovering their sense of self-worth as members of society and factors that help them achieve peace of mind, adopting a qualitative study approach.

[Methods] Data obtained from a semi-structured interview were analyzed using a Modified Grounded Theory Approach. The participants were 10 patients with schizophrenia, who had been hospitalized in Japanese psychiatric hospitals for 1 year or longer, and then continuously living in communities for 6 months or longer.

[Ethics] The study was approved by the research ethics committee of the university.

[Results] The long-term hospitalized patients with < decreased sense of self-worth> developed < expanded perspectives on society> based on < assurance of a peaceful community life> and through < mutual support by people close to them> as [factors that help them achieve peace of mind]. By < living in community> with an < intention to participate in society > as the most important factor, they came to < feel fulfillment in their lives>, and < recover their sense of self-worth>.

[Discussions] In Japan, with the largest number of psychiatric ward beds in the world, long-term hospitalized patients developed expanded perspectives on society when assurance of a peaceful community life was provided and through mutual support by people close to them. In order to help these patients achieve peace of mind, and recover their sense of self-worth, it may be necessary to continuously support them to live in society while respecting their intentions.

Poster

Diversity and Health

P1-231

A narrative analysis of child-raising difficulties and support needs of a mother with attention-deficit / hyperactivity disorder (AD/HD)

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[Objectives]

To clarify parenting difficulties and support/support needs of a mother with attention-deficit/hyperactivity disorder (AD/HD).

[Methods]

The subject was a mother with AD/HD who had 2 children. A semi-structured interview was conducted, and a thematic analysis was carried out to analyze the data.

[Ethics]

The ethics committee of Okayama Prefectural University approved research.

[Results]

Ten, 5, and 7 themes were extracted from core themes, <>, <>, and <>, respectively. Fatigue made the mother with AD/HD unable to take care of her children, and she had a feeling of guilt about being too strict on them. She was also ashamed of herself and felt sorry for her children for forgetting to check a list of school supplies. Despite there being conflicts, she was supported by teachers of her children and her own parents, but she viewed emotional support received at a day care center as the most helpful.

[Discussions]

Healthcare providers must be aware of the efforts of mothers with AD/HD to provide emotional support.

P1-232

Review of Review Articles about Mental Health Among Sex Workers

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[Objectives] Mental health is a major issue for sex workers. This minority group is both stigmatized and isolated in society. There is limited information on the factors of exposure and finding solutions. This review identified existing quality review articles to provide an overview of mental health among sex workers.

[Methods] The Scopus database was used to search for review articles focusing on mental health among sex workers in July 2019. The inclusion criteria involved 1) following appropriate literature review methods and 2) searching for articles that were published over the last 5 years. Articles were excluded if they were not literature reviews or systematic reviews. The keywords used were "sex worker" or "prostitution."

[Ethics] This was an article review study and therefore did not require an IRB.

[Results] Following the above methods, a total of four review articles were extracted. All were literature reviews (there were no systematic reviews). Results indicated that sex workers had high instances of mental health issues, with most being depression. There was also mention of trafficking victimization. The risk factors were childhood abuse, poverty, drug use, suicidal behaviors, and sexual health issues, including sexually transmitted infections and the human immunodeficiency virus. An intensive support requirement was mentioned.

[Discussions] A consolidated systematic review is an essential complement to continued cohort/intervention research in this context. Healthcare professionals must understand the backgrounds of sex workers. Sex work is a worldwide concern. These individuals are often in harmful environments, vulnerable, and unable to escape.

Poster

Diversity and Health

P1-233

Factors affecting a good death at home in Japan: an integrative review focusing on the choice of preferred place of death

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²Medical Hospital, Tokyo Medical and Dental University, Japan

[Objectives]

This study aimed to identify factors affecting good death at home in Japan by focusing on the choice of preferred place of death.

[Methods]

An integrative review was conducted. In April 2019, PubMed, CINAHL, Web of Science, and Ichushi-web (Japan's largest medical-literature database) were searched. Additionally, a manual search was conducted. Only papers written in English or Japanese language were included in this study.

[Ethics]

Since this review did not include human subjects, it has not received an ethical approval.

[Results]

The initial online search identified 1559 papers, of which 1285 were excluded based on the title and abstract. Eight papers were identified by manual search. Finally, 56 research papers published during 2000–2018 were included after reviewing the full text. Qualitative synthesis revealed the following thematic classifications: patient/client-related promoting factors (e.g., an attachment to home, hopes to spend time as one likes until death, hopes to cherish one's time with family, etc.), patient/client-related inhibiting factors (e.g., wanting to reduce the burden on one's family, inadequacy of health-and-welfare support system), family-related promoting factors (e.g., willingness to spend time with loved ones at home, wanting to respect the will of the dying person), and family-related inhibiting factors (e.g., deterioration of the patient's condition, lack of caring ability).

[Discussions]

This study identified diverse factors that influence the choice of home as a preferred place of death. For people to have a good death, it is necessary for medical providers to fully understand each individual patient/client's situation, while also considering such influencing factors.

P1-234

Aspects of the Daily Lives of Socially Isolated Elderly People

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[Objectives]

To explore aspects of the daily lives of elderly people isolated from the community and society, in other words, in a state of social isolation, through a subjective evaluation of their daily lives.

[Methods]

A questionnaire was distributed by mail to 422 people aged 65 years or older living in public housing in B district of A city. Social isolation was defined as a lack of both face-to-face contact and non-face-to-face contact, and those who met this definition were compared with those who did not.

[Ethics]

This research was approved by the ethics committee of the Mukogawa Women's University.

[Results]

Valid responses were obtained from 300 of the 422 people surveyed (71%). Sixty-six (22%) people met the definition for social isolation and these people did not differ significantly from non-socially isolated people in terms of age, sex, or living alone. Significant differences were, however, seen in subjective health ($p<0.001$), movement ($p<0.05$), instrumental activities of daily living ($p<0.01$), depressive tendencies ($p<0.001$), attachment to the community ($p<0.05$), and non-participation in neighborhood associations ($p<0.001$).

[Discussions]

The same tendencies were identified in both men and women for associations with state of isolation, and isolation was found not to be associated with family structure, such as living alone. However, the percentage of "not healthy" answers was high for perceived health, outings and shopping, activities of daily living, and depressive tendencies. The findings of this study suggest that elderly people in a state of social isolation feel difficulty in daily living.

Poster**Diversity and Health****P1-235****What are the social factors that impede a rich Child-rearing experience? - From an Interview Survey with Japanese midwives-**○Yuki Kawasaki¹, Yukiko Shindo², Yuko Oikawa³, Mitsuko Imai⁴, Yuriko Nozaki⁵, Mariko Kudo⁶¹*Faculty of Nursing/Graduate School of Nursing, Kansai Medical University, Japan*²*School of Nursing at NARITA, International University of Health and Welfare, Japan*³*Department of Nursing, Mejiro University, Japan*⁴*Faculty of Health Sciences/Department of Nursing Sciences, Japan University of Health Sciences, Japan*⁵*Faculty of Sports & Health Science/Department of Nursing, Daito Bunka University, Japan*⁶*Department of Nursing, Nihon Institute of Medical Science, Japan*

This study has three objectives: First, to understand recent changes in the child-rearing environment ; second, to elucidate future challenges pertaining to support during the child-rearing period; and finally, to elucidate the perceptions of midwives, who are among the supporters. We conducted semi-structured interviews with eight midwives who carry out local activities such as newborn visits. The content of the interviews was analyzed qualitatively. Furthermore, we examined the process of categorization with members of the research conference. This study was conducted with the approval of the Ethics Committee for Studies Involving Human/Animal Subjects of Mejiro University.

The survey revealed six social issues that hinder a rich child-rearing experience: "a more familiar space than a community where various people reside," "IT tools that can validate social connectedness," "an enclosed space (child-rearing) without society in sight," "harmonization with the inevitable 'appearance-oriented' society," "nursery schools that are essential for both parents to be able to work," and "child-rearing that can not rely on fathers." To enrich the child-rearing experience, systematic reforms that are not tied to fixed perceptions of women's roles and changes in mentality tailored to generational change are necessary in Japan, where the attitude that "housework and child-rearing is a woman's responsibility" is still strong.

P1-236**Current State and Problems of Hospitals Providing care for Foreign Patients by a literature review**○Kayoko Beppu^{1,2}, Yasuyo Osanai², Yuki Usune², Hiroko Yorozi³, Arika Noji¹¹*Graduated school of Nursing, Chiba University, Japan*²*Nursing department, National Center for Global Health and Medicine, Japan*³*Nursing department, National Hospital Organization Disaster Medical Center,***[Objectives]**

Few previous studies have examined priority issues faced by foreign patients in hospital. The purpose of this study is to clarify and manage these priority problems.

[Method]

A literature review was conducted using the Japanese Web version of "Ichu-shi". Keywords used were "foreigner," "hospital," and "problems." Proceedings and Economic Partnership Agreement(EPA) were excluded, and the search period was from 2010 to 2019.

[Results]

The study analyzed 54 papers, extracting 153 issues as the priority problems of hospitals when accepting foreign patients. These were multilingualism 62 (41%), intercultural care 27 (18%), and financial issues 27 (18%). Priority problem areas mainly followed the system's increasing acceptance of foreign patients and treating infectious disease issues, amongst other reasons. Of the authors, 17 (31%) were clinical physicians, 14 (26%) were researchers at universities, and 9 (17%) were from international patient departments. The number of problem areas was 71 , with the infectious area being the highest at 10 (14%), followed by the emergency area 9 (13%), and, lastly, the community area 9 (13%).

[Discussion]

The literature review showed that the problems of highest priority to be managed were multilingualism, intercultural care, and financial issues. It is therefore necessary to cope with and find solutions to foreign patients'problems while cooperating with multiple departments in hospitals.

Poster

Diversity and Health

P1-237

Midwifery practices for foreign mothers in Japan: A literature review

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Objectives: Recently, the number of foreign residents has increased in Japan. Accordingly, diverse foreign mothers have given birth at Japanese hospitals, but most hospitals have not been enough prepared for them. So, midwives have difficulty caring for them. Therefore, the aim of this review is to clarify midwives' experiences of care for foreign patients.

Method: In this review, we searched for scholarly articles using four key words: foreign, patients, nursing, and Japan, and four databases: Ichushi, CiNii, CINAL, and PubMed. Inclusion criteria was original articles focused on midwifery practices and published in 2010 to 2019.

Ethics: This study was conducted by three researchers to enhance reliability.

Results: From 143 articles, four articles were extracted according to the inclusion criteria. It was found that midwives identified foreign mothers as those need more support and cooperation with other occupations. Especially, they often shared information and work together with medical social workers at hospital and public health nurses in the community. Midwives also utilized various effective strategies to communicate with foreign mothers, such as using illustration and simple Japanese although they felt some difficulties in communicating with foreign mothers and taking care of them.

Discussions: The results of this study indicate that the cooperation with other occupations, especially medical social workers and public health nurses, and interpreters are essential for midwives to support foreign mothers at Japanese hospitals. Therefore, inter-professional networking system and the interpretation system should be introduced so that midwives can smoothly communicate with foreign mothers.

P1-238

Child-rearing experiences of parents with medical-dependent children at home in Japan: A literature review

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[Objectives] The number of medical-dependent children has been increasing recently in Japan. Parents who care for children with medical complexities are constantly providing medical care in their daily lives and simultaneously raising children. The objective of this literature review was to provide an overview about previous studies concerning the child-rearing experiences of parents with medical-dependent children at home.

[Methods] The study protocol included a structured literature search of Japanese papers covering the years between 2000 and 2019 using two relevant databases, Ichushi-Web and CiNii. The literature review systematically searched for appropriate papers, and the process included multiple steps. Fifty papers, including 8 quantitative studies and 42 qualitative studies, were examined in this review.

[Ethics]

[Results] The results identified seven themes: thoughts about pregnancy and childbirth; distress for the child's disability; fatigue from medical care; support from families, friends, and professionals; respecting the child as a person; awareness of being a parent of the child; and community barriers.

[Discussions] These parents were forced to perform medical care for their children every day and were fatigued both physically and mentally. They existed as parents who could not see the growth in their children. Therefore, nursing support for parents should first reduce the care burden so that parents can afford the time to realize their child's growth and development. Importantly, nurses should also watch the growth of the child with the parents and share their feelings with joy.

Poster

Diversity and Health

P1-239

International comparison of population aging and death of Japanese and Koreans in Japan

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[Objectives]

Koreans in Japan who migrated during war time are aging, and the population aged 65 and over exceeded 120,000. Comparative analysis was performed to evaluate the health level of the Korean in Japan, and the trends of their death and leading causes of the death in recent years were examined.

[Methods]

We examined the statistical trends of Japanese and Koreans in Japan between 2007 and 2017. The demographic change in population, death and causes of death were compared. The standardized mortality ratio (SMR) and 95% confidence interval for major causes of death of Japanese and the trends by sex were calculated.

[Ethics]

Existing data sources which personal information is not identifiable was used.

[Results]

The number and aging rate of Korean in Japan showed significant increase, with women increasing 1.4 times more than men. The death rate showed similar pattern with Japanese and was slightly lower. Regarding to SMR, 'senility' for women remained significantly low, but increased over time, while 'heart diseases' and 'suicides' for women were remarkably high.

[Discussions]

The Korean population in Japan has dropped due to declining birth rate and naturalization. Population aging and gender difference of Koreans in Japan are affecting the causes of death, and 'senility' increased and ranked third among the causes of death for women. This study suggests Koreans may follow the same trend as Japanese in the future. Further investigation is needed to find the social factors for 'heart diseases' and 'suicide', and to provide prevention measures for Koreans in Japan.

P1-240

Mothers of Trisomy 13 Experiences and meanings of bonds on trisomy 13 support group

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[Objectives]

The purpose of this study was to clarify experiences of mothers and bonds of trisomy 13 support group.

[Methods]

Subjects were members of 13 trisomy support group who were 8 mothers. In-depth interviews were conducted and the data were analyzed qualitatively and inductively.

[Ethics]

Ethical approval was obtained from the Institutional Review Board.

[Results]

The mothers, driven to despair by their children's disease and poor prognosis, didn't know what they should do from here on out. But they changed mind that after 1 year old, mothers had room in their mind, then 3-4 years old, they had felt hope for the future. They had thanked trisomy 13 support group and group members with great sincerity for direct and indirect support.

They had been felt by a firm sense of mission; many of children of trisomy 13 had died, and since the children's life was very short, as long as children were alive, they had to show children's enjoyed their life. Children's conditions had been stable and children were 10 years old, mothers came to the realization that children's conditions had been changed.

Mothers lost their children had participated trisomy 13 support group why they had felt continued bonds for their children, talked about the bereavement of experience and would like to give their support back to trisomy 13 support group members.

[Discussions]

First, mothers felt strong despair but expected the evidences of teenage of trisomy 13. Mothers lost their children and would value their children's "Lived Experience" more.

Poster

Diversity and Health

P1-241

A Survey Study on the Role and Ability of Japanese Nurses Supporting the Health of Japanese workers Abroad

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[Objectives] In the case of staying in a developing country, inadequate sanitation, and differences in climate, culture, language and diet may become risk factors for various health deterioration. The purpose of this study is to extract the role and required ability of Japanese nurses who take charge of health management of Japanese workers abroad from the viewpoint of international occupational health.

[Methods] A questionnaire survey consisting of 47 questions for 27 subjects who had experiences of the health management duty abroad as Japanese nurses for Japanese workers was conducted, and the results were analyzed, quantitatively and qualitatively.

[Ethics] The study was conducted under the principle of the Declaration of Helsinki by the World Medical Association, and Approval by the ethics committee of author's affiliated institution.

[Results] Despite the Japanese nurses felt difficulty in health management in response to the formation of human relationships and the medical system on the site, prevention of infectious diseases, endemic diseases and mental diseases, they were trying to complete their duty.

[Discussions] It has been reported that the workers, who live and work abroad in Unfamiliar environments, may have a stressor for adjustment disorders. Therefore, it was inferred that the existence of nurses from the same country who had a worthwhile role in their work played an important role in supporting not only physical but also mental health of Japanese workers. Furthermore, it was suggested that the importance of development of nurses with such qualities in international occupational health.

P1-242

Effects of a support program for the parents with cancer diagnosis and their children ? CLIMB® program?

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[Objectives]

Both the parents with cancer diagnosis and their children have various concerns. In this study, we implemented a CLIMB® (Children's Lives Include Moments of Bravery) program to clarify its effects on participants.

[Methods]

We held four CLIMB®'s for the parents with cancer diagnosis and their children in 2016–2019. Children attended a support program to improve their abilities to cope with stresses associated with parents' diseases. Parents attended a separate meeting with open discussion. After the program, parents and children separately completed an evaluation survey to obtain opinions about the program.

[Ethics]

We gave them written and verbal explanations for the purpose and usage of the study, and obtained consent from them.

[Results]

10 families, 16 children and 10 parents participated in CLIMB®. Notable comments from the children were as follows: "I learned we don't catch cancer" and "I was relieved to know I didn't cause my mom's cancer". Parents reported "My children's lives were settled after joining the program" and "I was relieved to know how my children were feeling."

[Discussions]

Obtaining correct knowledge of parents' cancer reduced the children's anxieties and enabled them to express feelings. With the increase of communication at home, the parents became aware of children's feelings and thoughts about their parents' cancer, conferring them a sense of security. Also, both the parents and children felt the value of sharing their feelings among those in the same situation. In conclusion, CLIMB® was effective in making parent-child relationship smoother; therefore, its continuous supports are necessary.

Poster

Nursing Coordination / Health Management

P1-243

Evaluation of Advanced Case Management for the High Medical Dependent: A preliminary result

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In this study, we performed a case management for the patients using high medical cost with chronic diseases, and evaluated the effects. This was a two-group comparative study. The participants in the intervention group (IG) were the insured adult patients using high medical cost in Kure city, Japan. IG received case management and was followed for 12 months. Then, we extracted the control group (CG) using the propensity score matching from the medical claims. Approval was obtained from the ethics committees of Hiroshima University. IG gave written consent and opt-out was implemented for CG.

For IG, 26 of 29 agreed to participate in the study, and 24 people except two who dropped out right after registration were intervened. In the comparison of two groups' medical and long-term care expenses, IG showed a decreasing trend, and CG showed an increasing trend. The number of emergency-use in IG was significantly reduced. Furthermore, QOL score in IG was maintained until registration for 12 months after registration. The effects of this model were shown from the points of health economics, QOL, and could be expanded wide testing.

P1-244

The Recognition and evaluation of the Role of MCHVs in Japanese Maternal Child Health Administration

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[Objectives]To clarify how Maternal and Child Health Volunteers (MCHVs) recognize and evaluate their role in Japanese maternal and child health administration.

[Methods]MCHVs cooperate with maternal and child health administration through home visits and assistance with childcare support services. The present researchers conducted individual and group interviews with 10 MCHVs in a certain community. The verbatim data of the interview contents were analyzed qualitatively and inductively.

[Ethics]The study was conducted with an approval of the research ethics committee.

[Results]The MCHVs had lived in the area for a long time, and some of them were concurrently engaged with other activities through which they were deeply involved in the life and health of the residents, such as by serving as district welfare commissioners and leaders of after-school care for children. Their recognition of maternal and child health activity included "heavy responsibility," "sense of mission," and "succession to the next generation" as well as their joy of interacting with small children and their enjoyment of spending time with their colleagues.

[Discussions]The role of the MCHVs was expressed as *hashiwatashi* [bridging], which signified succeeding their support for mothers having complex issues with childcare to Public Health Nurses (PHNs), who can take a quick action. By strengthening the collaboration between MCHVs and PHNs, swift and exact responses to mothers and their children become possible. Moreover, enjoyment of the activity itself holds a possibility of leading to healthy life of MCHVs themselves.

Poster

Nursing Coordination / Health Management

P1-245

Nurses' Support for Patients with Inflammatory Bowel Disease in Their Treatment Decision-Making: A Qualitative Study

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[Objectives]

Patients diagnosed with inflammatory bowel disease (IBD) have difficulty in making appropriate treatment decisions given the multitude of choices. Studies describing the nurses' support for these patients in particular are scarce. Therefore, in the present study, we aimed to explore the nurses' experiences in supporting the patients with IBD in their treatment decision-making.

[Methods]

In this descriptive study, we used a qualitative deductive approach involving semi-structured individual interviews and a constant comparative analysis. The participants included six nurses with more than three years of work experience at a specialized IBD clinic in Japan. Individual interviews were conducted for approximately 30–60 min and recorded using an integrated circuit recorder. A verbatim transcript was repeatedly read, and the statements regarding the treatment decision-making support were extracted. Furthermore, the data were coded and categorized.

[Ethics]

This study was approved by the ethics committee of Mukogawa Women's University and the clinic where the interviews were carried out.

[Results]

Through the constant comparative analysis, the nurses' support for patients with IBD was categorized into the following: (1) learning support to make a treatment decision, (2) intermediary support between the patients and healthcare professionals, (3) support to draw and clarify the patients' values, and (4) support to create a decision together.

[Discussions]

In this qualitative study, we revealed that the nurses played a significant role in supporting the patients with IBD in their treatment decision-making. Moreover, this report would contribute to the practice of shared treatment decision-making between the patients with IBD and nurses.

P1-246

Longitudinal Effects of Employment Status on Care Burden, Positive and Negative Affect, and Sleep Status among Family Caregivers at Home

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[Objectives] To investigate the intensive longitudinal effects of employment status on care burden, positive affect (PA), negative affect (NA), and sleep among family caregivers (FCs) at home.

[Methods] This study applied an intensive longitudinal design in which 25 FCs underwent in-home assessment for up to 56 days. At baseline, demographic data and employment status were collected. FCs wore an ActiGraph to assess objective sleep for 14 to 56 consecutive days. FCs completed the Zarit Burden Interview and Positive and Negative Affect Schedule every night before sleep. A linear mixed analysis was used to estimate the effects of employment status on the Zarit Burden Interview, PA, NA, and sleep.

[Ethics] This study was approved by the institutional review board at Kobe University.

[Results] FCs' mean age was 66.3 ± 10.8 y (72.0% female), and the mean survey period was 29.1 ± 9.6 days (866 observations). Among caregivers, individual differences in employment status significantly predicted care burden and NA; thus, FCs who worked full- or part-time experienced severe care burden and NA. Additionally, total sleep time was negatively associated with care burden and NA; thus, on days when FCs slept less the previous night, they experienced increased care burden ($B=-0.41$ [-0.75, -0.07], $P<.05$) and NA ($B=-1.30$ [-2.02, -0.58], $P<.001$). FCs who did not work experienced lower NA on days when they slept less (rate of change: 1.45 [0.55, 2.35], $P<.01$).

[Discussions] A reduction in total sleep time could lead to increased care burden and more severe NA, which might be affected by employment status.

Poster

Nursing Coordination / Health Management

P1-247

Interaction effects of job strain and job crafting on psychological distress in nurses in Japan

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[Objectives] Job crafting (JC) has been defined as "the physical and cognitive change individuals make in the task or relational boundaries of their work." The purpose of this study was to examine possible stress-buffering effects of JC in nurses in Japan. [Methods] In a cross-sectional study with nurses of five organizations, 149 nurses answered a self-administered questionnaire on paper completely (response rate = 79.7%). JC was assessed using the Job Crafting Questionnaire, which comprises four subscales, 'increasing structural job resources,' 'increasing social job resources,' 'increasing challenging job demands,' and 'decreasing hindering job demands.' Job strain based on the demands-control model was measured using the Job Content Questionnaire. Psychological distress was measured using the K6. These scales have been reported as reliable and valid in Japan. Interaction effects of job strain and each subscale of JC on psychological distress were tested using hierarchical linear regression analyses. We constructed regression lines and predicted values illustrating significant ($p < 0.05$) interactions. [Ethics] The study was approved by the Ethics Committee of Department of Nursing, Okayama University Graduate School of Health Sciences (D17-04). [Results] We found a significant interaction, which showed that when job strain was low, as the scores of 'increasing structural job resources' increased, psychological distress decreased, but when job strain was high, as the scores of 'increasing structural job resources' increased, psychological distress also increased. [Discussions] We failed to find stress-buffering effects of JC in nurses in Japan. 'Increasing structural job resources' can be useful only when job strain is low.

P1-248

Aspects of self-management in patients with schizophrenia undergoing hemodialysis treatment by hospitalization

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[Objectives]

This study aimed to reveal various aspects of patients with schizophrenia receiving hemodialysis treatment by hospitalization, and obtain suggestions as to nursing interventions.

[Methods]

Semi-structured interviews were conducted with twelve patients with schizophrenia aged from 25 to 65, who had started hemodialysis treatment less than five years before and then put into hospital for the treatment due to some difficulties in self-management. The interview data were qualitatively and descriptively analyzed.

[Ethics]

This study was approved by the ethical committee of University A.

[Result]

The aspects were classified into the following five categories: "lack of knowledge and understanding of dialysis," "difficulty in receiving dialysis because of the effects and side effects of antipsychotics," "dissatisfaction with restrictions brought by dialysis treatment," "pains resulting from physical restraint and time constraint," and "biased conceptions by delusion and hallucination."

[Discussions]

"Lack of knowledge and understanding of dialysis" brought life-threatening hyperkalemia, severe dehydration and cardiac failure to all the patients. In light of such difficulties in self-management, they had no option but to continue to stay in the hospital. The results suggested the following nursing interventions: (1) repeatedly dealing with the patients so as to make them understand the dialysis from the beginning; (2) trying to know the patients' world and prevent them from keeping stress in by early intervention; and (3) arranging the support system in cooperation with the local community to realize home-based care.

Poster

Nursing Coordination / Health Management

P1-249

Characteristics of services provided by multifunctional long-term care in a small group home and home visit nursing : A Text-mining Approach

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[Objectives] In Japan, multifunctional long-term care in small group homes and home visit nursing (MLSGH) provides day, visiting (by a care worker or nurse), and overnight services for the elderly living at home. We clarify the characteristics of service provision at one facility from the viewpoint of nurses.

[Methods] We conducted a semi-structured interview and surveyed 11 nursing officers at 11 facilities in the Kansai region. The interview data were analyzed using text mining. The interview was held from Dec. 2017 to Nov. 2018.

[Ethics] We explained the purpose of our research to the participants, and assured them that participation was voluntary and anonymous. Interviews were conducted after a formal agreement. This study was approved by the Ethics Committee of the Konan Women's University.

[Results] There were 31,523 extracted words, and the most frequent nouns were "family" (335 times), "nurse" (259 times), "use" (236 times). Seven groups were detected by the hierarchical cluster analysis with 70 or more commonly recurring words. These groups of words were given names as per their category, including [Collaborating with care managers to provide unique care of small-scale multifunctional facilities in the area], [Nurses and care workers take care together], [Supporting the community life of people who need medical care by services such as home visit nursing].

[Discussions] MLSGHs support the elderly who need medical treatment and their families, including during emergencies and changes in an individual's health. It is expected that these facilities will increase in the future, and community-based integrated care will progress.

P1-250

An Examination of the Stability of the Self-Care Scale Factor Structure in Young Women with Menstrual Cramps through Multiple Group Analysis

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[Objectives]

A self-care scale with a 6-factor structure for young women with menstrual cramps was created aimed at validating the stability of factor structure in multiple groups which was examined through multigroup structural equation modeling.

[Methods]

Two surveys were performed: main survey (1,000 women aged 18 - 22 years, conducted in July 2017); and related factor survey (300 women aged 18 - 24 years, conducted in March 2018).

To assess factors related to self-care among young women with menstrual cramps, 23 item measured on a 5-point Likert scale were used: 1)recognition of self-efficacy, 2)intention of alleviating menstrual cramps, 3)self-care improved through daily lifestyle, 4)self-care through medication, 5)changes in the expectation of burden through the reduction of menstrual cramps, and 6)feelings related to self-care behavior.

[Ethics]

This study was approved by a research ethics review committee prior to commencement (approval number: 17-Io-7).

[Results]

Data from two groups, main survey and related factor survey, were analyzed through multigroup structural equation modeling. Results showed that the goodness of fit of model without equality constraints was: GFI=0.903, AGFI=0.876, CFI=0.928, and RMSEA=0.043. Results for model with equality constraints were: GFI=0.902, AGFI=0.878, CFI=0.927, and RMSEA=0.042. RMSEA=0.042 in the model with equality constraints indicates that there was no impact on the values of variables examined. Thus, sufficient degree of goodness of fit was determined.

[Discussions]

Results revealed that both the main survey and related factor survey presented the same factor structure and the six structural concepts could be accurately measured.

Poster

Nursing Coordination / Health Management

P1-251

Coordinators' perception of difficulties faced by recipients, donors, and their families after living donor liver transplantation

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[Objectives] The present study aimed to describe the postoperative problems that coordinators perceive would be faced by recipients, donors, and their families after living donor liver transplantation.

[Methods] A semi-structured interview was administered to recipient transplant coordinators, regarding the details and factors that they consider to be problematic after transplant surgery. Content analysis was then applied.

[Ethics] This study was approved by the ethics committee of Osaka University.

[Results] The participants comprised six female coordinators. The first perceived problems faced by transplant recipients were "Regretting the choice of transplantation because of bad physical condition after transplant surgery," and "Feeling sorry for the donor to put burden on his/her healthy body." Next, problems faced by donors were "Long-term mental and physical difficulties" and "Dealing with loneliness for the pain of becoming a donor." Furthermore, problems faced by recipients' families were "Reluctance to have proceeded with the transplant because of facing to the painful recipient," "Burden of caring for the recipient," "Regretting the transplantation when the recipient has died." In addition, problems perceived in the donor-recipient relationship included "Donor's resentment of the inability of the recipient to self-manage" and "Dissatisfaction of the donor and his/her family due to the recipient's inability to show appreciation." In addition, problems perceived by coordinators from an objective standpoint were identified.

[Discussions] Coordinators perceived that the postoperative problems faced by recipients, donors, and their families were due to the poor physical condition of the recipients, a living donor, and the behavior of the families.

P1-252

Coordination of Activities of Daily Life in a Patient with Chronic Heart Failure Who Repeated Hospitalization and Discharge? Interpretation of Narrative by Hermeneutic Phenomenology

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[Objectives] The present study aims to clarify the meaning of the coordination of activities of daily living performed by a patient with chronic heart failure who repeated hospitalization and discharge.

[Methods] Multiple interviews were conducted with one patient. The verbatim transcripts of the interview voices were interpreted from the viewpoint of Heidegger's phenomenological ontology.

[Ethics] The present study was approved by the Shukutoku University Faculty of Nursing and Nutrition Ethics Committee (Approval No: N18-02). The freedom of the subjects to participate in the study of her own free will and drop out was ensured. In addition, the possible detriments and benefits and protection of privacy and personal information were explained, and consent in writing was obtained from the subject.

[Results] "Coordinating physical condition to usual life" was derived as a theme. Her body with heart failure was ready-to-hand for the physician. Therefore, the activity by the body with heart failure and the activity by the body that has lived were spoken of as if they were separate things. Moreover, she was stabilized by leaving the body with heart failure with the physician. Furthermore, after stabilization, the body with heart failure was partially returned to ready-to-hand for herself.

[Discussions] For the patients with heart failure who repeat hospitalization and discharge, health care practitioners need to be involved to create new meanings to the changes in activities and symptoms by undertaking coordination of activities to incorporating coordination of activities as part of medical care.

Poster

Nursing Coordination / Health Management

P1-253

A basic survey of Japanese family caregivers of people with very severe disabilities

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[Objectives] The social inclusion imperative combined with the popularization of home-based care have led to an increase in the number of severely disabled people living at home. In Japan the public visiting care system caters for the needs of those with the very severe disabilities, providing long-term, 24-hour care, including primary medical care. However, this system is not yet in widespread use, and people living with the very severe disabilities are often informally cared for by family members. This study used a basic survey to investigate this state of affairs.

[Methods] We requested 3574 offices providing public visiting care to distribute our questionnaires among family members taking care of people with very severe disabilities. The questionnaire comprised items related to age, sexuality, relationship to the care-receiver, and basic information on caregiving.

[Ethics] This study was approved by the medical ethics committee of the affiliated institution.

[Results] A total of 316 family caregivers participated in the study (mean age = 62.6 ± 11.8 years; male=25.3%). The mean amount of time spent on caring per day was 8.2 ± 6.4 hours, for a total of 19.1 ± 13.8 years. Among the caregivers, 45.6% provided care for their children, 32.6% spouses and 15.5% parents. The mean age of care receivers was 48.8 ± 17.6 years; 22.2% lived with cerebral palsy and 13.0% amyotrophic lateral sclerosis.

[Discussions] Care provision was centered around systemic pathology and physical care. Our findings suggest that care of Japanese people with very severe disabilities in the long term can place a large burden on family caregivers.

P1-254

Current situation of breastfeeding support by dental hygienists operating in regional areas

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Introduction:Dental hygienists are involved in pregnancy and childbirth and also play a significant role in breastfeeding support. Therefore, this study aimed to understand the current situation of breastfeeding support by hygienists whom mothers recognize as their advisors for child care.

Method:This study involved a self-administered questionnaire survey with quantitative descriptive research. As a free-writing format was used for the survey, items such as support details, considerations during breastfeeding support, difficulties while providing breastfeeding support and how difficulties are handled, details of breastfeeding support learnt at graduating institution, and necessary items for future breastfeeding support, were organized while increasing the level of abstraction of the record unit so as not to impair the meaning and contents of the description.

Results:Among those, 109 dental hygienists (80%) were providing breastfeeding support.Breastfeeding support advice details included concerns about being asked for specialized assistance such as "how to wean a child", and bewilderment facing mothers' thoughts such as "I am having a difficulty providing dental care to a child who falls asleep during breastfeeding", or "I want to continue breastfeeding after my child is two years old". Subjects also indicated that they respected mothers' thoughts such as "the hope of mothers to continue breastfeeding" and "breastfeeding improves mother and child special bonding" as they were aware of "the importance of providing correct knowledge".

Conclusion:Results suggested that breastfeeding provided by dental hygienists emphasizes both correct knowledge and respect toward mothers' feelings.The authors declare no conflicts of interest associated with this manuscript.

Poster

Nursing Coordination / Health Management

P1-255

Investigation of the Pressure Ranges in Compression Therapy Effective for the Treatment of Fibrified Lower-Limb Lymphedema

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[Objectives] This study investigated to clarify the pressure ranges (low to high values) effective in compression therapy of fibrified lower-limb lymphedema(LLL).

[Methods] The women who were diagnosed with Stage II or greater lymphedema following surgical removal of inguinal lymph nodes for gynecological cancer. We compared the condition of subjects' LLL before and after wearing an elastic compression stockings.

[Ethics] This study received the approval of the Osaka Medical University Research Ethics Committee (N-72).

[Results] The final subject count was 16. The mean applied pressures at the first visit for the group whose lymphedema stage improved were 28.5 ± 12.77 mmHg and 10.25 ± 4.43 mmHg for the lower and upper legs, respectively. The measurements for the subjects of the group that did not see any changes were 25.0 ± 8.87 mmHg and 11.3 ± 3.43 mmHg for the lower and upper legs, respectively.

[Discussions] Even if the listed pressure of a sleeve was above 30 mmHg, upon actually wearing it, the pressure exerted on the lower leg was measured at 28.6 mmHg. Similarly, if the pressure was listed below 30mmHg, the exerted pressure was measured at 24.0 mmHg. The mean exerted pressure among patients who saw improvement in their lymphedema stage was 28.5 ± 12.77 mmHg, while that of patients that did not see any change was 25.0 ± 8.87 mmHg. This indicates that an exerted pressure greater than 25 mmHg is necessary to observe improvement of lymphedema symptoms.

P1-256

Patient experience in sexual dysfunction related to localized prostate cancer treatment

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[Objectives]

This research aims to highlight patient experience in sexual dysfunction associated with localized prostate cancer treatment and obtain suggestions for nursing the disorders.

[Methods]

The research carried out a semi-structured interview among patients with sexual dysfunction caused by localized prostate cancer treatment. We applied Berelson's method of qualitative content analysis to collected data.

[Ethics]

With approval from the Chubu University Ethics Review Board, we obtained informed consent from the participants.

[Results]

Before the treatment, patients firmly desired to maintain male function. Because of insufficient information, however, they had to select treatment protocols without imagining a change in sexual power caused by the treatment.

After the treatment, they hoped to recover lost erectile function and sexual excitement as well as male self-image. Patients had to come terms with the reality of sexual dysfunction after trying various methods. In that process, however, they were afraid their way of coping with the adversity might harm their health.

Patients were reluctant to consult with busy doctors and nurses, particularly female nurses, about sexual disabilities. Additionally, media reports and friends and associates could not offer helpful information to solve their troubles. It became clear that a lack of detailed information led patients to live with their suffering alone.

[Discussions]

Indicated was the need for nurses to sympathize with sexual dysfunction among prostate cancer patient and provide specific information on the effects of a change in sexual ability, for the patients to share correct information among them, and for professional caregivers to offer appropriate knowledge.

Poster

Nursing Coordination / Health Management

P1-257

Japanese Nursing Coordination of community-based care system in Literature review

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[Purpose and background] The purpose of this study is to clarify the tendency and issues of coordination of nurses belonging to other institutions. In Japan, *Community-based care systems* are important because of rapid aging and the increase of chronic disease patients living in the region. Although coordination among nurses are various, high quality medical care and continuous nursing are expected. [Methods] Literature review. I selected the literatures using the *Ichu-shi web*(ver.5). The literatures from 2005 to 2019 were extracted by three search formulas. The formula A: "nursing coordination", "community", "cooperation", B: "among nurses", "community", "cooperation", C: "continuance nursing", "community-based care system", "cooperation". The narrowing conditions were "original article" "nursing" respectively. The 34 literatures were hit ,and I selected the subjects for analysis from the titles and abstracts. [Results] As a result, the subjects were 6. The subjects for questionnaire survey were 5, and factor search type qualitative research was 1. The nurses were belonging "community-based care wards", "nursing home" and "home visiting nurse station". The contents of the subjects were six categories:[Current situation of nurses][Home care support][Current status of coordination among nurses and continuous nursing][Improving the quality of continuous nursing][Specific measures for good nursing coordination][Important things in nursing coordination]were formed. [Discussions] As a whole, coordination among nurses is expected to be further improved, and there are issues such as effective use of nursing records for sharing information. Meeting directly such as face-to-face relationship is particularly important for specific improvement measures.

P1-258

Thoughts of Community-dwelling Individuals with Schizophrenia About Their Medications - A Pilot Study

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[Objectives]

To investigate the thoughts and feelings of community-dwelling individuals with schizophrenia about their medications.

[Methods]

Three 30-min. semi-structured interviews were conducted with each of six community-dwelling individuals with schizophrenia (3 men and 3 women). The KJ Method, a technique for refining and distilling the meaning(s) of fragmented verbal/textual information, was used to analyze interview data. We adopted an abridged version, using 34 labels to categorize relevant narratives. Labels were grouped into concepts, and concepts were grouped into islands according to symbolic meaning.

[Ethics]

This study was approved by the institutional review board of University A (Approval Number 614-1). Participants received full explanations of the study and their consent was obtained for participation.

[Results]

Data were grouped into five *islands*. Community-dwelling individuals with schizophrenia were aware of the potential side effects of the medications they were taking medications to avoid hospitalization. They wanted physicians and nurses to not only recommend medications, but also to explain their illness and medications. They regarded physicians as good partners and reported that they could live their lives while taking care of themselves.

[Discussions]

Community-dwelling individuals with schizophrenia who had experienced hospitalization appeared to understand that medication was necessary to pursue their dreams. They regarded physicians who talked to them about appropriate medications as good partners. Providing better care to community-dwelling individuals with schizophrenia would include efforts by clinicians to understand patients' lives and visions of the future, and to provide them with more information about how to control their disease.

Poster

Nursing Coordination / Health Management

P1-259 The carrying out hand health movement reduces in the neurosurgery department sickness house and yard special case of the infection

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[Objectives]

In the fourth quarter of 2014, the unit's manual hand washing implementation rate was 58.33%, and the in-hospital infection density was 2.40‰, including BSI: 0.80‰, RTI: 0.40‰, UTI: 0.86‰, which was promoted by the hand washing hygiene movement. In-hospital infection density.

[Methods]

Current situation 1. Hold hand-washing in-service education 2. Provide hand cream 3. Place reminder hand-washing slogan 4. Change placement and wide-ranging dry hand lotion 5. Establish unit hand washing audit system 6. Formulate reward and punishment methods, promote ward care staff Hand washing execution rate.

[Ethics]

Hand washing is the simplest and most economical method. It is the most important protective measure for infection control. This project advocates the "hand health campaign" as a unit nursing staff.

[Results]

After the project intervention, the implementation rate of hand washing was 62.5% in the first quarter of 2015, 85.7% in the second quarter, and the effect in the third quarter was 86.63%, which showed the effectiveness of this project compared with 58.33% in the fourth quarter of 2014. According to the reported infection density in the hospital, the average in-hospital infection density of the unit after the project fell to 0.94‰ in the first two quarters of 2015.

[Discussions]

As the project has achieved good results, it is expected that visitors and their families will jointly promote the hand-washing and let the hand hygiene campaign be implemented in every corner of the hospital to provide a safer medical environment and medical quality for patients.

P1-260 Circadian rhythm among shift workers: A literature review

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[Objectives]

The purpose of this literature review was to grasp the research trends and the challenges about circadian rhythm among shift workers in order to develop the adjustment methods of circadian rhythm for shift-work nurses.

[Methods]

This review was conducted by searching electronic databases, such as Ichushi-Web for papers in Japanese and PubMed for articles in English. The search query "shift workers" and "circadian rhythm" were used. The original articles published between 2014 to 2019 were included in this review. The inclusion of materials was determined based on the extent of detailed information they provided.

[Results]

Out of 35 articles (13 Japanese articles and 22 English papers) identified through these data sources and screened based on their title and abstract, 29 articles were selected for inclusion in the review. Majority of studies (26 documents) were experimental research while a cross-sectional study and a prospective cohort study were found. The subjects of these experimental researches were shift workers in 14 papers and non-shift workers in 12 articles. These studies clarified the relation between irregular eating pattern and blood sugar level, working arrangement and cardiovascular disease by measuring heart rate, and light environment and sleep efficiency by measuring level of melatonin.

[Discussions]

As most of research about circadian rhythm among shift workers were basic research, developing the adjustment methods of circadian rhythm for shift-work nurses are indispensable for future research.

Poster

Nursing Coordination / Health Management

P1-261

Relationship between pain associated with wound dressing change and breakthrough pain

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[Objectives] Complex factors are involved in the intensification of pain associated with wound dressing change in cancer patients. It is not clearly understood whether the increased pain associated with dressing change is related to breakthrough pain. The objective of this study was to assess whether there is a relationship between increased pain during dressing change and breakthrough pain.

[Methods] The subjects were advanced cancer patients with wounds who were receiving palliative care. Demographic (age, sex) were collected from clinical records. The wound status (site, depth:DESIGN®) and pain during dressing change (site, amount of pain) were observed and described during direct visits. A numerical rating scale (NRS; no 0, worst 10) was used to measure subjective pain. Data were analyzed using a qualitative exploratory method.

[Ethics] The study was approved by the medical ethics committee.

[Results] The subjects were 18 patients, 10 women and 8 men, aged 31-90 years old. The wound site was the trunk in 9 patients, head and neck in 7 patients, limbs in 2 patients. The wound depth was D. The sites of pain were wound, other. The pain scale ranged from 0-2 before, 8-10 during, 0-2 after.

[Discussions] The amount of pain associated with dressing change increased ≥3 points during dressing compared with before and after. The increase in pain during dressing change is thought to be related to breakthrough pain. Assessment of pain associated with dressing change and care to minimize the increase in pain are necessary.

P1-262

An overview of intervention studies for people living with HIV

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[Background] Due to advances in antiretroviral therapy (ART), most people living with HIV (PLWH) are able to maintain good adherence. With the change in the circumstances of PLWH, the care needs of PLWH has also been shifting.

[Objectives] This review aimed to identify and examine the intervention studies conducted for PLWH, and to generate an overview of nursing interventions for PLWH by summarizing systematic reviews.

[Methods] A literature search was conducted on PubMed with the following inclusion criteria: 1) studies targeted PLWH; 2) systematic review articles reported intervention-related nursing ; and 3) published in English from 2009 to April 2019. We excluded articles on HIV-testing, pre exposure prophylaxis and efficacy of particular drugs. Two researchers independently screened articles for eligibility.

[Results] Of the 120 articles, 18 studies met the eligibility criteria. We classified interventions on PLWH into five types: health system, psychosocial, technology, adherence, and lifestyle. Seven articles related to the health system, including task-shifting, service integration, ART service delivery and treatment monitoring duration. Four articles reported on psychosocial interventions targeting stigma, health literacy and advocacy, among others. Three articles reported on mobile technology interventions, and another three reported on adherence among pregnant women and drug users. One article reported on smoking cessation.

[Discussions] A large number of studies have focused on developing cost-effective health care. Further studies are required on adherence in high-risk groups, as well as psychosocial issues.

Poster

Nursing Coordination / Health Management

P1-263

Self-stigmatized identity as a Hansen's disease patient in patients who have recovered from Hansen's disease in Japan

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[Objectives]

Until the Leprosy Prevention Law was repealed in 1996, Hansen's disease patients in Japan had been forcibly segregated in sanatoriums for nearly 90 years. Some patients who were cured of Hansen's disease continue to live in sanatoriums due to sequelae and old age. Our aim was to identify the ways in which recovered Hansen's disease patients view themselves and how their lives are affected by their viewpoint.

[Methods]

Our ethnographic study of 31 recovered Hansen's disease patients was conducted by participant observation and episodic interviews. Their age was 76.9 ± 7.31 yr. This study was approved by the ethics committee of the University of Nagasaki.

[Results]

The recovered Hansen's disease patients had self-stigma as a Hansen's disease patient, that was inherent in themselves, in situations such as attendance at weddings and finding a house to rent. Subjects' narratives included "I feel uncomfortable attending celebrations as a Hansen's disease patient" and "as a Hansen's disease patient, I am not allowed to attend celebratory gatherings". One subject answered that even after recovering from Hansen's disease, the fact that they live in a sanatorium makes their visitors assume that they are still affected, and therefore such situations make them feel cowardly.

[Discussions]

Recovered Hansen's disease patients experienced exclusion from society due to the misconception that Hansen's disease is a terrifying contagious disease. Our results suggest that such experiences have stigmatized them and they continue to see themselves as Hansen's disease patients even after they have recovered.

P1-264

Characteristics of self-care ability for lymphedema prevention in elderly patients after gynecological tumor surgery ?Comparison between elderly patients and those younger than 65 years?

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[Objectives] We aimed to identify the characteristics of self-care ability for lymphedema prevention in elderly patients (≥ 65 years) after gynecological tumor surgery.

[Methods] The self-care abilities of 77 women (age range: 20-79 years) after gynecological tumor surgery were surveyed using a Self-Care Agency Questionnaire (SCAQ) scale. The patients were divided into two groups by age (<65 years and ≥ 65 years), and the SCAQ results were analyzed using the Mann-Whitney test.

[Ethics] The study was conducted after being reviewed and approved by the research ethics committee of the university and the ethics review committee of the study facility to which the researchers belonged.

[Results] The SCAQ item that scored highest in the ≥ 65 -year-old group was [Ability to become interested in health]. The analysis results showed that the score for [Ability to select] was higher in the <65-year-old group than in the ≥ 65 -year-old group ($p < .05$). Furthermore, the scores for [I select my health management method, taking my own pleasure and reason for living into consideration] ($p < .01$) and [From among various methods, I select a health management method that suits me] ($p < .05$) were also higher in the <65-year-old group than in the ≥ 65 -year-old group.

[Discussion] The results of this study suggest the necessity of educational support for [Enabling the Selection] of self-care for lymphedema prevention, which has now become necessary as part of daily living when [Interest in health] is heightened among elderly patients.

Poster

Nursing Coordination / Health Management

P1-265

Examination of effective clinical judgments in providing nursing care for multiple difficult-to-treat patients

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[Objectives]

The present study aimed to select the current nature of multitasking in nursing in order to gain fundamental insights that will help nursing teams to make the most appropriate clinical judgments when caring for multiple inpatients who require advanced medical care.

[Methods]

The study included 3 nurses with over 10 years of work experience who were recommended by their nurse managers. The participants were asked about scenes in which they successfully provided care for difficult-to-treat patients.

[Ethics]

The study was approved by the respective research ethics committees of the affiliated organizations.

[Results]

The participants described the 9 scenarios that they had experienced. These are examples:

(1) educating with the family members at the bedside to help them accept the physical changes they should expect to see in their dying parent;

(2) sharing information among the nursing team and performing other nursing tasks simultaneously in order to leave enough time to spend in feeding patients with dementia;

(3) staying an entire night with a middle-aged palliative care patient with pollakiuria and his wife to help find the best toileting assistance method for him to achieve his wish of returning home and for his wife who was ready to support him;

(4) working with the nursing team to share the most appropriate method of postural change that utilizes the pain sensation of a patient who developed delirium following surgeries to his/her waist and lower limbs.

[Discussions]

All these nursing scenarios revolved around the central themes of individuality, comfort, and safety.

P1-266

Awareness Among Local Resident Supporters in Relation to Support for Elderly People with Dementia

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[Objectives]

In Japan, which is experiencing rapid aging, it is important that elderly people continue to live in their local communities, even if they develop dementia. The Japanese government is promoting an "integrated community care system," and we believe that elderly people also need support from local resident supporters. The objective of this study is to clarify awareness among local resident supporters in relation to support for elderly people with dementia in Town A in Miyagi Prefecture. Local resident supporters are defined as the ward mayor, commissioned welfare volunteers, and persons working as local volunteers.

[Methods]

We created an original questionnaire and surveyed local resident supporters. The questionnaires included awareness about elderly people with dementia, working on supporting elderly people with dementia, and support that could be performed even by local residents.

[Ethics]

We conducted the research after gaining approval from the research ethics committee and the mayor of Town A.

[Results]

162 questionnaires were collected. The highest number of respondents was ward mayors (29.6%). In regard to awareness of dementia among elderly people, the result for "I think the decisions of elderly people must be respected even if they have dementia." was 93.2%, and the result for "I don't know how to interact with elderly people with dementia." was 63.6%.

[Discussions]

Local resident supporters in Town A have a sense of ethics to support of elderly people with dementia, however it seems that they do not have sufficient knowledge of how to interact with elderly people with dementia.

Poster

Nursing Coordination / Health Management

P1-267

A study of model patterns for coping with depression via the family system

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[Objectives]

The aim of this study was to model coping patterns of the family system for depression.

[Methods]

The participants were 20 persons with family members (spouses, siblings, parents, or children) who were diagnosed with depression. For each subject data were obtained via a semi-structured interview. The data thus obtained were analyzed using Kinoshita's modified grounded-theory approach. Patterns for coping with depression of family members were extracted as concepts. We focused on the combination of coping in the family system and examined coping patterns as a family system for dealing with depression.

[Ethics]

This research was carried out with the approval of the president of Sapporo Medical University and written informed consent was obtained from representatives of those cooperating in the research and the participants. There is no conflict of interest to be disclosed.

[Results]

The following five directionalities were found as coping patterns for depression: the direction of coping with "one pole concentration", "dispersion", "substitution", "tolerance", and "maintaining a connection with the local community". Four models were found by combining them as a family system, with a "one-pole concentrated dispersion type coping pattern", "one pole intensive tolerance type coping pattern", "dispersion substitution coping pattern", and "dispersion tolerance coping pattern."

[Discussions]

The participants in this study maintained connections with the local community, which is a relationship within the above system. Families of patients with depression dealt with depression as a family system by combining coping with depression and coping with family roles.

P1-268

Clarification of childcare worker's needs toward healthcare provider for protecting children's safety and health

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[Objectives]

The purpose of this study is to clarify the needs of childcare workers in nursery schools / Kindergartens towards healthcare provider for protecting children's safety and health

[Methods]

Free description type questionnaires were distributed to childcare workers in nursery schools/ kindergartens to clarify their expectation toward healthcare provider.

Based on information obtained from the questionnaires, word frequency analysis and dependency frequency analysis were performed utilizing computer-based software, Text Mining Studio Ver 6.2.

[Ethics]

This research was conducted after obtaining approval from the Yokohama Soei University Ethics Review Committee.

[Results]

The questionnaire was distributed to 187 peoples, and 143 valid responses were obtained (valid response rate 76.4%).

As a result of this research, the most frequently appearing words and its dependences were "teach + want", followed by "knowledge" "injury" "new" and "treatment".

Next, we focused on dependency relationships between phrases and conducted dependency frequency analysis. As a result, 4 of the top 10 frequently appearing were "knowledge-teach + want", "kindergarten-have + want", "treatment -do + want" and "training-open + want".

[Discussions]

A movement to secure "quality" of nursing gained momentum in overseas. Childs accidents have been decreasing recently due to rise in safety awareness of childcare workers resulting from the training received from medical workers. Needs of childcare workerstoward medical workers obtained under this research should be shared among them in protecting children's health and safety.

Poster

Nursing Coordination / Health Management

P1-269

Comparison of factors affecting productivity in working pregnant and non-pregnant women

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[Objectives] In Japan, women's employment rate is increasing annually. However, about 47% women quit work after pregnancy/childbirth. With support, women can work without productivity loss even post-pregnancy, benefiting both employers and women. This study aimed to compare factors affecting productivity in pregnant and non-pregnant women and obtain suggestions to support pregnant women's work continuity.

[Methods] Pregnant and non-pregnant women aged 20–45 years were surveyed online. Limitations Questionnaire-Short Form and data on absenteeism in the past four weeks were collected (dependent variables). Utrecht Work Engagement Scale-Short Version and Brief Job Stress Questionnaire were administered and data on subjective sleep quality and demographics were collected (independent variables). Multiple regression analysis was used.

[Ethics] Approved by the Ethics Review Board.

[Results] A total of 454 non-pregnant and 450 pregnant women (50.2% and 47.1% working full-time respectively) were analyzed. Psychological work burden, depression, and physical complaints affected productivity loss rates in both groups; was an additional influencing factor. Physical work burden and depression affected performance over the past four weeks in pregnant women. In both groups, performance over the past four weeks affected sleep quality, and work engagement affected vigour and boss's support. Interpersonal stress and colleagues' support affected pregnant women. These factors did not affect absenteeism in the past four weeks.

[Discussions] Improved sleep quality, support for physical complaints, and comfortable work atmosphere are essential to promote work engagement and minimize productivity loss.

P1-270

The Effect of Nurses' Sense of Mastery on Their Burnout and Mental Health

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[Objectives] In this research we examined the direct effect of nurses' sense of mastery on burnout and mental health and its indirect effect on mental health through burnout.

[Methods] An anonymous, self-administered questionnaire survey was performed on 3,089 nurses, from whom 1,505 responses were obtained. Their sense of mastery, burnout, and mental health were measured by the Sense of Mastery Scale, the Japanese version of the Oldenburg Burnout Inventory, and SF-36v2, respectively. A path analysis was set from (1) the sense of mastery to burnout, (2) burnout to mental health, and (3) the sense of mastery to mental health. Age and years of nursing experience were used as control variables in the analysis.

[Ethics] This research was conducted with the approval of Ethical Review Board of Juntendo University Graduate School of Health Care and Nursing.

[Results] The analysis showed that the standardized path coefficients from the sense of mastery and burnout to mental health were .352 ($p < .001$) and -.383 ($p < .001$), respectively, and that from the sense of mastery to burnout was -.453 ($p < .001$). The indirect effect of the sense of mastery on mental health through burnout was .173 ($p < .001$). The model goodness of fit was $\chi^2/df = 3.134$, CFI = .996, RMSEA = .038.

[Discussions] Nurses' sense of mastery had a direct effect on mental health and had an indirect effect of diminishing the effect of burnout on mental health.

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Poster

Nursing Coordination / Health Management

P1-271

Parent-child interactions in self-care acquisition of child with chronic condition: A systematic review

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[Objectives]

In the process of children with chronic condition acquiring self-care, the relationship between children and parents has a major impact. However, it is not clear what kind of parent-child interaction exists. Therefore, the purpose of the study is conducting a systematic review to clarify the phenomenon of the interaction of parent and child in the process that children with chronic condition acquire self-care.

[Methods]

PubMed and CINAHL were used to search for literatures. Index terms were used; adolescent, child, infant, nuclear family, single-parent family, parent-child relations, self care. Inclusion criteria are 1) English literature, 2) all publication year, 3) children with a chronic condition. Exclusion criteria are 1) children with an intellectual disability or/and mental disorder, 2) editorial, letters, and comments. Studies were screened by all researchers independently based on the criteria.

[Results]

A large number of papers have focused on adolescents and their parents. Children who are living with chronic conditions may be supported in self-care through enjoyable active learning and family social processes. A major issue for parents was being able to prevent or minimize their child's distress, which in turn was closely linked to parents' own emotional discomfort in the situation.

[Discussions]

In order for children to acquire self-care, health care professionals need to intervene after understanding the interaction between parent and child. As there were many studies that focused only on children or parents, it is necessary to carry out studies focusing on parent-child interaction as future issues.

Evaluation of Fatigue Management Education Program Using FRMS for Nurses

P1-272

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[Objectives]

We developed an educational program based on the concept of a fatigue risk management system (FRMS) to find ways to prevent and recover from fatigue based on one's own fatigue level and sleep state. The purpose of this research is to conduct a training seminar using this educational program and evaluate its usefulness.

[Methods]

An anonymous self-administered questionnaire was used for analysis:

1. Deepening of knowledge, training content and materials, and motivation (ARCS-V) of 15 participants were evaluated at the end of the training seminar.
2. The changes of fatigue, sleep state, labor productivity, and near misses of 10 participants before and after the training seminar were examined.

[Ethics]

This research was conducted with the approval of Ethical Review Board of University Faculty of Medicine.

[Results]

1. All of them answered that their own knowledge was deepened and most content of the training seminar was practical. The average scores for ARCS-V were 7.1 for attention, 7.6 for relevance, 6.6 for confidence, 7.2 for satisfaction, and 6.9 for volition.

2. There were improvements of fatigue rate from 17.0 to 16.4, sleep status from 6.8 to 5.4, and labor productivity from 55.0 to 58.0. In addition, near miss incidents decreased from 80% to 40%.

[Discussions]

Participants in the training seminar considered it interesting, satisfying, and useful for their needs. The findings suggest that the educational program that we developed is useful not only for improving individual fatigue and sleep, but also for maintaining organizational productivity and safety.

Poster

Nursing Coordination / Health Management

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Literature Review-Focusing on Health Management of Japanese Expatriates and Family Members-

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[Objectives] The purpose of this study is to clarify the health issues of Japanese expatriates and family members living abroad and the health management measures that companies in the dispatching company are implementing.

[Methods] Using the medical information site, CiNii, Medical Online, and J-STAGE, the keywords used "Japanese expatriates" and "mental health." We read the 125 titles and abstracts that searched and analyzed 24 references available along with a description of health issues and health care. Also, we collected five documents for expat families. The code table was created based on the document summary table of Pinch (1995).

[Ethics] As this is an analysis of published documents, it is not subject to the Research Ethics Committee, but care was taken not to identify individuals when publishing research results.

[Results] The health issues that occur among Japanese expatriates and family members were "illness in mental health," "the onset and hatred of lifestyle diseases," "overwork," "infection," and "anxiety to local medical institutions." The health management measures implemented by the dispatching company are "medical check", "intercultural understanding / adaptation training," "providing information necessary for local life," "patrol medical treatment" and "online counseling."

[Discussions] It became clear that the dispatching company is implementing various preparations and devices for Japanese expatriates and family members to live a safe and healthy life abroad. To maintain a healthy life, it physically and mentally fulfilling life is necessary to live, and it is crucial to improve self-management ability.

P1-274

Aging-related issues of residents with mental disorders living in group homes

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[Objectives] The study aimed to identify aging-related issues of residents of group homes for people with mental disorders.

[Methods] In August 2018, a questionnaire was administered on staff members of group homes for people living with mental disorders on the aging of residents. Among the 129 group homes for mental disorders registered in Yokohama City, 93 homes gave their permission.

[Ethics] Participants were informed about the purpose and content of the survey, as well as ethical issues involved. Consent was confirmed by the submission of the questionnaire.

[Results] A total of 58 responses were received. Of the staff members of group homes, 35 (60.3%) had experienced hospitalization of a resident due to physical illnesses and 29 (50%) had experienced the death of a resident (increased from 27.8% from the survey conducted five years ago). The cause of death was mostly physical illness, followed by suicide. The number of staff who had accompanied residents to hospital was 50 (86.2%; increased from 43.8%), and 35 (60.3%; increased from 36%) residents were receiving home-visit nursing services. A total of 43 (74.1%; increased from 33.3%) staff members working cooperatively with physicians from other medical departments.

[Discussions] Residents of group homes for mental disorders entered in a state where they could conduct their daily lives more easily; but as physical disease increased as they got older, so too did rates of hospital admission, use of home-visit nursing, and terminal care.

This work was supported by the Association of Yokohama City Mental Disorders Community Life Support.

Poster

Nursing Coordination / Health Management

P1-275

Creation of true presence nursing model for Japanese older people with citizen guardians

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[Objectives]

The purpose of this study is to creation of true presence nursing model for Japanese older people with citizen guardians.

[Methods]

From the prior literature, we chose a document with a conceptual analysis and explanation about true presence (Parce), and then extracted a description about true presence. And we organized the concept and explanation qualitatively, and repeated the examination in the specialized team.

[Ethics]

This study was conducted with approval of the Graduate School of Nursing, Chiba University ethics committee.

[Results]

True presence, three major concepts and seven sub concepts were identified. One major concept was to make sense, and its subordinate concepts are to image, value, and verbalize / share. The second main concept was rhythmic, and its sub concepts are the two sides of rhythm. And the third main concept was mutual transgression, and the sub concept was to give power, to create, to change. Citizen guardians' supports last for a longtime from contracting to death affair of the residents. Therefore, the nursing model was created by adding the pre-trajectory phase, the locus onset phase, and the falling phase of illness trajectory (Straus, Corbin.1984).

[Discussions]

The important point of this research was created a true presence nursing model for old people with citizen guardian. Future study is required to examine the effectiveness of this nursing model and longer follow-up period.

[COI]

Nothing.

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Characteristics of Patients/Families impeding End-of-Life discussion of Advanced Cancer Patients

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Objective

This study aims to identify characteristics of patients/family impeding End-of-Life discussion (EOLd) between nurses and patients aware of advanced cancer.

Methods

A questionnaire survey targeting nurses with cancer care experience was carried out. "I agree" and "I strongly agree" responses regarding basic attributes, 23 EOLd items on cause for reluctance, 25 EOLd items on characteristics of uncooperative patients/family were evaluated into six grades.

Ethics

Approval for this study was obtained from the Ethics Review Committee. Subjects were informed in writing that responses were anonymous and that they could freely fill out the questionnaire.

Results

445 nurses in 12 facilities were targeted for analysis (effective response 70.6%). Average age was 37.6 ± 9.3 years, average cancer patient nursing experience was 7.7 ± 6.1 years. Factors hindering EOLd as recognized by nurses included "difference in value between patient and family" most frequent at 238 responses (53.5%), followed by "family unwilling to accept severe prognosis" at 229 (51.6%), with patient/family related factors most common. Regarding characteristics of patients/family with difficulty accepting EOLd, more than 60% of respondents recognized difficulty in 15 items, such as "family begs staff not to inform the patient of his/her clinical condition," and "sudden change in patient clinical condition."

Discussion

Cause of EOLd impeding as recognized by nurses was patient/family. Difficulty was especially recognized when the intentions of the family and patient disagreed. We suggested that it is helpful that a nurse screens characteristics of patients/family with difficulty in EOLd, to establish of coordination between various professionals early.

Poster

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Difficulties in Nursing Care and Mealtimes Assistance for Elderly Patients with Dementia

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⁴Faculty of Human Well-being, Department of Human, Chubu Gakuin University, Japan

[Objectives]

This study aimed to clarify difficulties in nursing care and mealtime assistance for elderly patients with dementia experienced by nurses.

[Methods]

A questionnaire survey was administered to 97 nurses at three hospitals with community-based care wards between October and December, 2018. The nurses were asked about their primary attributes and to answer the questions "Did you experience difficulties in mealtime assistance for elderly patients with dementia?" and "Did difficulties in mealtime assistance improve after you practiced nursing care?" in the form of free descriptions. The basic attributes were simply totaled. The free descriptions were analyzed using qualitative induction.

[Ethics]

This study was approved by the Medical Review Board of Gifu University Graduate School of Medicine (No. 28-9).

[Results]

Forty-five (46.4%) valid responses were obtained. Hereinafter, the 45 nurses are considered to be 100%. Eighteen (40.0% majority) were aged 40?49 years. Seventeen nurses' (37.8% majority) total service years were 10?19. Eighteen (40%) assisted patients with difficulties during mealtimes. Difficulties included "the patient eats anything at any time in addition to food." Fourteen (31.1%) answered "yes" to "Did difficulties in mealtime assistance improve after you practiced nursing care?" Answers included "By arranging main and side dishes on a plate, the patients could focus on the dishes."

[Discussions]

Following cognitive decline, there is a reduced ability in attention and the five senses, making it difficult to recognize food and environment. Thus, it is necessary to provide an environment where patients can focus on something and an intervention to motivate patients.

P1-278

The current reality and future prospects of nursing research regarding low back pain in nurses in Japan

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[Objectives]

This study aims to review previous studies on low back pain (LBP) in nurses and examine the way of research for prevention and improvement.

[Methods]

Literature in the past twenty years was searched in Ichushi-Web using the keywords "Nurses" and "Low back pain." Ninety-seven original articles mentioning LBP in nurses were included and categorized according to the research topics.

[Results]

The mean rate of nurses with LBP was 63.9%. The number of articles doubled in the latter ten years. In the first ten years, there were reports about the reality of LBP, the effectiveness of no lift policy and utilization of assistive products, and the actions of nurses causing LBP. Guidelines on the prevention of LBP in workplace was thoroughly revised in 2013, and the number of researches regarding prevention education has increased. As to the LBP preventive and improvement care, researches on exercise accounted for 90%, but no research showed improvement effect. The articles were categorized into seven categories: Reality and factors of LBP, Education on prevention and improvement of LBP, Utilization of assistive products, LBP prevention clothes and appliances, Physical, mental, and social effects of LBP, Prevention and self-care for LBP, Support system, and Thoughts and recognition on LBP.

[Discussions]

Although the causes of LBP in nurses were determined and the prevention of LBP has been researched in the past twenty years, no research with high evidence leading to improvement of LBP was found. It is necessary to establish methods of physical care of nurses with LBP.

Poster

Nursing Coordination / Health Management

P1-279

Factors related to multi-disciplinary collaboration of visiting nurses: A multiple regression analysis

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[Objectives]

In Japan, where aging is progressing, the construction of regional comprehensive care systems is promoted, and visiting nurses play an important role in this system.

The purpose of this study was to clarify the factors related to the multi-disciplinary collaboration of visiting nurses and to use the findings as basic data to improve home care quality.

[Methods]

An anonymous self-administered questionnaire was used to conduct the survey via mail. The questions were on seminar attendance, presence of a Certified Nurse (CN) or Certified Nurse Specialist (CNS) in one's own office, the Nursing Practice Evaluation Scale of visiting nurse, and the Multidisciplinary Collaborative Action Scale, among other items. Multiple regression analysis was performed using SPSS 23.0, with the significance level set to 5%.

[Ethics]

The study was approved by the ethics committee of A University.

[Results]

Participants were 265 nurses, including 17 CNS, 146 CN, and 102 visiting nurses. The mean number of years of experience as a visiting nurse was 12.6 ± 6.9 , ranging from 0.6 to 35 years. The mean number of years of nursing experience was 25.6 ± 7.8 , ranging from 6–49 years.

Multiple regression analysis results showed that scores on the Multidisciplinary Collaborative Action Scale were high among nurses who practiced cooperation with other nurses, were supportive and considerate of patients, showed professional autonomy, and worked with specialists in their own office.

[Discussions]

It was suggested that the practice of client-centered care and the presence of CN/CNS in one's own office affected multi-disciplinary collaboration.

P1-280

The relationship between self-management behavior, biological data, and Health-Related Quality of Life among postkidney transplant patients

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[Objectives] The purpose of this study was to clarify the relationship between self-management behavior, biological data, and Health-Related QOL among postkidney transplant patients. [Methods] This was a cross-sectional observation study. The participants were 280 patients who had undergone kidney transplant. Health-Related QOL was measured using the self-administered 12-Item Short-Form Health Survey(SF12-v2), self-management behavior using the Kidney transplant self-management scale. Participant characteristics and kidney function data were obtained from patients' electronic medical record data. [Ethics] Ethical approval was provided by Osaka City University ethics committees. [Results] Among the 148 participants whose data were analyzed, 43.9% were women, the average age was 54.3 years, 89.9% had undergone living kidney transplantation. Generalized linear mixed model was performed, and the difference between the self-management groups was examined. Sex, age, months of posttransplant, presence of complications, kidney function immediately posttransplant was introduced into adjustment variables of study.

Groups with good self-management had significantly better high density lipoprotein - cholesterol: HDL($F=4.5$), kidney function ($F=5.6$), in blood collection results were significantly higher, and triglyceride: TG($F=5.1$) was significantly lower. Additionally, in the group with good self-management, Physical functioning: PF on the SF12-v2 subscale($F=8.5$), Bodily pain: BP($F=8.0$), General health: GH($F=4.9$), Vitality: VT($F=10.2$), Social functioning: SF($F=22.6$), Role emotional: RE($F=4.9$), were significantly higher and Physical component summary: PCS($F=4.9$) Role/Social component summary: RCS($F=4.1$) were significantly higher. [Discussions] In postkidney transplant patients, good self-management behavior were found to be associated with good biological data and Health-Related QOL. Nursing practice programs should be established to clarify the influence of self-management behavior appropriate to maintain and improve biological data and QOL of kidney transplant patients.

Poster

Nursing Coordination / Health Management

P1-281 Dealing with a Recurrent Pneumonia Patient

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Background According to the recent data, about 95% of people who die of pneumonia were elderly people aged 65 or older. Of them, it is said that about 70% or more of pneumonia was aspiration pneumonia. In addition, medical practitioners suggested that supplemental nutrition by gastrostomy or transnasal tube was essential for elderly patients because elderly patients had a high risk to lead to aspiration pneumonia by oral intake and the function of oral intake in elderly patients was declining.

Aim This study aims to clarify the methods of nursing inventions for the dilemma between elderly patients who want to eat food by mouth and medical practitioners who hope elderly patients to eat food by artificial gastrostomy or transnasal tube.

Methods: Case study

Results: To prevent disuse syndrome, we implemented food intake training , swallowing exercises before each meal and bed leaving exercises for 2 hours one day for an elderly patient who had aspiration pneumonia. On the 15th day of hospitalization, he started to eat food and had a good function of oral intake. However, on the 68th day, he developed aspiration pneumonia again and became fasted. At present, his willingness to eat remains unchanged. We continued the exercises of bed leaving and food intake and he can eat a small amount of jelly by mouth.

Conclusion: In this case, it was very important to find the existence of the ethical dilemma, to promote the surrounding staff and the person to understand the symptoms, and then, to solve the ethical problem gradually.

Poster

Safety Management / Quality Improvement

P1-282

Actual condition and prospect of elderly people by body surface inspection tool

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[Objectives]The purpose of this study was to develop a color chart scale that enables early elderly healthcare support to identify the skin injury based on digital camera images, objectively.

[Methods]The discoloration of body surface such as bruises and abrasions were recorded with patients' agreement in consecutive 10 days.

[Ethics]The survey was conducted with the consent of the Ethics Committee of the university, to which the prime writer of this research belongs.

[Results]53 cases (40 female, 11 male, unknown 2) ,65~ 100 (average 82.8) years old were enrolled in this study. The skin discoloration was observed at head 5 cases (9.4%), at upper trunk 29 cases (54.7%), and at lower trunk 23 cases (43.4%).

[Discussions]In conclusion, the skin color change could be evaluated by digital image software using color chart scale, and this objective data evaluation method could be used for early elderly healthcare support by early discovery and support to prevent severe elderly abuse.

P1-283

Research on the Difference of Incident Factors According to Nurse's Years of Experience

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[Objectives]We aimed to clarify the difference in incident factors according to working experience of the nurses.

[Methods]This research is based on questionnaire survey with enrollment of 684 nurses working in an acute hospital settings. The anonymous self-administrative questionnaire consisted of attributes, incident frequency and incident related factor questionnaire (62 items). The items mainly comprised of psychological characteristics, nursing behavior and workplace environment. The data were divided into two groups by nurses' experience: less than four years and more than four years. One-way ANOVA was conducted by dividing the frequency of incidents into 0 times, 1-2 times and 3 times or more.

[Ethics]Ethical committee of our institution approved this study.

[Results]Valid response was obtained from 435 (63.6%) nurses. Associated number of items with incident frequency were different between the two groups. Only in less than four years' experience group, the number of incidents was associated with the height of depression, time pressure and busy schedule and other ($p < 0.05$). However, in both groups, the number of incidents was associated with the height of tension and work delayed ($p < 0.01$).

[Discussions]Nurses with fewer years of working experience had many factors of incidents. Therefore, we must consider nurses' years of experience, when we investigate nurses' incidents factor.

Poster

Safety Management / Quality Improvement

P1-284

Development of a Scale for Measuring the Psychological Adjustment of Female Cancer Survivors-Study of reliability and validity-

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[Objectives]

The purposes of this study were to develop the Scale of Psychological Adjustment of Female Cancer Survivors (PAFCS) and to analyze its reliability and validity.

[Methods]

A temporary scale consisting of 32 items was prepared based on a qualitative analysis and an examination of the content validity as well as a pilot study, both conducted by an expert. The subjects for analysis were female cancer survivors.

[Ethics]

We received approval from the Ethical Review Board of the University of Tokushima Hospital to perform this study.

[Results]

The subjects for analysis were 304 female survivors of cancer. As a result of factor analysis, 4 factors comprised of 20 items were extracted from the temporary scale. The 4 items included: "I can feel connected with someone," "I am charming as a woman," "I like the way I am," and "I can graduate from pessimism." The reliability of the scale was confirmed by a Cronbach's alpha internal consistency reliability coefficient of 0.87 for the 20 items. Criterion-related validity was almost satisfactory for all areas. Confirmatory factor analysis was conducted by analyzing covariance structures and the hypothesized statistical model was found to fit the actual data.

[Discussions]

The reliability and validity of the PAFCS were confirmed. Therefore, this scale may be suitable for use with female cancer survivors. Using this scale helps to establish a perspective for creating and evaluating a nursing intervention thereby helping to support psychosocial intervention studies to promote the independent living of a female cancer survivor.

Differences in the risk of falls between individuals

P1-285

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[Objectives]

Psychiatric patients are at an increased risk of falls due to psychiatric disorders and/or antipsychotic medications. The current study examined differences between age groups in the risk factors for falls among psychiatric patients in Japan.

[Methods]

Incidences of severe falls requiring treatment were obtained from an incident database spanning 2001 to 2012, and aggregated into <65 years-old (adults) and ≥ 65 years-old (older) groups. A code related to the cause of falling was assigned to each incident based on the description of the incident. Codes were aggregated into subcategories, and subcodes aggregated into categories.

[Ethics]

The study was approved by the Ethics Committee of Osaka University.

[Results]

There were 379 falls in the sample. Approximately 30% of falls occurred in adults. Approximately 80% of the adult group had schizophrenia, and 80% of the older group had dementia. The following six categories emerged: gait/ambulation; mental status; medication; physical condition; toileting; and environment. Among the adult group, the proportion of "mental status" and "medication" was twice as high compared with the older group. "Mental status" included "altered mental status" and "restlessness" subcategories, and "medication" included "medication adjustment" and "hypnotics" subcategories. These subcategories included descriptions of potential side effects of medication, such as "unsteady gait" and "sleepiness." In contrast, the older group had a higher proportion of "gait/ambulation", reflecting decreased activities of daily living.

