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HEALTH TO ACHIEVE THE SUSTAINABLE DEVELOPMENT
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EDITORIAL

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COMMITTEE'S WELCOME

Greetings for all conference attendees and welcome to the 1st International Conference of Health_ *Ikatan Perawat Maternitas Indonesia Jawa Timur*(ICH_IPEMI East Java) 2017. We hope you all have a wonderful, inspiring conference and are able to take great ideas back to your individual programs.

At the end of the era of rolling era MDGs and Sustainable Development Goals (SDGs) since early 2015, still leaving overall homework has not achieved the MDG targets, so it needs a tougher effort in this SDGs era. SDGs universally applicable, not only for developed countries and developing countries but also the low-income countries. To ensure the goals that have been set can be achieved in 2030, required the commitment and hard work of all parties, including the government, parliament, civil society, private sector, and academia. Academia sector involvement is also very important to succeed in achieving the SDGs. Universities and research institutions needed contribution to research and develop monitoring tools, especially in sectors that are lagging behind and has not been achieved such as gender equality, food, water resources, sanitation, health, maternal mortality, poverty, and education.

Therefore by gathering and interesting each of attendees here can tighten our bond as academia, researcher and professional in order to increase the spirit of research and study.

Finally, we would ask you all to become more involved in this conference. Your unique talents, expertise and ideas are welcomed and appreciated. Please enjoy the conference and hopefully we can get a new knowledge and friend through this outstanding conference.

Thank you,

ICH_IPEMI 2017 Committee

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OLDER FIRST TIME MOTHERS

MAY HAVE INCREASE CHANCES OF LIVING LONGER

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Nowadays, women's roles are broader than previous times. Women is a wife, mother, and worker as well. Some women prefer to postpone to have a children because their carrier or they take time to find the right husband to have children. The phenomenon Older first time mother is high in developed country and it is a challenge for the maternity nurses because they are high risk pregnant mother. However, a published research discovered that older first time mother may have increased chance of living longer. It might influenced by better education about taking care the children, financial stable, confidence, and settled in life. Since, Older first time mother would be our one of precious client, maternity nurses and midwifery have to prepare the best plan to take care this clients.

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THE IMPACT OF VIOLENCE AGAINST WOMEN ON REPRODUCTIVE HEALTH AND CHILD MORTALITY

Professor, Dra, Setyowati., SKp., MAppSc., PhD., RN is senior lecturer in faculty of Nursing, Universitas Indonesia. She graduated her master degree from Sydney University and she got her doctoral degree from University Technology of Sydney. Today, she is the head of Indonesian nursing education accreditation in Independence Health Accreditation institution.

Violence against women happen in all cycle of women life. In Indonesia, the women abuse incident is real. However, this incidents are measured yet and it is because some women did not know what to do and how to report this case. In some countries, one of factors that may contribute with women abuse is gender equity issue. And the gender equity might be influence by culture believe and religion rules. Physical health and Psychological health after abuse tragedy have to treat to avoid the adverse effect. Mostly, the physical health after abuse has been treated well. Meanwhile, the psychological health isn't fulfilled yet. A professional maternity nurses have to contribute to provide a better treatment for the women abuse victim and helping to report it to the police. The most important part of education for client about abuse is providing education about violent against women. So that, every women understand what they have to do if they experience that kind of abuse.



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THE ROLE OF FEMALE IN ENSURING THE SUCCESS SDG'S

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Mother and child mortality and morbidity is one of indicator of citizen health. Therefore, maternity nursing has important roles in achievement of the SDG's. According to Indonesian Government Policy, health services focused on mother and baby by providing services for pregnant women, childbirth, childbirth and newborn including family to achieve a better health.



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JAKARTA

INDONESIAN'S APPROACH AND
LOCALIZING OF SDG'S

Mr. Sugeng Eko Irianto, Ph.D is a representative of WHO in Indonesia. (**Bu mungkin bisa ditambahkan biodata yang lainnya.**)

Sustainable Development Goals (SDG's) are an agenda that initiated by United Nations. There are 17 goals and 169 targets should be done in 2030. Our Government agrees to take a part and working to achieve the SDG's 2030. The third SDG's goal is a good health which has 1 goal, 13 targets and 26 indicators. Our government know that to achieve in good health goal, it depends on progress in other SDG's. Since 2015, our government has taken several steps such as mainstreaming SDGs in development plan, increasing awareness, multi stakeholders meeting, published the technical guidelines for national and sub national action plan of SDGs, formulation of metadata of SDGs Indicators Phase 1 and Dissemination process of SDGs implementation. And in 2017, Issuance of Presidential Decree on SDG's, Formulation of SDGs Road Map 2016-2030, and Formulation for National and Sub national Action Plan of SDGs have been working. And during 2017-2030, our government is implementing the SDG's plan and conducting monitoring, evaluating and reporting as well. Maternity Nursing as one of professional health worker has to take a part to achieve "no one left behind" in health sector especially in mother and child health.



ABSTRACT

“Older First Time Mothers May Have Increase Chances of Living Longer”
Rose Nanju, Senior Lecturer, University Malaysia Sarawak

Background: Pregnancy and child birth are normal physiological processes but health and age of mothers are crucial in determining the outcome. Elderly primigravida means first time mother, aged above 35 years old. The risk factors are complications during pregnancy, labour, puerperium and baby. Today's women life style changed in pursuit of higher education, entering into the work forces and heading for career advancement outside their homes. This inevitably leads to postponement of child bearing. With extensive academic attainment, women are matured, knowledgeable, having career and financial freedom. They are mentally flexible, more tolerant of others, thrive better emotionally and psychologically, so they do not abuse their children. The parenting style can contribute to a positive psychosocial environment which affects the children's upbringing. Older mothers tend to have more thought-through pregnancies in stable relationships, a better education and greater access to material resources and are more health conscious.

However, elderly women are at high risks of several complications including instrumental deliveries due to mal presentation, mal-positions and prolonged labor. They also have increased risk of caesarean section related to obstetric complications related to impaired joint mobility, inelasticity of the soft tissues of the birth canal. Induction of labor incidences increases due to pregnancy induced hypertension, diabetes mellitus and other complication. Intrapartum dangers are PPH and shoulder dystocia. Oligohydramnios, breach and transverse lie, IUGR and low birth weight were found significantly more in elderly primigravida. They also have an increased risk for prematurity, preeclampsia and perinatal mortality. Therefore, they should be well informed and given good antenatal care especially in the third trimester.

Conclusion

Years ago, when interventions were not as freely available, women may never have thought twice about having babies at older age. Nowadays with medical advances and published materials and other resources in medicine, women are more informed and well prepared for eventualities. Life expectancy of women are now longer than they used to be and are choosing to live healthier lifestyles which is conducive to maturely having and raising babies. So as trends in women's health and education evolve, the perceived biological risks are outweighed by the social benefits of older aged motherhood.

Keyword: *Elderly primi, malposition, inelasticity of soft tissues, caesarean section, medical technology.*

ANEMIA IN PREGNANT WOMEN BASED ON TRANSCULTURAL NURSING

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Abstract: Anemia is one of main health problem in the world. The prevalence is very high in reproductive age women, especially during pregnancy. The design of the study was descriptive analytic with cross-sectional approach. The population was pregnant woman trimester of 1 and 2. The 39 sample respondents were chosen by simple random sampling. The independent variables in this study were technological factor, family's support, cultural values and lifeways, economic factor, and knowledge. The dependent variable was anemia in pregnant women. The data were collected by using questionnaire and analyzed by using chi square test with a degree of significance $\alpha < 0.05$. The results showed a correlation between technological factor ($p = 0.045$), family's support ($p = 0.047$), and knowledge ($p = 0.006$) with anaemia in pregnant women. The cultural value and lifeways ($p = 0.092$) and economic factor ($p = 0.253$) does not affect the pregnant women. Some factors in transcultural nursing have a correlation with anemia in pregnant women. Further research was suggested to using qualitative methods or observation and decrease anemia in pregnancy with an effective health education.

Keywords: anemia, pregnant women, transcultural nursing

INTRODUCTION

Anemia affects half a billion women at reproductive age in the world and most of them are in Asia and Africa (WHO). Anemia 29% attacks in nonpregnant women and 38% in pregnant women in the world (WHO, 2011). Based on the results of Basic Health Research (Riskesdas) in 2013, the prevalence of anemia in pregnant women in Indonesia reached 37.1%. The result of research of PT. Merck Tbk. In East Java in 2010 data obtained anemia in pregnant women is high enough, 33%. According to a report by Radar Madura (2016), Bangkalan City Health Office stated that anemia in pregnant women is the biggest cause of maternal death after preeclampsia and eclampsia. Socah Sub-district was ranked the top of anemia in pregnant woman in Bangkalan District. According to the integrated ANC data 2015 at Socah Health Center, as many as 52.3% of pregnant women have anemia.

The incidence of anemia in pregnant women is associated with the fulfillment of nutrition during pregnancy. However, in some conditions, these nutritional needs can not be fulfilled because there are certain beliefs and restrictions on some foods needed by pregnant women (Hannan, et al., 2012). Culture is one of the factors that influence daily habits and actions that can increase health risks (Riegelman & Kirkwood, 2015). Munawara, Yasak, & Dewi (2015) explained that the tribe of Madura is still famous

with a strong community with the culture and customs of the ancestors. Therefore, a problem analysis with a cultural approach is required.

Based on the above description, this study will analyze the incidence of anemia in pregnant women based on Transcultural Nursing theory with the aim to analyze any factors related to anemia in pregnant women in Socah Community Health Center work area.

LITERATURE REVIEW

Transcultural nursing theory is a theory that discusses the tricks in managing healthy behavior of individuals and societies based on culture. This theory assumes that culture-based care needs to consider the values, beliefs, norms, and worldviews learned and derived by individuals and communities to maintain their well-being and health (Leininger, 2002). The conceptual model that Leininger (1988) describes in describing nursing care based on culture is illustrated by the form of sunrise or sunrise model. There are seven components in the sunrise model, namely technological factors, religions and philosophical factors, kindness and social factors, cultural values and lifeways, political and legal factors, economical factors, and educational factors. These factors can be used to identify individual and community health behaviors, where the nurse's interventions may include three things: 1) cultural care preservation / maintenance, if the client culture does not conflict with health behavior; 2) cultural care accommodation / negotiation, if found that the client's health culture is less profitable and there are other cultures that are more profitable and need to be taught to clients to improve their health behavior; 3) cultural care repatterning / reconstruction, if the client culture is detrimental to the client's health so it needs to be replaced with a more healthy new culture (Leininger, 2002).

According to The Global Library of Women's Medicine (GLOWN) anemia in pregnant women is the state of pregnant women with blood hemoglobin levels of less than 11 gr% in venous blood vessels. The magnitude of the incidence of anemia in pregnant women in the first trimester is 20%, whereas in the trimester II and III respectively 70% (Cunningham & F, 2001). This is because in the first trimester of pregnancy iron is needed a little and the growth of the fetus is still slow. While in the second trimester to III female blood volume increased to 35%. In pregnancy will occur hydremia or hipervolemia, namely the addition of blood volume. However, the addition of blood plasma volume is not accompanied by the addition of red blood cells, resulting in blood dilution. An increase in the amount of blood volume in pregnancy has begun at 10 weeks of gestation and peaked at 32 and 36 weeks' gestation. Physiologically, this blood dilution occurs to compensate for the more severe heart work during pregnancy (Hanifa, 2002). Haematological changes in pregnancy occur because of increased circulation to the placenta and breast growth. Increased blood plasma increased by 45-65% starting in the second trimester of pregnancy and maximum in the ninth month (Prawirohardjo, 2002).

METHOD

Research Approach

The research method used descriptive analytic design with cross sectional approach.

Participant

The population in this study are trimester II and III pregnant women who do antenatal care (ANC) in Socah work area of Public Health Center from January to June of 2016. There are 43 people. A sample size of 39 persons corresponding to the inclusion and exclusion criteria. This research using simple random sampling. Inclusion criteria are pregnant women who live with family (husband, parents, or other family members). Exclusion criteria of pregnant women who have a history of anemia before pregnancy and chronic diseases associated with decreased hemoglobin levels

Data Collection

The study was conducted on 10-14 July 2016. Independent variables of research are technology, family support, cultural values and lifestyle, economy, and knowledge. Dependent variable of research is the incidence of anemia in pregnant mother. The instruments used questionnaire to identify factor of technology, family support, cultural and lifestyle, economic, and knowledge.

Data Analysis

Data were analyzed using chi square statistic test with degree of significance $p < 0.05$.

RESULTS

Demographic characteristics and specific data on anemia factor analysis in pregnant women based on transcultural nursing in Socah Community Health Center work area.

Tabel 1 Characteristics of anemic responders research responders in pregnant women based on transcultural nursing in Socah Community Health Care

| No | Characteristic | Categori | f | % |
|----|--------------------|-------------------|----|-------|
| 1. | Age | <20 years old | 4 | 10.3 |
| | | 20 – 35 years old | 29 | 74.4 |
| | | >35 years old | 6 | 15.4 |
| | | Total | 39 | 100.0 |
| 2. | Job | Work | 5 | 12.8 |
| | | Housewife | 34 | 87.2 |
| | | Total | 39 | 100.0 |
| 3. | Educational status | Low | 8 | 20.5 |
| | | Medium | 28 | 71.8 |
| | | High | 3 | 7.7 |
| | | Total | 39 | 100.0 |
| 4. | Family form | Main family | 12 | 30.8 |
| | | Extended family | 27 | 69.2 |

| | | | |
|--|-------------------|----|-------|
| | Total | 39 | 100.0 |
| 5. Number of family member | 2 persons | 13 | 33.3 |
| | 3 persons | 13 | 33.3 |
| | 4 persons | 7 | 17.9 |
| | ≥ 5 persons | 6 | 15.4 |
| | Total | 39 | 100.0 |
| 6. Number of children | 0 | 17 | 43.6 |
| | 1 child | 14 | 35.9 |
| | 2 children | 6 | 15.4 |
| | ≥ 3 children | 2 | 5.1 |
| | Total | 39 | 100.0 |
| 7. Drinking tea/coffee | Yes | 9 | 23.1 |
| | No | 30 | 76.9 |
| | Total | 39 | 100.0 |
| 8. Number of blood-boosting tablets consumed | <30 | 32 | 82.1 |
| | ≥ 30 | 7 | 17.9 |
| | Total | 39 | 100.0 |
| 9. Hb | Anemia | 22 | 56.4 |
| | Not anemia | 17 | 43.6 |
| | Total | 39 | 100.0 |
| | Total | 39 | 100.0 |

Based on table 1 on the demographic characteristics of respondents concluded that most respondents between 20-35 years, 29 people (74.4%). In terms of work, 34 respondents (87.2%) did not work or just as housewives. From the aspect of education, most of the respondents have medium education, 28 people (71.8%). In terms of family form, 27 respondents (69.2) live with large families. In terms of the number of family members, each 33.3% of respondents have 2 and 3 family members, 17.9% of respondents have 4 family members and the remaining 15.4% have family members ≥ 5 people.

Judging from the number of children owned, most respondents do not have children as many as 17 respondents (43.6%). In terms of tea and coffee consumption habits, most respondents did not have a habit of consuming tea and coffee as much as 30 respondents (76.9%). Judging from the number of tablets consumed by respondents, most of the new respondents consume tablets plus blood less than 30 tablets as much as 32 respondents (82.1%).

Tabel 2 Technology with anemia in pregnant women based on transcultural nursing in Socah Community Health Center work area

| Technology | The incidence of anemia | | | | Total | |
|---------------|-------------------------|------|----|------|----------|-------|
| | f | % | f | % | Σ | % |
| Less | 10 | 25.6 | 2 | 5.1 | 12 | 30.7 |
| Enough | 8 | 20.5 | 7 | 17.9 | 15 | 38.5 |
| Good | 4 | 10.3 | 8 | 20.5 | 12 | 30.8 |
| Total | 22 | 56.4 | 17 | 43.6 | 39 | 100.0 |

Chi square p = 0.045 contingency coefficients = 0.370

Table 2 shows that respondents who received exposure and underutilized technology experienced anemia in pregnancy of 10 (25.6%), but a number of 2 (5.1%) respondents did not have anemia. Respondents who acquired and utilized the technology well did not experience the majority of anemia in their pregnancies. A number of 8 (20.5%), but a number of 4 (10.3%) respondents have anemia in pregnancy. The results of chi square statistic test obtained p = 0.045 ($\alpha \leq 0.05$) then H1 accepted which means there is a correlation between technological factors with anemia in pregnant women. In the correlation coefficient obtained 0.370 which means that the technological variables with anemia in pregnant women have a strong weak correlation.

Tabel 3 Family support to anemia in pregnant women based on transcultural nursing in Socah Community Health Center work area

| Family support | The incidence of anemia | | | | Total | |
|----------------|-------------------------|------|----|------|----------|-------|
| | f | % | f | % | Σ | % |
| Less | 0 | 0 | 0 | 0 | 0 | 0 |
| Enough | 7 | 17.9 | 1 | 2.6 | 8 | 100.0 |
| Good | 15 | 38.5 | 16 | 41.0 | 31 | 100.0 |
| Total | 22 | 56.4 | 17 | 43.6 | 39 | 100.0 |

Chi square p = 0.047 koefisien kontingensi = 0.303

Based on table 3 shows that there are no respondents received less family support. The majority of respondents who Getting enough family support for anemia in pregnancy 7 (17.9%), but 1 (2.6%) of respondent did not experience anemia. The majority of respondents who received good family support did not have anemia in pregnancy of 16 (41%), but 15 (38.5%) of respondents had anemia. The result of chi square statistic test obtained value p = 0.047 ($\alpha \leq 0.05$) then H1 is accepted which means there is a relationship between family support with anemia in pregnant women. The contingency coefficient is obtained 0.303 which means that family support variables have a weak association with anemia in pregnant women.

Tabel 4 Cultural values and lifestyle with anemia in pregnant women based on transcultural nursing in Socah Community Health Center

| Cultural values and lifestyle | The incidence of anemia | | | | Total | |
|-------------------------------|-------------------------|------|------------|------|----------|-------|
| | Anemia | | Not anemia | | Σ | % |
| | f | % | f | % | | |
| Positif | 7 | 17.9 | 10 | 25.6 | 17 | 43.6 |
| Negatif | 15 | 38.5 | 7 | 17.9 | 22 | 56.4 |
| Total | 22 | 56.4 | 17 | 43.6 | 39 | 100.0 |

Chi square p = 0.092 koefisien kontingensi = 0.261

Table 4 shows that the majority of respondents hold a positive culture and have anemia in pregnancy of 7 (17.9%), but 10 (25.6%) have no anemia in pregnancy. Respondents who held the most negative cultural and lifestyle values experienced anemia at 15 (38.5%). The results of chi square statistic test obtained p value = 0.092 ($\alpha \geq 0.05$) which means H1 is rejected, there is no correlation between cultural values and lifestyle with anemia in pregnancy.

Tabel 5 Economic with anemia in pregnant women based on transcultural nursing in SOcah Community Health Center wor area

| Economic | The incidence of anemia | | | | Total | |
|---------------|-------------------------|------|------------|------|----------|-------|
| | Anemia | | Not anemia | | Σ | % |
| | f | % | f | % | | |
| Low | 7 | 17.9 | 9 | 23.1 | 16 | 41.0 |
| Medium | 6 | 15.4 | 5 | 12.8 | 11 | 28.2 |
| High | 9 | 23.1 | 3 | 7.7 | 12 | 30.8 |
| Total | 22 | 56.4 | 17 | 43.6 | 39 | 100.0 |

Chi square p = 0.253 koefisien kontingensi= 256

Table 5 shows that respondents who have low economic status do not experience anemia in pregnancy is 9 (23.1%), while 7 (17.9%) have anemia in pregnancy. Respondents who had a moderate economy experienced anemia in pregnancy is 6 (15.4%), but 5 respondens (12.8%) did not develop anemia in pregnancy. Respondents with a high economic majority were anemic in gestation is 9 (23.1%), but 3 respondens (7.7%) had no anemia in pregnancy. The result of chi square statistic test obtained p value = 0.253 ($\alpha \geq 0.05$) which means H1 is rejected, there is no correlation between economics with anemia in pregnancy.

Tabel 6 knowledge with anemia in pregnant women based on transcultural nursing in SOcrah Community Health Center work area

| Knowledge | The incidence of anemia | | | | Total | |
|---------------|-------------------------|------|----|------|----------|-------|
| | f | % | f | % | Σ | % |
| Less | 9 | 23.1 | 1 | 2.6 | 10 | 25.6 |
| Enough | 3 | 7.7 | 0 | 0 | 3 | 7.7 |
| Good | 10 | 25.6 | 16 | 41.0 | 26 | 66.7 |
| Total | 22 | 56.4 | 17 | 43.6 | 39 | 100.0 |

Chi square p = 0.006 koefisien kontingensi = 0.457

Table 6 shows that respondents who had less knowledge of the majority had anemia in pregnancy is 9 (23.1%) persons, but 1 people (2.6%) had no anemia in pregnancy. Respondents with good category of knowledge did not have anemia in pregnancy is 16 (41%), but 10 persons (25.6%) had anemia in pregnancy. The result of chi square statistic test obtained p value = 0.006 ($\alpha \leq 0.05$), then H1 is accepted. It means there is correlation between knowledge with anemia in pregnant mother. In correlation coefficient obtained 0457 which means that the knowledge variables have a strong relationship with anemia in pregnant women.

DISCUSSION

The results showed that there is a correlation between technological factors with anemia in pregnant women. According to the theory of transcultural nursing, technology is one dimension of culture that can affect one's health (Leininger, 1978). The use of technology is affected by age. Most of the respondents were 20-35 years so that the use of technology to obtain information about anemia and nutritional fulfillment during pregnancy are good. Based on Snehandu B. Karr in Notoatmodjo (2007) states that health behavior which subsequently creates a good health status will be influenced by the presence or absence of health information or health facilities.

Proper use of technology can be a good source of information. Sources of information is everything that becomes intermediaries in the delivery of information. Mass communication media that can be used as a source of information consists of print media such as newspapers, magazines, books and electronic media such as radio, TV, film (Notoadmodjo, 2003). Notoadmodjo (2003) also explains that the more sources of information obtained, the more knowledge gained. The majority of respondents are housewives so they have more time to find information about anemia either through health workers, electronic media, print, and others. Professions as housewives also have more time at home so they can make their own nutritional needs by utilizing modern equipment, such as blenders, refrigerators, and others.

The level of education of respondents who are classified as upper middle class also affect the utilization of technology appropriately so that the number of anemia in pregnant women will be low. According Soekartawi (2003), the use of technology is strongly influenced by human resources or human brain. The higher a person's education level the better the mastery and utilization of technology.

Based on the explanation, researchers argue that exposure and utilization of good technology in the form of information, infrastructure, and health services tend to produce better health status. Pregnant women who utilize technology well in obtaining information and health services tend not to experience anemia in pregnancy. This happens because all information and health services received by mothers creates a good understanding to the mother so as to create a positive behavior, namely preventive measures that can maintain good health of pregnancy, thus preventing the occurrence of anemia.

The results of the study in Table 3 indicate that family support is one of the factors associated with anemia in pregnant women in this study. According to Andrews & Boyle (2012) family support is part of social support that serves as a support system of its members and is aimed at improving health and adaptation processes. Friedman (1998) adds that family support also means attitudes, actions, and family acceptance of sick. Family support obtained by the mother is closely related to the family form of pregnant women. Family forms consisting of large families and nuclear families (small) qualitatively describe developmental experiences. Pregnant women who come from small families usually get better family support than large families (Friedman, 1998). Family members believe that supportive people are always ready to provide help and help when needed (Hannan, et al., 2012). Factors affecting other family support are socioeconomic classes that include income or employment levels and education levels. In middle-class families, there may be a more democratic and just life, whereas in lower-middle-class families it is more authoritarian

According to research that has been done by Maunaturrohmah external factors in the form of family support effect on the incidence of anemia in pregnant women. If family support is good, then the anemia rate is also low. Researchers believe this is because family support can motivate mothers and behavioral changes to maintain their health during pregnancy. Maternal health status will be good and not anemic

Based on the above descriptions, the researcher believes that the better the support provided by the family will improve health status, so the number of anemia in pregnant women who are found low.

The results of the study in Table 4 show that there is no significant correlation between cultural values and lifestyle with anemia in pregnant women. The majority of the study respondents had negative cultural and lifestyle values. Respondents who hold negative culture have anemia and some are not. Respondents with positive cultural values were anemic and did not experience anemia with almost the same amount.

Negative culture of the respondents, among others, the belief not to consume blood tablets because they feel is not sick, worried babies born into large, and the belief that pregnant women should not eat foods that are fishy. Positive culture that develops in respondents is light exercise habits performed by pregnant women, pregnancy health checks to health personnel, and the habit of not smoking

The results of this study contradict the transcultural nursing theory that states that culture and lifestyle affect the behavior of one's health which will then affect the health status of the person. Culture and lifestyle illustrate the way a person perceives something, behaves, and judges something that is around

According to WHO (1990) in Kharismawati (2014) culture is a pattern of life generated by normal behavior, habits, values, and procurement of existing resources. Culture in the family means is the belief and values adopted by the family, in the big family of course there are some members who become role models or respected opinions. Respondents who live with large families and have more family members, will get more intervention and information from other family members. Most of the study respondents agreed to references from important people in their families (eg parents, parents, or husbands) that influenced the value of cultures and lifestyles that were believed. The age of respondents who are young is usually the reason to believe in the advice given by older family members.

Research respondents held a positive culture but the answer was not in accordance with the culture adopted. This can be known from the interview as clarification after the questionnaire. Most respondents said they did not believe in the trust and myths that developed in the community on the questionnaire but still did not consume tablets added blood. After clarifying the research data, respondents said that the respondents believe in the belief that has long developed in the Socah Community Health Center because it has been proven and recommended by many parents. Respondents who embrace positive culture (in line with health) still have anemia. Some respondents get intervention answers from health workers. Some health research respondents filled out questionnaires with the help of health workers, so the results tended to be positive even if they were not.

Some respondents did not experience anemia despite a negative culture, because their knowledge was high, so the respondents filled out questionnaires in accordance with their knowledge rather than the cultures they believed.

According to Lueckenotte (2000) in Kharismawati (2014) that one's education level can affect one's behavior and lifestyle. The level of education of respondents also affects the level of knowledge. Respondents filled in the questionnaire according to their knowledge and tried not to show the culture they trusted.

The results of the research in table 5 shows that there is no significant relationship between economic factors with anemia experienced by pregnant women. The results of this study contradict the theory proposed Marmi (2013) which states that the economic status affects one's health is through the ability to select and supply food. Mawaddah (2008) also explained that the economic status is closely related to the income earned, high income is usually the number and type of food consumed is also getting better. The economy and livelihoods of a society are the focus of an important ethnographic study.

Economic factors that affect the occurrence of anemia in pregnant women is closely related to the work of respondents. The majority of respondents work as housewives so they do not earn income every month. Revenue earned comes from other family members, such as husbands. If the source of income in the low family will affect the selection of nutritious food to be consumed. Economic status in transcultural nursing includes income in the family, other income sources, health insurance, and the impact of income on health (Andrews & Boyle, 2012)

The insignificant value that occurs in the cross tabulation of research data does not experience gaps that are too meaningful so that if tested statistically will yield insignificant value. Researchers believe that respondents in this study experienced anemia not only because of economic factors, but many other factors that affect. The results of data analysis showed that respondents with high economics, anemia in pregnancy live with large family. The high economy of the respondents is not very meaningful when used to meet the needs of one large family or the number of family members that many. Family size can be used to give an idea of the amount and type of food received by each family member (Sepseyanti (2009) in Liow et al (2013)

The results of the research in table 6 shows that the majority of respondents have a good level of knowledge. The statistical test showed that there was a significant correlation between maternal knowledge with anemia in pregnancy.