[Discussions]

Side effects of psychotropic medication accounted for a higher proportion of falls in the adult group than the older group. Medication review is necessary to reduce severe falls.

Poster

Safety Management / Quality Improvement

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Developing a Scale Evaluating End-of-Life Care in Nursing Homes in Japan: Face Validity Testing

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[Objectives]

This study aimed to test the face validity of a draft the evaluation scale of end-of-life (EOL) care in long-term care (LTC) facilities in Japan.

[Methods]

To develop the evaluation scale (Version 1) of EoL care, we reviewed previous research and interviewed bereaved families. Three certified nurses (CN) and three certified nurse specialists (CNS) employed at LTC facilities participated in this study. The first step included a face-to-face interview with each participant. Second, we revised the evaluation scale (Version 2) and mailed it to the participants for feedback. We then made final revisions to the scale (Version 3).

[Ethics]

This study received the approval of the Ethical Review Committee of the affiliated University in 2018.

[Results]

Based on Stewart's (1999) "Conceptual model of factors affecting quality and length of life of dying patients and their families," Version 1 scale consisted EOL care process and outcome that had 53 items. Version 2 reduced to 41 items and changed to 43 items in Version 3. There were three major modifications in Version 3. First, providing information on medical care in LTC facilities, which is different from a hospital. Second, confirming the resident's preference for EOL care. Third, the contents of three items evaluated in the EOL care outcome modified and moved to evaluated in the EOL care process.

[Discussions]

A total of 43 items were found to have face validity by CN and CNS employed at LTC facilities. Future research need to explore the reliability and validity of this evaluation scale.

P1-287

Current State of Preoperative Oral Care in A Japanese Public Hospital

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【Objective】 This study aimed to examine the current state of preoperative oral care for patients undergoing surgery with general anesthesia.

【Method】 A public general hospital with 713 beds was surveyed. Between May and June 2019, we interviewed 116 patients undergoing surgery with general anesthesia about oral care guidance from nurses before surgery. An anonymous questionnaire survey was conducted with 36 operating room nurses with an average of 9.4 years of nursing experience and 6.2 years of operating room experience. The questionnaire related to awareness of the importance of preoperative oral care and whether they provided this care for patients. The results were analyzed descriptively.

【Ethics】 This study was carried out after the approval of A Hospital Clinical Trial Review and the Clinical Research Ethics Review Committee.

【Result】 Results showed that all 116 patients were unaware of receiving guidance regarding oral care prior to surgery. All 36 operating room nurses agreed that it was important to answer the question "Do you think oral care before surgery is important?" Seven nurses (19.0%) answered that they were recommending oral care for preoperative patients.

【Discussion】 Results suggested that nurses were aware of the importance of preoperative oral care, but this did not lead to them providing preoperative oral care guidance to patients. It was clear that it was necessary to build a system in which oral care guidance during the preoperative period was provided at an effective time.

Poster

Safety Management / Quality Improvement

P1-288

Examination of Nursing Literature on Shared Decision Making in Japan

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[Objectives] In Japan, the Ministry of Health, Labor and Welfare revised the "Guidelines on the decision-making process of medical care and end-of-life care" in 2018, emphasizing the importance for the patient, family, and medical staff to discuss the shared decision making (SDM) process repeatedly. In this study, we review research trends in Japanese literature regarding the concept of SDM in the field of nursing.

[Methods] We searched the literature using the Ichu-shi web version in Japanese. Keywords used were "shared decision making".

[Results] The search period was unlimited and 229 documents were found. Proceedings were excluded and 15 nursing-related SDM documents were extracted. The first appearance of research on SDM and nursing was in 2005. No articles were found between 2008 and 2010, but 1-3 papers per year were published thereafter. By article type, 7 original articles, 6 commentaries, and 2 reviews were found. These consisted of the following target studies, in order of decreasing number: 4 cases of renal replacement therapy, 2 cases of hematologic malignancies, 2 cases of mental nursing, 2 cases of pediatric nursing (including children with severe physical and intellectual disabilities), 1 case of allergic diseases, and 1 case of ICU admission. The SDM concept was examined in 3 papers.

[Discussions] In Japan, the literature suggested that SDM mainly supports patients with chronic diseases and their families. Although little research existed on nursing and SDM in Japan, our study showed that nurses support patient and family decision-making through conscious SDM efforts.

P1-289

Factors predicting the quality of dementia care at acute care hospitals

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[Objectives] It is an important issue to improve quality of dementia care in acute care hospitals. Prior studies have demonstrated that not only knowledge and nurse experience but also psychological factors and the nursing practice environment are related to high-quality care on general wards. The purpose of this study was to investigate which factors are associated with quality of dementia care in acute care hospitals.

[Methods] The research design was a cross-sectional survey. Questionnaires were distributed to 300 acute care hospitals and valid responses were 773. Based on the hypothesis model, variables were tested using multiple regression analysis. The model described the relationship between quality of care, personal attributes, and the nursing practice environment.

[Ethics] This study was approved by the Institutional Review Board of Kobe University.

[Results] Almost 90% of the study sample was female. The mean age of participants was 37.4 ± 9.3 years. The results showed that nursing foundations for quality of care, staffing and resource adequacy, specialist consultation, and promoting systematic recreation and exchange, as well as knowledge and recognition for people with dementia, were associated with quality of dementia care at acute care hospitals. The adjusted coefficient of determination was .367.

[Discussions] The findings demonstrated that the nursing practice environment played an important role to improve quality of dementia care. To enhance quality of dementia care in acute care hospitals, a supportive nursing practice environment, in terms of staffing and resource adequacy, nursing foundations for quality of care, and specialist consultation, is essential.

Poster

Safety Management / Quality Improvement

P1-290

Impact of an ethical environment on the practice of spiritual care among Japanese nurses

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[Objectives] This study aimed to elucidate the impact of an ethical environment on the practice of spiritual care among Japanese nurses.

[Methods] A survey was conducted with 811 nurses affiliated with home nursing stations in Japan, of whom 185 responded.

The survey items were gender, age, the presence/absence of an ethics committee, the frequency of ethics conferences, nurses' spiritual care practices (NSCP), and Hospital Ethical Climate Survey (HECS) scores.

[Ethics] The study was approved by the ethics committee of Okayama Prefectural University.

[Results] HECS scores had significant positive correlations with NSCP (0.403) and the frequency of ethics conferences (0.390), and had a significant negative correlation with age (-0.147).

[Discussions] Ethics conferences had an impact on the ethical environment of the workplace, which influenced the practice of spiritual care among nurses. Therefore, conducting ethics conferences can lead to the development of a favorable ethical climate, which would presumably promote the practice of spiritual care among nurses.

P1-291

Evaluation of the quality of nursing care in Japanese hospitals as seen from foreigners staying in Japan

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[Objectives] Evaluate whether foreigners living in Japan felt that they received individualized nursing care during hospitalization using patient-reported outcome measures to clarify differences from Japanese.

[Methods] The questionnaires were distributed to 18 hospitals among the JMIP certified hospitals and non-certified hospitals for which cooperation was obtained. 713 questionnaires were distributed and 69 were collected. Total, 59 foreigners and 55 Japanese were analyzed. Question item translated Hospital Consumer Assessment of Healthcare Providers and System (HCAHPS) and Individualized Care Scale (ICS) to Chinese and Japanese.

[Ethics] Approved by Juntendo University Graduate School Research Ethics Committee (No.29-24).

[Results] The HCAHPS nurse communication scores were 10.7 for foreigners and 9.9 for Japanese ($p = .03$). Doctor communication scores were 10.9 for foreigners and 9.9 for Japanese ($p = .01$). Nurse communication, doctor communication, and the overall rating of hospital, all scored higher in the hospital than in the community ($p < .01$). Each of nurse communication, doctor communication was correlated with the ICS score ($r = .401$, $p < .01$, $r = .280$, $p < .01$). Nurse communication was significantly positively related to certified hospital ($\beta = .55$), foreigner ($\beta = .34$) and self-reliance in hospitalization ($\beta = .27$) ($R^2 = .41$).

[Discussions] Foreigners staying in Japan were evaluated as having received nursing that emphasized individuality during hospitalization more than Japanese. The development of the foreign patient acceptance system suggested the improvement of the quality of nursing in Japanese hospital.

This work was supported by JSPS KAKENHI (Grants-in-Aid for Scientific Research (A)) Grant Number 17H01607

Poster

Safety Management / Quality Improvement

P1-292

Characteristics of anger in nurses and care workers

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[Objectives]The purpose of this study was to clarify the characteristics of anger in nurses and care workers.

[Methods]From July 2018 to March 2019, a survey was administered to nurses and care workers. Items measured age, years of clinical experience, and the Japanese State-Trait Anger Expression Inventory (STAXI); this comprised the State-Trait Anger Scale (STAS) and Anger Expression Scale (AX).

[Ethics]The study was approved by the Ethics Review Committee of Yokohama City University. Consent was confirmed by submission of the survey.

[Results]A total of 181 valid responses were received. Demographics: age in years ($M = 42.62$, $SD = 10.01$); experience in years ($M = 16.60$, $SD = 9.52$); occupation (149 nurses, 32 care workers). STAXI scores: State Anger ($M = 12.42$, $SD = 4.06$); Trait Anger ($M = 22.74$, $SD = 5.91$); Anger-in ($M = 19.47$, $SD = 3.92$); Anger-Out ($M = 20.77$, $SD = 3.10$); and Anger-Control ($M = 18.64$, $SD = 2.78$). There was a negative correlation ($r = -.198$, $p = .008$) between years of clinical experience and state anger. When comparing occupation, the average state anger score was 12.03 for qualified nurses compared to 14.25 for care workers, who scored significantly higher ($p = .005$). There was no significant difference in other items.

[Discussions]As clinical experience increased, the intensity of state anger decreased. Due to the emotional labor investment in providing care, state anger among care workers is high. Therefore, occupation-specific training programs are needed.

This work was supported by JSPS KAKENHI Grant-in-Aid for Scientific Research(C).

Poster

Health Emergency / Disaster Nursing

P1-293

Roles of emergency nurses in trauma nursing in Japan

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[Objectives] Due to the importance of determining measures to reduce preventable trauma death (PTD), emergency nurses who are directly involved in PTD play important roles. This study aims to clarify the roles of emergency nurses in Japan in trauma nursing activities.

[Methods] In February 2018, a focus group interview was conducted with five certified nurses in emergency nursing covering demographics and the roles played in trauma nursing activities. Statements about roles of trauma nursing were extracted and categorized.

[Ethics] This study was approved by the Sapporo Medical University Ethics Committee. The study purpose was explained to be voluntary participation, and informed consent obtained.

[Results] The mean length of nursing and as certified emergency nurses: 16.0 ± 4.6 and 4.8 ± 2.3 years. Data yielded 19 categories: roles in nursing for trauma patients as [Explanation at the acceptance stage of patients suffering sudden dysfunction], for families of trauma patients as [Assessment of abilities of family to cope with sudden events], roles in trauma medical teams as [Arrangement among medical professionals involved in trauma patients to enable medical care], and educational roles as [Sharing information of progress of trauma patients obtained from experience and education support].

[Discussion] Roles of emergency nurses included injury to social rehabilitation, paying attention to functional prognosis. Activities to urgently try direct intervention in the initial medical care and encourage patients to gradually accept disabilities are characteristic to trauma nursing. Roles in arrangements of team medicine and education may be due to the characteristics of differences in traumatopathy.

P1-294

Physical conditions faced by nurse managers in the Great East Japan Earthquake and tsunami

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[Objectives] Miyagi prefecture was hit by the Great East Japan Earthquake and tsunami in March 2011. Four nurse managers in hospitals in Miyagi were interviewed about their physical conditions after the disaster.

[Methods] Using a guide based on previous studies, a semi-structured 60-minute interview of each person was performed in summer 2015.

[Ethics] The study was performed after approval by the Research Ethics Committee of the Japanese Red Cross Hokkaido College of Nursing and permission from the hospitals of the subjects. The study was supported by JSPS Grant-in-Aid for Scientific Research 26670933.

[Results] The subjects (A, B, C (female) and D (male), age 30s to 40s) described the conditions as follows. A: Sleep was shallow for several days after the disaster. I slept when I could lie down. Food prepared by the hospital was sufficient. With encouragement from the staff, I went to other disaster areas several times for 4 days until about 6 months post-disaster, leaving others in charge of the ward. B: I was originally healthy and I did not get sick. C: I was physically tired for several months after the disaster, but mentally uplifted. Physical conditions were not bad. D: I did not feel fatigue or sleepiness. The news of the disaster seemed unreal and I could not accept it. I did not get sick because help from other managerial personnel was sufficient.

[Discussions] These accounts suggest that the subjects were uplifted after the disaster and remained healthy due to help from people and organizations.

Poster**Health Emergency / Disaster Nursing****P1-295****Exploring factors affecting dispatch nurses' self-efficacy after the Great East Japan Earthquake**○Takayo Maeda¹, Sayaka Kotera², Nobuko Matsuda³, Carol A Huebner⁴¹*Department of Public Health, Graduate School of Health Sciences, Kobe University, Researcher of Health Sciences, Japan*²*Department of Public Health, Graduate School of Health Sciences, Kobe University, Associate Professor, Japan*³*Department of Nursing Unit of PublicHealth Nursing, Graduate School of Nursing Sciences, Kansai University of International Studies, Professor, Japan*⁴*Department of Health Restoration & Care Systems Management, School of Nursing, University of Texas Health Science Center at San Antonio, Professor Emerita, United States of America*

[Objectives] Self-efficacy might serve as a buffer against the stress brought about by disaster dispatch activities. This study focused on Japanese registered nurses and examined the actual status of their self-efficacy. This study aimed to investigate Japanese registered nurses' self-efficacy and explore its impact and characteristics after their dispatch to the relief activities in the aftermath of the Great East Japan Earthquake.

[Methods] The Japanese adaptation of the General Self-Efficacy Scale (GSE) was sent to 695 registered nurses. A total of 450 questionnaires (64.7%) were collected, 389 of which (56.0%) had valid answers. The Mann-Whitney U test and multiple linear regression analysis were conducted.

[Ethics] This study was approved by the university's ethics review committee.

[Results] The majority of participants were females (78%) whose mean age was 44.9 ± 7.7 years and whose average clinical nursing experience was approximately 22 years. The mean total score of the GSE was 25.8 ± 4.72 out of 40. The Mann-Whitney U test showed significant associations between total GSE scores and several background and disaster experience factors. According to the multiple linear regression analysis, the top three factors affecting self-efficacy were "positive feedback from family members after disaster dispatch activities," "family approval for the next disaster dispatch," and "consideration of their own health."

[Discussions]

Two of the major factors affecting nurses' self-efficacy were related to their families' understanding of their past and future disaster dispatch activities. Nurses are expected to benefit from self-efficacy improvement efforts to strengthen their resilience after disaster relief activities.

P1-296**Changes and issues regarding the living environment following the Great East Japan Earthquake perceived by the administrative officer who supported the recovery**○Chizuko Noro¹, Yuko Oikawa², Naoko Hibino³, Kyoko Imamura⁴, Takashi Takizawa⁵¹*Department of Nursing, International University of Health and Welfare, Japan*²*Department of Nursing, Mejiro University, Japan*³*Department of Nursing, Mie Prefectural College Of Nursing, Japan*⁴*Nursing Faculty of Nursing, Sanyo Gakuen University, Japan*⁵*Nursing Science, Daito Bunka University, Japan*

[Objectives]

Eight years have passed since the Great East Japan Earthquake. This study aimed to investigate changes in the living environment and associated issues based on the feedback of an administrative officer involved in the municipal recovery project in the affected area.

[Methods]

A semi-structured interview was conducted in March 2019 involving the administrative officer involved in the recovery project, and the obtained data were qualitatively analyzed.

[Ethics]

This study was conducted with the approval of the bioethics committee of Sonoda Women's University.

[Results]

After categorizing 101 codes into three phases: the shelter opening phase (9), temporary housing phase (7), and phase of admission to public housing (12), the changes in the living environment with time, residents' conditions that were perceived by the officer, and changes in the officer's thoughts were extracted.

[Discussions]

During the shelter opening phase, orderly behaviors of the residents had encouraged the officer to continue making recovery efforts.

During the temporary housing phase, the deepening of interactions among residents had contributed to the lack of complaints from them.

During the phase of admission to public housing, the aging population rate was high, and people had to endure a living environment they were not used to, showing the limitation of community development.

Based on these findings, suggestions were obtained concerning the need to cooperate with the Living Environment Improvement Division and Elderly Support Division from the early stages, as well as ways of providing support for affected people in the future.

Poster

Health Emergency / Disaster Nursing

P1-297

Present conditions and problems related to disaster response plans of hospitals based on the Business Continuity Plan

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[Objectives] This study aims to identify details and problems, perceived by nurse administrators, related to disaster response plans of hospitals based on the Business Continuity Plan (BCP).

[Methods] We randomly sampled nurse administrators working in 1500 hospitals in 8512 institutions nationwide, and requested participation in a questionnaire survey inquiring about demographic characteristics, guidelines for creating disaster response plans of hospitals, and 15 items of the BCP check list.

[Ethics] This study was approved by the ethics review committee of Chiba Institute of Science (29-7).

[Results] We analyzed 356 responses. More than 70% answered "No" to: "Do all the employees know the necessity of obtaining the understanding of family in assembling employees when notifying of an emergency?", "Do all the employees know what to do when assembled?", "Are the procedures from the reception of affected patients, treatment, examination, operation, admission to the discharge, as well as where to conduct consultations easy to understand?", "Are the procedures for contact arrangements for the affected inpatients, moving beds in the ward, and increasing the number of beds included in the disaster manuals?", and "Are desk simulations conducted to evaluate recovery from disasters and provide long-term response?".

[Discussions] The findings suggest the necessity to ensure following three: all the employees know what to do when assembled; the disaster manuals include the procedures for contact arrangements for the affected inpatients, moving beds in the ward, and increasing the number of beds; and desk simulations are conducted to evaluate recovery from disasters and provide long-term response.

P1-298

Examination of issues identified during Project to Create Welfare Evacuation Shelter Operation Manual for long-term care insurance facilities

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[Objectives] In Japan, many people have been forced to endure the harsh life in shelters following major disasters. Thus, welfare evacuation shelters have been established for people who require special care and considerations. To prevent the health deterioration of people who require special care and considerations, we have implemented a Project to Create Welfare Evacuation Shelter Operation Manual through discussions held between facilities that entered into signed agreements and related organizations, considering the need for discussion about welfare evacuation shelter operations even during normal times. The purpose was to report on issues that became the central focus of discussion whilst preparing the manual.

[Methods] On 2015-2018, three discussion workshops, each of which lasted 2 hours and were held at different facilities. The members comprised facilities, industry, academia, and government. The details of proceedings were recorded verbatim. We focused on the similarity of contents, analyzed the data in a qualitative and descriptive manner, and then extracted and discussed items that needed to be considered.

[Ethics] We obtained approval from the Ethical Review Board of the researcher's university.

[Results] The issues that could be determined included intake conditions, layout, and forms. Items that warrant continued discussion are creating a system for dispatching caregivers, securing of materials and equipment.

[Discussions] As organizations associated with welfare evacuation, shelter operations interact intimately to integrate measures with the idea of operation since non-disaster times. We will be able to support the health of people who require special care and considerations even while living in such evacuation sites.

Poster

Health Emergency / Disaster Nursing

P1-299

Trends and issues of research on disaster nursing education overseas using text mining

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[Objectives]

The purpose of this study is to clarify research trends and issues on disaster nursing education overseas.

[Methods]

We searched using the PubMed and Cochrane Library on June 24, 2019, and for five years from 2014 to 2019. The keywords of the search were disaster nursing and education, and the types were not limited. We targeted 96 articles obtained from the search results. Articles were analyzed using text mining software KH Coder.

[Ethics]

The target research papers were papers whose individuals were not identified.

[Results]

The total number of extracted words was 4,088. As a result of hierarchical cluster analysis, it was classified into five clusters, such as "simulate under multi-sector type collaboration", "education and preparation for students for emergency", and "behavior characteristic by nurse's training". As a result of the co-occurrence relationship network classification, it was classified into three categories. One is a nurse's point of view and carries out training by multi-sector collaboration. The second is to review the in-hospital education program. The third was a review of the practice training manual in the hospital. In the education of students, it was revealed that the simulation was conducted and prepared for the emergency.

[Discussions]

Overseas, we conduct training assuming all disasters. It was suggested that disaster nursing proceed with the development of educational programs under multi-sector collaboration. In addition, I think that education in disaster nursing abroad can be sufficiently referred to in Japan.

P1-300

Assessment and practice of nurses engaged in the acute care of slightly or seriously injured victims of a volcanic eruption of the Mt. Ontake

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Objectives : This study aims to identify the assessment and practice of nurses engaged in the acute care of slightly or seriously injured victims of a volcanic eruption of the Mt. Ontake.

Methods : We had semi-structured interviews of seven nurses engaged in the acute care of slightly or seriously injured victims of a volcanic eruption of Mt. Ontake, Japan in 2014, and this study was carried out and analyzed based on research design of qualitative inductive method.

Ethics : This study was conducted with the approval of the Ethics Committee of the institution of Nagano College of Nursing (# 2016-12).

Results : The analysis yielded 241 codes related to assessment and practice, within 160 codes which were divided into 11 subcategories and 7 categories related to the judgements and within 81 codes which were divided into 18 subcategories and 10 categories related to practices

Discussions : This study revealed that the nurses engaged in the acute care of slightly or seriously injured victims of a volcanic eruption of the Mt. Ontake practiced care based on assessment of need to do for in front of people's condition who had seriously injured with physical and mental, feeling self-responsibility and self-capacity for nursing and sharing knowledge and abilities with others.

Poster**Health Emergency / Disaster Nursing****P1-301****Role expectations with CNS in Disaster Nursing**○Ayumi Nishigami¹, Tomoe Watanabe², Tomomi Fujii²¹*Department of Nursing, Aino university, Japan*²*Department of Nursing, Japanese Red Cross Hiroshima College of Nursing, Japan*

[Objectives] The purpose of this study is to investigate expecting degrees for "Roles of CNS" and clarifying its availability. [Methods] In Japan, CNS in disaster nursing was born in 2017. "Roles of CNS" was clarified through the past surveys by the authors. Moreover we have surveyed nursing supervisors of disaster base hospitals, prefectural nursing associations and public health centers that utilize and collaborate with CNS so as to reveal the expecting degrees for this role. Investigation method was questionnaire and it was mailed to representatives of the facilities. Survey content: Basic attributes, expecting degrees for "Roles of CNS" (four-point evaluation "Greatly expect" - "Do not expect at all"), Job experience with CNS, recognition degrees for CNS. [Ethics] The rights of participants were considered and protected in accordance with the guidelines of the Research Ethics Committee of the Researcher's College. [Results] Mailed to 1147 facilities, valid answers obtained from 445 facilities (38.8%). The rate of persons who have ever worked with CNS was highest in the nursing associations and the second highest was the disaster base hospitals. The nursing associations recognized the birth of CNS most and the hospitals did second most. The hospitals are 38% of them did not recognize them. Comparison of expecting degrees among the three facilities revealed significant differences in 46 items. Several items were rated below "3 (expect)". No items were rated below "3" in all three facilities. [Discussions] This result suggests that recognition degrees of CNS remains low. It may be said that all items are almost expected in all facilities while the contents of expectation vary depending on facilities.

P1-302**Survey of nurse observations before sudden deterioration of a patient's condition**○Yuri Yamaguchi^{1,2,3}, Masako Miyajima², Nanae Ikeda²¹*Faculty of Nursing and Rehabilitation, Konan Woman's University, Japan*²*Graduate School of Nursing, Mukogawa Woman's University, Japan*³*Department of Nursing, Koritsu Hospital, Japan*

[Objectives] The objective of this study was to compare nurses who predicted sudden deterioration of a patient's condition with those who did not predict sudden deterioration and to define what nurses observe before sudden deterioration of a patient's condition.

[Methods] We referred to the literature and created an original questionnaire that considered nine concerns. The questionnaire was administered to nurses who worked at Hospital A between March and June 2018. The nurses who participated in this study had observed patients over an 8-hour period before sudden deterioration. Fisher's exact test was used for analysis.

[Ethics] This study was approved by the ethics review board of the hospital and the board of our university.

[Results] In this study, 17 patients experienced sudden deterioration, and a total of 150 nurses were identified. We sent out 129 questionnaires and received 100 completed questionnaires. Eventually, 88 of the 100 completed questionnaires were analyzed. Findings regarding patient response, atmosphere, and symptoms were significantly different between nurses who predicted sudden deterioration and those who did not predict sudden deterioration.

[Discussions] Nurses who predicted sudden deterioration of a patient's condition indicated that patient response, atmosphere, and symptoms are useful predictive concerns. Symptoms can be objectively observed, but response and atmosphere are subjective and depend on the experiences of nurses. Therefore, it is necessary to define how nurses use these three concerns to predict sudden deterioration of a patient's condition.

Poster

Health Emergency / Disaster Nursing

P1-303

Nursing Support Guide for Enhancing Disaster Preparedness Abilities of Children in Need of Health Care - A revision based on nurse's opinion

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[Objectives]

A nursing support guide for enhancing the ability of children in need of health care at times of disaster is currently being developed. This report describes points in which some amendments and additions for the nursing support guide.

Eight abilities required for children in need of health care to manage and maintain their health during a disaster were identified, and the nursing support guide that contains support content, individual support sheets, and a manual were created to enhance these abilities.

[Methods]

The transcription from semi structured interviews conducted about using these support guides in a hospital setting was analyzed to identify necessary improvements.

[Ethics]

This study was approved by the research ethics committees of the University and cooperating facilities.

[Results]

The participants were four nurses with an average of 10.8 years experience. From results of the analysis, a few additions or amendments were described. Continuous support appropriate to individual development, and the start of age-relevant support was added to the manual. In addition, a child ability assessment sheet was created to help assess children's abilities before and after receiving support.

[Discussions]

As the support guide is for practical use, it was indicated that the importance of the timing of the introduction and when the intervention support should be initiated, as well as the course for intervention while continuing usual care. The necessity of also providing support to parents/guardians and ensuring that support continues at home was also indicated.

This research was supported by JSPS KAKENHI Grant Number JP16K12153

P1-304

Post-traumatic stress disorder and depression among disaster workers after the Great East Japan Earthquake: A review of the literature

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[Objectives] This review aimed to clarify post-traumatic stress disorder (PTSD) and depression among disaster workers after the Great East Japan Earthquake.

[Methods] We searched PubMed, MEDLINE, CINAHL Plus, and Japan Medical Abstracts Society databases using subject headings and keywords until 13 July 2019. We selected quantitative studies published after 2011 focusing on disaster workers in the Great East Japan Earthquake, evaluating PTSD or depression, and using measurements where cut-off scores have confirmed validity and reliability. Sixteen articles met these criteria.

[Ethics] Literature review was conducted with ethical considerations.

[Results] Of the 16 articles, 11 focus on disaster workers dispatched from outside the disaster area, evaluate PTSD and depression 1 to 32 months after the disaster, and report prevalence of PTSD and depression exceeding the cut-off score. The five remaining articles focus on disaster workers living in the disaster area, evaluate 14 to 32 months after the disaster, and report the prevalence of PTSD and depression exceeding the cut-off score.

[Discussions] This study showed the long-term PTSD and depression trends among disaster workers after the Great East Japan Earthquake. In addition, while there were many studies on disaster workers dispatched from outside the disaster area, there were few studies on disaster workers living in the disaster area, and no studies with periods of analysis from the early stage of the disaster were found. In future, it will be necessary to investigate disaster workers living in the disaster area from the early stage of the disaster and to consider support for stress relief of disaster workers.

Poster

Health Emergency / Disaster Nursing

P1-305 What care did nurses provide for the families from legal brain death determination to organ donation surgery? ?A qualitative study

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[Objectives] This study aimed to describe nursing perspective for the families of brain-dead patients from legal brain-death determination to organ donation surgery.

[Methods] We conducted a semi-structured interview of seven nurses with experience in caring for brain-dead organ donors and their families. The interview results were qualitatively assessed.

[Ethics] This study was approved by the ethics committee of Osaka University.

[Results] Four out of the seven nurses were women. Following viewpoints were considered from legal brain-death determination to organ donation surgery. First, "To ensure that family can spend the limited time with patient without regret". Second, "To understand the role and ideal attitude of nurses at the time of death awareness and to remain discreet", indicating that nurses inferred the family's grief at the time of death declaration and departure for organ donation surgery and kept the atmosphere included the family alone. Third, "To anticipate that the families realize the patient's farewell after organ donation surgery", considering that it was difficult for family to accept the patient's death because of patient's warm body and heartbeat and the family realizes the patient's farewell after organ donation surgery because of the loss of body warmth and heartbeat. Last, "To care so that organ donation could be sublimated as positive memories for the family".

[Discussions] Nurses not only made efforts to ensure that families meaningfully spend remaining time with brain-dead patients but also provided families with care to make organ donation a proof that their loved ones had lived.

P1-306 Associated factors for disaster preparedness of parents/guardians with school-going children in Indonesia

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[Objectives] Family preparedness is necessary in order to reduce the impact of disasters on children. This study aimed to examine the association of factors affecting disaster preparedness in Indonesian families with school-going children.

[Methods] Ten public elementary schools were randomly selected in one disaster-prone area in Indonesia. A questionnaire survey of 309 parents/guardians with upper grade children was conducted. To explore the association between disaster preparedness and all variables, the preparedness score (19 items) was divided into four groups by quartiles; the highest-scoring and lowest-scoring groups were compared using Chi-square test and multivariate logistic regression.

[Ethics] This study was approved by the Institutional Review Board of Kobe University Graduate School of Health Sciences.

[Results] Most of the participants were mothers (77.3%). Almost all participants had previously experienced a natural disaster (97.4%). Disaster risk perception and knowledge of actions to be taken when a disaster occurs were not associated with disaster preparedness. Meanwhile, economic condition, living area, types of disasters previously experienced, social capital, participation in disaster evacuation simulation, and familiarity with information sources (pamphlets or newspapers) were significantly associated with disaster preparedness. Logistic regression analysis revealed that parents/guardians with higher disaster preparedness scores had greater social capital and were living in urban areas.

[Discussions] Individual social capital and living area were found to be significant predictors of disaster preparedness among parents/guardians with school-going children in Indonesia. The findings suggest that developing relationships with the community and promoting mutual support, could help improve disaster preparedness for parents/guardians with school-going children.

Poster

Health Emergency / Disaster Nursing

P1-307

Posttraumatic maladaptive beliefs of those who have and have not experienced traumatic experience: a secondary analysis of the national survey of stress and health in Japan

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[Objectives]

Negative beliefs after the experience of traumatic events significantly affect the onset and maintenance of mental health problems, including posttraumatic stress disorder. The purpose of this study was to compare the scores of the Posttraumatic Maladaptive Beliefs Scale (PMBS) in Japanese between groups with and without traumatic events.

[Methods]

We administered an online survey to 40,000 Japanese adults. Participants responded PMBS and other questionnaires. PMBS is composed of 15 items using a 5-point Likert scale. This scale assess three aspects of post-traumatic maladaptive beliefs: threat of harm, self-worth and judgment, and reliability and trustworthiness of others.

[Ethics]

This research was approved by the Ethical Review Board at the National Center of Neurology and Psychiatry (Approval Number: A2015-086) and funded by the Japan Association for the Promotion of Science Grant-in-Aid for Scientific Research. There is no COI to disclose.

[Results]

A total of 4,927 people experienced a traumatic event more than one month ago, and 1,030 people experienced no traumatic events. The average score for PMBS was 65.3 ($SD = 16.78$) for the experienced group and 58.36 ($SD = 15.62$) for the non-experienced group. When a two-tailed t-test was performed at a significance level of 5%, significant differences were observed at $t(5955) = 12.36$, $p < .01$.

[Discussions]

The score of PMBS was significantly higher among those who had experienced traumatic events than among those who had not. This result highlights the importance of attending to the participants' beliefs in prevention and/or treatment of PTSD.

Poster

Theory Development

P1-308

Concept analysis of nurses and nursing students' work values

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Objectives: To theoretically analyze the concept of work values of nurses and nursing students and to develop clearer definitions.

Methods: This study was conducted using the method proposed by Walker & Avant. Literature review aimed at clarifying the usage of the concept. First, the meaning of work, job and values were confirmed using a dictionary. Next, we identified the relationship among values, beliefs, attitudes, and behavior using major literature in the psychosocial field that have studied values. Subsequently, we investigated the usage of "work values" in prior literature targeted at nurses and nursing students and clarified the definition attribute. Furthermore, antecedents, consequences, and empirical referents of the concept were determined.

Ethics: This study reviewed published literature and paid careful attention to copyright handling.

Results & Discussions: According to the study results, the definition of work values is as follows: "Work values of nurses and nursing students are enduring beliefs about desirable states or results that they want through working. Also, these are enduring beliefs that they consider important for their work; act as principles and standards; and guide their attitudes, judgments and behaviors." In addition, antecedents included basic values that individuals have and an awareness of working, and consequences included attitude towards work, choice of job, choice of place to work, and choice of specialty in nursing. Clearer definitions obtained in this research are expected to help future researchers construct a theory on work values that nurses and nursing students possess.

Poster

Nursing Policy

P1-309

Examination of a proposal of a support program to aim at the balance of nursing work and care of family members by the nurses

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²*Nursing, Shukutoku University College of Nursing and Nutrition, Japan*

[Objectives]

This study aims at clarifying actual situations of balancing between nursing work and care of family members by the nurses and examine support for it.

[Methods]

The first survey was a factual survey by self-administered questionnaire for 924 nurses working in hospitals. The second survey was interviews to nurses having experience in taking care of their family members and analysis by M-GTA, and the third was a factual survey by Internet.

[Ethics]

This study was approved by Ethical Review Board of the university.

[Results]

The number of subjects for the first survey was 598 (response rate 64.7%), and 82 of them, having experience of taking care of their family members (13.7%), were at 40-50's working on shift. Approximately a half of them cared their parent with dementia for diaper exchange and cleaning. In the second survey, 15 nurses were interviewed and the analysis by M-GTA revealed three models [Beginning and incentive for balancing], [Continuation and wavering of balancing] and [Termination of balancing work and care]. For the third survey, 234 nurses with experience in taking care of their family members were registered, "Enhancement of understanding / support by workplace", "Support and cooperation by family", "Diversity working support" were obtained as balance support needs.

[Discussions]

Therefore, most of them do not quit the job though feel difficulty in balancing those, suggesting needs for supporting stable well-being. We proposed a tentative plan for balance support program aiming at positive spillover of work and care.

Poster**Others****P1-310****Development of a Family Functioning Scale for Single-parent Families (FFSS) and Evaluation of its Reliability and Validity**○Yuko Hiratani¹, Sayaka Kotera²¹*Department of Child Health Care Nursing, Graduate School of Nursing, Osaka City University, Japan*²*Division of Global health, Department of Public Health, Graduate School of Health Sciences, Kobe University, Japan*

It is pointed out that there is a difference of family functioning between single-parent families and two-parent families. However, scales of family functioning for single-parent families have not been developed yet. The aim of this study was to develop a Family Functioning Scale for Single-parent Families (FFSS) and to evaluate its effectiveness.

Items were selected through the previous studies on family functioning and literature reviews about a single-parent family, and the preliminary FFSS was constructed. This instrument was a self-administered questionnaire with 21 items. Face validity was confirmed by four researchers. For the preparation, a questionnaire survey was conducted for single-parent families in one nursery school. After we revised this FFSS, internet survey was conducted to evaluate the reliability and validity. The participants were 206 single-parent families with their children enrolled in nurseries and 183 of them provided valid responses.

We obtained approval from the university's Institutional Review Board.

Spearman's correlation coefficient between FFSS and Feetham's family functioning scale with higher scores reflecting low family functioning was -0.36, which supported concurrent validity. Having examined the construct validity, two factors were obtained from factor analysis. Cronbach's alpha coefficient was 0.93, showing high internal consistency reliability. Spearman's correlation coefficient was 0.79 at about 2-week interval, provided test-retest reliability.

It was indicated that the FFSS is a reliable and valid instrument to assess family functioning of single-parent families. The FFSS will contribute to family support and further research for single-parent families.

P1-311**Development of transition conditions self-assessment rating scale of Japanese Mid-career nurses based on Meleis transitions Theory**○Yuko Takakuwa¹, Kiyoko Aoki²¹*Faculty of Health Science and Nursing, Juntendo University, Japan*²*Graduate School of Health Care and Nursing, Juntendo University, Japan*

[Objectives]This study aims to develop a transition conditions self-assessment rating scale:TCSAS for Mid-career nurses, and examine the reliability and validity using the results from a phase 1 study that reported the transition conditions for mid-career nurses.

[Methods]First,we calculated the descriptive statistics of the TCSAS and demographics, and performed analyses of the 25 items, Item-Total correlation, and correlations between items, to determine items to be deleted. Second, we examined the construct validity of the scale. Third, we examined the reliability of the scale using 27 items from the Adult Career Maturity Scales:ACMS to examine the concurrent validity of the original scale.

[Ethics]This study was approved by the ethics review committee of the institution the author belongs to.

[Results][Discussions]We distributed the TCSAS to 791 ward nurses of 9 facilities in Japan, collected 319 responses, and analyzed 300. The TCSAS is comprised of 23 items covering 6 factors: "confirmation of the significance of working as a nurse and efforts made to develop a nursing career," "shifting or leaving workplaces expecting improvement," "appreciation by the organization, superiors, and others," "coping methods taken depending on changes in roles in workplace and family," "choice of workplace that advances career development," and "adjustments of work style in consideration of life stage", covering 60.1% of the survey. The findings suggest that the TCSAS is effective for self-assessments of the transition conditions of Mid-career nurses.

Poster

Others

P1-312 A Survey on Nursing Aid for Children that Facilitates Psychological Recovery from Invasive Treatment in Pediatric and Mixed Wards

○Tomoko Imanishi, Kazuko Ichie

Faculty of Health and Medical Sciences, Kyoto Univiversity of Advanced Science, Japan

[Objectives] This study aimed to reveal nursing practice for the psychological recovery of children who experience invasive treatment in pediatric and mixed wards.

[Methods] Anonymous self-administered questionnaires were distributed to 1578 nurses in pediatric departments nationwide. The questionnaire included demographic items and 64 questions on the degree of nursing aid that facilitates the psychological recovery of children from invasive treatment. Data were analyzed using SPSS (Ver. 25).

[Ethics] This study was approved by the ethics committee of the authors' university. Returning a completed survey form was taken as consent to participate in the study.

[Results] In total, 634 questionnaires (Collection rate, 40.2%) were returned and 573 valid responses(effective response rate, 90.4%) were analyzed. There were 260 pediatric ward nurses(45.4%) and 313 mixed ward nurses(54.6%). 81.6% of pediatric ward nurses and 78.6% of mixed ward nurses provided nursing support for psychological recovery after invasive treatment. 28 items were practiced by over 90% of pediatric ward nurses, and three items were practiced by 100%. In the mixed ward, 25 items were practiced by over 90% of nurses, but no items were practiced by 100% of nurses; these 25 items were also included in the 28 items practiced by pediatric ward nurses.

[Discussions] We believe that pediatric ward nurses provide care that is more appropriate for children than nurses in mixed wards. In mixed wards, it was suggested that items with low levels of practice need to be considered for nursing assistance methods.

P1-313 Difficulties That Nursing Ethics Educators Faced and Educational Challenges in Japanese Nursing Bachelor's Degree Programs

○Mari Tsuruwaka

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[Objectives] While nursing ethics is becoming accepted as an independent subject in Japanese universities, there are many issues concerning the education. The purpose of this study was to anew investigate nursing ethics programs in university, to reveal

the difficulties that nursing ethics educators in Japanese nursing bachelor's degree programs faced and educational challenges,

and to examine the best form of nursing ethics education.

[Methods] A self-administered questionnaire survey to nursing ethics educators in 235 nursing bachelor's degree programs in Japan was conducted. The questionnaire mainly asked about an overview of nursing ethics programs, the difficulties educators experienced and educational challenges, and the association of ethics education with nursing practice.

[Ethics] This study was approved by the Institutional Review Board of St. Luke's International University (No. 14-071).

[Results] The return rate of the questionnaire was 29.7%. Methods of group discussion based on case studies were common, and

patients' rights and analytical approaches to ethical issues were common topics. Many of the subjects faced difficulties in nursing

ethics education: curriculum, students' circumstances, students' readiness and abilities, the characteristics of ethical problems, and educators' abilities. The educators suggested that students should continue to learn nursing ethics over a few school years

according to a curriculum built in a step-by-step, systematic manner.

[Discussions] This survey indicated that discussions regarding what educational goals in what school year should be offered to students were needed at each university. Cooperation between educators and practical training instructors on the contents of education, and a clear definition of expertise necessary for teaching nursing ethics were challenges to be accomplished as well.

Poster

Others

P1-314

HOPE of lung cancer patients on chemotherapy

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²Graduate School of Health Sciences, Okayama University, Japan

³Graduate School of Nursing, Tokushima Bunri University, Japan

⁴Kawasaki Medical School Hospital, Japan

[Objectives] To reveal HOPE of lung cancer patients who are on chemotherapy.

[Methods] Data were collected by semi-structured interviews with 13 male lung cancer patients on chemotherapy and were analyzed with qualitative inductive method.

[Ethics] Ethical considerations were explained in written and verbal forms and received approval by the ethics boards of both Kawasaki University of Medical Welfare and the research facility.

[Definition of "HOPE"] HOPE is defined as psychological and sociological power that enables one to live positively in an extremely difficult condition.

[Results] The subjects were 65.8 years old on average with the average period of treatment being 25.2 months. The average HHI score was 34.3. Their HOPE was categorized into seven groups; "thinking about the meaning of life", "living the present moment positively", "going on their everyday living", "accepting cancer", "seeking help", "protecting family" and "continuing the therapy"

[Discussions] The subjects tried to accept cancer by "going with the flow" by not focusing on the illness. They also lived the present moment positively by, for example, watching their grandchildren to grow. In addition, they simply went on their everyday living. They continued the therapy by actively participating in it. In order to continue the treatment, they also sought help from others. Furthermore, they were protecting their family by "trying not to make their loved ones sad". They also thought about the meaning of life and willingly shared their experiences with other cancer patients or medical students. These are the seven groups of HOPE the research subjects had.

P1-315

Grief Care: Content Analysis of "Farewell Letters" (2)

○Sachie Miyabayashi, Yoko Kudo

Dept. of Nursing, Tohoku Fukushi University, Japan

As part of the Grief Care Advisor program, elderly participants were encouraged to consider the meaning of life and death. Subsequently, they were required to write a Farewell Letter to a loved one.

Objectives:

Through content analysis of these farewell letters, it should be possible to confirm participants' understanding of the significance of life, family, regrets at impending death etc. A secondary aim is comparison with a previous study (2016, Miyabayashi).

Methods:

Participants were asked to imagine their impending death and write a farewell letter to a significant person in their lives in 10 minutes.

Subjects:

n=11 (6.6% of 166 total participants). Average age: 65.8 years. Sex: male n=1 (9%), Women n= 9(82%) unknown n=1 (9%)

Ethics:

Participants' approval for research use obtained.

Results:

Meaning code: 64 and 7 Categories – "Wishes (22)", "Gratitude (13)", "Feelings up Until Now (11)", "Reminiscences (6)", "Keep eyes on (5)", "Apologies (4)" plus other code. The "Wishes" and "Gratitude" messages in particular varied and were described in detail.

Discussion :

All letters expressed deep feelings towards loved ones. Such content can be of deep significance in alleviating grief and one's life for a long time for the bereaved family members. "Reminiscences" messages were added for comparison with the previous study on adult subjects (average age: 42 years). In this case of elderly, people doing not nostalgia but evaluation their own whole life in a within 10-15 minutes.

Poster

Others

P1-316 End of Life Discussion with family among healthy elderly people

○Yukiko Tatsumi, Harue Arao

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[Objectives] This study aimed to clarify the actual situation of end-of-life discussion in the family among healthy elderly people.

[Methods] Among elderly people who participated in a bowling tournament sponsored by A city, explanatory documents and survey forms (including: participant attributes and questions such as "Have you ever discussed the following 15 topics with your family in preparation for end-of-life?" and whether they were talking enough with their family about it) were distributed. The data was analyzed by descriptive statistics.

[Ethics] The study was conducted with the approval of the Osaka University Hospital Ethics Review Board.

[Results] Of 606 surveys distributed, 442 were collected, of which 283 were valid responses (64% valid response rate). The average age was 73.5 years (SD=5.0: range=60-93), and there were 161 men, 120 women, and 2 non-respondents. Between 60.6% and 81.9% answered that they did not discuss the topic with the family. There was a tendency to not discuss ideas and values about life, such as the meaning of life and values about life after death.

[Discussions] It may be more unmanageable to talk about philosophy than real problems. But it may be inferred that it is difficult to arrive at practical solutions without discussing philosophical matters such as meaning and values of their life.

P1-317 Nurses' experiences on support for individuals with cognitive impairment in amyotrophic lateral sclerosis

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²Nursing Department, Gunma University Hospital, Japan

³Nursing Department, Mihara Memorial Hospital, Japan

[Objectives]

Amyotrophic lateral sclerosis(ALS) is a neuro-degenerative disease with no known cause. Individuals with cognitive impairment in addition to ALS have recently been increasing. The purpose of this study was to describe nurses' experiences in order to enhance the quality of care for ALS patients with cognitive impairment.

[Methods]

The study was a qualitative-descriptive study. The subjects were 172 nurses. We conducted the postal survey with anonymous self-administered questionnaire.

[Ethics]

This study was approved by the ethical committee for medical and health research involving human subjects of the first author's affiliation.

[Results]

We analyzed 117 questionnaires (Response rate:68.0%). 59 nurses (50.4%) experienced to support more than 11 ALS patients. The number of nurses who have known coexistence of cognitive impairments with ALS was 71 (60.7%). We found four [categories] about their experiences. The nurses experience [Difficulties to support ALS patients regarding understanding disease and their conditions], [Increasing difficulties in communication due to ALS and cognitive impairment combined], and [Increasing difficulties to provide daily care due to ALS and cognitive impairment combined]. On the other hand, a few of them felt [Confidence to manage cognitive impairment and relief from necessary to face the patient's psychological patients to accept ALS].

[Discussion]

It is clarified that nurses have felt an advantage that the patients are relieved from psychological pain thanks to cognitive impairment. Health care professions are aware of this overlap symptoms and develop the skills to support effectively to these patients and their families.

Poster**Others****P1-318****The Draw of Nursing Jobs Relative to Other Employment Types**

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⁴Department of Epidemiology, Nara Medical University School of Medicine, Japan

⁵Department of Nursing, Kyoto University Hospital, Japan

[Objectives] This study investigated the draw of the nursing profession for continuing to work in comparison with other types of employment.

[Methods] We conducted a semi-structured interview to determine what reasons nurses had for continuing to work. Nurses who participated in the study had more than 4 years' experience in their field, with other work experience as well. The recorded interviews were transcribed verbatim and analyzed using qualitative descriptive content analysis.

[Ethics] The Research Ethics Committee of Osaka University approved this study. The participants were informed in detail about consent, benefits and harm, their right to withdraw, and the data protections used. All participants signed a consent form. All data were anonymized and kept secure safely on a computer and a USB flash drive, which were both password protected.

[Results] The participants were 15 nurses. In all, 13 sub-categories and the following six categories were extracted: strength of the economic infrastructure, ease of job-hunting, variety of work shifts available to suit lifestyle, variety in the workplace environment and patients each day, the level of discretion in decision-making in their jobs, and profundity of the nursing profession.

[Discussions] The largest draws of the nursing profession relative to other employment opportunities were the strength of the economic infrastructure and the engaging nature of their work. This engaging nature could act as an internal incentive for continued work in the field of nursing. This study suggests that it is especially important for nurses to realize the various draws of nursing for continued work.

P1-319**Attitudes among Mid-career Nursing Professionals towards Role Transition to Middle Management: Investigating Methods to Support Career Development in Middle Management**

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¹Ina Central Hospital, Medical Safety Management Office, Japan

²Ina Central Hospital, Nursing Department, Japan

³Nagano College of Nursing, Department of Nursing Administration and Nursing Education, Japan

[Objective]

The present study aimed to determine attitudes among mid-career nursing professionals towards role transitions to middle management, in order to gain insight into necessary ways to support this process.

[Methods]

Semi-structured interviews were conducted with 20 mid-career nursing professionals who had at least 7 years of experience in the profession and who were working in Hospital A.

[Ethics]

An interview was administered to nurse who consented to participate in the study. This study was conducted with the approval of the institutional ethics committee.

[Results]

Fifty-six codes were extracted related to factors promoting role transitions, which were grouped into 20 subcategories and 9 categories. One hundred and ninety-four codes were extracted related to factors impeding role transitions, which were grouped into 30 subcategories and 7 categories. Fifty-four codes were extracted related to factors of necessary support for role transition, which were grouped into 14 subcategories and 6 categories.

[Discussion]

In relation to management roles, mid-career nursing professionals feel stressed about task performance and workplace relationships, and vaguely expected that they would require hard work. Given that we were able to categorize attitudinal factors separately based on whether they supported or impeded role transition, we recommend an investigation into development support methods which could help prospective middle managers gain the required skills in a stepwise manner in accordance with these patterns.

Poster

Others

P1-320

The Relationship between Spiritual Well-being and Quality of Life in Patients with Small Cell Lung Cancer Undergoing Treatment: The Mediating Role of Symptom Experience

OMyung Kyung Lee

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[Objectives]

The current study investigated whether spiritual wellbeing was associated with quality of life (QOL) and aimed to identify possible multistep indirect pathways of the association between spiritual wellbeing and QOL through experience of symptoms such as appetite loss, dyspnea, pain, and fatigue in patients with non-small cell lung cancer (NSCLC) undergoing treatment.

[Methods]

A consecutive sample of 132 patients having diagnosed with NSCLC undergoing chemotherapy, radiotherapy, or concurrent chemoradiation therapy was recruited from the national university hospital from June 2017 to January 2018 in Daegu. Symptom experience using symptom scales of the European Organization for Research and Treatment of Cancer Lung Cancer (EORTC QLQ-C30), spiritual well-being using the functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (Facit-Sp12), and global QOL using the EORTC QLQ-C30 were collected through self-reported survey. Data were statistically analyzed using serial multiple mediation analysis.

[Ethics]

The protocols of this study were approved by institutional Review Boards.

[Results]

Study findings showed that high spiritual wellbeing directly led to high QOL among patients with NSCLC undergoing treatment, and low spiritual wellbeing-induced appetite loss, dyspnea, pain, and fatigue may sequentially negatively affect QOL. Thus, spiritual wellbeing is a possible fundamental cause of deterioration of QOL in patients with NSCLC undergoing treatment. Therefore, spiritual wellbeing assessment and its management should be prioritized when caring for patients with NSCLC undergoing treatment, together with assessing symptom experiences.

[Discussions]

Clinical professionals should make efforts to assess spiritual wellbeing in order to improve symptom experience and QOL in patients with NSCLC undergoing treatment.

P1-321

Perspectives on Nursing Care of the Do-Not-Attempt-Resuscitation (DNAR) Patients: A Survey of Patients in Emergency and Critical Care Center in Japan

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[Objectives] The purpose of this study is to investigate the demographic data of DNAR patients admitted to emergency and critical care center, and to consider advanced nursing care for DNAR patients and their family in the emergency and critical care center.

[Methods] This study is a single-center retrospective study of care provided in emergency and critical care center. Medical record of patients who were given the end-of-life care in the center between April, 2018 and March, 2019 are identified. Demographic data collected are as follows: number of admitted patients, names of diagnosis, department in charge, presence of DNAR documentation, and average length of stay in the center.

[Ethics] This study was approved by the IRB of Hiroshima Bunka Gakuen University.

[Results] A total of 1540 patients were admitted to the emergency and critical care center during the one year period in FY2018. Among those, 71 patients received end-of-life care in the center, and 59 patients out of 71patients had DNAR orders. The average length of stay of DNAR patients in the center was about one day.

[Discussions] Even in the place where priority is given to vigorous treatment, there are patients who need end-of-life care in emergency and critical care center. Since the average length of stay of DNAR patients is one day, thus advanced nursing care is required, which is very challenging to nurses. Therefore, it is suggested that nurses in emergency and critical care centers are required to be specialists not only in emergency and critical care but also in end-of-life care.

Poster**Others****P1-322****Research on the effects of the touch technique using for self-care**

○Hiroko Kondo, Mika Nakamura, Yuka Kondo

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[Objectives] The purpose of this research was to clarify the effects of the touch technique that can be used for self-care.

[Methods] Thirty volunteer nursing students conducted the self-chakra connection, a technique of Healing Touch. The effects were measured by the heart rate RR continuously during touch and by the physical and mental condition evaluation using Likert scale of seven items. From the heart rate RR, the sympathetic nervous system index LF/HF and the parasympathetic nervous system index unHF were calculated. The data were divided into 2 groups by median value of LF/HF, and the physical and mental condition during touch was compared.

[Ethics] This study was conducted with the approval of the Gunma University Ethics Review Board.

[Results] The level of LF/HF was inversely correlated with the level of unHF($r=-0.86$, $p<0.001$). In the group where LF/HF was low, compared with the group with the higher level of LF/HF, the percentage of those who felt the warmth of the hand, sleepiness, and the concentration on touch were all high. However, there was no significant difference.

[Discussions] It is considered that the relaxation reaction was obtained by the conduct of the touch technique in the group with lower LF/HF. It was predicted that it was necessary to concentrate on touch to obtain relaxation reaction, but this result did not reach to clarify it.

P1-323**Relationship between visiting nurses' needs and difficulties in nursing care for patients with mental health issues**○Junko Yamamoto¹, Junko Gora², Hideko Ishi³¹Faculty Global Nursing, otemae university, Japan²Faculty of Nursing, Suzuka University of Medical Science, Japan³Faculty of Nursing, Gifu University of Health Science, Japan

[Objectives]

This study aimed to clarify relationships between visiting nurses' needs and difficulties in care for patients with mental health issues

[Methods]

Visiting nurses ($n=609$) completed questionnaires about difficulties during care, which were categorized into "anxiousness", "lack of support for nurses", "family", and "approaching patients". Nurses' needs were: (1) basic nursing knowledge, skills, and attitude,(2)conversational skills,(3)ethical practices, (4) knowledge of healthcare-related law, and (5) counseling skills. Relevant factors were extracted through multiple regression analysis, with needs items as dependent variables and total score of "difficulty during care" as the independent variable.

[Ethics]

Authors provided written explanation about the study and accepted the returned survey as consent. The university ethical committee approved this study.

[Results]

Subjects' were male 5.4% and female 94.6% with 7.62 ± 6.22 years of experience. Cronbach's alpha=0.94 showed internal consistency for the questions. Split-half correlation coefficient=.92($p<.01$) showed reliability. Correlation coefficient=.28($p=.01$) suggested validity between "difficulty during care" and "needs". Results showed (1) correlated with "lack of support" ($\beta =-.13$, $p=.02$), and (2) with "anxiousness" ($\beta =-.13$, $p=.009$). Family" correlated significantly with both (3) and (4) ($\beta =-.14$, $p=.009$ and $\beta =.11$, $p=.043$, respectively). (5) also significantly correlated with "anxiousness"($\beta =.96$, $p=.05$) as well as "family"($\beta =.10$, $p=.043$).

[Discussions]

Findings suggested that visiting nurses need counseling skills and knowledge of health-care related laws in dealing with patients with mental health issues. They often feel anxious and difficulties in deciding how to approach the patients and family. Therefore, providing support for nurses is necessary.

Poster

Others

P1-324

Verifying the Japanese version of pediatric delirium and withdrawal syndrome assessment scale: SOS-PD and the high accuracy of family's assessment of pediatric delirium

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[Objectives]

Promotion of family centered care (FCC) in pediatric intensive care units (PICU) has been advocated but not achieved due to a lack of emphasis on family presence. Recently, detecting pediatric delirium (PD) has been recognized as important but remains difficult for frontline nurses. A previous assessment scale, the SOS-PD (Sophia Observation Withdrawal Symptoms-Pediatric Delirium scale) was therefore translated into Japanese and verified. Additionally, the PD detection accuracy between researcher nurses and parents was compared.

[Methods]

We enrolled PICU patients less than 20 years old from October 2018 to July 2019. Pediatric delirium was simultaneously evaluated by a pediatric intensivist and researchers. Psychiatrists then verified these findings against DSM-5 criteria. We also verified the contents of family assessments of pediatric delirium.

[Ethics]

The Institutional Review Board of the University of Tsukuba Affiliated Hospital approved this study.

[Results]

We made a total of 56 independent assessments with an average age of 12 (± 16) weeks. Overall, the Japanese SOS-PD version showed high sensitivity (0.90), specificity (0.89), and high reliability within the researcher assessments ($\kappa = 0.85$). Family assessments of pediatric delirium also showed high sensitivity (0.90) and specificity (0.89).

[Discussions]

We confirmed the Japanese SOS-PD version as having high validity and reliability. Also, parents easily detect PD without assessment tools. This indicates a need for family presence in PICU to further assist nurse in the accurate diagnosis of PD.

P1-325

Audiovisual Educational Intervention on Cancer for Children: A Systematic Review

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[Objectives]

Audiovisual materials for children have been widely used for cancer education, however, the effects of the materials remain unclear. The objectives of this study are to clarify the types of audiovisual interventions used and the effects of audiovisual educational materials for children.

[Methods]

We searched PubMed, EMBASE, CENTRAL, PsycINFO, and CINAHL on 3 September 2018. Randomized control studies and quasi-experimental studies were included if they evaluated the effects of audiovisual material on the cancer-related phenomenon. The studies were evaluated using a Grade of Recommendation, Assessment, Development, and Evaluation.

[Results]

From the identified 5,367 studies we included four reports based on two trials. One trial found that audiovisual educational intervention increased knowledge and self-efficacy.

[Discussions]

Audio-visual interventions might increase knowledge and self-efficacy, but there were no meaningful overall conclusions. Further trials are needed to assess educational interventions used in pediatric cancer treatment. Healthcare professionals should consider whether the tools and materials they are currently using to communicate cancer-related information are sufficient and understandable for children with cancer.

Poster**Others****P1-326****Difficulties and problems faced by socially withdrawn middle-aged people and their parents living together**OKyoko Okamoto¹, Miharu Matsuura², Chieko Kamiyama³¹*Nursing department, Tenri Health Care University, Japan*²*Faculty of Integrated Human Studies life Department of Psychology, Sanyo Gakuen University, Japan*³*Faculty of Nursing, Kansai Medical University, Japan***[Objectives]**

"The 8050 problem" refers to a severe problem in contemporary Japan of people in their 50s that have not become independent for various reasons, living together with their parents who are in their 80s. Interviews were conducted with such parents to investigate their difficulties and problems.

[Methods]

Semi-structured interviews were conducted with parents (N=20) living with their children diagnosed as having mental disorders, as well as parents (N=16) living with their middle-aged *hikikomori* children, who had not contacted medical services. The results were analyzed qualitatively.

[Ethics]

This study was conducted after receiving ethical approval of the author's affiliated institution.

[Results]

Eleven categories were extracted from responses of parents with children having mental disorders. These included "it is financially difficult to live," among others. On the other hand, 17 categories were extracted from the responses of parents of *hikikomori* children, who had not used the medical services. These included, "I want to rely on the medical services, but I cannot trust them," among others. Moreover, eight categories were identified as common to both types of parents including, "all the family members are ill," among others. It was suggested that elderly parents and their children live in a condition in which the symptoms become rigid, the whole family is ill, and have financial difficulties.

[Discussions]

Hikikomori is perceived negatively by Japanese society, which might prolong the isolation of parents and children, and make it more difficult to intervention.

P1-327**Validation of the Effects of a Remote Nursing System for Total Hip Arthroplasty Patients**Akane Hashiya¹, Masumi Azuma², Haruhiko Nishimura³¹*Osaka University of Education, Japan*²*Department of Nursing, Kobe Women's University, Japan*³*Graduate School of Applied Informatics, University of Hyogo, Japan***[Objectives]**

The objective of this study was to verify the effects of intervention using a remote nursing system for patients who underwent total hip arthroplasty (THA).

[Methods]

A tablet computer was lent to patients who underwent THA, and patients were asked to browse the system freely at home. To verify the effects, the MOS Short-Form 36-Item Health questionnaire (SF-36) and Japanese Orthopaedic Association Hip-Disease Evaluation Questionnaire (JHEQ) were administered at the time of discharge and at Month 3 thereafter. The results of these surveys were analyzed and results compared. In addition, at Month 3 after discharge, a survey of the system's usefulness using an evaluation table prepared by the researchers was conducted.

[Ethics]

This study was approved by the Institutional Review Board of the Graduate School of Applied Informatics at the University of Hyogo.

[Results]

There were 3 study participants, all of whom were females in their 60s to 70s. The results of both the SF-36 and JHEQ were higher for all items at Month 3 after discharge than the time of discharge. The results of the survey on usefulness were responses of "very useful" and "useful" for the system content of "information for daily life" and "for the family."

[Discussions] The higher results for SF-36 and JHEQ items at Month 3 after discharge suggest that proper activities and behaviors were being implemented and indicated in the system, demonstrating improvements in quality-of-life. In the future, validation of the effectiveness of the system will be continued.

Poster

Others

P1-328

Results of Movie-making and Movie-viewing Self-Learning Methods During Basic Nursing Skills Training of Students Aiming to be School Nurses

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Purpose

The objective of this study was to clarify the respective impressions regarding movie-making and movie-viewing exercises utilized as self-learning methods in basic nursing skills training of students aiming to be school nurses.

Methods

This study was conducted as a qualitative study using a content analysis approach. Forty-seven 2nd-year students in training courses for school nurses at A University were divided into a movie-making and movie-viewing group and were asked to describe their impressions after completing exercises. For the analyses, content from written impressions regarding the movie-making and movie-viewing exercises were extracted, common themes were summarized, and codes, subcategories, and categories were determined.

Ethics

This study was conducted with the approval of the Institutional Review Board of Osaka University of Education.

Results

There were 47 individuals included, 19 in the movie-making and 28 in the movie-viewing group. Impressions of the movie-making group were extracted into 4 categories: 1) improvement areas become clearer, 2) leads to motivation for self-learning, 3) can be used for review, and 4) leads to improved motivation. Impressions of the movie-viewing group were extracted into 5 categories: 1) easy to visualize, 2) useful for self-learning, 3) lead to a feeling of understanding the topic, 4) useful for identifying self-improvement areas, and 5) able to understand the need for self-learning.

Discussions

The results indicate a necessity to understand the advantages and disadvantages associated with either movie-making or movie-viewing upon utilizing these methods.

P1-329

Moderating Effect of Help-Seeking Preferences on Mental Health among older adults living in a rural area

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Objectives

Attitudes toward seeking help from others when in need is considered to be a significant factor of mental health. This study investigated the moderating effect of help-seeking preferences on the association of psychological distress and mental health in community-dwelling older adults.

Methods

This cross-sectional study included 1,182 randomly selected older adults living in a rural area of Japan. Data on psychological distress, help-seeking preference, and mental health were collected with self-administered questionnaires. The association of psychological distress, help-seeking preference, and mental health and the interaction of psychological distress and help-seeking preference adjusting for socio-demographic characteristics were separately analyzed in men and women by multiple regression analysis. Simple slope analysis was used to test the interaction. Data were analyzed using R version 3.5.3. The study was approved by the local Ethics Committees.

Results

Questionnaires were returned by 731 participants (61.8%); 435 were included in the analysis, 51.4% from women(mean age 73.86) and 48.5% from men (mean age 72.6). The interaction of psychological distress and help-seeking preference was significant only in women. The negative slope of psychological distress and mental health was to at lower levels of help-seeking preference than at higher levels. The negative effect of psychological distress on mental health was also significant in women but not in men.

Discussion

For women only, more preference for seeking help could buffer the deterioration of mental health caused by psychological distress. Result suggests that interventions reduce psychological barriers to help-seeking may facilitate help-seeking behaviors and improve mental health in older women.

Poster**Others****P1-330****Evaluation of an ethics education program to enforce moral efficacy among nurses in acute hospitals**

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[Objectives] Purpose of this research was to evaluate the influence of an ethical education program on nurses' moral-efficacy.

[Methods] The program was carried out using action research methodology, and mainly consisted of Bandura's social cognitive theory to enforce moral efficacy. The plan was to recruit about 5 nurses including nurse managers as participants. Conversations at ethics consultation meetings held from November 2017 to June 2018 were recorded and analyzed qualitatively.

[Ethics] This study was approved by the ethics review committee at the author's institution.

[Results] Three nurses participated. First, eight categories of moral dilemmas and conflicts, including "Concern that the patient's will/wishes are ignored," and 21 subcategories were identified. Second, eight categories were depicted as of positive outcomes after trying to solve moral dilemmas and conflicts, such as "Gaining moral courage to cope with patients' will/wishes," and, 23 subcategories were identified during this program.

[Discussions] The results of this research indicated that participants gain confidence after experiencing ethical trials. Therefore, the results suggested that our ethics education program influence the moral efficacy of participating nurses.

P1-331**Experience of families visiting patients immediately after the operation**

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²Department of Health sciences, Kyushu University, Japan

[Objectives]

This study aims to clarify the experiences of the families immediately after the operation.

[Methods]

Eight families of patients who had undergone surgery participated. We observed the families visiting the patients immediately after the operation. After the observation, we conducted semi-structured interviews regarding at the time of the visit. Data were qualitatively analyzed.

[Ethics]

This study was approved by the Ethical Review Board of the institutions the authors belong to and that of the research institution which is the field of this study.

[Results]

Five categories were extracted from the postoperative experiences of the families of the postoperative patients. The families were trying to [understand the physical conditions of the patients] from the appearance and talk with the patients, and based on their experiences. The families felt a [tentative relief] with the surgery successfully completed. The families were [taking care of patients as family] by interacting with and caring about the patients, understanding their complaints. The families had [hope and expectation for the care provided by nurses], but also felt [anxiety] about the pain and influence of anesthesia, and changes in the waveform of the electrocardiogram monitor.

[Discussions]

The families had [hopes and expectations for the care provided by nurses], but also felt [anxiety]. In postoperative nursing care for patients and their families, nurses need to evaluate the conditions immediately after the surgery, provide necessary care, pay attention to the sensitive feelings of the family, and provide information that they want including the treatment schedule.

P1-332

Effects of a Walking Program as Physical Therapy for Individuals Experiencing Urinary Incontinence after Pregnancy or Childbirth

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Purpose: To clarify whether a 16-week postpartum walking program as physical therapy for individuals experiencing urinary incontinence after pregnancy or childbirth improves urinary incontinence and could be used in preventive care.

Methods: Seventeen women who experienced urinary incontinence between the first trimester of pregnancy and 1 month postpartum and who gave consent were randomly allocated to walking or no walking groups. Participants followed the walking program between 3 and 6 months postpartum and urinary incontinence symptoms were evaluated (using the ICIQ-SF questionnaire, Japanese version). SPSS ver.24 was used for statistical analysis, with significance set at 5%. The research was approved by the A University Medical School ethics committee.

Results: Age: 26–37 years (31.9 ± 3.1); height: 146–168 cm (157 ± 6.2); BMI: 18.0–24.4 (22.1 ± 1.9); parity: 4 primipara (23.5%), 13 multipara (76.5%); delivery: 14 vaginal (82.4%), 3 C-section (17.6%). Urinary incontinence started during pregnancy in 14 participants and after birth in three participants. No statistically significant difference was observed between walking ($n = 7$) and no walking ($n = 10$) groups ($p = 0.59$). However, a comparison of mean ICIQ-SF scores at 1 month and 6 months after birth showed that scores decreased in the walking group and increased in the no walking group. Furthermore, urinary incontinence reoccurred in three participants in the no walking group.

Conclusion: No statistically significant difference was observed between walking and urinary incontinence, but there was a tendency towards reduced urinary incontinence in the walking group. We speculate that walking may improve urinary incontinence.

Interventions of supportive care for women with breast cancer: A literature review

P1-333

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[Objectives]

Supportive care is considered an important service for women with breast cancer during treatment and long-term survival, especially in improving their quality of life. A growing number of studies have been published in the past decade exploring ways to support breast cancer survivors. This study aims to review current studies about interventions of supportive care in order to provide a reference for future practice.

[Methods]

We searched in PubMed and CINAHL databases and targeted English literature published from January 2009 to January 2019 using the keywords "breast cancer", "supportive care" and "intervention". Additional papers were included from reference lists. Literature review, studies without results, and if supportive care is not as intervention were excluded.

[Results]

Nine papers were included. Six were randomized controlled trials. Five studies concentrated on the early stages (0- III) of breast cancer; Five interventions were implemented by nurses and oncologists; and most interventions were conducted during the treatment period and/or within one year after diagnosis. Face-to-face and telephone interventions were the main format of supportive care, and they focused on treatment related information and psychological education. All interventions demonstrated some efficacy in improving patient's quality of life and contributing to better patient outcomes.

[Discussions]

Current literature highlights the effectiveness of supportive care though face-to-face and telephone interventions for breast cancer survivors. However, more studies are needed to assess the cost-effectiveness of these methods and their impact on patients at more advanced stages and beyond the treatment period.

Poster**Others****P1-334****Development of a Family Carer-Recognized Family Resilience Scale for People with Parkinson's Disease (FRS-PD)**OMinako Kawata¹, Taeko Shimazu², Shigeaki Watanuki²¹*Doctoral course graduate, National College of Nursing, Japan, Japan*²*Professor, National College of Nursing, Japan, Japan*

[Objectives] To develop a family carer-recognized Family Resilience Scale for people with Parkinson's Disease (FRS-PD).

[Methods] Based on our preliminary studies and literature review, a draft FRS-PD consisting of 71 items was developed. We distributed questionnaires to all 3,111 members of the eight Parkinson's Disease Associations across Japan that agreed to participate in the study. The survey participants were primary family carers of patients living with Parkinson's disease.

[Ethics] The author's institutional research ethics committee approved this study (No. NCGM-G-002378-01).

[Results] Data from the 640 participants who consented to participate were used for the analysis (effective response rate: 20.6%). Item analysis and exploratory factor analysis identified 38 items comprising 10 factors, which were labeled as follows: "Making meaning of adversity", "Positive outlook", "Flexibility", "Connectedness", "Recruiting extended kin", "Collaboration with patient groups", "Recruiting social support", "Identifying and affirming the limits", "Emotional sharing", and "Collaborative problem solving". The concurrent validity was confirmed. Cronbach's α index was 0.932, and the model fit indices were GFI = 0.860, AGFI = 0.841, CFI = 0.888, and RMSEA = 0.053.

[Discussions] The reliability and validity of the FRS-PD were confirmed. The FRS-PD consisted of items reflecting the family carers' experience with Parkinson's disease patients. As a result, it would be helpful for professionals to understand family resilience and to promote positive feedback to families. The FRS-PD can also be used as an indicator for professionals and family carers to share their goals.

P1-336**Views of Japanese and Korean childcare facilities having no automated external defibrillator (AED) about installation of AED**OMika Shishido¹, Cho Jeongwoo², Kyoko Kubo¹, Mamoru Ayusawa³¹*Hihashigaoka Tachikawa Faculty of Nursing, Tokyo Healthcare University, Japan*²*In-Ae Social Welfare Research Institute, Republic of Korea*³*School of Medicin Pediatrics, Nihon University, Japan*

[Objectives]

This study aimed to clarify how the Japanese and Korean childcare facilities having no automated external defibrillator (AED) thought of installation of the AED.

[Methods]

The questionnaires regarding the installation of the AED were distributed to the childcare facilities located in the Tokyo metropolitan area in Japan and City A in Korea. Survey was conducted from June, 2017 to September, 2018.

[Ethics]

This survey was anonymous. The response to the questionnaire was regarded as the consent to cooperate in this survey. This study was approved by the ethics committee of the institution one author belonged to.

[Results]

The responses were obtained from 280 and 428 childcare facilities respectively from Japan and Korea. Ninety-one Japanese facilities and 308 Korean facilities not equipped with AED were chosen for analysis. The most typical reason for uninstallation of the AED found in both Japanese and Korean facilities was "AED is placed in a nearby facility." Some Korean childcare facilities answered: "we have no idea because AED installation is left to the director's discretion." Both the Japanese and Korean facilities pointed out insufficient training for operation of the AED, hesitation in actually using the AED, and anxiety due to the absence of nurse.

[Discussions]

The Japanese and Korean facilities not equipped with AED were almost the same in situation. We consider any childcare facilities should be ready to protect children's lives in emergency although the childcare system is different between Japan and Korea.

Poster

Others

P1-337

Factors that pediatric nurses consider to promote discovery and cooperation in child abuse

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[Objectives] To articulate what pediatric nurses think to promote detection and cooperation against child abuse and to obtain their suggestions.

[Method] The survey requested to a total of 504 children's hospitals and hospitals holding children's wards with over 300 beds. A pack of a document explaining the purpose of study, a questionnaire, and a reply envelope was sent by mail to 1,634 nurses in 99 hospitals which consented. The questionnaire was collected individually by mail. The KH coder was used to analyze and the text was analyzed by morphological analysis.

[Ethics] Approved by the university ethics committee.

[Results] Among 710 subjects (43.0% collection rate), 52 subjects (3.2% response rate) gave us valid answers. A type of hospitals where the subjects work is general hospital which accounts for 61.5%. Among those, hospitals holding Child Protection Team(CPT): 80.8%; having experiences leading children under maltreatment to CPT: 46.2%; having checklists and assessment sheets: 59.6%; and having manuals and flowcharts: 82.7%. Factors that led to detection and cooperation against child abuse are: "CPT response", "easiness of consultation in a team", "appropriate response in ER", "cooperation with a local community", and "cooperation with MSW".

[Discussion] It was indicated that CPT, ease of consultation within a team, appropriate response in ER, cooperation with MSW as well as a local community are factors that will promote cooperating to find out the child abuse. We think that organizing this environment will lead to early detection and prevention of the child abuse.

P1-338

Development of a Scale for Perceived Difficulty of Pain Management among Visiting Nurses Caring for Community-dwelling Elderly Patients with Moderate to Severe Dementia

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[Objectives] This study sought to develop a measurement scale for perceived difficulty of pain management among visiting nurses caring for community-dwelling elderly patients with moderate to severe dementia.

[Methods] A cross-sectional design was used to collect data between March and April 2019. An initial questionnaire was sent by post to nursing managers at 1037 visiting nursing stations in Japan. Respondents were visiting nurses who had experience with pain management for elderly adults with dementia. The questionnaire was sent again three weeks later to 100 of the original 1037 stations, to collect a retest sample.

[Ethics] The study was approved by the ethics review board at the Tohoku University.

[Results] In total, 1,037 questionnaires were distributed to visiting nurses in the initial survey, of which 230 were returned (response rate: 22.8%). For the re-investigation, 100 were returned 62 (response rate: 62%). Factor analysis yielded a 29-item 4-factor solution: pain management, family education, interdisciplinary collaboration between medical professionals, and collaboration with welfare workers and other professions. The scale's construct validity was well supported. Cronbach's α was 0.92 across domains and ranged from 0.88 to 0.92 for each domain. The intraclass correlation coefficient between the first and second respondents data' was 0.75.

[Discussions] We developed a perceived pain scale with a 29-item 4-factor structure having good internal consistency and stability.

Poster**Others****P1-339 The Current Status of Home Care via Telenursing in Japan: A Comprehensive Review**

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³Faculty of Nursing, Hyogo University, Japan

[Objectives]

The aim of this review is to explore what kind of nursing activities are performed via telenursing in home care in Japan.

[Methods]

We searched IGAKU-CHUOU-ZASSHI web database (The most popular online database of medical articles written in Japanese) to find peer-reviewed studies on telenursing. We used the key-words “ENKAKU-IRYOU” (means “telemedicine” in Japanese) and “KANGO” (means “nursing” in Japanese). We searched for studies done in the past 11 years (from 2007 to 2018).

[Ethics]

We reviewed carefully to reflect the author's intention. Since this study did not target human beings, the approval from the ethical committee was not required.

[Results]

The 33 articles were reviewed. Of these articles, there were 9 articles written about diabetes care and 5 articles written about respiratory disease care. In recent years, articles about heart disease care or cancer care were published.

Several nursing activities were provided via telenursing. Patients monitoring, health education, and health consultation were common telenursing activities in Japan.

Conventionally, the most common devices for telenursing were desktop or laptop PC. However, since 2014, tablet PC or smartphones appeared to be more popular telenursing devices.

[Discussions]

In Japan, the varieties of disease that were given care for via telenursing were limited. The reason is that telenursing in Japan is still developing. However, it is expected that the field of telenursing will increase. Using tablet PC or smartphones will increase as a device for telenursing.

P1-340 Literature review on environmental arrangement of sickbed for adult/elderly patients in association with nursing students

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[Introduction/purpose]

Environmental arrangement is important for patients' comfort/safe recuperation. Nursing students cover the curriculum from basic training to field training. Yet, age gap between students and patients/their family widens with low birthrate and longevity. The generation gap exists all over the world, and it is no exception in Japan. Therefore, a difference in students' life background may generate a difference in maintaining sickbed's comfort/safe environment. We aim to clarify research characteristics and future issues through time course.

[Method]

We read and targeted 22 literatures with Japan Medical Abstracts Society (Web version:2019/06/20) as literature retrieval (“Nursing student”, “Environmental arrangement” or “Sickbed arrangement”).

[Result]

“Training experience of environmental arrangement (10 students/45.5%)” was the largest viewpoint followed by “Environmental arrangement as a viewpoint of medical safety (4 students/18.2%)”. High in experience and achievement level was reported for the training experience. Other studies examined the meaning of infection prevention and environmental arrangement. A relation between student life background/lifestyle and environmental arrangement was published in 1997.

[Discussion]

Environmental arrangement showed a high skill in experience/achievement level. After the research over 20 years ago, it did not report how students consciously dealt with environmental arrangement and their own background as influence factor. Due to the Japanese recent reduced learning/communication ability, a viewpoint of generation gap gets more attention. For younger generation learning nursing care even insufficient life experience and providing assured knowledge, consideration, and comfort/safe nursing care, it is important to enhance students' awareness quality. It is suggested to urgently clarify the current situations in future.

Poster

Others

P1-341

Difference in knowledge and recognition of nursing ethics between nursing administrator and staff nurses in Japan

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[Objectives]The purpose of this study was to grasp the actual situation about the ethical knowledge and recognition of nursing administrator and staff nurse, and the content of ethics education that they would like to give and receive.

[Methods]Data were collected using semi-structured interviews with 29 nurse administrator and 28 staff nurses. The results obtained were content analyzed. In addition, the analysis results were divided into two groups (nursing manager and staff nurses) and compared.

[Ethics]This study was conducted with the approval of the Suzuka Medical University Clinical Research Ethics Review Board.

[Results]There were 21 types of words on nursing ethics stated by the staff, and 12 types of nursing administrator. The recognition of nursing ethics was 6 categories for staff and 8 categories for nursing administrator. There was no clear difference between the two groups regarding the recognition of nursing ethics, and the statements regarding ethical issues were similar. However, the nursing ethics education that they wanted to give and receive was different in the two groups.

[Discussions]In this study, Staff were able to convey specific words of nursing ethics than nursing administrator. There was no big gap between the knowledge and awareness of nursing ethics and the exchange of ethics education between nursing administrator and staff. However, between the two groups, there was a difference in the sense of communication about ethical behavior. In addition, the fact that relationships with other types of work affect nurses' ethical behavior has become clear.

P1-342

Diabetes Distress in Emerging Adults with Youth-onset Type 2 Diabetes

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[Objectives]It has been shown that glycemic control is better among adolescents and emerging adults with lower diabetes distress levels, similarly to the case of adults with diabetes. The objectives of this study was to clarify diabetes distress perceived by emerging adults with youth-onset type 2 diabetes and their methods to manage it.

[Methods]Two emerging adults with youth-onset type 2 diabetes were recruited from a pediatric outpatient clinic. Semi-structured interviews were conducted with them. Their statements were examined by thematic narrative analysis.

[Ethics]This study was approved by the Ethics Review Board of our university.

[Results]HbA1c level of 2 patients were 9.0 and 11.0%. Two core themes were extracted from the narrative data. [I don't want others to know about my disease] reveals that the patients did not tell their friends or even faculty members of the universities they belonged to, if not necessary, about their disease, and perceived prejudice toward those with type 2 diabetes. [I realize that I can't adopt appropriate self-care behaviors] reveals that they skipped blood glucose measurement when feeling their food intakes excessive, and had difficulty in avoiding excessive eating despite their understanding of the risk of complications.

[Discussions]While being supported by their physicians in charge and families, the 2 emerging adults faced diabetes distress alone. Systems for these patients to receive support from specialists such as counselors should be established.

Poster**Others****P1-343****Development of a patient ADL information gathering system using FileMaker that enables multi-occupation collaboration**

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To ensure the quality of rehabilitation medicine, a multi-occupational team has to share patient information. The purpose of this study is to develop a database of the new system necessary for the recovery phase rehabilitation ward. Preliminary survey (survey 1) of the new system was conducted for nursing care staff, nurses, physiotherapists, occupational therapists, and language hearing experts in rehabilitation wards. The new system of Activities of Daily Living (ADL) was developed based on the result of survey 1, and the item of the new system was set as "transfer, movement, toilet transfer, excretion, meal, changing clothes, cleanliness, conditioning, danger recognition, bed environment". Furthermore, it has revealed that the information on "Capability ADL" and "Performance ADL" is important for the patients in the recovery phase rehabilitation. And the actual ADL information acquisition rate before the introduction of the new system has different information acquisition tendency depending on job type. The problem of sharing information required for recovery phase rehabilitation medicine and setting common goals became difficult. Using the new system for a month, this study measured the information acquisition rate of "Capability ADL" of ward staff before and after system introduction. As a result, the information acquisition rate improved compared to before introduction. The ward staff has been able to improve oversupport and to set common goals with rehabilitation staff. It is necessary to analyze the information acquisition rate of multi-occupation, and to improve bias of information acquisition rate by the system of ADL.

P1-344**Relationships between psychosocial work environment and intention to leave in care workers at dementia elderly person group homes in Japan**○Toshiyo Taniguchi¹, Jiro Takaki², Atsuko Wakasaki³¹*Department of Nursing Faculty of Nursing and Nutrition, The University of Shimane, Japan*²*Graduate School of Nursing, Sanyo Gakuen University, Japan*³*School of Nursing, Faculty of Medicine, Shimane University, Japan*

[Objectives] The annual turnover rate of care workers at dementia elderly person group homes (GHs) was 18.1% in Japan. The purpose of this study was to clarify the relationships between psychosocial work environment and intention to leave in care workers at GHs.

[Methods] In a cross-sectional study with care workers of 134 GHs in Japan, 502 care workers answered a self-administered questionnaire on paper completely. Intention to leave was assessed using the six-item scale developed by Tei and Yamazaki. Psychosocial work environment was assessed using the Brief Job Stress Questionnaire. These scales have been reported as reliable and valid. Multiple linear regression analyses were used.

[Ethics] This study has been approved by the Ethics Committee of Okayama Prefectural University (No. 465).

[Results] The subjects were 100 males (19.9%) and 402 females (80.1%). The mean (standard deviation, SD) ages of the males and females were 38.1 (11.3) years and 45.0 (12.4) years, respectively. The mean (SD) years of care experience at GHs were 3.5 (3.1) among the males and 4.7 (3.4) among the females. In males, intention to leave was significantly ($p < 0.05$) negatively associated with job control and intrinsic rewards. In females, intention to leave was associated with physical demands and interpersonal conflict positively and with job control and intrinsic rewards negatively with statistical significance ($p < 0.05$).

[Discussions] Intention to leave was negatively associated with job control and intrinsic rewards in both genders. Moreover, it was positively associated with physical demands and interpersonal conflict in females.

Poster

Others

P1-345

Development of a Paper Version of the Tuberculosis Implicit Association Test (IAT) and its Reliability and Validity

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²School of International Liberal Arts, YOKOHAMA CITY UNIVERSITY, Japan

[Objectives] This study aimed to develop a paper version of the Tuberculosis Implicit Association Test (IAT) and verify its reliability and validity.

[Methods] To evaluate explicit awareness of infections, 96 nursing and 27 psychology students were asked to complete a questionnaire that included a paper version of the Tuberculosis IAT and other existing psychometric scales. Test-retest reliability and discriminant, known-groups, and concurrent validities of the Tuberculosis IAT were then assessed.

[Ethics] This study was approved by Yokohama City University's Human Genome and Gene Research Ethics Committee (Study ID: A180300003).

[Results] Of those who completed the questionnaire, 41 were nursing and 20 psychology students, producing a valid response rate of 42.7% and 74.1%, respectively. The test-retest reliability was confirmed by the intraclass correlation coefficient of 0.679. However, contrary to our hypotheses: for discriminant validity, the IAT scores did not correlate with the social desirability scale score ($r = 0.023, p = 0.861$); for known-groups validity, there was no significant difference in IAT scores between nursing and psychology students ($t = 0.929, p = 0.357$) or among nursing students seeking credit for infectious control certification ($t = -0.220, p = 0.827$), yet there was no significant correlation between their knowledge of tuberculosis and the IAT scores ($r = 0.032, p = 0.845$); and for concurrent validity, no significant correlation was found between the perceived vulnerability to disease scale and IAT scores ($r = 0.190, p = 0.142$).

[Discussion] A paper version of the Tuberculosis IAT was considered to have a certain reliability and validity.

P1-346

Expectations of practice supervisors in a Japanese home care nursing practicum

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[Objectives] In Japan, there are more than 9,000 home visiting nursing stations. Due to the importance of these facilities, nursing students are required to have training at visiting nursing stations. The purpose of this study to clarify what kind of expectations for nursing students the practice supervisors conducting home care nursing practicums have.

[Methods] Semi-structured interviews were used to collect data from ten supervisors working at different home care settings. The data was analyzed qualitatively.

[Ethics] This study was conducted with the approval of the University Ethics Committee.

[Results] Expectations of the practice supervisors for nursing students were categorized following seven: Supervisors hoped to (a) feel the difficulties and the enjoyments of the home-visit nursing work and get to like it, (b) notice that there is no difference about the philosophy of nursing between in medical facilities and in homes, (c) feel the differences and the atmospheres of each persons' daily life, (d) look at the work of visiting nurse carefully, (e) get through the practicum enjoyably, (f) get the perspective of home care and put it to work as ward nurses, and (g) have hope to get to work as a home care nurse in the future.

[Discussions] Practice supervisors conducted the practicum having several expectations for students, it was short period, though. However there were some differences from the aim of study in home care nursing education core curriculum. Therefore it is necessary to consider and share the ideas to be able to perform better practice between the practice supervisors and the teachers.

Poster**Others****P1-347****The Association Between Stress and Mood in Nurses Involved in Palliative Care on General Wards**OAKO Terakado¹, Eisuke Matsushima²¹*Department of Nursing, Kanagawa Dental University Junior College, Japan*²*Section of Liaison Psychiatry and Palliative Medicine, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Japan***[Objective]**

Our objective was to formulate suggestions for stress-relief strategies by focusing on the association between stress and mood in nurses involved in palliative care on general wards.

[Methods]

A cross-sectional questionnaire study was conducted in nurses involved in palliative care on general wards. A scale developed by the author was used to measure stress (Terakado et al., 2012) and its correlation with the Profile of Mood States, which assesses mood, was analyzed.

[Ethics]

The study was approved the Research Ethics Committee of Kanagawa Dental University (No.461).

[Results]

The questionnaire was answered by 214 individuals, 86 of whom submitted valid responses. The items of "Stress linked to differences in ways of thinking about care among team members," "Stress regarding patients' and families' rejection of care," "Stress regarding lack of ability of self or nursing team," and "Stress regarding inadequacy of nursing management systems in the workplace" were positively correlated with tension-anxiety, depression-dejection, anger-hostility, fatigue, and confusion.

[Discussions]

Despite the preparedness in modern hospital environments, the issue of nurses faced with stress while dealing with various changes in their moods has attracted attention. To alleviate stress in nurses involved in palliative care on general wards, the findings of this study suggest, in addition to the maintenance of facilities, the need for education and support to enable nurses to acquire the resilience to control their own mental and physical health, as well as the need for mutually supportive communication skills by having team members express their feelings to each other.

P1-348**Surgical mask dependency in Japanese nurses: relationship with the psychometric variable**ONozomu Takada¹, Shoko Sugiyama¹, Yukari Hara¹, Akiko Ota², Mayumi Hoshi², Hajime Kurosawa¹¹*Tohoku University Graduate School of Medicine, Japan*²*Tohoku University Hospital, Japan*

[Objectives] Nowadays, in Japan, mask dependency has become a social concern. People now commonly wear surgical masks to avoid showing emotions, hide faces if no makeup has been applied, hide due to feeling of inferiority about the face, and so on. This study aims to clarify the relationships between mask dependency and accumulation of fatigue, self-esteem, and job satisfaction among nurses.

[Methods] The subjects were 1,259 nurses at a hospital in Japan's Tohoku region. A questionnaire survey was conducted on the mask dependency scale, accumulation of fatigue, self-esteem, and job satisfaction. Participants' responses were divided into three groups based on their mask dependency score (0: non-dependency; 1-9: mild dependency; 10-20: severe dependency). Each variable's score was compared among the three groups.

[Ethics] This study was approved by the Clinical Research Ethics Committee of the authors' affiliated university.

[Results] Responses collected from 834 participants (66%) were analyzed, and all subjects' mask dependency scores averaged at 3.2 ± 4.2 (median, 1; mode, 0). The non-dependency, mild-dependency, and severe-dependency groups had 387, 354, and 93 participants, respectively. The accumulated fatigue scores were 8.2 ± 5.9 , 10.3 ± 5.8 , and 12.0 ± 6.8 ($p < .001$), respectively, for the three groups. The self-esteem scores were 27.0 ± 5.5 , 25.2 ± 5.3 , and 24.4 ± 5.2 ($p < .001$), respectively, for the three groups. The job satisfaction scores were 12.3 ± 3.9 , 12.1 ± 3.8 , and 12.1 ± 4.0 ($p = .86$), respectively, for the three groups.

[Conclusion] Although mask dependency was associated with increased fatigue and decreased self-esteem, it was not associated with job satisfaction.

Poster

Others

P1-349 Factors that influence leadership of nursing generalists

○Yuka Murata, Kei Sounai

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[Objectives] The purpose of this study was to clarify the factors influencing nursing generalists' leadership.

[Methods] Four hundreds and eight nursing generalists ($M_{age}=41$, $SD_{age}=8.2$, 256 staff nurses, 130 chief nurses) participated the survey that measured nursing generalists' leadership, basic attributes, shared leadership in the ward, work environment, a head nurse's leadership (return rate is 41%).

[Ethics] This research was conducted with approval from the Research Ethics Review Committee of The Graduate School of Integrated Arts and Sciences, Hiroshima University.

[Results] The factor analysis indicated that nursing generalists' leadership had six factors of the competency of assertive communication for problem solving, on-site learning, support for the development of junior nurses, challenges to initiate change, self-control and cooperation, and reflection to leadership. Nursing generalists' leadership was positively correlated with shared leadership in the ward, head nurse's PM-type leadership, good work environment, job satisfaction, and ethical behavior. All of correlations were significant.

[Discussions] Leadership of nursing generalists is seemed to be developed in a work environment in which 1) nursing expertise can be demonstrated, 2) all staff members share leadership, 3) a head nurse's leadership is PM-type. Such the work environment will also bring nursing generalists job satisfaction and ethical behavior.

P1-350 Trends in studies on healthcare transition in Japan and overseas

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[Objectives]

Most children with chronic conditions survive into adulthood thanks to medical advances. Accordingly, healthcare transition, which is their planned movement from child- to adult-centered healthcare systems, has become more important. The aim of this study is to conduct a review of recent trends in studies on healthcare transition in Japan and overseas, and to determine implications for future research.

[Methods]

In March 2019, Ichushi-Web was searched for Japanese studies using text-based searches using the terms "care transition," "child," and "chronic disease." PubMed was searched for English studies published between 2010 and 2019 using the same search terms. We excluded 21 from a total of 77 papers due to duplication, and screened each title and abstract for inclusion. As a result, 34 paper were analyzed.

[Results/Discussions]

Six English papers investigated the transition skills of adolescents with chronic conditions and related factors using assessment tools. However, no Japanese studies were conducted using extensive survey assessment tools. Three Japanese papers reported that half of adolescents with chronic conditions remained in a pediatric setting, and their narratives discussed why they continue to receive medical in a pediatric setting. Our literature review found that Japanese healthcare transition lags behind that of overseas programs. Continuous evaluation is important for a successful transition, and using standardized assessment tools is valid. It is urgently needed that an assessment tool be developed that can be used for adolescents with a wide variety of chronic conditions, and for investigating the conditions and related factors of their care transition in Japan.

Poster**Others****P1-351****Relationship between the sense of achievement in their mother's role and Quality of life for breast cancer patients receiving chemotherapy**

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⁶Department of Nursing, Mie University Hospital, Japan

[Objectives]

Breast cancer has been increasing in women with young children. The aim of this study was to investigate relation between the sense of achievement in their mother's role and Quality of life (QOL) for breast cancer patients receiving chemotherapy.

[Methods]

Patients completed the questionnaires about the sense of achievement in the mother's role that was induced from the previous research and about EORTC QLQ-C30 and QLQ-BR23 to evaluate QOL. EORTC QLQ-C30 test is made up of 30 items under three sub-headings, which are general well-being, functional difficulties and symptom control. EORTC QLQ-BR23 test is made up of 23 items under two headings, functional and symptoms.

[Ethics]

This study was approved by the institutional ethical committee.

[Results]

The samples of this study comprises of 27 breast cancer patients with young children receiving adjuvant chemotherapy. The mean age was 42.2 (SD=6.6) years old. The sense of achievement in the mother's role was positively correlated with EORTC QLQ-C30 of physical score($r=.580$), social score($r=.507$), role score($=.460$) in functional scales and the fatigue score($r=-.482$), the dyspnea score($r=-.482$) in symptoms scale. The sense of achievement in the mother's role was positively correlated with EORTC QLQ-BR23 of arm score($r=.383$) in symptoms scale.

[Discussions]

This study shows that sense of achievement in the mother's role is important to improve QOL. The clinical nurses should understand the physical, social and other factors that affected to individual mother's role and then give the personalized care to improve QOL.

P1-352**Consideration of Reality Monitoring through Metamemory in Patients with Schizophrenia**

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²Faculty of Medicine, University of Tsukuba, Japan

[Objectives]

"Reality monitoring: R.M" is a function to determine own experience memory, and patients with schizophrenia often cause an error (R.M.E.) affected by positive symptoms of schizophrenia. In this study, we tried to consider the characteristics of R.M in patients with schizophrenia from the actual state of "Metamemory" which objectively evaluates one's own memory ability.

[Methods]

This questionnaire survey collected data on age, gender, treatment status, and condition (Positive and Negative Syndrome Scale: PANSS) from inpatients with schizophrenia. Metamemory evaluated using J-MIA-44. J-MIA-44 is a Japanese short version of MIA (Metamemory in Adulthood) and consists of six sub-scales (task, change, capacity, anxiety, locus, strategy).

[Ethics]

The survey conducted with the approval of the ethics committee of the relevant facility.

[Results/Discussions]

The analysis performed on 55 patients (35 males, 20 females). The average age was 48.05(SD=13.26), and the average dose of antipsychotic was 751.02(SD=523.62) mg. Result of analysis, two points suggested. First, "change ($r=.348$)" and "task ($r=.326$)" and "capacity ($r=.372$)" of J-MIA-44 (Cronbach $\alpha = .78$) showed a weak correlation with "locus" which assesses the sense of control of memory. Metamemory may be associated with considered to them interactively. Therefore, it was suggested that the self-evaluation of memory may also increase errors when R.M.E occurs. Next, it showed weak correlation between PANSS positive symptoms and "capacity ($rs=.360$)" and between negative symptoms and "strategy ($rs=-.304$)". Therefore, it was thought that R.M in patients with schizophrenia might be affected not only by positive symptoms but also by negative symptoms.

Poster

Others

P1-353

Effects of Animal Assisted Therapy on Rehabilitation: Review of Japanese and International Research

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²Welfare, Tokyo Online University, Japan

[Objectives]

We aimed to review Japanese and international research concerning the effect of Animal Assisted Therapy on rehabilitation.

[Method]

We used "AAT", "Rehabilitation", and "dog" as keywords and searched for papers in the Japanese Igaku-Chuo-Zasshi database and on Medline.

[Results]

We analyzed 5 Japanese and 20 foreign papers which met the criteria.

The participants in the Japanese studies were as follows: 2 dementia patients, 1 child, 1 terminal care, and 1 internal disease patient. The interventions were carried out in institutions or outside a hospital. All five studies focused on touching the dog.

The participants in the international studies were mostly internal disease/surgery patients. The interventions were carried out in rehabilitation centers or hospitals.

Animal interaction methods differed depending on type of patient. The purpose of the intervention was clearly stated, and physical interaction methods differed.

The handlers cooperated with the medical staff. Rehabilitation centers and hospitals follow guidelines established by each state pertaining to animal therapy and infections, so that the dog could be brought in bedside the patient.

[Discussions]

We found differences in how AAT is implemented. Outside Japan there are clear methods and evaluation criteria for each type of patients. Compared to the US, where AAT is widely used, in Japan there are no guidelines concerning the implementation of AAT, infectious diseases, or volunteers. In order to overcome these limitations, further research on the development and environment of AAT in foreign countries is necessary, in order to pursue AAT implementation methods that are appropriate in the Japanese context.

P1-354

Development of a nursing practice model that enhances the resilience of initial breast cancer patients using a nursing intervention program ;Intervention effects and nursing issues for the creation of a model plan

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Objectives

To clarify intervention effects and nursing issues from the early diagnosis period, for the creation of a nursing practice model plan to enhance the resilience of initial breast cancer patients using a nursing intervention program.

Methods

Semi-structured interviews of initial breast cancer patients in a nursing intervention group with a quasi-experimental study design were conducted twice (before adjuvant therapy and one year postoperatively), and qualitatively analyzed.

Ethical considerations

This study was approved by the research ethics committees of University A and Hospital B.

Results

The participants were 26 people (age38–73; BCT15, Bt11; Ax8, SND18).The program with educational DVD identified as intervention effects were *Understanding of surgical methods*, *Understandability of the initial treatment process with the video*, and more in the preoperative period; *Acquisition of knowledge used in selecting postoperative adjuvant therapy*, *Helpful in checking and understanding contents of physician's explanation*, and more in the postoperative period; and *Relief because the treatment course is proceeding as expected*, *Confidence in oneself for getting through treatment*, and more at one year postoperatively. Nursing issues identified were *Irritation with physical distress from adverse events with sensations that exceeded expectations* and more.

Discussion

Nursing interventions aligned with the program focused on the early diagnosis and treatment period provide cognitive support for the understanding of breast cancer and initial treatments. The patients' positive outlook suggests that patients approaching the completion of treatment had an increased ability to overcome difficulties and greater self-confidence.

This work was supported by JSPS KAKENHI Grant Number 25463453.

Poster

Others

P1-355 Nursing students learning from visiting nurses

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[Objectives]

The purpose of this study is to clarify learning from visiting nurses in home care nursing practicum, according to the records of the students.

[Methods]

The records of 103 students who gave consent regarding the intent of this study were targeted for analysis. Descriptions by the students were analyzed by text mining using KH Coder. Among 150 frequent used words, the word "nurse" was focused on and a co-occurrence network was prepared to determine any co-occurrence correlations.

[Ethics]

Approval from the research ethics committee of University A was obtained.

[Results]

"Nurse" appeared 748 times and was the 10th most frequently used word. Words which ranked higher were "family" (1681), "life" (1652), "patient" (1619), "think" (1270), and "care of informal caregivers such as family members" (1058). Words which showed co-occurrence correlation with "nurse" included "life," "home," "family," "patient," "think," "do," "learn," and "need." On the other hand, no co-occurrence correlation was observed for "information," "sharing," "cooperation," and "job type."

[Discussions]

Through the care provided to the patients and his/her families at home by the nurse, the students were learning the need to know about daily living of patients and their families. They students were also learning about cooperation with medical professionals, but this was not through the nursing practices.

P1-356 Infertile women's struggles to balance treatments with jobs, and support provided by their workplaces

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[Objectives]

This study investigates the actions taken by infertile women to get support from their respective workplaces in their efforts to balance the requirements of treatments with those of their jobs, and how they feel about support offered by people in their workplaces.

[Methods]

Study participant were 15 infertile women' receive advanced treatments, particularly Assisted Reproductive Technology (ART).Semi-Structured interviews were conducted and the collected dater were analyzed qualitatively and inductively.

[Ethics]

Approval of the study protocol was received from the institutional research ethics committee prior to the study commencing.

[Results]

The study has revealed that infertile women find their supervisors' supports helpful in maintaining their mental stability, particularly support for adjusting their work schedules to meet their treatment cycles, a backup during their treatment period, and supervisors' attitude of quietly watching over the progress of treatments.

The women also find it helpful their colleagues not questioning about their treatments while giving consideration to their health conditions in a casual manner.

On the other hand, words of encouragement sometimes cause psychological stress, depending on the time in the treatment cycle and the women's conditions.

The study results show the need for understanding and support in their workplaces, the latter offered based on understanding the psychological conditions of infertile women during their long treatment period.

Poster

Others

P1-357

Developing nursing-sensitive patient outcomes for nursing diagnosis: Verification of the content validity of the itch rating scale

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²Nagoya University Graduate School of Medicine, Japan

[Objectives] There are reports that "itching" occurs among dialysis patients about 40 – 70% of the time, and is one of the symptoms inadequately considered in nursing intervention. Because nursing intervention outcomes and nursing diagnoses must reflect the available diagnostic indexes and related factors, it is suggested that the development of nursing sensitive results is necessary. The primary objective is to verify the content validity of the itching scale used for dialysis patients.

[Methods] Interviews were conducted with study participants, four specialized and accredited nurses engaged in dialysis treatment, regarding the existing five scales used to evaluate itching and its characteristics that appear often in dialysis patients.

[Ethics] This study has been approved by the research ethics committee of Kansai University of Nursing and Health Sciences.

[Results] Visual analogue scales (VAS) tend to be biased when the patient is not used to the affliction, and can be difficult to use. The numeric rating scale (NRS) is easier to answer due to the presence of guidelines. Kawashima's pruritus degree criteria and Shiratori's classification severity criteria make it difficult to understand certain sentences.

[Discussions] Moreover, there was a lack of understanding of the difference between points 3 and 4 in the scale. Although the 5D-itch scale (Japanese version) is expected to take more time when answering, it may prove more effective when promoting proper interventions. Because itching can appear at any time and may be widespread in the torso and extremities, evaluations relying solely on the existing scales may prove inadequate.

P1-358

A concept analysis of safety culture focusing on antecedents of the concept

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Minoo school for special needs education, Japan

[Objectives]

The aim of this study was to clarify the current definition of safety culture and consider how nurses might contribute to its development in special support schools.

[Methods]

Seventy papers written in Japanese and English between 2009–2018 in the fields of medical science, engineering, nursing science, education, traffic science, agricultural science, safety science, social welfare, and psychology underwent concept analysis based on the methods developed by Rodgers (2000).

[Results]

Six categories were identified as the antecedents of the concept: development of the organizational safety system, respecting individual activities, participation of the organization's leadership, implementation of safety education programs, strengthening bonds within the workplace, and potential powers. Development of the organizational safety system included improvements to the work environment and information systems, definition of organizational safety rules, implementation of the safety policy in the workplace, and cooperation with external organizations. Organizational participation included the upper levels of leadership, top safety management, and their commitment to safety policies. The safety education programs implemented were continuous and experienced-based, and manpower training was also conducted. Bonds throughout the workplace were strengthened through enhanced communication, building mutual relationships, promoting teamwork, and developing job satisfaction and loyalty. Potential powers included resilience and empowerment.

[Discussions]

Nurses can contribute to the establishment of safety culture in special support schools through development of the schools' safety systems and the implementation of comprehensive safety education programs.

This study was supported by a grant from the Japanese society of child health nursing.

Poster

Others

P1-359

Challenging nutritional support of homecare nurses for terminally ill cancer residents

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[Objectives] This study aims to clarify what constitutes nutritional support provided by homecare nurses so that residents' and their family intentions are respected in support for nutrition support for terminally ill cancer residents.

[Methods] Semi-structured interviews were conducted with 12 nurses working in homecare, and the Krippendorff method for content analysis was used.

[Ethics] This research was conducted with the approval of the research ethics committee of the university.

[Results] We got 108 codes and 20 subcategories and finally grouped into five categories. The results suggest that, "attitudes of medical staff approving family effort", "need for family support that feels annoyed about not eating", "conflict of resident and their family who cannot tell family that they do not want to eat" and the other two categories.

[Discussions] As the current status of nutritional support for terminally ill cancer residents, nutritional support is provided by the resident's family. It has become clear that nurses need to predict the changing medical condition of residents, provide mental care for the caring family, and show support for nutritional support while showing an attitude that acknowledges their efforts.

P1-360

An International Japan-Thailand collaborative study regarding text messaging for pregnant women

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[Objectives]

This study compared the effects of text messaging interventions for pregnant Japanese and Thai women.

[Methods]

The study participants were pregnant women (32 Japanese and 59 Thai). We conducted a randomized controlled trial to evaluate the effects of text messages (disseminated via smart phone) among pregnant Thai and Japanese women. Text messages were sent to pregnant woman at 13-40 gestational weeks every Monday and Thursday between the two countries. The text messages conveyed nutrition information during pregnancy, appropriate gestational weight gain, appropriate self-care for their gestational age, and so on. The same message contents were utilized in both countries.

[Ethics]

Our study's protocol was approved by the research ethics committee at our research institution.

[Results]

At the end of the study-phase in Thailand, the intervention group had significantly lower severity of state-anxiety than the control group. The health care behavior score during pregnancy and other pregnancy outcomes for both groups was not statistically significant. Intervention group had a high level of satisfaction with text messaging. The study in Japan is ongoing.

[Discussions]

To our knowledge, this is the first study to compare the effects of text messaging interventions between two countries. After we complete this research, we will compare the results between the two countries and consider the differences between them.

Poster

Others

P1-361

Text messaging to encourage young psychiatric outpatients to seek help: A pilot randomized control trial

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⁴Graduate School of Health Sciences, Kobe University, Japan

[Objectives]

This study evaluates the effectiveness of intervention by text messaging in motivating young psychiatric outpatients to seek help.

[Methods]

We developed an automated text messaging program for mobile phones. The content of text messages stated the importance of addressing the individual's problem and of maintaining good mental well-being. Information about social welfare services was also provided. We randomly assigned 20- to 30-year-old participants to either the intervention group or the control group and sent text messages to intervention group for three months.

[Ethics]

Our study's protocol was approved by the research ethics committee at Mie University and the Mie Mental Medical Center.

[Results]

The clinical characteristics revealed no significant differences between each group at baseline. The most common diagnosis among the participants was mood disorder. After the intervention period, there was no significant difference in an individual's likelihood to seek help between the intervention and control groups. However, the proportion of participants who, when asked why they do not use social services, answered "I do not know how to use [them]" was significantly lower in the intervention group. More than 70% of participants in the intervention group reported that the text messages were helpful and useful.

[Discussions]

This was the first randomized controlled trial to encourage psychiatric outpatients to seek help. Our intervention did not improve the likelihood of young psychiatric outpatients' seeking help. However, our intervention reduced the barriers to their search.

P1-362

Age comparison of psychiatric outpatients' problems and help-seeking behavior

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[Objectives]

This study aimed to examine age-based differences in psychiatric outpatients' problems and help-seeking behavior to develop age-appropriate support for this population.

[Methods]

Data were collected using a questionnaire survey containing the following items: "What problems or troubles are you experiencing now?"; "What support you want?"; "Did you use a social service during the past 3 months?"; and "What is the reason for not using a social service?" We compared responses according to age group (young = 20s and 30s; older = <40 years).

[Ethics]

The study was approved by an institutional research ethics committee.

[Results]

We obtained data from 39 participants. Problems or troubles were mostly related to illness (97.1%). More than half the participants experienced problems with economic issues, work, family, and interpersonal relationships. The most common request for support was related to the appropriate facilities to consult on their problems. The proportion of young participants who had trouble with work was significantly higher than older participants. On the other hand, the proportion of young participants who were troubled by the burden of caring was significantly lower than older participants. There were no significant differences in their help-seeking behavior and reasons for not using social services. Less than 30% of all participants who used the social service. The most common reason for not using the service was "I do not know how to use"

[Discussion]

Psychiatric outpatients' problems are not limited to their illnesses and it is important to tailor support based on patient characteristics.

Poster

Others

P1-363

Structural equation model of factors related to resilience for community-dwelling schizophrenic patients in Japan

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[Objectives]

This study aimed to multi-dimensionally and structurally analyze factors related to resilience of community-dwelling schizophrenic patients and gain insight into how community-based mental health care can be improved.

[Methods]

We included 103 schizophrenic patients residing in the Tokyo metropolitan area who regularly visited rehabilitation facilities offering assistance to psychiatric patients and were receiving treatment on an outpatient basis. Questionnaires included items related to resilience (21 items in 3 subscales), self-efficacy (18 items in 5 subscales), self-esteem (10 items), psychosis based on the Behavior and Symptom Identification Scale (32 items in 5 domains), emotional support network (10 items), and socio-demographic factors. We performed based on covariance structural analysis, evaluated the goodness of fit of the resulting structural equations models.

[Ethics]

This study was approved by the ethics review of the organization to which it belongs. (approval number 2016-026).

[Results]

Self-efficacy, self-esteem, and degree of psychosis significantly impacted resilience. The number of times of hospitalization and the number of medicines also influenced resilience. Multiple linear regression analysis revealed self-efficacy and self-esteem to be predictors of total resilience score. Based on covariance structural analysis, the resulting model was found to exhibit reasonable goodness of fit ($\chi^2/df = 1.194$, GFI = 0.997, AGFI = 0.948, RMR = 2.830, RMSEA = 0.038).

[Discussions]

Self-efficacy had an especially strong and direct impact on resilience. Therefore, it is important to provide more positive feedback to patients, provide social skills training based on cognitive behavioral therapy, and engage patients in role playing to improve self-efficacy and self-concept.

Poster

Interprofessional Collaborations

P2-1

Examination of contents of manual for disease and life management of heart failure in elderly people with dementia in elderly people's facilities

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[Objectives] The purpose pf this study is through literature review to examine contents that should be included in the preparation of a manual on disease management and life management of heart failure in elderly people with dementia living with in nursing homes.

[Methods] Using Web Version 5 of the medical journal Japan Medical Abstracts Society, I searched a combination of keywords including heart failure, dementia, nursing, care, facilities, cooperation, and manual. Documents with contents suitable for the purpose of this research were analyzed qualitatively.

[Ethics] Sources of documents used in this research will be clearly stated.

[Results] Infection, fever, and dehydration were the top causes of heart failure in demented people who live in nursing homes. Because of this, infection control is very important. Deterioration of heart failure in demented people is also related to the behavioral psychological symptoms of dementia. Therefore, care for patients is also required so that they can live a peaceful life and not become overactive.

[Discussions] The manual was considered to require guidelines and information on handling of problems specific to demented people. In facilities for the elderly, it is important that nursing and care staff work in cooperation to carry out disease and life management for demented people.

P2-2

Relationship between difficulties related to care management for elderly with dementia living in communities and interprofessional collaboration

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[Objectives] Elderly people with dementia need various types of support to maintain community living. Care managers (CMs) perform care management through collaboration to effectively support the elderly who face diverse problems, such as behavioral and psychological symptoms of dementia, a solitary life, and heavy burdens on family caregivers. The present study examined the difficulties related to care management performed by CMs, and analyzed the relationship between such difficulties and interprofessional collaboration.

[Methods] From home care support offices throughout Japan, 4,000 were randomly selected, and an anonymous questionnaire was mailed to the CM representing each office. The difficulties related to care management and interprofessional collaboration were examined to analyze the relationship between them. The study period was from August to September 2018.

[Ethics] The study was approved by the research ethics committee of the university the researcher belonged to.

[Results] Responses were obtained from 1,113 CMs in 47 prefectures. Situations in which the CM frequently encountered the most difficulty were when the elderly refused observation, intervention, or medical consultation. Their difficulties related to the availability of resources and networks, observation refusal, and assessment of the feasibility of continuing home life were significantly correlated with insufficient collaboration among medical/administrative/law institutions and welfare commissioners.

[Discussion] Promoting interprofessional collaboration may help CMs to perform care management in difficult situations.

Poster

Interprofessional Collaborations

P2-3

Developing a contents system of common educational material for nursing teachers and nurses in charge of clinical safety education

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[Objectives] Nursing students and nurses need a consistent clinical safety education. This study aims to develop a content system of common educational material for nursing teachers and nurses in charge of clinical safety education.

The benefit of utilizing such a system is that it allows them to share knowledge gained from their actual practice/experience, thereby enhancing the quality of their clinical safety education.

[Methods] First, we conducted a focus group interview with 10 nurses and another interview with 13 nursing teachers on the challenges of clinical safety education for approximately 60 minutes. We then performed a qualitative content analysis to identify the areas where improvement is needed. Finally, we classified the digital data and organized it by topics and examined the possible browsing and utilization methods for users.

[Ethics] The study aim and methods were explained to the subjects and a written consent was obtained. It was conducted with the approval of the corresponding University Research Ethics Committee.

[Results] The desired needs to be met included: establishing and deploying a realistic simulation, elaborating teaching methods, and efficient planning of medical safety training. The system developed is a way of sharing educational content in the 5 common categories in SNS, namely: clinical training case studies, (institution) lesson cases, utilization reports, Q&A and a forum.

[Discussions] The analysis results suggested that mutual learning would help satisfy the needs. The challenge in the near future is to verify the usefulness of the system developed in the actual utilization.

P2-4

Psychosocial supports for AYA generations hospitalized at a pediatric unit in an acute hospital

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[Objectives]

AYA stands for the Adolescence and Young Adult generation. This generation develops appropriately by spending time with peers and adults around them. However, hospitalized patients of this generation have decreased opportunities to socialize and develop. Psychosocial supports for adolescent patients provided by pediatric staff were reported.

[Methods]

AYA parties where the pediatric staff and patients played board games and video games and talked to each other were held. Patients' reactions were reported and it was shown how important it is to offer peer support for AYA generations at hospitals.

[Ethics]

This research was accepted by an ethics committee at the researcher's hospital. Researchers obtained informed consent from patients and their caregivers. Participants could stop participating in this research study anytime. Participant's personal information will not be mentioned.

[Results]

A patient who was hospitalized for a month did not have much opportunity to spend time with someone around his age. A CLS told him about AYA party. He said that he would definitely participate in this party. He was smiling while playing games at the party and enjoyed talking to other participants. He said "it was fun!"

[Discussions]

This patient's hospitalization became longer than other patients, giving him less of a chance to socialize and develop as an adolescent. This party could provide an opportunity to spend time with other patients in the same generation, which is very important for age appropriate development. He looked forward to this party and it could encourage him to deal with hospitalization positively.

Poster

Interprofessional Collaborations

P2-5

Measures responsive to care needs of psychiatric patients in community who are reluctant to receive psychiatric services

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[Objectives]

This study aims to clarify measures responsive to the care needs of psychiatric patients in the community who are reluctant to receive psychiatric services.

[Methods]

This study is qualitative inductive research that data were collected through semi-structured interviews with psychiatric social workers (n=4), nurses (n=2) and occupational therapist (n=1) who had reluctant patients. The qualitative data analysis software NVivo11 was used for constant comparative analysis.

[Ethics]

Authors provided written explanation about voluntary participation and privacy protection to subjects and received consent. Authors' institution's ethical committee approved this study.

[Results]

Reluctant patients found in the community included "hikikomori" (voluntary shut-in) and untreated schizophrenics. In dealing with such patients, "assessment skills focusing on patients' lives in the community", "interdisciplinary team including health department and municipal office", and "interventional 'knack'" were found. Issues such as "difficulties in coordination due to lack of legal framework" and "issues with visiting nurses' assessment and interpersonal skills" were also extracted as hindrances.

[Discussions]

It is important for hospital nurses to be aware and develop assessment skills that focus on patient's life in the community and to grasp interventional 'knacks'. It is also important for the nurses to have multidimensional perspective and action plans to be responsive to patients' care needs. On the other hand, a legal framework for much needed interdisciplinary intervention and coordination had not yet realized that some professionals had to provide pro bono services. The issue of disseminating the effects of necessary interdisciplinary care to the society remains.

P2-6

Collaboration between nurses and nursery teachers in the practice of psychological preparation for children at a pediatric ward: A preliminary study

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[Objectives] Psychological preparation for children undergoing procedures such as lab test or surgery has been of focus in the field of pediatric nursing, and importance of collaboration with nursery teachers in implementation of such practices has been indicated. This preliminary study explored the collaboration between nurses and nursery teachers in actual practices of psychological preparation for hospitalized children.

[Methods] Data were collected using semi-structured interviews with three nurses and two nursery teachers at a pediatric ward, and qualitatively and inductively analyzed.

[Ethics] The study was approved by the ethics committee of the first author's facility.

[Results] Six categories were generated in relation to collaboration between nurses and nursery teachers from the nurses' interviews; extent of collaboration, information sharing, effectiveness of collaboration with nursery teachers, roles of nurses, roles of nursery teachers from the nurses' view, and challenges in collaboration with nursery teachers. Five categories were generated from the nursery teachers' interviews; extent of collaboration, nursery teachers' roles in the practices of psychological preparation, effectiveness of collaboration with nurses, limitations regarding implementing psychological preparations without nurses' involvement, and challenges in collaboration with nurses.

[Discussions] Nurses and nursery teachers were aware of their unique roles in implementation of psychological preparation respectively, and effectiveness of the practices under collaboration were mentioned by both. On the other hand, lack of mutual understanding was identified as a challenge by both parties. Facilitating communication between the two parties is essential for improving the practices in consideration of the best interests of the children.

Poster

Interprofessional Collaborations

P2-7

Shoku-shien for the Elderly: A Concept Analysis

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[Objectives]

A definition of *shoku-shien* for the elderly which means support their oral intake in Japanese is unclear. The aim of this study was to describe and explain how the concept of *shoku-shien* for the elderly has been used.

[Methods]

Rodgers evolutionary concept analysis was selected as the method for this study.

[Ethics]As an analysis based on literature review, this study was exempt from research ethics evaluation.

[Results]

Since English words equivalent to *shoku-shien* were not identified, only Japanese research papers were analyzed using the academic article database Ichushi-Web, CiNii. I found 151 records using the keywords "shoku-shien" and "koureisha (elderly)," and I included 20% of these in the analysis, with 36 articles selected by random sampling as cover all the disciplines. *Shoku-shien* for the elderly was mentioned in association with nine disciplines, including medicine, nursing, dentistry, and nutrition. Antecedents included "eating and swallowing dysfunctions," "community dwelling elderly," and "caregiver side issues"; attributes included "interdisciplinary team approach," "support for caregiver," "support for the pleasure of eating," and "regional support system construction"; and consequences included "improvement of QOL," "mitigate care burden," and "establishment of a community support system." Related concept included nutrition support.

[Discussions]

Shokushien for the elderly is a concept that is unique to Japan and is employed in interdisciplinary fields. This concept represents not only through direct intervention but also as comprehensive support that enable the elderly to enjoy their meals and maintain their function of oral ingestion.

Poster

Innovations in Nursing Education

P2-8

Modification of a program teaching English for nursing to undergraduate students in Japan

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Japan had thirty million foreigners; five percent accessed medical care. We modified a program that teaches English for nursing with diversity to undergraduate students. We set the following learning goals for students: have skills to communicate basic nursing information and concerns between patients and nurses and among medical staff by creating and presenting scenarios in which physical assessment is discussed, so that they can care of people with international diversity, and be able to state their own opinion to classmates and hear the opinions of others in a small group in English. Students who master these learning achievements will be able to have confidence and ability to communicate in English with internationally diverse people. The modification was developed based on learning experience related to educators going abroad and experiencing diversity as related to nursing education. The main modification was to have students experience a patient-nurse conversation as a bedside simulation and to think about how people are care for in Indonesia as compared to how they are cared for in Japan to encourage understanding of diversity. For undergraduate nursing students who speak English as a second language, there is no standard education that teaches them to care for patients in English. We'd like to share with educators how to teach English for nursing.

P2-9

Experience of providing care for babies/infants among nursing students

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[Objectives] This study describes the experience of providing care for babies/infants among nursing students prior to taking a course in pediatric nursing.

[Methods] The subjects were 50 students prior to taking a course in pediatric nursing, after providing written informed consent to participate. The subjects rated their experience of providing care for babies/infants on a five-point scale: one point for 'Never had the opportunity' and 5 for 'Frequent opportunities'.

[Ethics] Approval was obtained from the Ethical Board of the Facility where this research was conducted. The authors declare that there are no conflicts of interest associated with this manuscript.

[Results] Fifty (66.7%) of 75 surveys collected; 94% valid; 6.4% of the students were male and 93.6% female.

Experience of care for babies included "holding the babies" (83.0%), "taking care of babies alone for half a day or longer" (14.9%), "bathing the babies" (10.7%), and "changing diapers" (27.6%). Experience of care for infants included being a partner "playing with" (78.7%), "taking care alone for half a day or longer" (27.7%), "bathing the infants" (23.4%), and "attending to the toilet of the infants" (32.0%).

[Discussions] The findings suggest that nursing students have few opportunities to interact with and care for babies/infants in everyday life. It is necessary to provide students with training approximating actual settings, by making good use of model dolls. It is expected that students will acquire knowledge and skills required for taking care of babies/infants by repeating the training with model dolls.

Poster

Innovations in Nursing Education

P2-10 Learning Through Nursing Ethics Training by Practical Training Instructors

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[Objectives]

The purpose of this study is to clearly identify learning from practical training instructors (hereinafter referred to as "instructors") through nursing ethics training.

[Methods]

Nine nurses who gave consent to participate in nursing ethics training and cooperate with the study were targeted as study participants. Data was obtained from an anonymous questionnaire where training participants were allowed to freely fill in their responses. Study items included awareness of instructors regarding ethical dilemmas faced by students and how nursing ethics were perceived immediately after training. Data was qualitatively and descriptively analyzed.

[Ethics]

Approval from the ethical review board of the affiliated facility was obtained.

[Results]

The instructors showed sufficient awareness regarding "actual conditions of ethical issues in clinical care," and "respected the ethical viewpoint of the students," as well as desired to address these. After the training, the instructors once again recognized "the need to improve ethical judgment ability" and showed "eagerness to practice ethics education."

[Discussions]

As the instructors perceived the ethical viewpoint of the students, they felt caught between the ideal regarding nursing held by students and actual conditions where it is difficult to respond to ethical issues. In that situation, knowledge to organize one's way of thinking, and learning how to show one's own ethical judgment and its basis to the students, are considered to be significant. Reviewing cases carried out during ethics training such as this are indicated to connect to nursing ethics education.

P2-11 Thoughts on practical training guidance of instructors in charge of adult nursing clinical practicums

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[Objectives]

The purpose of this study was to clarify the thoughts of nurses who were in charge of practical training guidance in adult nursing clinical practicums through interviews.

[Methods]

A qualitative, inductive study design. A semi-structured interview was conducted on practical training guidance for 11 nurses in charge of adult nursing clinical practicums at 3 hospitals in A Prefecture in January and February 2018.

[Ethics]

This research was conducted with the approval of the Bioethics Committee of the university to which the researchers belong.

[Results]

As a result of analyzing the verbatim records, the instructors' thoughts on adult nursing clinical practicums could be categorized into 12 subcategories, and 4 categories could be extracted. The categories were "I would like to give guidance while sharing information about the student's learning situation," "I want to get involved so I can achieve the goals of the clinical practicum," "I want to support the student's learning," and "I am sorry the lack of practical training guidance."

[Discussions]

It became clear that the instructors had a desire to enhance the students' training and have been making an effort to do so in the adult nursing clinical practicums. However, because they concurrently serve as instructors and conduct regular nursing work, they cannot take the time they wish to instruct students under the present conditions, and some staff feel that clinical practicums are a burden. Therefore, it was thought that they experienced conflict with regard to not being able to provide productive instruction.(JSPS 17K12145)

Poster

Innovations in Nursing Education

P2-12 Factors reduce nurses' difficulty in taking care of foreign patients in Japan

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[Objectives] This study examined factors related to Japanese nurses' difficulty in taking care of foreign patients.

[Methods] This is a cross sectional study. A questionnaire was distributed to all nurses working at two hospitals in Tokyo, one university and one general, using Google form. Participants were asked their demographics and to rate the difficulty for 16 items from 1 to 6. All variables were compared between the two hospitals, and factors related to difficulty in taking care of foreign patients were explored using Spearman's correlation coefficients.

[Ethics] This study was approved by the Institutional Review Board of the university.

[Results] Responses of 138 nurses were analyzed (98 university and 40 general) with a response rate of 11.3%. More nurses in the university hospital held a bachelor's degree and had higher subjective English ability than in the general hospital. Though nurses in the general hospital had longer nursing experience, they felt overall higher difficulty. The most difficult item was "Communication other than in English" followed by "Communication with patients who state symptoms" and "It takes time to communicate with patients." The factors reducing difficulty were nurses' higher subjective English ability, being good at any foreign language, regularly studying a foreign language, having been abroad except sightseeing, having a higher academic degree, and attending training to take care of foreign patients.

[Discussions] Language training, especially English, experience abroad and taking training to take care of foreign patients may reduce nurses' difficulty and burden of taking care of foreign patients in Japan.

P2-13 Evaluation of simulation education for nursing students focusing on distress symptoms in patients with cancer

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[Objectives] This study aimed to clarify the usefulness of simulation education focusing on distress symptoms in patients with cancer.

[Methods] The subjects were 80 fourth-year nursing students in April 2019. Questionnaire surveys were conducted pre- and post-exercises. Exercise design was evaluated using the Japanese version of the Simulation Design Scale (SDS) (Ito et al. 2015) developed by the National League for Nursing (NLN) and created in accordance with the NLN rules.

[Ethics] This study was approved by the research ethics review board of the author institution (ID 18033).

[Results] The number of participants was 76 for the final analysis. After completing the exercise, the SDS sub scores were as follows: 3.42 for objective and information, 3.77 for support, 3.76 for problem solving, 3.92 for feedback/guided reflection, and 3.90 for fidelity. The post scores for the three subscale in the SDS, that is, objective and information, support, and feedback/guided reflection were significantly higher compared with the pre scores.

[Discussions] This research confirmed that this simulation education may be useful for teaching undergraduate nursing students how to care for patients with cancer experiencing distress symptoms. In addition, although the scores for the SDS element of objective and information significantly increased after completing the exercises, the average score after completing the exercises was the lowest among the five SDS elements. It is therefore necessary to carefully explain the purpose of the exercises, the practice method, the patient setting, and the necessary background knowledge to participants before starting the exercises.

Poster

Innovations in Nursing Education

P2-14 Practical Report on an educational program of Kampo Medicine to Nursing Students

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[Background] For comprehensive regional care, the working environment for nurses becomes a living environment. In such living environments, nurses must possess practical skills to make comprehensive judgments of people's minds and bodies and maintain a good balance of patients' health in their capacity as medical professionals who are few in number.

[Aim] Therefore, this study develops an educational program for nursing students, who are taught the philosophy behind *Kampo* Medicine. *Kampo* is characterized by an emphasis on mind-body unity totality. It employs four types of examination to "demonstrate" the various symptoms claimed by patients, and suggests "recuperative methods (such as diet, exercise, and rest)," per these symptoms.

[Contents of practice] We offered a course titled *Kampo Medicine and Nursing* (30 hours, 1 credit) for nursing students. This course aimed to (i) understand the basic theory of *Kampo*, (ii) learn the diagnostics of *Kampo*, and methods to comprehend people by using one's five senses, and (iii) learn recuperative methods, physical therapy, and pharmacotherapy that suit the patient's condition. The course's assignment was to write a report: "Demonstrate Your Own Health Condition and Consider Recuperative Methods." There were 23 registered students for the course over two years. Feedback after the course included comments like "I learned to take care of myself," "It tied in with my health problems," and "This course broadened my horizons." The satisfaction rate for the course was high.

[Future tasks] We need to develop teaching materials about *Kampo* for nursing students.

P2-15 Nursing Students' Learning through Volunteer Activities for Children with Rare Diseases and their Families - Focusing on Nurses' Emotions toward (Subjective Recognition of) Parents -

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[Objectives] This study examined nursing students' experiences and learning through volunteer activities for a group of patients with rare diseases and families, focusing on nurses' emotions toward (subjective recognition of) parents.

[Methods] A reflection session was held for 7 students in their third year at a nursing school, who had attended the national exchange meeting of a group of patients with rare diseases and families as childcare volunteers, to share their experiences and learning after the meeting. Their statements were recorded to create narrative records, and analyze them using SCAT.

[Ethics] This study was approved by the ethics committee of the institution the researcher belonged to.

[Results] The students observed and on parents of patients, while noting . <Parents' attitudes contrary to pessimism> led to the and development of of the students, consequently enhancing their awareness of as a basis for and , including the . This also helped them identify .

[Discussions] Through volunteer activities, the students became able to understand the physical, psychological, and social conditions of these parents more deeply.

Poster

Innovations in Nursing Education

P2-16

Evaluation of Nursing Interventions for Behavioral and Psychological Symptoms of Dementia (BPSD) in a Simulated Training Scenario

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[Aim] The number of people with dementia has recently been increasing in Japan. However, acute care nurses are often perplexed by BPSD or the unexpected actions of patient with dementia, because of their lack of knowledge and experience. Researchers have therefore developed a new simulation training program for clinical nurses, whose performance this study aims to evaluate.

[Method] Our simulation training involved a ten-minute scenario, in which six clinical nurses were each confronted with an elderly lady with dementia standing by her bed and removing all her tubes, shouting, "I'm going home!" Each participant was expected to intervene in this situation, and their performance was recorded. The researchers analyzed in particular the change in the lady's behavior due to the participants' actions and then considered the patient-nurse interaction to effective or ineffective.

[Ethics] This study was approved by a University's Ethics Committee.

[Results] Altogether, participants possessed 4–40 years' nursing experience. The most proficient performance entailed the nurse calming the patient by slowly approaching and staying face to face. An ineffective intervention involved several staff surrounding and coaxing the patient, who felt isolated and became agitated.

[Conclusion] Effective interventions require behaviors based on humanitude. We suggest simulated training is useful for clinical reflection, to understand the difference between actual and model performance. This study also helps clarify the purpose of critical thinking and debriefing.

P2-17

Examination of the items on the human resource development behavior self-checklist for chief nurses: The modified Delphi survey

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[Objectives] We aimed to use a modified Delphi survey to create a human resource development behavior self-checklist for chief nurses.

[Methods] Using a literature review and Focus Group Interviews (FGI), we created 53 items. A Delphi survey was conducted targeting experts in nursing management and human resource development. A questionnaire for chief nurses was also conducted.

[Ethics] This study was approved by the Ethics Review Committee of Nagoya University Graduate School of Medicine.

[Results] A total of 187 valid responses were reported in Round 1, 252 in Round 2, and 170 in Round 3. There was a final approval rate of at least 90% for 40 of the 53 items, producing an acceptance rate of 82.6 – 99.2%.

[Discussions] The FGI showed behaviors common to the human resource development of nurse managers, as demonstrated in previous research, and new behaviors unique to chief nurses, enabling us to create items that chief nurses can use to evaluate themselves. In the Delphi survey, we collected diverse opinions by questioning nursing staff from hospitals, universities, and nursing associations. The consensus of the panel demonstrated the credibility and relevance of chief nurses' human resource development behaviors. High acceptance was confirmed by the questionnaire results, with 40 items that were agreed by the panel found to be acceptable for chief nurses. The items selected will help chief nurses to evaluate their own human resource development, promoting more effective behavior. In the future, we plan to use these items to create an easy-to-use self-checklist.

Poster

Innovations in Nursing Education

P2-18 Clarifying the Challenges in Education on Occupational Hazards among Nurses in Basic Nursing Education Programs in Japan

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[Objectives] To clarify the current state of education on occupational hazards among nurses in basic nursing education programs in Japan.

[Methods] A self-administered questionnaire survey was conducted at 744 undergraduate nursing and nursing diploma schools in Japan.

[Ethics] This study was approved by the Independent Ethics Committee at Z University Graduate School of Medicine.

[Results] There were responses from 201 schools (effective response rate, 27.0%). A total of 86.9% of the schools provided education on occupational hazards among nurses in related subjects, and for difficulty in teaching, 57.3% of the schools responded, "I do not know how much content should be taught". As a result of categorizing the contents of the free description responses based on similarity, "thoughts on current education" was classified into the following four categories: "insufficient educational content", "worry about the content and method of education", "insufficient time", and "inability to share educational content among teachers". The "issues to be considered in the future" were classified into the following four categories: "requirement to review the curriculum", "requirement to collaborate with clinics", "requirement to review educational contents", and "need to establish student characteristics and relationships".

[Discussions] Education on several items regarding occupational hazards among nurses was not delivered sufficiently. The results of this study suggest that it is necessary to clarify the items and curriculum to be included in basic nursing education programs, and to show the educational method for each of the contents concretely.

P2-19 Learning from simulation-based education in maternity nursing practice Part 2: -Ideal practice resonating with students-

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Objective: This study aimed to identify future directions for simulation-based education in maternity nursing practice by analyzing how students felt and what they were thinking during their initial experience applying skills learned using the method.

Method: We developed a self-administered questionnaire using mixed methods and consisting of qualitative and quantitative questions to collect data on what students were thinking and feeling, with a focus on resilience.

Ethics: This study was approved by the Ethics Committee of the Faculty of Nursing, Shoin University. All students received oral and written explanations of the following: participation in this study was unrelated to assessment of academic achievement; participation in this study was not mandatory; students were considered participants in this study when they sent their questionnaire forms.

Results: The students' feelings, such as surprise, confusion, impatience, and interest, quickly turned into confident action. All students reported that they did their best, and a high proportion of the students (95%) mentioned that the simulated practice provided "an opportunity to learn theory," "an understanding of the method for infection prevention," and "an idea of adopting a different approach in the next practice."

Discussion: This study found that simulated practice generated interest among students, resulting in achievement of the skills taught. This supports the idea that simulation-based education could be used to provide instruction for basic procedures and to promote ingenuity and confidence in application.

Poster

Innovations in Nursing Education

P2-20

Educational Effects of a Fresher Orientation Program for New University Nursing Students

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[Objectives]

This study aims to examine the educational effects of an overnight orientation (Fresher Orientation Program; below, FOP) for first-year university nursing students conducted immediately after enrollment.

[Methods]

The FOP was held in April 2019. At the FOP, a self-introduction game was held, and a lecture was given on things to know as university students. Surveys were conducted before the FOP and two months later. The questionnaire consisted of original questions relating to the FOP and a communication skills index (below, ENDCOREs), the good or difficulties aspects. The results were analyzed by performing a Mann-Whitney U test on the pre- and post-orientation groups.

[Ethics]

This study was conducted after approval from the Research Ethics Committee of university.

[Results]

Comparing the responses two months after the FOP to those before, scores for survey items including "knowledge as a university student" ($U=1444.0$, $p=0.011$), "meeting new classmates" ($U=1369.0$, $p=0.004$) showed statistically significant increases. There was no significant difference in ENDCOREs. Things such as "an opportunity for making friends" "getting to know the university in detail" were given as good aspects of the program. Difficulties aspects included points such as "I was unable to sleep".

[Discussions]

Students acknowledged that through the program, they had mixed with teachers and other new students and acquired knowledge about the university. Moreover, it appears that sharing time with new classmates on the FOP can be a valuable opportunity to build friendships.

P2-21

Barriers to Inter-Professional Education Jointly Provided by Two Universities: A Three-Year Experience of Paper-Based Simulation Case Studies

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[Objectives]

This study aims to elucidate barriers to inter-professional education (IPE) for nursing and pharmacy students jointly provided by two universities.

[Methods]

Two universities (a School of Nursing and a School of Pharmacy) which have signed a joint education agreement planned and implemented three sessions of the IPE program entitled "Paper-Based Simulation Case Study Group" (from FY2017 to FY2019).

[Ethics]

This study was approved by the Research Ethics Review Committee of University A.

[Results]

In three years, did not change the purpose of the program, the goal. The first session was held twice in the morning, each lasting for two hours and thirty minutes. The second and third sessions were held one time each. In the first participation condition, students were experienced a practicum program. From the second session, those who wished to participate were not required to have experienced a practicum program. In the session, groups of students in different years were formed.

[Discussions]

Securing time is considered the greatest barrier to holding the IPE through collaboration between different universities. Additionally, in the initial meeting, the levels of study of participating students and the experience of a practicum program were considered as barriers for participation in the IPE. However, having groups of students in different years helped develop mutual respect among them. Through this, active participation was facilitated.

Poster

Innovations in Nursing Education

P2-22 Effects of holding fresher orientation program for new nursing students immediately after enrollment in university

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[Objectives]

This study aims to examine the effects of an fresher orientation program (below, FOP) for nursing college students conducted immediately after enrollment in the university.

[Methods]

An anonymous, questionnaire survey was conducted before and after the FOP on 62 students newly enrolled in the 2019 academic year. The questionnaire consisted of 17 original questions relating to the FOP program and 24 using a communication skills index (below, ENDCOREs). The results were analyzed by performing a Mann-Whitney U Test on the pre- and post-orientation groups.

[Ethics]

The study was carried after approval from the Research Ethics Committee of university.

[Results]

Valid responses comprised 62 (100%) of those before the FOP and 59 (95.2%) of those afterwards. Comparing the responses before and after the FOP, survey items including "I was able to participate actively in group activities" ($U=1210.0$, $p=0.000$), "I had a real sense of becoming a university student" ($U=1535.0$, $p=0.040$), and "Spending a night away with my classmates was fun" ($U=1338.5$, $p=0.002$) showed a significant increase. No significant difference in ENDCOREs was observed.

[Discussions]

Through participation in the FOP, the subjects developed an awareness that they would become university students while actively engaging in building relationships with their new classmates. Moreover, it was revealed that the students enjoyed staying the night with their new classmates more than they had expected. It appears that an overnight stay when personal relationships are still undetermined is useful as an opportunity for building new ones.

P2-23 A literature review of intercultural nursing skills

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[Objectives]

The number of foreign residents in Japan has increased from 2,217,426 in 2008 to 2,637,251 in 2018 in recent decade. However, Japanese nurses still have felt difficulty dealing with foreign patients. This study clarified the current status and issues of scales that can measure intercultural nursing skills to utilize an international nursing education, practice and research.

[Methods]

An electronic search based on MEDLINE, PubMed, *Ichushi Web* by Japan Medical Abstracts society were used. Search terms included 'cultural competence'/ 'transcultural'/ 'intercultural', 'nursing' and 'scale' with an abstract in all years except conference abstracts.

[Ethics]

This was a literature review and not a research targeted at human subjects. The copyright was protected.

[Results]

There were 14 scales classified into cultural attitude, cultural knowledge, cultural skills, cultural behavior, cultural desire , cultural awareness, intercultural sensitivity, and intercultural adaptation. Six Japanese scales among those were 4 translated Japanese versions and 2 original versions. 13 scales predominantly possessed validity and high internal consistency reliability, and the reliability were mostly verified by test-retest reliability.

[Discussions]

14 scales about intercultural nursing can be used, but are needed to be improved the reliability and validity. It is important to use such intercultural nursing scales to improve intercultural nursing skills among Japanese nurses.

Poster

Innovations in Nursing Education

P2-24

Cross-national comparative research on international nursing science of nursing students in Japan and China

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[Objectives] This study aims to investigate learning needs and interest about international nursing in Japan and China, and clarify their characteristics.

[Methods] An anonymous survey was performed for 264 Japanese (Group A) and 204 Chinese freshmen (Group B) from 2016 to 2019. Questionnaire sheets were distributed to Group A while the web page "Wen Juan Xing" was used for Group B.

[Ethics] This study was approved by the ethical committee of the organization (Approval number: 15-21, 18-26).

[Results] Two hundred sixty-four and 204 responses were obtained from Groups A (collection rate 100%) and B, respectively. Rates of students having experience in overseas were 17.0% and 11.3% for Groups A and B, respectively. Significant differences were not seen in population rate tests ($p>0.05$). Self-evaluation for "speaking foreign languages" was 25.8% and 63.3% for Groups A and B, respectively. Rates of expectation for learning were highest for "children's health and environment" in both groups (Groups A: 61.4% and Groups B: 70.6%). Differences were seen in interest in overseas. High interest was seen in overseas organizations, advanced activities, and understanding on nation's contribution in Group A, and health factors in the world in Groups B. Rates of students wishing to join activities abroad were 18.6% and 55.9% for Groups A and B, respectively.

[Discussions] Group B learns from an early stage, foreseeing future activities in overseas. Results have revealed present situations and environments of the two countries including natural disasters, poverty and education gaps.

P2-25

NURSES' ATTITUDES TOWARDS THE IMPORTANCE OF FAMILIES AND RELATED EDUCATIONAL FACTORS IN HOSPITALS

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[Objectives] The study aimed to clarify nurses' attitudes towards the importance of families and related factors in education methods.

[Methods]

"Families' Importance in Nursing Care—Nurses' Attitudes (FINC-NA)" consists of 26 items and assesses nurses' attitudes. The questionnaire sought information on the nurses' basic attributes and details of the family nursing education was distributed to nurses who had more than five years of clinical experience at the time. The comparisons of the FINCNA scores were done using Student t-test.

[Ethics] This study was approved by the Institutional Review Board of Osaka University (No. 17269).

[Results] 455 participants from 7 hospitals (valid response rate=71.3%) were recruited. Their clinical experience was 13.7 ± 7.2 years. The total FINC-NA of participants with family nursing education was significantly higher than participants without family nursing education (92.5 ± 9.7 vs. 89.3 ± 10.0 ; $P=0.001$). The participants who had attended a lecture by a visiting lecturer who was well versed in family nursing (97.4 ± 11.6) or a lecture that included an exercise (97.4 ± 11.1) were higher than other groups. Further, the score of participants who had attended a lecture that included an in-service training exercise was 95.3 ± 10.3 . These three group's scores were significantly higher than the groups of nurses who had not attended a lecture ($P < 0.05$).

[Discussions] Attending lectures on family nursing was found to be effective in improving the nurses' attitude. However, if it is difficult to set up such lectures, exercises involving in-service training was found to be effective as well.

Poster

Innovations in Nursing Education

P2-26 **Nursing Faculty Members' Coordination Capability for Conducting Basic Nursing Practicums**

○Tomoko Furuichi

Department of Nursing, Former Kinjo University, Japan

Objectives

The purpose of this study is to clarify the ability required of nursing teachers for coordinating practicums in a clinical setting.

Methods

Data was taken from thirteen targets including research associates, assistant teachers and lecturers who were involved in basic nursing practicums, in semi-structured interviews following the interview guide, then analyzed qualitatively and inductively. The researcher interviewed individual teachers for one hour at a place designated by the interviewee where he/she could relax.

Ethics

This study was approved by the research ethics committee of the Faculty of Nursing and Medical Care, Keio University. I gave explanation to the participants in writing and orally before obtaining their signatures of consent.

Results

It was revealed that teachers must have the following competencies to coordinate clinical practicums: 1. Readiness to adapt to the ward; 2. Resourcefulness including abilities to listen to others, to reflect on one's own behavior, to communicate, to create, to discipline oneself, and to persevere; 3. Social skills to report to and consult with the ward personnel including the manager and the instructor; 4. Support skills to advocate students' position and address their personal problems; and 5. Negotiating skills to cooperatively solve conflicts among educators as well as to carry out negotiation on one's own.

Discussions

It became clear that readiness, resourcefulness, social skills, support skills, and negotiating skills are required as capabilities to coordinate nursing practicums. In addition to this study of basic nursing field, questionnaire survey targeting the entire nursing field will be needed in the future.

P2-27 **Attitudes and perspectives of college teachers toward educating nursing students in practicum**

○Yayoi Wakazawa, Yoshiko Sera

Department of Nursing, International University of Health and Welfare, Japan

Objectives

This study investigated the attitudes and perspectives of college teachers regarding how to educate nursing students in practicum.

Methods

Six college teachers were individually interviewed by the researcher. The participants were asked about their perspectives on college education and nursing practicum. The interview data were analyzed using content analysis.

Ethics

This study was approved by the Ethics Committee of the International University of Health and Welfare (IUHW-2017-0832). All participants signed a consent form.

Results

Four core-categories were extracted: [teach students in a practical manner], [teach students to learn from patients], [believe in students' strength], and [encourage students]. In additionally, Nine categories were extracted as well: [support students to think independently], [help students in solving problems by themselves], [take patients' complaints and pain seriously], [value students' thoughts about care for patients], [do not cause confusion for students], [sympathize with students who were rejected by patients], [avoid paternalism], [encourage students to express their opinions], and [discover students' interests during practicum]

Discussions

The findings imply that college teachers conducted the nursing practicum with emphasis on both practical and emotional support.

Poster

Innovations in Nursing Education

P2-28

A questionnaire survey on nursing theories learned by nurses in Japan

○Yasuhiro Suzuki, Shizuko Sugaya, Masako Takahashi

Department of Nursing, Faculty of Nursing, Chiba Institute of Science, Japan

[Objectives] This study aims to identify what nursing theories are learned by nurses in Japan.

[Methods] We administered an internet questionnaire survey between February and March 2019, to nurses working at hospitals. Two hundred hospitals with 200 or more general beds were randomly chosen from the hospitals listed in an eastern Japan version of the hospital yearbook, 2018. A letter requesting permission was sent to nurse administrators, and upon receiving access, a letter introducing our study outline and individual ID numbers that were used to identify 970 nurses in 9 hospitals were sent. Question items included age, years of experience, gender, qualifications, nurse training course, nursing theories nurses learned, and learning methods outside of training courses (free description).

[Ethics] After obtaining the ethical review at the institution the researchers belong to, we explained the ethical considerations in writing to the participants.

[Results] We received 134 responses. Of those, 131 responses matched the ID and were analyzed. Background of participants: male nurse, 22 (16.8%). Age: twenties, 45 nurses (34.4%); thirties, 45 (34.4%); forties, 27 (20.6%); fifties, 14 (10.7%). Nurse training course: vocational school, 72 nurses (55.0%); four-year college of nursing, 37 (28.2%); junior college of nursing, 18 (13.7%); others, 4 (3.1%). Top five theories nurses learned in nurse training courses: Nightingale, 127 nurses; Henderson, 124; Orem, 102; Peplau, 99; Roy, 87.

[Discussions] The findings show that nursing theories related to traditional theories and nursing process are commonly learned in nurse training courses.

P2-29

The Reality of Clinical Imagination in Clinical Nursing

○Yoshiko Kajitani

Department of Nursing, Kyoto Tachibana University, Japan

[Objectives]

The goal of this study is to reveal the state of affairs around the clinical imagination of clinical nurses.

[Methods]

Research participants consisted of 7 clinical nurses with experience ranging from 11 to 17 years, all of whom consented to participate in the study. Semi-structured interviews regarding exemplary cases of demonstrating their clinical imagination were carried out, and were qualitatively and inductively analyzed.

[Ethics]

Approval was obtained from the Ethical Review Board of the author's associated graduate university.

[Results]

The following 8 categories were revealed: Clinical nurses aimed to heal and calm patients through imagining mental, physical, and social factors of the patient such as: the family's view of the patient, the background behind the patient's behavior, the physical conditions of the patient, the risks the patient has, the privileges of the patient, the medical treatment's effect on the patient, etc. Furthermore, the nurses cared for the patients while considering effective techniques and cooperation with others.

[Discussions]

In nursing practices, it is important for nurses to think about what the patient and the patient's family considers to be beneficial or risky to them as well as to cooperate with others. Therefore, it is necessary for nurses to always pay close attention to the patient and to have the ability to understand the reasons behind the patient's behavior. Furthermore, this study showed that reflection upon daily clinical nursing practices contributes to a better clinical imagination.

Poster

Innovations in Nursing Education

P2-30

A literature review on ethics education for nurses working in hospitals in Japan ? Aiming at educational reform through collaboration between hospitals and educational institutions

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²School of Nursing, Faculty of Medicine, University of Miyazaki, Japan

[Objectives]

This study analyzed literature on ethics education for nurses working in hospitals in Japan, and investigated the trends and characteristics of the research.

[Methods]

Original articles published in Japan between 2000 and March of 2019 were searched for on the Ichushi Web database using the keywords "hospitals", "nurses", "ethics education", and "ethics training".

[Ethics]

Articles were extracted accurately, paying careful attention not to violate the copyrights.

[Results]

Thirty-nine articles were retrieved, and the number of the articles have increased yearly. There were 31 articles reporting the results of questionnaire surveys targeting nurses (79.5%), and 24 (61.6%) used quantitative analysis. The awareness of ethical problems and dilemmas experienced by nurses were most frequently surveyed, and there were articles that investigated the effects of ethics education and interests in nursing ethics. In the classification of the institutions to which first authors belonged, 25 were educational institutions (64.1%) and 14 were hospitals (35.9%).

[Discussions]It can be inferred that it is necessary to provide ethics education in line with the characteristics and educational needs of nurses working in hospitals. The findings suggest the possibility to improve the ethics education of nurses through cooperation between hospital staff in charge of education and instructors who know details of the medical settings.

P2-31

Educational program for nurses in rural Japan using narratives of persons with dementia and family care

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School of Nursing, Jichi Medical University, Japan

[Objectives]

The problem of nursing in rural area is that there are few opportunities for training and research. We developed a nursing education program using narratives for persons with dementia and family care because of the high need for elderly care in Japan. This study is clarify the learning of nurses who have received an education program for dementia care nursing.

[Methods]

11 nurses working in Japanese rural area participated in the face-to-face group session after taking a series of internet lectures on gerontological nursing in 2016-2018. They were asked to access the website (<https://www.dipex-j.org/dementia/>) for the group discussion. Participants discussed the revelations they received from the narratives regarding the condition and its care. The analyze of the program was based on the observation of the group sessions and the responses to questionnaire about their learning.

[Ethics] This study was approved by The Ethics Committee of Jichi Medical University.

[Results]

Almost all participants found the program "intriguing" and "enjoyed the learning process." One stated that she realized the pain deeply entrenched in the patient's mind by watching the narrative of a woman with Lewy body dementia who said: "I'm not afraid of hallucinations, but am afraid of myself seeing hallucinations." This brought about an active discussion on the importance of being aware of the differences in the patients' and caregivers' viewpoints.

[Discussions]

By sharing the narratives together, participants learned from different responses from others and received the chance to reflect on their own practices.

Poster**Innovations in Nursing Education****P2-32****Differences in Nursing Students' Attitudes Toward Older Adults with Dementia by Year of Study and the Influencing Factors**OManami Kamiyama¹, Yuri Hanaoka²¹School of Nursing, Gunma Prefectural College of Health Sciences, Japan²Nursing, Shinsyu University Hospital, Japan

[Objectives] The aim of this study was to identify the differences in nursing students' attitudes toward older adults with dementia by year of study and the influencing factors.