Based on information from respondents, respondents' knowledge of anemia in pregnancy is obtained from printed media (newspapers, magazines, books, etc.), electronic media (mobile phones, television, radio, etc.), or from health workers (midwives, Nurses, doctors, and others). Knowledge is a process in a person that is obtained from simply knowing, understanding, translating according to the ability of the individual, then describe the situation and connect the outline of the experience gained for later accepted as useful information for himself (Notoadmodjo, 2007).

One of the factors causing anemia in pregnant women is lack of knowledge (Puji, et al., 2010). One of the factors that influence one's knowledge is the level of education. The majority of respondents have secondary education level, namely junior high and high school. The level of education of the mother will affect her behavior. The higher the education or knowledge, the higher the awareness to prevent the occurrence of anemia (Nurhidayati, 2013). Maternal knowledge has a significant relationship with adherence to tablet consumption Fe. Mothers with good knowledge, are more concerned about health and realize that maintaining health when pregnancy can be done with regular consumption of tablets plus blood. The majority of study respondents were taking tablets with less than 30 tablets, most of them said they often forgot to take Fe tablets.

Based on the above description the researchers believe that with good knowledge, pregnant women will be more concerned and aware of their health during pregnancy. It will motivate him to apply a healthy lifestyle such as eating vegetables, adequate rest, and taking tablets plus blood regularly to prevent the occurrence of anemia. Knowledge is an important domain for creating one's actions.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Technological factors relate to the amount of information obtained and the person's behavior so that anemia does not occur. Family support can increase the mother's motivation for prevention of anemia during pregnancy as well as education can influence a mother's decision making so that anemia does not occur. Cultural values and lifestyle and economy are not related to anemia in the mother hami as long as there is a

good knowledge factor and economic utilization is used by big family, so that influence to fulfill nutrition everyday.

Suggestions

Suggestions that can be given are first for health agencies to be able to disseminate Antenatal Care (ANC) Integrated program and routinely conduct health-related counseling during pregnancy especially prevention of anemia to increase mother's knowledge. Secondly, health personnel in the Socah Community Health Center are expected to provide health education on factors related to anemia in pregnant women. Third, the respondents are expected to be more active in following Antenatal Care (ANC) Integrated so as to motivate and control their health during pregnancy. In addition, respondents are expected to fill in the questionnaire according to their circumstances. Finally for the next researcher needs to do the research process with the provision of intervention to pregnant women so as to reduce the incidence rate of anemia in pregnant women. In addition, the next researcher is expected to investigate qualitatively or observation especially on cultural values and daily lifestyle, so that the data obtained more accurate.

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ENTREPRENEURSHIP TRAINING AS A CAREER TO DEVELOP HEALTH WORKER EFFORTS TO BE ENTREPRENEURSHIP

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ABSTRACT

The background of total number health workers graduates is not comparable with the available employment; so that many nurses and midwives feel difficulty to find job in the labor market. Remember that the increasingly narrow field of employment for health workers, especially in government institutions, it is necessary for health workers equipped with skills / other skills in accordance with its competence in order to open business opportunities both independently and collaborate. The ability to become entrepreneurship can be started since the health workers are still studying in college or when they have finished their education by providing Entrepreneurship Training. The aim of this activity is to create new entrepreneurship among students and alumni of the Academy of Health Karya Husada Yogyakarta. The metode of this activity is conducted by providing entrepreneurship training, visit and apprentice. The result of this program was attended by 22 participants, after training, did visit and apprentices were 6 (27,27%) independent self-employed tenant in Baby Massage and SPA service and other services, 3 (13,63%) entrepreneurship tenant Food culinary as well as 13 (59.1%) tenants still need assistance in order to become a new self-employed entrepreneur. The conclusion of entrepreneurship training activities can create new entrepreneurship covering 7 students and 2 alumni as new entrepreneurs who run business in various business product in the form of services and product of goods, realization of Incubator Entrepreneur as center of entrepreneurship and entrepreneurship capacity building system for students.

Keywords: Entrepreneurship, health workers

INTRODUCTION

Science and Technology Program for Entrepreneurship Akademi Kesehatan Karya Husada Yogyakarta with scheme Enhance business management skill for student through entrepreneurship training of care service "home care clinic" develop program doing health care at home service Home Care and Health services program for infants in the form of Baby SPA (Solus Per Aqua) in the second years. Solus Per Aqua is a traditional health effort with holistic approach in the form of comprehensive treatment using combination of hydrotherapy, massage, aromatherapy and food service, healthy drink and physical activity (Permenkes 1205 / X / 2004). Baby SPA service is a treatment that includes promotive and preventive. Solus Per Aqua (SPA) is more geared

to care body (physical), mind (mind), spirit (spirit) to achieve peace and relax (comfort) for infants.

LITERATUR REVIEW

When the infant growth slowly than the development of age should be, parents may intervene and stimulate motor movement of the infant. It is very important to optimize the baby's motor skills. In principle, infant stimulation is highly recommended, although the development of the infant already looks normal and good. Stimulation of infants regularly can cause optimal growth and development, independent and have a stable emotion, so when they are adult, they can easily adapt with the surrounding environment. Good stimulation for children will make them achieve optimal development of vision, hearing, language, social, cognitive, gross, smooth movement, balance, coordination, and independence. Stimulation that can be given such as soft touch, giving toys, talk, train to walk (Syaukani, 2015)

Solus per aqua (SPA) has two affects; it can develop infants' motori, and increases the quantity of baby's sleep. (Afrina, 2012)

The instinct of a baby responds to Mother's touch as a form of protection, attention, and expression of love. We can see the baby who getting touch looks so comfortable and calm. When the frequency of touching becomes higher, it can make the baby and person who closest to them more intent. Touches which presented to the baby in the form of gentle massages should be performed by the nearest person, whether it can be mother, a father, a grandfather, or a grandmother. But the lack of information and knowledge of parents about massage, it makes many parents assume that massage is not a form of scientific therapies as well as natural for infants. Pijat (massage) is one of the oldest treatment methods in the world. In terms of history, traditional massage in Indonesia is also influenced by the healing and medicinal arts from India and China. Traditional massages are performed by traditional healers and inherited knowledge, it is using herb massage ingredients that sometimes do not guarantee safely for the baby's skin (Maryati, 2014)

Nowadays, the baby massage method is modified with a more modern pattern in accordance with the latest research results. Baby Massage becomes a new trend in baby care that is *Solus Per Aqua (SPA)* baby or often called *Baby SPA*. Solus Per Aqua (SPA) which means "Healthy Through Water" is one way to rejuvenate the body with a series of body scrubs, massage, baby gymnastics and all activities that can make the body become more relaxed. Baby is given to soak in a small tub and the neck buffers buoy. Relaxation for infants is not only to relieve stress but also is essential for the child's growth process. (Galenia, 2014).

In fact, the condition that exists in the community is not all masseur especially if the baby massage does not know the basic mechanism how to massage in the right way, it can caused unwanted condition such as intracranial hemorrhage, extremities hematoma and ileus. It happened at some hospitals that they did erroneous massage techniques so that causes hemorrhage in infant.

Based on the background of the problem, health workers need to get entrepreneurship training in the form of Maintenance Service in "Home Care Clinic and Baby SPA". This type of service can be done either independently or collaboratively.

The output of the training which is provided to students and alumni with their own potentials is expected to generate entrepreneurship among students through science and technology program for entrepreneurship, so it can make students become new entrepreneurs by developing business plan to capture business opportunities in the community especially in the field of health. The declaration of Science and Technology Program for Entrepreneurship at the Akademi Kesehatan (Akes) Karya Kesehatan Yogyakarta is expected to (1) create a new self-employed entrepreneur from Akademi Kesehatan Karya Husada Yogyakarta (2) improve business management skills for students, (3) create a suitable entrepreneurship training method for students, and (4) Business units that give a profit as source of generated revenue from Akademi Kesehatan Karya Husada Yogyakarta. Through Science and Technology Program for Entrepreneurship, Academy Karya Husada Yogyakarta may: (1) develop the entrepreneurial among students by (a) providing conceptual knowledge and managerial skills about how to become a successful entrepreneur; (b) give some trainings for students how to find out business opportunities and (c) train the students' skills in preparing the Business Plan in accordance with the type of business chosen, (d) conduct a SWOT analysis to evaluate and improve the Business Plan based on the results of the business feasibility survey and relevant actual information to support business development in the future, and (e) create new independent entrepreneurs, (2) Improving business management skills for students, and (3) Create suitable training entrepreneurship method for students.

METHOD

The approach used in Science and Technology Program for Entrepreneurship activity is preceded by training. Training is done by individual and classical approach. The classical approach is made when the theory of Entrepreneurship given and the individual approach is made at the time of the skill practice of performing the treatment.

The methods are:

1. Business Management Training Services *Baby Massage and Baby SPA*. The method used in this training is:
 - a. lectures vary

This method is chosen to convey the concepts that are important to be understood and mastered by the trainees. The materials provided include: **Baby Massage Therapy Massage For Baby and SPA**, Child development concept, Pediatric massage therapy I and II, Developing Baby Touch and Baby SPA, the benefit of baby massage and baby SPA for infant, Swimming baby SPA, Benefits of swimming for infants, Baby SPA Requirements, Implementation procedures of infant massage and baby SPA, Sop Kiddy healthy baby SPA.

b. Demonstration of Pediatric massage therapy touch and Baby SPA. This method is selected to show each stage of massage process and baby SPA. The demonstration is performed by the instructor in the presence of the trainees so that the participants can observe directly. Afterwards, each participant conducted to re-demonstration with the guidance and it controlled by lecturer. Tools or media used in this method called panthoom which is continued by practicing directly with the baby.

c. Visit / Bands Making

Visit takes place at Massage and Solus Per Aqua (SPA) for Mom and Baby "Lobally" Majenang. The training participants observed the services given by *the massage and baby SPA and massage* for pregnant women and learn the management services of Massage and Solus Per Aqua (SPA).

2. Internships

This method is used to provide a *Home Care service* experience in a tangible setting for trainees. The internship was conducted at "*Alesha*" Mom, Kids and Baby SPA at Kaliputih Pendowoharjo Sewon Bantul, as source site of Science and Technology Program for Entrepreneurship Akademi Kesehatan Karya Husada Yogyakarta. Further, the strategy activities to achieve the goal are:

1. Stage of Preparation.

Students have been received entrepreneurship materials from their lecture in the third semester with 2 credits load consisting of 1 Semester credit units theory and 1 Semester credit units practice before they did the training. This course provides an understanding of innovation and creativity so students can achieve independence of entrepreneurship.

a. Socialization of Science and Technology Program for Entrepreneurship.

Socialization Science and Technology Program for Entrepreneurship is conducted to all academic community, director, assistant director, Head of Study Program, students and alumni about science and technology program for entrepreneurship at Akademi Kesehatan Karya Husada Yogyakarta. This program is an implementation of Entrepreneurship courses as a main course with the weight of 2 credits placement in the third semester of Prodi D III Nursing and fourth semester of Prodi D III Midwifery.

2. Tenant Recruitment

Participants' recruitment is done start from the socialization of Ib K program to all students, alumni, and academic community. In the second year, it will recruit new tenant as much as 6 tenants in the first year, there are 6

independent tenants released after Science and Technology Program for Entrepreneurship socialized well then registration will open. The procedure of the selection is arranging business plan as it has been taught in the course entrepreneurship. The best winner for the business plan will recruit as participants of Science and Technology Program for Entrepreneurship in second year. Requirements of the participants consist of: (1) registered as active student in Akademi Kesehatan Karya Husada Yogyakarta, (2) Graduated in Entrepreneurship course, (3) Willing to follow *recruitment test* or entrepreneurship test, (4) Submit a commitment participating statement in Science and Technology Program for Entrepreneurship, (5) Re-regenerate Science and Technology Program for Entrepreneurship based on recruitment test result. Students who passed the test are students who got score above the passing grade score of the accumulated entrepreneurship score. The maximum capacity of participant is 22 persons. The test participants consisted of 36 students and 2 alumni. Participants who passed the test as many as 22 people consisted of 5 students in fifth semester, 15 students in third semester and 2 alumni.

3. Provision of facilities

The facilities which is provided to support the entrepreneurship courses and Science and Technology Program for Entrepreneurship include: (1) Provision of space which prepared for Science and Technology Program for Entrepreneurship service that close to the *Home Care Clinic* such as (2) Helping tenant to open a business Entrepreneur under control of Akademi Kesehatan Karya husada Yogyakarta through Akademi Kesehatan Karya Husada Yogyakarta's *Home Care Clinic* located in Akes Karya Husada Yogyakarta and "*Alesha*" *Mom, Kids* and Baby SPA in Kaliputih Pendowoharjo Sewon Bantul. It is used for apprenticeship for IbK participants (3) Provision of maintenance services in 2015 such as: multi-purpose bed, bed check, RIESTER Stethoscope, Spigmed Spignomanometer, Magic Star Thermometer, Glucose Checker, Cholesterol, Easy Touch, ABN Flashlight, Hammer ONEMED, Walker Fold, Philra Infra Red Lamp, Ball for ROM (health ball), Set wound care 2 sets, Sterilisator, Oxygen Equipment, and it includes the Massage and Baby SPA equipment in 2016: SPA / Swimming Baby area, Modena water heater, single lever bathtub, liquid soap, Evamats number, Baby Toys, Vincart, Playgim, Todler swim, Big donut ring, Foam / mat 6X66X100, Mattress 6X70X100, Waiting Chair, Reception Desk, Glass Cabinet, Modena water heater, single lever bathtub, liquid soapbox

2. Step of Implementation

"BABY MASSAGE AND AND SOLUS PER AQUA (SPA)" training collaborated with Academic Hospital of Gadjah Mada University Yogyakarta which is conducted in the building of Academic Hospital of Gadjah Mada University Yogyakarta for 3 days from May 20 until May 22, 2016. It is

followed by 20 participants consisting of 5 students in fifth semester, 13 students in third semester students and 2 alumni. The interviewees consist of pediatrician, doctor, nurse and physiotherapist. Training methods include lectures, asking and answering question, discussions, demonstrations, and visits to "Labolly" in Majenang. Participants of alumni have been working in maternity clinics so they had experience in infant care, maternity and postpartum care and it has massage and SPA treatment for babies and mothers, while students get "*Alesha Mom, Kids and Baby SPA*" at Kaliputih Pendowoharjo Sewon Bantul as well as an incubation or places for tenant (students and alumni) who have not been able to organize their own business independently.

3. Monitoring and evaluation

After the tenants receive training, did visits, and apprenticeships, students will continue to conduct business according to their passion. The development of their business should be known by their lecturer so that each tenant should give the result in the form of cash flow financial reports and lecturer devotes to monitor and give evaluation for the result. The result monitoring, evaluation and financial report become consideration for establishing tenant as a new entrepreneur.

RESULT AND DISCUSSION

Science and technology for Entrepreneurship is one of the grants that propose by Dikti to build entrepreneurship in Higher Education as an anticipatory response for the higher of unemployment and low job vacancy. Universities that are focus on the provision of knowledge and technology can give the ability of business penetration for college graduates. Through the implementation of Science and Technology Program for Entrepreneurship grants, the target focus is to create new entrepreneurs who can develop an entrepreneurial atmosphere at Akademi Kesehatan Karya Husada Yogyakarta. The implementation of Ibk on the second year (2016), there are seven tenants and two alumni who have been eligible to be labeled as new entrepreneurs. As an effort to improve the business, Science and Technology Program for Entrepreneurship tenants are provided with tools production and stimulus funds to improve the competitiveness of business commodities. The tenant who has been success and ready to perform self-employment is one of the implementation entrepreneurship courses the field of business market. It has been stated by Lestari and Wijaya (2012) that entrepreneurship education affect is the mindset, attitude, and behavior of students to do entrepreneurship. (Lestari and Wijaya, 2012) Technique to increase production of tenant business is done by improving marketing, product packaging improvement, brochure distribution, banner installation or ex banner, and marketing through social media (*on line*). (Maryati, 2015). The tenants who are ready to become independent entrepreneurs will be given stimulus funds with limited capital but effective.

Tenant should give the report on their business in every month as a form of reasonability for receiving the funds.

The conditions of the students before they are becoming a tenant Science and Technology Program for Entrepreneurship got many obstacles in production due to the lack of science and technology knowledge, and marketing due to lack of ability in marketing. Sales of goods and services of students initially only reach small area, but there is science and technology creations in the production associated with the competence after they got coaching and mentoring in Science and Technology Program for Entrepreneurship. The marketing techniques in the production of *Baby Massage and SPA* services are made by picking up the ball that is making brochures / leaflets distributed to several hospitals, clinics, posyandu or in the community especially for families who have pregnant women, childbirth, infants and toddlers. Tenant products show sales progress significantly. It shows that Science and Entrepreneurship Program can increase the readiness of students to do entrepreneurship so they can compete in the business market. (Mardianingsih et al, 2015).

The first *Baby Massage and SPA* service techniques were administered to the infant to determine the health of the infant. After the next assessment, it determines to find out the needs of patients by doing massage, gymnastics fit and followed by SPA. Based on the results of anamnese, the quantity of baby sleep is better; babies can sleep more comfy accordance with the needs of the baby's hours. (Afrina,2012). Babies who get baby massage can improve baby's growth and development than babies who do not get massage. ("Massage for promoting growth and development of preterm and / or low birth-weight infants" - Vickers - 2004 - The Cochrane Library - Wiley Online Library, "nd).

Besides providing *Baby massage and SPA services*, it is also provide *home care* nursing independently or collaboration with other health teams such as doctors. Services provided by nurses in accordance with the competence of nurses. The results are documented in the form of a developmental record containing the progress of the patient's health after nursing did the action. Tenant products through *home care* and *Baby massage and SPA services* reach the highest peak in the profit with an average cash flow turnover of Rp. 4.5 million per month with an average profit margin of Rp 3 million per month.

There is an increasing of the production of service in marketing after being given training. First, the service is only serves massage and SPA in women, and then there are additional services like massage and SPA for pregnant and lactating women (nifas) to do the massage oxytocin and marmet techniques to smooth and increase milk production. It can increase the production of business as much as 25%.

On the production of traditional Culinary "Mie Des", the marketing techniques on the manufacture of noodles "des" is done by distributing products through leaflets / brochures to students, lecturers and community. Traditional Culinary products "Mie Des" is increasing especially on holidays and weekend.

The new product of Traditional Culinary "Mie Des" called "Mie Des" with a spicy level 1-10. The profit increases of 25%. (Hadiyati, 2011).

IbK Akademi Kesehatan Karya Husada Yogyakarta program must be followed up by Science and Technology Program for Entrepreneurship team under the coordination of Research Institute and Community Service (LPPM) of Akademi Karya Husada through several policies and technical programs, namely (1) establishing entrepreneurship courses as a compulsory course that must be taken by every student in all Program study at Akademi Kesehatan Karya Husada Yogyakarta. And it serves as one of the requirements for students to attend all internal competitions of entrepreneurship grant in Akademi Kesehatan Karya Husada Yogyakarta and other institution of Akademi Kesehatan Karya Husada Yogyakarta, (2) to make MoU with entrepreneur or private entrepreneur as IbK's partner institution in developing entrepreneurship culture at Akademi Kesehatan Karya Husada Yogyakarta based on *mutual-benefide cooperative*, and (3) developing money system and constructive internal audit on vertically and horizontally, so that we can know the opportunities of failure or obstacle in running business, whether on the management at Science and Technology Program for Entrepreneurship Akademi Kesehatan Karya Husada Yogyakarta, and students' business as new entrepreneurs. The improvement of Science and Technology Program for Entrepreneurship can carry out by developing partnership programs and cooperation with other business people outside at Akademi Kesehatan Karya Husada Yogyakarta. The climate and academic culture in Higher Education, especially Akademi Kesehatan Karya Husada Yogyakarta which emphasizes bureaucratic and structural elements is a socio-psychological barrier that can hinder creativity in entrepreneurship. On that basis, it is necessary to acculturate business culture between campus business world and business embryo in campus through assimilation process and cooperation accommodation based on *mutual-benefide cooperative foundation*. A college that views business based on the academically, they often get in isolation of the normative mind that puts the edge of science and technology of business commodities, while the business world is more focused on productive efficiency and *marketing-network* development that puts profit ahead. Both of polarizations of this business world can be integrated into Science and Technology Program for Entrepreneurship by reducing the space barrier of the university's world space with the business world, through the process of internalizing the entrepreneurial activities of the community of the campus with real campus business.

CONCLUSION

Based on the results above, it can be concluded;

1. Science for Entrepreneurship of Akademi kesehatan karya husada Yogyakarta in the second year 2016, it can produce 7 students and 2 alumni as a new

- entrepreneur who runs the business in various business products in the form of *baby massage and SPA services* and various goods products.
2. Realization of incubator Science and Technology Program for Entrepreneurship entrepreneur *as a center of entrepreneurship* in the development of entrepreneurship culture at Akademi Kesehatan Karya Husada Yogyakarta.
 3. Realization of *entrepreneurship capacity building system* for students of Science and Technology Program for Entrepreneurship which is controlled by Research Institutions and Community Service Akademi Kesehatan Karya Husada Yogyakarta.

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**VULVA HYGIENE USING PIPER BETEL LEAVES TO ACCELERATE ABNORMAL
VAGINAL DISCHARGE HEALING IN ADOLESCENT IN SPMAA FONDATION
LAMONGAN**

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ABSTRACT

Abnormal vaginal discharge will increase the risk of infection and malignancy in the reproductive system, so it is necessary to prevent and eliminate abnormal symptoms of vaginal discharge which one of them with vulva hygiene behavior by using piper bettle leaf. The aim of this study was to determine the influence of vulva hygiene by using piper bettle leaf to accelerate the abnormal healing of vaginal discharge.

The research method used pre-experimental with a population of adolescent girls who experienced abnormal vaginal discharge at SPMAA Foundation Lamongan District. Total sample of 30 people taken with random sampling technique. Instrument research using interview sheet, kemudaian data was analyzed using Mann Whitney test with significance level $\alpha = 0.05$. The results showed that the abnormal healing rate of vaginal discharge in the treatment group showed almost entirely (93.3%) was in the fast category and the smallest (6.7%) was slow, while in the control group it was found that almost (80%) abnormal healing vaginal discharge Slow category (80%). Based on the results of statistical tests showed that the value of $Z = -3.985$ and $p = 0.00$ ($p \leq 0.05$), Thus it can be concluded that the vulva hygiene by piper bettle leaf proved to accelerate the abnormal healing of vaginal discharge. Based on the results of the study in expecting health practitioners, especially treatment can provide health education for adolescent girls, especially in schools for the prevention and healing of abnormal vaginal discharge..

Keyword :Abnormal Vaginal Discharge , Piper Bettle Leaf, Vulva Hygiene

INTRODUCTION

Vaginal discharge is a common gynecological condition among women of childbearing age that frequently requires care affecting about one-third of all women and half of pregnant women. Vaginal discharge is normal in women in their childbearing years. It derives from physiological secretion of cervical and Bartholin's glands and desquamation of vaginal epithelial cells resulting from bacterial actionin the vagina. When abnormal vaginal discharge is more abundant and has not unpleasant odor, it is usually accompanied by vulval or vaginal itching, dysuria, and/or dyspareunia. Studies carried out in developing countries demonstrated that vaginal discharge is caused by sexually transmitted infections (STIs) in up to 90% of cases⁽¹⁾. Vaginitis is usually characterized by abnormal vaginal discharge and or vulval itching and irritation. Bacterial vaginosis (BV) and vulvovaginal candidiasis (VVC) are

responsible for the greater part of cases of infectious vaginitis^(2,3). There are many risk factors can be associated with VVC. Those risk factors include mainly pregnancy⁽⁴⁾, use of broad-spectrum antibiotics⁽⁵⁾, uncontrolled diabetes mellitus⁽⁶⁾, use of contraceptives and hormone replacement therapy⁽⁷⁾, use of corticosteroids⁽²⁾, tightfitting clothing, synthetic underwear, increase sexual activity and vaginal douching⁽⁸⁾. Vaginal Discharge is a clinical manifestation of various infections, malignancies or benign tumor reproduction, these symptoms do not cause mortality but morbidity because it always wets the inside of women and can cause irritation, itchy so disturbing and reduce comfort⁽⁹⁾. Vaginal discharge that differs in odor, color, consistency or significantly decreases or increases in amount, may be due to an underlying problem like an infection⁽¹⁰⁾. Many women have what they perceive as an abnormal vaginal discharge at some point in their lives, but usually it is just a normal physiological discharge. This is a white or clear, non-offensive discharge that varies with the menstrual cycle⁽¹¹⁾. Any change in the color and amount of vaginal secretions is a sign of vaginal infection. Vaginal infections are something that often appears and most women have experienced it and will give some abnormal symptoms of vaginal discharge or whitish that is the itch or wound in the area of the vaginal skin, vaginal secretions are white turbid / yellowish, odorless smelling or odorless secretions. The unnatural, the discomfort of genitalia⁽¹²⁾. Abnormal vaginal discharge (AVD) is not a disease for itself but it is a symptom of other diseases as reproductive tract infections and sexual transmitted diseases, and if it isn't treated well it may lead to severe complications as pelvic inflammatory disease, ectopic pregnancy, congenital anomalies, prognosis of genital tract malignancy, so early detection and treatment of abnormal vaginal discharge decreases the maternal morbidity and mortality⁽¹⁾. The causes of abnormal vaginal discharge may be infective or non-infective. The infective causes may be (non-sexually transmitted) as bacterial vaginosis and candida or (sexual transmitted) like neisseria gonorrhoea, trichomonas vaginalis. On the other hand, the non-infective causes of abnormal vaginal discharge are foreign bodies (e.g. condoms, retained tampons), genital tract malignancy, fistulae, cervical polyps, allergic reaction and douching. Others causes like the use of antibiotic, steroid or birth control pills, diabetes, douches, scented soaps or lotions, bubble bath, pelvic inflammatory disease (PID), pelvic infection after surgery, vaginal atrophy⁽¹³⁾. The risk factors for AVD are different in many settings due to difference in the socioeconomic level, personal hygiene and habits⁽²⁾. Other risk factors include low socioeconomic status, cigarette smoking, antibiotic treatment for another condition, young age of coitarche, acquisition of a new sex partner and a recent history of multiple sex partners^(14,15). Inversely, hormonal contraceptive use, male circumcision, and consistent condom use reduce the incidence of BV^(16,17,18). According to Indonesian stastistic data in 2008 of 43.3 million adolescents who experienced abnormal vaginal discharge or whiteness as much as 23 million or 53.30%. While in East Java in 2011 of 735 teenagers who experienced abnormal vaginal discharge or whiteness as much as 677 or 92.10% of adolescents and who did not experience abnormal vaginal discharge or whitish as much as 58 or 7.90% adolescents. The results of the initial survey at SPMAA Foundation Turi Village Turi Sub-district of Lamongan District in November 2015 were obtained from 10 teenagers,

7 or 70% of teenagers who experienced abnormal vaginal discharge or vaginal discharge and 3 or 30% of adolescents did not experience abnormal vaginal discharge or vaginal discharge. The data shows there are still many teenagers who have abnormal vaginal discharge or whiteness. The women who complain of abnormal vaginal discharge don't seek medical examination except the complaint become intolerable and hinder the daily work, this may be due to modesty from reveal the genital area or felling shame to be examined by male doctor⁽¹⁹⁾.