[Methods] The participants in the study were 247 first-year to fourth-year nursing students at A University from whom consent had been obtained. The survey was conducted as a self-administered questionnaire, with subjects providing background information and responding to questions corresponding to Baba et al.'s Attitudes Toward Old People Scale. Analysis was conducted with SPSS Version 21 software (IBM Corp., Armonk, NY, USA), with one-way analysis of variance and Tukey's multiple comparison test performed for the Attitudes Toward Old People Scale values from students in each academic year. The t-test was used to compare values on the Attitudes Toward Old People Scale of students with and without prior experience interacting with older adults with dementia.

[Ethics] This research was conducted with the approval of A University's ethics board.

[Results] Significantly higher values on the Attitudes Toward Old People Scale indicate that fourth-year students have a more positive attitude toward older adults with dementia than first-year ($p=0.01$) and third-year students ($p=0.035$). Students with prior experience interacting with older adults with dementia were found to have a significantly higher average value on the Attitudes Toward Old People Scale than students without such experience ($p=0.01$).

[Discussions] It was suggested that direct contact with older adults with dementia leads to a more positive attitude toward these patients.

P2-33**Effect of teachers' behaviors on the awareness of nursing students regarding their own health conditions during clinical practicum**OMotoko Azuma¹, Hiromi Fukuda², Saeko Hayashi³¹Graduate Student,Aichi University of Education, Japan²Department of School Nursing and Health Education, Aichi University of Education, Japan³University of Human Enviroments, Japan**[Objectives]**

To clarify whether teachers' behaviors affect the awareness of nursing students regarding their own health conditions during clinical practicum.

[Methods]

A questionnaire survey was conducted on nursing students who had completed their clinical practicum, just before their graduation, in Aichi Prefecture. The questionnaire focused on students' health conditions and teachers' behaviors during practicum. Teachers' behaviors were assessed using the Japanese Effective Clinical Teaching Behaviors scale. Furthermore, data of 43 items were subjected to factor analysis using the principal factor method with varimax rotation. The total variance of 43 items was 63.86%. The health conditions and data obtained were analyzed using one-way analysis of variance (ANOVA).

[Ethics]

This study was approved by the Aichi Educational University Ethics Review.

[Results]

We received responses from 613 students (16 of 43 nursing schools) in Aichi Prefecture. The analysis included 550 students, excluding those who did not respond. The effective response rate was 80.5%. The answers "healthy," "moderately healthy," and "unhealthy" were obtained from 270 (24.1%), 117 (21.3%), and 163 (29.6%) students, respectively. ANOVA extracted four significant factors that affected students' health conditions during clinical practicum: teaching behaviors adapted to student levels [$F(2,547) = 9.70, p < 0.001$], building an environment for practicum [$F(2,547) = 8.21, p < 0.001$], teachers' attitudes while providing guidance [$F(2,547) = 5.81, p < 0.001$], and relieved environment [$F(2, 547) = 8.08, p < 0.001$]. This indicated that teachers' behaviors affected students' health.

[Discussions]

Overall, teachers' behaviors affect students' health during stressful clinical practicums.

Poster**Innovations in Nursing Education****P2-34**
Ups and downs in working life perceived by novice nurses working in mid-sized hospitals - Relationship between perception of ups and downs and the nursing workplace environment using the Life-Line method -
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[Objectives] This study aims to determine the relationship between ups and downs in working life perceived by novice nurses in mid-sized hospitals and nursing workplace environment by the Life-Line method.

[Methods] Participants: 57 second-year nurses in mid-sized hospitals with a self-rating questionnaire survey from May to June, 2019 of Ups and downs in working life over one year from the start of working, using the Japanese version of the Nursing Work Index-Revised (NWI-R: 6 factors). Analysis: With two groups: a group with many curves in the plus region, and one with the curves in the minus region, tested for the relationship with the NWI-R.

[Ethics] Approved by the Ethics Review committee of the institution the researcher belongs to.

[Results] We analyzed 24 responses (collection rate: 33.3%; of these 96.0% were valid; 22 females, 2 males). More than half participants showed improving or maintained curves between July and December in the 1st year and from February to March, while declines from April to May and in January. There were no significant differences between the factors of the NWI-R ($U=33.5-54.0$, n.s.) (18 participants in plus, 6 in minus region).

[Discussions] The curve changes suggest that the nurses improve motivation as they become familiar with the workplace environment and their ability to perform the nursing, and when they become 2nd year nurses. However, the absence of a relationship with the NWI-R suggests ups and downs in working life has no relationship with whether the workplace environment allows them to employ their nursing expertise.

P2-35
Consideration of the Results of a Narrative Approach Aiming for Nursing Practice Visualization
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[Objectives] This study's purpose is to clarify results of the program based on a narrative approach (NP) that aims to achieve visualization of a nursing practice.

[Methods] An unstructured interview lasting approximately 1 hour was conducted with Nurse A, who attended NP courses. The topics discussed in the conversation were compiled into data. Referencing the cooperation and otherness making up the essential nature of the narrative, the researchers focused on relationships, context, created meaning, and processes of change, and interpreted the related results.

[Ethics] Approved by the Health Sciences Ethics Committee at Kobe University Graduate School of Health Sciences (approval number: 459-2).

[Results] She described on her nursing practice and developed the desire to have deeper interactions with patients and provide kinder care. She saw things differently, smiled and talked to every patient, and became proactive in conducting nursing practices. Seeing the increase in dementia in society, She aspired to respect the wishes of patients and provide nursing that would put a smile on their faces.

[Discussions] By describing on her nursing practices, She was able to visualize it and discover the aspects that she found important. Her proactive practice came from accepting diversity through NP, and she decided to learn about targets starting from a position of ignorance. The conversation in the interview suggests that these changes are results of the NP. This study was supported by JSPS KAKENHI Grant Numbers JP15K15796.

Poster

Innovations in Nursing Education

P2-36

Effects of a Clinical Learning Environment Design support program for Educational Instructors

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⁶Faculty of Nursing, Kobe Women's University, Japan

[Objectives] This study examined the effects of a clinical learning environment (CLE) design support program for educational instructors.

[Methods] Educational instructors were recruited from 23 hospitals and divided into an experimental group (n=22) and a control group (n=23). A clinical education strategy lecture was provided to both groups, and then a CLE design workshop was given to the experimental group. Questionnaire surveys were conducted prior to the program, immediately afterwards, and two months later. The two groups were compared using a t-test or Mann-Whitney's U-test, and the chronological comparison was analyzed using a paired t-test or Wilcoxon signed-rank test.

[Ethics] This study was approved by the ethical review board of the researchers' affiliated institution.

[Results] In the inter-group comparison, the experimental group had a significantly greater score difference between immediately afterwards and the baseline in the "iu (saying) skills." The experimental group scored significantly higher in the "iu (saying) skills" immediately afterwards and two months later than they did the baseline. Both groups scored significantly higher on the "support in facilitating students' metacognition" immediately afterwards in comparison to the baseline. The "support in facilitating new nurses' metacognition" scores were significantly higher than the baseline immediately afterwards for the experimental group and two months later for the control group. Both groups scored significantly higher on the "affective CLE" subscale two months later than the baseline.

[Discussions] The study showed that the program's lecture increased communication skills, support in facilitating learners' metacognition, and affective CLE while indicating the possibility that the workshop improved verbal communication skills.

P2-37

Visual Track Tendencies among Nursing Students

○Yayoi Imura

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[Objectives] We conducted research to elicit educational perspectives by using the visual track to compare the observation characteristics of patients immediately following surgery between nursing students and nurses to elucidate tendencies and differences in visual perception.

[Methods] The subjects were five nursing students who have completed an acute stage nursing course and four nurses with at least 10 years of acute stage nursing clinical experience who conducted observation on a post-operative patient model doll. We analyzed their visual track and behavior during this time.

[Ethics] This study obtained the approval of the Ethical Review Board of the regional university, and performed it.

[Results] The results of our analysis were that nursing students spent about twice as much time as nurses in close observation, they moved their line of sight more and for longer distances and there were slight movements between areas, i.e. they conducted a whole-body observation in an exploratory fashion. Also, observation performance evaluations had significantly lower results for the abdomen ($P<0.05$). In visual track comparisons, there were many line of sight movements, and oversights and confusion were recognized in observation of the abdomen, drains and transfusions.

[Discussions] The point that observation guidance just after the way to the nursing student is necessary to become clear, and observation in detail and teaching by practicing according to the object's situation after an operation are needed. On the other hand, a problem was seen by a nurse.

Poster

Innovations in Nursing Education

P2-38

Tendency of clinical judgments of school nurses during Epipen® administration ?From behavioral analysis of simulation education using a high-performance patient simulator?

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²Suzuka University, Japan

³University of Human Environments, Japan

[Objectives]

To examine the tendency of clinical judgments of school nurses during Epipen® administration.

[Methods]

Simulation education on dealing with food anaphylaxis was conducted using a high-performance patient simulator (SCENARIO, Kyoto Science) in 2018. Fifty school nurses were divided into nine groups; they were supposed to deal with children having food allergy and pediatric bronchial asthma for 8 min. Before the simulation, they were educated about the manual on how to deal with food anaphylaxis. We set the high-performance patient simulator to change its vital signs between before and after Epipen® administration, allowing us to determine the changes in the behavior of the nurses after completion of the stimulation.

[Ethics]

Suzuka University Ethics Review Board approved the study.

[Results]

The shortest duration from the start of the simulation to Epipen® administration was 2 min 42 s; however, two groups failed to administer the drug within 8 min. The manuals at hand were not utilized during simulation. While all the groups observed for signs of respiratory distress in children, each of them made different clinical judgments regarding the difference between bronchial asthma due to children's medical history and anaphylaxis due to food allergy, indicating that the manuals were not utilized.

[Discussions]

The results revealed that the clinical judgments of school nurses during an emergency situation, such as food anaphylaxis, are not based on manuals. Hence, reviewing the manual and training using a high-performance patient simulator are necessary in the future.

[Acknowledgment]

This work was supported by JSPS KAKENHI Grant Numbers 18K02842,17K12564.

P2-39

Competencies for simulation education required by facilitators to cultivate clinical judgment ability in intensive care unit nurses

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The objective of this study was to identify the competencies for a simulation education program needed by facilitators to cultivate clinical judgment ability in less experienced intensive care unit (ICU) nurses.

A group interview was conducted on three female ICU nurses (mean age: 47 years; ICU nursing experience: 15, 21, and 25 years) who were working as facilitators in a simulation education training. The obtained data were then analyzed qualitatively and inductively.

This study was approved by the Chiba Prefectural University of Health Sciences ethics committee (approval number: 2015-027)

The results of the analysis revealed 63 codes and the following 12 categories: [Understanding simulation education methods], [Possessing and using knowledge about adult education], [Possessing the knowledge and skills necessary to associate with others], [Possessing a knowledge base about the psychology of the learner and using it in the educational setting], [Possessing well-founded knowledge to explain clinical conditions], [Being able to assess the ability of learners], [Assuming and sensing the response of the learner], [Using effective metacognitive skills to monitor one's behavior while advancing a scenario], [Thinking and behaving toward the learning target], [Making a flexible and suitable response to the learner], [Guiding the learner to be capable of thinking and practicing by his/herself], and [Creating a safe environment for the learner].

The results of the present study suggest that to develop a successful facilitator education program, contents are needed that enable facilitators to obtain "knowledge about simulation education and adult learning", "metacognitive skills", and "flexible methods for learners"

Poster

Innovations in Nursing Education

P2-40

Actual state and issues on nursing skill-related items experienced in geriatric nursing practicum

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[Objectives]

This study aimed to understand contents of "nursing skill checklist (hereinafter referred to as the checklist)" filled in the geriatric nursing practicum by students and get insight on possible improvements in lectures, exercises, and practical.

[Methods]

Based on the checklist sheets completed by students in the past four years, we compared self-evaluation results for various items between years. A 3-point scale of ① experienced, ② partly assisted, and ③ observed were used for evaluation.

[Ethics] Before starting the practicum, students were asked if they were willing to participate in the study, and all participants provided their consent in writing and verbally.

[Results]

1. Of 140 check points in the checklist, $\geq 25\%$ of the basic nursing skills practiced fell into the following four categories: eating assistance skills, excretion assistance skills - activities, rest assistance skills - cleanliness, and clothing personal care assistance skills.

2. For all check points, no major differences were noted in year-to-year comparisons.

3. Students who selected "experienced" were fewer for risky assistance skills such as techniques related to catheters (tube management).

[Discussions]

Many students selected "experienced" for personal care assistance skills because they had practical training in a rehabilitation ward.

For the paucity of experience in nursing support skills, the role of this practicum in the whole department curriculum is required to be reconfirmed through, for example, reviewing information from practices in other fields.

E-learning material usage survey: analysis of learning motivation

P2-41

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[Objectives]

To survey the usage of e-learning materials, analyze their purpose and motivations for use, and discuss preparatory assignments aimed at encouraging subjective learning.

[Methods]

Participants were first-year nursing students using e-learning materials at A University, and survey and analysis of e-learning material usage were performed for one year using access logs and the annual program.

[Ethics]

This study was conducted with the approval of the B University Graduate School of Medicine Research Ethics Committee.

[Results]

The access logs were surveyed for two subjects that used e-learning materials. For the first semester subject, materials were accessed 1054 times by 92% students; the materials were viewed in 78% of cases and downloaded in 22%; for the second semester subject, these figures were 1182 times, 96% students, 57%, and 43%, respectively. Usage of the materials increased before each class, and active use was observed before practical exams and exercises.

[Discussions]

Among students for whom it was their first experience studying specialist university subjects, there was active use of e-learning materials for preparation and learning. The materials were also used before exams and practical exercises, indicating that effective materials are those that can be used by students to review and check their knowledge. As strong correlations in the learning materials exist with related topics in the same units, the creation of materials to expand the scope of relevant learning may be effective.

The creation of materials to expand the scope of relevant learning may be effective.

Poster

Innovations in Nursing Education

P2-42

The Current Situation of Nursing Students' Basic Social Skills

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[Objectives] Nowadays, basic social skills are required in basic nursing education. The purpose of this study is to investigate current situation of nursing students' basic social skills.

[Methods] The subjects were 4th year students at nursing university. The survey was carried out when all of the curriculum was finished (December, 2018). The survey asked students' episodes that became an opportunity to improve themselves, and the reason. The data was discussed by few researchers, and the sentence was separated by the meanings, and categorized based on basic social skill's 3 skills and 12 skill factors. This study adopts definition of "Basic social skills" from the Ministry of International Trade and Industry.

[Ethics] The survey was conducted, approved by Kanagawa University's ethics committee (20180322-18).

[Results] Out of 66 subjects, 48 were valid respondents. "Ability to work in a team" were 35 codes, "Ability to step forward" were 4 codes, in 53 codes total. "Ability to grasp situations" were 22 codes in "Ability to work in a team", among 20 codes related with nursing practice.

[Discussions] It was found from the result that nursing students notices their experience of understanding themselves and their interpersonal environment while conducting themselves to cooperate with others in nursing practice leads to the development of their ability to work in a team. The future agenda is to cultivate nursing students' ability to step forward in order to make them conduct themselves with confidence.

P2-43

Present conditions and educational strategies for metacognition among nursing school students in the lower grades in Japan

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Shiga University Of Medical Science, Faculty of Nursing, Japan

[Objectives] In this study, we clarified the current state of metacognition of first- and second-grade nursing students at a university and considered an education strategy for strengthening metacognition.

[Methods] The subjects were first- and second-grade nursing students without experience in clinical training. A self-report questionnaire survey was conducted between 2017 and 2019. The questionnaire was "the Adults' Metacognition Scale" and consisted of 28 items comprising 3 elements: "monitoring," "control," and "metacognition." The questionnaire data for each grade was analyzed through multiple comparisons using t-test, one-way analysis of variance, and the Bonferroni correction. Furthermore, as an education strategy, we conducted a simulation learning of patient care for second-grade students and analyzed their free descriptions of their learning from the debriefing.

[Ethics] This study was approved by the Institutional Review Board of University A.

[Results] The "monitoring" score was lowest in all grades and significantly different compared to "control" and "metacognition" ($p < 0.05$). A low score in "monitoring" indicates that reflection behavior has not been achieved. On the other hand, in the debriefing survey, the students answered that "other methods were considered by reflecting" and "if I didn't reflect, I didn't notice the mistake." This suggests that debriefing has shown that it encourages reflection behavior.

[Discussions] It is necessary to learn reflective behavior to strengthen metacognition. Additionally, simulation debriefing enhances reflective behavior; therefore, in the future, we plan to systematically study educational methods that enable reflection, such as simulation learning with a focus on debriefing.

Poster

Innovations in Nursing Education

P2-44

How Japanese nursing students co-learn about vulnerability in the English language classroom

○David Casenove

Graduate School of Nursing, Chiba University, Japan

English language proficiency is often considered a necessary asset for a nursing workforce that is becoming increasingly international and multicultural. English curricula often aim at the practice of academic and professional skills such as filling a patient chart or producing effective presentations.

As part of a general overhaul of the curriculum at the Graduate School of Nursing (Chiba University, Japan), a new “academic English” program, consisting of eight elective term-long (7.5 sessions) courses, has been developed in 2019 for addressing the evolving needs of undergraduate and graduate nursing students. Curriculum design involved six full-time instructors from language education and nursing backgrounds to integrate the content of the English class to the existing nursing curriculum.

A core teaching concept is “vulnerability”, that is approached either directly (as a topic for reading or listening materials) or indirectly (as a focus for self-reflective tasks). Therefore, students can establish parallels between their vulnerability as learners and that of foreigners interacting with them in Japan. Through collaborative and cooperative activities (co-learning), students produce meaningful communication that tackles themes relevant to their personal and professional growth as nurses while prompting self-assessment during the learning process to promote long-term learner autonomy. All activities were designed to balance input and output, for both content-focused and language-focused learning.

In this presentation, we present the state of English education as part of a nursing curriculum, contrast our new approach to previous program designs, and illustrate how Japanese students can transfer their experience as language learners in their practical nursing activities.

P2-45

Trend of study on person in charge of educating new graduate nurses at general hospital in Japan

○Akiko Matsumoto¹, Eisuke Mizumoto², Ayumi Nishigami¹

¹Department of Nursing, Faculty of Helth Science, Aino University, Japan

²None,

[Objectives]

The purpose of this study is to grasp the trend of studies on education of rookie nurses and to clarify problems that the persons in charge of education face and the present situation of support.

[Methods]

The authors searched original papers published after 2010 using the web version of Japan Medical Abstracts Society with "persons in charge of education" and "rookie" as key words.

[Results]

Total 96 papers hit, and studies only on persons in charge of educating rookie nurses in general hospitals were selected. Studies that targeted those together with training supervisors and practical instructors were excluded, and the number of papers to be examined was reduced to 17. The papers were categorized into A) Subjective of persons in charge of education and B) Environment of persons in charge of education, which were 11 and 6 papers, respectively. The titles of persons in charge of education were different in each hospital, and as well as their evaluation methods and supports were.

[Discussions]

Our survey has been only few studies on objective indicators from rookie nurses, practical instructors, and so on, and therefore future surveys are needed. Moreover, most of the studies evaluated only actions taken within their hospitals, and definition and action of persons in charge of education were vague in each hospital. Therefore, it is necessary to perform a factual survey for persons in charge of education to clarify types of roles they assume so as to build future support through comparison of the present problems.

Poster

Innovations in Nursing Education

P2-46 Factors influencing ward nurses' discharge planning for terminal cancer patients

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²Faculty of Health Sciences, Japan Health Care College, Japan

[Objectives] This study aimed to clarify the factors influencing ward nurses' discharge planning for terminal cancer patients.

[Methods] The study participants were general ward nurses working at nine hospitals, which were designated by the prefecture as facilities to promote cancer care and palliative care at home. A self-administered questionnaire survey, based on the attitude, subjective norms, and self-efficacy model, was conducted with 475 nurses. The questionnaire included items regarding participants' demographics, attitude, norms, self-efficacy, barriers, educational experience in discharge planning for cancer patients, the ethical behavior scale for nurses, the ENDCOREs communication skills scale. To evaluate ward nurses' discharge planning practices for cancer patients, the discharge planning of ward nurses (DPWN) was used. Data were analyzed using descriptive statistics and stepwise regression modeling. The significance level was 5%.

[Ethics] This study was approved by the Hokkaido University Ethics Committee.

[Results] In total, 348 general ward nurses completed and returned the questionnaire; the mean age was 33.4 ± 9.1. Stepwise regression results showed that the factors influencing the DPWN score for cancer patients were self-efficacy in discharge planning for cancer patients ($\beta=0.44$, $p<0.001$), respect for the patient's autonomy ($\beta=0.35$, $p<0.001$), experience of in-service education in terminal care ($\beta=0.12$, $p=0.002$), and self-efficacy in discussing death with patients ($\beta=0.09$, $p=0.04$). This model explained 49% of the variance.

[Discussions] It is important, for facilitating discharge planning for terminal cancer patients, to improve ward nurses' self-efficacy in discharge planning and interaction with patients, and their ethical behavior. In-service education might be an effective tool.

Nursing training to attract the interest of the nursing students

P2-47

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Faculty of Human Health Department of Human Nursing, Sonoda Women's University, Japan

[Objectives]

Appearance care is emphasized in the healthcare setting. We provided the original nursing practice which is the "Oshare" to understand the patient with changing appearances.

This study is to clarify the results and issues of the exercise class.

[Methods]

1. Introduction of model case

A thirty years old female with systemic lupus erythematosus(SLE) and altered appearance.

2. Exercise class

1) Prior learning for the patient's SLE and nursing assessment in advance.

2) Discussion and presentation on the "Oshare" to be proposed to patients.

3. Research data

Self-evaluation form on learning activities and learning outcomes written after class.

4. Analysis method

Analyze the submitted self-assessment form descriptively and qualitatively descriptively.

[Ethics]

Research cooperation protected the students' free will. Approved by the Ethics Committee.

[Results]

About 80% of students were actively engaged in learning.

The learning outcomes included "understanding the disease" and "broadening my horizons in group discussions".

The students understood that the patient had "experience of losing their identity" and "difficulty of accepting the reality". In order to propose "Oshare", they learned that "respecting the patient" and "adjusting to the condition" etc. are important.

[Discussions]

This model case made it easy for students to imagine patients, as Japanese adolescent nursing students around 20 years of age were interested in "Oshare".

For active learning, the challenge is to set up a model case that students are interested in and easy to imagine.

Poster

Innovations in Nursing Education

P2-48

The theory-practice gap in nursing education; A systematic review focused on the academic and clinical education

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²Kyushu University, Japan

[Objectives]

Although the theory-practice gap has been recognized as an issue in nursing education for many years, its definition and specific issues are not clear. In light of the current state of change in nursing education and medical services, we explored the international trends in research on the gap between theory and practice.

[Methods]

A systematic review. We searched the databases of MEDLINE and CINAHL with the keywords "theory-practice gap".

[Results]

In the MEDLINE, the number of articles has been increasing gradually since 1956 and has exceeded 50 studies a year since 2000. In addition to the nursing, the training field of the doctor, midwife, pharmacist, rehabilitation technician, and dental hygienist included. In CINAHL, 324 studies included in the theory-practice gap, and 22 studies in the theory-practice gap in nursing education. A review published in 2019 indicated that the concept and definition of the theory-practice gap were not clear. Otherwise, studies discussed the theory-practice gap focusing on evidence-based practice, the role of nurse teacher, and so on.

[Discussions]

In the undergraduate and postgraduate education of medical professionals, the gap between theory and practice was confirmed to be the common theme because of the large number of research papers. However, the concept was diverse, and the establishment of a conceptual model has been discussed as future research. Further research will be needed to define the comprehensive concept that goes through undergraduate and clinical education. This work was supported by JSPS KAKENHI Grant Numbers 18K17453 and 17K12160.

P2-49

Typology of learning in maternity nursing practice for male students-Using trajectory equifinality model-

OHiromi Matsui

Faculty of Nursing, Toyama Prefectural University, Japan

[Objectives]This research aimed to clarify the typology of learning for male student nurses during clinical training in maternal nursing.

[Methods]The participants were fifteen male students. The data was obtained using semi-structured interviews, conducted on three occasions: before clinical training, one week later and two weeks later. The data was analyzed using trajectory equifinality modeling approach.

[Ethics]The teacher explained the research cooperation in the presence of the clinical ethics coordinator and obtained the consent by targeting the students. Started with the approval of the Ethics Review Board.

[Results]The male student's learning was of three types: "actively learn about the characteristics of motherhood", "learn from the standpoint of paternity" and "it is difficult to learn beyond gender differences". Regardless of the type of learning, the preparation for practical training was "whether it is acceptable to pregnant women by noticing the nature of the male" and the first week of training was "he was relieved that he could be involved with a pregnant woman in outpatient training",After the training, "To realize the importance of life through neonatal care" were extracted as essential passage point.

[Discussions]The study results suggest "feel that masculine nature is a barrier in clinical training in maternal nursing" is a turning point that affects learning. It is necessary to make an opportunity to think about the way of nursing based on sex difference before practice.

Poster

Innovations in Nursing Education

P2-50 Pilot Study: Evaluation of Education Program to Improve Practical Skills of Mid-Career Nurses Involved in Intensive Care

ONana Inoue, Aiko Kitamura, Rie Ooe

Perioperative and Critical Care Nursing, Osaka Prefecture University, Japan

[Objectives]

This research is preliminary study to evaluate the educational intervention to improve practical skills of mid-career nurses involved in intensive care.

[Methods]

1. The content of the program was structured based on the Synergy Model for patient care and research papers on critical care in the past 5 years in Japan. The main content was the management of delirium, pain and respirators, the utilization of intensive care system, and the patient advocacy.

2. A questionnaire created to identify nurses' understanding level of the content was used immediately before and one month after the program. A scale to measure the clinical practice proficiency of mid-career nurses were used immediately after the program and three months after the program. In addition, we obtained permission to use the scale.

[Ethics]

This research was conducted with the approval of the Osaka Prefecture University Nursing Research Ethics Committee.

[Results]

The participants were five women working in the intensive care unit at hospitals in Osaka, Japan. After the program four participants answered from "understanding not much" to "understanding well" in most of the content of the program. On the contrary, the understanding level of one participant was declined after the program. Identically, in the comparison of self-assessment of the practical skills before and after the program, this participant rated lower the skill after participation.

[Discussions]

It was suggested that nurses who realized that they had a low understanding of intensive care evaluated their ability to practice after the program was low.

Comparison of simulation training learning evaluation

OToshiko Ishizuka, Yoko Yamada, Takao Hasegawa, Nobue Sato

Faculty of Nursing, Niigata University of Health and Welfare, Japan

[objectives] : To compare and examine evaluations due to changes in simulation cases.

[Ethics] : I was reviewed by my ethics committee and explained in writing and verbally that individuals can not be identified in anonymous surveys.

[Methods] : Simulation scores by 46 nursing university students in 2017, 38 in 2018 teachers and PBL evaluation Comparison of valence scores (Man-Whitney U test), weighing text analysis on the contents of student learning, and comparing.

[Results] : The score for fiscal 2017 was significantly different from the score for fiscal 2016 because of the simulation evaluation 1 item (full 12 points) "observation item" 9.2 (p <.003), PBL evaluation 4 items (5 points) 1 theme guessing 4.4 (p <.000) 2 application of knowledge 3.8 (p <.000) 3 self-learning 4.3 (p <.000) 4 achievement of goal 4.5 (p <.008)was. About 60% of the descriptive content words of student learning were identical.

[Discussions] : The students learned independently and were able to describe necessary observation items. The change in the case was easy for the students to visualize the problem, was able to utilize knowledge, and led to promoting self-study. The issue was that the review of implementation and reports was not enough.

Poster

Innovations in Nursing Education

P2-52

A Study of the Paradigm Shift on Psychiatric Nursing : Psychiatric Nursing Practical Training to Achieve a Better Understanding of Mentally Ill Patients Who Are Receiving Job Training

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²General Education Center, Hyogo University of Health Sciences, Japan

[Objectives] This study reveals how mentally ill patients who are receiving job training see nursing students who come for practical training, and examines better approaches to providing psychiatric nursing practice.

[Methods] This qualitative and descriptive study was conducted with semi-structured interviews of 11 mentally ill patients who had been involved with nursing students doing their practical training. The patients voluntarily agreed to be interviewed.

[Ethics] This study was conducted after the proposal was reviewed by the Ethics Committee of Hyogo University of Health Sciences and approved by the dean (Approval No.18048).

[Results] 1)Average age of subjects was 40.9. Mental illnesses they suffered from included "schizophrenic disorder," "eating disorder," "adjustment disorder," "obsessive-compulsive disorder," "developmental disorder," "epilepsy," and "alcoholism." Five out of 11 subjects also had intellectual disturbances. 2) Actions of nursing students recognized by the subjects are comprised of 9 categories: one "basic attitude" and 8 "communication skills."

[Discussions] Generally in Japan, nursing students are assigned to care for patients with "schizophrenia" and "mood disorder" at medical and/or mental health facilities as part of their course of study. Researchers suggest educators teach effective communication skills to nursing students, and that students explicitly learn about the recovery strategies and resilience of mentally ill patients who are looking for work in their communities.

P2-53

Measuring the effectiveness of the recognition scale for female intimate partner violence patients to evaluate improving recognition of intimate partner violence

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²Health and Nutrition, Okinawa University, Japan

[Objectives]

To examine the effectiveness of the recognition scale for female intimate partner violence (IPV) patients (RS-FIPVP) to evaluate improving recognition of IPV following educational intervention within healthcare settings. The RS-FIPVP was developed by us.

[Methods]

In the workshop, anonymous and self-administered questionnaire survey was administered to medical staff (n = 206) at six healthcare settings. 127 valid responses were obtained and used in the analysis.

The survey contained questions on characteristics (occupation, etc.), understanding of lecture and 20 items of RS-FIPVP (answering at before and after the workshop).

A 5-point Likert scale was used in RS-FIPVP questionnaire, with the responses "Disagree" to "Agree", being scored from 1 to 5, respectively. Scores were allocated so that higher scores indicated higher levels of IPV recognition. 5 of score means correct answer, so the value was a correct answer rate.

[Ethics]

This study was approved by the research ethics committee of the authors' institution.

[Results]

The participants were 50 nurses, 27 physicians and 42 others. The total score and the correct answer rate of the RS-FIPVP 20 items significantly increased after the workshop than before.

The correct answer rate before the workshop among nurses, physicians and others was 6.0%, 3.7% and 2.4%, respectively, which was not the significant difference. There was a significant difference ($p<0.01$) in a correct answer rate (56.0%, 59.3% and 26.2%, respectively) after the workshop.

[Discussions]

It was suggested that RS-FIPVP was an effective scale for evaluating educational intervention and improving recognition of IPV.

Poster**Innovations in Nursing Education****P2-54****Collaborative Online International Nursing Education**

Mayumi Negishi, Yoriko Watanabe
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[Objectives] To describe an innovative pedagogical approach using Collaborative Online International Learning (COIL) for undergraduate nursing students in a classroom setting between two facilities in two countries: Japan and the United States of America (USA).

[Methods] The first COIL experience was conducted in a small-sized classroom setting. Ten undergraduate nursing students from each facility attended a 90-minute Global Health Nursing class connecting via online in January, 2019. After three US instructors presented about their nursing experiences in developing countries, students engaged in discussions and exchanged ideas. The Second and third COIL classes were provided to Japanese students (N=120) by a US instructor in May and July, 2019. All of the lectures were done in English with English-Japanese translations and facilitation by a Japanese instructor.

[Ethics] This is an educational project not requiring the IRB approval.

[Discussions] Japanese and US students were able to share the same learning goals and engaged in active online learning during the first COIL experience. Through this innovative pedagogy, students had the unique opportunities to learn not only about the objectives of the class but also similarities and differences in nursing and their cultures. Second COIL experience had internet connection problems that caused interruptions several times and students' downtime. Third COIL class went well with no internet interruption. In the context of in-class and online environments, lecturers in both countries engaged in a collaborated team environment with technological supports from both universities. Using COIL in nursing education would expand student learning and global nursing education experiences.

P2-55**A study on the validity of low-back pain prevention workshop using posture support device for novice nurses**

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²*Engineering, University of Shiga Prefecture, Japan*

[Objectives]This study aimed to verify the validity of low-back pain prevention workshop using posture support device for novice nurses.

[Methods]The subjects were 16 novice nurses at Hospital A who consented to participate in this study. In June 2018, a low-back pain prevention workshop was held for novice nurses. Before and after the workshop, we measured the nurses' forward leaning angles during nursing activities and conducted a survey in which they rated the efficacy of the low-back pain prevention workshop using a visual analog scale (0 to 100). Forward leaning angles were measured using an occupational low-back pain prevention sensor (posture support device, Japanese Patent Application No. 2013-249758) jointly developed with a company. Survey data were analyzed using IBM SPSS Statistics 21 software.

[Ethics]This study was approved by the ethics review board of the authors' university (approval no. 495).

[Results]The mean awareness of methods for back pain prevention was 69.8 ± 19.5 points before the workshop, but improved significantly to 93.4 ± 7.5 points immediately after the workshop. The mean value of the forward leaning angles at which stress was placed on the lumbar region during nursing activities was 23.7 ± 10.3 degrees before the workshop; however, it improved by 16.5 ± 9.5 degrees immediately after the workshop.

[Discussions]The results of this study demonstrate that an education program improved consciousness of low-back pain prevention and the forward leaning angles during nursing activities. This suggests the importance of systematically implementing low-back pain prevention education for nurses.

Poster

Innovations in Nursing Education

P2-56

Risk awareness of nursing students on viewing a photo image around the bed of a pediatric patient

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³Nursing, Bukkyo UniVersity, Japan

[Objectives]

The rate of fall accidents among pediatric in-patients is reportedly high even with accompanying persons. In the present study, we aimed at clarifying the characteristic patterns of risk awareness of nursing students on watching around a bed of a pediatric patient.

[Methods]

Twenty-seven nursing students were examined for risk awareness around a bed of an 18-months-old infant under drip infusion. A photo image around her/his bed with seven risky areas were presented for 10 seconds to the subjects. In questionnaire, they were asked to point out risky areas in the image, with reasons for their recognition.

[Ethics]

this study was approved by the ethical review board of the authors university(No.670)

[Results]

The average number of the recognized risky points was 3.2 ± 1.5 (S.D.) (ranging from 1 to 5). The points frequently recognized as potential risks included "low bed fence" (96%), "infusion root" (59%), "tea cups on the table" (55%), "toys" (48%), and "piled cushion and futon" (44%). Totally, 93 reasons were mentioned, including "accident anticipation" (52), "fall" (28), and "choking" (6). No one referred to the potential risk of a pediatric patient touching the infusion pump.

[Discussions]

The present study showed that most students could recognize several potential risks around a bed of a pediatric patient under drip infusion. However, it appears difficult for them to discover risks around infusion pump, probably because they had little experience to handle it. It is necessary to deepen students' understanding of medical risks through educational seminars and practices.

P2-57

Satisfaction levels for nursing program sessions of peri-anesthesia care: A questionnaire survey

○Yuko Akanuma

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[Objectives] In 2010, our graduate school offered a first-time peri-anesthesia nursing program in Japan, but the education system and role in nursing science have not yet been established. As part of a continuing education program, we have held study sessions for 5 years, and participants have interacted with each other through educational seminars and clinical practice reviews. Here, we conducted a questionnaire survey to clarify satisfaction levels of study sessions.

[Methods] Likert scale questions. A self-administered questionnaire (20 items and free comments) was completed anonymously and voluntarily by each participant, and the answers were submitted. Satisfaction levels for educational talk, planning and operation were measured, and grand totals were calculated.

[Ethics] We conducted this study after having obtained approval by the institutional review board at our hospital.

[Results] The number of valid responses was 64 (return rate: 64%). Forty-five percent of the participants were working nurses, and half of them had over 10 years of experience. In satisfaction levels for study sessions, 96% answered "Very Satisfied" or "More than Satisfied," and high satisfaction levels were reached particularly in a refresher course. In satisfaction levels for planning and operation, 92% were highly satisfied with staff response, but low satisfaction levels were reached in time management.

[Discussions] Overall, high satisfaction levels for study session were revealed. The answers included essential factors for development and propagation in nursing program of peri-anesthesia care. Therefore, the problems of future continuing education program became clear.

Poster

Innovations in Nursing Education

P2-58

The Experience of prompting the growth of New Graduate Nurses in Psychiatric Hospital

○Yukiko Maeda

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[Objectives] In Japan, starting working as new graduate nurses in psychiatric hospital tends to be avoided because it is considered that they cannot learn the knowledge of body and technique. The purpose of this study is to clarify the experience of prompting the growth of new graduate nurses who start working in Japanese psychiatric hospital.

[Methods] The semi-structured interview for a new graduate nurse was conducted 3, 6, 12, 18, 24, 36 months after she started working. The data was the narrative of experience after starting working in psychiatry, and it was analyzed with using a qualitative inductive approach.

[Ethics] The study was approved by the University's Ethical Committee, and the subjects were well informed and consented to participate in the study.

[Results] The experience of prompting the growth of new graduate nurses for three years after starting working was classified into the following six categories: the enrichment of education in hospital, positive the spirit of inquiry, support from senior nurses, the relationship with patients, the failure in nursing and the existence of junior nurses.

[Discussions] In regard to training new graduate nurses, it is necessary to adjust the organized system of cultivating human resources. By the system, the support from senior nurses organically worked for new graduate nurses. The role models of senior nurses are the biggest support for the growth of new graduate nurses.

Poster

Innovations in Practice

P2-59

The value classification on the contents of psychological preparation that nurse performs to children undergoing a brain surgery

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[Objectives] To carry out the value classification of the item of the contents of psychological preparation which the nurse is carrying out before a child's brain surgery, the subjective value view of "importance" and "difficulty" as physical quantity was visualized, by using the concept quantitative visualizer app.

[Methods] The individual interview was conducted to seven nurses (years-of-experience range4-26). Tablet type PC containing the application of "The Concept Quantitative Visualizer-Rami" were used. Nurses were asked to draw circles freely and intuitively with "importance" as area and "difficulty" as height for each category by the application. Simple aggregation was conducted of the area of a circle, and the numerical value of height, and each subjective value view were compared using the Friedman Test.

[Ethics] The study was approved by the Ethics Committee at the Niigata University of Health and Welfare, Japan.

[Results] The elevated level of "importance" was "the purpose of an operation" (Mean:3.33), and "encouragement concerning the operation" (M1.66). The elevated level of "difficulty" was "postoperative restrictions" (M136.74) and "pain" (M111.59). There was statistical significance between difficulty in the Friedman Test($p=.006$).

[Discussions] "The purpose of surgery" and "encouragement to surgery" of high importance were presumed to be easy for nurses to perform because of their low difficulty. On the other hand, "Dysarthria after surgery" and "pain" were high in difficulty because those involve physical invasion. This clearly suggest that the nurse was struggling to convey negative information to children.

P2-60

Factors Influencing Home-visit Nursing Support for End-stage Cancer Patients Receiving Home Care in Japan

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Objective: To clarify personal/environmental factors influencing home-visit nursing support for end-stage cancer patients receiving home care and the associations among these factors.

Methods: An anonymous, self-administered questionnaire survey was conducted involving visiting nurses. Their responses were scored through factor analysis to create a path model that explains factors influencing home-visit nursing services for end-stage cancer patients receiving home care.

Ethics: The study was approved by the Ethics Committee of University-A.

Results: Valid responses were obtained from 706 visiting nurses (23.6%). In the pathway model ($\chi^2=3.06$, $p=0.82$, GFI=0.999, AGFI=0.994, RMSEA=0.000), home-visit nursing support for end-stage cancer patients was indirectly influenced by the following factors through the FATCOD-B-J: [principle-based behaviors], [opportunities to offer opinions regarding organizational operations], [collaborative relationships with home care doctors], [enthusiasm for the job], and [the length of work experience as a visiting nurse].

Discussion: It may be necessary to help visiting nurses establish supportive relationships among them, and make commitments to their organizations, while providing emotional support and advice for them in their workplaces based on organizational principles, in order to promote home-visit nursing support for end-stage cancer patients receiving home care.

Poster**Innovations in Practice****P2-61****Related factors of the “Nursing Protocol of Community Settlement for people with schizophrenia” in Japan**OShigeyoshi Maki¹, Shoko Ando²¹*Department of Nursing, Sugiyama Jogakuen University, Japan*²*Department of Nursing, Nagoya University Graduate School of Medicine (Health Sciences), Japan*

[Objectives] In Japan, even if people with schizophrenia leave the hospital, many return. Nurses should deliver care aimed at community settlement of these people. The purpose of this study is to clarify the related factors of the “Nursing Protocol of Community Settlement for people with schizophrenia” (NPCS-S).

[Method] Original questionnaires were distributed to 1,995 nurses that requested the NPCS-S, the Rumination-Reflection Questionnaire (RRQ), the Essen Climate Evaluation Scheme (EssenCES), and nurses' demographic data. The NPCS-S asked hospital nurses the extent to which nursing care items were carried out to prevent readmission for people with schizophrenia. Data were analyzed using SPSS Version 25.0. Stepwise multiple regression analysis of the NPCS-S was performed.

[Ethics] Approved for this study was granted by the ethical committee. The participants provided written informed consent by putting check marks on the questionnaire.

[Results] In total, 724 nurses responded (valid response rate: 36.3%); 300 males and 424 females. Mean years of nursing experience in psychiatry was 11.7 (SD=8.7). The related factors of the NPCS-S were: the years of experience in psychiatry ($B=0.18$, $p<0.01$); license of CN/CNS ($B=0.08$, $p=0.02$); RRQ “reflection” subscale ($B=0.18$, $p<0.01$); EssenCES “therapeutic hold” subscale ($B=0.32$, $p<0.01$); and so on.

[Discussions] For caring aimed at community settlement of people with schizophrenia, nurses need skills and knowledge specific to psychiatry. Nurses should reflect on their nursing care practices and improve patients' therapeutic environment.

*This study was funded by JSPS KAKENHI.

P2-62**Hand hygiene methods before putting on gloves in emergencies in a Neonatal Intensive Care Unit**OYoko Ueno¹, Akihiro Imura², Hitomi Maeda³¹*Department of Nursing, Faculty of Fukuoka Medical Technology, Teikyo University, Japan*²*Kumamoto Orthopaedic Hospital, Japan*³*Department of Nursing, Faculty of Life Sciences, Kumamoto University, Japan*

[Objectives]

The present study aimed to investigated hand hygiene methods using alcohol-based hand rubs, which are obstacles to the use of gloves in emergencies in a neonatal intensive care unit (NICU).

[Methods]

The glove juice method with *Escherichia coli* was used to compare the two hand hygiene methods in this study: wearing gloves after careful hands rubbing with an alcohol-based hand rub (hand group) and wearing gloves after careful forearms rubbing with an alcohol-based hand rub (forearm group), with respect to antiseptic efficacy and drying time. The parameters were evaluated based on log-transformed *E. coli* colony forming units (cfu) .

[Ethics]

The present study was approved by the Ethics Committee of Kumamoto University Graduate School of Life Sciences(Ethics No. 1179). Participants were informed in advance that their participation was strictly voluntary.

[Results]

The total number of *E. coli* colony forming units were 3.57 ± 1.83 log cfu/ml in the hand group and 3.96 ± 1.90 log cfu/ml in the forearm group. There was no statistically significant difference ($p = 0.370$) between the two groups. However, the mean drying time (mean \pm SD) were 43.8 ± 6.1 seconds in the hand group and 27.1 ± 3.1 seconds in the forearm group. Therefore, the forearm group had a significantly shorter drying time ($p < 0.001$).

[Discussions]

The results suggest that wearing gloves after careful forearms rubbing with an alcohol-based hand rub is more effective in time-limited situations, such as in emergencies in a NICU.

Poster

Innovations in Practice

P2-63

Differences in Care for Behavioral and Psychological Symptoms of Dementia between Long-Term Care Health Facilities and Hospitals for Community-based Care in Japan and Factors Related to Care for Behavioral and Psychological Symptoms of Dementia at Hospitals for Community - based care

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[Objectives] This study aimed to elucidate the differences in care for behavioral and psychological symptoms of dementia (BPSD) between long-term care health facilities (L-THFs) and hospitals for community-based care (Hs-C-BC) in Japan and factors related to care for BPSD at Hs-C-BC.

[Methods] An anonymous questionnaire survey was administered to 1,370 nurses at Hs-C-BC in four prefectures in the Tokai region. To compare the differences in the support standards for the behavioral and psychological symptoms of dementia (SS-BPSD) between L-THFs (a previous study) and Hs-C-BC, a t-test was performed. Stepwise multiple regression analysis was performed, in which factors related to SS-BPSD were used as dependent variables and those related to nurses as independent variables.

[Ethics] Nurses who returned the questionnaires by mail were regarded as having consented to this study. This study was approved by the Medical Review Board of Gifu University Graduate School of Medicine (No.29-423).

[Results] The valid response rate was 41.6% (N = 570). There were no relationships between the provision of nursing care and nurses' ages, educational backgrounds, and years of experience. Certain types of care were practiced more effectively at Hs-C-BC than at L-THFs, and vice versa. The multiple regression analysis revealed that SS-BPSD was related to personhood, exchange of opinions with people in other occupations, relationships, feeling of pride about their jobs, support received, fulfillment of dementia care, job positions, and discussions.

[Discussions] SS-BPSD was suggested to contribute to the practice of dementia care.

P2-64

Survey on views of life and death learning programs for medical workers

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[Objectives]

The aims of this study were to clarify the needs of medical workers for learning programs on views of life and death and examine changes in their perceptions following program implementation.

[Methods]

Participants in this study were 19 medical workers practicing in a hospital, including in palliative care units. Medical workers included nurses, physical therapists, occupational therapists, social workers, and clerical staff. A chaplain conducted a learning program for medical workers in six sessions. A questionnaire survey was disseminated before and after program implementation to confirm their learning needs, and changes in their perceptions after completing the program (free description). The data were analyzed with qualitative research methods.

[Ethics]

This study were conducted with the approval of the research ethics committee of Kyoto College of Nursing.

[Results]

Total 15 medical workers were served (valid response rate 78.9%). The subjects was 40.5 ± 9.8 (mean \pm SD) years old. Three males and 12 females participated. Subjects expressed their needs regarding learning programs; three categories related to "pursuit of a view regarding life and death," "expansion of vision," and "interest in various aids" were generated. Regarding changes in subjects' perceptions following completion of the learning programs; three categories related to "pursuit of insights," "expanded view of life and death," and "improvement in empathy" were generated.

[Discussions]

The subject felt changes in sensation of the view of life and death appropriate to the practical. So such the learning programs can lead to improved spiritual care for medical workers.

Poster**Innovations in Practice****P2-65****Developing an Evaluation Index for the Adjustment Process for Playing the Father's Role for Preterm Infants with High Risk of Developing Cerebral Palsy**OJunpei Shimono¹, Nobue Nakamura², Naho Sato²¹*Graduate School of Nursing Science, Chiba Institute of Science, Japan*²*Graduate School of Nursing, Chiba University, Japan*

[Objectives] To develop an evaluation index for the adjustment process of the father's role for preterm infants at high risk of developing cerebral palsy (CP).

[Methods] We conducted semi-structured interviews with five sets of parents of preterm infants with no other complications at birth besides pathology from premature birth. However, they subsequently developed intraventricular hemorrhage and periventricular leukomalacia and were diagnosed with CP. We developed an evaluation index from an inductive analysis of the interviews and results from previous studies. Selected experts reviewed the index to determine content validity.

[Ethics] Ethical approval was granted by the ethics committee of the researchers' affiliated university.

[Results] The evaluation index had four objectives: (i) the father and mother can adjust among themselves during outpatient medical examinations in the initial period after discharge from the NICU, (ii) the parents share a common understanding of the reality of the adjustment process concerning the father's role after being discharged, as well as their feelings on the subject, (iii) the father is able to integrate his role in a way that takes the entire family into consideration, (iv) the parents are able to modify the father's role for life after discharge and make adjustments without difficulty.

[Discussions] These indicators identify the family as a system, which focuses on the assessment of the fathers, and two-party and three-party relationships. Parents' adjustment processes for the father's role changes every day, and continuous nursing assistance needs to be provided.

P2-66**Verification of a DOTS default risk assessment checklist for Filipino tuberculosis patients living in Japan**OReiko Mori¹, Satoko Yanagisawa², Yoko Nagata³, Kenji Matsumoto⁴, Keiko Takayama⁵¹*Faculty of Nursing, Department of Nursing, Nihon Fukushi University, Japan*²*School of Nursing & Health, Aichi Prefectural University, Japan*³*Public Health Nurses Training Division, The Research Institute of Tuberculosis, Japan Anti-tuberculosis Association, Japan*⁴*Osaka City Public Health Center, Japan*⁵*Funabashi City Public Health Center, Japan*

[Objectives] To examine the validity and feasibility of a default risk assessment checklist for Filipino in-home tuberculosis patients.

[Methods] 10 PHNs at public health centers who were in charge of DOTS for Filipino tuberculosis patients were asked to use the 27-item default risk assessment checklist for Filipino patients. Five PHNs were in charge of new patients and used the checklist prospectively. The remaining five PHNs worked retrospectively with previous patients. Interviews were conducted with the PHNs to examine the validity and feasibility of each item. The data were analyzed with qualitative and descriptive analyses. Based on the results was discussed by an expert panel.

[Ethics] This study was approved by the Aichi Prefectural University Ethics Committee.

[Results] 10 PHNs who used the checklist all indicated that the checklist was feasible and effective to examine the default risks of Filipino patients. They pointed out that two points were necessary to add to the checklist, i.e., "characteristics of Filipino patients," and "change in residence during the treatment period." These items were examined, and added to the checklist. The panel also recommended to add "Filipino patients' response to nurses' questions and explanations," "smoking or passive smoking," "acceptance of Japanese DOTS system" and "understanding of different languages," making 32 risk items for the checklist.

[Discussions] The feasibility and validity of the risk assessment checklist specific to Filipino tuberculosis patients were confirmed through the field test and the expert panel. Further prospect-designed study is necessary to confirm if the checklist effectively distinguished defaulters from the cured.

Poster

Innovations in Practice

P2-67

The feeling regarding bowel care for Japanese patients with spinal cord injury who opted for surgical therapy: a qualitative study

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[Objectives]

The annual incidence of spinal cord injury (SCI) in Japan is estimated at approximately 40.2 cases per million (over 3,000 people each year). SCI leads to bowel dysfunction, causing constipation and fecal incontinence, which results in difficulty with bowel care.

[Methods]

The qualitative descriptive analysis was conducted on the thoughts regarding bowel care for patients with SCI who opted for surgical therapy.

[Ethics]

Written informed consent was obtained from the study participants.

[Results]

A semi-structured interview was conducted with six Japanese patients (five men and one woman). The following thoughts were recorded: "fecal incontinence affected social life" and "there was a decline in self-esteem because of fecal incontinence"; during the time after SCI, they felt "there was a limitation on physical burden in conservative therapy" and "there was a burden on caregivers." However, they also felt "fear of change" and "conflict about having surgery on the healthy gut." Additionally, they "hoped to reduce the surgical burden" and "collected information from those who experienced surgical treatment." They also "received explanations regarding surgery from the medical staff." As a result, they selected surgical treatment because they believed that they would be able "to live a life they desire."

[Discussions]

Bandura identified "outcome expectations" and "effect anticipation" as requirements to precede the determination of human behavior. In nursing-related bowel care for patients with SCI, our results suggest that it is necessary to enhance "outcome expectations" and maintain "effect anticipation" by constantly providing accurate knowledge and new information.

P2-68

A phenomenological study of the involvement between patients with diabetes foot lesions and nurses - Focusing on interactions starting with the perception by nurses -

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[Objectives] This study aims to describe details of the interactions that begin when nurses perceive patients with diabetes foot lesions. [Methods] The researcher observed the scenes where nurses provided care for patients, and described the details in field notes with phenomenological approach. [Ethics] This study was conducted with the approval of the Research Ethics Committee of the institution to which the researcher belongs. [Results] Seeing a patient with a lower limb amputated due to diabetes foot lesions maneuvering his wheelchair, a nurse said, "You are always trying", and the patient answered "I want to be able to walk, using my prosthetic foot. So I have to keep trying." From the usual behavior of the patient, the nurse perceived the will of the patient to regain independence. This led the patient to be future-oriented, something of which he was not clearly aware until expressing his will. At that time, the nurse said, "I have the same feelings with the patient" when seeing the positive attitude of the patient. In the background, where patients express their own will as a result of interactions with nurses, there is a bond established that exists as an interactive sympathy between patients and nurses, a bodily sensation that is felt by both patients and nurses. [Discussions] The perception of nurses leads to the interactions with patients, and the patients actually discover a new meaning.

Poster

Innovations in Practice

P2-69

Relaxation effects of footbath and foot massage on chronic phase patients with schizophrenia- Considerations based on physiological and psychological indices -

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[Objectives] In this study, 27 hospitalized chronic phase schizophrenia patients were given a 10-minute footbath followed by a 5-minute foot massage on each of their feet in order to investigate the relaxation effects from both a physiological and psychological perspective. [Methods] Salivary amylase activity values, pulse rate, systolic blood pressure and diastolic blood pressure were analyzed as the physiological reaction indices, while numerical rating scale scores and patients' impressions were analyzed as psychological reaction indices. [Ethics] This study was conducted after receiving approval from the Ethical Review Board of Meio University. [Results] A total of 28 subjects consented to take part in the study. The results showed that salivary amylase activity values, pulse rate, systolic blood pressure and diastolic blood pressure showed significant decreases after the footbath and foot massage. On the other hand, numerical rating scale scores showed significant increases. After the treatment, patients' impressions included "it felt nice," "so relaxing." All these results showed that a footbath and foot massages have a relaxing effect. [Discussions] Kinoshita (1994) stated that schizophrenia patients have a fragile ego at the base of their personality and have weakened ability to psychologically and physically acquire a feeling of relaxation, and are therefore unable to discover ways of relaxing on their own. For this reason, helping schizophrenia patients to relax of their own volition may promote integrated physical and mental recovery. In the present study, the footbath and foot massage was a pleasant stimulus, both psychologically and physiologically, for the schizophrenia patients.

P2-70

Recognition of death with dignity among elderly people living in local communities

OToida Sayuri

Doctoral Course of Human Well-Being, Chubu Gakuin University, Japan

[Objectives]

This study examined the recognition of death with dignity among elderly people living in local communities.

[Methods]

A questionnaire survey was administered to 130 elderly people living in city A. Through the survey, data regarding the basic attributes of the subjects were collected. Further, they were asked to select one statement from the following: (1) Death with dignity should be legalized, (2) I am interested in death with dignity, (3) Death with dignity is beyond my understanding, or (4) I have not heard about death with dignity. In addition, free descriptions regarding "What do you think about death with dignity?" were analyzed using IBM SPSS Text Analysis for Surveys.

[Ethics]

This study was approved by the Ethics Committee of University B (2018 SR 027). To protect the subjects' personal information, the survey adopted an anonymous form.

[Results]

One hundred and twenty-two valid responses were obtained (96.2%). The average age of the subjects was 76.8 ± 5.9 years. Twenty-six subjects selected (1) (21.3%), 50 selected (2) (41.0%), 43 selected (3) (35.2%), and 4 selected (4) (2.5%). Regarding free descriptions, many subjects described "state + <>," "nature," and "life extension." Directed layout was related to "nature," "life extension," and "dignity."

[Discussions]

It was revealed that more than 20% of the subjects wanted death with dignity to be legalized. The subjects considered death with dignity as natural death without life-prolonging treatment.

Poster

Innovations in Practice

P2-71 Palliative care seminar and symptom management for heart failure patients

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[Objectives]

Heart failure patients are increasing, palliative care is needed to manage symptoms. Although health care staff think the importance of palliative care for heart failure, they also have difficulty providing care. This study examined the relationships between experience of palliative care seminar and nursing practice regarding symptom management for heart failure.

[Methods]

A cross sectional, correlational design was adopted using a questionnaire. One hundred and eighty nurses at 11 hospitals around Tokyo city were invited to participate. Survey items were demographics, experiences of on-the-job or off-the-job seminar regarding palliative care, implementation of assessment and non-pharmacological intervention for 14 symptoms at end-stage heart failure, attitudes toward caring for patients and their families at end-of-life, and difficulties in caring patients.

[Ethics]

This study was approved by the institutional review board. Participants were informed in writing about their freedom to voluntarily participate.

[Results]

Of 180, 132 were responded (73.3%) and analyzed. Mean age was 30.9 and nursing experience was 8.6 years. Nearly 50% attended on-the-job palliative care seminar, whereas only 15.2% did off-the-job seminar. Additionally, 11.3% attended both seminars. Factors related to experience of on-the-job seminar were assessment of delirium and sleep disorder ($p < 0.05$), and difficulty in knowledge and skill of nurses ($p < 0.01$). Off-the-job seminar related to age ($p < 0.05$), nursing experience in cardiovascular ward ($p < 0.05$), and attitudes toward caring for patients and their families ($p < 0.01$).

[Discussions]

Participants in this study had few opportunities of off-the-job seminar. These results suggest that off-the-job palliative care seminar needed to promote palliative care for heart failure patients.

P2-72 Effectiveness of phototherapy in elderly people with dementia

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[Objectives]

To examine the effectiveness of phototherapy in elderly people with dementia using autonomic nerve balance, fluctuations, and other parameters.

[Methods]A pilot study was conducted in nine elderly (77–97 y/o) with mild to moderate Alzheimer's dementia. They underwent one 60-minute activity session (photography, photo selection, album creation, and presentation) once a week a total of 8 times. Autonomic nerve balance (ANB; rated on a scale of 1-10, where ≥ 5.0 indicates sympathetic nervous system dominance and <5.0 parasympathetic dominance), which is calculated using finger plethysmography, and largest Lyapunov exponent (LLE; rated on a scale of 0-10), which represents fluctuations in autonomic nervous activity, were used as indices to evaluate autonomic nervous activity. Pulse waves were measured at rest before and after activity, as well as during activity (photo selection) to examine trends in fluctuations.

[Ethics] This study was approved by our university committee (approval number:2018N004).

[Results]Data from only nine people have been obtained thus far; however, all nine of these showed an increase in LLE values during activity sessions (increasing range: 0.1-2.6). When the LLE value prior to activity was low (0-3), it tended to increase during activity and decrease after the activity ended. ANB tended to increase during activity in cases with parasympathetic dominant prior to activity and to decrease in those with sympathetic nerve dominant.

[Discussion]This pilot study suggests that implementing phototherapy for elderly people with dementia might regulate ANB and increase the LLE. Large sample study shall be followed in future.

Poster

Innovations in Practice

P2-73

Support for Mothers Nurturing Children in Need of Medical Care at Home—The Possibility for Utilization of Artificial Intelligence Technology—

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[Objectives] In recent years, with advances in medical techniques and promotion of home healthcare, the number of children needing medical care (hereafter, seriously ill children) nurtured at home has increased. However, the mothers nurturing the seriously ill children sometimes have difficulties understanding their own children due to their weak physiological reactions and unclear indication of intention. Therefore, mothers' experiences were analyzed to investigate the possibility of utilization of Artificial Intelligence (AI) to deepen the understanding. [Methods] Nine mothers nurturing seriously ill children reported their thoughts on nurturing experiences in the semi-structured interview, and verbatim records were prepared and analyzed. [Ethics] This research was approved by the institutional ethical review committee of the organization to which the researchers belong (Approval number 27018). [Results] The mothers have accumulated the experiences wherein they identified and understood reactions of their children based on alarms of medical devices and minute changes in their expressions. This situation enhanced their self-confidence, indicated by the belief that "Only I can care for my child." Concurrently, it caused the worry that "I can't leave my child in others' care," and disclosed insufficient utilization of social resources. On the other hand, the mothers who could not understand their children's reactions continued nurturing while worrying every day, experience isolation from the society and time constraints. [Discussions] For everyone to understand the children's reactions and indications of intention, we propose utilization of AI technology as the method of visualization.

P2-74

Evaluation of an Empowerment Support Group Program for Families of Alcoholics: Comparison of a Group Led by Researchers versus a Group Led by Public Health Nurses

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²Faculty of Nursing, University of Kochi, Japan

³independent, Japan

[Objectives] In Japan, families of alcoholics struggle, often in isolation, to deal with problems caused by alcoholism. We developed a solution-focused support group program to empower such families. We compared two groups: one group was guided by the researchers (Group A), the other guided by public health nurses who received pre-intervention training (Group B).

[Methods] Family members participated in three two-hour support group sessions held once every two weeks. Our goals were: 1) participants verbalizing their feelings, 2) realization of not being alone, 3) constructing images of solutions, 4) brainstorming coping strategies, 5) implementing coping strategies, 6) reviewing implemented coping strategies, 7) realizing their own inner power. Participants recorded their individual and group progress in logs. Facilitators and researchers recorded their observations about the participants. We analyzed the logs and observational data qualitatively and quantitatively.

[Ethics] The research protocol was approved by the University's nursing research ethics committee.

[Results] Groups A and B ages were in their 40s-70s. Group A consisted of six female spouses, three female parents, and one male child. Group B consisted of one male spouse, three female spouses, one female parent, and one female child. Group A and Group B achieved 100% of Goals 1-5. For Goal 6, Group A achieved 80%, Group B achieved 83%. For Goal 7, Group A achieved 60%, Group B achieved 83%.

[Discussions] Our results show that our empowerment support group program was effective. Importantly, we also found that trained public health nurses were just as effective as the researchers.

Poster

Innovations in Practice

P2-75

Study of the explanation effect using body composition analysis and hemodialysis records on weight management in hemodialysis patients

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[Objectives]

The objective of this study was to verify whether the explanation of the results of body composition analysis (multiple-frequency bioelectrical impedance analysis [MFBIA]) and hemodialysis (HD) records had an effect on the weight management in patients hospitalized for HD introduction.

[Methods]

Patients were randomly assigned to the intervention group, given an explanation about the MFBIA results and HD records during hospitalization, or the non-intervention group. The intervention effect was examined based on HD records during hospitalization and at 3 months after discharge, as well as the results of Fluid Management Self-Efficacy Scale questionnaire survey conducted at 3 months after discharge.

[Ethics]

This study was approved by the institutional ethics committee. Consent was also provided from the cooperating institutions.

[Results]

In total, 24 patients were included in this study. Meal intake during hospitalization was significantly greater in the intervention group than in the non-intervention group, and MFBIA for the intervention group showed a significantly improved body fluid balance at discharge, as compared to the baseline. The questionnaire survey at 3 months after discharge revealed significant items in the intervention group.

[Discussions]

The intervention group showed a significant improvement in body fluid balance in the MFBIA results and significant results in the questionnaire survey at 3 months, suggesting that the explanation at HD introduction had a favorable effect on the weight management of patients.

P2-76

Effects of Bed Baths using Towels with Different Textures-Comparison of Synthetic and Gauze Towels

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[Objectives]

To compare the effects of bed baths when using towels with different textures on subjective and objective indices.

[Methods]

Study design: A quasi-experimental study. We gave bed baths to 15 healthy males (age: 21.7 ± 2.9) using 2 types of towels with different textures (gauze: 100 meshes/cm²; and synthetic: 4 embosses/cm²) on different days. Under identical bed baths conditions other than the type of towel, all parts of the body, excluding the genital area, were wiped. We evaluated the effects of bed baths on core temperature, skin temperature, blood pressure, electrocardiographic values (heart rate variability), skin moisture and oil contents, skin surface pH and cleanliness levels, scores from the short-version POMS-J, senses of wakefulness and relaxation, and results of texture evaluation using a scale.

[Ethics]

We obtained approval from the research ethics committee of the affiliated university.

[Results]

There were no significant differences in the effects of the 2 types of towels on the subjective indices, although synthetic towels had a higher score for texture. On the objective indices, the skin moisture content and parasympathetic activity increased, whereas systolic blood pressure decreased after the completion of bed baths using gauze towels ($P < 0.05$). On the other hand, the skin oil content decreased, skin surface pH increased, and rate of change in the skin cleanliness level significantly decreased, indicating that dirt had been removed, after that using synthetic towels ($P < 0.05$).

[Discussions]

The effects of bed baths with synthetic towels were superior to gauze towels in texture and cleanliness levels.

Poster

Innovations in Practice

P2-77

Changes in the awareness and behavior of nurses who participated in an educational program to improve support during the transition to home care through an outpatient service-ward collaboration

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[Objectives]

To elucidate changes in nurses' awareness and behavior as a result of participating in an educational program to improve support during the transition to home care.

[Methods]

Eight nurses consented to participate in the present study. They attended group interviews before, during, and after an educational program; their responses were analyzed using a qualitative descriptive approach. The program consisted of one case study session and five discussion sessions in which an outpatient service-ward collaboration system with nurses was planned.

[Ethics]

The present study was conducted with the approval of the ethical review board of the researcher's affiliated university.

[Results]

From a state of limited awareness about patients (i.e., earlier they were aware of patients' transfer to home care but were not involved), nurses wanted to grant the patient's wishes, make use of various opportunities to know the patients and their family members, and paid attention and responded to the patient. Furthermore, their perspective changed from seeing home care staff as obstacles in the ward to understanding care managers' abilities and building a rapport with them. Moreover, within the nursing care team, the focus shifted from being aware of the tasks at one's own station to creating goals that served as a driving force and support for young nurses.

[Discussions]

Therefore, the educational program brought changes in the nurses' approach to patients and their family members, created a multidisciplinary collaboration, and resulted in changes within the nursing care team.

Results and Issues of Dementia Cafe Held by Medical University with Local Residents

P2-78

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The principal aim of the present study was to clarify the outcome of and issues related to the continuation of "dementia café" operated through cooperation between University and local residents. Group interview was conducted for six dementia cafe consecutive users and qualitatively analyzed. Based on the analysis results, 5 categories were extracted "A place where information on dementia and prevention can be shared," "Enhancement of self-esteem through intergenerational exchange with student volunteers," "A place in the local community to feel safe and secure," "Various program effects brought about by cooperation," and "Collaboration between the two that enable continuous use and related issues."

Regarding the achievement of collaboration/cooperation, the university could provide knowledge concerning dementia to residents. Moreover, the fact that we could conduct activities that focused on "enjoyment" ensured that the achievements of users were linked to the specific characteristics of the community. In addition, student volunteers who participated in the dementia café gave high evaluations regarding their experiences. The intergenerational exchanges between students and users increased the self-esteem of the users. The characteristics of the venue were found to be factors that contribute to continuation of utilization. For elderly persons, it is important that the facility is located within walking distance, and the facility's convenience, safety, and security in the local community were associated with continued use by users. Based on the present results, it will be necessary in the future to consider programs to attract withdrawn elderly persons with pre-dementia and users with different levels of cognitive functioning.

Poster

Innovations in Practice

P2-79

Extraction of judgment indices for the first time patients with cerebral infarction bathe

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The purpose of this study is to get a consensus among certified stroke rehabilitation nurses giving care to patients with cerebral infarction about indices used in common for judgment for starting to have them bathe in order to create a flow chart for judgment for starting to have patients with cerebral infarction bathe.

The Delphi technique was employed as the research design. Out of certified stroke rehabilitation nurses all over Japan, the participants were 182 nurses who agreed to participate in this study. As for the content of the questionnaire, literature research was conducted to find physiological and psychological influences of bathing on patients with cerebral infarction, and judgment indices considered to be necessary for patients with cerebral infarction to bathe were extracted. The respondents were asked to decide whether they considered each of the judgment indices important or not, and the agreement ratio for each item was fed back to the respondents. The survey was conducted three times. The criterion for the ratio showing consensus was set as 70% or higher. This study received the approval of the University of Human Environments study ethic screening committee.

The results were that consensus was reached in a total of 36 items: ten items in "hemodynamics," eight items in "respiratory condition," seven items in "infectious symptoms," nine items in "neurologic manifestation," and two items in "blood data."

These results show that nurses are mainly checking the stability of respiration and circulation, existence and extent of infectious symptoms, and development of new cerebral infarction.

P2-80

Bodily experiences of anorexia nervosa patients ~Preliminary research for the nursing care guidelines~

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[Objectives]

This study aims to identify and enumerate bodily experiences of anorexia nervosa (AN) patients in Japan to develop guidelines for nurses who are unfamiliar with this illness.

At present, there are very little nurse specialists who can effectively care for AN patients.

[Methods]

Semi-structured interviews were conducted with 4 AN patients who had the illness for more 10 years of longer. Thematic analysis of interview records produced generated patterns of body experiences.

[Ethics]

This study was approved by the Independent Research Ethics Committee University of Kochi. Participant consent was obtained following written and verbal explanations.

[Results]

The analysis revealed four categories of AN patient's bodily experiences. They are 'Bodily sense error,' 'Awareness of some irregularity,' 'Fear of change,' 'Recovery of bodily sensation'.

'Bodily sense error' occurred in the early stage of onset. The participants experienced going back and forth between the three 'Bodily sense error,' 'Awareness of some irregularity,' and 'Fear of change'. The last stage was 'Recovery of bodily sensation'.

[Discussions]

Patients once become 'Awareness of some irregularity,' would retnue back to anorexic status due to desire to lose weight and suppress their awareness to irregularity of bodily function. Hence, AN patients pendulate between these two experience. Nursing intervention is necessary for AN patients to break this pattern of falling back into anorexia.

Poster**Innovations in Practice****P2-81**
Usability of Nursing Support on Mothers' Parenting Attitudes to Develop the Self-Care Skills of Infants and School-age Children with Congenital Heart Disease: Changes in Parenting Attitudes Using Self-evaluation
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Objectives: This study aimed to evaluate the usability of nursing support guidelines developed from the coping process of the Roy Adaptation Model, based on previous studies, clinical experience, and interviews with mothers involved in developing the self-care skills of children with congenital heart disease (CHD).

Methods: This was a longitudinal intervention that used a multiple-case study design. Participants were five mothers rearing children aged three to eight planning to have surgery for CHD. Nursing support was provided twice; during surgery preparation and prior to discharge. Data were collected at three points; before surgery, before discharge, and after discharge, through semi-structured interviews and a questionnaire. Changes in mothers' self-evaluations of attitudes were analyzed individually and as a whole.

Ethics: Approvals were obtained from both the institutional review board at A College of Nursing and the research ethics committees of participating hospital.

Results: According to the characteristics in mothers' perceptions and attitudes, they were divided into two groups. All five mothers had stable or improved scores in terms of healthcare provider-child communication. Pattern A had stable or improved scores on understanding disease, self-decision-making ability, communication, and utilization of others. Pattern B had improved scores on independence, but no changes on self-decision-making ability and utilization of others.

Discussions: These results suggested the effectiveness of nursing support; however, changes in mothers were found to be related to their ability to assess their child's self-care skills and to reflect on how they relate to their child, as well as their belief in improving their child's self-care skills.

P2-82
Acute-phase nursing care for children displaying symptoms of Executive Dysfunction - Questionnaire survey among nurses -
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[Objectives] The final objective of study is to establish revised nursing guidelines for children with executive dysfunction. The objective of this research is to extract content of acute-phase care. We presented the "Nursing Care for the School Life of Children with Higher Brain Dysfunction ; Guidelines for Nurses (recovery period)" in 2015 (2015 guidelines) . We are planning to add acute-phase care to the 2015 guidelines.

[Methods] A questionnaire survey was conducted involved nurses in management or instructive roles at 284 hospitals. Content analysis was performed on the free responses about the 2015 guidelines and the acute-phase care.

[Ethics] This research was approved by research ethics committee of the university.

[Results] Response rate was 10.6%. Symptoms of executive dysfunction in children were reported by 15 facilities. We extracted eight categories of the necessary acute-phase care. These included [Family care], [Symptom assessment], [Intervention for symptoms], [Care soon after admission], [Coordination between hospital staff], [Continuous care from the acute to the recovery phase], [Discharge support] and [Societal resources].

[Discussion] Low response rate likely reflects the fact that small population of children exhibit symptoms and that nurses' low cognition. Our results suggest the content for new guidelines regarding the elements of care in the acute phase. The nursing care for a level of consciousness is known to affect the prognosis of children. We need to develop continuous care from the acute phase and spread the knowledge among nurses.

This research was supported by JSPS KAKENHI Grant Number JP16K12176.

Poster

Innovations in Practice

P2-83

Examination of the possibility of utilizing the developed self-management scale for rheumatoid arthritis patients

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Objective : To identify the characteristics of the subject by the scale score of the developed self-management scale for rheumatoid arthritis patients, and examine the possibility of using the scale.

Method : The survey was conducted on the developed self-management scale for rheumatoid arthritis patients, self-management related factors, QOL and self-efficacy in 149 outpatients with rheumatoid arthritis.

The high score group (26 people) and the low score group (25 people) were extracted by the scale score, and the difference between the two groups was compared for basic attributes, medical information, self-management related factors.

The differences between the two groups were examined using t-tests for which the survey responses can be quantified, and using Chi-square test for which the survey responses can be the ordinal scale.

Ethics : This study was approved by the Juntendo University faculty ethics committee and cooperation hospital ethics committee.

Result : On comparing patients with higher and lower scale scores, there were significant differences in use experience of the biological drug, awareness of the necessity of disease/symptom management, self-efficacy, psychological support, and the QOL. The medical condition did not vary between the 2 groups.

Consideration : This scale is considered to be a tool that can be used to identify targets that need support, such as treatment methods (experiences of using biological drug), psychological factors, and the ability to get familiar support.

P2-84

Effects of Micro Vibration Therapy on The Autonomic Nervous System Using Power Spectral Analysis of Heart Rate Variability in Nursing Homes Residents

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²Faculty of Nursing, Doshisha Women's College of Liberal Arts, Japan

³Kyoto College of Nursing, Japan

[Objectives]

Micro vibration therapy (MVT) is a massage technique used in anthroposophic medicine.

The aim of this study was to evaluate acute responses of the autonomic function on heart rate (HR) variability following MVT.

[Methods]

In this pilot randomized crossover trial, each participant received both MVT and the control intervention in a randomized fashion.

Fifteen subjects [3 male and 12 female, mean (SD) age 84 (5.6) years] were enrolled. Two continuous trials were conducted either with MVT [8Hz] or without vibration (Control). Low frequency (LF), high frequency (HF) and low frequency to high frequency ratio (LF/HF), as well as HR, were compared during two trials using power spectral analysis of HR variability (TAS9, YKC Co. Japan).

[Ethics]

Ethics were approved through the University Research Ethics Council (REC), which included participants consents, right to withdraw and a full debriefing at the end of the study.

[Results]

Following the MVT exposure, LF/HF was not changed. Although HF and LF increased significantly compared to control.

[Discussions]

These results suggest that there are some changes in autonomic nervous functions, in individuals following MVT exposure are related to the sympathovagal balance of HR variability, as measured by power spectral analysis. Randomized controlled trial with larger sample sizes and multiple sessions of therapy are needed to substantiate these findings.

Poster**Innovations in Practice****P2-85**
Development of an Assessment Tool for Midwives to Support Postpartum Mothers' Reflection on Their Childbirth Experiences: Selection of Assessment Items

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[Objectives] To develop an assessment tool for midwives to support postpartum mothers' reflection on their childbirth experiences, assessment items were selected through theoretical processes.

[Methods] Based on a conceptual framework for childbirth experience reflection support, assessment items were selected through qualitative/quantitative studies and literature reviews on childbirth experiences and subsequent face and content validity verification.

[Ethics] Qualitative/quantitative studies as a basis for item selection were approved by the Research Ethics Committee of Gunma University.

[Results] After examining conceptual frameworks, focusing on emotions and considering childbirth experience reflection support, Maslow's hierarchy of needs was adopted as a theoretical base. Based on this theory and the results of qualitative/quantitative studies, using interviews or self-description questionnaires for mothers who had vaginal or cesarean delivery, and literature reviews on childbirth experiences, the contents of such experiences were extracted and classified, and their face and content validity was examined by researchers or graduate students with childbirth experience and specialists in midwifery. Through these processes, assessment items covering all of the 5 basic needs were finally selected.