Drugs used in the treatment of abnormal vaginal discharge usually come from the class of fluconazole to overcome candida infections and metronidazole groups to overcome bacterial and parasite infections. While non-pharmacologic to accelerate the abnormal healing of vaginal discharge can also be by using betel leaves. Learning about hygiene during menstruation is a vital aspect of health education for adolescent girls, as patterns that are developed in adolescence are likely to persist into adult life. Strip soft swelling or cloth are not absorbent, lack clean lines and may produce an odour⁽²⁰⁾. Piper betel leaves belongs to genus Piper of the family Piperaceae. Leaves of Piper betle possess several bioactivities and are used in traditional medicinal systems. Many research studies on Piper betle has reported that it contains important chemical constituents and acts to arouse action for its medicinal properties like anticancer, anti-allergic, anti-malaria, anti-filarial, antibacterial, antifungal study, insecticidal, antioxidant, anti-diabetic, gastro-protective, cyto-toxic, anti-platelet, wound healing activity, chlorophyllase activity, oral hygiene and anti-asthmatic effect. In Indonesia, many traditional people use betel leaves that are boiled and then used for *vulva hygiene*⁽²¹⁾. Betel leaf that has been known since 600 BC contains anti-septic substances that can kill bacteria so widely used as antibacterial and antifungal. Betel leaf contains phenol derivatives that are kafikol whose antibiotic properties are five times more effective than ordinary phenol. In addition to phenol, betel leaf also contains a vulnerary that can be used as anti-septic with antibiotic and antiseptic properties, betel is often used for cleaning feminine area and is believed to cure abnormal vaginal discharge. The nurse has important role in increasing the awareness of women regarding the reproductive tract infection; causes, prophylactic measures, complications and signs of infection. Also nurse should instruct the woman how to differentiate between the normal and abnormal vaginal discharge and healthy behaviors and ask the woman to avoid the unhealthy behavior as using vaginal douch, using perfumes or any unhealthy herbal treatment⁽²²⁾.

LITERATUR REVIEW

According to (24,25) Piper betel plant species contains positive activity towards the fungi or has the ability to suppress fungal growth. Piper betel was reported to have antibacterial activity⁽²⁴⁾. The crude aqueous extract of Piper betel L. and its antibacterial effect towards *Streptococcus mutans*. The focus of antimicrobial effects includes the ultra-structure and acid producing properties of *Streptococcus mutans*. From the micrographs of the transmission electron, it was found that the crude extract of Piper betel L. leaves causes plasma cell membrane damage and coagulation of the nucleoid. The extract was found to significantly reduce acid producing properties of the

bacteria and changed to the ultra structure of Streptococcus mutans⁽²⁵⁾. Tiswati (2017) reported that average pH of vaginal discharge before and after the use of piper betel leaves boiled water in the first measurement was 2.00 with a standard deviation of 0.000. On the second measurement or after using piper betel leaf boiled water the pH is 1.21 with a standard deviation of 0.410. It can be concluded that there is a significant difference between the pH of vaginal discharge before and after the use of piper betel leaves boiled water⁽²⁷⁾.

METHOD

The research design in this research is to use the method of Experimental Practice approach by Static group Comparison design. The population of this study were teenage girls who experienced abnormal vaginal discharge at SPMAA Foundation Turi Village Turi Sub-district of Lamongan Regency as many as 30, while the research sample was all female teenagers who had abnormal vaginal discharge at SPMAA Foundation Turi Village Turi Sub-district of Lamongan Regency fulfilling the inclusion criteria of 30 Respondents.

Result

Tabel 1 Frequency Distribution of Control Groups And Treatment Groups by Age

| variable | Vulva hygiene with piper betel leaves | | control | |
|--|---------------------------------------|------|---------|------|
| | n | % | n | % |
| Woman age (years) | | | | |
| 13-15 | 0 | 0 | 13 | 86.7 |
| 16-19 | 15 | 100 | 2 | 13.4 |
| Education | | | | |
| SMP | 13 | 86.6 | 0 | 0 |
| SMA | 15 | 100 | 2 | 13.4 |
| Frequency of vulvar hygiene habits (times a day) | | | | |
| 3 - 5 | 2 | 13.4 | 11 | 73.3 |
| >5x/hr | 13 | 86.6 | 4 | 26.7 |

Table 1 shows that in the control group that is not given piper water betel leaves to vulva hygiene is almost whole or 86.6% aged 13-15 years. While the treatment group that is given water piper betel leaves for vulva hygiene entirely or 100% aged 16-19 years. While based on education that the control group that provided water piper betel leaves to vulva hygiene almost whole or 86.6% of junior high education. While the treatment group given piper betel leaves water for the whole vulva hygiene or 100% education. Based on the frequency of hygiene vulva habit showed that from control

group mostly or 73,3% have habit to do vulva hygiene 3-5x in a day While treatment group almost whole or 86,6% do vulva hygiene ≥ 5 x a day

Effect of betel leaves on vaginal discharge

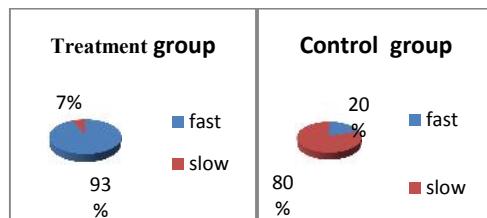


Diagram 1 Distribution of betel leaf effect and abnormal healing of vaginal discharge in treatment group and control group for vulva hygiene

Diagram 1 above shows that abnormal healing of vaginal discharges in the treatment group is much faster than in the control group. This result is reinforced by statistical test of Mann Whitney with SPSS version 16 in obtaining result $Z = -3.985$ and $p = 0,000$ where $p \leq 0,05$ so it can be concluded that H_0 is rejected which means there is influence of Piper Betel leaves (piper betle) for vulva Hygiene to abnormal healing of vaginal discharge. In young women in SPMAA Foundation Turi Village Turi District Lamongan District

Discussion

Diagram 1 above illustrates that in the control group or not given betel leaves water for vulva hygiene almost all or 80% of 12 abnormal healing vaginal dischargenya slow category and almost partially or 20% amounted to 2 abnormal healing process vaginal discharge fast category. Whereas in the treatment group or given water piper betel leaves for vulva hygiene almost entirely or 93.3% amounted to 14 respondents abnormal vaginal healing discharge fast category. Namely ≤ 7 th day there is no itching, fluid from vagina berwana clear, no smell or rotten, and the number of secretions a little. Mann Whitney test results also explain the value of $Z = -3.985$ and $p = 0.000$ which means there is a significant effect of piper betel leaves to vulva hygiene to abnormal healing of vaginal discharge. Based on the data above shows that the group treatment of abnormal healing of vaginal discharge faster due to good personal hygiene and optimal genetic care using stew water betel leaves. The use of vulva hygiene with betel leaf is one of the non-pharmacological genetic treatments. Genital care is one of the important things in general health and maintaining genetal hygiene, especially in doing vulva hygiene such as washing genetalia with antiseptic fluid (including water piper betel leaves), often changing dressing during menstruation if it feels moist, Keeping the genetalia area in order not moist because if moist will invite the fungus⁽²³⁾. Performing vulva hygiene or washing of feminine areas is the general way to be recommended after BAK and BAB to clean up various dirt on the surface of external organs by doing vulva hygiene can prevent infection in the genitorinary area, cleansing sweat and bacteria around the vulva outside the vagina, Prevent the stimulation of the

growth of fungi, bacteria and protozoa. Genetic treatment using piper betel leaves by boiling and using water for vulva hygiene or clearing genitals can speed up the abnormal healing of vaginal discharge, because piper betel leaves contain essential oils composed of bethophenol , Cavikal, seskulterpen hidroksivakol, cavigeral, estrogens, eugenol and karvakrool where the biochemical substances in piper betel leaves have the power to kill germs and fungi, besides betel leaf also contains phenol which has the power to kill the germ five times from ordinary phenol so it is antioxidant that accelerate Abnormal healing process of vaginal discharge⁽²¹⁾. Piper betel plant species contains positive activity towards the fungi or has the ability to suppress fungal growth. Piper betel was reported to have antibacterial activity⁽²⁴⁾ The crude aqueous extract of Piper betle L. and its antibacterial effect towards Streptococcus mutans. The focus of antimicrobial effects includes the ultra-structure and acid producing properties of Streptococcus mutans. From the micrographs of the transmission electron, it was found that the crude extract of Piperbetle L. leaves causes plasma cell membrane damage and coagulation of the nucleoid. The extract was found to significantly reduce acid producing properties of the bacteria and changed to the ultra structure of Streptococcus mutans⁽²⁵⁾. Piper betle produced the best result in antifungal susceptibility testing and showed to possess antifungal property against 4 out of 5 strains of fungus. SolidPhase Extraction (SEP) technique was applied to Piper betle to achieve initial separation of active antifungal compound in theform of methanol fractions⁽²⁶⁾. The piper betel leaves is widely used to treat various diseases, such as to lower the pH of the vagina and treat vaginal discharge. Tiswati (2017) reported that average pH of vaginal discharge before and after the use of piper betel leaves boiled water in the first measurement was 2.00 with a standard deviation of 0.000. On the second measurement or after using piper betel leaf boiled water the pH is 1.21 with a standard deviation of 0.410. It can be concluded that there is a significant difference between the pH of vaginal discharge before and after the use of piper betel leaves boiled water⁽²⁷⁾.

While in the control group it was found that in adolescents who were not given piper betel leaves for vulva hygiene (vulva hygiene using DTT water) almost all or 80% of abnormal healing vaginal discharge slow category and a small or 20% fast category. The purpose of doing vulva hygiene by using DTT water is that there is no itching, yellow vaginal fluid, no foul or rancid, and a small amount of secretions. In addition, many other factors are also influential in the healing of abnormal vaginal discharge such as healthy lifestyle, maintaining personal hygiene hygiene and other related factors. From Table 4.1 It shows that in the partial control group or 86.6% of adolescents aged 13-15 years and a small proportion or 13.4% of adolescents aged 16-19 years. So that can be categorized middle teenager. At this time the characteristics of adolescents are looking and want to seek self-identity, there is a desire for dating or interest of the opposite sex, embody deep feelings of abstract thinking ability or fantasize growing, berkhyal about sexual matters. But please also note that the increasing age of teenagers the more the task and development⁽²⁸⁾. When teenagers are not able to complete their tasks often teenagers will feel stressed. Stress is the brain that affects the work of all organs of the body, so if the brain receptors experience stress then the hormones in the body undergo balance changes and can cause abnormal

vaginal discharge or whiteness in women⁽²⁹⁾. From table 4.3 shows that in the control group more than half or 73.3% of teenagers did vulva hygiene 3-5x in a day and a small or 26.7% of adolescents performed vulva hygiene $\geq 5x$ in a day. From the data above shows that in the control group tend to poor habits of vulva hygiene. The poor habits of vulva hygiene are also often caused by the knowledge and awareness of young women who are less about abnormal vaginal discharge. Abnormal vaginal discharge was decreased in the women who had good knowledge score, and who used good hygienic practices, in contrast, there was increase in the abnormal vaginal discharge in those women who had poor knowledge score⁽³⁰⁾.

Conclusion

Based on the results of research and discussion it can be concluded that vulva hygiene by using piper betel leaves can accelerate abnormal healing of vaginal discharge in young women

Suggestion

The results of the study can be used as an alternative material to develop a nursing care plan in adolescents especially in the case of abnormal healing of vaginal discharge. Health practitioners, especially treatment, are also expected to provide health education for young women especially in schools for the prevention and treatment of abnormal vaginal discharge so as to reduce morbidity and mortality rates associated with infection and malignancy in the reproductive system.

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**FAMILY-BASED MATERNAL SENSITIVITY MODELS (MSM)
APPLICATION IN YOUNG MOTHERS IN RURAL AREA TOWARD
PARENT'S ROLE PERCEPTIONS AND HOW TO KNOW HEALTH-SICK
CONDITION IN INFANTS**

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Abstract

Introduction: Parent's role is very important to be studied more deeply for optimal infants care. Young mothers as parents need more information in parenting, including knowing whether the baby is healthy or sick. The present research aimed to analyze the effects of family-based Maternal Sensitivity Models (MSM) application in young mothers toward parent's role perceptions and how to know health-sick condition in infants. Method: the research design used in the present research was Pre Experiment Pre-Post Test Design, with the sample of young mothers in Puskesmas Sumbersari and Sukorambi, Jember counted 50 respondents using purposive sampling technique in March-June 2017. The data were collected by doing intervention in applying family-based Maternal Sensitivity Models (MSM) with the help of media booklets and modules. The perception of young mothers during pretest and posttest was measured using questionnaires and likert scales. The data analysis were a kind of general data using descriptive analysis, while special data were Dependent T-Test (Paired T-Test). Results: it indicated that family-based Maternal Sensitivity Models (MSM) application had an effect on young mother's perception about parenting role in infant care and perception of health-sick condition in infants with p Value of 0.00, respectively. Discussion: health-care workers need to provide information about the role of parents in infant care, and get to know babies in health-sick condition.

Keywords: *Maternal Sensitivity Models (MSM), parent's role, helath-sick in infants, young mothers*

INTRODUCTION

The lack of mother's ability to care for the baby is usually experienced by young mothers who gave birth at the age of 13-19 years. This is consistent with Infant Health and Development Survey (IHDP) survey in 2004 which found that young mothers are less skilled as parents when assess about their ability to care for their infants (Depkes, 2007). Such phenomenon often occurs in the community, especially in rural communities. The lack of maternal competence in infant care is also supported by a research (Asmuji, Indriyani, 2014) showing that maternal competence in bathing the baby is still very poor. All respondents said that no one dared to bathe the baby before

the umbilical cord off, and even found the condition that some respondents never bathe the baby because the role had been taken over by the family.

The baby's health condition is highly dependent on how parents do good and proper infant care. In addition, the parent's role for the baby, of course, cannot also be separated from the mother's experience in providing infant care. This is consistent with the results of the study (Vienna P, 2012) stating that most of good skills in early detection of growth and development of infant growth were 58 respondents (72%), there was a relationship between mother's competence about early detection of growth and development with the baby's growth.

Babies are a very vulnerable age group to experience the sickness. Improper care will result in the decrease of health status of infants, even will threaten their safety. This is depicted in the description of the research (Mahmudah, Cahyati, & Wahyuningsih, 2011) showing the results that one of the factors affecting the occurrence of death during the perinatal period is mother's knowledge that is still poor in caring the baby. Mothers with insufficient knowledge about infant care can have an impact on inappropriate behavior in parenting. Regarding to such condition, if the perception related to babysitting competence has a risk to infant's health, the researchers are then interested to intervene in developing perception, especially young mothers in improving parent competence with the present research entitled "Family-based Maternal Sensitivity Models (MSM) Application Family in Young Mothers in Rural Area toward Parent's Role Perceptions and How to Know Health-Sick Condition in Infants.

LITERATURE REVIEW

1. The Definition of Young Mothers

Young mothers can be defined as a woman who got married, has a child and/or children but their age is still no more than 20 years.

2. The Concept of Family

Family is a collection of two or more people who live together with rules and emotional attachments and individuals have their respective roles that become the part of family. Family generally has several functions, such as: a) biological function, b) psychological function, c) socialization function, d) economic function, e) education function, f) reproductive function, and g) health care/maintenance function (Friedman, MM, 2010)

Family's role describes a set of interpersonal behaviors, traits, activities, that relate to individuals in particular positions and situations. Various roles in the family include the role of father, mother and child. The family has also developmental tasks for infants, according to the fact that the childbearing family starts from the birth of the first child and continues until the first child reaches the age of 30 months. The task of the development at this stage is: a) to strengthen the role of parent, b) an adaptation to changes in family members, roles, interactions, sexual relations and family activities, c) to maintain a satisfactory relationship with

the spouse, d)) to nurture relationships affection (Wright LM & Leahey Maureen, 2009).

3. The Concept of Infant Care

Infants are individuals aged 0-12 months who are characterized by rapid growth and development and are accompanied by changes in nutritional needs (Hockenberry & Wilson, 2009).

The administration of infant care is based on the development of a mutual satisfaction of parents and infants.

a. Exclusive Breastfeeding

Breast milk is one type of food that is sufficient for all elements of the baby's needs, i.e., physical, psychological and spiritual needs. It contains nutrients, hormones, growth immunity, anti-allergies, and anti-inflammatory. Nutrition in breast milk includes nearly 200 nutrients (Hamilton, 2010).

b. Immunization

Immunization is an effort to provide immunity to infants and children by administrating the vaccine into the body so that the body makes anti-substance to prevent them from certain diseases. The complete basic immunization types in infants are BCG, hepatitis, DPT, measles and polio (Depkes, 2007).

c. Infant Nutrition

WHO, UNICEF, as well as health experts and health organizations agree that breast milk is the only food and drink needed by infants in the first six months of their lives. Breast milk is the main food source and most perfect for infants aged 0-6 months (Depkes, 2007). After the age of 6 months, each baby needs nutritious soft foods called Asiatic Food (MP - ASI) (Depkes RI, 2007).

d. Stimulation of Infant Growth

(Hockenberry, M. J & Wilson, 2009) state that stimulation is stimulation (sight, speech, hearing, touch) coming from the child's environment. Children who get direct stimulation will develop faster than children who are not even stimulated.

Required stimulation is sensory, motor, intelligence, language, emotion, autonomy, creativity, cooperation and leadership, moral-spiritual stimulation with sound, music, movement, touch, singing, playing, problem solving, crossing, drawing.

2.5 Family-based Maternal Sensitivity Models

A mother will instinctively have a character called mother insting. This sensitivity will lead the mother to be more responsive to her primary role in taking care of her baby she is responsible for. The role of parenting requires maternal competence whether cognitively, affectively or psychomotoric competences. Mother is the best nurse for the baby she was born with. In order to successfully optimize the role of the young mother, the family as the dominant social support should give support in achieving the success of the role. It also requires the role of health workers and health

institutions as healthcare facilitators as well as a referral center if young mothers and families experience obstacles in carrying out the role of infant care. When described the family-based Maternal Sensitivity Models will form the following models:

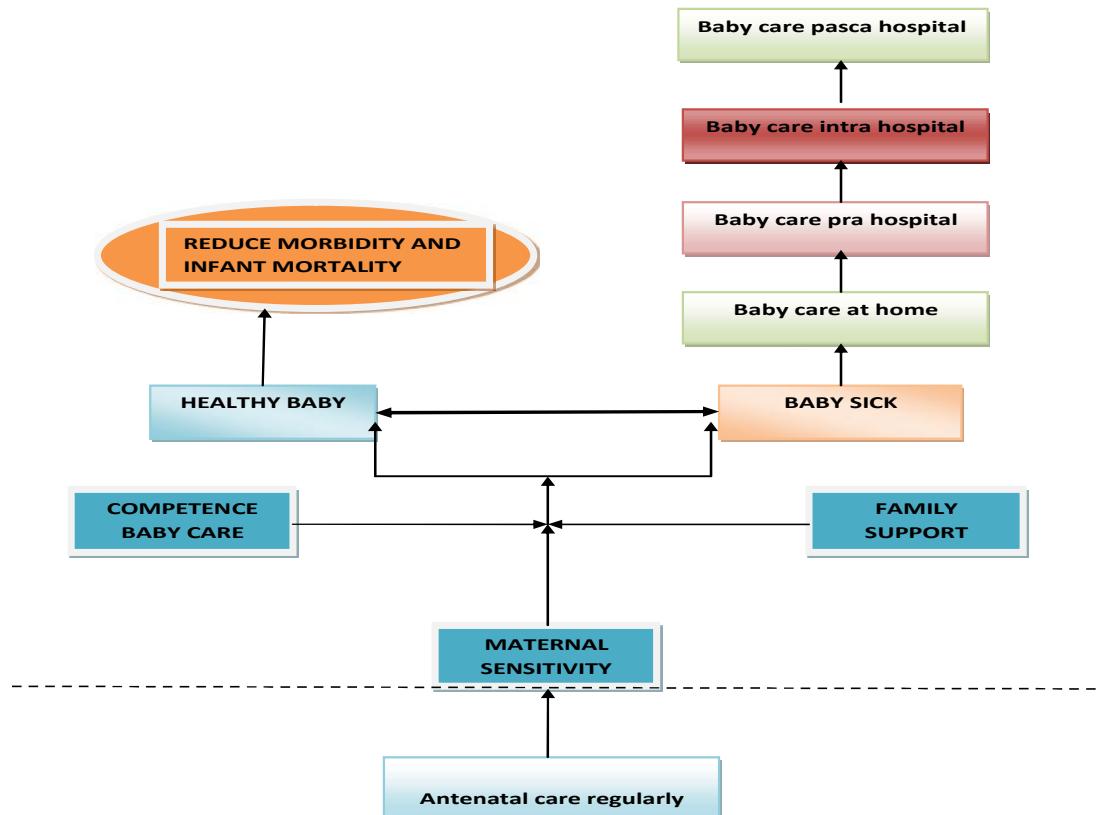


Chart 2.1 Family-based Maternal Sensitivity Models in Optimizing Infant Care Competence in Young Mothers in Rural Area

Based on the above models, it can be described as follows:

- The condition of healthy and sick babies is a continuum range. The healthy constants of illness in infants are highly dependent on the baby's health condition on the existing environmental situation.
- Babies are a very vulnerable age group experiencing the threat of illness and death.
- Mother is the best nurse for babies in maintaining health status including achieving optimal growth and development function.
- Mother sensitivity in recognizing changes in infant health status is needed to condition the right handling when the baby is in the home environment, pre-hospital, intra hospital and post-hospital.
- Mother must have optimal ability in infant care.
- Family is a support group that cannot be separated from mother-baby environment.

The steps in Family-based Maternal Sensitivity Models (MSM) can be seen below:

- Pregnant women are given the motivation to do antenatal care routinely, so that the condition of welfare of mother and fetus can be well known.

- b. Mothers attend prenatal classes and educational activities during the antenatal period.
- c. Mothers are given motivation to deliver health care.
- d. Health-care workers perform postnatal education with FCMC approach on newborn care, involving families as family and social support.
- e. Mothers and family are taught about infant care reviews, as well as the introduction of baby sick conditions.
- f. Mothers and family are taught about the ability to make decisions during baby sick time.
- g. Mothers and family carries out infant care efforts with techniques to approach infant care efforts correctly using booklet media.
- h. Mothers and family monitor the baby's growth and development.
- i. Health-care workers provide education on infant care, using the Infant Care Module media.

METHOD

Research Approach

The present research is conducted using Pra Experiment Pre-Post Test Design

Participant

The participants of the present research are young mothers in Puskesmas Sumbersari and Sukorambi Jember with 50 respondents.

Data Collection

Data collection techniques are conducted by intervening in applying family-based Maternal Sensitivity Models (MSM) with health education interventions on the role of parents in infant care as well as recognizing healthy infant-health conditions. Interventions are conducted using the help of media booklets and modules. The perception of young mothers during pretest and posttest was measured using questionnaires and likert scales. The sampling technique conducted by Purposive Sampling. The data retrieval period starts in March-June 2017.

Data Analysis

Data analysis used in the present research is general data using descriptive analysis, while special data using Dependent T-Test (Paired T-Test).

RESULTS

After the research process, it obtained the results that are illustrated as follows:

Table 1.1 Frequency Distribution of Young Mothers' Profession with Babies being Cared in Puskesmas Sumbersari and Sukorambi Jember 2017. n = 50

| Profession | Number | Percentage |
|-------------------|--------|------------|
| Not working | 18 | 36.0 |
| Labors or traders | 10 | 20.0 |
| Farmers | 6 | 12.0 |
| Civil Servants | 9 | 18.0 |
| Self-Employers | 7 | 14.0 |
| Total | 50 | 100.0 |

Based on the description shown in Table 1.1 above, the greatest number of young mother's profession with the babies being cared in Puskesmas Sumbersari and Sukorambi is those who did not work amounted 18 respondents (36%).

Table 1.2 Frequency Distribution of Young Mothers' Profession with Babies being Cared in Puskesmas Sumbersari and Sukorambi Jember 2017. n = 50

| Education Background | Number | Percentage |
|-------------------------------|--------|------------|
| Elementary-Junior High School | 16 | 32.0 |
| Senior High School | 28 | 56.0 |
| Higher Education | 6 | 12.0 |
| Total | 50 | 100.0 |

Based on the description shown in table 1.2 the greatest number of young mother's education background with babies being cared in Puskesmas Sumbersari and Sukorambi is senior high school with 28 respondents (56%).

Table 1.2 Frequency Distribution of Racial Type of Young Mothers with Babies being Cared in Puskesmas Sumbersari and Sukorambi Jember 2017. n = 50

| Education Background | Number | Percentage |
|----------------------|--------|------------|
| Madura | 26 | 52.0 |
| Jawa | 24 | 48.0 |
| Total | 50 | 100.0 |

Based on the description shown in table 1.2 the number of young mother's education background with babies being cared in Puskesmas Sumbersari and Sukorambi is almost the same with those who were in Java amounted 26 respondents (54%) and 24 respondents (48%), respectively.

Table 1.4 The Effects of Family-based Maternal Sensitivity Models (MSM) toward Parent's Role Perceptions on Infant Care in Puskesmas Sumbersari and Sukorambi Jember 2017.

n = 50

| Variable | Mean | Std. Deviation | Std. Error Mean | P Value |
|---|-------|----------------|-----------------|---------|
| Parent's Role Perceptions on Infant Care | | | | |
| Pretest | 60.00 | 6.999 | .990 | 0,00 |
| Posttest | 72.20 | 8.640 | 1.222 | |

Based on table 1.4 application of Maternal Sensitivity Models (MSM) according to family influence to perception of young mother on parent role in infant care, it obtained *p*-value 0,00.

Table 1.5 The Effects of Family-based Maternal Sensitivity Models (MSM) toward Parent's Role Perceptions on Health-Sick Condition in Infants in Puskesmas Sumbersari and Sukorambi Jember 2017. n = 50

| Variable | Mean | Std. Deviation | Std. Error Mean | P Value |
|---|-------|----------------|-----------------|---------|
| Perception on Health-Sick Condition in Infants | | | | |
| Pretest | 59.80 | 9.145 | 1.293 | 0,00 |
| Posttest | 72.80 | 10.698 | 1.513 | |

Based on the description shown in table 1.5 family-based MSM application affects young mother's perceptions on health-sick conditions in infants with *p*-value 0,00

DISCUSSION

Caring for infants can be defined as doing care in order to meet the needs of everyday babies and to facilitate their growth and development. The process needed to do in infant care requires the ability of parents in understanding and knowing it appropriately. The results showed that the provision of information through Maternal Sensitivity Models (MSM) approach with the topic of information is parent's role in infant care, proved to have an effect to improve the perception of young mothers with *p*-value 0.00. Young mothers who previously had a perception of 60 (moderate category), after being given intervention increased to 72 (good category). This is consistent with the research conducted by Safitri, Widayati and Aini (2014) that there is a very significant difference between mother's knowledge and skills before and after being given education and training of kangaroo method with *p*-value = 0.000 and 95% confidence interval (Safitri , EA., Widayati, Aini, 2014). In addition, when the baby may experience some deviation of health status, such as LBW, then the parent's role is needed in proper care. Parent's ability can be obtained through one way by giving a training or providing health education about the necessary of information. When

performing the parent's role as a baby sitter in charge, it is also necessary to recognize the condition of the baby in a healthy or sick condition. The results showed that after given information through Maternal Sensitivity Models (MSM) approach with the topic of information about healthy and sick infants, there was a change of perception before and after intervention with *p*-value of 0.00. This means that through the process of providing information, parents who in this case, are young mothers who have babies, have a better perception after health education. The ability to recognize the health status of infants is very useful in improving the sensitivity of parents in making decisions when the baby is in a condition of illness or deviation in growth and development. Through the ability to recognize such condition, mothers can seek infant care more optimally. This is in accordance with the statement of Indriyani, D., Asmuji, and Wahyuni (2016) that describes that one of parent's roles is infant care, recognizing the signs of healthy and sick babies and optimizing their growth and development. Also, this is in accordance with the statement of Ministry of Health (2011) that there are 3 components in the implementation of the strategy of MTBS namely: Component I: improving the skills of health-care workers in management of infant illness cases (doctors, nurses, midwives, health workers) Component II: improving health system for disease handling Toddlers are more effective Component III: improving family and community practice in home care and searching for help cases of sick children (improving family and community empowerment, known as "Integrated Community-Based Pain Management"). For successful implementation of MTBS, the proportion of emphasis on all three components must be the same.