[Discussions] Having been inductively extracted from the contents of childbirth experiences, the assessment items may make it easier for mothers as respondents and midwives utilizing their responses to visualize relevant issues.

P2-86
Approach of the introduction of Early Essential Newborn Care in operating theater in Tanzania

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[Objectives] The neonatal mortality rate in Tanzania is high worldwide. In a situation analysis of newborn health in Tanzania, it is suggested that nearly half of premature deaths can be prevented with kangaroo mother care, and birth asphyxia can be addressed by scaling up skilled attendance and obstetric care and ensuring that health workers can resuscitate newborns. From the above, the aim of this study is enhancing neonatal care by conducting Early Essential Newborn Care (EENC).

[Methods] As part of EENC, the training focused on early skin-to-skin contact (SSC) was conducted in the operating theater, and early SSC after caesarean section was implemented as a trial from November 2018 to February 2019.

[Ethics] Ethical clearance and permission obtained from 1) the Ethics Committee of St. Luke's International University; 2) the Ethics Committee of Muhimbili University of Health and Allied Sciences; and 3) National Institute of Medical Research.

[Results] 117 cases were intervened in and 70 cases were implemented early SSC in 4 months. The intervention rate was 0% before training, increased to 14% after 4 months trial. The implementation rate for full-term infants or infants over 2500 g was over 70% each. On the other hand, the implementation rate was 30% for premature infant or low birth weight infant.

[Discussions] The need to follow up on the practical skills of the staff and maintain the motivation was clarified. In addition, there were difficulties in implementation for preterm infants and low birth weight infants. Collaboration with pediatricians is required in the future.

Poster**Innovations in Practice****P2-87**
**A Discussion on Effect of secondary Lower Limb Lymphedema Patients Exercise
Designed Based on Flow of Lymph Fluid**
○Chitose Arakawa¹, Chiharu Akazawa², Sayoko Teraguchi², Risa Fukuda³¹*University of Shiga Prefecture, Japan*²*Osaka Medical College, Japan*³*Kyoto Nursing College, Japan*

This study was conducted to verify if there was any effect in the improvement of lymphedema through the exercises performed by patients with secondary lymphedema that are expected to promote the withdrawal of lymph fluid due to the extension of the skin and muscle pumping power.

The subjects of this study comprised patients with after stage II lymphedema who underwent operative treatment for gynecological cancer. After resting supine position for 30 minutes (Point A), they performed eight kinds of exercises including shoulder-rotation, abdominal-breathing, upperbody-stretching and the squat-movement of lower extremities. It took about 8 minutes. After the exercises, they rested supine position for 30 minutes (Point B). The evaluation items consisted of difference of water volume between the pre-exercise (Point A) and the post-exercise (Point B) in their affected lower extremity measured with a body composition meter.

This study was conducted with the approval of the Osaka Medical University Research Ethics committee (N-103). The subjects comprised six persons. Regarding the change in water volume, four subjects demonstrated a decrease of 50g, one subject an decrease of 150g, and one subject an increase of 50g. All subjects demonstrating a decrease were at Stage IIa, while the subject showing the increase was at Stage IIb. The patient showing the increase had edema at Stage IIa in the other side, and a decrease of 50g was found.

The above findings suggest that the exercises used in this research had a positive effect on lymphedema in the lower extremities at or before Stage IIa.

P2-88
Change in social support after a telenursing intervention for older adults with chronic diseases
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[Objectives] This study aimed to evaluate the change in social support (SS) after a telenursing intervention for older adults with chronic diseases.

[Methods] We conducted home-monitoring-based telenursing intervention for older adults (>60 years) with chronic disease for three months. The participants assessed their vital signs and symptoms at home, and reported to telenurses using a tablet device once per day. Participants' data were monitored by telenurses; if data triggered an alarm, telenurses instructed them via phone calls or e-mails. SS was assessed with the Japanese version of the Multidimensional Scale of Perceived Social Support at the start and end of the intervention.

[Ethics] Ethics committee was approved the study.

[Results] Eighteen older adults (3 amyotrophic lateral sclerosis, 6 chronic heart failure, 3 chronic obstructive pulmonary disease, 6 diabetes) with mean age of 73.5 ± 9.1 years participated. Nine lived with their spouse, and four lived alone. The mean number of instructions by telenurses was 10.9 ± 5.5 ; telenurses advised about daily life, including exercise and diet. The mean SS score was higher at the end (70.0 ± 11.2) than the start (65.5 ± 17.9), but the difference was not significant. The scores on "My family really tries to help me" and "I get the emotional help and support I need from my family" were higher at the end of the intervention. Three of four participants living alone had improved scores on SS.

[Discussions] SS, especially from family, in older adults with chronic disease can be enhanced through telenursing due to improve dialogue between family members about daily psychosomatic status of older adults.

Poster

Innovations in Practice

P2-89

Spiritual Pain with facing uncertainty in Emergency Room

○Akane Kato

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[Objectives] To describe Spiritual pain whose a patient was admitting Emergency Room.

[Methods] A reflective case report concerning a patient's spiritual pain. A patient(X) had suffered from undiagnosed diseases, furthermore, X's physiological conditions got worse day by day in ER. Concretely, deteriorating inflammatory indicators suchlike White blood cell and C-reactive protein, decreasing thrombocyte, and increasing fluid of pleural and ascites. Even though X had been on non-invasive positive pressure ventilation and Hemodialysis therapy, being dyspneic, painful, and severe edema. Yet X had painful times, X was eager for doing rehabilitation at midnight, time and again. One day, X said, "I'm through! I can't believe my body to endure medical treatment and continue with life anymore!", suddenly. And two days later, X had intubated due to multiple cerebral infarctions. Finally, X passed away in ER.

[Ethics] This report has been approved by an institutional review board. Besides, written informed consent was obtained from the patient's family for this report.

[Results] X had fallen into an imbalance state, because of facing a high degree of uncertainty. At the same time, X had the sense of losing oneself and felt the limitation of own's life. Thus, X had been in severe compositely spiritual pain of which classified into existence in time, relational existence and autonomous existence.

[Discussions] Critical care nurses must perceive patients' spiritual pain opportunely because sometimes there is little time left to provide spiritual care.

P2-90

The Goal of Visiting Nurses' Support for Families of Infants with Severe Motor and Intellectual Disabilities

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[Objectives]

This study aimed to reveal how nurses understood the goal and developed their support for families of infants with SMID (severe motor and intellectual disabilities).

[Methods]

Semi-structured interviews of 9 visiting nurses were carried out regarding cases in which they oversaw assistance for a child from the time they began living at home until support was ended. The data was qualitatively and descriptively analyzed with a focus on changes in the relationship between the family and the visiting nurse.

[Ethics]

This research was carried out with approval from the ethical review board of university.

[Results]

Prerequisites for visiting nurses to consider ending their support for a family were sharing in the process of dealing with the family's difficulties through a supportive and cooperative relationship and recognizing a shift from a dangerous situation to a "rising family." Moreover, families were judged to be capable of coping on their own when the visiting nurses discovered a previously unknown strength in them and further confirmed that they were "well-functioning" even without the involvement of the visiting nurse. Assistance was ended at this time with the family's approval. The nurses understood this series of events as a process of growth for themselves also.

[Discussions]

It was suggested that the goal of visiting nurses' support for families of infants with SMID is to develop their own functional coping strategies for growth through collaborative interactions.

P2-91

Educational intervention for symptom relief in patients with advanced cancer: A systematic review

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Objective: The purpose of this study was to evaluate the effects of educational intervention for symptom relief in patients with advanced cancer

Methods: We searched the following databases up to July 2017: the Cochrane Central Register of Controlled Trials, PubMed, and Japan Medical Databases (Ichushi-Web). The search terms used were “education”, “intervention” and “advanced cancer”. We also included associated studies by hand search. Selection criteria was randomized controlled trials studies (RCTs) in English or Japanese. Two review authors selected studies, extracted data using standardized forms following the guideline methods.

Results: One-hundred forty-six studies were identified; however, 134 studies were excluded after screening the titles, abstracts and complete articles. Twelve studies met the inclusion criteria. We analyzed results for functional capacity, activity, pain, fatigue, breathlessness, and QOL. Most educational interventions for pain or breathlessness in patients were provided with advanced practice nurse such as nurse practitioner. Main educational intervention included breathlessness or pain management in outpatient's clinic, home visit, and telephone consultation with using special program such as 6 weeks of PRO-SELF or leaflets. No adverse events from educational intervention in patients with advanced cancer were observed.

Conclusions: Despite the small sample size, educational intervention appears to be a useful intervention in reducing pain, breathlessness, or some symptoms in advanced cancer patients. However, advanced practice nurses are not sufficient for all facilities, clinical adaptability is a challenge.

Poster**Health Promotion / Disease Prevention****P2-92****Effect of a Warm Hand Bath and Massage on Sleep and Relaxation in Elderly Women with Disturbance of Sleep: A Crossover Trial**

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[Objectives] The purpose of the present study was to clarify the effects of a warm hand bath and massage on sleep, autonomic nervous activity, subjective sleep quality, and relaxation in elderly women with disturbance of sleep.

[Methods] A crossover design was used. Participants were assigned to two groups: a structured control first and intervention second condition, or an intervention first and control second condition. The sleep index as assessed by actigraphy and the middle-age and aged version of the Oguri-Shirakawa-Azumi sleep questionnaire (OSA-MA), and autonomic nervous activity and subjective comfort and relaxation were then recorded.

[Ethics] This study was approved by the Independent Ethics Committee at Z University Graduate School of Medicine. Before the study began, the protocol and procedures were explained to all participants, and written informed consent was obtained.

[Results] The mean age of the participants was 77.8 ± 6.8 y (n=28). According to the actigraph, the intervention day showed significantly improved sleep efficiency ($p=0.048$) and sleep onset latency ($p=0.015$). Regarding autonomic nervous activity, heart rate decreased significantly after the intervention ($p=0.001$), but no significant differences were seen in the other indexes. OSA-MA was significantly higher after the intervention for four out of five factors. Subjective comfort and relaxation were significantly higher after the intervention for all items.

[Discussions] A hand bath and massage in the evening improved sleep efficiency and sleep onset latency in elderly women with sleep disturbance. These results suggest that a hand bath and massage may improve subjective sleep quality and relaxation.

P2-93**Relationship between the intake balance of energy-providing nutrients and visceral fat by cross-sectional analysis -Dietary patterns of older women in the general Japanese population-**○Yuka Ohnuma^{1,2}, Shizuka Kurauchi³, Itoyo Tokuda⁴, Mina Misawa⁵, Mika Kumagai⁶, Kaori Sawada², Shigeyuki Nakaji²¹Department of Nursing, Akamon College of Sendai, Japan²Department of Social Medicine, Hirosaki University Graduate School of Medicine, Japan³Faculty of Health Sciences Department of Nursing, Aomori University of Health and Welfare, Japan⁴Department of Oral Health Care, Hirosaki University Graduate School of Medicine, Japan⁵Department of Water Health Science, Hirosaki University Graduate School of Medicine, Japan⁶Department of Active Life Promotion, Hirosaki University Graduate School of Medicine, Japan

[Objectives] We analyzed the relationship between the intake balance and visceral fat through a cross-sectional study of the general Japanese population.

[Methods] Subjects were 713 Japanese people (292 males and 421 females) who participated in "Iwaki Health Promotion Project" in 2015 Japan. Survey items were as follows: Height / weight(BMI), brief-type self-administered diet history questionnaire (BDHQ), lifestyle (exercise habit/ smoking/ drinking habit) and menstruation. In addition, both body fat percentage and visceral fat area (VFA) were measured by electrical impedance method. We calculated total energy intake and nutrient intake per day using the result of BDHQ, which was based on the frequency of food intake of 80 items in the past one month.

[Ethics] This research has been approved for ethics review of Graduate.

[Results] Men had no items with significant differences. For women in the elder group (60-69 y.o.), VFA and protein energy ratio / lipid energy ratio showed a significant negative correlation and a significant positive correlation with carbohydrate energy ratio.

[Discussions] These results suggest that dietary patterns of high protein, high lipid and low carbohydrate are preventive for accumulation of visceral fat in older women of general population.

Poster

Health Promotion / Disease Prevention

P2-94

The Consumption of Energy Drinks Containing Caffeine among Junior High School Students in Japan: An Investigation into Related Factors

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[Objectives] There is growing concern about children's consumption of energy drinks containing caffeine. Research shows that the harmful impacts of excessive caffeine intake on health are greater in children than adults. Several countries have set a recommended daily caffeine intake. This study elucidates the current situation of energy drink consumption among Japanese junior high school students and related factors.

[Methods] In July 2018, a self-administered questionnaire survey was conducted with junior high school students in Prefecture A (n=236). I then examined factors related to the experience of consuming energy drinks with a chi-square test and Mann-Whitney U test. The significance level was set at below 0.05.

[Ethics] This study was approved by the research ethics review committee of my university (E-1118).

[Results] The gender breakdown of participants who had consumed energy drinks was as follows: 51.8% male and 27.0% female. Factors related to consumption among male participants were buying snacks and soft drinks for themselves ($p=0.001$), not understanding the nutritional components of food ($p=0.04$), having a high body weight ($p=0.03$), waking up late on days off ($p=0.03$), and drinking a large amount of caffeinated drinks ($p=0.01$). No factors that were significantly related to energy drink consumption were observed among females.

[Discussions] The results suggested that there is a relationship between the self-management of diet and sleep and energy drink consumption. In order to prevent excessive caffeine intake among children, it is necessary for children to start receiving health education on caffeine from the senior grades of elementary school.

P2-95

Development of Community Orientation Scale among Community Health Nurses in Fiji

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[Objectives] To develop community orientation scale among community health nurses (COSCHN) in Fiji and to examine reliabilities and validities of the scale.

[Methods] A descriptive cross - sectional design. The study is part of a larger study. A self-administered questionnaire that included 51 items of preliminary COSCHN was distributed to community health nurses in Fiji from April to July 2016.

[Ethics] This study was approved by the Fiji National Health Research Ethics Committee (2016.6.NW) and the a university research ethics committee that the principal researcher belonged (No.27APU-SIC6-32).

[Results] Exploratory factor analysis for the COCHN from 226 responses (77.4%) revealed 30 items loading on the four factors: Community Initiative Promotion, Consensus Building for Community Needs and Activity Goal, Commitment toward Work and Community Members, and Mutually Trusting Relationships with Community members toward Empowerment. Confirmatory factor analysis with High-order factor modeling indicated that the model has a reasonable fit to the data. Cronbach's alphas for COCHN for the four factors ranged .787 to .885. Concurrent validity showed weak correlations, known group validity and time stability were generally satisfactory.

[Discussions] COSCHN can serve as a self-assessment tool and discussion tool. COSCHN can help identify weakness as well strengthens that encourages CHNs to overcome weakness as well as increase of confidence. Also, it enables supervisors to understand CHNs' point of view as rated items in COSCHN. We suggest increase of discussions regarding their community health activities among CHNs using COSCHN. Also, OSCHN can be used as a reference when developing a community orientation scale for other countries.

Poster

Health Promotion / Disease Prevention

P2-96

A study of an experiential program to raise the motives of dementia supporters to support people with dementia in the community

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²Faculty of Medicine, University of Tsukuba, Japan

[Objectives]

This study aimed to verify an experiential program wherein dementia supporters communicate with people with dementia in order to increase the dementia supporters' motives and future activities in the community.

[Methods]

The experiential program in which dementia supporters communicate with people with dementia was held in a day service center, and 37 dementia supporters participated. After the program, a focus group interview (FGI) was conducted. The interview consisted of questions regarding the satisfaction and difficulties related to communicating with people with dementia. The data from the FGI were analyzed using content analysis.

[Ethics]

This study was approved by the Ethics Committee of the University of Tsukuba (1241). All participants signed a consent form and were informed that they could withdraw from the study at any time, and that personal information was protected by a personal identification system.

[Results]

As a result, six categories were extracted: [concern before the program], [proper understanding of people with dementia], [respect for the person with dementia's motivation to communicate], [difficulty of communication], [possible support] and [application to community support], additionally, 19 sub-categories were extracted. Some of the sub-categories are as follows: [concern about the person with dementia's stress from supporters], [change from a negative image to a positive one], [extraction of positive feelings], [difficulty of communicating with an uncommunicative person], [importance of daily life], and [advantage of experiential learning].

[Discussions]

It was implied that the experiential program was effective for dementia supporters; they increased their understanding of people with dementia and their motivation increased.

Support to maintain daily existence of the elderly living alone in Japan

P2-97

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[Objectives]

Japan's growing number of aging citizens is unmatched elsewhere in the world.

This study intends to ascertain why elderly citizens are satisfied with rural lifestyles and to determine the support they require to continue living in their village communities.

[Methods]

The authors visited a village every month for seven years and collected data through ethnography.

[Ethics]

This study was conducted with the approval of the ethics committee of the Kansai University of Health Sciences.

[Results]

The rural lifestyles of seven senior citizens whose mean age was 86.1 ± 4.7 years were surveyed for seven years. Life in the residential village with no shops or clinics was inconvenient, but the elderly respondents helped each other lead a satisfying life. The results of the longitudinal investigation revealed that the surveyed elderly loved village life despite its hardships and scored it highly at an average of 6.2 out of a possible 10 for the subjective feeling of well-being.

[Discussions]

The elderly are intimately connected with neighbors in places that have been home to them for more than 50 years. They are comfortable with their lifestyles and desire to continue living within their communities. However, when they require nursing care, it becomes difficult for aged residents who live on their own to maintain desired lifestyles.

To continue living independently in the longer term in surroundings to which they are accustomed, it is necessary for the elderly to maintain physical fitness and interact with people other than village residents.

Poster

Health Promotion / Disease Prevention

P2-98

Confidence for Community Organization Activities and Related Experiences in Japanese Public Health Nurses

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[Objectives] The purpose is to elucidate confidence for community organization activities and related experiences in Japanese public health nurses.

[Methods] The subjects were public health nurses. A self-administered questionnaire survey was conducted by mailing the questionnaire to participants. About 25% of municipalities nationwide were randomly selected. The subjects were asked whether they were confident or not in undertaking community organization activities independently. The subjects were also asked about their experiences with community organization activities. The analysis was done by chi-square tests. Regarding ethical considerations, the survey was conducted anonymously, and obtaining a response to the questionnaire was treated as consent to participate.

[Ethics] This study was approved by the Ethical Committee of Kobe University Graduate School of Health Sciences.

[Results] Among the 2,524 subjects who were mailed the questionnaire, 1,220 subjects (48.3% response rate) responded. Valid responses were obtained from 1193 subjects (47.3% valid response rate). In those with little experience, confidence was significantly lower ($p<0.01$).

[Discussions] Support for public health nurses who have insufficient experience is important. This study was supported by a Grant-in-Aid for Scientific Research(C), Japan Society for the Promotion of Science(JSPS), 15K11883.

P2-99

Awareness and perception of preconception care among high school students in hilly and mountainous regions in Japan

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[Objectives] Preconception care provides appropriate knowledge and information to women and couples at an appropriate time before pregnancy, ensuring future healthcare and good health for the next generation. Health management and health education at an early age is essential in hilly and mountainous regions in Japan owing to a lack of perinatal care in these areas. This study aimed to assess awareness and perception of life planning and preconception care education among high school students in hilly and mountainous regions in Japan.

[Methods] A cross-sectional study using self-rating questionnaires was conducted with 771 high school students from a single school in hilly and mountainous regions in Japan. Data were analyzed using SPSS version 23.0.

[Ethics] The study was approved by the ethics committee of the affiliated university.

[Results] Valid responses were collected from 768 students. In total, 67% of the participants wanted to get married in the future, 78.7% wanted to rear children, and among them, 48.2% of them wanted to rear their children in the region they were presently located in. Participants perceived that cessation of smoking (72.5%), abstinence from alcohol (68.9%), having a maternal and child healthcare handbook (53.6%), and having health checkups for pregnant women (32.2%) were necessary elements to be aware of during pregnancy.

[Discussions] There was poor awareness but good perception and acceptability for preconception care. Hence, there is a need to create awareness and to incorporate it into routine preconception care services to achieve better fetomaternal outcomes.

Poster

Health Promotion / Disease Prevention

P2-100

Developmental transition of bowel and voiding habits in early childhood; the integrated literature review

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[Objectives] Toilet training is an important developmental task for preschoolers. The trouble is that toilet training causes some parents to feel that their parenting skills are failing. Also, it can cause health problems, such as constipation and enuresis. Unfortunately, there is little nursing research about this issue. This integrated literature review was aimed to clarify the associated factors of child bowel and voiding habit transition, and develop a framework for nursing intervention.

[Methods] Four online databases were searched. Factors associated with toilet training were extracted.

[Ethics] Only peer-reviewed articles were included.

[Results] Twenty literatures were analyzed. Associated factors were categorized into "readiness of child and parent" and "community environment". The child readiness factors were child sensory experience and physical/cognitive/social development relative to elimination. The parent readiness factors were "awareness of self-care abilities in elimination", "prior knowledge of toilet training", "experience of caring for child in infancy" and "capture of child character". The reciprocity factors were "correspondence between child development and parental expectation" and "mutual negotiation patterns". There were four elements in "Community environment"; community norms appropriate toilet trained age, agreement upon toilet training between parent and child care professionals, cultural perspective of tolerance in child rearing, and toilet facility. There is a suitable time span for transition, which facilitates child learning of self-care of elimination.

[Discussions] The child developmental transition interacts with the parental role transition. For nursing interventions, the assessment of child/parent readiness and the timing are crucial. This review suggests nursing intervention that equip the parent to facilitate interactions during toilet training.

P2-101

Examination of the effect that reminiscence has on brain activity of the frontal lobe of elderly people

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[Purpose] The objective of this study was to understand the implications of reminiscence in the care of elderly people.

[Methods] Bilateral frontal lobe activities of 21 elderly people with or without reminiscence were examined using near infrared spectroscopy (NIRS). Change in oxygenated hemoglobin concentration (Oxy Hb) and deoxygenated hemoglobin concentration (Deoxy Hb) were used as indicators of brain activity. Mental state of participants was examined using Mini-Mental State Examination (MMSE) and Geriatrics Depression Scale-Short Version-Japanese (GDS-S-J). IBM SPSS version 25 was used for analysis. Mean and standard deviation was reported for all parameters.

[Ethical considerations] This study was conducted with the approval of the University of Medicine Ethics Review Board (approval number 3762).

[Results] Average age of participants was 69.8 ± 4.6 . Their MMSE scores and GDS-S-J scores were 29.18 ± 0.96 points and 1.59 ± 1.74 points, respectively, indicating no decline in cognitive function or depression during reminiscence than with no reminiscence. Deoxy Hb during reminiscence than with no reminiscence.

[Discussion] This study revealed that reminiscence in the elderly increases blood flow in the frontal lobe suggesting that it activates frontal lobe activity.

[Conclusion] Further examination of the effects of activation of brain activity by reminiscence on the elderly is necessary to utilize the findings in their care.

Poster

Health Promotion / Disease Prevention

P2-102

The current status and tasks of interdisciplinary case study meetings conducted by regional comprehensive support centers in Japan

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[Objectives] This study aims to elucidate the functions of the interdisciplinary case study meetings held by integrated community care support centers (ICCSC) to promote collaboration among professionals across varied domains. [Methods] An anonymous, self-completed, nationwide postal questionnaire survey was administered to ICCSC professionals (PHNs, social workers, and primary care managers). The survey items queried the present circumstances, functions, and tasks pertaining to the interdisciplinary case study meetings. [Ethics] This study was approved by the ethics committee of the university with which the authors are affiliated. [Results] 317 questionnaires were deemed valid (21.1%). The average annual participation in case study meetings held by interdisciplinary professionals was 7.6 times (maximum 76, minimum 0). 85.8% of the ICCSCs conducted these case study meetings. 61.8% of the respondents felt that the collaboration of specialists from multiple disciplines was promoted and 61.8% believed that regional networks were constructed through such meetings. 42.2% of the respondents asserted that individual problems in the community could be resolved through the case study meetings. However, only 13.0% found that community issues were reflected in the long-term care insurance plan etc. [Discussions] The findings of this investigation suggest that the interdisciplinary case study meetings influence cooperation and aid the construction of networks of specialists from discrete disciplines within a community. This collaboration seems to help the construction of community-based integrated care systems. However, the new policy does not reflect the clarification of the particular problems of specific communities at the meetings.

P2-103

Child-Rearing Experiences of Women Who Gave Birth for the First Time in Their 40s

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[Objectives] The purpose of this study was to investigate the child-rearing experiences of women who gave birth for the first time at the age of forty or older.

[Methods] The subjects were 5 primiparas who had their first delivery between the ages of 40 and 42 years. Semi-structured face-to-face interviews were conducted. Participants were asked what made them happy, pleased, or bewildered as well as what they found tough or daunting after childbirth, and to discuss gaps between their reality and what they had imagined while still pregnant. Transcribed interview narratives were analyzed with qualitative and descriptive methods.

[Ethics] Approval was obtained from Mukogawa Women's University Institutional Review Board.

[Results] From the participants' narratives, 3 "categories" and 13 subcategories were extracted. Participants reported that they were "Happy to spend time with their baby after pregnancy and childbirth". Conversely, they also reported that they had "Mixed feelings about the gap between their ideals and the reality of childrearing" and "Increasing burden of relentless childrearing tasks".

[Discussions] Participants generally felt happy about their lives with babies after pregnancies that were typically filled with anxiety, about pregnancy complication, fetal disease and disorder. However, they also experienced fatigue and distress from the relentless, around-the-clock demands of childrearing, and had mixed feelings about the gap between their ideals and the realities of childrearing. When providing support to primiparas who aged 40 years or older, it is important to consider practical support as needed while also focusing on their complex feelings toward childrearing.

Poster

Health Promotion / Disease Prevention

P2-104

The relationship between undetermined complaints felt by junior high school students and actual lifestyle habits

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[Objectives]The purpose of this study is to analyze the lifestyle habits associated with undetermined complaints of students and to consider measures for leading a prosperous school life.

[Methods]A questionnaire-based survey was conducted on lifestyle habits of junior high school students living in a city area. The relationship between undetermined complaints such as headaches, vertigo and palpitations that students practically felt, and actual lifestyle habits was examined. Chi-square test was used for analysis ($P<0.05$).

[Ethics]This study was approved by our university ethics committee (E-1118).

[Results]The analysis targets were 236 students. Among them, 85 (36.0%), 94 (39.8%), 27 (11.4%) had headaches, vertigo and palpitation, respectively. In addition, it was found that students who answered that “the time from entering the duvet to sleeping is long” and “doing worries in the bed” feel more of these undetermined complaints.

[Discussions]The sympathetic nerve activates during thinking in bedtime. As a result, it gets poor quality of sleep. When giving health instruction to students about lifestyle, it is necessary to provide guidance on the importance of alleviating worries during sleeping time. Adolescent children need communication with not only their families but also at schools. It is necessary to create an environment that makes it easy to consult with class teachers and nursing teachers and to ensure effective use of school counseling. It is important to communicate regularly so that adults in the school become more familiar to the students.

P2-105

Trends in Research on the Support for Sexuality of People with Mental Disorders in Japan

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[Objectives]This study aimed to clarify trends of research on the support for sexuality of people with mental disorders in Japan by examining domestic literature and to obtain suggestions for such support.

[Methods] We examined 54 research papers using the Japan Medical Abstracts Society database and by hand searching. The keywords “mentally ill persons,” “schizophrenia,” and “mood disorders” were combined with “sexuality” and “support.” Meanwhile, we excluded papers on perinatal management.

[Results]The papers were dated from 1973 to 2018, and the ones after 2000 accounted for 74%. The first author was a psychiatrist (56%). Such studies examined marriage and outcomes, psychotropic-related sexual dysfunction, sexuality needs, and their impact on psychiatric staff and family. Some studies also investigated sexual needs related to love, marriage, and sexual function. In addition, studies revealed that the support includes interpersonal skill advices, consultations, information provision, marital lifestyle guidance, guaranteeing sexual desire, and sexual behavior instruction. The approach to psychotropic-related sexual dysfunction was to maintain medication adherence. However, some studies reported that the psychiatric staff has a negative attitude toward sexual issues.

[Discussions]With the spread and side effects of antipsychotics, patients' opportunities for love, marriage, and sexual function consultation have increased. However, the negative attitude toward sexual issues may lead to a lack of sexual desire in people with mental disorders. Future challenges concerning the support for sexuality of people with mental disorders in Japan include sexual needs related to love, marriage, and sexual function and addressing psychiatric staff's negative attitude toward sexual issues.

Poster

Health Promotion / Disease Prevention

P2-106

Rehabilitative slipper toe clearance for aged individuals with fall risk

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[Objectives] In the present study, risks of fall using rehabilitation slippers were studied during a one year prospective intervention.

[Methods] Subjects included 75 self-care independent patients (61 women and 14 men, aged 84.4 ± 6.8 years) selected randomly from the patient pool at eight nursing homes. The final intervention group comprised 29 patients who participated in a full intervention study and control group comprised 30 patients who participated in a one year observation examination. The rehabilitative training slipper has a space at the top of the lead beads (200g, 300g, or 400g). One to three days each week for one year, subjects walked wearing the slippers for 10 ~ 20 min at a self-chosen comfortable walking speed and weight (200g, 300g, or 400g). The risk of falls was measured by Berg Balance Scale and Tinetti's Performance – Oriented Mobility Index (POMA test) before and after three, six, nine, and 12 months of either intervention or control.

[Ethics] The study was performed in accordance with the Rules of study, Hirosaki University of Health and Welfare.

[Results] Both Berg Balance Scale and POMA test in the intervention group using rehabilitation slipper improved significantly (Friedman's test), while in the control group, values did not change. Subjects with fall risk decreased from ten to six subjects in the intervention group, while in the control group, this increased from 11 to 14 subjects. Many subjects in the exercise group spontaneously reported a feeling of lightness in their step.

[Discussions] We observed a significant reduction of fall risk in subjects using the rehabilitation slipper.

P2-107

The effects and relevant factors of Community Living Room in Japan

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[Objectives]

The aim of this study was to clarify the effects and relevant factors of Community Living Room which is casual and social activities organized by local leaders.

[Methods]

A self-reported questionnaire survey was conducted at 398 Community Living Room in A prefecture, Japan. The questionnaire examined demographics, purposes, effects, and involvement of health professionals (Public Health Nurse (PHN), Nurse, Occupational Therapist, and Physical Therapist).

[Ethics]

Participants were given written information about the study. Approved by the Ethical Review Board of the Faculty of Medicine at Tokyo Medical and Dental University (M2018-318).

[Results]

"Promote friendship" was the most common purpose (68.6%), followed by "prevention of isolation" (58.0%) and "maintain and promote health" (55.9%). As for the effects, "increase smiles" was the highest (79.6%), followed by "increase interests in health" (69.6%). The group whose effect is "increase interest of health" had a significantly higher percentage of health professional involvement ($p < 0.001$). Also, the group whose effects are "the connection of community became stronger" had a significantly higher proportion involving PHN ($p < 0.01$). "Facilitate communication in the same generation" "increase interests in health" and "improvement of cognitive function" had a significantly higher percent of involvement by Nurse ($p < 0.05$).

[Discussions]

Many of Community Living Room were opened to promote friendship and health, and it became clear that they were effective. In particular, it was suggested that health professional involvement was important.

Poster

Health Promotion / Disease Prevention

P2-108

Fostering Maternal and Child Health Promoters as Partners of Public Health Nurses in Okinawa

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Maternal and child health promoters (MCHP) are active in all municipalities in Okinawa, Japan. The purpose of this study is to clarify the background of fostering such promoters in Okinawa.

Methods of this study were semi-structured interviews and the collection of related materials. The participants of the interview were public health nurses (PHNs) who have been involved in fostering MCHPs in the PHN station system and PHNs in charge of maternal and child health (MCH) in Okinawa prefecture.

The Ethics Committee of the researcher's university approved the study protocol of this study.

In Okinawa, the concept of MCHP was introduced after the region was returned to Japan in 1972. According to records, MCHPs were introduced in several municipalities from the start. The PHN who was in charge of the MCH division of Okinawa prefecture secured various funding and created guidelines to apply to the Japanese MCH system after Okinawa's return. Fostering MCHPs was one such guideline. Because of the lack of health human resources in the community, PHNs selected appropriate MCHP candidates from the residents as their partners working for the communities in order to improve the health status of mothers and children in the community.

There were four factors that made up the background for fostering MCHPs in Okinawa, as follows: the application of the Japanese MCH system following Okinawa's return to Japan, the lack of health human resources, the mission of regional MCH improvement, and the need by the communities for partners working with PHNs.

P2-109

Awareness of susceptibility to diabetes-affected lifestyle changes among young healthy adults after primary diabetes prevention program intervention

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[Objectives]

This study's aim was to determine whether awareness of susceptibility to diabetes affected lifestyle changes.

[Methods]

We implemented a primary diabetes prevention program targeted toward young healthy adults (20–39 years) and used a visual analog scale (VAS) in order to measure the extent to which individuals were aware of their susceptibility to diabetes after intervention. Participants (N=118) were divided into two groups according to their VAS scores (increased group: IG, decreased group: DG). We analyzed differences in lifestyle changes between two groups using Wilcoxon signed-rank test and Mann-Whitney U test.

[Ethics]

Approved by the Ethical Review Board of the Faculty of Medicine at Tokyo Medical and Dental University (M2016-150).

[Results]

The number for the IG was 80 (67.8%). The IG significantly improved dietary behavior regarding fruit consumption ($p=0.048$) and tended to improve regarding snack and soft drink consumption ($p=0.051$). However, there were no significant differences between the groups (IG vs. DG, $p=0.056$, $p=0.097$). Regarding changes in behavioral stages (measured twice, at 6 weeks and 10 weeks), the dietary and exercise habit stages significantly improved in the IG (6 weeks, $p=0.004$, $p=0.001$). The IG showed significant progress in the exercise habit stage compared to the DG (6-weeks, $p=0.015$), but no differences occurred at 10 weeks.

[Discussions]

Awareness of susceptibility to diabetes may reduce excessive intake of carbohydrates and create interest in exercising among young healthy adults. However, issues regarding sustaining their interest still persist.

Poster

Health Promotion / Disease Prevention

P2-110

Current status and Issues of intervention research using Aromatherapy for depressive state: Comparison of prior researches in Japan and foreign countries

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[Objectives]

This study aimed to clarify the effects of an intervention using aromatherapy for the depressive state provided internationally, and consider implications for future studies of subjects and methods from comparison with study in Japan.

[Methods]

The research design involved a literature review using the "Matrix method" with a search for keywords of "Aromatherapy," "Depression or Depressive state," "Peer review," and "References" under the conditions that the study a) is an original article, b) has interventions using essential oils, and c) has human participants based on EBSCO host and Cochrane Library's Trial. Twenty-two articles were finally extracted and analyzed. On the horizontal axis of the Matrix, the same fourteen items as that of Era et al. (2018), object, and evaluation scale etc. were set and analyzed.

[Ethics]

The literature used described sources.

[Results]

The most frequent "Object" was "improvement of depression," being 28% of the whole. In "Research design," "experimental research" was the most common, being 77% of the whole. In "Evaluation scale," "Hospital Anxiety and Depression Scale" was the most common, being 21% of the whole.

[Discussions]

For the future, experimental research using a single case design is suggested, which can ensure a certain level of evidence when it is difficult include a large sample. Additionally, in foreign countries, many studies have used specialized measures for evaluating depressive status compared to Japan. In the future, intervention evaluation research using scales specialized for evaluation of depressive state is needed.

P2-111

The association between dietary habits and health literacy and healthy behavior among parents of primary school children

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[Objectives]

To clarify the association between dietary habits and health literacy and healthy behavior among parents of primary school children.

[Methods]

Participants comprised 253 fathers and 275 mothers of primary school children. The research was conducted from October–November 2017, using a self-administered questionnaire consisting of the Eating Behavior Scale (EBS), Communicative and Critical Health Literacy scale (CCHL), and items on lifestyle, healthy behavior (routine health monitoring and cancer prevention), and health awareness. Pearson correlation coefficient and Mann-Whitney U test were used.

[Ethics]

Approved by the Ethics Review Board of the Faculty of Medicine at Tokyo Medical and Dental University (M2017-124).

[Results]

We found several significant positive correlations between fathers and mothers. Dietary habits (vegetable intake: $r=0.639$, $p<0.001$; fruit intake: $r=0.613$, $p<0.001$) were strongly correlated. The EBS and CCHL scores of fathers ($p=0.002$, $p=0.030$) and mothers ($p=0.000$, $p=0.018$) who exercised regularly showed higher significance compared with those who did not. The EBS scores of parents who exhibited healthy behavior and health awareness were more significant compared with those who did not ($p<0.05$). The CCHL score of fathers ($p=0.002$) and mothers ($p=0.031$) who had an early medical examination had higher significance compared with those who did not, but there was no significant difference in smoking habits.

[Discussions]

Spouses' lifestyles are closely related. Fathers and mothers with healthy dietary habits tend to be aware of their health and engage in cancer prevention practices. However, other issues, such as smoking habits, are difficult to alleviate through improved health literacy.

Poster

Health Promotion / Disease Prevention

P2-112

The emotional change between spouses immediately after the birth of the first child: A literature review

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[Objectives] The birth of the first child is a stressful event to a couple, which at times it causes a crisis in the relationship and emotion between the spouses. This literature review was conducted to understand how the emotion between the spouses changes immediately after the birth of the first child.

[Methods] Literature since 1999 was searched using the keywords: "marital relationship" and "change" in the Japan Medical Abstracts Society and CiNii databases. Based on inclusion criteria, 13 literatures were retrieved and included in the analysis.

[Ethics] This literature review followed ethical standards and was careful not to plagiarize for the articles.

[Results] From the third day after the birth of the first child, there was a significant drop of degree of affection by both husbands and wives to the other spouses, they were both dissatisfied with their marital relationship. Wives indicated lower affection to their spouses compare to the husbands as well as marital satisfactions.

[Discussions] Wives experience a transition into motherhood by the birth of their first child, on the other hand, husbands might expect to regain intimate relationship with their wives when their first child is delivered. This literature review indicated that there was a change of emotion toward spouses immediately following the birth of the first child. Welcoming the first child into the family is a time of transition for the couple, further study is needed to understand the phenomenon.

P2-113

Changes in the ovulation / anovulation cycle, diet, and mental health of nursing students in Okinawa, Japan: an intervention study with the basal body temperature measurement

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[Objectives]

The purpose of the study was to assess the possibility for improving the lifestyle and diet of women by using menstruation as an index.

[Methods]

For analyses, we included the responses of 26 participants that consistently measured basal body temperature for three consecutive cycles. After receiving the results of the personalized analyses concerning menstruation, basal body temperature, lifestyle, and diet with recommendations via postal mail, participants were asked to measure their basal body temperature for a single cycle and to return the completed questionnaire forms. This round of investigation has been conducted for three times with a basal thermometer, a brief self-administered diet history questionnaire, and the 28-item General Health Questionnaire (GHQ).

[Ethics]

The University of the Ryukyus' Research Ethics Review Board examined and approved this research.

[Results]

Most participants who were categorized as underweight or obese according to the body mass index reported anovulation. However, those who transferred from the underweight to the normal weight group also moved from the anovulation to the ovulation group. The tendency toward increasing the ratio between energy intake and protein was observed in the third round if the participants reported anovulation in the second. With regard to the relationship between GHQ and ovulation, the third round revealed overall improvement in somatic symptoms, anxiety, insomnia, and social dysfunction.

[Discussions]

Consistent measurement of basal body temperature has the potential to motivate lifestyle changes or stress-reduction efforts in women thereby helping them achieve their optimal health.

Poster

Health Promotion / Disease Prevention

P2-114

Observation points necessary for preventing frail elderly care-recipients from reaching a state requiring nursing care - With a spotlight on home caregivers involved in the elderly recipients' daily life support care -

○Emiko Wada

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[Objectives] We had previously surveyed the causes why information about an elderly care-recipient the home caregiver obtained was not conveyed to other professionals taking care of the same recipient. To present the specific observation items was definitely necessary. This study aimed to clarify the targets of observation items the home caregivers can use to prevent the frail elderly from reaching a state requiring nursing care.

[Methods] We conducted semi-structured interviews with the professionals long engaged in home medical care, including two dentists, two dental hygienists, two nutritionists, two physical therapists and one occupational therapist. Their narratives transcribed verbatim were analyzed by the KJ method according to professions.

[Ethics] After obtaining the approval of the ethics committee of A University, we conducted this study with the subjects' consent.

[Results] The extracted observation items were: the elderly recipients' activity level, their will to act, posture during meals, motions when going to the toilet, motions while having a bath, manner of walking, influence of paralysis, degree of dependence on family members, degree of stain in the oral cavity, condition of teeth and denture(s), intake of meals, and changes in dietary form. The nutritionist proposed the kinds and amounts of foods to the home caregiver and instructed the home caregiver how to cook to prevent the elderly's malnutrition.

[Discussions] The extracted observation items are important to maintain the elderly recipients' condition and improve their ADL. We consider the cooperation between the nutritionist and the home caregiver essential for preventing malnutrition in the elderly recipients.

P2-115

Current situation and influencing factors of volunteer health collaborators' health literacy in A prefecture

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[Objectives]

The objectives of this study were to clarify volunteer health collaborators' health literacy (HL) and factors affecting their HL, and to obtain suggestions to better their activities.

[Methods]

A cross-sectional study using anonymous self-administered questionnaires was conducted. The subjects were 5,414 volunteer health collaborators from all municipalities of Prefecture A. Data were obtained from 2,422 (valid response rate: 44.7%) persons. The level of satisfaction and burden felt with activities, HL scale, lifestyle behavior, social capital, and basic characteristics were investigated. Basic statistics for HL were calculated and multiple regression analysis was performed with HL as the dependent variable and other items as independent variables.

[Ethics]

The study was performed after approval was obtained from the ethics committee of the affiliated research organization (approval number: 1753).

[Results]

The subjects were mainly ≥ 60 years old (80%) and female (90%). HL for collecting information was highest and evaluation of information was lowest. Results of the multiple regression analysis were ($R^2=0.160$, $p<0.01$). High HL was related to a strong sense of satisfaction with an activity, favorable lifestyle activities, high social capital, high independence in performing an activity, participation in workshops, and local roles, while increased age was associated with lower HL.

[Discussion]

This study shows that the HL of volunteer health collaborators in Prefecture A is relatively high in terms of their capacity to obtain information. Results suggest that the promotion of activities found to be related to high HL in this study may further increase their HL.

Poster

Health Promotion / Disease Prevention

P2-116

Factors associated with success of quitting smoking in Japanese Smoking Cessation Treatment Program: A systematic review and meta-analysis focusing on age, depression disorders and side effects of varenicline

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[Objectives]

The objective of this review is to clarify the effects of age, depression disorders and side effects of varenicline associated with success of quitting smoking.

[Methods]

A systematic search of four English electronic databases (Pubmed, CINAHL Plus, Scopus and Web of science), two Japanese electronic databases (CiNii Articals and Ichushi), and additional gray literature search was conducted to identify eligible studies. The search terms were: ['factors' or 'predictors'] and ['smoking cessation' or 'smoking cessation interventions' or 'quit smoking' or 'stop smoking']. The term of ['Japan' or 'Japanese'] was further limited when these papers were searched in English databases. For meta-analysis, we used the software of Review Manager 5.3 to compute pooled effect estimates.

[Ethics]

This paper is a literature review and it does not require ethical consideration in human research.

[Results]

Of 1079 identified studies, 30 studies (N=6389 people) were included in this review. Our study demonstrated that ≥ 50 years old ($OR=1.53, 1.19-1.97, < 0.001$), depression disorders ($OR=0.75, 0.60-0.93, < 0.001$), side effects of varenicline ($OR=0.75, 0.60-0.93, < 0.01$) and completion of SCT program ($OR=17.64, 5.11-60.92, < 0.001$) were significantly associated with success of quitting smoking in Japanese SCT program. However, other factors such as nicotine dependence, previous abstinence, cohabitation with smokers, were not significantly associated with success of quitting smoking.

[Discussions]

In SCT program, age, depression disorders and side effects of varenicline were found to predict success of quitting smoking.

P2-117

The effect of "Life Association Method" in the preventive care for community-dwelling elderly people

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[Objectives]

This study clarified the effect of "Life Association Method" in the preventive care for community-dwelling elderly people.

[Methods]

The subjects were community-dwelling elderly people over 65 years old.

The intervention group were given "Life Association Method" once a week in addition to usual preventive care and the control group were given usual preventive care.

A questionnaire survey related to the self-administered dementia checklist by Awata, Euro Qol 5 Dementia (EQ5D) and the basic checklist/Depression.

It was conducted on the subjects at baseline, three months, and six months.

[Ethics]

We received approval from the Ethics Review Board of our university as an ethical consideration.

[Results]

Forty subjects in total were analyzed.

About the health condition of QOL, the EQ5D Index value of the intervention group was significant improvement at baseline and three months later ($P = 0.033$, Friedman's test).

The dementia score decreased after three months in the intervention group. In the cognitive function and mental condition questions, "not anxious or depressed" increased from baseline to six months later in the intervention group. Also, "a lack of fulfillment in daily life" decreased significantly six months after baseline in the intervention group.

[Discussions]

It was suggested that "Life Association Method" was related to improvement of the health condition of QOL. In particular, "Life Association Method" was effective for maintaining the cognitive function after three months.

Poster

Health Promotion / Disease Prevention

P2-118

Mothers' experience over death of their children having severe physical and intellectual disabilities and having lived at home and social concerns about those mothers

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[Objectives] This study aimed to clarify mothers' experience over death of their children having severe physical and intellectual disabilities and having lived at home and the social concerns about those mothers, and discuss how to support such families.

[Methods] The date obtained from interviews with six mothers having lost their children were qualitatively and inductively analyzed.

[Ethics] This study was approved by the ethics committee of the institution one author belonged to.

[Results] The following five categories were extracted: ambivalent feelings and fear about child's death, feelings of isolation and loneliness, transition from long-term lifestyle concentrating on child's care and nursing, work loss and job hunting activities and wish to do something for the society for being supported and self-actualization.

[Discussions] The experiences over death of children having severe physical and intellectual disabilities and having lived at home uncovered by the mothers in this study supported the process of mothers' grief care reported by the previous research. The important finding of the study was the fact that some mothers had social problems after their children's death, as indicated by the category of . In some cases, the mothers got anxious about financial difficulty and started job hunting activities for family finances and savings for old age. There are few studies relating to work loss of mothers having children with disabilities. The economical aspect should also be considered when discussing the support for families caring the children with severe physical and intellectual disabilities at home.

P2-119

Examination of literature regarding the current state of sexual behavior and awareness of male university students in Japan

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[Objectives]

Unwanted pregnancies, abortions, and sexually transmitted diseases are considered social problems that particularly affect young people. Undergraduate students are known to increase sexual activity around the time of entering university, and male students are less aware of the role of contraception and the prevention of sexually transmitted infections than female students. Special measures are therefore needed to raise sexual awareness in male university students in Japan. The purpose of this research is to organize and examine the current state of sexual behavior and awareness in male university students in Japan, using previous research papers as samples.

[Methods]

By searching the online resources "Central Medical Journal Web Ver.5" and "CiNii Articles", I extracted domestic literature that related to the study of sexual behavior and awareness among male university students. The keywords used were a combination of "male college student", "sexuality", "sexual behavior", "sexual activity", "sex", and "sexual awareness".

[Ethics]

This study followed ethical standards.

[Results]

Study results found that the literature thus far on sexual behavior and awareness has mainly focused on the role of contraception and on sexually transmitted diseases.

[Discussions]

In conclusion, it is necessary to continue investigations regarding the current state of sexual behavior and awareness of male university students, and to further study the factors necessary for raising awareness to prevent unwanted pregnancies and sexually transmitted infections.

Poster**Health Promotion / Disease Prevention****P2-120****Prediction of intention to undergo screening for cervical cancer using the "Motivation Phase" of the Health Action Process Approach**ORika Nakagoshi^{1,2}, Yuka Okazaki², Sakae Mikane²¹*Department of Maternity Nursing & Midwifery, Ehime Prefectural University of Health Sciences, Japan*²*Faculty of Health and Welfare Department of Nursing Science, Okayama Prefectural University, Japan***[Objectives]**

This study examines whether the motivation phase of the Health Action Process Approach (HAPA) can predict the intention to undergo cervical cancer screening.

[Methods]

A questionnaire survey was distributed via mail to Japanese women aged 20–40 years, who anonymously completed it. The questionnaire examined the variables constituting the motivation phase of HAPA; namely, the intention to undergo cervical cancer screening (intention), action self-efficacy for undergoing cervical cancer screening (ASECCS), risk perception of cervical cancer (RP), positive outcome expectancy of undergoing cervical cancer screening (POECCS), and negative outcome expectancy of undergoing cervical cancer screening (NOECCS). We used IBM AMOS Version 25 for confirmatory factor analysis.

[Ethics]

This study was approved by the Ethics Review Board of Affiliation university (receipt number: 13-30).

[Results]

After selecting 585 valid responses for analysis, we demonstrated construct validity using a causality model, which assumed that ASECCS, RP, POECCS, and NOECCS were related to intention, confirming a significant path coefficient. The goodness of fit was 0.902 and 0.08 for CFI and RMSEA, respectively, whereas the path coefficients from each variable to intention were 0.17, 0.09, 0.25, and 0.52 for POECCS, NOECCS, RP, and ASECC, respectively; all values were significant.

[Discussions]

The validity of the causality model was good for intention, and the prediction of intention by the motivation phase of HAPA was verified. However, although the path coefficients from POECCS, NOECCS, and RP to intention were significant, it had low values. Further investigation by extending the candidate range is necessary to reverify the results.

P2-121**Decision Making in the Final Stage of Life for Healthy Older Adults**OShoko Abiko^{1,2}, Kazuko Mitoku³, Eriko Arakane⁴¹*Graduate School of Nursing, University of Human Environments, Japan*²*Faculty of Nursing, Seisen University, Japan*³*Faculty of Nursing, Hyogo University, Japan*⁴*Faculty of Nursing, Kobe Women's University, Japan***[Objectives]**

To elucidate the medical information necessary for promoting decision making in the final stage of life for healthy older adults.

[Methods]

Target population: 1,239 healthy older adults living in City A and Town. Survey Method: A survey questionnaire was administered to the target population. The medical information was evaluated using the 14-item Health Literacy Scale (HLS-14) (Suga et al.2013).Analysis Method: The HLS-14 score (14–70), and their association with medical information was examined.

[Ethics]

The University of Human Environment's Research Ethics Review Committee (2017N-026) approved the study. There is no conflict to disclose.

[Results]

The mean age was 75.0 (SD=6.93) for males and 74.3 (SD=6.39) for females.

Among individuals with low health literacy, those who were uneducated about medical choices (114, 24.6%) significantly outnumbered those who were educated (20, 20.4%) ($p<0.05$). Many individuals had low level of knowledge with respect to medical care in the final stage of life (fewer than 4 items out of 10) and symptoms typifying the near-death period (fewer than 3 items out of 6) ($p<0.01$ for both). Compared to individuals (52, 18.9%) who knew about the communication method of decision making, significantly more (81, 28.0%) did not know about it ($p<0.01$).

[Discussions]

The results suggest the importance of disseminating correct knowledge about medical care in the final stage of life as well as knowing how to communicate about decision making to others to promote it in the final stage of life for healthy older adults.

Poster

Health Promotion / Disease Prevention

P2-122

Value of social activities for older adults living in a rural community in Japan: Primary research on social activity programs for preventing frailty

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[Objectives]

The present study explores the value of social activities for older adults living in a rural Japanese community to develop the social activities program for preventing frailty.

[Methods]

The participants were 14 older adults who were members of the voluntary salon for the elderly in a rural city in Japan. Individual semi-structured interviews were conducted; the participants were asked about their social activity and its value. The data were analyzed using a descriptive qualitative approach.

[Ethics]

The Ethical Review Board of the affiliated institution approved this study.

[Results]

The data analysis identified nine categories: "a social network as a source of security for living in the community," "happy time spent with familiar companions in the community," "self-affirmation provided from the community," "sense of unity within the lively community," "replenishment of vitality in order to live cheerfully," "contributing to the community based on a spirit of mutual support," "fulfillment of one's own individuality cultivated in their life," "further self-growth in harmony with growing old," and "mutual guarantee of interpersonal distance that does not expose one's inner self."

[Discussions]

The values of social activities for older adults in this Japanese rural community were: a social network to prevent isolation, reciprocal relationships with the community, and the fulfillment of their individuality. The contents of the social activities program in a rural community in Japan for preventing frailty should enable participants to feel a sense of security, well-being, and involvement in reciprocal relationships with the community. [Supported by JSPS KAKENHI Grant Number JP18H03103]

P2-123

Risk factors of child abuse perpetrators: A review to help public health nurses prevent child abuse

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[Objectives]The purpose of this review was to identify the risk factors of child abuse perpetrators during pregnancy to help public health nurses (PHNs) more effectively prevent the child abuse.

[Methods]A systematic search of major electronic databases covering both medical and social science research (PubMed, Scopus, etc.) was conducted in 2019 (with an additional manual search, as needed) for the following types of abuse: physical, sexual, and emotional abuse, and neglect. The risk factors were extracted from the collected literature and classified by abuse type. The analysis focused on the timing of PHNs' support.

[Ethics]This study is a literature review and does not require ethical considerations for human research.

[Results]Sixty-six articles were extracted. Analysis revealed numerous risk factors relating to perpetrators' backgrounds known to exist before the stage of PHN intervention; we divided these into attributes, social conditions, interpersonal relationships, growth history, and personality traits.

[Discussions]Perpetrators' background factors such as history of abuse are important information for the prevention of abuse, but such information can be difficult to ask for before there is a strong enough relationship between PHNs and potential abusers, meaning that little may be learned in the early stages of a pregnancy. Effectively collecting background information that would help identify people who would potentially abuse will require reconsidering the questionnaire that is currently used in the pregnancy notification, as well as clarifying the techniques used by PHNs to collect information and understand its significance.

Poster

Health Promotion / Disease Prevention

P2-124

Effectiveness of Childcare and Parenting Support Program in the Community

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²Miyama Kodomoen; Miyama early childhood education and care, Japan

[Objectives] Recently, Japan has witnessed a decreasing number of parents able to care for their children with confidence. A childcare and parenting support program "M-Hiroba" was held by childcare professionals and public health nurses to provide parents of children under 2-years of age the opportunity to improve their childcaring skills. The objective of this research was to clarify the effectiveness of the M-Hiroba program.

[Methods] A chief childcare professional and a public health nurse involved in the M-Hiroba program volunteered to participate in this research. Data was collected using a semi-structured interview guide and analyzed using the qualitative descriptive method.

[Ethics] The study was approved by the M Kodomoen Educational Institution Ethics Committee.

[Results] Positive effects of the M-Hiroba program were found for both parents and professionals. For the parents, four themes were identified; 1) learning how to play with children; 2) gaining childcare knowledge; 3) experiencing peer-counselling; and 4) gradually reducing early childcare uneasiness. For the professionals, two themes emerged; 1) developing childcare network services; 2) improving coaching techniques of parenting skills for parents.

[Discussions] Findings of this research indicate the M-Hiroba program is important for parents and professionals in sharing the value of childcare in the community. The themes that emerged from the interview data for the professionals may be a limitation of this study. Therefore, further research is required to explore the parent's evaluation of the program.

P2-125

Postpartum stress: focusing on the Japanese custom SATOGAERI

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[Objectives]

This study assessed differences in stress levels of postpartum women depending on whether they practiced SATOGAERI, a Japanese practice of women returning to their parents' home during the perinatal period, to develop a strong perinatal support system.

[Methods]

A questionnaire-based survey was conducted on 291 Japanese women in their postpartum 4 months in a city in Aichi, Japan. The survey investigated whether participants experienced stress during postpartum 4 months and whether stress depended on their return to home for childbirth. Chi-square test was used to analyze the differences between the study groups.

[Ethics]

This study was approved by the Research Ethics Committee of the affiliated university.

[Results]

Of 261 participants, 137 returned home (SATOGAERI: 52.5%) and 124 did not (non-SATOGAERI: 47.5%). The SATOGAERI group included 81 (59.1%) primiparas and 56 (40.9%) multiparas, whereas the non-SATOGAERI group included 34 (27.4%) primiparas and 90 (72.6%) multiparas. In the SATOGAERI and non-SATOGAERI groups, 14.6% and 8.9% women experienced high stress, 49.6% and 36.3% experienced moderate stress, 29.9% and 36.6% experienced low stress, and 5.8% and 18.5% experienced no stress, respectively, indicating that women who returned home experienced significantly more stress ($p < .01$).

[Discussions]

Primiparas are presumably overwhelmed by new childbirth-related experiences, and mothers who practice SATOGAERI are likely to experience difficulties adapting to their marital homes. Members of women's support system should anticipate postpartum stress type and plan accordingly during pregnancy while considering whether a woman plans to practice SATOGAERI and whether the woman is primiparas or multiparas.

Poster

Health Promotion / Disease Prevention

P2-126

Reconstruction of Day-to-Day Life Experience by People with CFS / ME living at home

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[Background] CFS (Chronic Fatigue Syndrome) or ME (Myalgic Encephalomyelitis) are disease of unexplained etiology, and presence of a certain amount of patients is confirmed in all the word. And most of them seems to struggle against this disease, furthermore they seek to overcome their customary suffering.

[Objectives] The objective of this study was to describe reconstruction of Day-to-Day life experience by people with CFS / ME living at home.

[Methods] Phenomenological approach was used in this research. The data were obtained through semi-structured interviews of 2 people with CFS / ME living at home. In analysis researcher repeated the process which explored some keys based their own experience and their subjective fact.

[Ethics] This study was conducted after receiving written informed consent form from participants. And the study protocol was reviewed and approved by Research Ethics Committee of university.

[Results] From result of analysis, their disease burden were described as follows. 1) With the evolution of disease extreme fatigue is gradually occupied their ordinary living. 2) Therefore people with CFS/ME had no choice but to recognize to make a break with ordinary living of the past. 3) It is a hard challenge, which mixed plenty of failure and small success, for them to reconstruct Day-to-Day life at home. 4) However they identified reconstructing Day-to-Day life was required process for them to view their living in a new way.

[Discussions] Results of analysis showed nurses should physically and emotionally follow and promote their construction process of Day-to-Day life with intense interests.

P2-127

The Study of Quality of Life Evaluation by using SF36 for Head and Neck Cancer Patients who Received Chemoradiation Therapy

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[Objectives]

In cancer treatment it is very important to improve patients' quality of life (QOL) after treatment. This study was to clarify the change of head and neck cancer patients' QOL from before the start of chemoradiation therapy to one year after discharge from hospital.

[Methods]

Subjects were patients who were admitted to hospital for cemoradiation therapy. We examined their basic attributes and eight items of QOL scales in SF-36v2. JMP12 was used for calculating descriptive statistics of basic attributes and conducting analysis of covariance with QOL as a dependent variable ($p < .05$).

[Ethics]

This research was approved by Fukuoka University Ethics Committee.

[Results]

A total of 58 subjects were included in this study. They were 47 males (81.0%) and 11 females (19.0%), and their average age was 65.2 ± 10.7 years (ranging from 40 to 84 years). Their QOL before treatment was: PF_N 42.2, RP_N 39.5, BP_N 46.1, GH_N 44.1, VT_N 49.8, SF_N 41.7, RE_N 39.9, and MH_N 47.4. The score of PF_N was significantly low before hospital discharge. There was no statistically significant difference on the other items.

[Discussions]

It was revealed that after radiation therapy the score of QOL was the lowest immediately before discharge from hospital and gradually improved until one year later. It is necessary to conduct nursing intervention until discharge from hospital for QOL improvement. It is also necessary to maintain nursing support until one year after discharge.

Poster**Health Promotion / Disease Prevention****P2-128****The relationship between occupational stress, work-life balance and mental health of home care staff. (The first report)**OSatoshi Ikeda¹, Kayoko Koga¹, Kazumi Nishimura², Hisanori Hiro³¹Fukuoka university, Japan²Japanese Red Cross Kyushu International College of Nursing, Japan³University of Occupational and Environmental Health, Japan**[Purpose]**

The purpose of this study is to investigate the actual conditions of work stress, work-life balance and mental health of workers working at home-visit nursing stations, and to clarify the factors related to their mental health.

[Methods]

We carried out a self-administered questionnaire survey for 1022 people in 108 facilities where consent were obtained from the managers at visiting nursing stations in 181 facilities (investigation period: January 2019–February 2019). Items are basic attributes (14 items), compatibility supportive organizational culture scale (12 items), Japanese version of the Survey Work – Home Interaction – NijmeGen, the SWING as the work-life balance scale (hereinafter, SWING-J) (22 items), Job Content Questionnaire (hereinafter referred to as JCQ) (22 items), and K6 (6 items) used to measure mental health as a measure of occupational stress.

[Results]

Date was collected from 245 people (recovery rate: 24%). As a result of multiple logistic regression analysis using high and low K6 groups as dependent variables, two factors; the degree of requirement in work and a home → work positive outflow, were statistically significant (model χ^2 test $p < 0.01$, discriminant predictive value 93.0%).

[Discussion]

Although positive events in the home are largely the responsibility of the individual, changes in work loads that may be excessive should be monitored and quickly addressed. Managers need to keep track of the labor situation of staff on a daily basis and need to ensure that the work load is not excessive ensuring that a good work-life balance is achieved and maintained.

P2-129**The relationship between work stress, work-life balance and roles of home care staff. (The second report)**OSatoshi Ikeda¹, Kayoko Koga¹, Kazumi Nishimura², Hisanori Hiro³¹Fukuoka university, Japan²Japanese Red Cross Kyushu International College of Nursing, Japan³University of Occupational and Environmental Health, Japan**Purpose**

The purpose of this study was to clarify the association factors between work engagement which has been gathering attention as a positive aspect in work, occupational stress and the work-life balance.

Methods

We carried out a self-administered questionnaire survey for 1022 people at 108 facilities where consent were obtained from the managers at visiting nursing stations in 181 facilities. Basic attributes (14 items), compatibility supportive organizational culture scale (12 items), work-life balance scale, Japanese version of the Survey Work – Home Interaction – NijmeGen, the SWING (hereinafter, SWING-J) (22 items), Job Content Questionnaire as a measurement of occupational stress (hereinafter referred to as JCQ) (22 items), and the Utrecht Work Engagement Scale (hereinafter referred to as UWES-J) (9 items) as a measure of work engagement were used.

Results

The causal model with work engagement as a dependent variable was composed of “support from co-worker”, “home → work negative spill over”, “home → work positive spill over” and “control of work” and a clear Goodness to fit was found in the analysis ($CMIN = 2.109 p , GFI = .996, AGFI = .981, CFI = 1.00, RMSEA < 0.001$).

Discussion

It further suggests that the potential for receiving the support of others by enhancing individual communication skills through self-care training. Therefore, in addition to reducing work stress, it is important for the organization's attitude to actively adopt measures to improve individual skills such as interpersonal skills, as well as work resources that are factors known to promote individual growth, learning, and development.

Poster

Health Promotion / Disease Prevention

P2-130

Survey of violence on home care staff by patients and their families. (The third report)

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²Japanese Red Cross Kyushu International College of Nursing, Japan

³University of Occupational and Environmental Health, Japan

[Purpose]

The main purpose of this study was to clarify the relationship between the actual state of violence at home care sites and the mental health status of the care worker and to suggest the basic data required for the construction of measures to prevent violence.

[Methods]

We carried out a self-administered questionnaire survey for 1022 people in 108 facilities where consent was obtained from managers at visiting nursing stations in 181 facilities (investigation period: January 2019–February 2019). Survey items included basic attributes (14 items), type of violence received, time of violence, duration of violence, impact of Event Scale-Revised (hereinafter referred to as IES-R) (22 items), which were asked only those who experienced violence.

[Results]

Of the 245 home care staff, 101 had experienced violence (41.0%). And items that observed the association between the presence or absence of violence and the basic attributes were on call, total home care experience (month), the total working period of the current work place (month), working hours / day (hours). Items that were associated with hyperarousal symptoms were; age, home care experience history (month), service period of current work (month) marital status.

[Discussion]

The research suggested that violence against people is likely to occur during on-call. Naturally, it is desirable to prevent violence in advance, but as a countermeasure after an emergency, there is a need for special consideration and care for staff who are young and are unfamiliar with home care.

P2-131

Suggesting Future Themes about the Role of Conversation in Child Rearing Support in Japan by Literatures Review

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[Objectives]

Previous literature on Neuvola and comprehensive child rearing support centers state the importance of conversation with families for continuous child rearing support. The objectives of this research are to clarify the importance of family-care provider conversation, and explore the care provider's attitude towards conversation.

[Methods]

A literature review was conducted through ICHUSHI Web and Cinii using the keywords, "Neuvola" and "comprehensive child rearing support center". Conference reports, practice introductions, and any overlaps literatures were excluded. Literature which described the use of dialogue was identified.

[Results]

Twenty pieces of literature concerning conversation between family and care provider were identified. Important themes to family-care provider conversation were identified as: respect for each other, emphasis on an equal relationship, respect in interactions, creating face to face networks based on individual relationships, and the care provider's expertise in facilitating conversation. Themes identified regarding the care provider's attitudes to conversation were: thinking from the family's view point, listening to parents' feelings, and considering the child's health checkup as an opportunity to better understand the family.

[Discussions]

There are two themes to explore in future research regarding the role of conversation in child rearing support in Japan. First, research should suggest practical techniques for creating dialogue that is based on respect for each other, equal relationships, respect in the interaction, within the context of Japanese childcare support and culture. Second, further examination of "conversation help for child rearing," specifically, the role of care providers, is required in Japan.

Poster

Health Promotion / Disease Prevention

P2-132

The current situation of women's homecoming around childbirth in Japan, and factors relating to the development as a father

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²Department of Health Sciences, Graduate School of Medical Sciences, Kyushu University, Japan

[Objectives]

To examine the current situation of homecoming around childbirth in Japan, and confirm factors for the development of the first-time father.

[Methods]

An anonymous self-administered questionnaire survey was conducted at obstetric medical facilities in Fukuoka Prefecture, Japan.

[Ethics]

This study was conducted with the permission of the Clinical Research Ethics Review Board of the university that the researchers are affiliated with.

[Results]

Of those fifty-four percent who was homecoming around childbirth, 24.8% went home before delivery and 29.2% went after delivery. Since there were 18.6% of those who received their mothers' support at their own home, it revealed that 72.6% of the total subjects needed postpartum support. Factors such as daily contact with a partner via telephone and feeling stressed about childcare and domestic household chores were had a significant positive relation with development as a father. On the other hand, feeling psychologically distant from the child had a significant negative association with development as a father.

[Discussions]

The results displayed that the need for postpartum support for the subjects is high. In addition, it was suggested important for fathers to promote active communication to mothers and children, to provide knowledge on childcare, and to give them an opportunity to think about childcare affairs.

P2-133

The association between sexually transmitted infections (STIs) aspect knowledge of cervical cancer and STI prevention behavior awareness among female university students

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[Objectives]

This study aimed to examine is there any association between STI aspect knowledge of cervical cancer and STI prevention behavior awareness among female university students.

[Methods]

An anonymous self-administered questionnaires study was investigated through 3rd and 4th female university graders in Japan. Questionnaire items are based on the basic attributes, knowledge of cervical cancer, sexually transmitted diseases prevention behavior awareness scale on university students (STDASUS).

[Ethics]

This study was conducted with the permission of the Clinical Research Ethics Review Board of the university that the researchers are affiliated with.

[Results]

Two hundred and forty questionnaires were analyzed as valid responses. The correct answer rate for the three STI-specific questions were 29.6, 26.7, and 23.8 percent. There was no correlation between the total score of STDASUS and cervical cancer knowledge. However, of the three STI-specific questions, lower than that of the incorrect answer groups.

[Discussions]

The results suggested significant relationships between the understanding that cervical cancer is caused by sexual intercourse and the higher STI prevention behavior awareness. Education concerning fundamental knowledge on the relationship between cervical cancer and sexual experience should be introduced and emphasized in universities' health education programs.

Poster

Health Promotion / Disease Prevention

P2-134

Self-care during pregnancy to improve readiness for childbirth and childcare: a qualitative study of midwives and postpartum women

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[Objectives]

The purpose of this study is to clearly establish more effective pregnancy self-care from interviews with midwives who provide continued care and normal postpartum women.

[Methods]

We conducted semi-structured interviews with five midwives who provided one-to-one midwifery care during pregnancy and five postpartum women who were proactive during pregnancy. The data were analyzed using Berelson's content analysis.

[Ethics]

The University of the Ryukyus' Research Ethics Review Board approved this research.

[Results]

There were four categories that presented the physical aspects: (1) preparation of the body for birth and childcare (2) balanced diet to prevent physical disability (3) Hiesho prevention , and (4) preparation for breastfeeding. Also, four categories were presented showing the psychosocial aspects: (1) proactive attitude toward delivery with a strong will (2) a relationship with a midwife to whom I can express myself candidly, (3) with attachment to a baby and having a solid image of life, and (4) invention without burden in lifestyle. From the postnatal women's narrative, two categories were mentioned: a birth plan convinced by oneself and positive self-management utilizing the maternal and child health handbook. And from the midwife's narrative, one category was shown: awareness from the early pregnancy using the birth plan.

[Discussions]

In addition to preparing the body, the woman's own determination and the relationship of trust with the midwife are emphasized. Pregnant women used the maternal and child health handbook and birth plan from the early pregnancy as a means of resolution.

Postpartum stress: comparison of stress between primiparas and multiparas

P2-135

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[Objectives]

This study aimed to highlight differences in stress in the postpartum period between primiparous and multiparous women to achieve a perinatal support system.

[Methods]

A questionnaire-based survey was administered to 291 Japanese women in their postpartum 4 months in a city in Aichi, Japan. The questionnaire comprised 17 questions regarding stress experienced at postpartum 2 weeks and 1, 2, 3, and 4 months. Chi-square test was performed to compare stress between primiparas and multiparas.

[Ethics]

This study was approved by the Research Ethics Committee of the affiliated university.

[Results]

Among 261 participants, 144 women (78 primiparas and 66 multiparas) responded that they experienced stress. Forty-four primiparas (56.4%) and 36 multiparas (54.5%) stated that they experienced stress in postpartum 2 weeks. "Breastfeeding" was significantly more stressful for primiparas in postpartum 2 weeks ($p=.040$) and 1 month ($p=.012$), whereas "baby's cry" was more stressful in postpartum 2 weeks ($p=.000$), 1 month ($p=.000$) and 2 months ($p=.022$) than in multiparous women. Fifty-five multiparous women (83.3%) experienced stress for "balancing care between a newborn and older children" [33 (50.0%), postpartum 2 weeks; 27 (40.9%), postpartum 1 month].

[Discussions]

Postpartum stress was experienced by the majority of both primiparas and multiparas, most notably during postpartum 2 weeks, suggesting the importance of countermeasures in the immediate postpartum period. It is important for them to develop stress coping education about child care in the perinatal period and to make continuous social support system after childbirth.

Poster**Health Promotion / Disease Prevention****P2-136****Validity of Subjective Degree of Health as a Measurement Tool of Mental Health in Junior High School Students**○Yuko Ida¹, Yukiko Ageno¹, Yoshinori Asahara¹, Takako Sogaya², Hiroko Tamura¹, Yumi Sawata¹¹Graduate School of Nursing, Sanyo Gakuen University, Japan²Nursing Department, Former Kawasaki College of Allied Health Professions, Japan

[Objectives] This study aimed to examine the validity of subjective degree of health as a tool for measuring the mental health of junior high school students.

[Methods] We conducted a questionnaire survey of 186 first-year students studying at a public junior high school in S city, prefecture A, Japan, in June 2018.

[Ethics] After obtaining approval from the principal of the junior high school, it was explained to the students that not participating in the study would not cause any disadvantage to them. Then consent was obtained from all students who had agreed to participate.

[Results] Subjective degree of health was evaluated on a 0 to 100 scale, and the students were classified into four groups based on average values and standard deviation. Results of 1-way analysis of variance of the 4 groups on each of the items of Junior High School Adolescents' Health Questionnaire-12 (JHQ-12) and the subjective degree of health showed a significant difference between Group 1 and Group 4 on all 12 items ($p < .01$).

[Discussions] In the field of education, objectively assessing their own mental health and acquiring coping strategies are important processes for students. Subjective degree of mental health is a validity-proven tool that can be visualized, and shared by the students with their support providers. Also, owing to its simplicity, it is considered to be a useful tool for dealing with the mental ups and downs of adolescent students.

P2-137**Development of Programs Social Capital and Improve Self-Care Capabilities in Urban Semi-Marginalized Communities**○Naoko Masaki¹, Miyuki Matsubara², Kazuko Mitoku³, Tadashi Takeshima⁴, Shuji Hashimoto⁵, Yoshinori Koga², Kinuyo Sakaeda², Natsumi Imada², Akemi Abe⁶, Yukiko Ogata⁷¹Faculty of Nursing, St.Mary's College, Japan²Faculty of Nursing, Japanese Red Cross Hiroshima College of Nursing, Japan³Faculty of Nursing, University of Hyogo, Japan⁴National Institute of Mental Health, Japan⁵Fujita Health University School of Medicine, Japan⁶Hatsukaichi-city, Japan⁷Faculty of Nursing, Fukuoka Prefectural University, Japan

[Objectives] The objectives of the present study were to regularly conduct health promotion classes at senior groups known as "elderly salons" in rapidly aging urban semi-marginalized communities, to compare the self-care capabilities of the residents over time and with other communities, and to identify the driving factors.

[Methods] The data from these interviews were then qualitatively and descriptively analyzed using the checklist and social capital measures to clarify changes over time. The same process was repeated in K district, and the data from both districts were then compared.

[Ethics] The present study was conducted after obtaining approval from the ethics review board of Japanese Red Cross Hiroshima College of Nursing.

[Results] To measure the standardization and refinement of the checklist and health indicators for measuring social capital. In a baseline study from fiscal year 2012–2013, group interviews regarding changes in issues revealed in community diagnoses, group interviews, and workshops were carried out in A district. The data from these interviews were then qualitatively and descriptively analyzed using the checklist and social capital measures to clarify changes over time.

[Discussions] The health promotion checklist revealed the importance of maintaining and improving physical health as the community ages. According to a comparison with other communities in previous studies, the present study suggested that the studied community promoted social capital. Dissemination of information and interventions towards those who cannot attend the elderly salons are important. Continuous monitoring and investigation in the future could lead to the promotion of a comprehensive community-based care system and social capital.

Poster

Health Promotion / Disease Prevention

P2-138

Verification the health education program to increase bus drivers' physical activity

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[Objectives] The goal of this study was to verify a health education program contributing to increase physical activity among bus drivers.

[Methods] We invited 113 bus drivers to participate and classified them into three groups ; A group members received the health education program involving health information, setting the goal, and practicing self-monitoring; B group members received the program involving health information and setting the goal; and C group members received the program involving only health information. We compared the three groups before and after interventions.

[Ethics] This study was approved by the Ethical Review Board of the author's institution.

[Results] In total, 80 drivers completed the survey and there were 25 drivers in group A, 24 in group B, and 31 in group C. In group A, there were significant differences in three items for performing the goal, three factors for Physical Activity Assessment Scale, and two items for physical activity, for example consciously walking fast. In groups A and B, there were significant increases in "consciously walking fast" compared to group C.

[Discussions] We found that the health education program involving health information, setting the goal, and practicing self-monitoring contributes to increasing physical activity for bus drivers. In addition, we found that there was possibility of increasing physical activity for them through the health education program involving health information and setting the goal.