Based on the previous description, it is very important to improve the empowerment of family and society. In addition, the research that supports the results of the present research is conducted by (Wahyuni & Wulyani, 2015) to get the results that the variable of breastfeeding, MP-ASI and the role of parents have a significant relations with the condition of infants aged 12 months. Also a research conducted by (Aries & Yulianti, 2015) on Behavioral Health Maintenance and Environmental Health Behavior Associated with ARD of Underfives shows that 51% less health maintenance behavior, 65.3% health seeking behavior, and 57.1% less environmental health behavior. Therefore, it can be concluded that health care and environmental health behavior less affect the incidence of ARI in infants. According to the researchers based on the results of the study and some related literatures, it is very important that young mothers as a parent should know more properly about their role. In addition, another important thing the parents need to notice is to know the baby's condition whether he is healthy or sick, so this perception will trigger parent's sensitiveness in making the right decision in infant care.

CONCLUSION

The present research concludes that family-based Maternal Sensitivity Models (MSM) application significantly affects young mother's perception toward their role in infant care with *p*-value 0.00. It also found that family-based Maternal Sensitivity Models (MSM) application affects young mother's perception toward health-sick condition in infants with *p*-value 0.00.

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IMPLEMENTATION OF PROJECT BASED LEARNING METHOD (PjBL) TO IMPROVE STUDENTS' ABILITY AND COMMUNITY PARTICIPATION IN HIV PREVENTION

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Aims: To identify the ability of students ability and community participation before and after the implementation of *Project Based Learning method*. **Design:** This research uses Quasi Experimental method with pre and post test. The sample of this research is 40 nursing students in Faculty of Nursing Universitas Airlangga and 20 community people. The study was conducted from 13 November to 30 December 2015. **Result:** Before *Project Based Learning* 10% students have enough knowledge and 90% have good knowledge. After *Project Based Learning* 100% have good knowledge. There is a significant difference between the knowledge before and after *Project Based Learning* ($p = 0.002$). Before the *Project Based Learning* 60% students have a positive attitude while the remaining 40% have negative attitude in HIV prevention. After *Project Based Learning* 92.5% have positive attitude. There is a significant difference between students' attitude before and after *Project Based Learning* ($p = 0.001$). Before the *Project Based Learning* 85% community respondents have good participation while the remaining 15% have enough participation in HIV prevention. After *Project Based Learning* 100% have good participation in HIV prevention. There was a significant difference the participation of community between before and after ($p = 0.001$). **Conclusion:** Implementation of *Project Based Learning* improves knowledge and attitude of student in HIV AIDS prevention. Implementation of learning method with *Project Based Learning* improves community participation in HIV AIDS prevention. *Project Based Learning* can be continuously developed to overcome various other problems in society through contribution from nursing students.

Keyword: Project Based Learning, knowledge, attitude, community participation, HIV AIDS

INTRODUCTION

The current curriculum developed by High Education is required to change the lecturer-centered approach into a student-centered approach. These skills consists of problem-solving skill, critical thinking, collaboration, and communication (Harsono, 2008; Kurdi, 2009). *Project Based Learning (PjBL)* is a learning method that provides the opportunity for educators to manage learning in the classroom with involving project work. *PjBL* is a innovative learning method containing complex tasks based on questions and challenging problems, and it requires students to design, solve problem, make decision, conducting investigation, as well as providing opportunities for students to work independent (Lasauskiene & Rauduvaitė, 2015).

In these days, the HIV / AIDS epidemic in Indonesia is already a global crisis and a severe threat to social development and progress. The cases of HIV / AIDS have

increased rapidly. In Indonesia, the total number of HIV / AIDS case reached to 143,899 consisting of 98.390 HIV and 45.499 AIDS with 8,235 deaths (Kemenkes, 2014)

There have been many HIV prevention programs, but community participation is lacking. Community participation can be enhanced through socialization of HIV / AIDS as an effort to increase community awareness and knowledge. The community's strategic role in preventing HIV / AIDS includes educating family member based on religious norms, active participation in implementing HIV / AIDS prevention program. Society also plays an important role to reduce stigma and discrimination of HIV patients (Latifa & Purwaningsih, 2016)

High education has an important role to be able to reduce stigma and discrimination from society, which is through community development program related to change of view of society in patient of HIV / AIDS. This study aims to identify the knowledge and attitude of students on before and after the implementation of PjBL. Another purpose is to identify community participation on before and after the implementation of PjBL.

LITERATURE REVIEW

Nowadays, The HIV AIDS case is increasing, followed by the development of stigma and discrimination in patients. Stigma and discrimination can encourage patients to hide their condition thereby reducing treatment compliance for patients. Society needs to get the right information about HIV AIDS because it has an important role in the prevention and control of HIV AIDS (Feldacker, Ennett, & Speizer, 2011; Watthayu, Wenzel, & Panchareounworakul, 2015)

Project Based Learning (PjBL) is an innovative learning method that requires student to design and solve problems. PjBL can develop student competence, lecturer and student collaboration. Another benefit of the PjBL is to improve teamwork, critical thinking, problem solving, and learning motivation of student (Kaya, Şenyuva, İşık, & Bodur, 2014; Lasauskiene & Rauduvaitė, 2015; Zouganeli, Tyssø, Feng, Arnesen, & Kapetanovic, 2014)

Throughout PjBL, students are expected to have good competence on HIV AIDS. The students can provide the right education to the community in order to increase the role of HIV AIDS prevention in Indonesia.

METHOD

Research design

This study used quasi experiment with data measurement before and after intervention.

Respondents

There are 60 respondents in this study, consisting of 40 students who were taking Hematology immunity course and 20 members of the community.

Data collection

The data were collected by using questionnaire that have been tested for validity and reliability. Questionnaire used to measure knowledge, attitude, and community participation.

Data analysis

Data analysis used descriptive statistics and wilcoxon test. Confidence level is at 95%. If $\text{sig} > 0.05$, H_0 is accepted. If $\text{sig} < 0.05$, H_0 is rejected.

RESULTS

Before the *PjBL* activity, 4 respondents (10%) have a sufficient level of knowledge and 36 respondents (90%) had a good knowledge level. After activity, 40 respondents (100%) have good knowledge.

Table 1 Student knowledge data

| | Pretest result | Posttest result |
|--|-----------------------|------------------------|
| mean | 38.28 | 40.10 |
| SD | 3.43 | 2.83 |
| Wilcoxon Test Sig Value (2 tailed) = 0.002 | | |

Wilcoxon Signed Rank Test is obtained $p = 0.002 \leq 0.05$ so it shows that there is a significant difference between the knowledge of students before and after the *PjBL activity*. After the application of *PjBL*, all students have knowledge with good category. Based on the average score, it also earns an increasing score on the data post test application of *project-based learning*. The increasing score is supported by the educational status, where all the respondents are nursing students.

Before the *PjBL* activity, there are 24 respondents (60%) having a positive behaviour and the remaining respondents is negative in HIV. After the *PjBL* activity, there are 37 respondents or 92.5% who are positive.

Table 2 Data on student attitude

| | Pretest result | Posttest result |
|--|-----------------------|------------------------|
| mean | 16.08 | 18.45 |
| SD | 2.19 | 1.32 |
| Wilcoxon Test Sig Value (2-tailed) = 0.001 | | |

Result of *Wilcoxon Signed Rank Test* obtain sig (2-tailed) with $p = 0.05$ $0.001 \leq$ so that there is a significant difference between the attitude of student before and after the *PjBL activity*.

Before the activity, There are 17 respondents (85%) having good role while the rest has moderate role. After the *PjBL* activity, there is 100% respondents who has a good participation in HIV

Table 3 Community Participation Data

| | Pretest result | Posttest result |
|--|-----------------------|------------------------|
| mean | 30.8 | 32.75 |
| SD | 3.9 | 2.9 |
| Wilcoxon Test Value Sig (2-tailed) = 0.001 | | |

From Table 3, it can be seen *Wilcoxon Signed Rank Test*, sig (2-tailed), is $p = 0.05$ $0.001 \leq$ so that there is a significant difference between the role of the community before and after activity of *PjBL*

The increase number of role can be supported by the age factor of the community respondents, where the majority is <35 years old. The age affects how a person be able to receive well-informed information. Implementation of *PjBL* is undertaken by student which is through the public health education on HIV AIDS.

DISCUSSION

Knowledge or cognitive is a very important domain in enforcing one's actions. Knowledge is influenced by the learning process in individual, group and community from less informations of health to understanding health, and from not being able to overcome the problem to being able to cope with its own problem (Notoatmodjo, 2010). In *PjBL*, the students learn looking at problem and gather information through various media to devise a settlement of the problem. The group learning also helps students to exchange new information so it enhance their understanding of HIV AIDS prevention efforts. The *PjBL* is a learning method that is able to improve student softskill (Musa, Mufti, Latiff, & Amin, 2012; Rais, 2010)

Formation of behaviour is related to knowledge. By gaining many experiences, a person has a tendency to be better, get inspired by its experience that will affect one's behaviour ¹¹. In respondents who remain negative, it can be explained that behaviour changes are influenced by internal process. It needs time and every person will respond differently to change. Respondents who are still acting negative are caused by the learning process on the respondent takes longer to respond changes in behaviour.

Behavior is formed from 3 domains, namely: knowledge, attitude and actions that are related each other. Behavior can be changed with changing knowledge and attitude. Through the application of the *PjBL*, students actively try to solve problems through health education about HIV prevention. *The PjBL* is an innovative learning method to develop students' competence, teamwork, critical thinking, problem solving, and learning motivation of students (Kaya et al., 2014; Lasauskiene & Rauduvaitė, 2015; Zouganeli et al., 2014)

Health education provided aims to change the wrong view in the community about the scheme of HIV/AIDS transmission. A good educational method will be able to improve the knowledge and behaviour of the community. Therefore, the role of community participation will increase.

CONCLUSION

Application of *PjBL* increases the knowledge and attitude of students in HIV/AIDS prevention. Application of *PjBL* learning method can increase community participation on HIV/AIDS prevention. *PjBL* learning method can be developed continuously to overcome various other problems that exist in society through the contribution of students.

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EFFECT OF GREEN BAY EXTRACT ON HEMOGLOBIN CONTENT ON PREGNANT WOMAN

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ABSTRACT

Hemoglobin was very important for pregnant women because it serves to meet the needs of the mother and supply food and oxygen to the fetus through the placenta. The decrease in hemoglobin levels especially in the second trimester requires iron for the formation of hemoglobin. The iron in the spinach is easily digested so that the spinach extract can be used as an anemic drug. This study aims to determine the effect of green spinach extract on hemoglobin levels in pregnant women in the Village Banjarsari District JetisMojokerto regency. The design of this research is preexperimental with pretest-post test one group design approach. The population in this study were all pregnant women in Banjarsari Village, Jetis Sub-district, Mojokerto Regency, in May 2017, 49 people. The sampling technique of this research is purposive sampling with sample number 23 people. Independent variable in this research is giving green spinach extract, and dependent variable is hemoglobin level. The measuring instrument uses a digital Hb meter. The results of this study indicate that almost all respondents who experienced mild anemia become not anemic (83,3%), most of respondent having anemia become not anemia (60%). The result of P-paired sample analysis showed that $P < \alpha$ so that H_1 is accepted, meaning that there is influence of green spinach extract on hemoglobin level in pregnant women in Banjarsari Village, Jetis Sub-district, Mojokerto Regency. This is because the iron in the spinach leaf extract will be metabolized in the body to form transferrin and ferritin useful in the formation of hemoglobin.

Keywords: green spinach extract, hemoglobin, pregnant women

INTRODUCTION

Hemoglobin is very important for pregnant women because it serves to meet the needs of the mother and supply food and oxygen to the fetus through the placenta (Ministry of Health RI, 2016). In pregnancy the need for oxygen is higher thereby triggering increased production of erythropoietin. As a result, plasma volume increases and red blood cells (erythrocytes) increase. However, an increase in plasma volume occurs in larger proportions when compared with an increase in erythrocytes resulting in a decrease in hemoglobin (Hb) concentration due to hemodilution (Abdulmuthalib, 2009). This decrease in hemoglobin levels requires iron for hemoglobin formation. One source of iron from vegetable materials is green spinach (*Amaranthushybridus L*). The iron in the spinach is easily digested so that the spinach extract can be used as an anemic drug (Bangun, 2010).

According to WHO, pregnant women's Hb level less than 11gr% ranges from 20% to 89% (Manuaba, 2010). According to the World Health Organization (WHO) (2012) prevalence of pregnant women with hemoglobin levels less than 11gr% to 41.8% in the world, and Asia ranked second in the world after Africa with prevalence percentage of pregnant women with hemoglobin levels less than 11gr% of 48.2%. Research conducted by Merida et al (2014) concerning the effectiveness of Combination Therapy Extract Spinach and Tomato to Improvement of Hemoglobin on Pregnant Women with Anemia in Puskesmas Sail Pekanbaru 2014 states combination therapy extract of green spinach and tomato effective to increase hemoglobin levels in pregnant women With anemia.

Nuraysih (2015) on the effectiveness of combination therapy extracts of spinach-orange sunkis-honey on hemoglobin levels in pregnant women with anemia in the working area UPTD District Health Clinics South Pontianak in 2015 showed that there was a significant effect on hemoglobin levels in the experimental group and the group Controls before and after treatment of a combination of green spinach extract-orange sunkis-honey in pregnant women with anemia. Rohmatika research results et al (2016) Data from preliminary studies on 2-6 January 2016 in the village of BanjarsariJetisMojokerto, obtained the data that there were 15 pregnant women who visit the village, and Hb examination performed in 5 pregnant women with the result 2 (40%) levels Hbnya Under 11g% or anemic, the results of the mother interview said that the mother consumed rice and side dishes, and rarely ate vegetables, and 3 people (60%) Hb content above 11g%. Mother interviews say that mothers consume rice, vegetables and side dishes every day, and drink milk for pregnant women.

Efforts made in order to overcome the problem of decreasing hemoglobin levels can be done by consuming foods containing iron such as spinach vegetables and taking supplements of blood enhancer during pregnancy (Emilia & Freitag, 2010). The government has implemented a Fe tablet program. Provision of iron tablet is integrated with the service of pregnant women (antenatal care) (Ministry of Health RI, 2013). Based on the above background, researchers are purposed to examine the effect of green spinach extract on hemoglobin levels in pregnant women in Banjarsari Village, Jetis Sub-district, Mojokerto Regency.

LITERATUR REVIEW

1. Definition of haemoglobin

Hemoglobin as part from erythrocyte serves as a carrier of oxygen throughout the body tissues, therefore if there is a deficiency of hemoglobin resulting in anemia so that body activity, especially thinking power will decrease (Kuntarti, 2009).

Decreased levels of hemoglobin in pregnant women may lead to anemia that has an impact of abortion, IUFD, IUGR, preterm labor, possible birth defects, infants born with anemia. Low birth weight babies have a high mortality and morbidity risk (Manuaba et al., 2012).

2. Concept of green spinach extract

Leaf green spinach (*Amaranthushybridus L*) has iron (Fe) content of 3.9 mg per 100 grams (Bangun, 2010). The existing iron in the foodstuff is iron element. Only Fe ++ is absorbed by the small intestine. To regulate the entry of iron in the body then the body has a proper way. Iron can only enter the mucosa if it can be in contact with apoferritin. The amount of apoferritin present in the intestinal mucosa depends on the body's iron content. When the iron in the body is enough then all apoferritin in the intestinal mucosa bound by Fe to Ferritin. Iron-bound β -globulin apart derived from the intestinal mucosa is also derived from the spleen, where the erythrocytes are old into the tissue of the spleen and then bound to the

β -globulin (being transferrin) and then follow the blood flow to the bone marrow to be used Erythroblasts form hemoglobin.

RESEARCH METHODS

The design of the research is preexperimental with one group pretest osttest design approach. In this study population is all pregnant women in the Village Banjarsari District JetisMojokerto regency in May 2017 a number of 49 people. Sampling taking in this research using purposive sampling technique.Large sample of 23 people. The data analysis used is T-pair Sample Test.

General Data of Respondents

Table 2 Frequency Distribution of Respondents Based on General Data in Banjarsari Village, Jetis Sub-district, Mojokerto Regency in 2017

| No | General Data | Frequency | Percentge (%) |
|---------------------|--------------------------------------|-----------|---------------|
| Age | | | |
| 1 | <20 years old | 2 | 8,7 |
| 2 | 20-35 years old | 20 | 87,0 |
| 3 | > 35 years old | 1 | 4,3 |
| Educational Level | | | |
| 1 | Low (elementary, junior high school) | 7 | 30,4 |
| 2 | Moderate (senior high school) | 11 | 47,8 |
| 3 | High (Bachelor) | 5 | 21,7 |
| Working | | | |
| 1 | Working | 7 | 30,4 |
| 2 | Not working | 16 | 69,6 |
| Pregnancy | | | |
| 1 | 1 | 11 | 47,8 |
| 2 | 2 | 12 | 52,2 |
| Body Weight Raising | | | |
| 1 | < 10 Kgs | 13 | 56,5 |
| 2 | 10-12 Kgs | 10 | 43,5 |
| Pregnancy Old | | | |
| 1 | 13-28 weeks | 12 | 52,2 |
| 2 | 29-40 weeks | 11 | 47,8 |
| Jumlah | | 23 | 100 |

Source: Primary Data 2017

Custom Data

1. Hb level before given Spinach Leaf Extract

Table 3 Distribution of frequency of respondents based on Hb content before given Spinach Leaf Extract at Banjarsari Village, Jetis Sub-district, Mojokerto Regency, 2017

| No | Hb Level | Frequency | Percentge (%) |
|-------|----------------|-----------|---------------|
| 1 | ≥ 11 g/dl | 0 | 0 |
| 2 | 9-10,9 g/dl | 18 | 78,3 |
| 3 | 7-8,9 g/d | 5 | 21,7 |
| 4 | <7 g/dl | 0 | 0 |
| Total | | 23 | 100,0 |

Source: Primary Data 2017

2. Hb level after given Spinach Leaf Extract

Table 4 Distribution of frequency of respondents based on Hb content after being given Leaf Spinach Extract at Banjarsari Village, Jetis Sub-district, Mojokerto Regency, 2017

| No | Hb Level | Frequency | Percentge (%) |
|----|------------------------|-----------|---------------|
| 1 | $\geq 11 \text{ g/dL}$ | 18 | 78,3 |
| 2 | 9-10,9 g/dl | 5 | 21,7 |
| 3 | 7-8,9 g/dl | 0 | 0 |
| 4 | <7 g/dl | 0 | 0 |
| | Total | 23 | 100,0 |

Source: Primary data of research in 2017

Table 4 shows that almost all respondents had aHb rate of $\geq 11 \text{ g / dl}$, ie 18 respondents (78.3%).

3. Differences Analysis of Hb Levels before being given Spinach Leaf Extract with Hb Level after being given Spinach Leaf Extract at Banjarsari Village, Jetis Sub-district, Mojokerto Regency in 2017

Table 5 Cross-Table Difference Hb Levels before being given Spinach Leaf Extract with Hb Level after being given Spinach Leaf Extract at Banjarsari Village, Jetis Sub-district, Mojokerto Regency, 2017

| Before | | After | | | | Total | |
|-------------------------|--|----------------------------------|------|---------------------------------|------|--------|--|
| | | $\text{Hb} \geq 11 \text{ g/dL}$ | | $\text{Hb} 9-10,9 \text{ g/dL}$ | | | |
| | | f | % | f | % | | |
| Hb 9-10,9 g/dl | | 15 | 83,3 | 3 | 16,7 | 18 100 | |
| Hb 7-8,9 g/dl | | 3 | 60 | 2 | 40 | 5 100 | |
| Total | | 18 | 78,3 | 5 | 21,7 | 23 100 | |
| <i>pvalue=</i> 0,000 | | <i>α=0,05</i> | | | | | |

Source: primary data of research in 2017

Table 5 shows that almost all respondents whose Hb levels were $9-10.9 \text{ g / dl}$ to $\geq 11 \text{ g / dL}$ (83.3%), most respondents whose Hb levels were $7-8.9 \text{ g / dl}$ to $\geq 11 \text{ g / DL}$ (60%). The result of T paired samples test shows that p value = 0,000 and $\alpha = 0,05$ so that p value $< \alpha$ thus H1 is accepted means that there is Influence of Spinach Leaf Extract to Hemoglobin Level in Pregnant Women in Banjarsari Village, JetisSubdistrict, Mojokerto Regency, 2017.

DISCUSSION

1. Hb level before given Spinach Leaf Extract

Table 3 shows that almost all respondents had Hb levels of $9-10.9 \text{ g / dl}$, ie 18 respondents (78.3%), and 5 people (21.7%) Hb levels of $7-8.9 \text{ g / dl}$. Hemoglobin is very important for pregnant women because it serves to meet the needs of the mother and supply food and oxygen to the fetus through the placenta (Ministry of Health RI,

2016). In pregnancy the need for oxygen is higher thereby triggering increased production of erythropoietin. As a result, plasma volume increases and red blood cells (erythrocytes) increase. However, an increase in plasma volume occurs in larger proportions when compared with an increase in erythrocytes resulting in a decrease in hemoglobin (Hb) concentration due to hemodilution (Abdulmuthalib, 2009).

Respondents whose Hb levels of 7-8.9 g / dl were caused during pregnancy increased blood volume (hypervolemia). Hypervolemia is the result of an increase in plasma volume and red cell (red blood cell) in the body but this increase is unbalanced ie the plasma volume of increase is much greater to give effect that is reduced hemoglobin concentration. In addition, the lack of consumption of green vegetables as a source of iron forming hemoglobin will make the levels of iron in the body decreased and Hb levels also decreased. Lack of consumption of other nutrients such as vitamin C can also reduce the absorption of iron in the body so it can not be absorbed by the body properly to be used to form hemoglobin. Table 2 shows that almost half of respondents have medium education (SMA), ie 11 respondents (47.8%). Education will form a good mindset where the mother will be easier to receive information so that knowledge can be formed. This knowledge is used as a basis for mother to behave to prevent and overcome anemia so that mother does not decrease Hb level. In accordance with Munir (2011) which mentions the low knowledge can lead to the formation of poor health behavior. The occurrence of decreased Hb levels during pregnancy can be overcome through the provision of health education to pregnant women with regard to the level of education. Mothers with basic education can be done through the provision of counseling and two-way communication in order to achieve a better understanding of the material. Mothers of middle education can be done counseling and health socialization. Mothers with high education can be done by providing KIE (Information Communication and Education) (Ridayanti et al, 2013).

Maternal education affects the ability of the mother to absorb information about pregnancy, either the changes that occur during pregnancy, or the disturbances that occur in pregnancy and how to prevent it, in this case is anemia. Mothers with secondary education will tend to be easier to get information, but not all health problems are obtained from formal education, so even if the mother has a secondary education, do not always know what to do to avoid anemia during pregnancy by consuming adequate nutrition, because Assume that weakness, fatigue, lethargy is a natural thing happening in pregnancy so left alone is not addressed. Table 2 shows that most do not work, ie 16 respondents (69.6%). Employment affects the economy so that it is driven by inadequate economic needs that the need to meet nutritional intake is ignored. In addition, this type of work affects activity. Jobs that require heavy activity with not offset by sufficient nutrient intake can lead to decreased hemoglobin levels either directly or indirectly (Zarianis, 2011).

Work requires a lot of energy, pregnant women who work will lose energy in large quantities and red blood cells will die faster so that requires iron intake to form new red blood cells and hemoglobin to transport energy and nutrients.

Table 2 shows that most of the respondents were second pregnant, ie 12 respondents (52.2%). Frequent motherhood during labor may lead to anemia, especially in near-term pregnancies, where the mother's body has just lost blood in labor, then another pregnancy requires more red blood cells to carry oxygen for the mother and baby's life. If the nutrients are not adequately consumed can cause anemia.

Table 2 shows that most respondents experienced weight gain <10 Kg, ie 28 respondents (66.7%). During pregnancy, the mother will gain weight around 10-12 kg, while pregnant women with height less than 150 cm is about 8.8 - 13.6 kg (Arisman, 2012). Weight gain is less than 10 kg because of gestational age not yet approaching labor so that has not experienced weight gain maximally. Respondents with anemia will experience less weight gain because of reduced nutritional intake due to decreased hemoglobin, because Hb levels function to bring nutrients to the fetus, if the nutrients that are brought to the fetus is less, then weight gain is also less because the fetal growth is not as good as the mother who is not anemic .

Table 2 shows that most of the respondents were 13-28 weeks pregnant, ie 12 respondents (52.2%). At the beginning of the second trimester the growth of the fetus is very rapid and the fetus is actively moving, ie sucking and swallowing the amniotic fluid so that more oxygen needs are required. As a result the need for iron is increasing to offset the increased production of erythrocytes and susceptible to the occurrence of anemia, especially iron deficiency anemia (Abdulmuthalib, 2009). Respondents experiencing anemia caused by trimester 2 occurs rapid growth of fetus so that physiologically hemodilution to help alleviate the work of the heart. Hemodilution occurs since 10 weeks of pregnancy and peaks at 32-36 weeks' gestation. Therefore, many pregnant women experience anemia in pregnancy.

2. Hb level after given Spinach Leaf Extract

Table 4 shows that almost all respondents had aHb level of ≥ 11 g / dl, ie 18 respondents (78.3%), and 5 people (21.7%) Hb levels 9-10.9 g / dl. Spinach is processed into more extract provides health benefits compared to boiled or cooked. A decrease in hemoglobin levels in the body requires iron for the formation of hemoglobin. One source of iron from vegetable materials is green spinach (*Amaranthus hybridus* L). The iron in spinach is easily digested so that the spinach extract can be used as an anemic drug (Bangun, 2010).

Respondents whose Hb rate was ≥ 11 g / dl were 100% of mothers <20 and 35, 81.8% of middle-educated respondents, 80% of working mothers, 81.8% of respondents who were pregnant with their first child, and 83 , 3% of respondents with gestational age 13-28 weeks. Respondents with gestational age 13-28 weeks which means trimester 2 still consume Fe tablet so get more intake of Fe besides from spinach leaf extract. The first child's pregnancy means the mother has never given birth and has never lost much blood so that not much Fe is wasted. Mothers with secondary education are sufficiently able to absorb information when giving IEC about the consumption of balanced nutritious food that always given midwife every time doing antenatal examination so that understand what to do in order not to anemia. Working mothers may not have higher activity than mothers who do not work, because mothers who work in an agency get priority to not work so that weight given with spinach leaf extract hbnya can be normal. The above-mentioned factors lead to differences in Hb levels after spinach extract, due to age differences that cause physiological differences in metabolizing iron, the difference in education in which mothers with higher education tend to be more informed about nutritional needs during pregnancy because more Easy to absorb information from various sources, differences in work because of the higher one's activity, the hemoglobin level is very risky decreased because the body needs oxygen in large quantities but not balanced with the formation of hemoglobin enough so that many red blood cells that die and cause hemoglobin decrease. Differences in gestational age can also cause differences in the results of elevated Hb levels after being given spinach extract, since the age of 2nd trimester pregnancy still increases the volume of fluid resulting in hemodilution or blood thinning, so consumption of iron does not give a significant effect on pregnant women.

3. Relationship Levels of Hb before given Spinach Leaf Extract with Hb Level after being given Spinach Leaf Extract

Table 5 shows that almost all respondents whose Hb levels were 9-10.9 g / dl to \geq 11 g / dL (83.3%), most respondents whose Hb levels were 7-8.9 g / dl to \geq 11 g / DL (60%). The result of T paired samples test shows that p value = 0,000 and α = 0,05 so that p value $<\alpha$ thus H1 is accepted means that there is Influence of Spinach Leaf Extract to Hemoglobin Level in Pregnant Women in Banjarsari Village, JetisSubdistrict, Mojokerto Regency, 2017.

Green spinach leaves (*Amaranthushybridus L*) has iron (Fe) content of 6.43% mg per 180 gram. The function of iron is to form red blood cells, so that if the production of red blood cells in the body enough then the hemoglobin level will be normal (Arisman, 2012). Iron is a mineral that is needed in the process of hemopoiesis, but iron is a substance that is difficult to be absorbed by the body. In the process of digestion, iron undergoes a reduction process of the ferrite form (Fe³⁺) to ferro (Fe²⁺) to be easily absorbed. Only Fe⁺⁺ is absorbed by the small intestine. Iron can only enter the mucosa if it can be in contact with apoferritin. When the iron in the body is enough then all apoferritin in the intestinal mucosa bound by Fe to Ferritin. Iron-bound to β -globulin aside from intestinal mucosa also comes from the spleen, where erythrocytes are old into the lymphatic tissue to then bind to β -globulin (to transferrin) and then join the bloodstream to the bone marrow for use Erythoblasts form hemoglobin (Kuntarti, 2009).

Respondents who did not change the status of anemia caused by the fact that the amount of Hb level increased, but not significant so that the anemian status remains. This is due to many factors that cause the mother does not change Hb levels, can be caused by food factors that do not meet the intake of Fe, or because of high activity so that the need for oxygen and high energy but the intake of Fe does not meet the needs.

CONCLUSION

- 1) Levels of hemoglobin in pregnant women before being given green spinach extract in the Village Banjarsari District JetisMojokerto regency mostly Hb levels 9-10.9 g / dl.
- 2) Levels of hemoglobin in pregnant women after being given green spinach extract in the Village Banjarsari District JetisMojokerto regency most of the Hb \geq 11 g / dl.
- 3) There is influence of green spinach extract on hemoglobin level in pregnant women in Banjarsari Village, JetisSubdistrict, MojokertoRegency, that can increase Hb level.

SUGGESTION

1. For Pregnant Women
Eat fresh green spinach and cooked as a vegetable, consume nutritious foods, avoid or reduce heavy activity, perform regular pregnancy checks to monitor pregnancy conditions and Hb levels.
2. For Educational Institutions
Conduct cross-community cooperation in terms of counseling about anemia in pregnancy and utilization of green spinach extract to increase pregnant women's hemoglobin levels.
3. For Health Workers
Giving HE about anemia in pregnancy and how to overcome it, handling pregnant women who have anemia, so as not to risk pregnancy and disrupt the welfare of the fetus.
4. For Health Service Institutions
Increase the compulsory effort to consume 90 Fe tablets in second trimester pregnant women in anemia prevention efforts so that the welfare of mother and fetus is more awake.

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**EFFECT COMPRESS GINGER IS WARM TO CHANGE INTENSITY OF
JOINT PAIN IN THE ELDERLY IN PANTI WERDHA MOJOPAHIT
MOJOKERTO**

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Abstract

Degenerative changes especially seen in the elderly is change musculoskeletal the marked decrease in the number of cells accompanied by the size of the muscles and joints is not elastic which leads to joint pain manifestations. In addition to pharmacological treatment is also required non-pharmacological treatment of pain intensity by using warm ginger compresses. This research aims to prove effect compress ginger is warm to change intensity of joint pain in the elderly. In this research the design used is *Pre-Eksperimental* with approach *One Group Pretest-Posttest Design*. Sampling using technique *purposive sampling*, so that obtained 16 respondents of elderly suffering from joint pain in Panti Werdha Mojopahit Mojokerto. Data collection uses an interview format that contains a scale of intensity of numerical pain and interview data collection of pain before and after giving warm ginger compress. Intensity of average pain before given warm ginger compress 3,00 and after given warm ginger compress compress 2,56, these results indicate that there is a difference between the intensity of joint pain before and after giving of warm ginger compresses. Test statistics using test *Wilcoxon Signed RankTest* value obtained *pValue* (0,008) < α (0,05). So that H0 rejected that meaning there is effect compress ginger is warm to change intensity of joint pain in the elderly. Warm ginger compresses for joint pain sufferers can decrease pain scale through obstacles to the activity *Siklo Oksigenase(COX²)* that obstruct production PGE2, leukotriene (inflammatory mediator) and *TNF-α* to synoviocytes and human joints are effectively performed in the morning and afternoon for 10-20 minute.

Keywords: Compress Ginger Is Warm, Intensity of Joint Pain, Elderly

INTRODUCTION

Elderly is a process of tissue dissipation to repair it self and maintain its normal function slowly, so it can not survive the infections that attack the health of the body and repair the damage that will affect the changes that occur in humans (Sumedi, 2016). Body changes occur from early life to advanced age in all organs and tissues. Such a condition will be seen in the musculoskeletal system and other tissues. The effects of degenerative changes are particularly noticeable in musculoskeletal changes (reduced collagen and elastin, degenerated cartilage, bone loss, decreased number and size of elastic muscles and joints) leading to elderly at-risk One disease is joint pain (Darmojo and Martono, 2000).

Joint pain is a pain in the part of the body that connects the bone with the bone, causing movement and quality of life to be disturbed. Joint joints can be short or long. The level of pain severity also varies, ranging from mild, middle to severe (Admin, 2016).

Nearly 8% of people over the age of 50 and older often complain of pain in the area of joints-joints, for example: sore, and sometimes feels like pain. In the elderly this is usually, often feel the pain in the joints of the fingers, the spine, joints of weight bearing (knees and pelvis) (Azizah, 2011). Survey results in the European continent in 2004 showed that rheumatic disease is a chronic disease Most often encountered. Less 50% of Europeans over 50 years of age experience musculoskeletal pain (Deslinda, 2011).

The prevalence of joint disease based on the diagnosis of health personnel in Indonesia is 11.9% and based on the diagnosis or symptoms 30.3 percent (Indonesia Health Profile, 2014). Data from Central Bureau of Statistics of East Java, rheumatism is one of the most afflictions suffered by the elderly, namely in 2014 as many as 4,209,817 elderly of whom 45% suffer from rheumatism, 37% suffer from osteoarthritis, and 18% suffer from gout arthritis. This figure shows that the pain caused by rheumatism is enough to interfere with community activities, especially those who have activity.

The number of elderly in Mojokerto regency of 2014 who have complaints with health problems as much as 42.49% of the total elderly. The results of the preliminary survey on December 14-15, 2015 conducted at Panti Werdha Majapahit Kabupaten Mojokerto data from medical record status there are 47 elderly and who suffered rheumatism as many as 37 elderly with details that have joint problems with disorders such as osteoarthritis as many as 13 elderly (35%), Rheumatoid arthritis 16 elderly (43%), and gout arthritis as much as 8 elderly (22%).

The result of preliminary study conducted on December 13, 2016 at Panti Werdha Majopahit Mojokerto, obtained data that the number of elderly living in Panti Werdha Majopahit Mojokerto currently as many as 49 elderly, consisting of 15 elderly men and 34 elderly women. There are 20 elderly who suffer from joint pain. Most of the joint pain experienced by elderly women as much as 16 men elderly 4. The result informal interview with 8 elderly states often experience complaints on the joints, such as sore, and sometimes Pain and stiff joints. Of the eight elderly states that 3 elderly people never use warm compresses to reduce pain, while 5 others only use drugs from puskesmas to reduce pain.

Musculoskeletal disorders cause gait disorders and are associated with physiologic aging, for example: stiffness of connective tissue, reduced muscle mass, slowing of nerve conduction, decreased vision or visual field will cause a decrease in range of motion (ROM) Joints, decreased muscle strength especially extremities, extension of reaction time, body shake. All these changes also trigger the pain in the joint area resulting in slow movement, short steps, decreased rhythm, the foot can not tread strongly and tend to easily wobbly, difficult or late in anticipation of interference, such

as slipping, tripping, (Nugroho, 2000). Disease in the joints is one result of degeneration or damage to the surface of bone joints that are common in elderly people especially the obese (Azizah, 2011).

In the joints paint will also affect muscle changes, until the function can decrease when the muscles in the suffering are not trained to activate muscle function. A number of rheumatic disorders may arise in the elderly. Some rheumatoid arthritis is a continuation of suffering before old age and often leads to disability that will cause paralysis (Darmojo, 2000).

In the case of mild, moderate to severe pain, non-pharmacological action becomes an effective complement to pain relief in addition to major pharmacological measures (Prasetyo, 2010). Research conducted by Demir (2012) states that not only pharmacologic treatments such as the NSAID (Non-Steroid Anti Inflammatory Drugs) group alone can be used to decrease the intensity of joint pain, but non-pharmacologic therapy can also reduce pain quickly. Most individuals often use herbal remedies such as herbal remedies using chemicals obtained directly from the roots of plants that still contain the seeds are still natural and very powerful in treating pain.

In contrast to research conducted by Haghghi in Yuniarti (2006) One other non-pharmacological therapy that can be done in reducing joint pain is by giving warm ginger compress, where Ginger (*Zingiber officinale Rosc*) contains zingiberol and kurkuminoid proven efficacious reduce inflammation and reduce pain Joints through barriers to the activity of Siklo Oxygenase (COX-2) which inhibits the production of PGE2, leukotriene and TNF- α in human synoviocytes and joints. In addition, according to research conducted by Yuniarti (2015) ginger also has a pharmacological effect that is hot and spicy, which can relieve pain, stiffness, and muscle spasms or vasodilatation of blood vessels, the maximum benefit will be achieved within 20 minutes after the application hot.

RESEARCH METHODS

The design in this study is one group pretest-posttest design. The number of populations that meet the criteria of researchers amounted to 16 people. Sample using non-probability sampling technique ie purposive sampling.

The minimum sample size in the type of eksprimen research is 15 subjects (Kasjono H, 2009). The study was conducted on March 23 to March 31, 2017. Measuring tool using interview format of data collection of pain in which there is a description of the response of pain intensity clients subjectively and objectively. In the respondents will be given a warm ginger compress treatment momentarily when the onset of pain is done for 10-20 minutes to obtain optimal results.

Statistical test in this study using Wilcoxon Signed Rank Test that is to know the change of joint pain intensity before and after giving treatment. Wilcoxon test results show data that p (0.008) and α (0.05) so $p < \alpha$ then H_0 rejected and H_1 accepted so that there is influence of warm ginger compress to changes in intensity of joint pain in elderly in werdha mojopahit mojokerto.

RESEARCH RESULT

1. General Data

Table 4.1 Distribution of frequency of respondents by age.

| No | Age | F | % |
|-------|--------------|----|------|
| 1. | 45 – 59 year | 0 | 0 |
| 2. | 60 – 74 year | 9 | 56,2 |
| 3. | 75 – 90 year | 7 | 43,8 |
| Total | | 16 | 100 |

Based on table 4.1 it is known that most respondents aged between 60-74 years as many as 9 respondents (56.2%).

Table 4.2 Distribution of frequency of respondents by sex.

| No | Gender | Total | |
|-------|--------|-------|-----|
| | | (F) | (%) |
| 1. | Male | 4 | 25 |
| 2. | Female | 12 | 75 |
| Total | | 16 | 100 |

Based on Table 4.2 it is known that most of the respondents are female 12 (75%).

Table 4.3 Distribution of frequency of respondents by education.

| No | Education | F | % |
|------------|-------------|----|------|
| 1. | ELEMANTARY | 12 | 75 |
| 2. | HIGH SCHOOL | 3 | 18,8 |
| 3. | SENIOR | 0 | 0 |
| 4. | SCHOOL | 1 | 6,2 |
| UNIVERCITY | | | |
| Total | | 16 | 100 |

Based on Table 4.3 it is known that most respondents have elementary education that is as much as 12 respondents (75%).

2. Special Data

Table 4.4 Distribution of frequency of respondents based on the intensity of joint pain before giving warm compress ginger.

| No | Paint Intensity | Total | |
|----|-------------------|-------|------|
| | | F | % |
| 1. | No Pain | 0 | 0 |
| 2. | (0) | 3 | 18,8 |
| 3. | Mild Pain (1- | 10 | 62,5 |
| 4. | 3) | 3 | 18,8 |
| 5. | Moderate Pain (4- | 0 | 0 |
| | 6) | | |
| | Severe Pain (7- | | |
| | 9) | | |
| | Unbearable Pain | | |
| | (10) | | |
| | Total | 16 | 100 |

Based on Table 4.4 it is known that before being given treatment, most of the respondents experienced pain with a scale of 4-6 as many as 10 respondents (62.5%).

Table 4.5 Distribution of frequency of respondents based on the intensity of joint pain after administration of warm ginger compresses.

| No | Paint Intensity | Total | |
|----|-------------------|-------|------|
| | | F | % |
| 1. | No Pain | 0 | 0 |
| 2. | (0) | 7 | 43,8 |
| 3. | Mild Pain (1- | 9 | 56,2 |
| 4. | 3) | 0 | 0 |
| 5. | Moderate Pain (4- | 0 | 0 |
| | 6) | | |
| | Severe Pain (7- | | |
| | 9) | | |
| | Unbearable Pain | | |
| | (10) | | |
| | Total | 16 | 100 |

Based on table 4.5 it is known that after treatment given most respondents experience pain with scale 1-3 as many as 7 respondents (43.8%) and 4-6 scale as many as 9 respondents (56.2%), while the scale of pain 7-9 after given Treatment to be (0%).

Table 4.6 Mean intensity of pain before and after treatment given warm ginger compress.

| N o | Intensity of Joint Pain | Mean | SD |
|--------|----------------------------|------|------|
| 1. | Before treatment is given | 3,00 | 0,63 |
| 2. | After treatment is given | 2,56 | 0,51 |

Based on Table 4.6 it is known that the average intensity of joint pain before treatment is given 3.00 and after treatment is given that 2.56 of these results a decrease in pain intensity of joints (6.25%). This suggests that there is a change in the intensity of joint pain before treatment is given with the intensity of joint pain after treatment is given.

Table 4.7 Analysis of changes in joint pain intensity before and after treatment of warm ginger compresses.

| No | Intensitas Nyeri Sendi | Pre-Test | | Post-Test | |
|------------------------|---------------------------|----------|------|-----------|------|
| | | F | % | F | % |
| 1 | No Pain (0) | 0 | 0 | 0 | 0 |
| 2 | Mild Pain (1-3) | 3 | 18,8 | 7 | 43,8 |
| 3 | Moderate Pain (4-6) | 10 | 62,5 | 9 | 56,2 |
| 4 | Severe Pain (7-9) | 3 | 18,8 | 0 | 0 |
| 5 | Unbearable Pain (10) | 0 | 0 | 0 | 0 |
| Total | | 16 | 100 | 16 | 100 |
| p value = 0,008 | | | | | |

Based on table 4.7 The results of statistical tests using Wilcoxon Signed Ranks Test with the help of SPSS for Windows version 16.0 note that the significance value p (0.008) $<\alpha$ (0.05), meaning H_0 rejected, which indicates there is influence of warm ginger compress to changes in intensity Joint pain in elderly at Panti Werdha Mojopahit Mojokerto.

DISCUSSION

1. Analyze pain intensity before giving warm ginger compress on elderly with joint pain in Panti Werdha Mojopahit Mojokerto.

The results of the research in Table 4.4 shows that before being given treatment, most of the respondents experienced pain with a scale of 4-6 that is each of 10 respondents (62.5%).

This is because Joints are part of the body that is often affected by inflammation and degeneration seen in joint pain disease. In contrast to degenerative joint pain, secondary inflammation may occur, this swelling is usually milder and reflects a reactive process, and is more likely to be seen in advanced disease (Brunner & Suddarth, 2002). Lelo (2004) explains that Pain arises from the activation and sensitization of the nociceptive system, both peripherally and centrally. Under normal circumstances, the receptor is inactive. In a pathological state, such as inflammation, the nociceptor becomes sensitive and even hypersensitive. The presence of tissue injury will relieve various types of inflammatory mediators, such as prostaglandins, bradykinin, histamine and so on. Inflammatory mediators may activate nociceptors that trigger pain.

Joint pain is a pain in the part of the body that connects the bone with the bone, causing movement and quality of life to be disturbed. The joints can be short or long. The severity of the pain also varies, ranging from mild, medium, to severe (Admin, 2016).

In this study, most of the intensity of joint pain felt by the respondents is the intensity of pain in the category of moderate pain, it happens because joint pain experienced by the respondent is an event that is often experienced in everyday life, where the client has never felt before.

Measurement of pain intensity in this study was performed using numerical pain scale. In this numerical scale perform an assessment using the numbers 0-10. This scale is the most appropriate scale in the assessment and is most often used in pain intensity before and after the nursing action, and data obtained from each respondent gives different measurement results. This is natural, because the measurement of the intensity of pain in a person is highly subjective and individual and the possibility of pain in the same intensity felt by two different people will also be very different pain that is felt. In addition, Measurement of pain with an objective approach is also needed in determining how severe the pain is felt by each individual. What may be done in the measurement of pain with this objective approach is to use the body's physiological response to the pain itself. However, measurement with this objective approach also can not give a definite picture of the pain itself.

The most common main factor can affect the intensity of pain is age. Based on table 4.1 obtained data that most respondents aged 60-74 years as many as 9 respondents (56.2%). From the above data can be explained that the older age, the greater the risk of pain in the joints.

2. Analysis of pain intensity after administration of warm ginger compress in elderly with joint pain in Panti Werdha Mojopahit Mojokerto

The result of the research in table 4.5 shows that after treatment the majority of respondents had pain with scale 1-3 as many as 7 respondents (43.8%) and 4-6 scale as many as 9 respondents (56.2%), while the pain scale 7-9 After being treated to (0%).

This is because pain is always associated with the stimulus (pain stimulation) and receptors. The response in question is nociceptor, the free nerve endings of the skin that respond to a strong stimulus. The emergence of pain begins with the existence of a pain stimulus. The stimuli can be biological, chemical, heat, electrical and mechanical (Prasetyo, 2010).

Pain stimulation is meant here is the stimulation of pain caused by an inflammatory reaction that occurs in the joints. The pain felt by each person may be different due to the various factors and pain felt by the individual is subjective and individual. The main factor especially in children and elderly. Developmental differences, perceived among this age group can affect how children and the elderly react to pain (Andarmoyo, 2013). When an elderly reports the presence of pain, often elderly people have more pain source than one place (Prasetyo, 2010).

There are many actions that can be done to reduce the pain suffered. Such actions include pharmacological measures and non-pharmacological measures (Andarmoyo, 2013). One of the non-pharmacological measures used in reducing the intensity of pain is by using warm compress techniques, in this case using a warm ginger compress. This is because ginger has a spicy flavor, and has an anti-inflammatory effect that can be used to overcome inflammation and to express pain, such as joint pain (Pranata, 2014).

When compared with the pain felt by the respondent before being given treatment, then there is a change of intensity of joint pain felt by respondent after given treatment. Changes in the intensity of the pain can occur due to the influence of warm ginger compresses.

3. Analysis of the Giving Compression of Warm Ginger on Changes in Intensity of Joint Pain In Elderly at Panti Werdha Mojopahit Mojokerto

The result of statistic test using Wilcoxon Signed Ranktest Test using SPSS for Windows version 16.0 is known that the significance value of p (0.008) $<\alpha$ (0,05), meaning H_0 is rejected, showing that there is influence of warm ginger compress on the change of intensity of joint pain in elderly At the Panti Werdha Mojopahit Mojokerto.

Based on table 4.5 shows that of 16 respondents who received warm ginger compress intervention, after intervention which decreased 1-3 pain scale as many as 7 respondents (43.8%) and decreased up to 4-6 pain scale as many as 9 respondents (56.2%).

The data above show that a person who has joint pain after a warm ginger compress intervention has decreased a significant pain scale. This is because ginger has many active compounds that are very beneficial to health, such as essential oils,

zingiberol, kamfena, flavonoids (Sarr, 2014). According to Manju and Nalini (2005) say in the essential oil content (1-3%) contain extracts of seskuliterpen, especially zingiberen, monoterpenes and oxidized terpenes which are often used as anti-pain and anti-inflammatory drugs. Another study conducted by Yuniarti (2015) mentions that ginger also has a pharmacological effect that is hot and spicy, which can relieve pain, stiffness, and muscle spasms or the occurrence of vasodilation of blood vessels. So far, pharmacological results show that ginger has several activities as anti-inflammatory.

Laboratory tests show that ginger extract in hot water can inhibit the activity of lipoxygenase and cyclooxygenase thereby decreasing levels of prostaglandins and leukotriane (inflammatory mediators) (Setyawan, 2015).

The results of this study support previous research from Yuniarti that warm compress (Ginger) is effective to decrease the scale of joint pain in rheumatoid arthritis patients in Bleberan Village, Jatirejo Subdistrict, Mojokerto Regency with $p < 0.001$ ($\alpha = 0.05$) (Yuniarti, 2015). Compared with the results of this study, warm ginger compresses have an influence on the change in pain intensity, either acute pain such as joint pain or chronic pain such as rheumatoid arthritis pain. This is because warm ginger compress is one of the techniques of management of non-pharmacological pain both acute and chronic.

Another study conducted by Susanti (2014), explains that this warm ginger compress is one of the herbal remedies as an alternative therapy to reduce joint pain. In addition, this warm ginger compress also has a pharmacological effect that is hot and spicy, where it can relieve pain, stiffness, muscle spasms and vasodilation of blood vessels and can reduce leukotriene and prostaglandin. The maximum will be achieved within 20 minutes after the application of heat, and made a warm ginger compress momentarily when the onset of pain.

The warm ginger compress technique can decrease the intensity of pain by inhibiting the activity of Cyclooxygenase (COX-2) which inhibits the production of PGE2 (prostaglandin), leukotriene and TNF- α in synoviocytes and human joints that can reduce inflammation and pain in the joints. In addition, Barriers from the Cyclo-oxigenase 1 (COX-1) enzyme and Cyclo-oxigenase 2 (COX-2) enzyme may play a role in suppressing bleeding (Pranata, 2014).

Those, the use of warm ginger compresses is effective for decreasing the intensity of pain because at the time of the pain there will be some increased mediator such as prostaglandins and leukotriene. At the time of giving warm compress ginger can be felt warm sensation on the skin, which with the provision of heat, blood vessels will dilate (vasodilatation), so improve blood circulation in the network. In this way increased cell activity will reduce pain / pain.

CONCLUSIONS AND SUGGESTIONS

Conclusion

1. Intensity of pain before giving warm ginger compress on elderly with joint pain in Panti Werdha Mojopahit Mojokerto, most of respondents felt pain with moderate pain scale (4-6) ie 10 respondents respectively (62,5%).
2. Intensity of pain after administration of warm ginger compresses in elderly with joint pain in Mojokerto Mojokerto Werdha Orphanage showed that after being given the treatment of a significant pain scale decrease.
3. There is influence of warm ginger compress on the change of intensity of pain in elderly with joint pain in Mojokerto Mojokerto Werdha Orphanage. Warm ginger compresses can decrease the intensity of joint pain in the elderly.

Suggestion

1. It is expected that the elderly to be more frequent and regular in implementing warm ginger compress, which has beneficial effect on the change of pain intensity due to joint pain, because it does not require cost, easy to do and does not cause risk if done, besides, elderly hope also try to use therapy Other nonpharmacologic measures to decrease the intensity of joint pain.
2. It is expected that with non-pharmacological therapy using warm ginger compresses this became one of the alternatives of self-care nursing that can be used by nurses to reduce the intensity of pain in elderly suffering joint pain.
3. It is expected that the results of this study can be used as baseline data and add new reference for nursing home about non-pharmacologic type of therapy in handling the intensity of joint pain, so hopefully with this warm ginger compress can also be useful and can be applied in decreasing intensity of joint pain in elder other than Pharmacological therapy as the main nursing action.
4. Due to this study the provision of warm ginger compress therapy using a cloth that will absorb the content in the ginger so as to make the decrease in pain intensity is less significant. It is expected that the next researcher will perform this warm ginger compress technique by attaching the ginger collision after being heated directly to the joint area experiencing the pain so that the ginger content remain intact and can penetrate directly to the area experiencing pain, so that the result of decrease intensity of pain more significant.

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THE DETERMINANT FACTOR OF FINE MOTORIST OF PRESCHOOL STUDENTS OF YBPK KINDER GARTEN, PARE, KEDIRI

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ABSTRACT: Development function component of children period is physical development, fine motorist, rough motorist, language, socialization, cognitive, and family bounding. [1,2] Fine motorist development is the ability of children to use fine motorist such as writing, crumpling, drawing, composing the box, making puzzle, etc. [1,2,3] The better fine motorist motion, the more activity can be done by the children. [4]. The purpose of this research is to analyze the determinant factor which influence fine motorist development of preschool children of YBPK Kindergarten Sidorejo Pare Kediri Regency. It used quantitative, with the population 21 students by using total population. The result of bivariat statistic test by using pearson correlation while multivariate analyze using linear regression. It was gotten ($p= 0,002$), education ($p=0,009$), occupation ($p=0,006$), parity ($0,002$) and children caring ($p=0,000$) with the value $p < \alpha (0,05)$ so H_0 is rejected and H_1 is accepted. It means there is the influence of determinant factor which influence the fine motorist of preschool children from the linear regression analyzes, the dominant factor which influence fine motorist is occupation and children caring with OR 0,563 or 56,3%, while 43,7% is influenced of another factor. The parents is hoped to give simulation of fine motorist, besides the school can cooperate with health sciences institution to examine development and growth periodically.

Keyword: *determinant factors, preschool, fine motor skills.*

INTRODUCTION

Preschool age is children development period. [1,4]. According [5] this age is growth and development in brain cell and still continue and become the bundle of nerve fibers and the branch so it formed the complex neural and brain network, in this period the family is important for giving early simulation so the children growth can grow normally. If the children growth normally, they will be able to be well and ready next generation in life. Unluckily, there is still many disturbance of fine motorist growth in preschool age.