P2-139

The Correlations between Social Networks and Functional Capacities among Frail Older Persons reside Island, Urban and Agricultural area and their Generativities

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[Objectives] The purpose of this study is to clarify correlations between social networks [SN] and functional capacities [FC] among frail older persons who live in Island, urban and agricultural area and their generativities.

[Methods] A total of 381 frail older persons (average age: 83.9 ± 6.2 years; 92 males and 982 females) were selected at community comprehensive care centers from 9 areas (Island;104 people, Urban;153 people, Agricultural;124 people). An interview survey was conducted using three scales as follows; 1) Lubben Social Network Scale short version [LSNS-6], 2) Tokyo Metropolitan Institute of Gerontology Index of Competence [TMIG], 3) Japanese Generativity Scale. Pearson's correlation coefficient (r) were used for statistical analysis.

[Ethics] This study was approved by Kwassui Women's University Ethics Committee (Study No; 17-006).

[Results] As the result of the research there found correlations between SN and FC among frail older persons in all areas; correlation between SN and TMIG (Island; $r=0.26$, $p<.01$, Urban; $r=0.46$, $p<.01$, Agricultural; $r=0.49$, $p<.01$) and correlation between SN and generativity (Island; $r=0.32$, $p<.01$, Urban; $r=0.41$, $p<.01$, Agricultural; $r=0.49$, $p<.01$).

[Discussions] It was revealed that there are positive correlations between SN and FC among frail older persons and also between SN and their generativities. There are moderate correlation between social networks and functional capacities and their generativities in Agricultural and Urban area. We expect that to enhance the FC and to greater the opportunities of multigenerational exchanges would lead to more effective care prevention in the future.

Poster**Health Promotion / Disease Prevention****P2-140****Stress of childcare in mothers of infants**

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[Objectives] Stress management is vital to preventing a buildup of childcare-related stress in mothers of infants. It is said that to do this, mothers must recognize the stress, realize that it is connected to child care, and understand the necessity of taking steps to deal with it. The objective of this study is to clarify the stress mothers have that is related to child care.

[Methods] Subjects were twelve mothers with infants about ten months of age. Each mother underwent a loosely structured interview in which they were asked about times they felt stress as a part of caring for their child, the specific situations and their thoughts about those experiences. Then the content of interviews was analyzed.

[Ethics] This study was conducted with the approval of the Ethics Screening Committee of the Gunma University of Health and Welfare (18A-16)

[Results] Six categories of stress related to childcare were identified in interviews: "relationship problems with husband and other family members," "fluctuations in emotions," "not being able to lead one's desired lifestyle," "urgency and pressure of childcare-centered lifestyle," "physical fatigue," and "a feeling of being trapped and isolated."

[Discussions] Clarification of stress related to child care in mothers of infants will be of assistance when considering ways to help these mothers with stress management.

P2-141**Accumulation and analysis of best practices for specific health checkups and health guidance to prevent lifestyle diseases in middle-aged and elderly individuals**

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[Objectives]

Japan is a super-aged society, so initiatives to ensure healthy longevity are important. The purpose of this study is to accumulate and analyze best practices for specific health checkups and guidance to prevent lifestyle diseases in middle-aged and elderly individuals.

[Methods]

We performed semi-structured interviews regarding effective and efficient specific health checkups and guidance on 19 public health nurses from 14 municipalities who gave their consent to be interviewed as part of a previous national questionnaire survey.

[Ethics]

Approval was obtained from the institutional review board at the university with which the principal investigator was affiliated (approval number: H28-42). The ethical considerations were explained to the subjects verbally and in writing, and their written consent was obtained.

[Results]

The best practices for effective and efficient specific health checkups and guidance to prevent lifestyle diseases in middle-aged and elderly individuals fell into six categories: creating a foundation for cooperation, creating a foundation for encouraging examination, encouraging examination, multidisciplinary cooperation, longitudinal support at all ages, and customized support.

[Discussions]

Public health nurses must not only perform checkups and deliver health guidance, but also develop methods to cooperate with numerous other professions, and provide education to prevent lifestyle diseases that recognizes preventive care from a young age. Going forward, we believe it will be important to create a multidisciplinary support system to prevent lifestyle diseases longitudinally throughout all age groups. This study was subsidized by the Japan Society for the Promotion of Science Research Grant 15K11905 (representative: Yuko HAMAZAKI).

Poster

Health Promotion / Disease Prevention

P2-142

Actual use of a post-partum care facility in Municipality A

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[Objectives] The purpose of this study was to clarify actual conditions of use of post-partum care facilities in Municipality A.

[Methods] In fiscal year 2016, consent to participate in this research was obtained by mail from post-partum care facility users in Municipality A. Data were collected from admission records at the time of facility use of consenting individuals.

[Ethics] This research was conducted with the approval of the institutional review board of the university.

[Results] Consent to participate in the research was obtained from 251 users. The average age was 35.9 ± 4.4 years old, 161 (64.1%) were 35 years old or over, and approximately 70% were employed. There were 177 (70.5%) primiparas, 74 (29.5%) multiparas, and 104 (41.4%) had undergone fertility treatment. There were no significant differences between the number of days first-time parents stayed at the facility and number of days postpartum at the time of first use, with about half utilizing the facility within 21 days post-partum, and utilization was uniform throughout the 120-day post-partum period the facility could be used. Additionally, 70% of the users expressed concerns with difficulty nursing and not having confidence in childcare regardless of time of utilization.

[Discussions] Mothers residing in Municipality A received aid from the municipality and uniformly utilized facilities until 4 months post-partum. For nursing difficulties and anxiety with childcare following birth, the ability to stay long-term while also receiving specialist care was important.

P2-143

Cross-sectional study on the physical, mental, and social relationships of parturient women in Japan

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[Background] In Japan, the leading cause of death in expectant mothers and nursing mothers who have given birth within one year is suicide, according to the Ministry of Health, Labor and Welfare. Postnatal depression mainly caused by concerns and frustrations about raising a child may be one possible factor behind their suicides.

[Aim] The aim of this study is to survey physical and mental conditions of nursing mothers a month after delivery.

[Methods] A cross-sectional research was conducted using a self-administered questionnaire. 344 women who have given birth a month ago were asked to fill out the questionnaire including background factors, physical conditions, Edinburgh Postnatal Depression Scale (EPDS), and Japanese version of Mother-to-Infant Bonding Scale (MIBS-J).

[Results] One hundred ninety-three (56%) of these 344 women were primiparas, and 151 (44%) were multiparae. The EPDS scores were used to divide them into a group with low risk (scores 8 or less) or with high risk (scores higher than 8) of contracting postnatal depression. 33% of the primiparas and 17% of the multiparae had a high risk of postnatal depression; which indicates primiparas has significantly higher risk than multiparae ($\chi^2(1)=11.15$ $p=0.001$). A kind of significant correlation in the total score of EPDS and MIBS-J for both the primiparas ($r=0.53$, $p=0.000$) and multiparae ($r=0.40$, $p=0.000$) was recognized.

[Conclusions] The risk of postnatal depression is significantly higher for primiparas than multiparae. Understandably, however, attention should also be paid to multiparae.

Poster

Health Promotion / Disease Prevention

P2-144

A narrative analysis of the interpretation of personal recovery as expressed by mental health supporters

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[Objectives]

The purpose of this study is to clarify the interpretation of personal recovery as expressed by mental health supporters in Japan.

[Methods]

We interviewed 7 mental health professionals(average years of experience, 20.0) and 3 peer supporters(average years of experience, 7.0). The interviews took about 60 minutes per person and were conducted from May to July 2019. Interviews concerned (1) the support experiences that they felt related to recovery among people who use mental health services, and (2) what they felt recovery is. Based on the interview data, we conducted a narrative analysis of the interpretation of personal recovery to them.

[Ethics]

The study was approved by the Ethical Review Board of the Faculty of Tokyo Medical and Dental University(M2018-292).

[Results]

The interpretation of personal recovery was expressed variously. All the mental health professionals and peer supporters discussed personal recovery based on their own experiences. The expressions they used included "the energy to act for oneself or another" and "the feeling that one lives one's own life". The stories that they shared were of unique experiences.

[Discussion]

The interpretation of personal recovery they expressed matched the existing definition of recovery, and all their stories more specifically reflect the definition of recovery. Their interviews also show that they provided support for personal recovery tailored to each person.

P2-145

Irritation affecting on improper coping behaviors of mothers rearing preschool children

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[Objectives] The purpose of this study was to clarify the relationship between feelings of irritation in mothers and their improper coping behavior when their children exhibit negative emotions such as crying or fretting.

[Methods] The participants were mothers who are raising one-to-six-year old preschool children who are enrolled in any of three kindergartens or day care centers in the Metropolitan area., and a self-administering questionnaire survey was conducted from April to July, 2017 (N=450). Difficulty in raising children, mothers' cognitive styles, state-trait help-seeking preferences, persecutory cognitions, and feelings of irritation were scored and analyzed by hierarchical multiple regression analysis.

[Ethics] This study was conducted after it was reviewed by the Research Ethics Committee of the Graduate School of Comprehensive Human Sciences, University of Tsukuba (Approval Number 27 -147).

[Results] It was clarified that feelings of irritation in mothers affect their improper coping behaviors.

[Discussions] The importance of interventions to support mothers to control their own feelings of irritation was suggested.

Poster**Health Promotion / Disease Prevention****P2-146****Maternal nutritional intake condition during pregnancy and one month after delivery in Shimane Prefecture, Japan**○Yoko Nakatani¹, Yukiko Kagohashi², Aiko Katsume³, Reiko Nagashima¹, Hiroki Otani⁴¹*Faculty of Nursing and Nutrition, Department of Nursing, The University of Shimane, Japan*²*Faculty of Nursing and Nutrition, Department of Health and Nutrition, The University of Shimane, Japan*³*Shimane Prefectural Central Hospital, Japan*⁴*Faculty of Medicine, Shimane University,*

[Objectives] To clarify maternal nutritional intake condition during pregnancy and one month after delivery in Shimane Prefecture, where the low-birth-weight newborn ratio is higher than the national average.

[Methods] Food Frequency Questionnaire Based on Food Groups (FFQg) was performed 4 times, at 12 (Early), 26 (Middle), 36 (Late) weeks of gestation, and at 1 month after delivery (Post-D), for pregnant women without complications at each health check in the delivery service facilities in Shimane Prefecture from July 2017 to September 2018.

[Ethics] Approved by the Ethical Review Board of the Institution.

[Results] Twenty-six females (mean age, 29.8 ± 4.6 years; 14 primiparous, and 12 multiparous) were included. Their offspring were not of low-birth weight except one. The averages of energy intake were 1518.0±400.6 kcal (Early), 1677.7±300.5 kcal (Middle), 1730.0±376.8 kcal (Late), and 1753.7±438.9 kcal (Post-D), which all, as well as most of nutrients, were under the recommended standard. Among the categories of the meal balance guide, the intake of grain and vegetable dishes was significantly lower, while that of sweets/favorite drinks was higher than the standard throughout the examined period. Ratio of fat is higher than while carbohydrates and protein are at the lower border of the recommended range.

[Discussions] Energy and nutrients intake was continuously lower than the standard. The higher intake of sweets/favorite drinks throughout the period may be related with decreased grain and vegetable dishes and may lower the energy intake and have disturbed nutrients balance.

P2-147**Relationship between the frailty of female elderly engaged in voluntary group activities and their physical psychosocial characteristics**○Sayumi Negoro¹, Masae Ueno², Ayumi Koma³, Yui Motoya³, Norihiro Yamamura³¹*Graduate School of Nursing, Osaka Prefecture University, Japan*²*School of Nursing, Kansai Medical University, Japan*³*Elderly Care Division, Health and Welfare Department, Izumiotsu City, Japan*

[Objectives] The purpose of this study is to clarify the relationship between the frailty of female elderly engaged in voluntary circle activities and their physical psychosocial characteristics.

[Methods] Subject: female elderly actively engaged in voluntary circle. Items for data collection: age, subjective health, residence style, presence or absence of disease, presence or absence of backache or knee pain, trouble to going out with pain, the 5-item frailty screening index, toe-gap force. Analysis method: simple aggregation and chi-square test.

[Ethics] We explained the purpose and the protection of rights to the subjects and agreed.

[Results] The average age of 123 subjects was 76.1 ± 4.3 years, 43 were living alone (35.0%). It was found that 95 subjects felt healthy (77.2%), 103 had diseases (83.7%), 71 had backache (57.7%), 59 had knee pains (48.0%), and 14 had pains that prevented them from going out (11.4%). About 20% of the subjects had tip-over risks. In the frailty judgment, 18 subjects were judged as frail (14.6%) and 59 as pre-frail (48.0%). Those who were living alone, having backache, and having trouble going out with pain were significantly higher in the percentage of frail or pre-frailers.

[Discussions] Since the group had a high health consciousness, no relationship was found with age, disease or tip-over risks. However, a majority of the elderly, although they were periodically engaged in activities, belonged to the preliminary frail group. To prevent their frailty from progressing, certain associations were considered necessary by taking into consideration their residential styles or pains.

Poster

Health Promotion / Disease Prevention

P2-148

Feelings of Difficulty with Child-Rearing of Working Women: A Concept Analysis

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[Objectives]

The purpose of this study was to identify the concept of "Feelings of Difficulty with Child-Rearing of working women".

[Methods]

Articles referenced from the Japanese language database *Igaku Chuo Zasshi*, CiNii, Google Scholar, and a manual investigation for this study. The keywords used for the search comprised "working women" or "feelings of difficulty with child-rearing." The search revealed relevant results in the form of 22 articles, and an analysis of these papers was accomplished using Rodger's 2000 concept analysis model.

[Ethics]

There are no ethical issues pertaining to this study.

[Results]

Three attributes were identified: (1) harm to mother's child-rearing (2) reduced ability of mothers to balance work and child-rearing, and (3) feeling of isolation from the society. Furthermore, three antecedents were identified: (1) factors pertaining to family background, (2) unmet social support, and (3) conversion of mothers' cognition for coexistence. Two consequences were determined: (1) decline in the quality of child-rearing and (2) diminished motivation to continue work. Finally, the following substitute terminology are "child-rearing anxiety" and "child-rearing stress. The outcomes of the present analysis suggest "feelings of difficulty with child-rearing of working women" can be defined as: feeling of isolation from the society, and reduced ability of mothers to balance work and child-rearing with harm to mother's child-rearing.

[Discussions]

The results of this study suggest that working mothers require support not only in the development of positive work environments where they can continue to be employed but also in building a network of working mothers.

P2-149

Management strategies for lipid abnormality among Japanese men with HIV/AIDS

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[Objectives] This study aimed to identify management strategies for lipid abnormality among Japanese men with HIV/AIDS.

[Methods] We performed semi-structured interviews based on the Discovery & Action Dialogues (DAD) with 28 Japanese men with HIV/AIDS who were outpatients, 18 years old and over, and did not have hyperlipidemia. Our interviews focused on management strategies for lipid abnormality. We then categorized and analyzed actions for lipid control among study participants.

[Ethics] This study was approved by the ethics committee at Kumamoto University's Graduate School of Medical Science (No. 1271).

[Results] When assessing physical conditions, participant interviews revealed 7 categories pertaining to physical health such as "being informed of lipid levels by a physician." Considering that preventive actions are related to dietary practices, 11 categories were extracted, such as "a diet centered on vegetables, beans, and soy products." For preventive actions related to exercise, 15 categories were identified including "aerobic and strength training at the gym" and "walking more than 20 minutes every day." Inhibitors of preventive actions were also documented and 15 categories emerged, including "self-catering," "snacks," "exercise-induced fatigue," and "bad weather." Tactics used by participants to overcome these inhibitors revealed 15 categories, including "food preparation on holidays," "dietary restrictions," "not overdoing it," "choosing sustainable exercise," and "quit smoking with co-worker."

[Discussions] This study identifies actions suitable for hyperlipidemia prevention that can be implemented to aid in the development of a prevention program for hyperlipidemia among persons with HIV/AIDS.

Poster

Health Promotion / Disease Prevention

P2-150

Prevalence of metabolic syndrome and lifestyle in an urban area of Cambodia

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[Objectives]

A rapid increase in non-communicable diseases (NCDs) (e.g., cardiovascular diseases and diabetes) has created an important health issue in Cambodia.

This study determined the prevalence of metabolic syndrome (MetS) (a high-risk factor for NCDs) and assessed the criteria for a related nursing intervention in an urban area of Cambodia.

[Methods]

We analyzed 4,287 Cambodians (aged ≥ 20) who had received health check-ups at a Japanese-owned hospital in Phnom Penh, Cambodia between January 2017 and December 2018. We used existing data related to MetS (e.g., waist circumference, blood pressure, and fasting blood), and lifestyle (e.g., smoking and alcohol consumption habits). The prevalence of each criteria item was then compared by gender. MetS was defined using the NCEP-ATP III criteria.

[Ethics]

This study was approved by the ethics committee of the affiliated institution and the cooperative hospital.

[Results]

The prevalence of MetS was 44.2% (48.1% in men and 40.0% in women). The most prevalent criteria items were hyperglycemia among men (60.9%) and low HDL-cholesterol among women (63.4%). Abdominal obesity was the least prevalent item among men (9.5%) and women (22.8%). The alcohol consumption rate was high among men (73.5%), but the tobacco smoking rate was low in both men (9.2%) and women (0.3%).

[Discussions]

The prevalence of MetS with alcohol consumption and a lack of obesity was high in Cambodia. This issue needs further analysis of the items related to health behaviors that are risk factors for MetS in order to consider a related country-specific nursing intervention.

P2-151

A Literature Review of Postpartum Depression Screening

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[Objectives] To organize the results of domestic and international studies on postpartum depression screening, and clarify a factor concerned.

[Methods]Original research papers published in Japan and other countries within the 10-year period between 2009 and 2018 were searched for using the Ichushi Web (Ver. 5) and PubMed databases, respectively, with the following keywords: “postpartum depression AND EPDS AND discharge” and “postpartum depression AND EPDS AND system”. Among the 110 papers identified, 44 containing descriptions of mothers with postpartum depression after hospital discharge were analyzed.

[Ethics]Considering the specificity of a literature review, we sufficiently addressed ethical considerations, especially when specifying previous studies. We clearly cited all references and sources to avoid plagiarism.

[Results]The mean numbers of domestic and international papers per year were 1.6 ($SD \pm 0.7$) and 2.8 ($SD \pm 1.9$), respectively. As <>,, and were reported in these papers.

[Discussions]It has been suggested that it is necessary to focus on various factors involved as discharge support to mothers of postpartum depression.

Poster

Health Promotion / Disease Prevention

P2-152

Psychosomatic status in community dwelling older adults participating weekly intergenerational day program for long durations in an urban community in Tokyo

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[Objectives]

This study aimed to describe the psychosomatic status in community dwelling older adults participated to an intergenerational day program (IDP) for more than three years, and to discuss the psychosomatic changes and the meanings of intergenerational relations and generativity.

[Methods]

IDP is people-centered care program targeted school-aged children and older adults (≥ 65 y.o) provided by St. Luke's International University and both generations have jointed activities weekly basis facilitated gerontological nursing faculties. The assessment included activities of daily living (ADL), neurocognitive state, quality of life (QOL), and depression. Those were assessed every three months and the changes were described every 12 months.

[Ethics]

The ethics committee of A university provided approval for the study.

[Results]

The participants were 11 women. At baseline, they were typically grouped with non-frail, seven frail group with high risk of fall, and one with neurocognitive disorder. In non-frail group, two subjects maintained mean QOL scores. In frail group, one subject decreased ADL and increased fall risks; two subjects progressed neurocognitive state, decreased mean QOL score, increased nutritional or fall risks and also depressive score; and one subject decreased mean QOL score and increased depressive score. The subject with neurocognitive disorder progressed neurocognitive decline and also QOL.

[Discussions]

IDP provides continuous social and intergenerational interactions between old-older adults and children brings the improvement of depression in some of non-frail group, however we should to know the frail group has special care needs to support and prevent depression and physical risks to participate the IDP.

P2-153

Unmet Needs of Caregivers of Thai Children with Special Health Care Needs

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[Objective] This study aims to develop a scale to measure the unmet needs of caregivers of children with special health care needs (CSHCN) in Thailand.

[Methods] Data were collected using a questionnaire comprising items on the caregiver's background and the child's illness or disability; CSHSC Screener®; and tentative items of an unmet needs scale, based on the findings of previous qualitative research. The questionnaire was developed in English and translated into Thai, after which back-translation was conducted. Caregivers of CSHCN were recruited through hospitals, clinics, and social welfare institutes in Maha Sarakham Province, Thailand. Questionnaires were distributed among some participants, while face-to-face surveys were conducted among others. Items were discarded after verifying ceiling and floor effects and item-total correlation. After exploratory factor analysis, the dimensional structure was statistically determined using confirmatory factor analysis.

[Ethics] This study was approved by a university ethics committee.

[Results] Data from 233 participants were analyzed. After examining the ceiling and floor effects and item-total correlation, 35 items were used in the exploratory factor analysis, using the maximum likelihood method and promax rotation. Elimination of items with factor loadings below 0.4 or over 1.0 resulted in a three-factor model. The unmet needs of CSHCN caregivers comprised health care needs, burden of care, and information needs. Cronbach's alpha of the total and sub-scales were .860, .872, .831, and .792, respectively.

[Discussion] An unmet needs scale for caregivers of CSHCN was developed. Future research should clarify the factors related to unmet needs to develop appropriate support.

Poster

Health Promotion / Disease Prevention

P2-154

Association between environmental tobacco smoke exposure, menstrual cycle related symptoms and depression among Japanese adolescent girls

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[Objectives]

The present study examines the correlation between environmental tobacco smoke (ETS) exposure, menstrual cycle related symptoms and depression among Japanese adolescent girls.

[Methods]

We recruited 85 participants who were adolescent girls aged 16-18 years, living in Osaka, and not using any hormonal contraceptives in this study.

A prospective observational study was conducted to evaluate the menstrual cycles that participants were given standard instructions for obtaining BBT (Basic Body Temperature): to use the thermometer orally every morning over the course of two menstrual cycles. Participants were asked to complete a questionnaire on secondhand smoke, menstrual-related symptoms, and depression over the course of two menstrual cycles.

Symptoms related to the menstrual cycle were assessed using the Moos Menstrual Distress Questionnaire (MDQ). Depression was assessed using the Center for Epidemiologic Studies Depression Scale (CES-D).

[Ethics]

The present study was conducted with the approval(2013-013) of the research ethics committees of Morinomiya University Graduate School.

[Results]

Among regular exposure of ETS, the symptomatology was significantly more severe on the premenstrual symptoms category (behavior change and negative affect) and the menstrual symptoms category (concentration, behavior change, and negative affect) than those without ETS exposure. Overall, the adolescent girls exposed to ETS were more likely to experience depressed moods than those without ETS exposure.

[Discussions]

ETS exposure is positively associated with severe menstrual-related symptoms and depressive symptoms in never-smokers, highlighting the need for further research to determine the mechanisms of association.

P2-155

A literature review regarding cervical cancer prevention targeting junior and senior high school students

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[Objective]

To understand the state of education for the prevention of cervical cancer and trends in research. The subject of cervical cancer prevention will be examined.

[Method]

Articles from the ICHUSHI Web version 5, CiNii, and PubMed databases for the period from 2009–2019 were used. Search terms used were cervical cancer, HPV/human papillomavirus, prevention, public awareness, and education.

[Results]

17 articles (9 Japanese and 8 English) were analyzed.

The majority of students had heard of cervical cancer but did not know of the link between it and HPV. Vaccinated individuals were significantly more likely to have deeper knowledge regarding cervical cancer and HPV.

Various factors affect the vaccination rate. These include knowledge of HPV and cervical cancer, age, ethnicity, the organization or location which administers the vaccine, how to breach the subject, finances, and the opinions of friends and family. In particular, consultations with parents lead to mothers recognizing the importance of the vaccine.

By way of educational intervention, opinions have grown more positive about advancing awareness, being vaccinated, and having cervical cancer screenings for the future.

[Discussions]

The prevention of cervical cancer requires support and fostering the judgement based on sufficient awareness and adequate education.

What we need is educational intervention rooted firmly in the current societal climate aimed not only at students, but at their parents as well.

Poster

Health Promotion / Disease Prevention

P2-156

Post-hoc qualitative analysis of the characteristics of heart failure patients who are suitable for disease management education program

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[Objectives]

To identify the characteristics of heart failure (HF) patients who are suitable for disease management (DM) program.

[Methods] Previously we conducted a RCT for HF patients to prevent rehospitalization comparing DM education alone as self-management (SM) group and DM using telemonitoring as collaborative management (CM) group with usual care. As a result, CM had greater reductions in the rehospitalization and improvements in QOL. However, there were patients who only needed DM. We extracted the intervention contents and clinical outcomes and rehospitalization factor from each patients' records. Next, patients were categorized into SM or CM suitable group to prevent rehospitalization and described reasons. Then, we revealed the characteristics who needed DM using content analysis.

[Ethics] This study was approved by the ethics committee of the researchers' institute.

[Results]

Among 59, 19 and 36 patients were categorized into the CM and SM suitable group respectively, and 4 did not fall under any of them. The qualitative analysis revealed that patients who are ready for learning can look back on self in educational sessions and acquire self-management. Also, patient who need mental support at convalescent period after acute stage, suggestion of the coping method to the family issue, social (emotional and companionship) support are suitable for DM. Furthermore patients who have stable vital signs and weight, and have anxiety to be observed closely were suitable for DM.

[Discussions] We exposed that patients' needs were not only educational support but coping skills to recover from the acute stage and handle the family issues.

P2-157

Comparison of sleep quality and fatigue across ages and genders among shift work nurses in Japan

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[Objectives] To investigate sleep quality and fatigue experienced by shift work nurses in Japan, and compare these variables across ages and genders.

[Methods] The study employed a descriptive correlation design and assessed relevant variables with self-report surveys. The survey was administered from January to February 2015, to 653 nurses who worked two shifts in an advanced treatment hospital in Japan . The questionnaire assessed sleep quality using the

[Ethics] This study was approved by the Institutional Review Board of Kobe University Graduate School of Health Sciences, Japan.

[Results] A total of 405 questionnaires (62.0%) were returned. Mean age of participants was 29.3 ± 6.8 years, with 94 nurses (23.2%) in the age group of 20-24 years, 183 (45.1%) in 25-29 years, 61 (15%) in 30-34 years, and 24 (5.9%) in 35-39 years. A total of 34 nurses were male and 368 were female. Nurses 25 years and over slept for significantly longer durations than nurses under 25 years of age. Additionally, female nurses experienced significantly higher levels of usual fatigue and longer sleep durations at night than male nurses.

[Discussions] Nurses under 25 years may sleep easier because they have less experience and work hard. Female nurses may experience severe fatigue and fall asleep quickly . It is important for shift work nurses to get adequate amounts of quality sleep to avoid fatigue.

Poster

Health Promotion / Disease Prevention

P2-158

Health behavior and motivation for nursing education of nursing students in Japan

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²Department of Public Health Nursing, Kobe city college of nursing,

[Objectives] The purpose of this study was to describe health behavior and motivation for nursing education of nursing students in Japan

[Methods] An anonymous survey was conducted from May to June 2018. 270 Japanese university nursing students participated. The questionnaire were composed of items within the following factors: Basic Attributes, Lifestyle habits, and motivation for nursing education. Chi-square test was used for analysis.

[Ethics] Board approval was obtained from the Ethics Committee of Tokushima University Hospital.

[Results] 193 students (71.5%) were analyzed. 96.9% were between the ages of 18-22 years, and 185 were women (95.9%). 98.4% of respondents were Single. To the question of Are you living with your family?, 57.5% nursing students answered No.

About 60% of the respondents were living alone. As the grade level goes up, lifestyle habits get worse and the motivation for nursing is lower. A significant difference was found between motivation of nursing education and Alcohol consumption, Nutrition and dietary habits, Weight management, and Social media ($P < 0.01$).

[Discussions] Further investigation is necessary about the fact that a significant difference is recognized in motivation to nursing education by grade level. In the future, It is necessary to clarify the factors related to the motivation and lifestyle of nursing education in Japan.

P2-159

Awareness about foot troubles and foot health in nurses and care workers

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²Care & Welfare Division, Shinshu Junior College, Japan

[Objectives] To evaluate the awareness regarding foot troubles and foot health in nurses and care workers.

[Methods] Self-administered questionnaire survey forms were mailed to 724 nurses and care workers working in hospitals and nursing homes. Free-description responses were qualitatively and inductively analyzed.

[Ethics] The study was approved by the Research Ethics Board of Saku University (approval number, 2018008).

[Results] Among the valid responses (69.6%), 80.0% reported having foot troubles. In the free description field, 162 respondents (32.1%) gave provided some comments. Foot complications were classified into six categories, including "burdens placed on feet because of work" and "complications caused by shoes." Awareness about foot health was classified into five categories, including "I want to wear shoes that fit my feet" and "education on foot health is necessary."

[Discussions] Because many nurses and care workers have foot problems, wearing safe and comfortable work shoes is required. Facility managers should promote foot health of nurses and care workers as part of staff health management.

Poster

Health Promotion / Disease Prevention

P2-160

Research trend of postpartum care in Japan; A systematic review

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[Objectives]

In Japan, new mothers can use various services of postpartum care, such as home visit, peer support group, and telephone checkup. To understand the research trend of postpartum care in Japan would be useful to identify current research gaps. The aim of this review is to understand the study trend of postpartum care in Japan.

[Methods]

A systematic review was conducted using a Japanese database, the Ichushi. Five key words, *postpartum*, *support*, *care*, *assessing*, and *effect* were used to identify appropriate articles based on inclusion criteria. Eleven original articles were extracted and analyzed for participants, study periods, kinds of support, and research methods.

[Ethics]

This review was followed ethical standards.

[Results]

Mothers were participants in seven articles, both mothers and caregivers were participants in three articles, and caregivers were ones in one article. Five studies were conducted at hospital after birth. Care by nurses or midwives was described in five articles, while community and family support was reported in six articles. Regarding study methods, one was a qualitative study, while eight were quantitative studies, and two were mixed method studies.

[Discussions]

Various types of study for postpartum care have been published in Japan. It should be important to further learn from previous studies for the future study.

P2-161

The Effectiveness of a Post-Delivery Parental Crisis Prevention Workshop for Health Caregivers in Mother and Child Health Care

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[Objectives] We developed a post-delivery parental crisis prevention program in 2016. The aim of this study was to evaluate the effectiveness of the after-birth couple's crisis prevention workshop to train health caregivers in mother and child health care.

[Methods] The workshop for the couple's after-birth crisis prevention program consisted of lectures and group work for three hours. After the workshop, anonymous questionnaires were administered to the participants. The main contents of the survey included degree of understanding, usefulness, effectiveness of group work, practicality and satisfaction with this program.

[Ethics] The Ethics Committee of Miyagi University, Japan (No.1028) provided ethical approval.

[Results] Six workshops were held with a total of 117 healthcare professionals in participation: fifty-three community health nurses, forty-three midwives and twenty-one health caregivers in other specialties. 98% of the respondents reported being able to understand the program, 98% recognized the program was useful, 86% felt the group work effective, 78% recognized the practicality and 99% were satisfied with the program. Many participants cited inclusion of the simple model of "two gates" between couples after birth, and effective use of animation as notable factors in enhancing participant comprehension of concepts.

[Discussion] The program was highly evaluated. It is the researchers' hope that many health caregivers in mother and child health care will use this program in after-birth crisis prevention between couples beginning from the prenatal period.

Poster

Health Promotion / Disease Prevention

P2-162

Working Caregivers in Super-Aged Societies: A Comparison between Finland and Japan

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[Objectives]

Population aging and the rapid increase in the number of elderly people who need assistance is a global issue we are facing. The impact of informal care on working caregivers, workers who provide care for their family, is still less known despite the demand for them would grow with global trends of promotion for homecare.

This study explores and compares the status and policies of working caregivers in Finland and Japan, two known super-aged societies.

[Methods]

Demographic characteristics, current elderly care services, and the state and policies of working caregivers in Finland and Japan were collected from international/domestic statistical data, national reports, legislation, and related literature and analyzed.

[Results]

There were differences in the workplace environment and policies for working caregivers between two countries. Working hours were much longer and the holidays were less in Japan. Data showed that a certain number of working caregivers existed in both countries. While workers providing family care were more likely to report difficulties in managing work and care in both countries, issues such as leaving from the workforce due to care were found more in Japanese literature. In Japan, employers are required to offer family care leave to employees, while there is technically no legal right for employees to leave from work for the care of a family in Finland.

[Discussions]

The results demonstrated impacts of family caregiving on workers in Finland and Japan. The need for further study of working caregiver's needs and development of support programs was suggested.

Poster**Research Methodology****P2-163****Reliability of upper limb circumference measurement using optical 3D digitizer**

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[Objectives] Currently, more reliable assessment techniques are required to measure upper extremities in lymphedema case. An optical, three-dimensional (3D) digitizing system, comprises a 3D scanner and 3D analysis software, is an extremely accurate device because unlike tape measure, it can acquire 3D body shape data without skin contact. However, for some measurement protocols with the 3D analysis software, measurements made by the same rater may have variations. Therefore, this study aimed to evaluate the intra-rater reliability of the circumference calculated using 3D analysis software and then to examine the protocol.

[Method] Using a 3D scanner, we acquired 3D data of the upper limbs. Subsequently, using 3D analysis software, we identified one measurement point in the upper arm and determined the circumference passing through this point. The intra-rater reliability was calculated using statistical software. All procedures using the 3D analysis software were operated by one rater.

[Ethics] This study was approved by the relevant organization's ethics committee.

[Results] Ten female patients with or at risk of upper-limb lymphedema participated. The mean (SD) of the circumference was 265.00 (24.45) mm. Intraclass correlation coefficients (1, 1) and (1, 3) were both >0.9.

[Discussions] Although only one measurement point was used, excellent intra-rater reliability of the 3D analysis software was obtained. However, bias owing to rater characteristics cannot be excluded. In addition to examining the inter-rater reliability, it is necessary to determine the extent of difference in results using this method compared with that using the tape method, which frequently used in nursing practice.

P2-164**Development of a Method for Systematically Utilizing Large-scale Consultation Records at Cancer Consultation and Support Centers**

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[Objectives] The aim of this study was to develop a primarily text-mining-based approach for systematically utilizing the large volume of consultation records that accumulate daily at cancer consultation and support centers.

[Methods] As a first step in this effort, we previously investigated a method for identifying patterns and tendencies in consultation content in one year's worth of consultation record data at a cancer consultation and support center. In this study, we attempted to improve the accuracy of the method by expanding the scale of data to the past ten years' worth of consultation records and verified the effectiveness of the method as a means of systematically utilizing the data.

[Ethics] This study was approved by the institutional review board of the hospital where data were acquired and the Research Ethics Committees of University of Hyogo and Kobe Women's University.

[Results] A text-mining-based approach was found to be effective even after the scale of data had been expanded, and the patterns and tendencies found in the consultation content were generally consistent with the results of the analysis using one year's worth of data. Furthermore, detailed relationships were also revealed in the generated co-occurrence network.

[Discussions] Our results suggest that the method developed in this study could also be used as an educational tool for sharing the knowledge necessary for consultation and support staff to provide appropriate consultation services.

Poster

Research Methodology

P2-165

Creating a framework for children with severe motor and intellectual disabilities (CWSMID) in transitional period from pediatric to adult life using the ICF-CY coding system

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[Background] Children with severe motor and intellectual disabilities (CWSMID) who mature into adults need to transition from child to adult life. However, it is difficult for CWSMID to transition because of their health complexities and lack of social resources. Although CWSMID need effective transition care, there is no framework for CWSMID in transitional period to provide transition care.

[Objective] To create a framework for CWSMID in transitional period using the international classification of functioning, disability, and health: children and youth version (ICF-CY).

[Methods] We extracted items related to CWSMID in transitional period from previous studies, and then created the framework with the ICF-CY code corresponding to the extracted items.

[Results] The framework was constructed using the 35 codes of body structure, function, activity, participation that compose ICF-CY, and two personal factors. Previous studies described that CWSMID experience changes in their health status, environments, and caregivers, as they grow older. Therefore, it is necessary to assess a wide range of items such as respiratory function, pharyngeal structure, extroversion, adaptability, family, health professionals, social security services, age, severity of disability, and so on, in order to understand CWSMID.

[Discussions] We could create the framework for CWSMID in the transitional period using ICF-CY. This framework serves as a common language for developing transition care across medical, educational, and welfare fields. Therefore, this framework can enhance the quality of life of CWSMID.

P2-166

Biomarkers for the assessment of body temperature dysregulation

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[Objectives] Central dysregulation of body temperature (BT) is one of the hazardous signs affecting patients with autonomic dysfunction, brain tumor, drug abuse and reduced levels of consciousness. Since the critical nursing care of diseases showing BT fluctuation has so far been meager in methodology in approaching BT dysfunction, we attempt to establish promising biomarkers informing the real pathophysiology of BT regulation.

[Methods] We measure RNA content and use immunostaining, immunoassay and in situ hybridization.

[Ethics] All experiments were carried out according to the approved guidelines for the Care and Use of Animals.

[Results] Nociceptin (NOC) is a brain peptide with agonistic properties on NOC receptor, which is related to classical opioid receptors. NOC and its receptor are abundant in hypothalamic preoptic area/anterior hypothalamic area (PO/AHA), and are shown to regulate central BT (Tcore) in rodents. The effects of NOC receptor on Tcore are believed to derive from PO/AHA neurons enriched with the peptide receptor system. These neurons may govern and control BT via NOC secretion into blood vessels and/or neuronal connections to the spinal autonomic system. The NOC content in the blood thus at least partially reflects the levels of BT regulation. With antibodies against NOC or NOC receptors and enzyme immunoassay system, we preliminarily assess the relationship between NOC peptide receptor contents and the degree of BT regulation in rodents.

[Discussions] The findings described herein suggest that NOC and its receptor system provide a promising tool to aid critical care nursing involving clinical assessment of BT dysregulation.

Poster

Professional Issues

P2-167

Development of an education program based on reflection aimed at promoting psychiatric nurses' critical thinking disposition-Focusing on the determination of the physical symptoms of patients with schizophrenia-

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[Objectives]

Investigate the effects of educational intervention through reflection to promote the critical thinking disposition of psychiatric nurses.

[Methods]

Our educational program is theoretically based on the reflection cycle of Bulman (2013), and the program reflected the situation in which the physical symptoms of schizophrenic patients were judged.

Intervention was conducted using a quasiexperimental (one-group pre-test/post-test) design, and the study subjects comprised 23 nurses with less than 5 years of clinical psychiatric experience. Before, immediately after, and one month after the intervention, we conducted a survey using a Critical Thinking Attitude Scale (CTAS) and Cognitive consideration-Impulsiveness Scale (CCIS). In addition, one month after the intervention, semi-structured interviews were conducted with 10 participants in order to qualitatively clarify the situations in which the physical symptoms of patients with schizophrenia were determined.

[Ethics]

This study was conducted with the approval (No. 29-D1) of the Juntendo University Graduate School of Medical Nursing Research Ethics Committee.

[Results /Discussions]

After the intervention, the median of the two measures (CTAS, CCIS) increased significantly. In particular, the CTAS sub-scales "skeptical attitude", "inquiry" and "logical thinking confidence" were raised. And it was shown that the ability to reflect on critical thinking and the ability to consider were promoted. These results were supported by the category 'Changes due to reflection' formed as a result of the interview. From this, it was found that the educational program developed using reflection has a certain effect in promoting the tendency of critical thinking.

Literature review of prescription of the nurses

P2-168

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[Objectives]

Although there are countries where nurses are permitted to write and distribute prescriptions to patients, no such system exists in Japan. This study aimed to clarify the effects of nurses having prescription rights on patients and medical staff.

[Methods]

This study conducted a literature review of 40 articles that were related to the prescription rights of nurses.

[Ethics]

Not applicable because this is a literature review

[Results]

The following themes were identified: "opinion of the nurses and doctors regarding nurses having prescription rights," "patients' opinion and changes," "medical care benefits," and "challenges regarding nurses having prescription rights."

In many articles, patient satisfaction was high when nurses were able to prescribe medications. Having prescription rights not only increased the motivation and autonomy of nurses but also increased occupational stress. Nurses experienced difficulty in acquiring academic, medical, and pharmaceutical knowledge and therefore tended to hesitate to prescribe medicines because of the lack of knowledge and self-confidence. Moreover, doctors considered nurses' lack of knowledge of medicine and pharmacology to be problematic. Another issue was the lack of clarity regarding the position and responsibility of nurses who could prescribe medication. If nurses could not demonstrate their abilities, then confusion might ensue among other medical staff.

[Discussions]

In order for nurses to safely and confidently prescribe medication, an education system must be developed that allows them to acquire sufficient knowledge and to establish laws to clarify their roles and responsibilities.

Poster

Professional Issues

P2-169

Paranoid delusions of the ICU by mechanically ventilated adults

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[Objectives]

ICU survivors with delusional memories have been reported to have a reduced QOL and exhibit PTSD symptoms after discharge. Furthermore, paranoid delusions are considered to be highly offensive among delusional memories. The purpose of this study was to investigate the influence of paranoid delusions on mechanically ventilated adults admitted to the ICU.

[Methods]

Adults who were admitted to the ICU and mechanically ventilated for more than 24 h were analyzed regarding their demographics, QOL prior to ICU stay and memories in the ICU (primary survey). Six months post-discharge, we carried out a questionnaire survey on daily life by mail (secondary survey). We classified the patient's ICU memories and extracted paranoid delusions. Analyses were conducted to examine the factors and influence of paranoid delusions 6 months after discharge.

[Ethics]

This study was approved by the ethics committee at Okayama Red Cross Hospital, Japan (No. 119).

[Results]

During a 2-year period, 3791 patients were admitted to the ICU and 150 participated in the primary survey. Twelve participants remembered paranoid delusions and 8 returned the secondary survey. There were no differences in patient demographics, QOL or PTSD symptoms after discharge based on ICU paranoid delusions. Although there was strong discomfort due to paranoid delusions, they were not described in nursing records for half of the patients and 25% told their family.

[Discussions]

Paranoid delusions of the ICU do not have long-term effects on life. However, care for paranoid delusions during the ICU stay is insufficient and needs to reduce discomfort.

P2-170

Characteristics of nutritional management in oral and enteral nutrition for patients with amyotrophic lateral sclerosis (ALS)

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[Objectives]

Amyotrophic lateral sclerosis (ALS) has the medical problem of weakness and dysphagia in the extremities. This study aimed to clarify characteristics of nutrition management for ALS patients from the comparison of oral nutrition and enteral nutrition.

[Methods]

The subjects were 3 ALS patients who received oral nutrition and 4 ALS patients who received enteral nutrition. The survey contents are BMI, residence status, prevalence period, mind and body status, diet maker, intake method, energy intake.

[Ethics]

Explained the purpose of the study to ALS patients and their families and obtained written consent.

[Results]

The average age of the subjects was 61.4 years old (42 ± 73) of 3 males and 4 females.

The average period of illness was 9.1 years (4 ± 12). The average BMI was 17.8 (13.7 ± 21.6), and BMI were lower than the standard level. An ALS patient resided in an institution and other 6 ALS patients by home care. Meals for 3 ALS patients who received oral nutrition were prepared by a wife, a mother and a home-helper, and for 4 ALS patients who received enteral nutrition were prepared by two wives, a husband and an institution staff.

[Discussion]

ALS patients are considered to cause respiratory muscle weakness, and high risk of infections such as pneumonia. The ALS patients, low energy intake and malnutrition caused BMI decrease in both oral and enteral nutrition. To conclude, ALS requires an early assessment of inadequate malnutrition according to the prevalence period, proactive response, and accurate prognosis.

Poster

Professional Issues

P2-171

What difficulties do women with breast cancer face when telling their children about their illness?

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[Objectives] The objective of this study is to understand the difficulties that Japanese women with breast cancer face when telling their children about their illness.

[Methods] The participants were 19 Japanese women with breast cancer who had children and who attended the breast surgery department. The data were acquired through semi-structured interviews and were analyzed using content analysis.

[Ethics] This study was approved by the medical science ethical review board at the Kyoto Prefectural University of Medicine.

[Results] The age range of the participants was from 37 to 59 years old, with an average age of 48.4 ± 5.4 . They had one to three children whose ages ranged 4 to 17. Sixteen (84.2%) of the patients had told their children about the illness. Three themes were derived from the analysis: the difficulties of telling children about the illness, the causes for the difficulties, and measures to deal them. The difficulties of telling about the illness comprised five categories, namely, "The impact of cancer," "Telling other people about it," "Looking for a way to talk about it while minimizing the effect on children," "Impact of the illness on children," and "Various adjustments within the family."

[Discussions] The difficulties for female breast cancer patients with children lie in minimizing the impact on their children. This suggests the need for nurses to understand the causes for difficulties in talking about the illness and to provide support for patients to deal with them.

P2-172

Conditions That Allow End-of-life Care for Older Adults at Home in Doctorless Districts of Heavy Snowfall Areas

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[Objectives] To clarify conditions that allow end-of-life care for older adults at home in doctorless districts of heavy snowfall areas, we analyzed actual cases of such care.

[Methods] Semi-structured interviews were conducted with 10 main caregivers, who had provided end-of-life care for older adults at home in a doctorless district of a heavy snowfall area with consent, using the home-visit medical and nursing services of a prefectural hospital. The interview data were qualitatively and inductively analyzed to clarify the conditions that had allowed these caregivers to provide end-of-life care for older adults at home.

[Ethics] The study was approved by the Ethics Committee of the institution each researcher belongs to.

[Results] There were 5 conditions that had allowed the caregivers to provide end-of-life care at home: (1) care-receivers: there was no pain, and frequent care during the night-time was unnecessary; (2) main caregivers: favorable subjective health was achieved; (3) families: other family members living/not living together cooperated; (4) medical services: home-visit medical/nursing services were available on a 24-hour basis; and (5) long-term care insurance services: required services were available.

[Discussions] The 5 above-listed conditions may allow caregivers to provide end-of-life care for older adults at home with less of a burden and a greater sense of security.

Poster

Professional Issues

P2-173

Relationship between communication skills and emotional labor and psychological stress in Hospital Nurses

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[Objectives]

To examine the relationship between psychological stress response and emotional labor of nurses in high and low communication skill groups and clarify their characteristics.

[Methods]

A self-reported questionnaire was distributed among 1,774 nurses at 10 hospitals in Japan. Questionnaires included subject characteristics, the Japanese version of Emotional Labor Inventory for Nurses (ELIN), psychological stress response subscales of the new version of the Brief Job Stress Questionnaire (New BJSQ), and communication skills scales for nursing (CSN2). The relationship between the sub-scales of emotional labor and the sub-scales of psychological stress responses was calculated using Spearman correlation coefficient for high and low communication groups.

[Ethics]

This study was conducted with the approval of the Ethics Committee of University of the Ryukyus for Medical and Health Research Involving Human Subjects.

[Results]

1,439 nurses voluntarily returned valid responses and 945 subjects were analyzed. In the group with high communication skills, there was a weak negative correlation between; "surface adjustment" of ELIN and "irritability" and "depression" of New BJSQ; "suppressed expression" of ELIN and "fatigue" and "anxiety" and "depression" of New BJSQ; "deep adjustment" of ELIN and "anxiety" of New BJSQ. In the group with low communication skills, there was a weak negative correlation between "deep adjustment" of ELIN and "anxiety" and "depression" of New BJSQ.

[Discussions]

The improvement of communication skills is an essential part of the nursing profession, but in addition to focusing on the improvement of communication skills, it is necessary for nurses to consider how to manage their own emotions.

Nurses' awareness of geriatric nursing practice in hospital settings

P2-174

○Miho Matsui

National Defense Medical College, Japan

[Objectives]

Elderly patients are increasing worldwide, quality improvement of geriatric nursing practice are essential. This study investigated nurses' awareness of geriatric nursing and nursing excellence in clinical practice among hospital settings.

[Methods]

A cross sectional, correlational design was conducted using a questionnaire. A convenience sample of 101 nurses at 6 hospitals were invited to participate. The questionnaire contained items on demographics, 15 self-developed questions regarding geriatric nursing, 15 categories of geriatric nursing practice, and nursing excellence scale in clinical settings.

[Ethics]

The institutional review board granted ethical approval. Participants were informed in writing about their freedom to voluntarily participate.

[Results]

Nurses' awareness of geriatric nursing that 13.9% were strongly interested in geriatric nursing, 8.9% thought they had an aptitude for geriatric care, 15.8% had great difficulty caring older patients, and 14.9% felt strong stress to geriatric care. Regarding conference with staffs about geriatric care, 11.9% responded frequently with nurses or other medical staff, and 9.9% with doctors. Moreover, 8.9% could easily access information about geriatric care, and enough experience of seminar attendance regarding geriatric care were reported by 10.9% on-the-job and 5.0% off-the-job. Significant relationships were observed between interest in geriatric nursing and well nursing practice of dementia care or physical restraint release.

[Discussions]

Although a few participants strongly interested in geriatric care, nursing practice especially dementia care and physical restraint release were well-implemented among those nurses. These results suggest that seminar regarding geriatric care is needed to improve quality of geriatric nursing in hospital settings.

Poster**Professional Issues****P2-175****Fluid intake and voiding status of patients with prostate cancer undergoing intensity-modulated radiotherapy**○Yuka Hayama^{1,2}, Tae Hasegawa², Shizuka Kimura¹, Ryoong-Jin Oh²¹*Department of Nursing, Faculty of Nursing, Doshisha Women's College of Liberal Arts, Japan*²*Osaka, Miyakojima IGRT Clinic, Japan*

[Objectives] We provide intensity-modulated radiation therapy (IMRT) to patients with prostate cancer. However, it is currently not possible to offer guidance on the balance between micturition pattern and water intake. This study aimed to determine fluid status and voiding patterns in patients with prostate cancer undergoing IMRT during treatment.

[Methods] The participants were three patients undergoing IMRT for prostate cancer at our clinic. The data collection period was from June 2018 to May 2019. We collected data on each patient's water intake and urination on seven occasions before starting treatment and on six occasions during the treatment period (weekly). Data on basic attributes and degree of disease were obtained from medical records.

[Ethics] Our ethics committee approved this study. The patients were given oral and written explanations of the objectives, significance, and methods of the study, and consent was obtained.

[Results] All patients underwent IMRT of 75.0 Gy in 30 fractions (2.5 Gy per fraction). Mean (\pm standard deviation) patient age was 72.7 ± 4.2 years. Fluid intake and frequency did not change significantly over the treatment period. However, with regard to voiding, the number of voids increased as treatment progressed. Individual differences in water intake and voiding were large.

[Discussions] The patients are able to keep the water in and out. However, it is necessary to give guidance on the countermeasure, because it is easy to cause pollakiuria. This work was supported by JSPS KAKENHI Grant Number JP15K11648.

P2-176**Health-related Quality of Life Characteristics of Post-gastrectomy Cancer Patients in Japan**

○Miharu Ogasa

*Nursing, Doshisha Women's College of Liberal Arts., Japan***[Objectives]**

To clarify the health-related quality of life (QOL) characteristics of post-gastrectomy cancer patients in order to formulate suggestions for support of medical treatment lifestyles.

[Methods]

An anonymous, self-administered questionnaire-based survey including the Short Form-8 and questions on subjects' characteristics was conducted in 422 post-gastrectomy cancer patients aged 40–79 years who had been discharged at least 1 month ago and who had undergone surgery less than 3 years prior. Data were analyzed using SPSS ver. 25.

[Ethics]

This study was approved by the Ethics Committee of Osaka Medical College.

[Results]

303 patients were analyzed. Patients aged ≥ 70 years had significantly lower physical functioning and role physical scores compared with patients aged younger than 60 years. Furthermore, patients who had undergone surgery less than 6 months prior had significantly lower physical functioning and social functioning scores than patients who had undergone surgery at least 2 years and 6 months prior. As for the frequency of occurrence of discomfort, patients who experienced discomfort at least 4–6 times per week had significantly lower scores in all areas compared with patients who experienced discomfort no more than 2–3 times per week.

[Discussions]

Older patients and patients with a shorter period since surgery in particular had reduced physical functioning and restricted daily roles and social lives. The present findings suggested the need to support the medical treatment lifestyles of these patients so that post-gastrectomy syndrome can be prevented and managed and so that patients can continue to execute role functions.

Poster

Professional Issues

P2-177

Analysis of Thoughts and Feelings that mothers held on Breastfeeding due to Mother-infant Separation and after Discharge: Focusing on preterm and low birth weight infants

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[Objectives]

A survey of Ministry of Health, Labour and Welfare in 2015 reported the breastfeeding ratio at discharge was lower among longer length hospitalization in neonatal intensive care units (NICU), although 93.4 % of pregnant women wanted to breastfeed. Support for breastfeeding is crucial during prolonged maternal-infant separation, as promoted by WHO with the Ten Steps to Successful Breastfeeding. Therefore, this study aimed to analyze mothers' perceptions of maternal-infant separation and after hospital discharge of their infants for nurses to better understand.

[Methods]

Contents of free description data of questionnaires were analyzed.

[Ethics]

This study was approved by St. Mary's College Ethical Review (H22-041) and the Clinical Research Ethics Review Committee of Hospital "A."

[Results]

Questionnaires were mailed to 247 mothers with preterm and low birth weight infants hospitalized in Hospital "A." The number of responses was 132 (the response ratio: 46.6%). From free description data on breastfeeding and pumping, six categories were extracted: 1) measures for maintaining and promoting breastfeeding, 2) awareness and desire for breastfeeding, 3) pleasure of breastfeeding, 4) feedback from their infants, 5) feelings of pumping breast milk and 6) hindrance factors for milk secretion.

[Discussions]

Due to mother-infant separations, while negative feelings towards reduction of milk secretion and burdens on breast pumping were shown, infants showed positive feelings from nursing supports and feedbacks for mothers.

Features of the Abilities of Certified Expert Nurses Involved in Cancer Nursing

P2-178

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²School of Nursing, Ibaraki Christian University, Japan

[Objectives]This study aimed to examine the features of the abilities certified expert nurses in specialized practices of cancer nursing related authorization nurse.

[Methods]The participants were 1435 cancer nursing related certified expert nurses who consented. The survey contents included the professional practice abilities scale for accredited nurses. An anonymous questionnaire was mailed to participants. In the analysis, scores were calculated for each factor and descriptive statistics were used.

[Ethics]The Institutional Review Board of affiliated institution gave their approval for this study to be conducted.

[Results/Discussions]We got responses from 432 certified expert nurses involved in cancer nursing.Certified expert nurses had high total of "very capable" and "capable" because of factors such as < Professional clinical practice >, , and .Their professional practice ability was high. , "Provide an accurate answer to and instruct on the consultation of patients, families, and important others"; "Provide high quality nursing using specialized knowledge and techniques"; "Patients themselves to create an environment in which the thoughts and intentions. , "We value each other for the expertise of other healthcare workers and cooperate with each other to provide healthcare services", "Care for patients requested by other healthcare workers Appropriately, to convey the results".

Poster**Professional Issues****P2-179****Reflections of an Elderly Widower living alone after the Death of his Wife to whom he provided care for Ten Years**OKumiko Furukawa¹, Tsukasa Kuroki², Chie Magota³¹*Faculty of Nursing, Nishikyushu University, Japan*²*Faculty of Medical Technology, Teikyo University, Japan*³*Nursing department, Kurume Univercity, Japan*

[Objectives] The purpose of this research is to shed light on how the subject feels living alone after his loss.

[Methods] The design takes the form of qualitative research employing the semi-structured interview method. Verbatim interview records were used as data, and the Yamaura Qualitative Synthesis Method (KJ) for analysis.

[Ethics] Approval was obtained from the Ethics Committee of the university to which the author belongs. Approval from the subject was obtained after research goals and methodology, and how to withdraw from the research were explained.

[Results] With feelings of gratitude to his wife, who devotedly cared for his father, who opposed the marriage, the subject made offerings to her cremated remains at home. Although having no regrets because he had done his best to care for his wife, he felt remorse that he had not been with her when she passed because of inadequate explanations from the doctors. While wanting for nothing especially thanks to visits by many relatives and friends, his new partner has given purpose to his life.

[Discussions] While the death of a spouse brings great suffering, the subject feels that the fact that he gave his wife long-term devoted care has helped him find closure. Moreover, while still feeling a connection with his dead wife, he was setting out on a new journey of life with a feeling of "renewal."

P2-180**A questionnaire survey to understand the caring relationship between older people with dementia and nurses: subject characteristics and the situation of caring practice**OMisa Komatsu¹, Seisuke Hayakawa², Norikazu Ohnishi¹, Kazunari Takemura¹, Makoto Tabata¹, Ritsuko Shimizu¹¹*Department of Nursing, Mie Prefectural College of Nursing, Japan*²*The University of Tokyo, Japan*

[Objectives] This study aims to conduct a questionnaire survey using a questionnaire constructed with a focus on the caring between older people with dementia and nurses. This presentation shows the characteristics of the study subjects and describes the situation of their caring practice.

[Methods] A questionnaire based on 37 items to understand the caring relationship between older people with dementia and nurses was constructed. Out of the questionnaire distributed to 1445 nurses, 876 responded (response rate of 60.6%), and the analysis was performed on 788 valid responders.

[Ethics] This study was conducted with the approval of the institutional review board of the affiliated university. To obtain consent, documents that described the objective, contents, and ethical considerations of the study were mailed to nurses.

[Results] The mean age of the 788 analysis subjects was 38.36 ± 12.2 years old, with 40 males and 746 females. The occupation was 712 nurses and 64 assistant nurses, with 14.4 ± 11.1 years of practical experience and 7.4 ± 6.9 years practicing dementia nursing. Only 31.2% responded that they regularly have a conference regarding dementia nursing, and the frequency of conference was 5.45 ± 7.66 times per month on average. The frequency of information sharing was 3.32 ± 3.20 times per month on average.

[Discussions] The subject nurses showed the characteristics that even though they could practice a relationship, which is the basis of care, only a small proportion of them was practicing the care that could change older people with dementia or themselves. This study has received a grant from JSPS KAKENHI JP16K12210.

Poster

Professional Issues

P2-181

Difficulties experienced by nurses in caring for the elderly with dementia at general hospitals in China

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³School of Nursing, Hangzhou Normal University Qianjiang College, Hangzhou, China

[Objectives]

The purpose of this study is to clarify the difficulties that nurses experience in dealing with elderly people with dementia at general hospitals in China.

[Methods]

This was a qualitative study using semi-structured interviews with 11 nurses who have experience in nursing elderly people with dementia at general hospitals in China. A qualitative synthesis method was used for data analysis.

[Ethics]

This study was approved by the Hiroshima University Ethical Committee for Epidemiology (E-812).

[Results]

A total of nine categories were identified regarding the difficulties of nursing the elderly with dementia. First, five difficulties related to dementia symptoms: "correspondence when there is trouble during treatment," "guarantee of safe hospitalization life," "creating relationships with patients," "communication with patients," and "effective assessment." Next, two difficulties related to the medical system: "balancing patient needs and nursing services" and "undeveloped medical environment." Lastly, two difficulties related to family members and the other patients: "family support for patients" and "complaints from other patients and their families."

[Discussions]

The nine areas of difficulty experienced by nurses reflect the characteristics of elderly hospitalized patients with dementia in a general hospital. Most of the difficulties were attributed to the dementia symptoms, which suggest that nurse have insufficient knowledge and skills of dementia nursing. In addition, there were difficulties in dealing with the lack of support from medical system and family members.

P2-182

Career change motivation for nurses changing places of work to intensive care home for the elderly

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²Osaka Prefecture University, Japan

[Objectives] The subject was to identify features in the Career change motivation for nurses changing places of work to intensive care home for the elderly.

[Methods] A semi-structured interview of 14 nurses due to the changing places of work to intensive care home for the elderly. The nurses have worked experiences at the hospitals and changed the first full-time nurses in intensive care home for the elderly. The nurses have experiences from two to five years at there.

[Ethics] This research was conducted with the approval of the Osaka Prefecture University Graduate School of Nursing Research Ethics Committee.

[Results] From the interview, 50 codes, 10 subcategories and 4 categories were extracted. Career change motivation was 4 categories that were «Expectations for nursing care in intensive care home for the elderly», «Anticipated to be easier than working in a hospital», «Matching with the conditions for working» and «Invited to work there by a friend or acquaintance».

[Discussions] In this study, it was found that they were characterized as career change motivation with the expectation that they would work there other than the good conditions suitable for them. Because they were changing their places of work without knowing what role or task they would be responsible for, they were forming expectations with vague information. I think that there was a divergence from reality because it was an expectation from vague information.

Poster

Professional Issues

P2-183

Literature review of Japanese studies on competencies of mid-career nurses

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[Objectives]

To better understand the competencies of mid-career nurses, the evaluation methods used to assess these competencies, and to identify support provided for mid-career nurses through a literature review.

[Methods]

Original articles published between 2000 and 2018 were searched on Ichushi Web (Ver. 5) and CiNii using the keywords: mid-career nurse, competencies, practical skills, and clinical skills. A total of 26 articles were selected and reviewed. Reviews focused on the competencies of mid-career nurses, the definition of a mid-career nurse, and the evaluation method described in the articles.

[Results]

Definitions for the competencies of mid-career nurses

Practical nursing skills: Comprehensive nursing practice behavior including the ability to contribute to the development of a nursing team, the ability to provide high-quality care, the ability to promote patient participation in medical care, and the ability to take an active part in the current situation.

Scales used for evaluation of nursing competencies

Clinical practice proficiency measurement scale for mid-career nurses (Sato et al., 2007)

Nursing excellence scale in clinical practice for self-evaluation: For ward nurses (Funashima et al., 2009) etc.

[Discussions]

Competencies of mid-career nurses primarily referred to practical nursing skills and practical clinical skills. These are overall abilities related to nursing that enable active involvement in an existing situation. They correspond with level III or higher for the "Clinical Ladder for Nurses" developed by the Japanese Nursing Association in 2016 as an index for clinical nursing skills common to Japanese nurses.

P2-184

Anxiety and Difficulties Experienced by Parents of Childhood Cancer Survivors Receiving Long-term Follow-up Outpatient Care

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³Jichi Medical School University of Nursing, Japan

[Objectives]

This study examined anxiety and difficulties experienced by parents of childhood cancer survivors receiving long-term follow-up outpatient care after discharge.

[Methods]

Semi-structured interviews were conducted with 4 parents of childhood cancer survivors receiving long-term follow-up outpatient care. The parents freely described their anxiety and difficulties after discharge, emotions during hospital visits, and marital relationships. The obtained data were analyzed using qualitative data analysis software (Nvivo) and converted to codes to create sub-categories and categories.

[Ethics]

This study is authorized by the Saitama Prefectural University Ethical Review Boards.

[Results]

There were 4 categories (<>) and 10 sub-categories ({}) representing anxiety and difficulties experienced by parents of childhood cancer survivors after discharge, including: {anxiety over infection}, {adverse drug reactions}, {coordination with the school}, {altered body image}, {anxiety over academic/career development and other future events}, {friendships}, {bullying by friends}, and {anxiety over the recurrence of cancer}.

[Discussions]

Many parents of childhood cancer survivors experience various psychological difficulties, and such difficulties tend to be resolved over time. However, the present study revealed that their anxiety over their children's interpersonal relationships and future and the recurrence of cancer persists, indicating the necessity of creating care guidelines to be used by parents after discharge and establishing systems to continuously support them in outpatient departments providing follow-up care.

Poster

Professional Issues

P2-185

Resilience in Cancer Patients: A Literature Review

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[Objectives]

The purpose of this study is to clarify through a literature review the reality of resilience in cancer patients and the factors affecting resilience.

[Methods]

Using the database of Pub Med, CINAHL, Psychology Database, and ICHUSHI Web, literature published after 2014, using "cancer" and "resilience" as search keywords were searched.

[Results]

The target literature covered 42 subjects. The resilience of cancer patients was found to have an average score of 60 to 70 out of 100, which indicates moderate resilience. Factors affecting a cancer patient's resilience include age, gender, living together, marital status, personal factors such as household income, disease stage, recurrence/metastasis, presence or absence of symptoms, time since diagnosis, and other diseases. In addition, the resilience of cancer patients was shown to be associated with anxiety, depression, and quality of life (QOL); it was revealed that patients with high resilience had lower anxiety and depression, and higher QOL.

[Discussions]

In order to reduce anxiety and depression in cancer patients and to improve their QOL, it is important to improve their resilience.

P2-186

Attributes of nursing personnel desired by nursing directors in Japan: Content analysis of open-ended questionnaires

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[Objectives]

The aim of this study was to elucidate the attributes of nurses desired by hospital nursing directors in Japan.

[Methods] A questionnaire survey regarding employment of nurses was sent by mail to the nursing directors across hospitals in Japan. In addition to employment-related questions, the questionnaire included open-ended question items: "What type of nursing personnel do you consider necessary in your facility?" Analysis was conducted on the content of responses from 533 facilities that agreed to cooperate with the survey and replied by mail.

[Ethics] Approval was obtained from the Ethics Committee of the University of A Graduate School of Medicine was conducted. This study was supported by a grant from the Japanese Ministry of Health, Labor and Welfare.

[Results] We identified the following attributes: qualities such as "autonomy", "ambition", "cooperativeness"; practical skills including "highly specialized nursing practical skills", "nursing practical skills in line with the organizational character of the facility"; attitudes towards nursing such as "deep interest in nursing" "patient-centered thinking and attitudes"; and management abilities such as "leadership", "abilities as a nursing manager".

[Discussions] Individual qualities of having autonomy, practical abilities, and role fulfillment were desired by the nursing directors. In recruiting personnel, they evaluated personnel capabilities from various aspects. The findings provided suggestions for nursing education and career support.

Poster

Professional Issues

P2-188

Content analysis of abstracts related to meals of patients receiving palliative care : using text mining techniques

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[Objectives]

The purpose of this study was to clarify the actual conditions and significance of meals by analyzing the contents of abstracts of case studies related to meals of patients receiving palliative care, using text mining techniques.

[Methods]

The keywords of "palliative care" and "meals" were used in a search within Japan Medical Abstracts Society website. Documents published in the past 10 years were searched. Finally 12 case studies were extracted as the subject documents for this research. The abstracts of case studies were analyzed by using text mining methods.

[Ethics]

In handling the literature, the author paid utmost consideration not to infringe the copyright.

[Results]

As a result of a cluster analysis, descriptions related to meals of patients receiving palliative care were categorized into five clusters, which were interpreted as the importance of a team approach to eating, providing food tailored to the condition, the importance of eating for patients and families, the desire to eat, and the meaning of being able to eat at home. The co-occurrence network analysis showed that words with high centrality included "patients" and words strongly associated with target words included "meals" and "practicable".

[Discussions]

It was considered that family eating in a place the patient had gotten used to living was connected to the will to live. In addition, in order to support this, it was suggested that medical staff were engaged in support as a team and that meals were provided in accordance with assessments of the conditions of patients.

P2-189

Effects of an Educational Program for NICU Nurses on Transitioning Infants from NICUs to Their Homes: A Focus on Nurses' Efforts

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[Objectives]

This study assessed the effects of an educational program designed to train nurses on transitioning infants from NICUs to their homes.

[Methods]

We recruited nurses who had practical nursing experience with families whose infants were transitioning from NICUs to their homes. We conducted three courses of an educational program designed to provide training on this issue from February 2014 to June 2016. The program included eight sessions over a two-month period and two follow-up sessions. Sessions covered topics such as home care nursing, family system nursing, and discharge adjustment. Data were collected from self-reported questionnaires that were distributed during the second follow-up session. The questionnaires asked each nurse about the specific contents of their new efforts in transitioning infants from NICUs to their homes. All resulting data were analyzed through a coding and categorization process.

[Ethics]

This study was approved by the Research Ethics Committee of Osaka Prefecture University, Osaka, Japan.

[Results]

A total of 45 nurses completed this study's program. The mean years of work experience as an NICU nurse was 6.7. The contents of their new efforts were classified into 15 categories (e.g., "early intervention for families," "family support after discharge," "education for staff nurses," "create a screening sheet/checklist used for transitional care," "gathering information about social resources," "cooperation with community nurses," "create a system for sharing information," and "organizational improvement").

[Discussions]

We clarified the effects of the above educational program for NICU nurses. Results indicated the importance of promoting discharge support in the NICU setting.

Poster

Professional Issues

P2-190

Experience of a Female with Recurrent Breast Cancer and VUS (variant of unknown significance)

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[Objectives] This study examined the experiences of a female with recurrent breast cancer, in whom variants of unknown significance (VUS) was identified through genetic testing.

[Methods] A female with recurrent breast cancer in her thirties, who was diagnosed with VUS, was interviewed using a semi-structured questionnaire, and the obtained data were qualitatively and descriptively analyzed.

[Ethics] The study was approved by the ethics committees of our university and cooperating facility. The female's informed consent was also previously obtained.

[Results] The female with recurrent breast cancer who was diagnosed with VUS became aware that « she had no sense of resistance against hereditary cancer ». She found it « difficult to tell her blood relatives about her test results, even though the findings were uncertain ». Furthermore, she was forced to make difficult decisions, such as « giving up on her marriage and having a child/children after undergoing a conflict ». On the other hand, she also acquired positive experiences, including « developing proactive attitudes by overcoming hard times ».

[Discussions] It may be necessary to continuously support females with recurrent breast cancer and VUS, so that they can fulfill their lives by choosing what they need despite distress they may face in an uncertain situation.

Poster

Diversity and Health

P2-191

Challenges to promote activities to understand genetic diversity in communities and school in the general public

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[OBJECTIVE] Understanding genetic diversity is essential in health promotion. Both public health nurses and school nurses have a health promotion. The objective was to identify issues in promoting genetic diversity activities in people's lives. [METHOD] Focus group interviews were conducted among six public health nurses and six school nurses from a town that agreed to participate in the study. The transcripts were used to perform a qualitative content analysis and a comparison by profession was conducted. [ETHICS] The study was approved by the Epidemiological Research Ethics Committee (E800-1). [RESULTS] Four categories emerged from the public health nurses: 1) were not thinking about the relationship between diseases and genetics; 2) were not conscious of genetics; 3) understood the needs of those who come for genetic consultations; and 4) recognized the need for supervision. Three categories emerged from the school nurses: 1) there is a limitation on teachers can become involved in genetics and diversity; 2) both uniqueness and diversity exist in a child's mind; and 3) it is important to teach uniqueness and diversity during childhood. [DISCUSSION] In communities in the general public, it is difficult to consider diversity as one is confronted with uniqueness of individuals. Due to the collective nature of school education, the promotion of uniqueness is stagnant by uniformity. Challenges of activities to promote genetic diversity in community are the lack of understanding of the need, the issues in schools are related to propaganda methods.

P2-192

Culturally Sensitive Medical Care and Nursing Support: Perceptions of Complementary and Alternative Therapies among Foreign Visitors to Japan

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Objectives : The aim of this study was to determine foreign visitors' perceptions of complementary and alternative therapies in relation to culturally sensitive nursing support.

Methods : A questionnaire survey addressing perceptions of complementary and alternative therapies was completed in Kyoto city by 110 foreign visitors, aged 20 and over, who came to Japan for the purpose of traveling, studying abroad, working, etc. (53 males, 48.2%; 57 females, 51.8%). The average age of the respondents was 33.32 ± 12.86 . Statistical analyses were performed using simple and cross tabulation and chi-square tests.

Ethical Approval : This study was approved by University Ethical Review Board.

Results : Visitors were initially grouped by continent: North and South America (American), Europe (European), Oceania and Asia (Asians). First, in relation to favorite items and complementary and alternative therapy, Asians and North and South Americans prefer to take dietary supplements in comparison to Europeans ($p < 0.05$). Second, Asians prefers dietary supplements when compared to North and South Americans and Europeans ($p < 0.05$). Third, North and South Americans and Europeans prefers yoga in comparison to Asians ($p < 0.05$). Finally, North and South Americans, Europeans and visitors from Oceania prefer meditation in comparison to Asians ($p < 0.05$).

Discussion : The study revealed differences in perceptions of alternative and complementary therapies in visitors from different continents, suggesting a link between health awareness and cultural habits.

Poster

Diversity and Health

P2-193

Efforts to Promote a Dementia Caf? in Town B, Prefecture A, Japan

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Purpose

Dementia cafés were first developed in the Netherlands. In Japan, dementia cafés are a national measure for dementia. In Town B, Prefecture A, family meetings and dementia cafés are held every other month. This research is to clarify the issues based on the history and present conditions of the dementia café in Town B, and to examine the direction of future efforts.

Method

Analyze the issues from interviews with participants in the family meetings and field notes from researchers. This research has been approved for research ethics by the university to which the researcher belongs.

Results

In Town B, there has been family meetings for some time. There was a demand for a "café" from the participants, and the Regional Comprehensive Support Center newly started a "dementia café" as a dementia measure for the town.

It is held once every two months in one room of a public facility for about two hours on a weekday afternoon. There was no program and participants talked freely. There was little mention of dementia. The issue for the "dementia café" of Town B is that there was a gap between the establishment needs of the organizer and the participants, not the contents of the dementia café.

Discussion

As the management criteria for dementia cafés were specified, the "dementia café" was reconfirmed through dialog between the present participants and professionals. It is necessary to co-create the needs of current participants and the format of the dementia café for dementia care in the community.

P2-194

Family self-stigma and its association with hope among spouses of individuals with autism spectrum condition in Japan

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[Background] There is increasing recognition of adults with autism spectrum condition (ASC) in intimate relationships; moreover, recently, research on self-stigma of parents with children with ASC has increased. However, little is known about the reality of self-stigma in situations where one partner has ASC. Recent studies have shown that spouses of individuals with ASC experience hopelessness. Japanese population displays significantly greater social distance toward individuals with autism compared with American population.

[Objectives] This study aimed to investigate the relationship between family self-stigma and hope among spouses of individuals with ASC in Japan.

[Methods] We recruited 400 spouses who participated in a self-help group for families of individuals with ASC in this cross-sectional study in 2018. The Japanese Herth Hope Index and Family Self-Stigma Scale were administered to spouses of individuals with ASC. A generalized linear model was used to analyze data.

[Ethics] This study was approved by the Ethics Committee of the Tokyo Gakugei University (approval number 272) and Ethics Committee of the Faculty of Medicine of the University of Tsukuba (approval number 1304) and was performed in accordance with committee guidelines.

[Results] The response rate was 64.8%. A high proportion of spouses were found to experience family self-stigma in Japan. Family self-stigma was negatively correlated with hope score ($b = -0.124$; $p < 0.05$).

[Discussions] All four self-stigma domains were significantly associated with hope, indicating that it is imperative to improve public's perception regarding individuals with ASC to reduce stigmatization and improve spousal hope in Japan.

Poster

Diversity and Health

P2-195

Nurses' Experiences for Foreign Patients in Japan: A Literature Review

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[Objectives]

Recently, the number of foreigners has rapidly increased in Japan, and it is urgent to deal with foreigners at medical institutions. The purpose of this study is to describe nurses' experiences for foreign patients in Japan.

[Methods]

Researchers searched four databases; Ichushi, CINII, PubMed, and CINAHL to identify appropriate articles published in 2010 to 2019 using the following key word: *foreign, patient, nurse OR nursing, and Japan*.

[Ethics]

Literature extraction was conducted by three researchers to ensure reliability.

[Results]

From 239 abstracts initially identified with databases, researchers selected 29 articles based on the inclusion criteria. These articles described "nurses' difficulties for foreign patients," while 21 articles did "strategies to take care of them". "nurses' difficulties" could be categorized as follows: *language communication, culture and religion, healthcare system, and lack of knowledges about social and hospital resources*. In contrast, "the strategies" could be categorized as follows: *use of material and human resources inside and outside of the hospital, use of non-verbal or easy communication, and active engagement*

[Discussions]

Nurses had *active engagement* with foreign patients by taking *non-verbal or easy communication* through individual or team's efforts. To overcome difficulties and built trust relationships with foreign patients. This review also indicates that nurses might not able to use available resources due to insufficient knowledges. It would be effective to improve support environment for nurses to actively use *material and human resources inside and outside of the hospital* such as the interprofessional collaboration with interpreters and social worker and so on.