Stimulation is a factor needed or children simulation to introduce the knowledge or new skill which is very important to increase the children smartness. One of the children smartness must be developed is fine motorist simulation which very useful to express the feeling, thinking, and children idea freely so it can increase psychomotor and support the children personality structure, esteem, creativity, communication capability, and social adaptation which can influence the emotion, physic, cognitive, social, language, and another development. [8,9,10]

LITERATURE RIVIEW

The recent research about the children development shows that optimal growth is supported by genetic factor and environment. Environment factor consists of biological environment, physic , psychosocial, and family factor. [4,6,7,11]

The children must finish development level needed to begin with the elementary school, especially for reading and writing. That is why the readiness for writing and reading is needed, it means the children must have all knowledge and skill to start to read and write. That is why the fine motorist development to support the readiness of writing and reading of children for next education level. [12]

METHOD

Research Aproach

It was correlation analytic research by using cross sectional approach with independent variable mother age, parity, occupation, children caring, and dependent variable is fine motorist development.

Participant

The subject of this research is students of YBPK Kindergarten Sidorejo Pare Kabupaten Kediri in 2016/2017 with 21 students by using total sample technique.

Data Collection

It used independent variable by using questionnaire which is fulfilled by the parents, while children motorist development using DDST observation sheet.

Data Analysis

It used bivariat data analyzed by using pearson correlation statistic test with the value α 0,05, while multivariat using linier regression.

Results

The result of the research for bivariat analyzed is gotten the income ($\rho= 0,002$), education ($\rho=0,009$), occupation ($\rho=0,006$), parity ($0,002$) and children caring ($\rho=0,000$) with the value α 0,05 so H_0 is rejected and H_1 is accepted, so there is a correlation between the determinant factor of fine motorist development for preschool students and dominant factor linear analysis which influenced fine motorist namely occupation and children caring with OR 0,563 or 6,3%, while 43,7% is influenced with another factor.

DISCUSSION

Mother as the factor of family environment factor which influenced the children growth and development, has big roles in educating the children, especially during preschool age. There are three main important roles, namely as mother as satisfier children needed, mother as the role model of children, and mother as stimulator of children development. [14]

Family is the first environment where the children interact with since they was born and give simulation, caring from the parents is so important to defend physic life and increase the healthy, facilitate children to improve their capability, increase the self

esteem, mature the psychosocial, independent, and increase the interaction with the environment. [9,11,13]

CONCLUSION

The result of the research shows that the mother whose become the housewife has the awareness to give attention and caring to the children by giving stimulation based on the age to reach the fine motorist maturity.

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THE TRIGGER TYPE IN THE IMPLEMENTATION OF CERVICAL CANCER EARLY DETECTION THROUGH INSPECTION METHOD OF ACETIC ACID VISUAL (IVA) IN KEDIRI

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Abstract: The purpose of this research is to find out various types of trigger in women who have conducted the screening of early detection of cervical cancer IVA method. This research uses qualitative approach through case study. The informants in this research consist of 9 (nine) women who have conducted early detection of cervical cancer IVA method. The data collection uses in-depth interviews and supported by data recorder tool. The results of this research showed that the types of triggers which delivered by the participants can be distinguished between internal triggers and external triggers. The public health office of Kediri should provide health education to the public in order to perform early detection of cervical cancer using the appropriate type of trigger.

Keywords: Trigger, early detection of cervical cancer, IVA Screening

INTRODUCTION

Early detection of cervical cancer and immediate treatment is effective in reducing the morbidity and mortality of cervical cancer (1). WHO states that cervical cancer is currently ranked top among the various types of cancer that causes deaths to women in the world.

Based on data Globocan, International Agency for Research on Cancer (IARC), it is known the prevalence of cervical cancer in the world reached 16 per 100,000 women (2). In Indonesia, cervical cancer is ranked second in terms of number of cancer patients in women but as a cause of death is still in the first rank (WHO, 2010). East Java Province is the first ranked province as the largest contributor to the number of cervical cancer cases in Indonesia (3). For not doing regular screening tests is the biggest factor causing cervical cancer in someone (4).

So far, the efforts that have been made to increase women's participation in early detection of cervical cancer such as dissemination of information or counseling about early detection of cervical cancer through print media, electronic or through health workers. However, the number of female visits related to early detection of cervical cancer in various places is still low (5). The research conducted on migrant women in Thailand suggest that perceived susceptibility, cues or triggers for detection and self efficacy are factors that influence breast self-examination for early detection of breast

cancer (6). The Fog Behavior Model (FBM) also asserts that the one who wants to do target behavior if she has: 1) sufficient motivation, 2) sufficient ability to conduct treatment, and 3) effective triggers for treatment (7).

Based on the theory of HBM and FBM, to improve the behavior of early detection of cervical cancer in women, the effective cues to action or trigger (trigger) is required so it can increase the motivation and ability of women to perform early detection of cervical cancer. Until now, there has been no research that examines the effective types of triggers based on female characteristics on the behavior of early detection of cervical cancer. Therefore, this research was conducted to determine the various types of triggers in women who have carried out the examination of early detection of cervical cancer IVA method.

LITERATURE REVIEW

A trigger is something that tells people to get treatment now (7). According to (8) triggers (priming) is a phenomenon in which a small amount of exposure to stimuli leads to an increase in the impulse of the stimuli emergence. Cues to action are the readiness of individuals to accept or perform an action. This is a supported factor owned by the client to perform positive treatment. Cues to action or Trigger can also mean something that speeds up actions so that someone immediately takes a treatment.

METHOD

Research Approach

This research uses qualitative approach through case study on the analysis of various types of triggers in the screening of early detection of cervical cancer IVA method.

Participant

The informants in this research consisted of 9 (nine) women who have conducted the early detection of cervical cancer IVA method.

Data Collection

Data collection used is in-depth interviews conducted in the residence of women who have conducted the screening of early detection of cervical cancer IVA method in 9 (nine) Public Health Centers in Kediri Health Office Work Area in February to April 2016. The research instrument in this research is the interview guideline prepared based on the objectives to be achieved and refers to the supporting theories related to the research focus. In addition to interview guidelines, researchers also use recorder and stationery as a means of collecting data so that data obtained during the interview is not missing. The information digging was obtained from interviews and observation results for three months conducted at the residence of each informant.

RESULTS

The trigger type presented by the participant can be distinguished between the internal trigger and the external trigger.

1) Internal Trigger

Participants revealed various types of internal triggers that strongly encouraged them to perform the detection of cervical cancer IVA method. The internal triggers found in this research consist of: 1) Various physical complaints such as age above 40 years, often whiteness etc, and 2) Previous experience related to the implementation of early detection of cervical cancer.

2) Trigger eksternal

The participants also revealed various types of external triggers that strongly encouraged them to perform detection of cervical cancer IVA method. The external triggers found in this research consist of: 1) Information from the television, 2) Recommendation from the doctor; 3) Recommendations from midwives; 4) Information from friends or neighbors, 5) Seeing directly the people who affected cervical cancer, 6) Ever seen a friend or neighbor who had cancer; 7) Read a book about cervical cancer.

DISCUSSION

Trigger in this research is anything that can ignite women so that immediately carry out early detection of cervical cancer IVA method. Based on the research results, it can be known the type of trigger that can trigger the implementation of early detection of cervical cancer IVA method. They are the internal trigger and external trigger.

Based on the research (9), the trigger in the form of doctor and family recommendations can influence the use of influenza vaccine by parents to their baby. The triggers have been shown to be effective in reducing perceived obstacles or minimizing the parents' concern about the negative effects of vaccine delivery and may increase perceived benefits about the effectiveness of influenza vaccine in infant. Thus, it increases the external motivation to use influenza vaccine.

Research (10) suggests that cues to action or triggers are associated with adherence to taking anti-hypertensive drugs. By reading the disease information, knowing the services, and consulting with others about illness that can trigger a person to obey. Triggers are needed to encourage individual involvement in health behaviors. Trigger can come from internal or external. The internal triggers such as physiological cues are pain. The external triggers such as: illness from family members, media reports (11). The existence of clues, education, symptoms or information media can affect a person about the dangers of illness, so he/she needs to take action.

According (12), one of the trigger sources is the physiological condition of humans in the form of a sense of discomfort or tension. When the tension is strong enough, it will motivate humans to act to meet their needs. The previous human experience and current physical condition will greatly affect the behavior to be taken. Meanwhile, the research conducted by (13), states that medical triggers have greater or more effective power in losing weight than other triggers. Medical triggers can be an advice from doctors or stories of patients who have been sick from being overweight.

Medical triggers will cause health threats and increase the motivation in patients to lower or control weight.

CONCLUSION

The target of counseling should also be considered. The target should wife and husband, because at this time most of the counseling is always given to the wife only. Whereas, the role of husband in the implementation of early detection of cervical cancer is considerable because to be able to carry out the early detection, the majority of wives always ask for their husband approval. In order to implement the IVA screening regularly, a husband as motivator is needed.

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**THE INFLUENCE OF NUTRITIONAL STATUS IN TODDLER DEVELOPMENT
WHO VISITED THE POSYANDU MELATI AND MENUR OF KELURAHAN
LIRBOYO MOJOROTO KEDIRI**

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ABSTRACT

Nutrition is one of the determinants of the quality of human resources. Nutritional problems can be more nutrients (Obesity) or less nutrition (less calories protein). Less nutrition is caused by direct and indirect factors. Indirect factors include unavailability of domestic food, inadequate childcare patterns, low levels of education, parental knowledge and skills, while direct causal factors include unbalanced food intake and infectious diseases. In case of infection of the gastrointestinal tract then the absorption of nutrients will be disrupted which will lead to decreased cellular immunity. Low nutritional status has an impact on the decreased cognitive abilities of children so that the development of children experiencing delays. The purpose of this study was to determine the relationship of nutritional status to the development of toddler age children. This research is an observational research with cross sectional design on toddler age population in Lirboyo Kediri village. Subjects were taken by random sampling of 50 children. Nutritional status data obtained by weight and age measurement. The nutritional status classification used is WHO NCHS with indicator BB / U. Child development data were obtained by DDST (Denver Development Screening Test) measurement. Data analysis using bivariate analysis is Spearman Rho test with 95% confidence level ($\alpha = 0.05$). The result of this research is no relationship between nutritional status with personal social development ($p = 0.76$), there is no correlation between nutritional status with fine motor ($p = 0.176$), there is no correlation between nutritional status with language development ($p = 1, 37$), and there was no relationship between nutritional status and gross motor development ($p = 0.807$). With early detection of growth and improvement of nutritional status of Toddler children is expected to delay the development of children can be prevented.

Keywords: Status of nutrition, development, child toddler

INTRODUCTION

Nutrition is one of the determinants of the quality of human resources. Nutritional problems can be more nutrients (Obesity) or less nutrition (less calories protein). Less nutrition is caused by direct and indirect factors. Indirect factors include unavailability of domestic food, inadequate childcare patterns, low levels of education, parental knowledge and skills, while direct causal factors include unbalanced food intake and infectious diseases.

Decreased nutritional status of patients who cause decreased immune system, thus facilitating the occurrence of other infectious diseases such as malaria. In addition to

causing anemia, loss of nutrients and blood will affect the level of intelligence. Anemia can decrease learning achievement and productivity.

The impact of malnutrition on mental and brain development depends on the degree of severity, duration and time of growth of the brain itself. If underweight conditions occur in Todler, especially in the golden period of brain development, the brain can not develop as a healthy child, and this condition will be difficult to recover. Thus it is feared that children who suffer from malnutrition at age toddler will experience developmental disorders that are settled in later times. Developments have successive stages ranging from doing simple things to the ability to do the perfect thing and each individual has a different speed of development.

The relationship between mild to moderate malnutrition, as measured by food intake and anthropometric status, and developmental outcome was explored in 110 Kenyan toddlers. Developmental outcome was assessed at 30 months of age by the Bayley Mental and Motor scales and by evaluation of play behaviors. Mild to moderate malnutrition does appear to affect the child's development adversely even when other environmental characteristics, which also relate to development, are considered. (Rosales, 2009). The research investigated the feasibility and effectiveness of the integration of interventions to enhance child development and growth outcomes in the Lady Health Worker (LHW) programme in Sindh, Pakistan. We randomly allocated 80 clusters (LHW catchments) of children to receive routine health and nutrition services (controls; n=368), nutrition education and multiple micronutrient powders (enhanced nutrition; n=364), responsive stimulation (responsive stimulation; n=383), or a combination of both enriched interventions (n=374). The allocation ratio was 1:20 (ie, 20 clusters per intervention group). The responsive stimulation intervention can be delivered effectively by LHWs and positively affects development outcomes. The absence of a major effect of the enhanced nutrition intervention on growth shows the need for further analysis of mediating variables (eg, household food security status) that will help to optimise future nutrition implementation design. (Kyousafzai et all, 2014). To determine if anthropometric status mediates the relation between socioeconomic status and psychomotor development of young children in resource-limited settings. A total of 204 (105 girls) children from two resource-limited communities in the Coast Province, Kenya. The mean age of these children was 29 months ($SD = 3.43$; range: 24–35 months). Among children under 3 years living in poverty, anthropometric status shows a clear association with psychomotor development while socioeconomic status may only have an indirect association. (Abu bakar, 2008). This report presents findings from a study in rural Kenya, designed to test the impact of three different diets on the cognitive development of school children. Results suggest that supplementation with animal source food has positive effects on Kenyan children's cognitive performance. However, these effects are not equivalent across all domains of cognitive functioning, nor did different forms of animal source foods produce the same beneficial effects. (Whalley, 2003). conducted a systematic review of studies that examined the effect of interventions combining a child development component with a nutrition. The trials showed nutritional interventions usually benefited nutritional status

and sometimes benefited child development. Stimulation consistently benefited child development. There was no significant loss of any effect when interventions were combined, but there was little evidence of synergistic interaction between nutrition and stimulation on child development. (Grantham-Mc Gregor, 2013). A survey of two poor neighborhoods in Kingston, Jamaica is reported. Nutritional indicators, weight for age and weight for height, as well as developmental levels declined with the children's age. Multiple regression analysis showed that stunting (ht/age) and weight for age had significant effects on DQ, whereas wasting (wt/ht) did not. (Selvam, 2015). This study investigates associations between food insufficiency and cognitive, academic, and psychosocial outcomes for US children and teenagers ages 6 to 11 and 12 to 16 years. The results demonstrate that negative academic and psychosocial outcomes are associated with family-level food insufficiency and provide support for public health efforts to increase the food security of American families. (Alaima et all, 2001). The effects of nutritional supplementation, with or without psychosocial stimulation, of growth-retarded (stunted) children aged 9-24 months were assessed in a study in Kingston, Jamaica. These findings suggest that poor mental development in stunted children is at least partly attributable to undernutrition. (Armond, 2004)

Aspects of monitored progress are gross motor, fine motor, language and speech skills as well as socialization and independence. One effort to know the existence of deviation of toddler child development that is with early detection deviation of child development. Through this early detection and knowing the nutritional status of the recovery then can be done earlier so that growth can develop optimally.

MATERIALS AND METHODS

This research uses analytic survey research design with cross sectional approach where each subject is observed only once and the measurement is done on the character's status or subject variable at the time of examination. The population in this study were all children of toddler age who visited the Posyandu Melati and Menur of Kelurahan Lirboyo Mojoroto Kediri in June 2017, amounting to 50 children.

This study uses the instrument that is in the form of body weight scales to measure body weight in determining the nutritional status of children with weight based on Age (BB / U) criteria based on WHO 2006 Growth curve and Denver II observation sheet to measure child development.

The data processing which is taken from the result of this research is manually processed by determining the nutritional status and then the child development then analyzed using statistic processing program. After that processed using computer system, the stages are editing, coding and entering.

Data analysis in this research is bivariate analysis that is analysis of two variables that are correlated. Spearman Rho test with significance level of 95% ($\alpha=0.05$).

RESULTS

1. Relationship of Nutritional Status with Personal Personal Development

Table 1 Relationship of Nutrition Status with Personal Development of Toddler Child Social In Kelurahan Lirboyo Kediri

| | Personal social | | | Total | |
|--------------------|-----------------|---------|--------|-------|----|
| | Delayed | Caution | Normal | | |
| Nutritional status | Less | 8 | 2 | 18 | 28 |
| | Good | 2 | 2 | 15 | 19 |
| | More | 1 | 1 | 1 | 3 |
| Total | | 11 | 5 | 34 | 50 |

Based on table 1 found 8 children who have less nutrition have a delay in their personal social skills. Of the 19 children who have good nutrition only 2 children who experienced delays in social development.

2. Nutrition Status Relationship With Smooth Motor Development

Table 2 Relationship of Nutrition Status with Smooth Motoric Development of Toddler Toddler in Kelurahan Lirboyo Kediri

| | Smooth Motoric | | | | Total |
|------------------|----------------|---------|--------|-----|-------|
| | Delayed | Caution | Normal | Tot | |
| Nutrition status | Less | 8 | 1 | 19 | 28 |
| | Good | 1 | 1 | 17 | 19 |
| | More | 1 | 0 | 2 | 3 |
| Total | | 10 | 2 | 38 | 50 |

From table .2 it can be seen that there are 28 children who have less nutritional status experiencing delays in fine motor development as many as 8 children

3. Relationship of Nutrition Status with Language Development

Table 3 Relationship of Nutrition Status with Language Development Toddler Children in Kelurahan Lirboyo Kediri

| | Language | | | Total | |
|--------------------|----------|---------|--------|-------|----|
| | Delayed | Caution | Normal | | |
| Nutritional status | Less | 17 | 1 | 10 | 28 |
| | Good | 5 | 3 | 11 | 19 |
| | More | 2 | 0 | 1 | 3 |
| Total | | 24 | 4 | 22 | 50 |

Based on table 3 can be seen that the delay of language occurs in many children who have less nutrient status and of 19 children who have good nutrition there are only 5 children who are late in the development of language.

4. Relationship of Nutritional Status with Rough Motoric Development

Table 4 Relationship of Nutritional Status with Rough Motoric in Toddler Development in Kelurahan Lirboyo Kediri

| | Rough Motoric | | | Total | |
|--------------------|---------------|---------|--------|-------|----|
| | Delayed | Caution | Normal | | |
| Nutritional status | Less | 7 | 0 | 21 | 28 |
| | Good | 2 | 2 | 15 | 19 |
| | More | 1 | 0 | 2 | 3 |
| Total | | 10 | 2 | 38 | 50 |

Based on table 4 found there are 28 children who suffer from malnutrition has a gratuitousness in motorik roughly a number of 7 children

DISCUSSION

1. Relationship of Nutritional Status with Personal Development of Todler Child Social in Kelurahan Lirboyo Kediri

There are many problems in the development of personal social child toddler as children have not been able to use a spoon or fork as a cutlery. The child has not been able to drink with a cup because his parents used to drink with a pacifier. Children tend to be afraid to socialize. Personal social child toddler can be influenced by the fulfillment of balanced nutrition. Children with good social development then he will be able to carry out adjustments to his social environment well, independently and not

always dependent on his parents. Children are easily accepted in members of their social groups and can control themselves well. Children are able to have good relations with their friends and cooperate with others. Most of the toddlers in Lirboyo urban village showed anxious expression and cried when weighed by Posyandu cadres. Children look uncooperative.

Children who have good personal social development will be able to relate well to society and children can also learn to meet their own needs. Toddler-age children who are not fulfilled in their personal social development will experience problems in their social development. Children with personal social development problems will have less learning achievements, like anger, fighting, likes to challenge and like crying. Personal social skills include aspects of independence, ability and socializing and interact with the environment is important for the child. The development of personal social on toddler children can be influenced by nutritional status, stimulation and a conducive environment.

. Direct factors that can affect the nutritional status of one of them is to consume unbalanced food so that in maintaining good nutrition for an toddler required balanced nutrition intake. Children with the fulfillment of nutrition that suits the needs of the body through a balanced daily diet can make a healthy child active optimal, not disrupted disease and social development is good. Children with good personal social development will be able to carry out adjustments to the environment. Children with good social skills capable of being independent, not always dependent on parents and children will also be easily accepted in members of social groups. Children will be able to control themselves, have a good relationship with friends and cooperative to others.

The results showed that the development of personal social toddler age children is not only influenced by the provision of balanced nutrition but also influenced by genetic pattern of care, environment, health status, peer group, gender, education level and working condition of the parents. Hurloc states that there are several factors that affect the development of children, one of which is the gender of the child. Girls will grow faster and reach adulthood than boys, and girls also experience faster motor development so that girls first eat using spoons and forks seta buttoned their own clothes.

2. Relationship Nutrition Status with the development of Smooth Motorik Toddler Children in Kelurahan Lirboyo Kediri

Child development is closely related to physical growth. A healthy child between physical growth and motor development will be aligned with the age of the child. Child motor development influenced by nutritional intake (Tayong, 2016).

Fine motor movements can not be done perfectly when the muscle mechanism is undeveloped, this occurs in children with growth disorders where the striped muscle or striated muscle that controls voluntary movements develops at a rather slow rate (Hurloc EB, 1978). The level of adequacy of energy, protein and zinc has a significant

relationship with the smooth motor development of children. Nutrition intake is a very important factor and the factors directly affect the child's growth and development. Current growth and development disorders are still one of the problems. One aspect that can be monitored is the development of toddler age children is fine motion or fine motor.

Fine motor is an aspect related to the ability of the child to perform movements involving small muscles but requires careful coordination such as observing something, narrowing, writing (Ministry of Health, 2010). Fine motor skills require good brain and muscle performance because the body is in need of good nutrition. According Hasdinah (2014) children who get good nutrition usually look more active and intelligent while children who get less or inappropriate nutritional intake will cause developmental disorders because it affects the level of intelligence and brain development.

Motor development is strongly influenced by nutrition, health status and motion treatment in accordance with its development, so anatomically the development will occur in the structure of the individual body that changes proportionately as one gets older.

3. Relationship of Nutrition Status with Rough Motor Development of Toddler Children in Kelurahan Lirboyo Kediri

According Soetjiningsih (2014) factors that can affect the development of children is a factor of genetic and environmental factors. Things that include environmental factors include nutrition and stimulation. Nutritional intake will affect the nutritional status of children associated with growth. Rough motor development is an aspect of development of locomosi (movement) and posture (body position). Stimulation and provision of good nutrition is included in the basic needs of children to be met. Rough motor development in the age of toddlers is closely related to physical development and self-confidence. If at a certain age can not do rough motor so the child has experienced delays. Motor ability of children getting better with increasing age because of the maturity of body funsi and muscle.

4. Relationship of Nutritional Status with Language Development of Toddler Age Children in Kelurahan Lirboyo Kediri

The impact of malnutrition on mental and brain development depends on the degree of severity, duration and time of brain growth if malnourished conditions occur in toddlers, the brain can not develop according to its age and this condition will be difficult to recover or be irreversible (Nency, 2005).

The toddler period is a period of golden period for brain development. Speech and language skills are aspects related to the ability to respond to voice, speech, communicate following commands and so on. The acquisition of language (Language Acquisition by Maksan in Suhartono, 2005) is a process of mastery of a language committed by an individual unconsciously, implicitly and informally. Children acquire

knowledge of the language of their environment both family environment, society as well as social environment, peers that develop in the family (Susanto, 2011)

CONCLUSIONS AND SUGGESTIONS

Conclusion

Most children toddler in Melati and Menur posyandu have nutritional status of krang that is 60%. Most of the language development of Toddler-age children in the Melati and Menur area of Kelurahan Lirboyo has been delayed. There is no relationship between nutritional status with the development of Toddler-age children in Kelurahan Lirboyo Kediri. There are other factors that influence the development of toddler age children such as stimulation, parenting and mother's knowledge of development

Suggestions

For parents and families who have toddler children with less nutritional status can spend more time to supervise child development and provide a balanced nutrition menu, especially in times of growth and development. Parents can provide stimulation for child development. Parents always apply and teach children about clean and healthy living behaviors.

The research was developed experimentally with nutritional intervention for malnourished children, so in addition to obtaining scientific value from the research results can also improve the nutritional status of children who become respondents.

Higher malnutrition cases should be addressed seriously by Puskesmas, especially nutrition workers by improving nutritional services such as demonstrations of food cooking that meet nutritional requirements and provide skills to the community for the use of yard land for high nutritional materials and to increase revenue

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THE EFFECTS OF BRAIN GYM TOWARDS CREATIVITY AMONG PRESCHOOL CHILDREN IN KINDERGARTEN, MOJOROTO SUB- DISTRICT, KEDIRI CITY

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Brain gym involve the dynamic of body movements. The movements could enable the balancing of hemispheres activity. Thus, brain gym could improve the creativity of children. Preschool children could be trained to perform brain gym movements. The purpose of this study was to identify the effects of brain gym towards creativity among preschool children in kindergarten, Majoroto Sub-Districts, Kediri City. Quasi experimental design with time series design was used in this study. Cluster random sampling was used to select the kindergarten and simple random sampling was used to select 142 participants. The Intelligence test for thinking creativity was used to collect the data. The data was analyzed using descriptive statistics and Anova Friedman. The results showed that almost all of the respondents (76,8%) had medium creativity before brain gym and almost all of the respondents (90.1%) had high creativity after brain gym. In addition, the results also showed that there were effects of brain gym towards creativity among preschool children in kindergarten, Majoroto Sub-Districts, Kediri City. Based on the results, the brain gym could be taught and performed in educational institution before the class begin. Thus, the creativity of preschool children could be improved.

Keywords: brain gym, creativity, preschool

INTRODUCTION

Childhood is part of the long journey of every individual that lays the foundation for their life in adulthood. At this time, all the potential tends to grow very rapidly. therefore, people are more often mentioned the golden age. At this time, every aspect of development such as social, emotional, cognitive, linguistic, fine motor, rough motor, and creativity within a child could thrive. The child would also begin to be sensitive to receive various potential maturation efforts and the child will be very sensitive to the effort of maturation of physical and psychic functions (Sutikno, 2008).

Children have great creative personality traits in preschool. Therefore, once children go to school, the creativity will decline, because their spontaneous, open, free minds, and expressions get less attention, as well as their curiosity, wonder, imagination and pleasures in school are not well responded. Unfortunately, preschool age children have a great opportunity to develop and express their creativity. The decline in creativity occurs because the school children are not trained to express opinions. The curriculum content requires only the students to think convergent with one big answer and the most appropriate one there is a problem. This does not stimulate creative thinking to be even

rigid and narrow in the way of thinking divergently and creatively. Thus, it is necessary to make other possible alternatives to encourage children's creativity. preschoolers' creativity needs to be maintained and developed by creating an environment that values creativity by giving play advice. However, the reality in kindergarten is more academically oriented compared to the method of play (Khotimah, 2010).

In developing the creativity of children, certain ways need to be used in order to develop the creativity in children. The game is one of the learning methods that could improve creativity, increase motivation, and could develop creativity, increase motivation and can reduce the boredom and boredom when learning. In principle, play cannot be removed from the lives of children because playing is a very fundamental process in physical growth, mental development, development of creativity, and social development of a child.

One of active play that could be performed to improve creativity is the brain gym. According to Oriza, in (Kiki, 2006) at the age of preschool (4-6 years), the brain gym could be applied, because at that age the child could already be trained to perform the movements of brain gym which is basically easy and also fun. Brain gym is a stretching exercise of dynamic body movements, allowing the balance of activity of both hemispheres (Ag Masykur & Fathani, 2008). This brain gym movement will not only smooth the flow of blood and oxygen to the brain, but also can stimulate the work and functioning of the brain optimally by activating the ability of the right brain and left, thus the coordination between the right and left hemispheres can be intertwined.