P2-196

A sense of difficulty that visiting nurses feel about the care of clients and families who do not use Japanese as their first language

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[Objectives] The purpose of study is to clarify the difficulties felt by visiting nurses to clients and families who do not use Japanese as their first language. Long-term care insurance began in 2000 in Japan. The target population is increasing year by year. The number of foreign insured persons has also increased from 85,212 in 2000 to 157,514 in 2016. Also, visiting nurses are often associated with the client's family.

[Methods] In this study, qualitative research is used. qualitative research is a way to gain insights through discovering meaning. The subjects were three visiting nurses who have experience with clients and families whose first language is not Japanese. Questionnaire survey and interviewed. The survey period is March 2019

[Ethics] This study was approved by the ethics review board of the university to which the author belongs. The interview was recorded with consent. The interview content was made anonymous and made it impossible to identify an individual.

[Results] The visiting nurse said, "Even though I wanted to give food instruction, I was troubled how to talk because the cooking method is different" they felt that they were having difficulty with life support. they used communication to say, "I used the hiragana when writing on my notes."

[Discussions] The difficulties felt by visiting nurses were in communication and care for lifestyle habits such as eating. In order to use home-visit nursing in Japan, referrals from other occupations are required. This also affects the difficulty felt by the visiting nurse.

Poster

Diversity and Health

P2-197

Awareness towards Sexual Minorities among Japanese Nursing students

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[Objectives] There remains an insufficient level of education for nursing students regarding sexual minorities in Japan. It is important for nursing education to clarify the awareness towards sexual minorities among nursing students. The aim of this study was to clarify the awareness of nursing students towards sexual minorities from two aspects (explicit / implicit) and to clarify the factors related to their awareness.

[Methods] Participants of the study were undergraduate students majoring in Nursing Science. The survey used in this study assessed experience (including both classroom or other informational learning, and direct experience), knowledge, and explicit (interests, psychological distance, acceptance) and implicit awareness regarding sexual minorities. The Implicit Association Test (IAT) was used to measure implicit awareness. The survey was carried out using anonymous questionnaires from July to August 2018.

[Ethics] This study was approved by the ethics committee at Kanazawa University.

[Results] Responses were received from 278 students (85.5%). Results indicated that 19.8 % of them had negative awareness towards sexual minorities, and their IAT scores were higher than those of students who didn't have negative attitudes. Explicit awareness were related to direct experience, interests, psychological distance, and acceptance. Implicit awareness were related to informational learning, knowledge, psychological distance, and acceptance. There was no relationship between awareness and classroom learning.

[Discussions] It is suggested that in order to develop students' awareness towards sexual minorities, it is necessary to devise methods of education that extend beyond classroom knowledge and provide them direct experiences and the opportunity to think for themselves.

P2-198

Immigrant patients' perceptions of Japanese nursing care

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[Objectives]

The number of immigrant residents in Japan seeking medical care and hospitalization has been increasing. However, little has been reported about immigrant patients' perceptions of Japanese nursing care. This study investigates the experiences of immigrant patients regarding Japanese nursing care.

[Methods]

Purposive sampling and qualitative analysis were used in this study. Semi-structured interviews were conducted with seven immigrants from six countries who had been hospitalized in Japan. All of the interviews were recorded, transcribed verbatim, and analyzed using thematic analysis.

[Ethics]

The Institutional Review Boards at Kobe University Graduate School of Health Sciences approved this study.

[Results]

Seven themes and related subthemes emerged from the data: language barriers, discrimination, cultural barriers, unfamiliar hospital rules, respect for patients, communication skills, and the quality of nursing practice. The communication skills theme included subthemes, such as showing interest in individual patients and interacting using nonverbal communication. The theme of quality of nursing practice contained subthemes, including their appreciation of comprehensive nursing care and unfriendly or abrupt practices.

[Discussions]

The analysis revealed important aspects of immigrant patients' needs and how Japanese nurses might provide transcultural care. Although immigrant patients were critical of some aspects of the nursing care received, they highly valued the nurses' communication skills and their respectful attitudes, perhaps in contrast to their experiences in their home countries. This study suggests that the development of transcultural care skills is important, however it is more vital to develop the fundamental skills of providing individualized care.

Poster

Diversity and Health

P2-199

Researches on Home Care for Elderly Immigrants in Canada : A Literature Review

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[Objectives]Canada is a multicultural society where a percentage of immigrants is 21.9% of the total population. As aging rate of immigrant raises, the demand of home care has been increasing. Health care providers practice culturally considered care to immigrants in the institutional settings. However, it is still unclear about culturally considered home care. The purpose of this review was to investigate tendency and contents of researches regarding home care for elderly immigrants in Canada.

[Methods]The search of articles published from 1998 to 2019 was conducted using CINAHL and PubMed. Search terms included Canada, home care or home nursing care, and immigrants.

[Results]The search revealed limited literature on home care for the immigrants. Although 71 potentially useful articles were identified, majority were studies on pre and post-partum care, mental health and adjusting process to new society. Ultimately, 5 articles were identified for the review. Two articles were qualitative study on palliative home care of Chinese immigrants. It mentioned nurses were required to be aware of taboo and ethno-specific practices. One was qualitative study on experiences of family caregivers of elderly immigrants. It suggested improvement of home care services. Two were a quantitative study which identified predicting factors of home care utilization.

[Discussions]Some researches revealed the experiences of immigrants and families who received home care. The necessity of cultural consideration in home care were suggested. However, it is imperative that further research on home care be conducted since aging of immigrants will advance in near future.

Poster

Nursing Coordination / Health Management

P2-200

Relationship between nutritional status and chief complaints of cancer patients undergoing outpatient chemotherapy - using the CONUT method -

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[Objectives] This study aimed to clarify factors that the relationship between nutritional status according to the CONUT method and main complaints of cancer patients undergoing outpatient chemotherapy.

[Methods] The subjects were 290 chemotherapy patients at A University Hospital from October 2015 to April 2016. For the evaluation of nutritional status, CONUT values of 0–1 were considered normal, values of 2–4 were considered to indicate mild undernutrition, values of 5–8 were considered to indicate moderate undernutrition, and values of 9–12 were considered to indicate severe undernutrition. The presence of stomatitis, taste alteration, and loss of appetite was compared between the two groups using the χ^2 test.

[Ethics] This study was approved by the medical ethics review committees of A University of Medicine.

[Results] The mean age of the patients was 66.8 ± 10.2 . Nutritional evaluation using the CONUT method revealed severe undernutrition 1.7%, moderate undernutrition 8.7%, mild undernutrition 48.0%, and normal 41.5% cases. Comparison of the rates of presence loss of appetite between the normal and undernutrition groups based on CONUT score revealed that there were many patients with loss of appetite in the undernutrition group, and significant differences were observed ($P < 0.001$).

[Discussions] Among the chief complaints, loss of appetite was associated with the CONUT score, which is a biochemical nutrition indicator. This suggested that in settings such as home care, there is a need for interventions to improve nutritional status in patients with loss of appetite, even in the absence of biochemical indicators.

P2-201

The Discharge Support for Older Persons that Nurses at Inclusive Community Care Wards are Conscious of and Details of Its Implementation

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Objectives: To clarify the discharge support for older persons that nurses at inclusive community care wards are conscious of and to clarify the details of its implementation. Method: The research subjects are 5 nurses who work in 3 different inclusive community care wards, all in Prefecture A. Semi-structured 30-minute interviews were held for each subject. The interviews were recorded word-for-word and a qualitative analysis was carried out using the recordings as descriptive data. The data was analyzed by the researchers. Ethics: Research was carried out after obtaining permission from the ethical review board of the researchers' affiliated institutions. Throughout the research period, subjects were guaranteed the freedom to participate or refuse participation, and researchers took every effort to protect personal and institutional information. Results: The roles of nursing related to discharge support for older person at inclusive community care wards were categorized into 11 categories : "Understanding the characteristics of the ward", "Understanding the characteristics of their patients", "Mission as a nurse in the inclusive community care ward", "Sensing the dilemmas in older patient care", "ADL maintenance", "Physical adjustment care", "Cooperated with other fields", "Encouraged to doctors", "Empathizes with the family and encourage discharge", "Staff development" and "Future problems". Discussions: Each nurse practiced discharge support for older persons using a variety of methods despite dealing with a variety of doubts and problems. There is no COI in this study.

Poster

Nursing Coordination / Health Management

P2-202 Factors influencing self-management behavior of kidney transplant recipients

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[Objectives]

This study aims to identify factors influencing self-management behavior of kidney transplant recipients.

[Methods]

An anonymous self-administered questionnaire survey was carried out. Applicants included 292 recipients who were attending A University Hospital. The questionnaire covered the self-management scale developed by Kosaka, and patients' basic attributes and clinical background factors. In the analysis of factors influencing the self-management behavior of recipients, the unpaired t-test and the one-way analysis of variance were used to determine the mean difference among groups. The Bonferroni method was used for the multiple comparison test.

[Ethics]

The study was approved by the Medical Ethics Review Board of University A.

[Results]

The mean score of the self-management scale was 68.9 ± 11.0 points. The scores of the self-management scale were higher in female recipients than in male recipients ($p=0.007$). The scores increased with age. The 70s recipients showed the highest score ($p=0.001$). Moreover, there were significant differences between the absence and presence of spouses, work, and dialysis history respectively ($p=0.002$, $p=0.006$, $p=0.014$). With regard to the duration after the transplantation, the highest score was showed in the group of ≥ 6 months– <1 year, and the scores gradually decreased with extending the duration ($p<0.001$).

[Discussions]

Sex, age, marital status, working status, duration after transplantation, and history of dialysis were identified as factors influencing the self-management behavior of recipients. These findings indicated that it was required to support recipients in consideration of the factors.

P2-203 Factors affecting stress in families with diabetic patients

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[Objectives] At least 50% of families of patients with diabetes experienced disease-related stress in Japan in 2013. We examined the factors affecting that stress.

[Methods] Semi-structured interviews were conducted with 33 families who had accompanied a diabetic family member when the patient visited a hospital. A questionnaire survey was administered to 82 families who had not accompanied a diabetic family member when the patient visited a hospital. The factors, such as basic properties, degree of family support for diabetic patients, degree of interest in treatments for diabetic patients, and degree of stress that family members felt in supporting diabetic patients, were investigated by multiple regression analysis, in which "degree of stress in family support" was used as a dependent variable (significance level < 5%).

[Ethics] This study was approved by the local ethics committee.

[Results] Data on 115 families were analyzed. "Degree of family support for diets" ($\beta = 0.256$, $p=0.017$) and "HbA1c%" ($\beta = 0.268$, $p=0.003$) were extracted as stress factors. The HbA1c% and stress level for support had two-way effects.

[Discussions] Families who support family members who are diabetic patients must take care of the patients' diet every day, resulting in stress for the families. The results suggest that as families tend to consider that HbA1c% affected the level of support they need to provide, an increase in HbA1c% might increase the families' stress. The increased family stress might make it more difficult for them to support the patients effectively. Consequently, the HbA1c% may increase further.

Poster

Nursing Coordination / Health Management

P2-204

The study of acquisition of a New Self-image of Japanese type 1 diabetes patients

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[Objectives]

In this study, we aim to highlight the transformation of self-image in patients with type 1 diabetes after diagnosis. Our objective in examining the self-image of these patients is to provide practical insights for nursing, as well as a basic reference for understanding patients.

[Methods]

The participants were 15 patients (2 men and 13 women) over 20 years of age who visited an outpatient setting to treat type 1 diabetes and had no serious complications, and who agreed to participate in the study. Semi-structured interviews were conducted 1–2 times, with a duration of 60–75 minutes per person, from February 2016 to March 2017. We drew on Krippendorff's (1999) content analysis to carry out our analysis.

[Ethics]

This study was approved by the ethic committee of Tottori University (Record Number 2307)

[Results]

We identified a total of 107 codes. The self-image of patients with type 1 diabetes was categorized into 8 subcategories and 4 categories. The 4 categories were 'the wavering of a self-image that is distinct from the past,' 'loss of former self-image,' 'discovery of a new self-image,' and 'developing a new self-image.' Ultimately, we were able to extract a fifth core category, 'acquisition of a new self-image.'

[Discussions]

The self-image of patients with type 1 diabetes transformed from a negative to a positive one; ultimately, patients acquired a new self-image that was congruent with their ideal self-image. Our results showed that the new self-image that patients acquired through various experiences influenced motivation for treatment and continuation of self-care.

P2-205

The Stigma and Coping Strategies in Patients with Type 1 Diabetes: A Qualitative Study

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[Objectives]

In this study, we aim to highlight the transformation of stigma and coping strategies in patients with type 1 diabetes after diagnosis. The purpose of this study was to examine the stigma and coping strategies of patients with type 1 diabetes.

[Methods]

Data were collected from 24 adult patients with type 1 diabetes via in-depth semi-structured interviews that took place in clinic waiting rooms. Qualitative and descriptive data analysis was conducted to identify stigma and coping strategies of patients with type 1 diabetes.

[Ethics]

This study was approved by the ethic committee of Tottori University (Record Number 2307).

[Results]

Stigma of patients with type 1 diabetes consisted of four categories: (i) "hatred of insulin", (ii) "imperfect body", (iii) "social outcast", and (iv) "poor me." Regarding the coping strategies for reducing stigma, the following four categories were derived from the analysis: (i) "hiding their disease" or (ii) "pretending to be healthy". (iii) "gradually spoke out to those around them about their illnesses." (iv) When they could not do either (i) or (ii), they resorted to "limiting their social life" or limiting interactions with others.

[Discussions]

Patients with type 1 diabetes changed their coping strategies for reducing stigma as the disease progressed because stigma was tied to their disease. Physical, psychological, social, and spiritual coping strategies are required to reduce stigma, and the strategies are interrelated. It is important for nurses to assess patients from various viewpoints, including the viewpoint of stigma.

Poster

Nursing Coordination / Health Management

P2-206

Transitional Cares to Families having Children with Cancer: A Review of the Japanese Medical Literature

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[Objectives] Childhood cancer is becoming curable thanks to newly developed medical treatments. However, the intensive treatment and long-term hospitalization required to achieve positive outcomes has multiple effects on both the patients and their families. The purposes of this study are 1) to provide an overview of the current research on support for families of children with cancer and 2) to consider how nurses can best support children and their families in the future. [Methods] The study was conducted by reviewing multiple articles which have been published since 2007 focusing on the trends regarding support for such families. [Ethics] All date of this research was held under anonymity on consideration. [Results] After analyzing the content of 33 domestic articles, we extracted four categories: "family concerns about side effects from medications", "family concerns regarding end-of-life care", "life support and transitional care related to therapy after leaving hospital", and "exploring for a solution about medical care." In our view, these four categories were important and deserve further study. [Discussions] Ultimately, we concluded that a continuous, comprehensive support care system based on the two aspects of educational support and transitional support is necessary.

P2-207

Review: Long-Term Follow-up program after Hematopoietic Cell Transplantation

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[Objectives]

Since 2012, the number of hospitals that establish Long-Term Follow-Up (LTFU) program for patients after Hematopoietic Stem Cell Transplantation (HSCT) is increasing in Japan. The aim of this review is to find problems of LTFU after HSCT.

[Methods]

We researched documents using keywords 'LTFU' and 'HSCT' in the last 10 years on the document retrieval web system 'Japan Medical Abstracts Society'.

[Ethics]

We distinguished between our knowledge and another one from an ethical aspect.

[Results]

As a result, we found 20 documents (3 original articles, 1 research report, 10 conference proceedings, and 6 commentaries). We selected 14 documents excluding the commentaries. Their contents are about 'present status and problem of LTFU in multiple hospitals (1 document)', 'present status and problem of LTFU in a hospital (3 documents)', 'patient's condition in LTFU (patient's complication, patient's quality of life, patient's anxiety and depression, patient's needs related to LTFU, pediatric patients in LTFU; 7 documents)', 'case report of patient (support for working, support for meaning of experienced disease; 2 documents)', and 'support from multi-disciplinary (medication counseling from pharmacist, exercise guidance from physical therapist; 2 documents; and 'cooperation with community medical institutions; 1 document)'. 'Development of human resources', 'cooperation between multi-disciplinary', 'assessments about LTFU', and 'making LTFU guideline' are reported as the main problems of LTFU.

[Discussions]

Over this review, a lack of original articles is suggested. More research about assessments about LTFU in multiple hospitals, cooperation between multi-disciplinary, and cooperation with community medical institutions should be reported.

Poster

Nursing Coordination / Health Management

P2-208

Situational Analysis of Occupational Stress and Avoidant Coping Behavior in Female Nurses

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[Objectives]

This study aimed to reveal the correlation between occupational stress and avoidant coping behaviors in female nurses through statistical analysis of survey data.

[Methods]

Responses to the Brief Job Stress Questionnaire (BJSQ) and a survey of avoidant coping behavior were collected from 990 female nurses. Comparison between groups, significant difference test, and covariance structure analysis were performed for the scores on each scale.

[Ethics]

This study was performed after ethical review and approval by the author's affiliated department.

[Results]

Participants were divided into a high and low group for avoidant coping behavior, and differences in BJSQ were analyzed between these groups. As a result, the high group had higher stressors, stronger stress responses, and less supports, particularly from bosses and coworkers, than the low group. These findings imply that avoidant coping behaviors can be treated as behaviors signaling situations in which stress is high, and workplace support is limited.

[Discussions]

The same trends as the above results are expected to be obtained by a covariance structure analysis of our proposed model consisting of latent variables and observable variables, which is currently under investigation.

P2-209

State of self-management behavior in patients with concomitant diabetes and cancer

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[Objectives] To determine the state of self-management behavior in patients with concomitant diabetes and cancer.

[Methods] Patients with concomitant diabetes and cancer visiting the diabetes outpatient clinic of general hospitals were recruited as participants. Data were collected by conducting 30-60 minutes interviews using a semi-structured questionnaire. The content of the interviews was recorded and transcripts were created. The data were analyzed qualitatively and inductively using content analysis.

[Ethics] This study was approved by the researchers' affiliated research ethics committee.

[Results] All eight were men. Two were aged in their 60s, three were in their 70s, and three were in their 80s. The disease duration ranged from 13 to 35 years for diabetes and from 1 month to 15 years for cancer.

Four categories of self-management behavior were identified prior to cancer treatment: "continuing a diabetes treatment lifestyle true to oneself," "judging the state of diabetes," "continuing to attend regular appointments," and "alleviating stress." Four categories were identified during cancer treatment: "adhering to blood glucose management for cancer treatment," "getting into shape for cancer treatment," "continuing a diabetes treatment lifestyle true to oneself," and "judging the state of diabetes." Six categories were identified after completion of cancer treatment: "continuing a diabetes treatment lifestyle true to oneself," "judging the state of diabetes," "continuing to attend regular appointments," "alleviating stress," "managing symptoms after cancer treatment," and "reviewing lifestyle habits to maintain health."

[Discussions] Diabetes treatment continued from prior to cancer treatment until after completion of cancer treatment. Symptom management after completion of cancer treatment was continued thereafter.

Poster

Nursing Coordination / Health Management

P2-210

The relationship between cold sensitivity and living conditions in female college students

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[Objectives]

The relationship between the results of a "cold sensitivity" interview sheet for investigation (Terasawa Henpo) and living conditions in female college students is examined.

[Methods]

Based on the results of a "cold sensitivity" interview sheet, students at Women's College A were classified into two groups: the cold sensitivity group and the non-cold-sensitivity group. Comparison between the two groups was made about their living conditions such as awareness of cold, bathing style, exercise habits, stress, etc.

[Ethics]

This investigation was conducted after the Ethical Review Board of Women's College A approved it.

[Results]

94 subjects were analyzed, and the average BMI of all the subjects was 17.08 ± 7.49 , and their average bathing time was 30.89 ± 16.32 minutes. 51 subjects (54.3%) had awareness of cold sensitivity, but only 17 subjects (18.1%) were classified into the cold sensitivity group. There is a significant difference in BMI ($z = 0.02$), breakfast intake ($z = 0.047$), and swelling ($z = 0.042$) between the two groups, but no significant difference was found in bathing style, exercise habits, .

[Discussions]

There was no significant difference in bathing method, exercise habits, etc. between the two groups. There is a possibility that this is a result of the influence of 34 subjects (36.1%) who were not included in the cold sensitivity group because of the results of the interview sheet. There were many subjects in the cold sensitivity group who have high BMI, tend to have swelling, and tend not to eat breakfast. This suggests that cold sensitivity affects metabolism.

P2-211

Relationship between teamwork and quality of work(ing) life among nursing staff

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[Objectives] This study aimed to clarify the relationship between the recognition of teamwork and quality of work(ing) life (QWL) among nursing staff at acute-phase hospitals.

[Methods] The subjects were 1132 nurses and assistant nurses at 11 acute-phase hospitals in Japan. Data were collected between November and December in 2018. Self-administered questionnaires that measure teamwork (Misawa, 2009), QWL (Lee J.W., 2003) and demographics were distributed by the chief nurse, and sent back by each subject. Spearman's correlation coefficient was calculated to assess the relationship between teamwork and QWL using SPSS Ver. 23.

[Ethics] The Osaka Prefecture University Research Committee approved this study (No.30-41).

[Results] Responses were received from 592 subjects (recovery rate: 52.3%), of which 566 were analyzed. There was a significant correlation between teamwork and QWL ($r=.575$, $p<.001$). In the high-score group for teamwork, a significantly high correlation was found between teamwork and "growth satisfaction" ($r=.385$, $p<.001$) and "satisfaction with superiors" ($r=.348$, $p<.001$). On the other hand, in the low-score group for teamwork, there was a significant correlation between teamwork and "satisfaction with colleagues" ($r=.479$, $p<.001$) and "satisfaction with superiors" ($r=.371$, $p<.001$).

[Discussions] Regardless of the level of teamwork among nurses and assistant nurses, this study suggested that the relationship with the superior needs to be satisfactory. Therefore, learning organizational skills and developing human relationships with the nursing administrator are important.

Poster

Nursing Coordination / Health Management

P2-212

Following the onset of Acute Myocardial Infarction, Regional Clinical Alliance Path in Japan: A Systematic Review

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As Japan's progression towards a super-aged society continues, the Ministry of Health, Labor and Welfare is promoting a coordinated health care system using the "Regional Clinical Alliance Path" (RCAP).

The purpose of this study was to clarify the actual conditions of RCAP usage, following the onset of acute myocardial infarction (AMI), and extracting the self-care behavior suggested to patients for recurrence prevention following the AMI event, by taking a systematic review.

Using multiple databases inside and outside of Japan, searches were performed using "acute myocardial infarction," "Regional Clinical Alliance Path," and "self-care behavior" as the search terms, and 13 studies were selected for analysis. Of these, 12 were Japanese reports and 1 was conducted overseas.

Following the occurrence of AMI, RCAP was used for coronary risk factor management coordination between the acute hospitalization phase and patients' personal doctors, as well as for recurrence prevention patient education. Regarding self-care behavior recommended for recurrence prevention, the extracted education content included lifestyle management and treatment behaviors. Self-care behavior to be implemented by patients were nutrition management, understanding the effects of drugs and continuing to take them, and consulting their personal doctors. However, the details of the self-care behavior were unclear.

Based on the results of this study, RCAP following the onset of AMI can be used for recurrence prevention patient education behavior. However, future research is necessary to determine the specific details of recurrence prevention self-care being implemented by patients, as well as self-care behavior they would like to implement in the future.

P2-213

Factors Affecting Respiratory Unit Nurses' Self-rated Practical Ability to Care for Patients with Chronic Obstructive Pulmonary Disease

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[Objectives]

This cross-sectional study aimed to identify the influence of nursing practical ability and respiratory unit nurses' demographic characteristics on nurses' self-rated ability to care for patients with chronic respiratory diseases, particularly Chronic Obstructive Pulmonary Disease (COPD).

[Methods]

Self-administered questionnaires were sent to 464 nurses in advanced treatment hospitals as well as other hospitals. A total of 257 nurses (55.4% response rate) returned completed surveys. Questions covered areas such as demographic information and the Six Dimension Scale of Nursing Performance (6D-scale), which assesses nursing practice abilities and self-rated abilities across seven areas: "understanding disease," "understanding patients," "respiratory rehabilitation," "helping patients and families," "protecting the rights of patients and families," "cooperating with other health workers," and "being a role model." Welch's t-test, Fisher's exact test, and stepwise logistic regression analysis were performed.

[Ethics]

Approval was provided by the Research Ethics Committee of the Juntendo University Faculty of Medicine (No. 2014090).

[Results]

Self-rated interpersonal relationship/communications on the 6D-scale were positively associated with "understanding patients," "protecting the right of patients and families," "cooperating with other health workers," and "being a role model."

Professional development activities were positively associated with "understanding disease," "respiratory rehabilitation," "protecting the rights of patients and families," and "cooperating with other health workers." Regarding care for patients with COPD, some nursing practice abilities were associated with self-rated nursing abilities.

[Discussions]

An improvement in interpersonal relationship/communications and professional development activities may enable nurses to provide high-quality nursing for patients with chronic respiratory diseases.

Poster

Nursing Coordination / Health Management

P2-214

Challenges and interventions in managing KANTAKI in Japan : A qualitative study

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[Objectives]

KANTAKI is an integrated multifunctional long-term care service, established in 2012, as one of services in the community-based integrated care systems to address the aging population in Japan. KANTAKI is able to combine short stay, daycare, home helper, and home visiting nurse services to accommodate client needs, whereas previously established services are unable. However, the number of KANTAKI has not been increasing as expected. The aim of this study was to identify challenges in managing KANTAKI and interventions to overcome those challenges.

[Methods]

Semi-structured interviews with managers of KANTAKI were conducted, and the collected data was analyzed. The qualitative content analysis by Mayring (2000) guided this analysis.

[Ethics]

The Ethics Committee of University of Hyogo approved this research.

[Results]

12 mangers (8 professionals in caregiving and 4 nurses, 7 male and 5 female, age 35-63) were interviewed. Their challenges were categorized in obscurity, obtaining clients, securing staffing, multi-professional collaboration, conditions in facilities, gaining proper profit. The interventions to overcome those challenges were categorized in collaborating with surrounding communities and related organizations, meeting multiple needs of clients and their family, staff development, improving working environment and conditions, specializing and differentiating from others, marketing and advertising.

[Discussions]

KANTAKI was developed to serve persons requiring long-term care at home with multiple needs. However, there are many challenges existed in the KANTAKI operations. To overcome those challenges, managers are trying different interventions to meet various needs which clients and their family have to suit different situations and to make operations of KANTAKI sound.

P2-215

Difficulties characteristic of families with Prader-Willi Syndrome. -A literature review-

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²Faculty of Nursing, Fukuoka Nursing College, Japan

[Objectives]

The aim of this study is to clarify the difficulties characteristic of families with Prader-Willi Syndrome (PWS).

[Methods]

We reviewed articles of PWS published in English from 1989 to 2018 and performed qualitative analyses. A comprehensive search was conducted in the CINAHL database using "Prader-Willi Syndrome" and "family" as search terms.

[Ethics]

This study is a literature review and is not required for the approval of the ethics committee.

[Results]

A total of 68 articles were identified in the CINAHL database. Despite improvements in physical symptoms like delayed motor milestones during infancy, parenting stress increases with the growth of PWS individuals due to behavioral problems. Although it is well known that PWS individuals cause food-related behavioral problems, various kinds of behavioral issues except food have worried their families. Concerns in undesirable behaviors among children with PWS is rapidly increasing and changing. This makes it difficult to identify family issues and gain the understanding of others. The reason family members think it's difficult to raise PWS are not only the maladaptive behavior of the individual but also the lack of social understanding of PWS by the people around them.

[Discussions]

The following was clarified from the articles. The maladaptive behavior of children with PWS changes with their growth. Diversity of maladaptive behaviors and behavioral instability make it difficult for families to care for PWS. Family issues should be addressed comprehensively using nursing, health care, education, and occupational and social resources.

Poster

Nursing Coordination / Health Management

P2-216

Research Issues and Directions Regarding Transitional Care for Peritoneal Dialysis Patients

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[Objectives] To explore the research issues and directions regarding transitional care for peritoneal dialysis patients.

[Methods] A total of 19 articles were examined. These articles were identified by search of the Japan Medical Abstracts Society website and PubMed, using the keywords "peritoneal dialysis," "discharge support," and "transitional care."

[Ethics] Articles used in this study were accurately reflect by conducting a close reading of each.

[Results] Seven of the Japanese articles reported examples of transitional care involving smooth transition to home-based treatment made possible by multi-institutional, interprofessional collaboration and management of societal resources to prepare for life after discharge. Another 10 Japanese articles were practice reports regarding Peritoneal dialysis (PD) education, nursing care support systems, and interprofessional collaboration within a medical facility. The 2 non-Japanese articles were both on intervention studies based on nurse-led case management models. Though application of the models was limited, there was evidence of increased quality of life in PD patients transitioning home when care was carried out on a continuum from inpatient to post-discharge.

[Discussions] We identified building a seamless support system is important in transition care for PD patients. However, the composition of effective nursing practice to be delivered in each different section within the series of consistently nurse-related transitional care for PD patients is unclear. The systemization of nursing support within the transitional care for PD patients and the development of an objective evaluative index of the outcome require further investigation.

P2-217

Thoughts expressed by patients with concomitant diabetes and cancer on medical treatment

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⁷JCHO Kyoto Kuramaguchi Medical Center, Department of Nursing, Japan

⁸Rakuwakai Otowa Hospital, Department of Nursing, Japan

[Objectives] To determine the thoughts of patients with concomitant diabetes and cancer on treatment.

[Methods] Participants were patients with concomitant diabetes and cancer visiting diabetes outpatient clinics of general hospitals. Data were collected by conducting 30-60 minutes interviews using a semi-structured questionnaire. The interviews were recorded using an electronic recording device with the permission of the participants and transcripts were created. The participants were asked what difficulties they experienced in undergoing treatments for both cancer and diabetes, and what psychological distress they had experienced from the diagnosis with cancer till the interview.

[Ethics] This study was approved by the research ethics committee researchers are affiliated to.

[Results] All eight participants were males: two in the 60s, three in the 70s, and three in the 80s. Thoughts from the time of the diagnosis with cancer to starting treatment were in two categories: [fear of cancer] and [burden on the diabetes treatment behaviors]. Thoughts arising from the start of the cancer treatment to the present were distinguished into seven categories: [fear of cancer treatment], [hope to live longer in good health], [expectations for the diabetes treatment], [fear of diabetes], [feeling that continuing the treatment behavior of the diabetes is uneventful] and so on.

[Discussion] Patients with diabetes felt fear of the cancer when they were diagnosed with cancer, and throughout the course of treatment, and had hopes to live longer in good health despite the awareness of the coming death, experiencing shock similar to that experienced by patients without diabetes.

Poster

Nursing Coordination / Health Management

P2-218

Literature review on factors related to nurses' compassion fatigue in Japan

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[Objectives]

"Compassion fatigue" describes the painful emotions induced in those caring for or listening to the narrative of people with traumatic experiences. Due to the nature of the job, nurses are required to be caring and empathetic are known to be at high risk for developing compassion fatigue. Compassion fatigue is known to adversely affect their own health condition and negatively impact the medical institutions they work at and the patients involved. This study used existing research to identify and examine factors related to nurses' compassion fatigue, and to assess the research methods.

[Methods]

During the period from 2000 to 2019, research literature relating to compassion fatigue in nurses was extracted from searches in "Medical central journal" and "CiNii", using the keywords "compassion fatigue" and "nurse."

[Results]

We reviewed the literature and selected six studies relating to nurses' compassion fatigue. The research methods used were mainly qualitative and intervention research, and factors can cause compassion fatigue include "human relations in the workplace" and "leisure". Additionally, two empirical studies aimed at promoting self-congruence by acquiring better communication skills and developing Emotional Intelligence, for example.

[Discussions]

There have not been many research studies conducted on nurses' compassion fatigue. Additionally, no research quantitatively verified the nurse's compassion fatigue and its related causal factors. In the future, based on what has been revealed by the previous research, it is necessary to clarify the relationship between nurses' compassion fatigue and its related factors through quantitative research.

P2-219

Review of Literature on Home Transition Support for Children with Special Health care needs and Families

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[Objectives]

While Japan maintains high standards for maternal and child health, children who require medical care are increasing. These children are able to live at home with support primarily by family, but social systems to support these children and their families are not sufficiently prepared. There is a need to consider ideal home transition support for children with special health care needs and their families. The objective of this study was to clarify the current status and issues of studies on the home transition of children with special health care needs and their families, and to consider support methods.

[Methods]

The research targets 55 items of literature with content concerning the state of at-home support, found from search of the online *Igaku Chuo Zasshi* (Ver. 5) or adding items hand-researched. The target literature was classified according to trend of literature, research method, survey targets, and research content.

[Ethics]

(Not applicable)

[Results]

The content of research was classified into "Experiences of parents receiving support for at-home care," "Current state of and issues in transition period care," "Role of supporting nurse," and "Changes in lifestyle after transition to at-home care."

[Discussions]

The results suggest that the state of at-home support for children and their families from early hospitalization onward, and of support assuming at-home living. It was necessary for sharing the anxieties and difficulties that families supporting children face after hospital discharge, and re-examining the support provided.

Poster

Nursing Coordination / Health Management

P2-220

Relationship between Feelings of Sound Sleep and Levels of Mental Health among Mothers Lacking Support after delivery 4 mounth

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Daito Bunka University, Japan

[Objectives]

The purpose of this study was to understand the actual conditions of physical activity and mental health in women under post-partum confinement and investigate the relationship therewith after delivery 4 month.

[Methods]

A statistical investigation of the attributes, living environment, physical activity, health conditions and 4 indices of mental health was conducted targeting 110 women in post-partum confinement for 4 month after childbirth, and a comparison between first-time mothers and those with previous birth experience was conducted. Next, a multiple regression analysis was conducted via the Stepwise Method with 4 indices of mental health (depression, anxiety, lack of ambition, and irritability) as dependent variables and the numerical values of items relating to attributes, living environment and physical activity as independent variables.

[Ethics]

Also, this study was approved by the Ethical Review Board that the researcher belongs to. (no. 18-5)

[Results]

The results showed that first-time mothers experienced sluggish physical activity and stronger "anxiety" with a high rate of symptoms such as "fatigue", "joint pain", and "ringing in ears". Mothers with previous child-birth experience experienced more "weight gain" and stronger "irritability". In terms of the relationship between physical activity and mental health, those who engaged in "houseworking within the scope of reasonable mind and body", "stretching", "moderate walking", and "proactively moving the body" had more favorable mental health levels.

[Discussions]

The above facts suggest that moderate physical activity even during post-partum confinement contribute to mental health.

P2-221

Factors influencing stress coping ability of male family caregivers

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²School of Nursing, Kyoto Prefectural University of Medicine, Japan

[Objectives]

The aim was to clarify factors influencing stress coping ability of male family caregivers to help consider burden-reducing support.

[Methods]

We asked home nursing stations, etc., to distribute questionnaires to randomly selected family caregivers. Questionnaires were collected anonymously by mail (survey period, January to July 2018). Survey items included age, relationship with care recipient, gender of care recipient, and Sense of Coherence 13-item scale (SOC-13). One-way analysis of variance was used for the analysis, and Scheffe's test was used as a subtest.

[Ethics]

Approval was obtained from the Ethics Review Board of our university.

[Results]

Responses from males (171 responses, 57%) were included. Forty-one percent of these respondents were over 75 years old, 35% were 65-74, and 24% were under 65. For relationship with care recipient, 66% were husbands, and 29% were sons. For gender of care recipient, 97% were female, and 3% were male.

Respondents under 65 years old had the lowest stress coping ability for six items including feel like I don't care what is happening around me, feel emotions that I don't want to feel normally, and have felt that I was a bad person, and there was a tendency for caregivers to more easily feel the disappointment of those who relied on it when conducting gender-to-gender care ($p < 0.05$).

[Discussions]

The results suggested that young male caregivers tend to have lower SOC. In males conducting gender-to-gender care, SOC tended to be lower.

Further support appears to be needed, especially for young male caregivers conducting gender-to-gender care.

Poster

Nursing Coordination / Health Management

P2-222 Enabling the patient with interstitial pneumonia at terminal stage to discharge to his home by arranging palliative home health supports: a case report

OAsuka Hashino, Mariko Mizukawa, Michiko Moriyama

Division of Nursing Science, Hiroshima University Graduate School of Biomedical and Health Sciences, Japan

[Objectives] In accordance with the intentions of the patient at terminal stage, I'll report a case the patient discharged by coordinating ethical dilemma and arranging home palliative care services.

[Methods] 87-year-old man with interstitial pneumonia who lives alone admitted to the hospital for symptom exacerbation. Despite receiving antibiotics and steroid pulse therapy, he continued to inhale 6 liters of oxygen owing to hypoxemia. Peripheral capillary oxygen saturation was 92% at rest, and 85% at exertion. Although there was a risk of sudden death, he strongly requested discharge from the hospital. We extracted the care contents provided by a clinical nurse specialist from the nursing records and analyzed the care using content analysis.

[Ethics] The written informed consent was obtained by the patient.

[Results] Because the patient had a high risk of death without receiving appropriate medical care, his physician was reluctant to discharge him from the hospital. Listening to the reasons of patient's will of discharge to home and life story, the CNS found that the patient wanted to place the ashes of the wife in a grave. In order to grant his will, the CNS worked to obtain the physician's permission by arranging the home care services with his family and care manager. As a result, he was able to discharge with oral administration of prednisolone, home oxygen therapy, and home-visiting nursing.

[Discussions] CNS coordinated the ethical dilemma by respecting the patient's intentions along with the arranging home palliative services and enabled the patient to discharge to his home.

P2-223 The role of clinical nurse specialist to improve the generalist nurses' quality of patient education by reviewing a case consultation of motivating to change behavior of a young patient with diabetes

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[Objectives] To explore the strategies to improve the quality of diabetic education for generalist nurses by reviewing a consultation case of patient education for a young adult.

[Methods] Examining a consulting case from a generalist nurse to a clinical nurse specialist (CNS). The generalist nurse who has experience for 15 years and was in charge of diabetes group education classes for 7 years. Because she had not received specialized education, she only provided general knowledge for the patient. The patient was 21-year-old man with Type II diabetes (HbA1c 16.4%) and hospitalized for glycemic control and diabetic education. He worked at a desk, preferred to eat fried foods and meats, and didn't exercise. He wasn't interested in any information about diet and exercise to control his disease.

[Ethics] The written informed consent was obtained by the patient.

[Results] The nurse didn't have experience of using nursing theory. Therefore, the CNS suggested to use nursing models to understand the patient. The nurse analyzed the psychological status of the patient without physical defects and severe symptoms using the Cohn's stage model of adjustment to disability. She assessed the patients was in the pre-contemplation stage of the transtheoretical model and intervened to increase awareness about the healthy behavior, built a relationship with him, and eventually motivated to change healthy behavior.

[Discussions] The role of the CNS was to assess each individual's readiness to use the nursing theories and provide opportunity to assess the patients and implement the intervention based on the theories.

Poster

Safety Management / Quality Improvement

P2-224

Study on Evaluating a Cultural Competence Trainig Program in Japan

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⁷Nursing Department, Takeda Hospital, Japan

[Objectives]

The purpose of this study is to evaluate a Cultural Competence Training Program basic course for nurses in Japan.

[Methods]

- 1) We have created and offered the training program based on our research findings with reference to the German program.
- 2) Any nurse interested in this theme registered and was asked to complete the feedback sheet for evaluating the program anonymously.
- 3) Descriptive statistics and content analysis of free description were performed.

[Ethics]

This study was carried out after receiving approval from the principal investigator's university ethics review committee.

[Results]

- 1) There were 217 applicants and 184 participants. Of the participants, 167 (90.8%) responded in agreement with the analyses.
- 2) The program consisted of five components: inbound and health care, social background and educational needs, nursing care for foreigners, communication, and ethics. All components received high satisfaction in the evaluation.
- 3) The developed teaching material "Encounters with different cultures," which included illustrations, was evaluated highly.
- 4) Generated categories from the free description: 1. Sharing the same trouble, 2. Opportunity for reflection, 3. Learning about dealing with foreign patients, 4. Tips for activities, 5. Application to own facility, 6. Request for an advanced course.

[Discussions]

It was suggested that the participants were aware of the importance of cultural competence training continually to improve their competence and to make a difference to their clinical settings. An advanced course will be held.

This study was supported by JSPS KAKENHI Grant [A] FY2013-2021.

P2-225

The effectiveness of the Risk Prediction Training (KYT in Japanese) for the evaluation of clinical practice of nursing students

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[Objectives]

The purpose of this study is to evaluate the usefulness of KYT in maternal nursing education in Japan.

[Methods]

Students of nursing course of B university were studied (n=78). The ability to predict the risk in maternal nursing was evaluated using a KYT drawing of baby bathing. The students were asked to find risky problems in the drawing of maternal nursing before and after nursing practice. The problems were divided into fourteen risk categories. Data were statistically processed with chi-square test and factor analysis.

[Ethics]

The study was approved by the Ethical Review Board of B University.

[Results]

Three of 14 risk categories in KYT were significantly improved after the maternal nursing practice.

The three elements are lack of necessary goods, obstruction of movement, and improper position.

Improved three risk categories were related to the nurse, and none of risk categories related to the baby didn't show any improvement.

[Discussions]

It was shown that we could evaluate the improvement of the critical cognitive ability using KYT.

Poster**Safety Management / Quality Improvement****P2-226****Discussion on the Effects of Countermeasures against Infectious Diseases by Positive Deviance Approach at elderly nursing facilities -Identification of Positive Deviance Approach(1)-**○Toshiharu Shibue^{1,2}, Hitomi Maeda²¹*Faculty of Nursing, St.mary's College, Japan*²*Health Science Education Department, Kumamoto University Graduate School, Japan***[Objectives]**

“Hand hygiene when changing diapers” is a difficult act as countermeasure against the spread of infectious disease at elderly nursing facilities. In this paper, we focus on countermeasures against infectious diseases through positive deviance approach, an approach centered on searching for solutions, not from the viewpoint of identifying the problem but from what we can do about the problem. In elderly nursing facilities that have problems with insufficient diaper-changing hygiene, we aimed at detecting “a positive deviance act (hereafter referred as “PD act”), where proper diaper-changing hygiene was successfully achieved.

[Methods]

A group discussion was conducted on hand hygiene with staff (nurses and care workers) of elderly nursing facilities when changing diapers and a direct observation was carried out.

[Ethics]

Conducted after receiving an ethics review of the affiliated university

[Results]

There was no washstand nearby and no hand hygiene was performed for the series of changing diaper services due to labor scarcity at the facility. However, we found out that a staff member was wiping his hands with a disposable towel after he changed the diaper, which was the same towel that was used during the diaper changing process.

[Discussions]

Wiping hands with a disposable towel is not a sufficient hand hygiene method; however, under the conditions where there is no washstand nearby and labor is scarce, it is considered to be a possible PD acts. We plan to bacteriologically verify its effect in the future.

This research was conducted with Grant-in-Aid for Scientific Research (17K17531).

P2-227**Factors influencing nursing practice in psychiatric day-care services - focus on care for new participants**

○Tomoko Chijiwa, Mutsuo Deguchi, Kayoko Ishimura

*Faculty of nursing, Ichinomiya Kenshin College School of Nursing, Japan***[Objectives]** To clarify the factors influencing nursing for psychiatric day-care service participants during their introductory period.

[Methods] We carried out a self-administered questionnaire survey among 463 psychiatric day-care nurses. The questionnaire included questions about attributes of nursing, nursing practice (“self-care management” and “maintenance of treatment participation”), and autonomy of nursing (“cognition and prediction”, “mental judgement”, “concrete judgement”, “physical judgement”, and “independent judgement”). A stepwise multiple regression analysis was performed using the total score for each nursing practice factor as the dependent variable, and factors that might influence nursing practice as explanatory variables.

[Ethics] Ethical approval was obtained from the ethics committee of Hamamatsu University School of Medicine, Japan.

[Results] Responses from 100 psychiatric day-care nurses were analyzed. For nurses, “cognition and prediction” ($\beta = 0.292$, $p < 0.01$), clinic work ($\beta = -0.271$, $p < 0.01$) and being a male nurse ($\beta = 0.223$, $p < 0.05$) were found to affect “self-care management” (adjusted $R^2 = 0.171$). “Cognition and prediction” ($\beta = 0.291$, $p < 0.01$), “mental judgement” ($\beta = 0.228$, $p < 0.05$) and ability to predict whether participants dropped out of treatment ($\beta = 0.218$, $p < 0.05$) were found to affect “maintenance of treatment participation” (adjusted $R^2 = 0.216$).

[Discussions] Participants’ introductory period in psychiatric day-care is an uncertain time. It is hard to obtain relevant information and predict participant disease state to target services appropriately. Nurses are therefore required to have good reasoning skills. Our results showed that they particularly needed cognition and prediction skills to deliver services during this period. This study suggests that training to develop these skills is an important issue for psychiatric day-care nurses.

Poster

Safety Management / Quality Improvement

P2-228

The State of Infection Control and the Difficulties of In-Hospital Education for Infection Prevention in Psychiatric Hospitals without Certified/Specialist Nurse: Interview of Nurses in Charge of Infection Control

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²Faculty of Nursing, Toyama Prefectural University, Japan

[Objectives] To clarify the state of infection control in psychiatric hospitals without certified/specialist nurse (CN/CNS) and the difficulties felt by nurses in charge of infection control in educating others about infection control.

[Methods] Data were collected through semi-structured interview with three nurses in charge of infection control in psychiatric hospitals less than 200-300 beds without CN/CNS. Interviews were conducted on 1) problems of infection control, 2) implementation status and role of infection prevention education, 3) feeling of difficulty in playing the role, 4) necessary support for developing infection education. The interviews were analyzed by qualitative description. In addition, we observed the setting of equipments required for hand hygiene.

[Ethics] This study was approved by the Ethics Committee Aichi Medical University.

[Results] The study participants were in charge of other duties. There was no ICD in any hospitals. The following problems and difficulties in developing infection-prevention education were identified: "Insufficient infection control", "Insufficient human resources", "Psychiatric specific difficulties", "Training planning difficulties" and "No feeling of difficulties in infection control". Hospital staff carried hand antiseptics, but the use was not sufficient. Only one hospital had soap and paper installed in the washroom for patients.

[Discussions] It became clear that the infection -prevention education has not penetrate staff, necessary infection control measures have not been implemented and they had the difficulty in developing education programs specialized for psychiatry. It is suggested that the Clarification of infection control characteristic in psychiatric hospitals and the needs for the support of education program are necessary.

P2-229

Attitudes of Older Adults When Seeing Doctors and Receiving Medical Care: A Questionnaire Survey

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Tomomi Tsujimoto, Tomoko Inoue

Division of Health Science, Graduate School of Osaka University, Japan

[Objectives]

The purpose of the present study was to examine four attitudes of older adults when they see doctors and receive medical care.

[Methods]

We distributed an anonymous questionnaire, which included individual attributes and four attitudes (active disclosure, active questioning, cooperative recognition, and decision regarding process selection), to 515 older adults in Osaka. We collected responses via mail between April and June 2019, and 152 (29.5%) were deemed eligible for data analysis. The questions were scored using a 5 point-scale, and descriptive statistics was performed for each question.

[Ethics]

This study was approved by the Ethics Committee of the Osaka University Hospital.

[Results]

The mean age of the participants was 77.0 (range, 65–93, men 69, women 83) years, and 80.9% of participants were visiting a hospital for treatment and 88.8% had a hospitalization experience. More than 90% of participants recognized the following three attitudes: active disclosure regarding medical history and medication at first examination, actively asking questions regarding disease progress and treatment, and cooperative recognition with medical staff. 82.5% of participants tended to trust the doctor's treatment for decisions regarding process selection.

[Discussions]

Older adults recognized the importance of the initial disclosure of information and querying regarding directionality, medical examinations, and treatment, and collaborating with medical staff. However, they tended to leave the final choice to the doctor. Therefore, it is necessary for medical staff to inform patients such that they can independently select the method and process of treatment.

Poster

Safety Management / Quality Improvement

P2-230

Literature Review of Nurses' Experiences and Coping With Inpatient Suicide in Psychiatric Wards

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[Objectives] This literature review aimed to clarify the outcomes of previous research on nurses' experiences and coping with inpatient suicide in psychiatric wards and to consider the research challenges.

[Methods] A search using the keywords "patient's suicide", "nurse", "experience", "impact", "response", "reaction", and "effect" was performed on MEDLINE, CHINAL, PsycINFO, and Ichushi-Web. The period of investigation was from 1980 to 2018.

[Results] Eight international and eleven domestic research articles coincident with the author's research purposes were analyzed. Mostly in Europe and the United States, studies of nurses' experiences of inpatient suicide started in the early 1980s, whereas, in Japan, studies started in 2004. In Japan and overseas, nurses had experiences of shock, confusion, sadness, fear, remorse, and feeling of helplessness. Also, measuring nurses' stress reactions following a patient suicide using IES-R indicated that the number of nurses who showed higher stress levels was higher compared to general adults. In Japan and overseas, nurses cope with informal style and meetings and knowledge acquisition have been revealed. Studies that targeted mental and health specialists resulted in two different outcomes: there was no difference in responses to patient suicide between professions; for others, the opposite was found. In Japan, such studies were not seen.

[Discussions] Most studies are retrospective cohort studies at a specific point after a certain period of time after suicide, which focused on the clarifications of individual viewpoints of nurses who experienced inpatient suicide. Clarifications of the responses of teams or organizations to suicide using a longitudinal study will be required.

P2-231

A Delphi Study of Important Nursing Practices in Rural Areas of Japan

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[Objectives]

We aimed to investigate and identify the common and important activities of clinical nurses in rural areas of Japan.

[Methods]

The Delphi method was used for this quantitative descriptive study. Thirty-nine items within four areas of nursing practice, including "Basic Nursing Practice," "Community Understanding," "Administration and Operation," and "Cooperation with Local Government," were used to identify common and popular activities of 40 nurses. An established consensus was defined by 51% agreement on the third survey results referred to by previous Delphi studies.

[Ethics]

This study was approved by the Bioethics Committee of our institution.

[Results]

The nurses reached a consensus on 33 activities. These included all of the activities within the categories of "Basic Nursing Practice" and "Community understanding," while half of the "Administration and Operation" and "Cooperation with Local Government" items were recognized as important activities by more than 70% of nurses. Four activities were recognized as important by less than 50% of nurses. These activities were related to emergency and disaster preparation and operation of remote medical system.

[Discussions]

Thirty-three activities were based on community understanding skills for health issues. They can be completed within the clinics and involve collaboration with acute care and home healthcare workers.

Nurses from all the selected rural areas recognized these activities as common and important; therefore, these should be highlighted and standardized within nursing practice and would benefit the community.

Poster

Safety Management / Quality Improvement

P2-232 Examination of factors influencing medical safety climate among ward nurses

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Faculty of Nursing, Fukuoka Prefectural University, Japan

[Objectives]

The purpose of this study is to elucidate factors influencing medical safety climate among ward nurses.

[Methods]

A self-administered questionnaire based on the medical safety climate scale was implemented targeting ward nurses at two general hospitals and two small-to-medium scale hospitals in Japan. Statistical examinations were conducted using chi-squared tests and t-tests.

[Ethics]

Approval for this study was obtained from the research ethics committee at Fukuoka Prefectural University.

[Results]

724 people were targeted for analysis. Significantly more of those who had participated in ethics training were aware of the principles of medical ethics than those who had not. In addition, among those who were aware of the principles of medical ethics, there were significantly more nurses working in the field of internal medicine than nurses working in the field of surgery. Also, the total score measuring medical safety climate was significantly higher in internal medicine wards than in surgical wards. In terms of occupational position, the total score measuring medical safety climate was significantly higher among staff members than among managers.

[Discussions]

It is thought that the higher score measuring medical safety climate in the field of internal medicine is related to awareness of the principles of medical ethics. In addition to the necessity of providing nurses working in surgical wards with opportunities for ethics training, these results also suggest the necessity of initiatives to promote medical safety climate among managers.

P2-233 Verification of health literacy scale among Elderly People

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[Objectives] To Understand the health literacy of elderly people is important for considering nursing practices that respect quality of life(QOL).The purpose of our research is to clarify the health literacy status of elderly people using the comprehensive health literacy scale shortened version (HLS-Q12) developed by Finbråten(2018).

[Methods] I intended for people of 65 years old or over to participate in regional silver activities from May to June, 2019. A self-administered questionnaire was distributed to those who obtained consent. Our survey included basic attributes such as age and gender, two health literacy scales (HLS-Q12 and 14-item health literacy scale [HLS-14]), and health related quality of life (SF-8).

[Ethics] This research was approved by the University of A Ethics Committee and conducted.

[Results] The survey was conducted on 89 participants, and 79 of them who completed the questionnaire were included in the analysis. Of the participants included in the analysis, the average age was 76.3 years, 78.5% were women and 59.5% were during medication. The average scores (standard deviations) of HLS-14 was 37.2 (10.19), HLS-Q12 was 33.5 (7.38). In addition, only HLS-Q12 was correlated with SF-8 physical and mental summary scores ($r = 0.255$, $p < 0.05$, $r = 0.418$, $p < 0.001$).

[Discussions] In nursing practice that respected QOL, it was suggested that HLS-Q12 is appropriate as a scale to grasp the actual condition of health literacy of elderly people.

Poster

Safety Management / Quality Improvement

P2-234

Semantic verbalization of expert nurses' proficiency of endotracheal suctioning skill

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[Objectives]

Visualisation of proficiency is one of important pedagogical theme to foster understanding of nursing skills despite novice or expert. However, quantitative evaluation has limitations to describe full aspects of proficiency. In our previous researches, we struggled to explain what is actually "good suctioning technique" with obtained numerical data.

The aim of this study is to verbalize the process of suctioning semantically to find out expert nurses' proficiency of endotracheal suctioning skill for enabling numerical evaluation in depth.

[Methods]

Twelve nurses and 12 nursing students were participated in this research. An eye-mark recorder (EMR-9, nac) was used for eye-tracking during endotracheal suctioning.

[Ethics]

Approval number of the ethical committee is 17-81-1.

[Results]

By the time of finishing to put disposable gloves on, eye trajectory of an expert nurse shifted to the connector of suctioning catheter. Her left hand turned on the suctioning machine, and simultaneously bending the root of suctioning catheter, she evaluated the vacuum pressure setting. Once she held an alcohol wipe, her attention was on the patient model, evaluating the deoxygenation from facial colour. While students have to be careful to deal with the catheter.

[Discussions]

To measure proficiency of multi-attention, hand-eye coordination, and feedforward mechanisms might be future tasks to discover proficient nursing skills and teaching methods.

Poster

Health Emergency / Disaster Nursing

P2-235

Patients' perception of sound levels while undergoing eye surgery under local anesthesia

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[Objectives] Given that eye surgeries are generally conducted while patients are awake and out of view, it is important to reduce patients' sound-related stress. This study aimed to investigate actual sound levels in the operating room (OR) and patients' perception of noise.

[Method] Ten adults undergoing cataract surgery agreed to participate in this study. Sound levels were measured using a noise meter during the following periods: 1) while entering the OR, 2) during the introduction of anesthesia, and 3) at the time of cataract-removal, using the machine. After the surgery, patients were interviewed on their perception of noise in the OR.

[Ethics] This study was approved by an institutional ethics review board.

[Results] Sound levels were significantly higher during the Periods 1 and 3, compared to the Period 2 ($2 < 1$: $p=0.032$, $2 < 3$: $p=0.000$). Machine noise did not induce stress in any patients during Period 3, and they recognized the sound as necessary and meaningful for their surgery. Two patients would have preferred less disruptive sound during Period 1, related to the preparation of equipment and sudden broadcast. The results suggest that disruptive sound could be a stress-inducing factor during eye surgery.

[Discussion] Tools and situations characterized by disruptive sounds should be avoided during eye surgery. Additionally, preparing patients for certain sounds may help them cope with noise-related stress.

P2-236

The Relationship Between Bioterrorism Training Participation of Public Health Nurses and Their Attributes, Knowledge, and Recognition of Preparedness in Japan

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[Objectives] Public health nurses (PHNs) are integral to bioterrorism preparedness, but there is no research of their bioterrorism preparedness in Japan. This research aimed to clarify the relationship between the bioterrorism training participation of Japanese PHNs and their attributes, knowledge, and recognition of preparedness.

[Methods] The target is the 190 PHNs working at the infection control department of a public health center in Tokyo and 3 neighboring prefectures. An anonymous self-administered questionnaire survey was conducted via mail. Analysis included Fisher's exact test or unpaired t-test.

[Ethics] This study was approved by Tokyo Medical University, Research Ethics Committee.

[Results] A total of 71 PHNs (37.4%) completed the survey. Ten PHNs (14.1%) had participated in the bioterrorism training, and most did so in the past year in a specific prefecture. There was no significant difference between the bioterrorism training experience and their attributes. There were significant differences in the knowledge and mental barriers to bioterrorism.

[Discussions] Bioterrorism training for Japanese PHNs has just been started in specific areas since 2018. Participants have a possibility to have a higher proportion of knowledge and less mental barriers. There are only 14% of bioterrorism training participants, so we will conduct and evaluate bioterrorism training for PHNs and strengthen their preparedness.

Poster

Health Emergency / Disaster Nursing

P2-237

Support provided for outpatients to prepare for disasters - Analysis of free descriptions -

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[Objectives] To provide basic knowledge to examine the possibility of providing outpatients with advice on disaster preparation.

[Methods] In October 2018, questionnaire survey forms were sent to head nurses of 1,754 hospitals with a Department of Neurology for Outpatients that had been designated as Health Care Institutions for Treatment of Intractable Diseases. Descriptions of "their opinions of support provided for outpatients to prepare disasters" were analyzed qualitatively and inductively.

[Ethics] The following was explained in written form: the study protocol had undergone screening conducted by the ethics committee of the author's research institution; the survey was anonymous so that individuals and hospitals could not be identified.

[Results] (1) The response rate was 21.2% (371 responses), and 165 responses that included free descriptions were analyzed. (2) The opinions of the head nurses were classified into the following categories: [Development of disaster measures by the entire hospital is in progress], [It is necessary to provide outpatients with advice on disaster prevention], [Although it is necessary to provide advice, its implementation is not easy], [I question the effectiveness of advice on disaster prevention provided by the Department of Outpatient Nursing], [We plan to cooperate and discuss with other organizations], and [There is a lack of a sense of crisis regarding potential disasters].

[Discussions] The necessity of providing support was recognized by most head nurses, and it is important to develop effective methods for its implementation. The study was conducted with the support of part of a Grant-in-Aid for Scientific Research (JP26463542).

P2-238

Effects of Poor Neighborhood Communication on Disaster Preparedness: A Study on the Characteristics of Older Persons Requiring Special Care in Coastal Communities of Western Japan

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[Objectives]

This study aimed to clarify how the characteristics of persons requiring special care, aged 75 years or older and having poor neighborhood communication, affect disaster preparedness differently from the characteristics of those with good neighborhood communication.

[Methods]

Participants were 673 persons requiring special care, aged 75 years or older. The survey period was from 2014 to 2018. The survey included participant characteristics such as health status, mobility level, community interaction, and disaster preparedness. A binomial logistic regression analysis was performed, with participant characteristics as explanatory variables and disaster preparedness as the dependent variable.

[Ethics]

We obtained approval from the Ethical Review Board of the researcher's university.

[Results]

The characteristic of "participation in community activities" was correlated with multiple preparedness items in participants with poor neighborhood communication, compared to those with good communication. Among participants with poor neighborhood communication, those who did not participate in community activities were less likely to speak with their families about evacuation methods, compared to those who did participate in community activities (OR 1.53). Furthermore, they were not prepared with water (OR 1.65) or medications information (OR 1.94).

[Discussions]

Of persons requiring special care and having poor neighborhood communication, it was particularly those who did not participate in community activities that did not receive support from community members (such as family and neighbors), and were considered to be at higher risk for insufficient disaster preparedness. It is therefore essential to build communities in which these individuals are more connected to the community.

Poster

Health Emergency / Disaster Nursing

P2-239

Emotional Factors Supporting the Activities of a Public Health Nurse in an Area Affected by the Great East Japan Earthquake and Future Challenges of Resident Support

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[Objectives]

To identify the future challenges of resident support provided by public health nurses, the emotional factors that had supported the activities of a public health nurse in an area affected by the Great East Japan Earthquake were examined.

[Methods]

In March 2019, a semi-structured interview was conducted with a public health nurse who had been engaged in support activities in an area affected by the Great East Japan Earthquake. Her statements were recorded to create narrative records and extract emotions that supported her public health nursing activities. The emotions were analyzed, adopting a qualitative data analysis approach.

[Ethics]

This study was approved by the Bioethics Committee of Sonoda Women's University.

[Results]

Narrative records were carefully read and summarized into 101 sentences, which were classified into 17 codes and 4 categories, including: "recognizing aged and disaster-affected residents as persons to be supported by public health nurses" and "clarifying the role of public health nurses and continuing public health nursing activities adopting basic approaches".

[Discussions]

The public health nurse noted the importance of continuously supporting residents, while considering that many of them are aged and affected by the disaster. Recognizing the role of public health nurses and giving importance to basic approaches may have been emotional factors supporting her public health nursing activities.

P2-240

Current state and problems of collaboration of healthcare, medical service and welfare professionals in area hit by the Great East Japan Earthquake

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[Objectives]

This study aimed to clarify the current state and the problems of interprofessional collaboration during the formation of a new community in the area hit by the Great East Japan Earthquake.

[Methods]

A focused group interview was conducted with four professionals involved in support of the elderly in the area hit by the Great East Japan Earthquake. The recorded narratives were transcribed verbatim. The narratives relating to collaboration of healthcare, medical service and welfare professionals were extracted and analyzed by qualitative data analysis. The survey was conducted in March, 2019.

[Ethics]

This study was approved by the ethics committee of the institution one author belonged to.

[Results]

From 93 codes, 21 sub-categories and five categories including [establishment of the elderly support system started up before the Earthquake], [collaborative system of healthcare, medical service and welfare professionals linked together with their activities beyond the individual corporations] and [measures against lack of professionals in the medically underserved region] were extracted.

[Discussions]

The stricken area was found to figure out various ways to make the best use of limited human resources and facilities. Through "the formation of face-to-face relationship," they have built the system where information can be smoothly shared. On the other hand, how to support the elderly persons living alone was a difficult problem confronting the area. The collaborative system beyond the individual organizations the professionals belonged to was considered to result from their strong intention to rebuild the community after the big earthquake.

Poster

Health Emergency / Disaster Nursing

P2-241

The effects of intervention with the “Disaster Preparedness Package for Challenged Children” tool for intellectually challenged children at Special Support Schools

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[Objectives]

Intellectually challenged children tend to struggle to understand given instructions in unfamiliar situations, therefore drills based on their characteristics need to be conducted to increase their self-preparedness capabilities. Researchers developed the above tool for various natural disasters, including ICT education. This research is to examine the effects of intervention with this tool.

[Methods]

The transcription from semi-structured interviews conducted about the capabilities these children need to acquire as recognized by teachers and the effect following intervention was analyzed.

[Ethics]

This research was approved by the research ethics committee of the University.

[Results]

Interviews were conducted with 5 teachers teaching 12 children with an approximate IQ of 50 where the intervention was implemented 3 times. The capabilities children need to acquire as recognized by teachers are categorized as: [Capability to evacuate in various situations] and [Protect ownself]. Intervention effects were categorized as: [Acquired capability to evacuate in various situations] [Acquired independent action] [Acquired ability to protect ownself] [Acquired overlooked actions] and [Effect of past experiences].

[Discussions]

The research results showed the necessity for these children to prepare for and protect themselves to deal with various situations in disasters. With this tool, these children were able to increase their ability to deal with such situations. This research proved the usefulness of the intervention tool, however showed there is a limit due to participant numbers.

This research was supported by JSPS KAKENHI Grant Number JP15H05088.

P2-242

The Post-Disaster Life Experiences of Care-requiring Elderly Individuals Living in Disaster-Affected Areas

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Objectives

To describe the post-disaster life experiences of care-requiring elderly individuals and to explore the meanings of their experiences.

Methods

This research has a qualitative descriptive design through phenomenology. The research participants were care-requiring elderly individuals (65+) using the long-term care insurance system to receive at-home nursing care. Data were stories of experiences gleaned from semi-structured interviews.

Ethics

This research was conducted after obtaining approval from the Research Ethics Committee of the Research Institute of Nursing Care for People and Community.

Results

Research participants were 9. Their average age was 84.9. I identified six structural elements in the post-disaster life experiences. [By facing death, they realized their life also included those around them]. While evacuated, despite the fact that they were passively receiving help most of the time, they endured hardship, and [they were saved by their connections to those around them]. As time passed, and societal resources and other things around them began to recover, [they noticed and were grateful for their support in life]. By [seeing the disaster in a positive light] and [incorporating their disaster experiences into their lives], they were able to see past the aftermath of the disaster and [live proactively].

Discussions

The post-disaster life experiences of care-requiring elderly individuals involved aiming for a stable life defined by harmonious interaction with a surrounding environment destroyed by a disaster. This research highlights the importance of support aimed at fully utilizing the strengths of care-requiring elderly individuals and realizing harmony between their needs and their surrounding environment.

Poster

Health Emergency / Disaster Nursing

P2-243 Experience of mothers forced to change their place of life by the Chernobyl nuclear power plant accident disaster

OMie Naiki

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[Objectives]

The Fukushima Nuclear Power Plant Accident forced some mothers with children in the affected place to relocate for a long time to the different place from their original home town. Those mothers still have some anxiety, and it is necessary to consider the support for them. The purpose of this study was to clarify the experiences of the mothers with children forced to change the base of life for a long time due to the Chernobyl accident.

[Methods]

This study took the method of the qualitative semi-structured individual interview. Data collection was made in October in 2018. The participants were the mothers with children forced to change the base of their life due to the Chernobyl accident. The participants were ten mothers.

[Ethics]

This study was approved by the ethical committee of the Japanese Red Cross College of Nursing (2018-070).

[Results]

The range of the mothers' age was in their 50s to 70's. Their most suffered experience was the discrimination in their first evacuation community just after the accident to be told that they would contaminate other people with radioactivity. The mothers who evacuated with the others from the same hometown supported each other in the new community. One of their recent concerns was the physical health such as cancers.

[Discussions]

From the results, it would be necessary for the evacuees to communicate with each other as support for the relocated mothers affected by the Fukushima accident.

P2-244

Actual condition of disaster countermeasures and responding to patients receiving home oxygen therapy in case of a disaster: Examining practices of home-visit nurses in West Japan

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[Objectives] Disasters, such as heavy rain and earthquakes, have occurred frequently in Japan, leading to delays in responding to disaster-vulnerable individuals. To ensure that patients with home oxygen therapy (HOT) take appropriate actions during disasters, it is important for home-visit nurses to assist them. In this study, we conducted a survey of disaster countermeasures at home-visit nurses and clarified the related issues.

[Methods] Accordingly, 32 home-visit nursing stations in Japan were examined, and a self-report questionnaire survey on the methods of responding to disasters, comprehension of related manuals, and other factors.

[Ethical] This research was conducted with ethical approval from Osaka University.

[Results] Responses were received from 23 nurses. 80% of nurses had knowledge of preparing for disasters with HOT patients and their families. With regard to timing, preparation was focused on "when the disaster occurred" and "when there was danger of typhoon or heavy rain." For 90% of the nurses "contacts of medical equipment companies," was considered in their preparation, followed by "evacuation places." Most of nurses had anxiety about dealing with disasters or emergencies, such as "if HOT patients and families could manage medical risks," or "if nurses could give appropriate instructions".

[Discussions] It is necessary to discuss disaster preparation with HOT patients during normal times as well as when disasters occur in other areas in order to appropriately respond to a sudden disaster. Furthermore, these discussions will lead to smoother cooperation within care support specialists by clarifying the patients information sharing and role at the time of disaster.

Poster

Health Emergency / Disaster Nursing

P2-245

Hospital nurses' perception on their health support activities for evacuees after the Fukushima nuclear plant accident

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²Fundamental nursing, Japanese Red Cross College of Nursing, Japan

[Objectives]

The purpose of the research was to explore the perception on experiences of hospital nurses who had conducted health support activities for evacuees living in temporary houses after the the Fukushima nuclear plant accident in 2011.

[Methods]

It is a qualitative and descriptive study by semi-structured interviews. Data collection period was from September 2018 to March 2019. The participants are the hospital nurses who worked on support for health support projects on site where most of those evacuees resided between 2012 and 2017.

[Ethics]

This study was approved by the ethics committee of the Japanese Red Cross College of Nursing (2018-057).

[Results]

The participants were eight nurses who working in the hospital who had never enrolled as public health nurses. Short-term delegates felt that only they could do was to listen the narratives of the evacuees although they had expected to do more. On the other hand, through this activity, they wanted to expand their activities in the area where their own hospital was, and participated home visiting nursing workshops.

[Discussions]

From the results, nurses working at the hospital had difficulties in providing care while listening to stories for residents who evacuated for a long time after disasters.

It is necessary to plan the nursing education in the middle and long term after disasters.

P2-246

Effects of human resource development as disaster prevention countermeasure for elderly people in Japan

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[Objectives]

In Japan which is super-aged society, a disaster prevention countermeasure is a pressing problem in the coastal area where depopulation is serious. The purpose of this study is to clarify the effects of volunteer who trained as supporter of disaster prevention countermeasure for elderly people.

[Methods]

The intervention aimed at disaster prevention countermeasure was performed for the elderly people in the coastal area in Japan. First, the volunteer trained as supporter of disaster prevention countermeasure. Secondly, the volunteer lectured about disaster prevention and exercise to the elderly. The intervention was performed twice a month for 1 year. The effects of intervention were evaluated by physical fitness test and individual disaster preparation.

[Ethics]

This study got approval from the ethical review committee.

[Results]

Eighty five people trained as supporter of disaster prevention countermeasure for elderly people. One hundred fifty one elderly people participated in the intervention by the volunteer (average age; 76.0, ± 5.2). As effects of intervention, the power of walking and individual disaster preparation were improved significantly.

[Discussions]

The power of walking and individual disaster preparation of elderly people improved by the intervention of volunteer. In Japan, a disaster prevention countermeasure is a pressing problem serious. But there are few supporters for elderly people in an area. So it's necessary to train a supporter, and provide the effective and continuous intervention of disaster prevention measure.

Poster

Health Emergency / Disaster Nursing

P2-247

Nursing practice and ethical issues during disasters in an out-of-hospital context: An integrated literature review

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[Objectives] Just after disaster happened, nurse might practice in situations without physicians. The decision in allocating of scare resources in that situation causes ethical dilemmas. This study aims to clarify the nursing practice in out-of-hospital situations just after disaster happened and consider ethical issues in a disaster nursing.

[Methods] Online database and hand searches were conducted on nursing practice in out-of-hospital care just after a disaster happened.

[Results] Twenty literatures and five books met the search criteria. Six nursing practices revealed the following: physical assessment of limited equipment; the overall decision on priorities of care and transportation; coordination for transportation; advice to voluntary citizens for safety support for victims; protection of the dignity of the deceased; care for the bereaved. In the five books, there were several reports in which nurses voluntarily responded to the disaster without physicians in out-of-hospital. In those cases, no description about medical triage was available. Even when nurses decided the priorities, their criteria of judgment were not clear. In some situations, the voluntary nurses had to decide to withdraw the resuscitation. Through fulfilling the responsibilities of accountability, the bereaved shared their feelings and self-consent of family deaths with nurses.

[Discussions] Nurses are expected from society to act autonomously as a professional in disasters beyond their scope of specialty. The results suggest that the ethical issues of transparency in decision making on priorities and fairly allocation of scare resources including nurses themselves. There are also legal vulnerability and uncertainty in nursing practice in the disaster.

Poster

Theory Development

P2-248

Concept Analysis of Hope among Cancer Patients in Japan

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[Objectives] This study aimed to clarify the concept of hope among cancer patients in Japan.

[Methods] Rodgers' (2000) concept analysis method was used to analyze documents published in Japan in the fields of nursing and medical care. A search was conducted for articles containing the word "hope" in their titles and abstracts, and 25 articles were selected for analysis.

[Results] Eight attributes of hope were identified: spiritual and psychological support to live regardless of life left remaining; changeable and never completely gone; individuality; complexity; consciousness of life's persistence; consciousness of how to live; consciousness of how to die; and consciousness of what happens after death. The antecedents of hope were fear of having cancer, brightness for the future, and recognition of one's values and beliefs. The consequences of hope were living positively, spiritual well-being, and psychological well-being.

[Discussions] The findings revealed that "hope" for Japanese cancer patients could be defined as follows: Hope is the consciousness of life's persistence, how to live, how to die, and what happens after death. It reflects individuality in the lives and values of cancer patients, as well as the will to live, which changes according to the process and situation.

P2-249

Exploring Japanese parents' experience of dealing with the impact of mental illness stigma related to their children with psychosis

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[Objectives]

The objective of this study was to explore parents' experience of dealing with the impact of stigma related to mental illness when their children had psychosis in Japan.

[Methods]

A qualitative method was used in this study. The in-depth interviews explored parents' experience related to the stigma of mental illness regarding their children with psychosis. The interviews were repeated depending on the participant and data saturation. The interviews were digitally recorded and transcribed for analysis. The transcribed data were analyzed using thematic analysis.

[Ethics]

The participants provided informed consent prior to the interviews and recordings. The study was approved by the research ethical committee of Miyagi University.

[Results]

The interviewed data from fifteen parents were analyzed for generating the preliminary findings. The participants included thirteen mothers and two fathers in the age range 50-70. The preliminary findings of this analysis revealed that parents of children with psychosis deal with the impact of stigma between family members, within extended family, and outside of family. In addition, they deal with self-stigma in their children with psychosis, siblings and themselves.

[Discussions]

The study has shown that parents dealt with the impact of stigma inside and outside of family. The increased understanding of parents, who have children with psychosis, has important clinical implications for mental health care and family nursing.

Poster

Theory Development

P2-250

An analysis of the concept of FURERU

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[Objectives] While there have been a number of studies on various effects of touch in Japan and other parts of the world, the meaning of a Japanese term *FURERU* (literally translated into "touch" as a verb), which is often used in the field of care, is not clearly distinguished from that of "touch." In response, this study aimed to analyze the concept of the term to propose a new perspective of nursing.

[Methods] 32 original articles and review articles containing *FURERU* in their title were extracted from the online archive of Japan Medical Abstracts Society and analyzed based on the concept analysis approach of Rodgers (2000).

[Ethics] A document was handled appropriately.

[Results] Antecedents identified as a result of the analysis were "cognitive decline," "decreased psychological well-being," "tense situation," "being in health needs;" attributes were "communication," "relationship," "promptness," and "intentional;" and consequences were "relaxing and healing," "fulfilling," "connecting with others," and "increased sensation and recovery."

[Discussions] As the word "touch," *FURERU* refers to an intentional act. However, findings of this study suggest the act of *FURERU* also has a nature of "promptness" and thus the concept is rooted in physicality.

Poster

Nursing Policy

P2-251

Relationship between average of psychiatric hospital stay and number of Advanced Practice Nurses (APNs) worldwide: Literature review

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[Objectives]

It has become clear that there is a negative causal relationship between the average of psychiatric hospital stay by prefecture in Japan and the number of Advanced Practice Nurses(APNs).This study aimed to clarify the current status of research on the relationship between the average of length of psychiatric hospital stay and the number of APN in each country, and to search for future research issues.