Based on the phenomenon above, the objective of this study was to identify the effects of brain gym towards creativity among preschool children in kindergarten, Mojoroto Sub-Districts, Kediri City.

LITERATURE REVIEW

Preschoolers are those who aged 4-6 years. Preschoolers used to attend preschool programs. In Indonesia, generally, children who aged 4-6 years follow a kindergarten program (Biechler and Snowman from Patmonodewo, 2006). The pattern of growth and development is clear and predictable, continuous, orderly, and progressive, this pattern or trend is also universal and fundamental to all individuals, but unique in terms of the way and time of achievement.

Brain gym is a series of simple and fun moves. The simple movement of brain gym could stimulate certain aspects of the brain and help increase the integration of the right and the left hemisphere. Thus, the brain gym could optimize the use of all parts of the brain. In addition, the brain could access all of sensory information and react to the information that is received. The information that is obtained was stored in memory and could be recalled to use, one of them in the learning process (Dennison, 2008).

Santrock (2009) stated that creativity is the ability to think of all the unusual, in different ways, and produce a unique solution to the problem. Furthermore, Munandar (2004) formulates creativity as follows; 1) Creativity is the ability to create new combinations, based on existing data, information, or elements, 2) Creativity (creative

thinking or divergent thinking) is a capability based on available data or information to find many possible answers to a problem where the emphasis is on quantity, usability, and diversity of answers, 3) Operationally, creativity can be defined as the ability to reflect fluency, flexibility, and originality in thinking, Berta's ability to elaborate in developing, enriching, and detailing idea.

METHOD

Research Approach

A quasi experimental study with time series design was conducted in this study.

Participant

One hundred forty-two preschool students were recruited from three kindergartens in Majoroto Sub-district, Kediri City.

Data Collection

The data were collected by using Torrance Test of Creativity Thinking questionnaire and socio-demographic questionnaire. Face-to-face interviews with questionnaires was used to collect the data. The data was collected by researchers. Overall, data collection took around 30 minutes for each participants. The data were collected before and after the brain gym. The brain gym was performed for 6 times in 2 weeks.

Data Analysis

Descriptive statistics were used to identify the characteristics of each variable, including number and percentage. Further, the data was analyzed by using Anova Friedman

RESULTS

Characteristics of Demographic

Table 1 Characteristics of Demographic

| Variables | Frequency | Percentage (%) |
|----------------------------------|-----------|----------------|
| Age of Respondents (year) | | |
| 6 | 76 | 53,5 |
| 7 | 66 | 46,5 |
| Gender | | |
| Female | 74 | 52,1 |
| Male | 68 | 47,9 |
| Age of Respondent's Father | | |
| Young Adults | 81 | 57 |
| Middle Adults | 61 | 43 |
| Age of Respondent's Mother | | |
| Young Adults | 97 | 68,3 |
| Middle Adults | 45 | 31,7 |
| Education of Respondent's Father | | |
| High | 73 | 51,4 |
| Middle | 63 | 44,4 |
| Low | 6 | 4,2 |
| Education of Respondent's Mother | | |
| High | 72 | 51,4 |
| Middle | 67 | 44,4 |

| | | |
|-----------------------------------|----|------|
| Low | 3 | 4,2 |
| Occupation of Respondent's Father | | |
| Civil Servants | 47 | 33,1 |
| Private Employee | 42 | 29,6 |
| Farmer | 20 | 14,1 |
| Businessman | 25 | 17,6 |
| Soldier/Policeman | 8 | 5,6 |
| Occupation of Respondent's Mother | | |
| Housewives | 52 | 36,6 |
| Civil Servants | 37 | 26,1 |
| Private Employee | 23 | 16,2 |
| Farmer | 15 | 10,6 |
| Businessman | 11 | 7,7 |
| Soldier/Policeman | 4 | 2,8 |

Based on the Table 1 most of the respondents (53.5%) were 6 years' old, most of the respondents (52.1%) were female. Based on the age of the respondent's father, most of the respondents 'father (57%) were young adults. Based on the age of the respondent's mother, most of the respondents 'mother (68.3%) were young adults. Based on the education of the respondent's father, most of the respondents 'father (51.4%) had high education. Based on the education of the respondent's mother, most of the respondents 'mother (51.4%) had high education. Based on the occupation of the respondent's father, most of the respondents 'father (33.1%) were civil servants. Based on the occupation of the respondent's mother, almost half of the respondents 'mother (33.1%) were housewives.

Table 2 The effects of Brain Gym towards Creativity among Preschool Children in Kindergarten, Mojoroto Sub-Districts, Kediri City

| BRAIN GYM | CREATIVITY | | | p-value |
|------------------|-------------------|---------------|-------------|---------|
| | Low | Medium | High | |
| Pretest 1 | 27 (19%) | 109 (76.8%) | 6 (4.2%) | 0.000 |
| Posttest 1 | 7 (4.9%) | 125 (88%) | 10 (7%) | |
| Pretest 2 | 7 (4.9%) | 125 (88%) | 10 (7%) | |
| Posttest 2 | - | 120 (84.5%) | 22 (15.5%) | |
| Pretest 3 | - | 120 (84.5%) | 22 (15.5%) | |
| Posttest 3 | - | 97 (68.3%) | 45 (31.7%) | |
| Pretest 4 | - | 97 (68.3%) | 45 (31.7%) | |

| | | | |
|------------|---|------------|-------------|
| Posttest 4 | - | 66 (46.5%) | 76 (53.5%) |
| Pretest 5 | - | 66 (46.5%) | 76 (53.5%) |
| Posttest 5 | - | 35 (24.6%) | 107 (75.4%) |
| Pretest 6 | - | 35 (24.6%) | 107 (75.4%) |
| Posttest 6 | - | 14 (9.9%) | 128 (90.1%) |

Based on the table 2, the results showed that $p\text{-value} < \alpha$ (0,05). Thus, the results showed that there were effects of brain gym towards creativity among preschool children in kindergarten, Mojoroto Sub-Districts, Kediri City.

DISCUSSION

The results showed that preschoolers had a high creativity after brain gym. The results also showed that there was an increasing of creativity among preschoolers after brain gym. Creativity is influenced by external factors, including gender and socioeconomic status. In this study, almost half of the respondents (47.9%) were male. The inherited characteristics have a major influence on the development of the sex of the child, determined by random selection at the time of conception, directing the pattern of growth and behavior of others towards the child. Gender and other determinants of offspring could strongly influence the outcome of growth and the rate of progression to obtain the outcome. There was a great relationship between parent and child in terms of properties such as height, weight, and growth rate.

In addition, socioeconomic status also affects creativity. In this study, most of the education of respondents' fathers included in higher education, i.e. 73 respondents (51.4%), most of the respondents' maternal education included in higher education, i.e. 73 respondents (51.4%), and almost half of respondents' as civil servant, i.e. 47 respondents (33.1%). The social economic status of the family had a significant impact on the growth and development of the child. At all ages children of the upper and middle classes had a significantly higher impact than low-income family children. Families from low socioeconomics, lack the knowledge or resources needed to provide safe, stimulating and nutrient-rich environment conditions that could foster optimal development in children.

The results of Anova Friedman's statistical test showed that there were effects of brain gym towards the creativity among preschool children in Kindergarten, Mojoroto Sub-Districts, Kediri City ($\square\text{-value} < 0.005$). The result was consistent with a previous research which stated that the brain gym had a positive effect for the improvement of creativity (Kristi, 2015). Dennison (2008) also stated that brain gym movements was a touch that could stimulate the work and function of the brain optimally by activating the ability of the right and left brain. Thus, the coordination between the right and left hemispheres can be intertwined. Kristi (2015) also stated that the brain gym had a very effective movement to train the five senses, such as the sense of sight, hearing, and sense of taste. The five senses that were trained can support the body's sensitivity in

responding to external stimuli. This proves that simple body movements in brain gym methods had a positive effect on the creativity of preschool children in kindergarten.

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THE INFLUENCE OF THE DEEP BACK MASSAGE ON THE INTENSITY OF LABOR PAIN TO MATERNAL IN THE FIRST ACTIVE PHASE AT THE AURA SYIFA HOSPITAL, KEDIRI 2017

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Abstract: The pain of labor can be reduced in several ways, pharmacological and non-pharmacological. In non-pharmacological using *deep back massage* techniques to reduce labor pain. Based on previous survey in maternal at the Aura Syifa Hospital Kediri, 2015, from 10 maternal, it got 7 (70%) serious pain, 2 (20%) medium pain and 1 (10%) minor pain. The purpose of this research is to know the effect of *Deep Back Massage Techniques* to Intensity of Labor Pain to Maternal in the First Active Phase. The method of this research is *one group pretest - posttest design*. The all of population take the maternal of the first active phase are 16 respondents by *purposive sampling* technique. During a contraction it can begin an emphasis at the first contraction and stopped after the last contraction. The Analysis of the data using *Wilcoxon test*. The results of this research is show if maternal pain intensity before *Deep back massage* given are medium pain and after *Deep back massage* given almost minor pain. The results of *Wilcoxon* test p value 0.000, it means p values <0.05 . So it can conclude the *Deep Back Massage Techniques* it has effect to the intensity of labor pain to Maternal in the First Active Phase. The results of this research is expected to be used as an alternative non-pharmacological therapy to reduce the intensity of labor pain.

Keywords: *Deep Back Massage Techniques*, pain intensity, Inpartu

INTRODUCTION

Labor and birth are physiological process that a mother experienced. During process of labor there is takedown of the head into the pelvic cavity and emphasize the pudendal nerves and then trigger sensation of pain by the mother. In addition, labor pain is also caused by regular contractions with longer intensity , stronger and more frequent. In this condition has effect for the physical and psychological a mother. Various ways have been making to reduce pain in labor, such as pharmacologically and non pharmacologically. Management pain by Pharmacologic is more effective than non pharmacological methods but the pharmacological method is more expensive, and it has potentially bad effect. Meanwhile non-pharmacological methods are cheap, simple, effective, and without adverse effects. Based on the preliminary survey on the maternal at Aura Syifa Hospital Kediri 2015 at 10 (100%) maternity it found 7 (70%) with serious pain, 2 (20%) with medium pain and 1 (10%) with minor pain. In this case showed that are many maternal can't manage to reduce pain labor. There are several factors that affect pain labor such as the meaning of pain, tolerance pain, reaction to pain and perception pain [1]. Pain is a natural problem in labor, but if not good solve, it will cause the other problems, like afraid felt and usually caused by lack of knowledge

about labor process. It can be caused old partus and postpartum trauma. Interventions done by non-pharmacological approaches like a psychological analgesia and it done in early pregnancy such as relaxation, *massage*, aroma *therapy*, hypnosis, hot and cold therapy, acupuncture and yoga [2]. The effects of pain if unsolved it has affect for the mother, fetus and labor process it self, The high of pain and anxiety, it can increase the secretion of ketakolamine by increased cardiac output, maternal blood pressure. *Massage* technique is the simplest pain therapy and it is use human soft to hold, rubbing, or squeezing parts of the body. Giving *massage* is able to close the gate pain, so in can obstruct painful journey [3]. *Massage* is way to help mothers felt more refreshed, relaxed and comfortable during labor. A research showed if mothers who are massaged 20 minutes every hour during of labor will be more free from pain. It is occurred because massage can stimulate the body to release *endorphins* compound which a natural pain reliever. *Endorphins* also creates comfort and tasty felt. In labor, *massage therapy* also makes the mother felt closer to the person who cares for her. The miracle of touch who cares and wants to help is a source of strength when the mother is sick, tired, and strong. Many parts of the mother's body can be massaged, such as head, neck, back, and legs. When massaging, the massager should be pay attention to the mother's response, whether the pressure given is appropriate [4]. *Deep Back massage* is an emphasis on the sacrum that can reduce tension on the joints sacroiliacs of oksiput posterior fetus position. During a contraction it can begin an emphasis at the first contraction and stopped after the last contraction. An Emphasis can be made with a clenched hand such as a tennis ball on the sacrum 2,3,4. An Emphasis during contraction is same using reduce pain method by using 50-100 mg of meperidine. By emphasis , it can stimulation of kutaeus. So it can obstruct pain into thalamus. In addition it will help the *myometrium* contraction and it will help faster the process of opening [5].

LITERATUR REVIEW

Various kinds of nonpharmacological relief pain, and pharmacological interventions, in currently available for labor. Relaxation, breathing techniques, position / movement, *massage*, hydrotherapy, hot / cold therapy, music, acupressure and aromatherapy are some of the actions can take during labor to effective coping level for their labor experience [6]. Non-pharmacological approach in labor it has non-invasive value, low cost, simple, effective and without side effects [7,8]. The *massage* proved an effective therapy for reducing pain, anxiety, agitation, and feelings of distress during labor [9]. Controlling the pain without endangering the mother, the fetus, or progress of the labor, it still focused during labor. Pharmacological method to reduce labor pain is more effective than nonpharmacological method but it is more expensive and have potential side effects [10]. Nonfarmakologi method should be complement, and unchanged pharmacological intervention for management labor pain.[11]. Nonpharmacological methods can be effective in reducing patients pain during labor, some of the studies showed, In this method is actually reduce the perceived of pain [11].

METHOD

Research Approach

The Methods of this research is *pre experimental* research by *one group pretest-posttest design*, and *purposive sampling* technique used.

Participant

The all of population take the maternal of the first active phase are 16 respondents, During a contraction it can begin an emphasis at the first contraction and stopped after the last contraction for 20 minutes.

Data Collection

The Variables analyzed are labor pain scale before and after given treatment by *Deep back massage* method at maternal in the first active phase and divided into some categories such as serious, medium and minor pain.

Data Analysis

The Analysis of the data using *Wilcoxon test*. The quantitative data of this research analyzed by SPSS program.

RESULTS

Based on the results of this research almost (93.8%) of respondents 20-35 years old, (50%) of respondents as housewife, most of the respondents (68.8%) had medium education, and paritas of respondents (56.2 %) primiparas, The intensity of maternal pain before *deep back massage* techniques, (75%) medium pain occurred and After *Deep Back massage* techniques given almost (81.2%) minor pain occurred, Based on the statistic test results by Wilcoxon it can interpretation p value $0.000 < \alpha 0.05$, it means that H₀ rejected and H₁ accepted. So it can be concluded the *Deep Back Massage* Techniques has effect to the intensity of the maternal in the first active phase.

DISCUSSION

The results of this research is show that pain intensity at maternal in the first active phase Before *Deep Back Massage* Techniques used, (75%) medium pain, After *Deep Back Massage* Techniques used, almost (81.2%) minor pain. Based on the statistic test results by Wilcoxon it can interpretation p value $0.000 < \alpha 0.05$, it means that H₀ rejected and H₁ accepted. So it can be concluded the *Deep Back Massage* Techniques has effect to the intensity of the maternal in the first active phase. In the first stage of labor, pain is caused by uterus contractions which dilatation and the cervix depletion at uterus. Pain caused by cervical dilatation and ischemia at uterus this is visceral pain and

felt by mother at the lower abdomen and spread to the lumbar, back, and thigh areas [12]. The Factors that affect of perception pain are age and parity. The cervix in multiparous women change soft before onset of labor, but it is not with cervix in primiparous women that caused of primiparous pain more heavy than multiparous. The intensity of uterine contractions felt in primiparas is greater than in multiparas, especially at the last of the first phase of labor. The young woman experience in pain more less than experiences of pain felt by older woman [12]. The process of labor in primipara is longer than multiparous, so primiparas experience more fatigue. Fatigue here has big effects about perception of pain. The response of pain faced by fear and anxiety by primigravid, it can increase the activity of the sympathetic nervous system, so increase secretion of *catecholamines (epinephrine and norepinephrine)*. The meaning of pain is knowledge for individuals who have many differences and almost meaning of pain is a negative meaning, such as harm, damage and others. In this situation influenced by several factors such as education and employment [12]. Mothers with higher education it has better access of information about health and more active and more independent in taking action. Mothers with Low education, it has impact for mother's knowledge about health, by good knowledge about the process of childbirth will be helping a mother to cope labor pain in *intermittent* (temporary). *Deep Back massage* is an emphasis on the sacrum that can reduce tension on the joints sacroiliacs of oksiput posterior fetus position. During a contraction it can begin an emphasis at the first contraction and stopped after the last contraction. By emphasis , it can stimulation of kutaeus. So it can obstruct pain into thalamus. It is suitable by the control gate theory of Melzack. In addition it will help the *myometrium* contraction and it will help faster the process of opening. An Emphasis can be made with a clenched hand such as a tennis ball on the sacrum 2,3,4. An Emphasis during contraction is same using reduce pain method by using 50-100 mg of meperidine [5]. *Deep back massage* given in mother inpartu feeling pain and very disturbing and tortured. It is causing the difference of perception each individual. The emphasis on the sacrum area will help a mother to reduce anxiety and pain felt during labor, especially in mothers with greater pain perception. According [13] based on control theory (*Gate Control Theory*) nerve fibers transmit pain to the *spinal cord*, and modified in *spinal cord* before transmitted to the brain. Synapses-synapses in the *dorsal horn* use as gate (*gate*) are closed to keep impulse before to the brain or opened to allow implus up to the brain. This theory states that during labor process, pain impulses from the uterus to the nerve fibers to *substantia gelatinous* in the *the spinal column*, the cells transmission of pain to the brain. Stimulation (such as a rub or *massage*), it has opposite message more powerful, fast and runs along the small nerve fibers. These opposite message closed the gate (*gate*) in *gelatinous substance* and blocking the pain message to the brain, so it can't record. The benefits of this massage during labor will make a mother felt free from pain. In this occur because the massage stimulates the body releasing endorphin compounds that are natural pain relievers. Endorphins also create a comfortable feeling in labor.

CONCLUSION

The results of this research is expected to be used as an alternative non-pharmacological therapy to reduce the intensity of labor pain and Professionals health care able to apply the *Deep back massage* technique in the mother *inpartu*. So it can reduce pain during *labor*.

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THE INFLUENCE OF COMBINATION MUROTTAL HOLY QUR'AN AND DEEP BREATH RELAXATION TO FACE ANXIETY A LABOR

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Abstract

The purpose of this research is analyze the influence of murottal holy qur'an and deep breath relaxation to faced anxiety a labor in Kediri. This research used a quantitative approach design by one group pre-post test to evaluate anxiety before and after treatment. The subjects of this research is the third trimester of pregnancy are 16 respondents and the sampling is taken by purposive sampling. The results of this research showed the influence of combination murottal holy qur'an and deep breath relaxation to face anxiety a labor it has effect for pregnancy. The results of this research is expected to be used as an alternative therapy to reducing anxiety in pregnancy.

Keywords: anxiety, combination murottal holy qur'an and deep breath relaxation technique in pregnancy.

INTRODUCTION

In the pregnancy period, physical and psychological will be changed. [1]The emotional changes are anxiety of tense, worry, sadness, nervousness, and fear felt is become a fundamental issue. The Psychological changes in the third trimester of pregnancy are more complex and increased, because pregnancy conditions is growing. [2,3]The emotional change when continued, it will cause anxiety reactions and it will trigger mental disorders. Anxiety can give affect for the baby's physical and brain.

One of the efforts to reducing anxiety by murottal holy qur'an and deep breath relaxation techniques. The murottal holy qur'an therapy can be lowering intensity of pain and increasing β endorphin level. So it is very effective to lowering of anxiety. [4] In addition, deep breath relaxation able to lowering muscle tense, bored and anxiety. [5] Therefore , by giving both of therapy, it is hopefully can reduce of pain.

LITERATURE REVIEW

Based on the research [6,7] which has been doing by music therapy and relaxation, it can have affect at student's anxiety and behavior. The Anxiety significantly can reduce and had been changing at student's behavior more consistent with their performance on the targets and integration at schools. [8,9]

METHOD

The approach of this research is quantitative by one group pre-post test design. The Researcher identified an anxiety first, before giving therapy. And then ,The researcher provides a combination of murottal holy qur'an therapy and deep breath relaxation techniques in respondent. After therapy given, it should identified about anxiety for the respondents.

PARTICIPANT

The subjects of this research is the third trimester pregnancy who experienced anxiety but there are no complications and diseases at their pregnancy. In this research used sample in 16 respondents at Sukorame local public clinic in Kediri.

DATA COLLECTION

The instrument of this research is Hamilton Rating Scale anxiety (HARS) to identify the anxiety variables into four categories such as not anxiety felt, minor felt, medium, serious and very serious.

DATA ANALYSIS

The analysis of the research data, using Wilcoxon test by SPSS 16 program to know the influence of combination murottal holy qur'an therapy and deep breath relaxation to faced anxiety a labor

RESULT

The results of this research is show before treatment given, most of respondents anxiety experienced at medium levels and after treatment given, most of respondents anxiety experienced at minor level. Based on the result of the test, it got $p = 0.001$ ($p < \alpha$), it mean H_0 rejected, H_1 accepted. So it can conclude, if giving a combination of murottal holy qur'an and deep breath relaxation techniques to faced anxiety a labor, it had effect.

DISCUSSION

Based on the results of the research showed the difference of anxiety level before and after given combination of Murottal qur'an therapy and deep breathing relaxation technique. The results of this research same with previous research results that the therapy is effective to reduce anxiety in pregnancy because of faced a labor, by giving murottal qur'an therapy can increase β -endorphin levels and delta waves in the human brain more than 50% . It will show a person is in a relaxed condition, so it is very effective to reduce anxiety. [7,10,11,12] In addition, deep breathing relaxation can improve lung ventilation and increase blood oxygenation so that it can effectively

reduce stress and lowering anxiety. [13,14] Because of that giving both of the combinations therapies is very effective in reducing anxiety.

CONCLUSION

There is an effect of giving a combination of murattal qur'an therapy and deep breath relaxation techniques to faced anxiety a labor. The results of this research can be used by professional health care in reducing anxiety in pregnancy. In addition, this therapy can be done by pregnancy independently because this therapy is very easy to applied.

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ENTREPRENEURSHIP TRAINING AS A CAREER TO DEVELOP HEALTH WORKER EFFORTS TO BE ENTREPRENEURSHIP

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ABSTRACT

The background of total number health workers graduates is not comparable with the available employment; so that many nurses and midwives feel difficulty to find job in the labor market. Remember that the increasingly narrow field of employment for health workers, especially in government institutions, it is necessary for health workers equipped with skills / other skills in accordance with its competence in order to open business opportunities both independently and collaborate. The ability to become entrepreneurship can be started since the health workers are still studying in college or when they have finished their education by providing Entrepreneurship Training. The aim of this activity is to create new entrepreneurship among students and alumni of the Academy of Health Karya Husada Yogyakarta. The metode of this activity is conducted by providing entrepreneurship training, visit and apprentice. The result of this program was attended by 22 participants, after training, did visit and apprentices were 6 (27,27%) independent self-employed tenant in Baby Massage and SPA service and other services, 3 (13,63%) entrepreneurship tenant Food culinary as well as 13 (59.1%) tenants still need assistance in order to become a new self-employed entrepreneur. The conclusion of entrepreneurship training activities can create new entrepreneurship covering 7 students and 2 alumni as new entrepreneurs who run business in various business product in the form of services and product of goods, realization of Incubator Entrepreneur as center of entrepreneurship and entrepreneurship capacity building system for students.

Keywords: Entrepreneurship, health workers

PRELIMINARY

Science and Technology Program for Entrepreneurship Akademi Kesehatan Karya Husada Yogyakarta with scheme Enhance business management skill for student through entrepreneurship training of care service "home care clinic" develop program doing health care at home service Home Care and Health services program for infants in the form of Baby SPA (Solus Per Aqua) in the second years. Solus Per Aqua is a traditional health effort with holistic approach in the form of comprehensive treatment using combination of hydrotherapy, massage, aromatherapy and food service, healthy drink and physical activity (Permenkes 1205 / X / 2004). Baby SPA service is a treatment that includes promotive and preventive. Solus Per Aqua (SPA) is more geared

to care body (physical), mind (mind), spirit (spirit) to achieve peace and relax (comfort) for infants.

LITERATURE REVIEW

When the infant growth slowly than the development of age should be, parents may intervene and stimulate motor movement of the infant. It is very important to optimize the baby's motor skills. In principle, infant stimulation is highly recommended, although the development of the infant already looks normal and good. Stimulation of infants regularly can cause optimal growth and development, independent and have a stable emotion, so when they are adult, they can easily adapt with the surrounding environment. Good stimulation for children will make them achieve optimal development of vision, hearing, language, social, cognitive, gross, smooth movement, balance, coordination, and independence. Stimulation that can be given such as soft touch, giving toys, talk, train to walk (Syaukani, 2015)

Solus per aqua (SPA) has two affects; it can develop infants' motori, and increases the quantity of baby's sleep. (Afrina, 2012)

The instinct of a baby responds to Mother's touch as a form of protection, attention, and expression of love. We can see the baby who getting touch looks so comfortable and calm. When the frequency of touching becomes higher, it can make the baby and person who closest to them more intent. Touches which presented to the baby in the form of gentle massages should be performed by the nearest person, whether it can be mother, a father, a grandfather, or a grandmother. But the lack of information and knowledge of parents about massage, it makes many parents assume that massage is not a form of scientific therapies as well as natural for infants. Pijat (massage) is one of the oldest treatment methods in the world. In terms of history, traditional massage in Indonesia is also influenced by the healing and medicinal arts from India and China. Traditional massages are performed by traditional healers and inherited knowledge, it is using herb massage ingredients that sometimes do not guarantee safely for the baby's skin (Maryati, 2014)

Nowadays, the baby massage method is modified with a more modern pattern in accordance with the latest research results. Baby Massage becomes a new trend in baby care that is *Solus Per Aqua (SPA)* baby or often called *Baby SPA*. Solus Per Aqua (SPA) which means "Healthy Through Water" is one way to rejuvenate the body with a series of body scrubs, massage, baby gymnastics and all activities that can make the body become more relaxed. Baby is given to soak in a small tub and the neck buffers buoy. Relaxation for infants is not only to relieve stress but also is essential for the child's growth process. (Galenia, 2014).

In fact, the condition that exists in the community is not all masseur especially if the baby massage does not know the basic mechanism how to massage in the right way, it can caused unwanted condition such as intracranial hemorrhage, extremities hematoma and ileus. It happened at some hospitals that they did erroneous massage techniques so that causes hemorrhage in infant.

Based on the background of the problem, health workers need to get entrepreneurship training in the form of Maintenance Service in "Home Care Clinic and Baby SPA". This type of service can be done either independently or collaboratively.

The output of the training which is provided to students and alumni with their own potentials is expected to generate entrepreneurship among students through science and technology program for entrepreneurship, so it can make students become new entrepreneurs by developing business plan to capture business opportunities in the community especially in the field of health. The declaration of Science and Technology Program for Entrepreneurship at the Akademi Kesehatan (Akes) Karya Kesehatan Yogyakarta is expected to (1) create a new self-employed entrepreneur from Akademi Kesehatan Karya Husada Yogyakarta (2) improve business management skills for students, (3) create a suitable entrepreneurship training method for students, and (4) Business units that give a profit as source of generated revenue from Akademi Kesehatan Karya Husada Yogyakarta. Through Science and Technology Program for Entrepreneurship, Academy Karya Husada Yogyakarta may: (1) develop the entrepreneurial among students by (a) providing conceptual knowledge and managerial skills about how to become a successful entrepreneur; (b) give some trainings for students how to find out business opportunities and (c) train the students' skills in preparing the Business Plan in accordance with the type of business chosen, (d) conduct a SWOT analysis to evaluate and improve the Business Plan based on the results of the business feasibility survey and relevant actual information to support business development in the future, and (e) create new independent entrepreneurs, (2) Improving business management skills for students, and (3) Create suitable training entrepreneurship method for students.