[Methods]

It is a literature research by Matrix method. Using cross search engine of EBSCO HOST and Google Scholar's , we searched English literature for the whole year by "APN staffing" AND "length of hospital stay" AND "psychiatric hospital AND cohort research". In EBSCO HOST, there were 3 hits and 1,420 hits on Google Scholar in and out. The titles of the extracted documents were confirmed, the abstracts of the documents related to the theme were read, and the documents matching the conditions were extracted.

[Ethics]

The documents used specify the source.

[Results]

There were no hits related to this research theme.

[Discussions]

Matsueda et al. (2018) clarified 1% level relationship between the average of length of psychiatric hospital stay and the number of APNs by prefecture. However, none of the studies in the world revealed the same theme, therefore more research needs to be conducted at prefectoral and national levels. In order to do so, it is necessary to conduct research using data indicating the quality of mental health care collected by national institutions.

Poster

Others

P2-252

Contents of a narrative of a family member who took care of a terminally ill patient

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[Objective] The aim of this study was to investigate the contents of a narrative approach for a family member who took care of terminally ill patients.

[Methods] Ten family members narrated their experience twice over two weeks using prepared questions with a nurse, and their narratives were categorized as qualitative analysis.

[Ethics] This study was approved by the board of ethical committee from a college.

[Results] The categories regarding taking care at home were, "feeling that home is better" or "taking care at home was natural." Categories related to difficulties in care-taking were "difficulties of economic problems" or "problems about physical and mental syndrome." Categories regarding good things in home care was like "being safe" or "strengthening family ties."

[Discussion] From these categories, family members had difficulties, however they found these coping and recognized caring positively.

P2-253

Contamination of infection-protective clothing surfaces of nurses during patient repositioning

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[Objectives]

To identify areas of contamination when nurses wearing infection-protective clothing reposition patients.

[Methods]

The subjects were two healthy nurses who were asked to reposition simulated patients from a sitting to a standing position, and back to sitting position in another chair. To identify areas of contamination on the surface of infection-protective clothing, the patients wore full-cover clothing that was dusted with fluorescent powder. The nurses wore protective clothing (ISO Class 5) over their uniforms, including goggles, N95 masks, and gloves, before repositioning the patients. Immediately after repositioning, we carefully examined the surfaces of nurses' infection-protective clothing under a black light to identify the areas of contamination.

[Ethics]

The study protocol was approved by the Ethics Committee of the on-site academic institutions.

[Results]

We found the left and right chest to be the areas of highest contamination, followed by the forearm, glove palm, flank, and thigh. Further, most of the fluorescent powder on the patients' backs spread to the test subjects' uniforms.

[Discussions]

Due to the risk of carryover, healthcare workers should be better educated on properly wearing protective clothing.

This study was supported in part by Grants-in-Aid for Scientific Research (15H02581) from (JSPS).

Poster**Others****P2-254****The effect of soft massage therapy on comfort level after laparoscopic surgery of gastric intestinal (GI) cancer: Pre and post quasi-experimental design**OShoko Ogata¹, Yukiko Kukimoto², Masako Sotomura²¹*Faculty of Nursing, Seisen University, Japan*²*Faculty of Nursing, Morinomiya University of Medical Sciences, Japan*

[Objectives] The number of laparoscopic GI surgery has increased. Comfort care is vital for taking care of post-surgical patients and soft massage is one of the nursing skills used to promote comfort for them. The purpose of this study is to assess the effect of soft massage therapy after laparoscopic GI surgery by using the Comfort Visual Analogue Scale (Comfort VAS). Kolcaba proposed that Comfort can be measured through three factors; relief, ease, and transcendence (empowerment).

[Methods] Post-surgical GI cancer patients were assigned to either a massage group plus standard care or standard care only. Two days post-surgery, massage group patients received soft massages on their back for ten minutes. Comfort VAS, and heart rate variability (HRV) were measured for both groups before and after the intervention.

[Ethics] This study was approved by both university and hospital research committees. Participants were explained the study protocol and agreed to sign the consent form.

[Results] Eighteen participants agreed to join this study, three with stomach and 15 with colon cancer. For the massage group, the states of relief ($p=.034$) was statistically significant, but total comfort ($p=.905$), ease ($p=.091$), transcendence ($p=.078$) and HRV were not significant compared with control group.

[Discussions] We could not conclude that massage therapy promotes comfort for patients in post laparoscopic surgery of GI cancer. One of the reasons is that the intervention was not enough to reach comfort level and more often and longer length of massage therapy should be provided to enhance comfort state.

P2-255**Practices by Care Managers of Interdisciplinary home palliative care for lonely end-stage cancer patients in Japan**OChise Wada¹, Kuniko Ishii², Shigeru Kobayashi³, Takeshi Ogura³, Takako Sagino⁴, Joe Nakano⁵, Miharu Nagasaka⁶, Mitutoku Wada³¹*Doctoral Course / Division of Chronic Illness and Conditions Nursing / Department of Nursing, Kobe University Graduate School of Health Sciences, Japan*²*Faculty of Nursing / Department of Nursing, Hyogo University, Japan*³*Faculty of Lifelong Welfare / Department of Social Welfare, Hyogo University, Japan*⁴*Faculty of Nursing / Department of Nursing, Himeji University, Japan*⁵*Hachibusenosato, SEKIJYUKAI of Social Welfare Corporation, Japan*⁶*Akashi-City Council of Social Welfare, Akashi-City Office, Japan*

[Objectives] Even in Japan, there is an urgent need to establish, disseminate, and enhance home palliative care. In particular, an interdisciplinary approach to home palliative care is important for lonely end-stage cancer patients. However, few Care Managers can provide primary care. Thus, this study identified experienced Care Managers' practice contents of interdisciplinary home palliative care for lonely end-stage cancer patients.

[Methods] A semi-structured interview was conducted with each of 9 experienced and knowledgeable Care Managers. The survey contents were analyzed qualitatively and extracted practice contents of interdisciplinary home palliative care for lonely end-stage cancer patients. Data were classified by code, subcategory, and category on the basis of similarity.

[Ethics] The survey was conducted between June and September 2017, with the approval of the ethics committees of the University.

[Results] Four categories and 18 subcategories were extracted in the experienced Care Manager's practice contents. The categories were: (1) Coordinate a team for interdisciplinary home palliative care to support end-of-life patients, (2) Provide support to prepare a comfortable and individual life from the present to the future, (3) Establish a relationship as a partner in life, (4) Carry out support with a line-up of patient values and beliefs.

[Discussions] Care Managers, based on the hospice mind, didn't neglect efforts to know the life history and feelings of the patient, and shared what they knew with team members, thereby enabling a comprehensive approach.

Poster

Others

P2-256

Development of a Web-based System for Recording Patient Reported Outcomes of Chemotherapy Side Effects

○Hiroyuki Yamamoto, Yuko Kitamura

Nursing Care Research Division, Shizuoka Cancer Center Research Institute, Japan

[Objective]

For most cases, chemotherapy has taken the form of outpatient treatment. This has led to the patients having to cope with its side effects by themselves. We develop a web-based system for recording patient reported outcomes (PRO) concerning the side effects of chemotherapy. This proposed system aims at alleviating the burden of cancer patients and prevent aggravation of its side effects.

[Method]

We constructed a web-system that can be used without any support from the device being used. The criteria used to evaluate PRO is the one developed in our previous study. Patients can rate the severity of their side effects from in a scale graded from 0 to 3.

[Results]

The system enables self-adjustment of its size depending on the used device. The user logs in using a management "ID" and password and selects a day from the calendar located at the top of the screen. The user can evaluate a maximum of ten different side effects and check a graph of the side effects record by a single tap. The input information is saved in cloud. This system is designed to collect information related only to side effects.

[Conclusions and Future Work]

The system enables medical staff to timely intervene to the user, and to use of the information of the side effects for medical examination. We conduct a clinical study of this system. In terms of future enhancement, we plan to evaluate the efficiency of the system for the management of chemotherapy related side effects.

P2-257

Relationship between emotional intelligence and psychological distress among psychiatric nurses in Japan

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[Objectives]

A critical problem among the healthcare workforce in Japan is the shortage of psychiatric nurses. To improve their retention, it is important to manage their mental health. Job stressors contribute to poor mental health, including psychological distress, and could be addressed by workplace improvements. Additionally, psychiatric nurses should make individual efforts to maintain their mental health. Emotional intelligence, which is the ability to understand and control emotions, is a factor that could improve mental health. However, this has not been sufficiently demonstrated among psychiatric nurses. This study examined the relationship between emotional intelligence and psychological distress among psychiatric nurses in Japan.

[Methods]

A survey was conducted in 2018 on 422 psychiatric nurses in Japan. Participants completed a self-administered questionnaire, which assessed the demographics, job stressors, four sub-dimensions of emotional intelligence (self-emotions appraisal, others-emotions appraisal, regulation of emotion, and use of emotion), and psychological distress. Data were analyzed using multiple regression with psychological distress as the dependent variable.

[Ethics]

This study was approved by the Institutional Review Board of Kobe University, Japan.

[Results]

The mean age of participants was 42.0 ± 11.4 , and 283 (67.1 %) of the participants were women. After adjusting the values of demographics and job stressors, regulation of emotion was negatively associated with psychological distress ($\beta = -0.19$; $p < 0.001$).

[Discussions]

Skills that enable psychiatric nurses to remain calm in stressful work situations may reduce psychological distress. For protecting the mental health of psychiatric nurses, their emotional control skills should be educated.

Poster**Others****P2-258****A study on the importance of nursing for intractable neurological disease patients with dysesthesia**○Yuko Yamamoto¹, Rika Moriya²¹*Department of Nursing, Faculty of Health Sciences, Kio University, Japan*²*Faculty of Nursing, Setsunan University, Japan*

[Objectives] The purpose of this study was to clarify the importance of nursing for symptomatic patients with intractable neurological diseases from the viewpoint of nurses in neurology wards.

[Methods] Self-report questionnaires were mailed to 677 nurses belonging to 24 facilities, which were randomly extracted from 378 certified educational facilities accredited by the Japanese Society of Neurology. They were asked to describe the subjective importance of nursing care for symptomatic patients with intractable neurological diseases. The data were analyzed qualitatively and inductively using content analysis.

[Ethics] The research proposal was approved by the ethics committee of the Institutional Review Board of our respective facilities.

[Results] Responses were obtained from 243 nurses, and the collection rate was 35.9%. 1) Background of the subjects: The mean age was 36.4 ± 9.7 years old and they had 5.8 ± 4.9 years of neurological nursing experience. 2) Important nursing activities: The following seven categories were generated: [Active listening to the needs or feelings of patients] [Patient understanding through careful observation] [Being with patients] [Safe and comfortable care to relieve pain] [Sincere attitude] [Interprofessional collaborative practices] [Family nursing].

[Discussions] For intractable neurological disease patients with dysesthesia, it is thought that nurses should be close to the patients in a sincere manner, make efforts to understand them, and do as much as possible to relieve their pain. However, considering the characteristics of the disease, it is difficult to alleviate the symptoms. Therefore, it is necessary to support the nurses to prevent burn-out. (JSPS 16K12046)

P2-259**Coping with difficulties in conducting research among nursing educators at the early-career stage**○Yuko Yamamoto¹, Kayoko Ishimura², Akiko Suzuki³, Fumie Murai⁴, Aya Ishihara⁵, Ritsuko Yamada⁶¹*Department of Nursing, Faculty of Health Sciences, Kio University, Japan*²*Ichinomiya Kenshin College, Japan*³*Faculty of Nursing, Josai International University, Japan*⁴*Faculty of Nursing, Tokiwa University, Japan*⁵*School of Nursing, Hyogo University of Health Sciences, Japan*⁶*School of Nursing and Social Services, Health Sciences University of Hokkaido, Japan*

[Objectives] The purpose of this study was to determine how nursing educators at the early-career stage cope with difficulties in conducting research.

[Methods] 1) Study participants: twenty-two assistant professors working at nursing universities. 2) Data collection: semi-structured interview. 3) Subject of study: coping with difficulties in conducting research. 4) Data collection period: 03-09/2018. 5) Analysis method: qualitative inductive analysis.

[Ethics] The study was approved by the institutional review board of the university which the researcher belongs.

[Results] 1) Background of participants: The mean age was 39.1 ± 4.8 years, and the mean duration of being an assistant professor was 3.7 ± 2.0 years. 2) Coping with research difficulties: eight categories were generated; [support from their superiors to conduct research] [support from their superiors to improve research ability] [being in a good working environment to conduct research] [learning techniques from colleagues and seniors] [arranging the environment to improve ease of conducting research] [utilization of the doctoral program to learn research methods] [self-learning of research methods] [emotional adjustments].

[Discussions] The nursing educators at the early-career stage coped with difficulties in conducting research by receiving support from their superiors and actively improving their research abilities. On the other hand, they had to make emotional adjustments, such as lowering the priority of research, because of childcare and many work tasks. From a long-term perspective on their career, the life-work balance should be considered, and support should be provided. (JSPS 17K12146)

Poster

Others

P2-260

Evaluation of wearable devices in tracking daily steps of people with diabetes: a systematic review and meta-analysis

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[Objectives]

Early self-care is considered important to prevent serious complications associated with progression of diabetes mellitus (DM). In recent years, daily activity has been monitored using technology. The researchers reviewed how wearable devices were used for people with DM to track daily steps.

[Methods]

A comprehensive literature search was performed using CINAHL, PubMed, PsycINFO, and Cochrane Central Register. Literature which featured, 1) DM persons, 2) use of wearable devices, and 3) an intervention study of 4 weeks or more, were extracted. Following this, two investigators independently screened the full text, assessed potential bias risk, determined overall content, and extracted data according to the Cochran Data Extraction Form.

[Results]

Four randomized control trial (RCT) studies were identified and meta-analyzed: Bender (2017), Grewal (2015), Kooiman (2018), and Polgreen (2018). The studies included 285 diabetic participants. Across studies, 167 intervention groups and 118 control groups were compared. Polgreen's intervention featured wearable device use and goal-setting, across intervention and symmetry groups (3-arm RCT). The interventions used only Fitbits and included reminders from medical personnel. Others studies defined intervention groups according to the use of wearable device. The intervention periods ranged from 28 to 180 days.

[Discussions]

There are several intervention using wearable devices for tracking the number of daily steps for people with DM. The results should be interpreted carefully across different methods. Future studies should examine the effects of intervention methods, including the use of indicators related to psychological status as well as the assistance from healthcare workers in self-care. (JSPS19H01082, PROSPERO CRD42018111632)

Support to the terminal care of the dementia elderly person

P2-261

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Background & Objection: This study aims to clarify how family members deal with terminal care at home for dementia elderly members (hereafter DEM) and how they evaluated their experiences of it.

Methods: Self-administered questionnaires are delivered to those who experienced terminal care at home for DEM. This contains questions for respondents' character; symptoms at the end of life (CAD-EOLD); family members' level of satisfaction with care and so forth.

Analysis & Ethical: SPSS ver.20 was used for analysis. Ethical considerations for potential participants are explained by written document. The approval for this questionnaire survey by potential participants confirmed by returned mails into which questionnaires were put.

Results: Respondents' average is 65.6 (± 9.3) years old, female dominates almost 80%, and their family status are spouses and daughters. The respondents evaluate that DEM, keeping their well-being, died at home quietly and peacefully, though they had have dysphagia, uneasiness and/or difficulty at breathing. 80% of respondents evaluates that their DEM care had been sufficient but do not evaluate few information about it. The satisfaction of their experience of DEM's death at home is higher than those at hospital ($P=0.000$), however, they felt stress by decision making for use of gastrostomy and/or infusion.

Discussion: DEM could spend last days at home quietly and peacefully with their family members. Nurse may contribute for reducing these members' stress by giving useful and sufficient information for terminal care for DEM when gastrostomy and/or infusion are needed for them.

Poster**Others****P2-262****Reflective reports show peer-learning effects**

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[Objectives] The peer-learning effect in clinical practice has been studied using self-rating questionnaires or interviews. This study analyzed students' reflective reports using text-mining methods to reveal the peer-learning effect.

[Methods] Peer learning was implemented in second-year nursing students' clinical practice to promote inpatients' activities of daily living. Learning in pairs in clinical practice is still not yet common in Japan; therefore, students were paired only in hospital settings where circumstances allowed. The students were asked to describe the details of their most impressive experience in their reports. Text-mining methods were used to compare the most frequently used and distinctive words between traditional one-patient-to-one student and paired peer-learning student groups. This study was approved by the ethical committee of Josai International University.

[Results] Fifty-seven reports using the traditional model and 23 peer-learning reports were analyzed. Highly frequently used terms in both groups were "bed-bath," "foot bath," "hands," "lower limbs," "body," and "towel," which showed that students most frequently mentioned bathing-related scenes. When distinctive words were compared among the groups, terms related to persons, i.e., "I," "supervisor," "together," and "nurse" were prominently used in the traditional group. In addition, terms describing one's behaviors, such as "prepare," "transfer," "convey," and "arrange" were distinctive in this group. However, "kiku" (i.e., ask/listen in Japanese), "good," "skin," "tense," "edema," "smile," "expression," and "patient's voice" were prominent in the peer-learning group.

[Discussion and Conclusion] Our study suggested that peer-learning students have engaged practices with more autonomy and their focus was more on patient observations.

P2-263**The experiences and understanding of dementia among community volunteers at a dementia café**

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[Objectives] This study explored the experiences of community members volunteering at a dementia café with people with dementia and their families and their understanding of dementia.

[Methods] Semi-structured interviews were conducted with seven community members who had been volunteers at a dementia café for at least one year. Qualitative and descriptive analyses were used.

[Ethics] This study underwent ethical review by the affiliated institution and was approved by the café manager. The study's objectives, methods, and ethics were explained to the potential participants, orally and in writing, before obtaining their consent.

[Results] All of the participants were female (mean age: 68.4 ± 4.5 years). Five participants had experience as caregivers for elders with dementia. The participants indicated that people with dementia "have diverse symptoms," the diseases are "progressive," and they are "terrible diseases." The participants interacted with people with dementia "as they would with non-afflicted people" and they stated that, despite their "troubles," people with dementia have "their own plans" and are "living normally." Regarding family members, the participants stated that they indicated the "difficulty of caregiving" They tried to "send them home in a good mood." The participants considered dementia a "disease that could happen to anyone" and that they might be people with dementia or family caregivers someday.

[Discussions] The participants' direct interaction with people with dementia and their families promoted their understanding of dementia and its relevance to their lives as community volunteers.

This work was supported by JSPS KAKENHI Grant Number JP18K17600.

Poster

Others

P2-264 Review of the literature on support for toileting independence provided to elderly care recipients

○Yumi Tanaka, Tomoko Sakai

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[Objectives]

This study involved a review of the literature from Japan to clarify the current state of support for toileting independence provided to elderly care recipients.

[Methods]

Ichushi Web was used to conduct a search of the literature. Original papers published within the past 10 years, between 2009 and 2019, were sought using the key words "elderly person," "toileting," "independence," and "support." The abstracts of 67 applicable papers were read and 19 papers were identified. The papers were analyzed regarding their research field, and the state of support in each research field.

[Ethics]

Sufficient caution was paid to the handling of copyright relating to the papers.

[Results]

The research site was the home in 4 papers, hospitals in 8 papers, and special nursing homes for the elderly or long-term care health facilities in 5 papers. Papers in which the home was the research site described support for elderly people with urinary incontinence, including maintenance of physical function, caregiver support, and coordination with physicians. In hospitals, the papers reported evaluation of lower urinary tract function and clarification of criteria for judging symptoms in pursuit of early discharge in addition to guiding care recipients to toilet and training tailored to the home toilet environment. In facilities, the papers reported support for improving malnutrition and achieving independent movement indoors.

[Discussions]

Cases of elderly people transitioning between care locations such as the home, hospitals, and facilities also exist, suggesting that mechanisms to continue providing support for toileting independence without interruption are also needed.

P2-265 The Difficulties Experienced by Visiting Nurses in Settings of End-of-life Decision Making

○Satomi Nakagi

School of Nursing, Sanyo Gakuen University, Japan

[Objectives]

To reveal the difficulties experienced by visiting nurses in settings of end-of-life decision making.

[Methods]

The survey was executed using a mail-in, anonymous self-report multiple choice and free response form. Content analysis was performed through the process of categorizing the difficulties.

[Ethics]

This research was performed after approval by the ethical review board of Sanyo Gakuen University (Approval No.: 2018-015).

[Results]

Of the 72 subjects who responded "yes" to having experienced difficulties in providing support for decision-making regarding end-of-life treatment and care, 61 gave specific descriptions and 7 categories were selected from these: "difficulty when confirming the decision," "difficulty interacting when the patient does not understand the condition," "confusion when there is a gap between the patient's perception and that of their supporters," "difficulty providing support when the patient is accepting their condition and feeling lost," "difficulty in gaining cooperation from the family," "wavering feelings on the part of the visiting nurse," and "difficulty coordinating with doctors."

[Discussions]

The current reality, in which support for decision making must be provided while also carrying out necessary procedures and care with only limited time, making it impossible to take sufficient time to understand the decisions, was thought to be leading to difficulties. Further, it was found that, because the end-of-life period in older adults varies due to many factors, it is difficult to predict the time they have left and it may not be possible to fulfill the patient's requests, causing feelings of difficulty in visiting nurses.

Poster

Others

P2-266

A Qualitative Study on Nursing Practice for Intractable Neurological Disease Patients with Dysesthesia

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²Department of Nursing and Medical Care, Faculty of Health Science, Kio University, Japan

[Objectives] To reveal actual practice of nursing for intractable neurological disease patients with dysesthesia.

[Methods] One hundred out of 378 educational facilities certified by the Japanese Society of Neurology were randomly extracted. Then, an anonymous self-administered questionnaire survey was conducted regarding nursing practice in 677 nurses, in the neurology department of 24 facilities. We considered that the consent for this study was obtained by the submission of a questionnaire from the participants. In analyses, the data were inductively abstracted to create categories.

[Ethics] The survey was conducted with the approval of the Ethics Review Board of the researcher's institution.

[Results] Two hundred forty-three nurses responded to the survey, and the collection rate was 35.9%. (1) Background of the subjects: the mean age was 36.4 ± 9.7 years old, and the mean number of years practicing nursing at neurology department was 5.8 ± 4.9 years. (2) Following 7 categories were obtained as actual practice of nursing for intractable neurological disease patients with dysesthesia: "understanding and assessing patients", "Palliation of dysesthesia", "assisting in activities of *daily living*", "prevention of secondary complication", "consideration to respect patients in provision of care", "paying attention to communications", and "providing team-collaborative care".

[Discussions] In addition to providing direct care to alleviate dysesthesia of patients with intractable neurological disease, nurses appeared to be making efforts to understand the patients and respect them through communications.

P2-267

The aging lifestyle of older adults with dementia living at home and the support provided by their family members and caregivers

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[Objectives]

To describe the lifestyle of older adults with dementia living at home and how their family members and caregivers perceive and support their desired lifestyle of such older adults.

[Methods]

Participants included 7 groups, each comprising an older adult with dementia living at home, their family members, and the assigned caregiver. Data were collected via semi-structured interviews, and verbatim records were created. These data were subsequently categorized and analyzed in a qualitative descriptive manner.

[Ethics]

The researchers provided verbal explanations to the groups using explanatory documents describing the ethical considerations and obtained signed consent forms. This study was approved by the Ethics Review Committee of the researchers' universities.

[Results]

Through their "life experiences," older adults with dementia had the ability to play "roles that use their work and hobbies as strengths." Moreover, their family members and caregivers supported and encouraged them to practice such roles. Such older adults "shared their bewilderment and feelings" with family members and had a "place where their self-esteem is not threatened" in their homes or community and in places where they received care services. The "involvement of caregivers" accorded with the feelings of these older adults and their families.

[Discussions]

To ensure dignified quality of life of older adults with dementia, caregivers must understand their desired lifestyle and the feelings of their family members, grasp the symptoms of dementia and situation of home care, bring out their "strengths," and provide a place where such older adults can have a sense of security.

Poster

Others

P2-268

Current state and problems of child rearing by fathers having infants through midwives' recognition

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[Objectives] This study aimed to clarify how the midwives in charge of home-visit of newborn babies recognized the current state of child rearing by fathers, and gather materials for the future childcare support.

[Methods] Semi-structured interviews were conducted with eight midwives in charge of home-visit of newborn babies. Their narratives were transcribed verbatim, and qualitatively and inductively analyzed to obtain categories.

[Ethics] This study was approved by the ethics committee of the institution one author belonged to.

[Results] From 18 sub-categories, the following six categories were extracted: [childcare by father depending on his situation and circumstances], [increasing number of fathers positively involved in household chores and childcare], [father's involvement in childcare interrupted by his work], [young parents bound by the consciousness of gender role-based division of labor], [difficulty in relying on father for childcare] and [self-centered father].

[Discussions] The Japanese government has promoted fathers' involvement in childcare. The midwives found many young fathers to show a positive attitude toward childcare. However, they pointed out that fathers just gave assistance to mothers in most cases. The interviews also indicated lack of childcare skill in some fathers. On the other hand, it was found that the idea of gender role-based division of labor still remained in some young parents. It is considered necessary to support fathers as well as mothers from the pregnancy period by providing them with classes for expectant parents where they can understand the newborn babies' characteristics and learn how to treat the babies.

P2-269

Characteristics of childcare difficulties of mothers raising infants with SGA short stature

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[Objectives]

Recent years have seen increasing numbers of newborns with low birthweight in Japan, even as the birth rate falls overall. Small for gestational age (SGA) is a subcategory of low birthweight; affected infants who fail to achieve catch-up growth by the age of two are diagnosed with *SGA short stature*.

This study sought to identify the characteristics of the difficulties perceived by mothers related to raising young children with SGA short stature.

[Methods]

Forty-nine mothers of children with SGA short stature were given an anonymous self-report questionnaire.

[Ethics]

This study received the approval of the Seisen University Ethics Review Committee. Returning the questionnaire was considered to indicate informed consent.

[Results]

Questionnaires were returned by 28 mothers (response rate: 57.1%). Sample characteristics were as follows (all mean \pm SD): mother age: 37.07 ± 4.97 y, child age: 4.6 ± 1.1 y, birth height: 41 ± 2.9 cm, birth weight: 2021 ± 405 g, current height: 97.1 ± 7.9 cm, current weight: 13.6 ± 2.1 kg. Mothers' remarks demonstrated major concerns about childcare of every variety, and a perceived inability to understand their child.

[Discussions]

Mothers raising SGA short-stature children in early childhood seem not to regard childcare itself as difficult, but feel turmoil and blame themselves for their child's small size at birth, as well as worries based on negative perceptions of potential developmental diseases they may face.

Poster

Others

P2-270

Relationship between the presence or absence of sequelae and health-related QOL in patients with mild stroke

○Eiko Tomizawa

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[Objectives]

The present study aimed to clarify the relationship between the presence or absence of sequelae and health-related quality of life (QOL) in patients with mild stroke and to provide insight into improvements required in nursing support.

[Methods]

Of patients with cerebral infarction or cerebral hemorrhage who had developed stroke and were treated on an outpatient basis or hospitalized in a stroke care unit or ward, those without dementia who were able to communicate were included. Health-related QOL was investigated using the Optum SF-8 Health Survey (eight items, 5 and 6-point Likert scales).

[Ethics]

This study was approved by the Medical Research Ethics Review Board of the Tokushima University Hospital (approval number, 3134-1).

[Results]

Responses were obtained from 112 patients with stroke. Mean(SD) SF-8 subscale score was 45.0 (9.2) for general health, 41.5 (13.0) for physical functioning, 40.8 (13.7) for role physical, 51.5 (10.2) for bodily pain, 45.6 (7.9) for vitality, 43.9 (11.3) for social functioning, 46.6 (9.7) for mental health, and 45.9 (10.4) for role emotional. For patients in whom stroke onset occurred <1 month earlier, those with NIHSS ≥ 2, and those with Barthel Index score <60 points, all SF-8 subscale scores, except for bodily pain, were significantly different from those of other patients ($p < .05$).

[Discussions]

The results suggest that bedside rehabilitation by nurses from the early stage after stroke onset is crucial for preserving activities of daily living and alleviating sequelae, thereby improving the QOL of patients with stroke.

P2-271

Coping with bereavement of elderly widowers: A qualitative study

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[Objectives]

Exploring nursing suggestions for elderly widowers to cope with the bereavement of losing their wives.

[Methods] Two elderly widowers participated in this research. Semi-structured interviews were conducted and the descriptions of interviews were analyzed by content analysis. Analysis was conducted by three researchers who engage in geriatric nursing, home care nursing, and qualitative research.

[Ethics] Two widowers were explained the purpose of this research, optionality of participation, publication before signing an informed consent (Ethics committee of SAGA University of medical faculty: 30-5).

[Results] Ages of the participants were ninety and seventy. The lengths of bereaved were 10 years and one year, respectively. Their responses were classified into four categories and fifteen subcategories. The four main categories were labeled: [looking back on a role as a husband after the death of his wife], [appreciation for social support], [the avoidance of grief to cope with life] and [rebuilding their own life].

[Discussions] The bereaved experiences became an opportunity for widowers to think about the significance of their wife's existence and their role as a husband. However, they tended to avoid healthy grieving process by focusing on their past activities or challenging things they had never tried, such as cooking. Interestingly, even though it has been 10 years since one participant's wife's death, he was still avoiding grieving the death. The present study suggests that it is important to understand that widowers need individual care and support regardless of time since the death.

Poster

Others

P2-272

Investigating Elements Necessary for Strengthening Organizations to Build Community-Based Integrated Care Systems for Children Who Need Constant Care

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[Objectives]

We investigated the elements necessary for strengthening organizations to expand community-based social and medical support for children who need constant care and for building up a social foundation to support this kind of care.

[Methods]

In three Japanese prefectures, we interviewed 12 administrators and health professionals at eight organizations about their organizational activities designed to strengthen functions to build up community-based integrated care systems. We looked at how they collaborated with other organizations applying four aspects of organizational development. We also collected data from activity participation logs and reports. We analyzed these data to identify elements necessary for strengthening organizations.

[Ethics]

The research protocol was approved by the University's ethics committee.

[Results]

We found that staff in each prefecture have their own particular approaches to organizing activities and building collaborations. We found three different approaches: (1) strategic interventions to advertise their organizations and their activities by sending out requests and publicizing their work, (2) maximizing the use of human resources to provide professional training and consultations, and (3) personal development to build face-to-face relationships between healthcare professionals and families through trainings and HIROBA activities. We also found that community healthcare nurses are aware of the importance of translating support for individuals into community-based support and encouraging individual development by organizing meetings for organizations to communicate with each other.

[Discussions]

Further technical and structural development is needed to specify the dynamics of collaborations of different organizations and professionals to build community-based integrated care systems.

P2-273

Use versus non-use of wearable device in monitoring physical activity in people with chronic disease: a systematic review and meta-analysis

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[Objectives]

To support patients with chronic disease (CD) at home through a telenursing system, monitoring specific indicators of illness without adding to their sense of burden is important. Recent studies show that using a wearable device (WD) was useful for dual monitoring by patients and their healthcare providers. The present systematic review shows the effectiveness of using WD to monitor physical activity duration in patients with CD compared to those without WD.

[Methods]

A comprehensive literature search of relevant published literature was conducted dating up to October 23, 2018. Key search terms were (wearable devices OR wearable technology OR smart watch OR waist belt OR active tracker OR wearable electronic devices) AND (chronic obstructive pulmonary disease (COPD) OR diabetes (DM) OR congestive heart failure (CHF)). Studies included i)those with COPD, DM or CHF patients, ii)studies comparing WD use, iii) those with more than 2 weeks of intervention, and iv)studies utilizing randomized controlled trial (RCT) or controlled clinical trial (CCT) designs.

[Results]

We identified and evaluated two RCT studies, Deka (2016) and Grewal (2015). The studies included 70 participants with CHF or DM. Physical activity times were aligned every 150 minutes for comparison. There was no difference in activity time (Deka, 2016) or changes in time spent walking based on WD use (Grewal, 2015).

[Discussions]

The available studies were limited; there were only two studies, both with small sample sizes. We found little evidence comparing the effectiveness of the WD. Further studies using different intervention could possibly change these conclusions.PROSPERO/CRD42018111632/JSPS19H01082

Poster

Others

P2-274

Behavioral process of mothers for children who develop childhood cancer and receive initial treatment in early childhood

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[Objectives] To clarify the behavioral process of the mother corresponding to a child who has developed childhood cancer and received initial treatment in early childhood.

[Methods] The study included 6 mothers of children with childhood cancer who visited Hospital A. We conducted a questionnaire on age and treatment of affected children. After that, a semi-structured interview was conducted for about one hour per person. The question is, "What kind of relationship did you have with your family and other people in the period from the onset of the child's illness to the end of the first treatment? Was it?"

[Ethics] Hospital A and Yamanashi Prefectural University were approved by ethics review and approved (approval number 1714).

[Results] The storyline of the result was that the mother was unwilling to accept her child's illness when diagnosed. At the same time, she was linking her child's illness to behavior. She was healed by her husband encourage each other to mutually, and trust the medical staff, so that she could concentrate on the treatment to heal. She was acting with the recognition that she was to be the most important person to take care of sick children. Husbands, family members, and mom friends were power resources for mother who take care of her children.

[Discussions] The core category of this study is < The most important person to take care of the child >. The importance of supporting husbands and their families was suggested, as mother is the leading person in child care.

P2-275

Current status of educational pamphlets for families of terminally ill patients at home

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[Objectives] Recently, pamphlets explaining the signs and symptoms of the dying process and how to care for a loved one have been developed as aids for families of terminally ill patients. The purpose of this study was to explore the current status of educational pamphlets for families of terminally ill patients.

[Methods] We sent out the questionnaire to 2000 visiting nursing station directors in Japan, and obtained responses from 431 (response rate: 21.6%). Seven directors were excluded from this analysis, because their stations opened up at the survey.

[Ethics] This study was approved by the Ethics Review Committee of SAGA University of medical faculty.

[Results] Fifty-two percent of the directors (n=221) used the pamphlets. Most directors who used pamphlets recognized their usefulness for families, including that they helped families understand the patient's present condition, care for the patient, and understand the dying process. About 80% of directors who used pamphlets also recognized their usefulness for visiting nurses, indicating that they helped visiting nurses strengthen their relationships with patients' families, and provide explanations to families clearly and confidently. However, about 50% of pamphlet users in the present study found it difficult to decide the timing. Forty-eight percent of the directors (n=203) didn't used the pamphlets. The main reason given for not using pamphlets was that there were none available (n=100). Some directors have considered using pamphlets.

[Discussions] It is possible that pamphlet use may increase if we can elucidate why some directors do not find timing to be an issue.

Poster

Others

P2-276

A Study of Literature on Delirium prophylactic Care for The Elderly in ICU

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[Background] With the growth of global population of the elderly, a number of ICU sit-ins for the elderly over 65 is increasing. It is said that developing delirium in elderly affects their prognosis and QOL after discharge from ICU. The purpose of this study is to summarize domestic and international articles on the prevention of delirium in the elderly in ICU, and to provide a basic material for considerable tasks in nursing practice.

[Methods] The database is based onPubMed, CINAHL, CiNii, and Japan Medical Abstracts Society databases¹ in addition, keyword of "delirium," "gerontology," "ICU," "Nursing," in 2008-2018 13 articles were selected to analyze among Japanese and English written articles.

[Ethical approval] The subject of articles has been published, therefore it has not been applied for ethics reviews.

[Results] The most of the articles were about delirium prevention and treatment, followed by educational intervention programs for delirium prevention.no studies was found regarding intervention programs or protocol evaluations for the elderly.

[Discussion] Only a few reports were found of delirium prophylactic care targeting on elderly in ICU. It is expected that more elderly people will need treatment in ICU in the future. Considering the prognosis and QOL of elderly patients after leaving ICU, delirium prevention is essential. to creating guidelines and intervention programs based on the characteristics of the elderly were necessary, referring to existing guidelines, etc., To aim the effort of delirium prophylactic care, it needs to conduct and collect further research in elderly.

P2-277

Experiences and Interactions among Children with Cancer, their Parents and Health Care Professionals During End-of-Life Decision-Making Process: a Systematic Review and Meta-Ethnography

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²Child Health Nursing, St. Luke's International University Graduate School of Nursing Science, Japan

[Objectives] To synthesize the qualitative studies of the experiences of children, parents and health care professionals (HCPs) and their interactions during End of Life (EoL) decision-making process in pediatric oncology settings.

[Methods] Studies eligible for inclusion in this research are those that explore the experiences of children with cancer, parents and HCPs and their interactions during EoL decision-making process, and are published in English or Japanese using qualitative methods. PubMed, CINAHL, PsychINFO were searched, combined with citation tracking and hand searching. Quality assessment was implemented independently using Critical Appraisal Skills Program checklist by two researchers. Studies were synthesized using techniques of meta-ethnography.

[Results] Twenty-one studies were eligible. Most of the participants were parents and/or HCPs, and only two studies involved children. Three themes emerged within experiences: (1) "Hope and confrontation with the child's death": social role and responsibilities as a parent, parental hope, avoiding confrontation with the child's death, and awareness reality and finding new hope; (2) "Guide and support in uncertainty": supporting hope of children and parents, uncertainty as barriers; (3) "Awareness and hope in being protected": under controlled information, pretending and silence, unknown child's hope. For interactions during the process, one theme emerged: "Integration of values under tacit understanding": misalignment in value of children, parents and HCPs and hope protected by uncertainty.

[Discussions] This meta-ethnography presents distinctive and complex three-direction interactions during EoL decision-making process. Children, parents and HCPs were considerate to others, while maintaining uncertainty and future-oriented hope, finding new hope in the real world.

Poster**Others****P2-278****Characteristics of induration occurring after intramuscular injection of hormone preparations**

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²Faculty of Health Sciences, Tohoku Fukushi University, Japan

[Objectives]

The present study was conducted to clarify the circumstances of induration occurring at the site of Fulvestrant injection in women receiving hormone preparations for postmenopausal breast cancer and the nursing care offered for it.

[Methods]

We conducted a questionnaire survey of nurses treating patients with Fulvestrant injection. Questionnaires were mailed to hospitals and returned individually using a reply envelope.

[Ethics]

The questionnaire was anonymous, and the cover stated the purpose, method, and ethical considerations of the study, which was approved by our Research Ethics Review Board (Approval No. 19-8).

[Results]

Eighty-four copies of the questionnaire were mailed and 38 copies were returned (response rate 45.2%). Among the nurses who responded, 63.2% had experience of induration, which ranged from 1.0 to 2.0 cm in diameter. Half showed no apparent change, whereas some formed ulcers and scars. No care was given for induration itself, and 60% of affected patients complained of pain or discomfort. All nurses complained of injection difficulty, insertion difficulty, anxiety, fear or stress.

[Discussions]

Induration due to Fulvestrant was confirmed to occur with a fairly high probability. Although it occurred within a small area, it appeared to worsen if effective care was not given. In addition to difficulty in offering complete treatment, nurses were aware of a psychological burden. Many of the patients complained of pain and discomfort, indicating the need to consider measures to prevent or treat induration.

P2-279**Literature review on factors associated with S-IgA level changes in breast milk due to maternal stress**

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²Graduate School of Health and Welfare Science, Okayama Prefectural University, Japan

[Objectives]

The objective of the study was to explore factors associated with S-IgA level changes in breast milk due to maternal stress based on a literature review.

[Methods]

As a result of a database search (Medical Journal, CiNii, PubMed, and Proquest) as of January 2019 and review of inclusion/exclusion criteria, 12 articles were identified.

[Ethics]

No ethical review is required for the study.

[Results]

POMS was the most frequently employed (in five articles) as a stress measurement scale. Four of the five articles demonstrated significant differences in the scores of S-IgA levels in breast milk. The survey was conducted from Day 3 to Week 6 after delivery. Significant differences were noted in age and experience of delivery. All analyses were performed by ELISA. Milking conditions included the time, timing, and volume of milk. Analytical conditions included the centrifugation time and dilution ratio of breast milk.

[Discussions]

Factors associated with S-IgA level changes in breast milk due to maternal stress may include the survey time and milking and analytical conditions. For measurement, the time, timing, and volume of milk should be matched, and dilution ratios should be adjusted according to the survey time and measurement ranges of kits.

Poster

Others

P2-280

Sherman(YUTA)'s function in support of the suicide surviving families in Okinawa

Keiko Suzuki, Michiko Shinzato, Kazuko Kito

Faculty of Nursing, Meio University, Japan

[Objectives] The purpose of this study is to clarify the role of Yuta in supporting suicide surviving families ("survivors") in Okinawa.

[Methods] We interviewed one Yuta regarding his interaction with survivors. The data was analyzed by qualitative descriptive analysis.

[Ethics] Approval for the study was obtained from the Research Ethics Committee to which the researchers belong.

[Results] Mr. A (Yuta) receives about 5-6 cases a year, and so far about 60 cases of survivor consultations. Survivors strongly desire to know the final circumstances and reason for the suicide, and whether the deceased are able to rest in peace. Mr. A calls on the souls of the dead and tells them "I will convey your pain and sadness." As a result, most of the survivors are very relieved and calm. It is important that sincere dialogue makes no distinction between bereaved and deceased, that it respects the dead, receives their feelings sensitively, and relieves suffering.

[Discussion]

In Okinawa, support for survivors is provided by local governments and self-help groups, but the issue has been that few participate, and it has not spread. This is because in a close-knit community, survivors are very fearful and anxious that talking about the suicide will make it known to others, who feel aversion toward it. On the other hand, it became clear that Yuta, a traditional shaman, fulfills an important function in caring for survivors and also for the souls of dead.

P2-281

Managing the risks of assistive technology for older adults with dementia living at home

Kazue Wakabayashi

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[Objectives] Assistive technology is frequently used in daily care for older adults with dementia. This study aimed to investigate the status of accidents involving older adults with dementia living at home when using assistive technology and to consider measures for their prevention.

[Methods] Surveys were sent to one assistive technology specialist consultant at each of the 622 assistive technology rental offices in the Tokyo metropolitan area. The survey was an anonymous self-report questionnaire that included questions regarding the status of accidents and the details of their operations pertaining to older adults with dementia. Analyses included simple tabulation, cross tabulation, and an investigation of countermeasures in the use of assistive technology by older adults with dementia living at home from the free response section.

[Ethics] This study was conducted after approval was granted by the ethical review board of the affiliated facility.

[Results] Survey responses were received from 168 individuals (27% response rate). The mean age of the responding assistive technology specialist consultants was 34.0 years old. Among 130 accidents, the most common was "bed railing" with 39 incidents (30%), followed by "climbing over the railing and falling" with 22 incidents (17%). Falls were not from the bed, but due to climbing over the bed railing and falling. "Walking assistance devices" accounted for 18 incidents (13.8%). Within this category, "wheelchairs (including motorized wheelchairs)" accounted for 16 incidents, while "walkers" accounted for 2 (0.01%).

[Discussions] Risk management in older adults with dementia must include the careful use of bed railings.

Poster**Others****P2-282****Research Related to Excretion Support for Home-Based Terminal Cancer Patients**

OKazue Wakabayashi

School of Nursing and Rehabilitation Science at Odawara, International University of Health and Welfare, Japan

[Objectives] Terminal cancer patients suffer from limited independence to conduct excretory actions owing to progression of the disease or changes in physical functions. We, therefore, aimed to study the support methods used by home-visiting nurses to help terminal cancer patients living at home to carry out excretory actions independently.

[Methods] The study targeted one nurse each from all the home-visiting nurse stations within the Tokyo Metropolitan Area that are part of The National Association for Visiting Nurse Service. Anonymous self-administered questionnaires were sent to the 668 nurse stations by post with a request to send the questionnaire back after completion. Items investigated included basic attributes (age, sex, number of years of experience), and status of excretion of terminal cancer patients as well as the support methods. Analysis included simple tabulation, cross-tabulation, and analysis of the current status and challenges related to excretion support for home-based terminal cancer patients based on the free description sections.

[Ethics] This study was conducted after approval was granted by the ethical review board of the affiliated facility.

[Results] We obtained responses from 222 visiting nurses (recovery rate of 35.6%). In terms of the gender distribution, 216 nurses were female (97.3%) and 6 nurses were male (2.7%). On average, the nurses had 13.3 years (± 9.3 years) of experience working in their current position. [Discussions] It is important for the patients to be able to excrete independently in order to maintain or improve their quality of life.

P2-283**Coping with teaching difficulties among nursing educators at the early career stage**OKayoko Ishimura¹, Yuko Yamamoto², Aya Ishihara³, Fumie Murai⁴, Akiko Suzuki⁵, Ritsuko Yamada⁶¹Faculty of Nursing, Ichinomiya Kenshin College, Japan²Faculty of Health Science, Kio University, Japan³Faculty of Nursing, Hyogo University of Health Science, Japan⁴Faculty of Nursing, Tokiwa University, Japan⁵Faculty of Nursing, Josai International University, Japan⁶School of Nursing and Social Services, Health Science University of Hokkaido, Japan**[Objectives]**

The purpose of this study was to clarify how nursing educators at the early career stage cope with difficulties in teaching.

[Methods]

1) Study participants: 22 assistant professors working in nursing universities. 2) Data collection: semi-structured interview. 3) Subject of study: coping with difficulties in teaching. 4) Data collection period: 03–09/2018. 5) Analysis method: qualitative inductive analysis.

[Ethics]

Ethical approval was obtained from the ethical committee of Kio University.

[Results]

1) Participants' background: Participants' mean age was 39.1 ± 4.8 years, and the mean duration of experience as assistant professor was 3.7 ± 2.0 years. 2) Coping with teaching difficulties: six categories were generated: [consulting with superiors for guidance] [support among colleagues] [utilizing off-university human resources] [using student feedback] [developing self-study on teaching methods] [objective consideration of a participant's own educational activities, and acceptance of self-performance]

[Discussions]

Nursing educators at the early career stage used human resources inside and outside the university to cope with difficulties in teaching while undertaking self-study. There was a tendency to avoid confronting other difficulties by viewing objectively educational activities and accepting self-performance , saying that "only the minimum needs to be communicated." These trends indicated that the educators' main educational activities involved off-university teaching and that there was a conflict in the balance between childcare and educational activities as a characteristic of the educators' age. Therefore, it is important to establish support systems for educators undertaking educational activities. (JSPS 17K12146)

Poster

Others

P2-284

Awareness of importance to health guidance about during and post pregnancy sexual life in hospital setting as midwife

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[Objectives] To identify how the midwives who work in hospital setting recognize importance of providing health guidance about sexual life during and post pregnancy.

[Methods] Semi-structured interviews were conducted on ten midwives having more than five years of working experiences, who currently work in hospital setting. Obtained data were then qualitative analyzed.

[Ethics] The present study was conducted with approval from the ethics committee of the university of the researcher.

[Results] The research identified 13 categories. The midwives are realizing "their clients are lacking of proper knowledge about sexual activities" "the clients are feeling embarrassed discussing about sexual life" "the clients actually want to discuss about their sexual life with professionals" and so on. They are feeling "the sex education would not be so high in priority in hospital setting" "the limits in their facility system", "need for guidance involving their partner" "more personalized approach is required to satisfy clients." They also pointed out "building a trust in relationship with clients takes a big part", "we also need to set our mind to provide sex education intentionally" and so on.

[Discussions] Despite of the fact that the midwives are recognizing the needs for sex education on their clients, it is a challenge to implement it in their work settings. It indicates that it is more up to how individuals put stress on the sex education into their practice as midwife.

There is no conflict of interest in this study.

P2-285

The Adversity for Caregivers when Confronted with End of Life Situations Can be an Uneasy Experience at Nursing Homes

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²Department of Nursing Science, University of Yamanashi, Japan

[Objectives]

I have researched that the caregiver can, and dose, have anxiety and troubled experiences in the terminal care of elderly people through interviewing care workers in nursing homes.

[Methods]

A qualitative descriptive study by the semi structured interview. We interviewed 8 caregivers in 2 nursing home institutions where medical staff was not available. I analyzed the content of the interviews of the caregivers.

[Ethics]

We obtained the consent of the University of Yamanashi Faculty of Medicine Ethical Review Board and performed it.

[Results]

- When the caregiver is incapable of relying on the opinion of an available physician, there is anxiety, dissatisfaction, and confusion.
- Caregivers are unable to express their own opinion to nurses and doctors directly, which leads to a worsening of the work relationship.
- Caregivers have a feeling of anxiety with regards to a patient condition due to a lack of clear communication with health care professionals. Therefore, they tend to hold back at the time of consultation regarding reports to nurses and/or doctors.

[Discussions]

In Japan there is a culture of hierarchy. This precludes any respect with regards between medical professionals and the care professions.

Consequently the causation effect results in anxiety with regards to the caregiver's terminal care. It is important for both nurses and doctors to build relationships of trust and understanding in order to work effectively with caregivers. Thus, the division of roles must be established and respected.

Poster**Others****P2-286****Literature review on the psychological effects of hair-washing support on subjects**

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³Department of Nursing, Faculty of Health Science, naragakuen University, Japan

[Objectives] To examine the research trends in Japan on the psychological effects of hair-washing support on subjects.

[Methods] Using Ichushi-Web without restrictions regarding the year of publishing (but excluding conference proceedings, meeting minutes, review articles, and commentaries), we performed searches with the keywords "hair washing" and "body position or posture." Next, we narrowed the results to 16 papers that dealt with the psychological effects on subjects who underwent hair washing (search date: February 6, 2019). Thereafter, the trends in these previous studies were observed.

[Results] Eight studies targeted healthy persons and eight studies targeted patients with disease (including three cases of threatened premature delivery). The number of subjects ranged from 5 to 80. Body positions examined included the supine position, sitting position, Fowler's position, lateral position, and prone position; of these, the supine position was most common, with 11 hits. Subjects' emotions such as distress, fatigue, exhilaration, postural stability, etc. were measured. The supine position and Fowler's position were associated with many positive emotions, such as relaxed, easy, and "no oppressive" feelings, while the sitting position was associated more often with more negative emotions, such as tiredness, fatigue, and pain.

[Discussions] Examination of extant research on various hair-washing positions and psychological evaluation indicators grouped according to the subjects' condition revealed that each position was chosen to maximize the comfort of subjects. However, due to the limited number of references and cases, further research may be necessary for generalization.

P2-287**Trends in research on communication education in basic nursing education in Japan**

○Noriko Okamura

Nursing, Niigata College of Nursing, Japan

[Objectives] To clarify the characteristics and trends of communication education research in Japan, and to get an indication on how communication in basic nursing education is carried out.

[Methods] I used literature as data, and searched for articles online using Ichushi. I used the keywords "basic nursing education" and "communication education", with no limits to the year of publication. In addition, I checked terms for "basic nursing education" in a thesaurus, and found that nursing education in vocational schools, universities, and colleges were included in subordinate categories. For my analysis, I carefully read literature and classified it in accordance with the similarities and differences of its content. Next, I reviewed the content in each classified literature. Based on this, I discussed the ideal way to teach communication education.

[Ethics] I tried not to distort the meaning of the original literature when analyzing them, and I tried to distinguish that content and my own knowledge.

[Results] I reviewed 26 literature. The literature were classified into three types: research papers, reports in commercial journals, and commentaries in commercial journals. In the research papers, "the current situation of students" and "the content of educational initiatives" were reported. "The current situation of students" showed that students felt it was difficult to cope with patients' emotions, as well as their own emotions.

[Discussions] The results of this study suggested the necessity of education for handling students' emotions. In addition, it is also important to continue to accumulate research data on educational initiatives.

Poster

Others

P2-288 Research trends and future issues in "help-seeking" among people with depressive symptoms in Japan

○Tomoko Arai, Yumi Okinaka

Okayama University, Graduate School of Health Sciences, Japan

[Objectives]

"Help-seeking" refers to behavior of an individual with a psychological problem to seek help of other individuals. Among people with psychological problems, previous studies have shown that those with depressive symptoms are less prone to help-seeking and often cannot obtain appropriate help. This study aimed to clarify research trends and future issues in "help-seeking" among people with depressive symptoms in Japan through literature review of relevant previous studies.

[Methods]

The Japan Medical Abstract Society Ichushi-Web search system (ver.5), CiNii, and Jdream-III were used for the literature search with the following key words: "depressive," and "help-seeking," and 16 papers were analyzed. In analysis, contents of these papers were summarized and classified according to content similarities.

[Ethics]

Considerations were given not to infringe copyrights.

[Results]

In 13 papers, factors related to help-seeking were investigated, and "mental distress," "personality," and "network" were reported as promoting factors, while "mental distress" was reported as a preventing factor. Future issues fell into "pursuit of factors related to help-seeking," "examination and efficacy of intervention," "examination of help-seeking process," and "influence of people around."

[Discussions]

Given the fact that there are promoting factors and preventing factors for help-seeking behavior of people with depressive symptoms, support should be provided to facilitate appropriate intervention at an early stage to people with depressive symptoms by people around them.

P2-289 Mental health problems among Japanese high school students and the signs understood by school nurses

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²Faculty of Nursing/Graduate School of Nursing, Kansai Medical University, Japan

[Objectives]

The objective of the present study was to clarify the mental health problems among Japanese high school students and the signs understood by school nurses.

[Methods]

We conducted a self-administered anonymous questionnaire on 971 high school nurses in Japan. The questionnaires included items on the school nurses' demographic characteristics, the students' mental health problems, and the signs understood by the school nurses. Informed consent was obtained from all participants. A total of 168 school nurses returned completed questionnaires, and their data were analyzed.

[Ethics]

The ethics committee of Kyoto Koka Women's University approved the research protocol.

[Results]

The school nurses' mean (\pm standard deviation) experience was 16.1 (\pm 10.7) years. The students' conspicuous mental health problems were classified as interpersonal relationships with others (95.2%), frequent complaints of physical symptoms (87.5%), family relationships (82.7%), school refusal (82.1%), and self-harm (69.6%). The students' mental disorders included developmental disorders (95.8%), sleep disorders (57.7%), depression (54.8%), and eating disorders (44.1%). The signs of mental health problems encountered by the school nurses included poor attendance (70.8%), frequent visits to the health room (88.1%), little change in expressions (73.2%), repeated complaints of mental and physical symptoms (78.0%), extremely few interactions with others (80.4%), and little verbal communication with others (70.8%).

[Discussions]

The findings of the present study suggest that Japanese high school students have a variety of mental health problems, and that developmental disorders are noticeable as mental disorders.

Acknowledgments: This work was supported by JSPS KAKENHI Grant No. JP15K15884.

Poster**Others****P2-290****Collaboration between school staff and other professionals to support high school students suffering from mental problems**○Yuri Kawano¹, Etsuko Fujimoto²¹*Department of Nursing, Kyoto Koka Women's University, Japan*²*Faculty of Nursing/Graduate School of Nursing, Kansai Medical University, Japan***[Objectives]**

The objective of the present study was to clarify the collaboration needed between school staff and other professionals to support high school students in Japan suffering from mental problems.

[Methods]

We conducted a self-administered anonymous questionnaire on 971 high school nurses in Japan. Informed consent was obtained from all participants. A total of 168 school nurses returned completed questionnaires, and their data were analyzed. The questionnaires included items on 1) the school nurses' demographic characteristics, 2) the other types of professionals collaborating with school nurses, 3) collaboration methods, and 4) the need for collaboration between school staff and social service agencies.

[Ethics]

The ethics committee approved the research protocol.

[Results]

The school nurses' mean (\pm standard deviation) experience was 16.1 (\pm 10.7) years. The other professionals were homeroom teachers (97.0%), head teachers for particular years (93.5%), school counselors (92.3%), principals/vice principals (88.1%), healthcare personnel belonging to psychiatric institutions (62.5%), and others (data not shown). In addition to these professionals, caregivers were also selected as collaboration partners (90.5%). Regarding collaboration, the school nurses communicated consistently with homeroom teachers, head teachers for particular years, principals/vice principals, and school physicians (92.3%), and also worked in a unified response with homeroom teachers (91.7%). The school nurses affirmed the necessity of collaboration with mental care professionals (97.6%).

[Discussions]

The results of the present study showed that school nurses collaborated with various professionals, and found it necessary to collaborate with mental health professionals.

Acknowledgments: This work was supported by JSPS KAKENHI Grant No. JP15K15884.

P2-291**Recruiting nurses with specific certification and nurses beyond retirement age: A survey in the medical care and elderly care facilities in Japan**○Keiko Kunie¹, Minako Sasaki², Ryohei Kida¹, Yuki Horigome³, Masatoshi Saiki¹, Yuki Yonekura⁴, Maho Inoue¹, Naoko Ichikawa¹, Yukie Takemura¹¹*Division of Health Sciences and Nursing, Graduate School of Medicine, The University of Tokyo, Japan*²*Division of Nursing, Faculty of Healthcare, Tokyo Healthcare University, Japan*³*School of Nursing, Gunma Paz University, Japan*⁴*Graduate School of Nursing Science, St.Luke's International University, Japan*

[Objectives] To investigate the healthcare facilities' employer interest in recruiting and hiring nurses with specific certification and nurses beyond retirement age.

[Methods] A cross-sectional survey was conducted to investigate the employer interest in recruiting and hiring specialists (clinical nurse specialists and certified nurses) and nurses over the age of 60 years. Hospitals, home-visit nursing stations, and elderly care facilities, chosen by random sampling across the country, surveyed between January and February 2019. Descriptive statistics were performed.

[Ethics] The Ethics Committee of the University of A Graduate School of Medicine approved this study, which was supported by a grant from the Japan Ministry of Health, Labour, and Welfare.

[Results] 998 hospitals, 200 home-visit nursing stations, and 237 eldercare facilities that responded to the questionnaire were enrolled (valid response rates ranged from 23.4 to 33.3%). In each three types of healthcare facilities, some facilities recruited specialists and some recruited nurses aged over 60. Although 13.0% of hospitals recruited specialists, only 4.9% indicated that they actually hired specialists. Few home-visiting nursing stations or care facilities reported hiring specialists. The percentage of facilities interested in hiring specialists was 42.1% for hospitals and 19.5% for home-visit nursing stations. As for nurses aged over 60, 31.2% of eldercare facilities and 16.0% of hospitals were interested in new hiring.

[Discussions] Various types of facilities required a nursing workforce with specific certification and characteristics. Some facilities could not hire specialists even though they recruited. A system to match employers and job applicants is necessary for recruiting diverse human resources.

Poster

Others

P2-292

Analysis of a narrative and the lifeline of a mother having a child with Down syndrome : A Case Study

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[Objectives]

Some congenital malformations can be diagnosed during pregnancy; however, several others are suspected to occur after birth. Therefore, genetic testing is conducted in neonatal settings. This study aimed to help clarify a mother's experiences in rearing a child with Down syndrome during early childhood and understand the process of a mother's acceptance of her own child's condition.

[Methods]

A semi-structured interview was conducted. Furthermore, participants' self-reported life timelines and contents of their recordings about life events were used as references for the qualitative data analysis.

[Ethics]

This study was approved by the Ethics Committee of Kyoto University.

[Results]

The main lifeline branching points were "initial diagnosis," "referral to medical center," "child birth," "postnatal diagnosis," and "timing of child's development." During the course of these stressful life experiences, the lifelines assumed a negative direction. Although the mothers experienced mixed emotions during the doctor's definitive diagnosis, they accepted of their child's condition due to the support from their loved ones; considered their children as an irreplaceable treasure, not as a child with a disorder; and accepted being the mother of a child with Down syndrome.

[Discussions]

These results suggest that nurses should establish care relationships with clients and their families, as well as society. Moreover, for consistent counseling and care, a new nursing area that integrates genetic, pediatric, and obstetric clinic and ward should be developed.

P2-293

A Concept Analysis of Frailty in the Elderly

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[Objectives]

To expand understanding of the concept of frailty, specifically clarify the meaning of frailty and provide the operational definition for further application of health promotion in aging populations.

[Methods]

Concept analysis guided by Walker and Avant's (2005) approach, focused on definitions, antecedents, attributes, consequences, and related concepts drawing on literature from nursing. Literature searches were conducted using bibliographic databases (Medline (Ovid), PubMed, EBSCO, Cochrane and CINAHL, and internet search engines (Google Scholar). The articles published from the period of 2010 and 2019 were reviewed. Only research published in English or Chinese was included for the review.

[Results]

Based on this analysis, we exposure three distinctive definitions include the reserve capacity of multiple physiological system declines below the threshold, affecting the loss one or more area of physical, psychological and social functions, and lead to disability and other adverse outcomes and risk subsequently.

[Discussions]

Based on the concept analysis, maintain a healthy diet, a healthy body weight and regular exercise would increase the health status and the quality of life for the elder. It is very important to design the appropriate interventions and strategies lead to decrease frailty and enhance individual competence need to be developed.

Keywords

frailty, concept analysis, elder

Poster**Others****P2-294****The effect of overtime hours on work engagement in relation with the reasons of overtime work**○Mayumi Watanabe^{1,2}, Keita Yamauchi²¹*College of nursing, Kanto-gakuin University, Japan*²*Graduate School of Health Management, Keio University, Japan***[Objectives]**

Overtime work is assumed to have detrimental effect on health of nurses, but the evidences are inconclusive about the associations between overtime hours and motivation of work. This study aimed to clarify the relationship between overtime hours and nurses' work engagement, in relation with the reasons of overtime.

[Methods]

A cross-sectional survey design was conducted in four hospitals in Japan. A total of 1075 staff nurses' questionnaires were analyzed. Anonymous, self-administered questionnaires were distributed. The reasons of overtime work and work engagement were measured by The Motivations for Overtime work Scale and Utrecht Work Engagement Scale, respectively. Overtime hours were derived by subtracting the contracted hours from the actual work hours. We conducted multiple regression analysis.

[Ethics]

This study was approved by the Ethics Committee of Keio University (No. 2015-25). We conformed to the Helsinki Declaration concerning human rights and informed consent, and we followed correct procedures concerning the treatment of humans in research.

[Results]

Overtime hours were not significantly associated with work engagement, but the interaction between overtime hours and reasons of overtime work (fun of work) was significant ($\beta = 0.12$).

[Discussions]

Overtime hours related positively when nurses were working overtime because of the fun of work, but related negatively without fun of work. It is suggested that overtime hours solely is not decisive about its effect on motivations of work. We should consider the quality, or reasons of overtime work when investigating the effect of overtime hour on nurses.

P2-295**An Intervention Study on Networking Events of Mothers with Disabled Children Who Need Medical Care at Home**○Tsutako Miyazaki¹, Yuya Uesugi¹, Ikumi Honda²¹*School of Nursing, Mie Prefectural College of Nursing, Japan*²*Department of Nursing, Nagoya University, Japan***[Objectives]**

The number of children living at home with continuous medical care has been increasing. Consequently, the challenges have been revealed, such as "There being no opportunity to interact with parents in the same situation." In this study, we held networking events for mothers with children who need medical care and clarified their parenting stress before and after the meetings.

[Methods]

We had held a "Mothers' Meeting" twice a year since 2017 for mothers with children who need medical care, and conducted questionnaire surveys (Japanese version PSI-SF) on childcare stress before and after each meetings and inquiry surveys after each participation.

[Ethics]

This study was conducted with the approval of the relevant organization's ethics committee. Written informed consent was obtained from the participants.

[Results]

The mean scores of both the total scores and the scores of the subscale of PSI-SF decreased comparing before and after the meetings. The feelings of mothers were mainly related to "connections," "confidence," and "information exchange."

[Discussions]

The results suggest that mothers with children who need medical care need "An opportunity to share and exchange information" where they could comfortably meet each other. For this, the cooperation of the relevant experts and an offer of an opportunity where they can provide medical treatments are considered essential.

Poster

Others

P2-296

Community Members' Experiences of Suicide against the background of Okinawan culture — Avoidance and support surrounding suicide in a mutual assistance culture —

○Michiko Shinzato, Keiko Suzuki

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[Objectives] Reveal community members' experiences of suicide in Okinawa, to find suggestions for suicide surviving families' support in traditional Okinawan culture.

[Methods] Semi-structured interviews with community members; qualitative descriptive analysis of data.

[Ethics] Researchers received ethical approval, respected privacy protection obligations and ensured anonymity.

[Results] Experiences of suicide included: funerals where cause of death was not mentioned, as if nothing was unusual, or family-only cremations. Regarding mutual assistance for mourning families, communities differed: mutual assistance regardless of cause of death; only monetary assistance; no official funeral so no mutual assistance. Regarding ashes deposition, communities differed: treat the same as any other death; custom of placing in temporary grave, then moving to family grave when next death occurs; no custom exists. Regarding Yuta (shaman) participation, they knew that survivors asked for *nujifa* (releasing the spirit) or to listen to deceased's voice. However, regardless of mutual assistance or ashes deposition, they experienced a strong, fundamental aversion to suicide: "it's hereditary, so would avoid interaction and marriage", "troublesome", and the like. Meanwhile, they were aware that survivors experienced unpleasant rumors, having to move away from family who knew about it, and isolation. So it is clear they were aware of the fear of public exposure and rumors, and the fact that survivors do not meet in normal survivors' groups because of Okinawan customs.

[Discussions] Strong aversion to suicide is deep-rooted in Okinawa, so surviving families suffer avoidance, hurt and isolation. Possible participation by Yuta for survivor support is suggested.

P2-297

Experiences of persons with mental disorders in Wellness Recovery Action Plan facilitator training

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[Objective] In Japan, the Wellness Recovery Action Plan (WRAP) education program is beginning to spread throughout the country, and research results have shown it to be a strategy that can promote individual recovery. However, in Japan, which has no basis for promoting public measures from overseas, the possibility of making use of the support system of the WRAP program has not been fully considered. The purpose is to describe the experiences in WRAP facilitator training of persons with mental disorders living in the community, and to provide suggestions for and highlight issues in constructing a recovery-oriented support system using WRAP.

[Method] We conducted semi-structured interviews with persons with mental disorders. The data were analyzed qualitatively and subjected to descriptive analysis. This study was approved by the Kobe City College of Nursing Ethical Committee.

[Results] There were 1 male and 7 female participants, all of whom participated in the WRAP facilitator training course. The following seven categories were extracted for experience of persons with mental disorders in WRAP facilitator training: "improved skill of self-control," "expanding relationship," "can afford to accept others," "recovery is becoming familiar," "being able to accept myself as I am," "free from framework," "fresh hope".

[Conclusion] The parties were changed by participating in WRAP facilitator training, and suggestions were obtained for the development of a support system.

Poster

Others

P2-298

Medical dissatisfaction and Anxiety among Japanese People Staying in Brisbane for a Long Stay

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[Objectives]

The purpose of this study is to explain the causes of medical complaints among Japanese staying in Brisbane, Australia.

[Methods]

The participants were Japanese who stayed for a long time in the suburbs of Brisbane and other suburbs. I did a semi-structured interview.

Then qualitative descriptive analysis was conducted to extract key themes. The interview contents were coded each phrase, and the cord with a description "An action for uneasiness and the thought for the health medical care" was extracted. Then the semantically similar codes were aggregated as subcategories. To ensure reliability, multiple nursing researchers were analyzed until their opinion agreed.

[Ethics].

Before conducting research, the ethics committee member of the researcher's institution

Approved by the meeting (approval number 1063).

[Results]

We contacted 8 Japanese people living in Brisbane (3 males and 5 females). Age of the participants was: male -31-68 years old; female : 27-52 years old). Participants's residency history was 4 persons in 1 to 10 years and 4 persons in 11 years or more.

As a result of analyzing "dissatisfaction" and "anxiety" from the number of 103 answers, five categories [Feelings when receiving a medical examination] 35.9%, [difference in medical system] 29.1%, [Japanese community] 12.6%, [Thoughts on prescription] 11.7%, [Thoughts after becoming an elderly person] 10.7%. And there were 16 subcategories.

[Discussions]

Dissatisfaction and anxiety were not proportional to the abundance of the five categories. Dissatisfaction and anxiety were found to be scattered in all categories.

Gaining a sense of security in healthcare is an urgent and important issue for long-term resident Japanese, which has recently been increasing rapidly in Australia.

Study of Father's Participation in child Care and The Support

P2-299

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The purpose of this study was to reveal the process of father's participation in child care and ?nd the way of support.We selected 6 fathers who were positive about child care when they know mother's pregnancy by snow ball sampling. We collected the data by semi- structured interviews on life line method from each fathers. We interviewed fathers along the interview guide we made about what they thought their wife and children at each event of child care and what they did. After the interviews, we made literal minutes and analyzed by modified grounded theory approach.We applied for Fukuoka University- Medical Ethics Reviews Board and had an examination (authorization number : 2016M046) before this study. Participants? average age were 36 and all of them had jobs.The analysis result showed 50 concepts, 21 sub-categories that is consisted of those concepts, and 8 categories that is consisted of those sub-categories. Fathers thought they could change their minds from "not accepting their children" into "accepting their children" and through the "collaboration with wife" and "child care on deliberation of future" , feel "becoming a parent" and "bettering themselves". Then there were case of "changing their lives" and "not changing their lives".

P2-300

Differences in terminal care practices of visiting nurses owing to personal characteristics

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[Objectives]

In this study, we clarify the differences in terminal care practices of visiting nurses owing to personal characteristics, using an original behavioral index created based on the competency framework.

[Methods]

After selecting 450 visiting nursing stations in Japan, we asked 3 visiting nurses from each station to answer an anonymous self-administered questionnaire survey. The behavioral index had 62 items relating to 13 competencies. Responses were recorded across five stages. After summarizing the results for each competency, we analyzed the differences in practice owing to personal characteristics (position, number of patients providing terminal care, thoughts for terminal care) of visiting nurses (March to April 2019).

[Ethics]

This study was approved by the ethics review board of the researcher's university.

[Results]

The number of collected questionnaires was 176 (recovery rate 13.0%), of which 160 were analyzed. The average experience of visiting nurses was 9.4 ± 6.5 years, and the current position was at 97 staff members (61.0%). Competencies with significant differences owing to the personal characteristics of visiting nurses were "flexibility" for managers and staff; the number of patients providing terminal care (less than 10 and more) were "initiative," "focus on customer service," "impact and impact," and "flexibility"; thoughts (strong and weak) for terminal care were "impact and influence," "teamwork and coordination," "analytical thinking," and "flexibility."

[Discussions]

The differences in terminal care practices of visiting nurses owing to personal characteristics were identified. In the future, the issue of using and evaluating the behavioral index must be considered.

P2-301

Technology acceptance of eHealth solutions among health care workers

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Health care providers are considered the key driving force in pushing eHealth solutions (Li, et al, 2013). This study aims to assess the technology acceptance of the use of eHealth solutions, such as electronic medical records, and hospital information system among medical doctors, nurses, midwives, and volunteers in the Philippines.

A survey was conducted among 86 health care workers to determine their receptiveness to eHealth solutions using the standard tool, Technology Acceptance of Health Information Survey. The first part of the survey measured how comfortable respondents were in accomplishing certain tasks using technology, while the second part measured *perception* in using eHealth solutions or systems within the context of their work.

Majority of the respondents were females (74%), with a mean age of 32 years, who feel comfortable most of the time in accomplishing the given tasks related to technology use. The relatively high overall mean score reflects the "ease of use" and "job fit" reflective of their training prior to use of the eHealth solutions. In terms of their perception of the eHealth solutions in relation to their work, they rated highest the intention to use (3.92); followed by effort expectancy (3.88), then social influence (3.87), performance expectancy (3.80), communication (3.75), voluntariness (3.71), and facilitating conditions (3.64). The respondents' perceptions are largely positive since the eHealth solution is required, useful in accomplishing their tasks, they have prior training and support of the local chief executive. The least positive is the presence of technical support impacts on its actual use.

Poster**Others****P2-302****Determining the Required Skill Mix to Deliver Primary Health Care Services Across Various Rural and Urban Communities**

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[Objectives]

This study determined context- and area-specific factors in computing optimal health worker-population ratio for adequate primary care services across geographical settings. Multi-site collective case study design with local government unit (LGU) as unit of analysis was used.

[Methods]

Records review, KII and FGD were conducted among officials, employees and health workers from 21 municipalities/cities involving 316 informants and focus group participants. Qualitative content analysis was used for interview and FGD data.

[Ethics]

Ethical clearance and approval by UP Manila REB

[Results]

Findings showed that geographic attributes, socio-economic factors and governance/political structures were determinants of optimal skill mix. Optimal skill mix was relative to needs and defined by context- and area-specific characteristics of setting. Drivers of skill mix relate to inadequacy of health workers, changing care needs and settings of care and changing roles of and expectations from health workers.

[Discussions]

Local governments use care needs of population to determine required skills of health staff. Context-specific characteristics and implications to health care delivery were derived. A multi-sectoral approach is needed to address skill mix of health workers at primary care level. Local government efforts to increase health worker complement with health workers adopting task management modalities to improve efficiency of service delivery are not sufficient to address complex nature of ensuring optimal skill mix. Interventions needed require support from all levels of government.

Recommendations target to improve: 1) governance and administration of health workforce; 2) health worker complement; and 3) efficiency and effectiveness of health workers.

P2-303**Relationship between the factors of unlearning and interprofessional collaborative competency of senior clinical nurses**OTae Yamaguchi¹, Ikuko Sakai²¹Department of Nursing, Faculty of Nursing and Nutrition, University of Nagasaki, Japan²Graduate School of Nursing, Chiba University, Japan**[Objectives]**

This study aimed to clarify the relationship between the five factors of senior clinical nurses' process of unlearning, identified in a previous study, and interprofessional collaborative competency.

[Methods]

We mailed a request for research cooperation to 1087 hospitals in Japan. After obtaining consent from a hospital manager, I asked for the questionnaires to be distributed among five senior clinical nurses. The nurses' consent was obtained through the questionnaire and implied by their individual replies. The questionnaire covered the five factors of senior clinical nurses' process of unlearning – awareness, conflict, discard, acquisition, and establishment – and the Chiba Interprofessional Collaborative Competency Scale (CICS 29). The CICS 29 score was used as a dependent variable with the factors of unlearning as independent variables in a multiple regression analysis, to calculate the ratio of each factor to the CICS 29 score.

The study was conducted with the approval of an appropriate ethics review board (No. 29-18).

[Results]

The response rate for the questionnaire was 20.2%. Following multiple regression analysis by the forced injection method, adjusted $R^2 = 0.245$. The standardized partial regression coefficient (β) of each factor was: awareness = 0.04 ($p = 0.237$); conflict = -0.19 ($p < 0.01$); discard = 0.04 ($p = 0.198$); acquisition = 0.01 ($p = 0.710$); and establishment = 0.48 ($p < 0.01$). A high CICS 29 score was linked to low conflict and high establishment scores.

[Discussions]

Our findings suggest that reaching the "establishment" phase of unlearning may enhance interprofessional collaborative competency among senior clinical nurses.

Poster

Others

P2-304

Contribution of male and female health volunteer pairs towards improving husband's support for ethnic minority mothers in remote rural areas in Lao PDR

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[Objectives] To compare husband's support for ethnic minority mothers between villages where female village health volunteers (VHVs) are working with male VHVs as a pair (intervention village) and where VHVs are working alone (control village) in remote rural areas in Lao PDR.

[Methods] A cross sectional study was conducted in March 2019. Mothers who delivered a baby within one year preceding the study were recruited from 19 intervention villages and 17 control villages. Among 305 women, 227 responded (response rate: 75%). The questionnaires included 1) demographic characteristics such as age, education, economic status, and birth experience, and 2) husband's support. Logistic regression analysis was performed.

[Ethics] Ethical approvals were obtained from University of the Ryukyus and the National Ethics Committee for Health Research Lao PDR.

[Results] Average age (+SD) was 24.0 (+5.7) among intervention area and 25.5 (+6.1) among control area. Average score for husband's support (+SD) was 3.1 (+1.2) among intervention area and 2.6 (+1.3) among control area. Results of logistic regression analysis showed husband's support significantly associated with area (OR: 2.49, 95%CI: 1.39-4.44).

[Discussions] This study suggested that VHVs working in pairs may help increase husband's support for mothers. Since husband's support is associated with maternal and child health, expanding VHVs activities as pairs may be beneficial to improve health status among minority mothers who live in rural and remote areas.