METHOD

The approach used in Science and Technology Program for Entrepreneurship activity is preceded by training. Training is done by individual and classical approach. The classical approach is made when the theory of Entrepreneurship given and the individual approach is made at the time of the skill practice of performing the treatment.

The methods are:

1. Business Management Training Services *Baby Massage and Baby SPA*. The method used in this training is:
 - a. lectures vary

This method is chosen to convey the concepts that are important to be understood and mastered by the trainees. The materials provided include: **Baby Massage Therapy Massage For Baby and SPA**, Child development concept, Pediatric massage therapy I and II, Developing Baby Touch and Baby SPA, the benefit of baby massage and baby SPA for infant, Swimming baby SPA, Benefits of swimming for infants, Baby SPA Requirements, Implementation procedures of infant massage and baby SPA, Sop Kiddy healthy baby SPA.

b. Demonstration of Pediatric massage therapy touch and Baby SPA. This method is selected to show each stage of massage process and baby SPA. The demonstration is performed by the instructor in the presence of the trainees so that the participants can observe directly. Afterwards, each participant conducted to re-demonstration with the guidance and it controlled by lecturer. Tools or media used in this method called panthoom which is continued by practicing directly with the baby.

c. Visit / Bands Making

Visit takes place at Massage and Solus Per Aqua (SPA) for Mom and Baby "Lobally" Majenang. The training participants observed the services given by *the massage and baby SPA and massage* for pregnant women and learn the management services of Massage and Solus Per Aqua (SPA).

2. Internships

This method is used to provide a *Home Care service* experience in a tangible setting for trainees. The internship was conducted at "*Alesha*" Mom, Kids and Baby SPA at Kaliputih Pendowoharjo Sewon Bantul, as source site of Science and Technology Program for Entrepreneurship Akademi Kesehatan Karya Husada Yogyakarta. Further, the strategy activities to achieve the goal are:

1. Stage of Preparation.

Students have been received entrepreneurship materials from their lecture in the third semester with 2 credits load consisting of 1 Semester credit units theory and 1 Semester credit units practice before they did the training. This course provides an understanding of innovation and creativity so students can achieve independence of entrepreneurship.

a. Socialization of Science and Technology Program for Entrepreneurship.

Socialization Science and Technology Program for Entrepreneurship is conducted to all academic community, director, assistant director, Head of Study Program, students and alumni about science and technology program for entrepreneurship at Akademi Kesehatan Karya Husada Yogyakarta. This program is an implementation of Entrepreneurship courses as a main course with the weight of 2 credits placement in the third semester of Prodi D III Nursing and fourth semester of Prodi D III Midwifery.

2. Tenant Recruitment

Participants' recruitment is done start from the socialization of Ib K program to all students, alumni, and academic community. In the second year, it will recruit new tenant as much as 6 tenants in the first year, there are 6

independent tenants released after Science and Technology Program for Entrepreneurship socialized well then registration will open. The procedure of the selection is arranging business plan as it has been taught in the course entrepreneurship. The best winner for the business plan will recruit as participants of Science and Technology Program for Entrepreneurship in second year. Requirements of the participants consist of: (1) registered as active student in Akademi Kesehatan Karya Husada Yogyakarta, (2) Graduated in Entrepreneurship course, (3) Willing to follow *recruitment test* or entrepreneurship test, (4) Submit a commitment participating statement in Science and Technology Program for Entrepreneurship, (5) Re-regenerate Science and Technology Program for Entrepreneurship based on recruitment test result. Students who passed the test are students who got score above the passing grade score of the accumulated entrepreneurship score. The maximum capacity of participant is 22 persons. The test participants consisted of 36 students and 2 alumni. Participants who passed the test as many as 22 people consisted of 5 students in fifth semester, 15 students in third semester and 2 alumni.

3. Provision of facilities

The facilities which is provided to support the entrepreneurship courses and Science and Technology Program for Entrepreneurship include: (1) Provision of space which prepared for Science and Technology Program for Entrepreneurship service that close to the *Home Care Clinic* such as (2) Helping tenant to open a business Entrepreneur under control of Akademi Kesehatan Karya husada Yogyakarta through Akademi Kesehatan Karya Husada Yogyakarta's *Home Care Clinic* located in Akes Karya Husada Yogyakarta and "*Alesha*" *Mom, Kids* and Baby SPA in Kaliputih Pendowoharjo Sewon Bantul. It is used for apprenticeship for IbK participants (3) Provision of maintenance services in 2015 such as: multi-purpose bed, bed check, RIESTER Stethoscope, Spigmed Spignomanometer, Magic Star Thermometer, Glucose Checker, Cholesterol, Easy Touch, ABN Flashlight, Hammer ONEMED, Walker Fold, Philra Infra Red Lamp, Ball for ROM (health ball), Set wound care 2 sets, Sterilisator, Oxygen Equipment, and it includes the Massage and Baby SPA equipment in 2016: SPA / Swimming Baby area, Modena water heater, single lever bathtub, liquid soap, Evamats number, Baby Toys, Vincart, Playgim, Todler swim, Big donut ring, Foam / mat 6X66X100, Mattress 6X70X100, Waiting Chair, Reception Desk, Glass Cabinet, Modena water heater, single lever bathtub, liquid soapbox

2. Step of Implementation

"BABY MASSAGE AND AND SOLUS PER AQUA (SPA)" training collaborated with Academic Hospital of Gadjah Mada University Yogyakarta which is conducted in the building of Academic Hospital of Gadjah Mada University Yogyakarta for 3 days from May 20 until May 22, 2016. It is

followed by 20 participants consisting of 5 students in fifth semester, 13 students in third semester students and 2 alumni. The interviewees consist of pediatrician, doctor, nurse and physiotherapist. Training methods include lectures, asking and answering question, discussions, demonstrations, and visits to "Labolly" in Majenang. Participants of alumni have been working in maternity clinics so they had experience in infant care, maternity and postpartum care and it has massage and SPA treatment for babies and mothers, while students get "*Alesha Mom, Kids and Baby SPA*" at Kaliputih Pendowoharjo Sewon Bantul as well as an incubation or places for tenant (students and alumni) who have not been able to organize their own business independently.

3. Monitoring and evaluation

After the tenants receive training, did visits, and apprenticeships, students will continue to conduct business according to their passion. The development of their business should be known by their lecturer so that each tenant should give the result in the form of cash flow financial reports and lecturer devotes to monitor and give evaluation for the result. The result monitoring, evaluation and financial report become consideration for establishing tenant as a new entrepreneur.

RESULT AND DISCUSSION

Science and technology for Entrepreneurship is one of the grants that propose by Dikti to build entrepreneurship in Higher Education as an anticipatory response for the higher of unemployment and low job vacancy. Universities that are focus on the provision of knowledge and technology can give the ability of business penetration for college graduates. Through the implementation of Science and Technology Program for Entrepreneurship grants, the target focus is to create new entrepreneurs who can develop an entrepreneurial atmosphere at Akademi Kesehatan Karya Husada Yogyakarta. The implementation of Ibk on the second year (2016), there are seven tenants and two alumni who have been eligible to be labeled as new entrepreneurs. As an effort to improve the business, Science and Technology Program for Entrepreneurship tenants are provided with tools production and stimulus funds to improve the competitiveness of business commodities. The tenant who has been success and ready to perform self-employment is one of the implementation entrepreneurship courses the field of business market. It has been stated by Lestari and Wijaya (2012) that entrepreneurship education affect is the mindset, attitude, and behavior of students to do entrepreneurship. (Lestari and Wijaya, 2012) Technique to increase production of tenant business is done by improving marketing, product packaging improvement, brochure distribution, banner installation or ex banner, and marketing through social media (*on line*). (Maryati, 2015). The tenants who are ready to become independent entrepreneurs will be given stimulus funds with limited capital but effective.

Tenant should give the report on their business in every month as a form of reasonability for receiving the funds.

The conditions of the students before they are becoming a tenant Science and Technology Program for Entrepreneurship got many obstacles in production due to the lack of science and technology knowledge, and marketing due to lack of ability in marketing. Sales of goods and services of students initially only reach small area, but there is science and technology creations in the production associated with the competence after they got coaching and mentoring in Science and Technology Program for Entrepreneurship. The marketing techniques in the production of *Baby Massage and SPA* services are made by picking up the ball that is making brochures / leaflets distributed to several hospitals, clinics, posyandu or in the community especially for families who have pregnant women, childbirth, infants and toddlers. Tenant products show sales progress significantly. It shows that Science and Entrepreneurship Program can increase the readiness of students to do entrepreneurship so they can compete in the business market. (Mardianingsih et al, 2015).

The first *Baby Massage and SPA* service techniques were administered to the infant to determine the health of the infant. After the next assessment, it determines to find out the needs of patients by doing massage, gymnastics fit and followed by SPA. Based on the results of anamnese, the quantity of baby sleep is better; babies can sleep more comfy accordance with the needs of the baby's hours. (Afrina,2012). Babies who get baby massage can improve baby's growth and development than babies who do not get massage. ("Massage for promoting growth and development of preterm and / or low birth-weight infants" - Vickers - 2004 - The Cochrane Library - Wiley Online Library, "nd).

Besides providing *Baby massage and SPA services*, it is also provide *home care* nursing independently or collaboration with other health teams such as doctors. Services provided by nurses in accordance with the competence of nurses. The results are documented in the form of a developmental record containing the progress of the patient's health after nursing did the action. Tenant products through *home care* and *Baby massage and SPA services* reach the highest peak in the profit with an average cash flow turnover of Rp. 4.5 million per month with an average profit margin of Rp 3 million per month.

There is an increasing of the production of service in marketing after being given training. First, the service is only serves massage and SPA in women, and then there are additional services like massage and SPA for pregnant and lactating women (nifas) to do the massage oxytocin and marmet techniques to smooth and increase milk production. It can increase the production of business as much as 25%.

On the production of traditional Culinary "Mie Des", the marketing techniques on the manufacture of noodles "des" is done by distributing products through leaflets / brochures to students, lecturers and community. Traditional Culinary products "Mie Des" is increasing especially on holidays and weekend.

The new product of Traditional Culinary "Mie Des" called "Mie Des" with a spicy level 1-10. The profit increases of 25%. (Hadiyati, 2011).

IbK Akademi Kesehatan Karya Husada Yogyakarta program must be followed up by Science and Technology Program for Entrepreneurship team under the coordination of Research Institute and Community Service (LPPM) of Akademi Karya Husada through several policies and technical programs, namely (1) establishing entrepreneurship courses as a compulsory course that must be taken by every student in all Program study at Akademi Kesehatan Karya Husada Yogyakarta. And it serves as one of the requirements for students to attend all internal competitions of entrepreneurship grant in Akademi Kesehatan Karya Husada Yogyakarta and other institution of Akademi Kesehatan Karya Husada Yogyakarta, (2) to make MoU with entrepreneur or private entrepreneur as IbK's partner institution in developing entrepreneurship culture at Akademi Kesehatan Karya Husada Yogyakarta based on *mutual-benefide cooperative*, and (3) developing money system and constructive internal audit on vertically and horizontally, so that we can know the opportunities of failure or obstacle in running business, whether on the management at Science and Technology Program for Entrepreneurship Akademi Kesehatan Karya Husada Yogyakarta, and students' business as new entrepreneurs. The improvement of Science and Technology Program for Entrepreneurship can carry out by developing partnership programs and cooperation with other business people outside at Akademi Kesehatan Karya Husada Yogyakarta. The climate and academic culture in Higher Education, especially Akademi Kesehatan Karya Husada Yogyakarta which emphasizes bureaucratic and structural elements is a socio-psychological barrier that can hinder creativity in entrepreneurship. On that basis, it is necessary to acculturate business culture between campus business world and business embryo in campus through assimilation process and cooperation accommodation based on *mutual-benefide cooperative foundation*. A college that views business based on the academically, they often get in isolation of the normative mind that puts the edge of science and technology of business commodities, while the business world is more focused on productive efficiency and *marketing-network* development that puts profit ahead. Both of polarizations of this business world can be integrated into Science and Technology Program for Entrepreneurship by reducing the space barrier of the university's world space with the business world, through the process of internalizing the entrepreneurial activities of the community of the campus with real campus business.

CONCLUSION

Based on the results above, it can be concluded;

1. Science for Entrepreneurship of Akademi kesehatan karya husada Yogyakarta in the second year 2016, it can produce 7 students and 2 alumni as a new entrepreneur who

runs the business in various business products in the form of *baby massage and SPA services* and various goods products.

2. Realization of incubator Science and Technology Program for Entrepreneurship entrepreneur *as a center of entrepreneurship* in the development of entrepreneurship culture at Akademi Kesehatan Karya Husada Yogyakarta.
3. Realization of *entrepreneurship capacity building system* for students of Science and Technology Program for Entrepreneurship which is controlled by Research Institutions and Community Service Akademi Kesehatan Karya Husada Yogyakarta.

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CORRELATION OF NUTRITIONAL STATUS WITH BLOOD SUGAR AT DIABETES MELLITUS

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Abstract

Diabetic Mellitus was a collection of symptoms that arise due to an increase in blood glucose levels due to decreased progressive insulin secretion. Excess nutritional status is a major risk factor for diabetes mellitus. Excess body weight can make insulin resistant or make cells insensitive to insulin. The purpose of this study to know the relationship of nutritional status with blood sugar levels in Sakinah Hospital Mojokerto. The design of this study using correlation analytics. There are two variables of research that is nutrition status as independent variable and blood sugar level as dependent variable. The population of this study were all diabeticsmillitus with target population in the period of May to July 2017, and the samples were taken by consecutive sampling technique which amounted to 49 respondents. Data were collected using weight measuring instrument, microtoise and glukotest then analyzed by editing, coding, scoring, and tabulating and tested by Rank Spearman test. The results showed that there was a correlation between nutritional status and blood sugar levels with $\rho = 0,321$. The terms $\alpha = 0.05$ where H_0 is rejected. Researchers concluded that there is a relationship of nutritional status with blood sugar levels in Sakinah Islamic Hospital Mojokerto. For people with diabetes millitus in principle can live normally as long as the discipline undergoes four major modalities that follow counseling to understand and independently overcome diabetes millitus, regulate diet, exercise regularly and drug therapy. Maintaining a balance between diet and activity is a simple way to overcome excessive nutrition and most importantly the will and strong intentions, as well as the support and attention of the people around them.

Keywords: Nutrition Status, Blood Sugar Level.

INTRODUCTION

The World Health Organization (WHO) predicts an increase in the number of people with diabetes mellitus in Indonesia from 8.4 million in 2000 to about 21.3 million in 2030, while the International Federation of Diabetes (IDF) in 2009 predicts an increase in the number of people with diabetes mellitus from 7.0 million in 2009 to 12.0 million by 2030 (Persi, 2011). Indonesia has now ranked the fourth largest number of people with diabetes after the United States, China and India.

Data from the Central Bureau of Statistics (BPS) the number of diabetics in 2003 was 13.7 million people and based on the pattern of population growth estimated in 2030 there were 20.1 million diabetics with 14.7 percent prevalence rate for urban

areas and 7.2 percent In rural areas (Persi, 2011). Type 2 DM occupies over 90% of cases in developed countries. Developing countries, almost all diabetes classified as type 2 diabetes mellitus, 40% of which is evident from a group of people who already changed the traditional lifestyle into a modern. DM type 2 is the largest in Indonesia.

The prevalence of diabetes mellitus in East Java Province in 2013 was 2.1%, an increase compared to the prevalence in 2010 of 1.16%. The highest prevalence is in the region of Yogyakarta Special Region of 2.6% (Risikesdas, 2013). A total of 135,000 people with diabetes millitus treated in hospitals in 2013 increased compared to the number of diabetics millitus treated in hospitals in 2012 as many as 120,000 people. Based on Hospital Annual Report 2012, most cases of inpatients in public hospital type Bdiabetesmillitus were ranked second after Diarrhea with 8,370 cases. In a typical C government type hospital, Diabetes Mellitus was ranked first in the largest number of inpatients as many as 9,620 cases. And from the data of the Health Office 2013, Mojokerto regency was ranked the 4th case of diabetes mellitus (DinKes, 2013).

Based on Sakinah Mojokerto Hospital Annual Report 2016, 21,785 patients suffering from diabetes mellitus. Preliminary Study Results in RSI SakinahMojokerto on June 10, 2017 there are diabeticsmillitus of 36 people.

According Gibney (2009), excess body weight is a major risk factor for the occurrence of diabetes millitus associated with type 2 diabetes is very complex. Excessive weight can make insulin resistant or make cells insensitive to insulin. Insulin plays a role in increasing the coverage of glucose in many cells and in this way also regulates the metabolism of carbohydrates, so that if insulin resistance occurs by the cells, the sugar levels in the blood can also be impaired (Guyton, 2008).

One way to measure obesity or whether a person has body fat directly is difficult and instead of using a Body Mass Index (BMI).

From the description above authors interested in conducting research with the purpose identivication relationship between nutritional status with blood sugar levels in patients with Diabetes Millitus in RSI SakinahMojokerto".

LITERATUR REVIEW

1. Definition of Diabetes Mellitus

Diabetes Mellitus is a non-communicable disease whose prevalence is quite high in the world. Diabetes Mellitus disease can affect anyone, old-young, rich-poor, skinny-fat (Wahdah, 2011). Diabetes Mellitus (DM) is a collection of symptoms that arise in a person caused by an increase in blood glucose levels due to a decrease in progressive insulin secretion backed by insulin resistance (Soegondo, 2011). Insulin hormone serves to regulate the balance of blood sugar levels as a result of the disruption of insulin production, there will be an increase in blood sugar levels above normal limits (Yunir, 2007).

2. Nutritional Status

Status need nutrition woman pregnancy define Body Mass Index (BMI), which is the ratio of body weight (in kilograms) to the square of height (in meters) Justitia, 2012).

Body mass index is a simple tool or way to monitor adult nutritional status, especially related to deficiency and overweight. Less weight can increase the risk of infectious diseases while excess weight increases the risk of degenerative diseases such as coronary heart disease, hypertension, kidney millitus diabetes and liver serosis (Maryam, 2008).

RESEARCH METHODS

The design of this research is correlational analytic cross sectional design method. The population is all diabeticsmillitus in RSI SakinahMojokerto that meet the inclusion criteria. Sampling using teknik *consecutive samplingsampling*. The sample is 49 respondents. The study was conducted on 22 s / d July 19, 2017. Measuring tool using the observation of nutritional status with weight and height measurement badsan and observation of blood sugar at the time. Data analysis using cross tabulation and Spearman Rho statistical test. The relationship was significant if $\rho (0.321) < \alpha (0.05)$.

RESEARCH RESULT

1. General Data

Table 4.1 Distribution of frequency of respondents by Age at RSI SakinahMojokerto 2017.

| No | Age | Frequency | Percent |
|--------------|-------------|-----------|---------------|
| 1 | <45 years | 16 | 32,7% |
| 2 | 45-50 years | 14 | 28,6% |
| 3 | 51-55 years | 11 | 22,4% |
| 4 | 56-60 years | 8 | 16,3% |
| Total | | 49 | 100,0% |

Source: Primary data dated July 22-29, 2017.

Based on table 4.1 it can be seen that most of the respondent age is age less than 45 years as many as 16 respondents (32.7%). Ages 45-50 years as many as 14 respondents (28.6%).

Table 4.2 Distribution of frequency of respondents by Gender in RSI SakinahMojokerto 2017

Source: Primary data dated July 22-29, 2017

Based on data 4.2 can be seen the largest number of respondents are women as

| No | Gender | Frequency | Percent |
|----|--------------|-----------|---------------|
| 1 | Male | 16 | 32,7% |
| 2 | Female | 33 | 67,3% |
| | Total | 49 | 100,0% |

much as 33 respondents (67.3%) than the number of male respondents 16 respondents (32.7%).

Table 4.3 Distribution of frequency of respondents based on Weight Loss in Kilogram in RSI SakinahMojokerto 2017.

| No | Weight(Kg) | Frequency | Percent |
|----|--------------|-----------|---------------|
| 1 | 50-59 | 12 | 24,5% |
| 2 | 60-69 | 19 | 38,8% |
| 3 | 70-79 | 10 | 12,2% |
| 4 | 80-89 | 6 | 4,1% |
| 5 | 90-99 | 2 | 3,8% |
| | Total | 49 | 100,0% |

Source: Primary data dated July 22-29, 2017.

From table 4.3 obtained the highest respondent body weight is in the range of 60-69 kilograms as many as 19 respondents (38.8%).

Table 4.4 Distribution of frequency of respondents by Height Body (Cm) in RSI SakinahMojokerto 2017.

| No | Height(cm) | Frequency | Percent |
|----|--------------|-----------|---------------|
| 1 | 140-149 | 1 | 2,0% |
| 2 | 150-159 | 28 | 57,1% |
| 3 | 160-169 | 11 | 22,4% |
| 4 | 170-179 | 9 | 18,4% |
| | Total | 49 | 100,0% |

Source: Primary data dated July 22-29, 2017.

From table 4.4 it can be seen that the highest percentage of respondents is 150-159 cm as many as 28 respondents (57.1%).

2. Special Data

Table 4.5 Distribution of frequency of respondents based on Body Mass Index (BMI) RSI SakinahMojokerto 2017.

| No | BMI | Frequence | Percent |
|--------------|--------------------------------|-----------|---------------|
| 1 | Thin weight rate (<17,0) | 0 | 0,0% |
| 2 | Light weight level (17,0-18,5) | 0 | 0,0% |
| 3 | Normal (18,5-25,0) | 16 | 32,7% |
| 4 | Fatty light level (25,0-27,0) | 16 | 32,7% |
| 5 | Heavy weight grease (>27,0) | 17 | 34,7% |
| Total | | 49 | 100,0% |

Source: Primary data dated July 22-29, 2017

Based on table 4.5 can be seen that from 49 respondents there are 16 respondents have normal BMI (32.7%), light weight BMI as much as 16 respondents (32.7%), and weight fat BMI 17 respondents (34.7%).

Table 4.6 Distribution of frequency of respondents based on Blood Sugar Level in RSI SakinahMojokerto year 2017.

| No | Blood sugar (mg/dl) | Frequence | Percent |
|--------------|---------------------|-----------|---------------|
| 1 | <90 | 0 | 0% |
| 2 | 90-199 | 10 | 20,4% |
| 3 | >200 | 39 | 79,6% |
| Total | | 49 | 100,0% |

Source: Primary data dated July 22-29, 2017

Based on table 4.6 it can be seen that most of the respondents experienced a rise in blood sugar levels in the high category as much as 43 respondents (82.7%).

Table 4.7 Cross tabulation of Nutritional Status (BMI) relationship with Blood Sugar Level in diabetics millitus Diabetes Mellitus at RSI SakinahMojokerto 2017.

| BMI | Blood sugar (mg / dl) | | | | | | Total | |
|--------------------------------|------------------------------|-----------|-----------|--------------|-----------|--------------|--------------|---------------|
| | Low | | Normal | | Height | | | |
| <17,0 (skinny weight level) | 0 | 0,0% | 0 | 0,0% | 0 | 0,0% | 0 | 0,0% |
| 17,0-18,5 (skinny light level) | 0 | 0,0% | 0 | 0,0% | 0 | 0,0% | 0 | 0,0% |
| 18,5-25,0 (normal) | 0 | 0,0% | 6 | 12,2% | 10 | 20,4% | 16 | 32,7% |
| 25,0-27,0 (light weight level) | 0 | 0,0% | 3 | 6,1% | 13 | 26,5% | 16 | 32,7% |
| >27,0 (fat weight level) | 0 | 0,0% | 1 | 2,0 % | 16 | 32,7% | 17 | 34,7% |
| Total | 0 | 0% | 10 | 20,4% | 39 | 79,6% | 49 | 100,0% |

Based on table 4.7 it can be seen that from 49 respondents who have normal body mass index of 16 respondents (32,7%) which have normal blood sugar level as much as 6 respondents (12,2%) and 10 respondents have high blood sugar level (20 , 4%). From the data, respondents who have a body mass index of fat are over 16 respondents (32.7%) of whom have normal blood sugar levels of 3 respondents (6.1%) and 13 respondents (26.5%) have high blood sugar . We can also find many respondents who have weight fat weight index as much as 17 respondents (34,7%) which have normal blood glucose value of 1 respondent (2.0%) and 16 respondent (32,7%) have content High blood sugar.

The result of analysis using SPSS Spermen Rho correlation statistic test obtained $\rho = 0,321$ with $\alpha = 0,05$. This shows that $\rho < \alpha$ then H_0 hypothesis is rejected means there is a relationship of nutritional status with blood sugar levels in patients with Diabetes Mellitus in RSI SakinahMojokerto

DISCUSSION

4.1. Characteristics of Nutrition Status at Sakinah Hospital Mojokerto

Based on table 4.5 it is known from 16 respondents male and 33 female respondents have normal body mass index as much as 16 respondents, light weight category as much as 16 respondents, and body mass index weight category weight level as much 17 respondents.

The term nutrition can be defined as the process of organism in the use of food through the process of digestion, absorption, transportation, storage, metabolism and disposal, which is used for the maintenance of life, the growth of organ function and production and produce energi. While the nutritional status is an indicator of the relative levels of body fat a person is used to determine the nutritional status (Supariasa, 2012). Nutritional status consists of less nutritional status, normal nutritional status and more nutritional status (WHO, 2011). In more nutritional status, many impacts due to the increase in body mass of a person beyond the normal limits such as heart disease, kidney disease, high blood pressure, and diabetes mellitus disease. Excessive nutritional status or commonly said to be obese, will lead to excessive body fat accumulation (Sudilarsih, 2010). The results of a UK health survey suggest that the 16-24 year age group is not at risk of becoming obese than the older age group but middle-aged and retirement age groups are at higher risk of obesity due to overeating and lack of physical activity (Priasmara, 2015).

In accordance with the above data, obesity is overweight as a result of excessive body fat accumulation. Obesity occurs as a result of consuming many calories from the body needs, so it can be a factor of chronic and degenerative diseases such as diabetes millitus. In patients with diabetes mellitus who have a high body mass index, glucose metabolism that is in the blood can not enter into cells covered in fat. As a result. Blood sugar levels. This will continue to increase blood sugar levels which eventually leads to type 2 diabetes.

4.2. Characteristics of Blood Sugar Levels in Diabetes Millitus Patients In RSI Sakinah Mojokerto.

Based on Table 4.6 it is known that respondents who have high blood sugar ($GDA > 200 \text{ mg / dl}$) score 39 respondents (79.6%) and respondents who have normal or normal blood glucose level ($GDA 90-199 \text{ mg / dl}$) As many as 10 people (20.4%). Diabetes millitus is a disease in which the level of glucose (simple sugar) in the blood has a higher level because the body can not release or use enough insulin (Aulia, 2009). Diabetes millitus is a sedentary change in the chemical system of the body that causes the blood to contain too much sugar. The cause is a deficiency of the hormone insulin. Diabetes is a group of heterogeneous disorders characterized by elevated levels of glucose in the blood or hyperglycemia. Long-term hyperglycemia can lead to chronic macrovascular complications (kidney and eye disease) and neuropathic complications (nerve disease). Diabetes millitus also results in incidents of macrovascular disease that include myocardial infarction, stroke, peripheral vascular disease (Brunner, 2001). In diabetics millitus, the sugar used for energy is needed immediately when the patient eats sugar and goes into the bloodstream quickly. In a hyperglycemic state, insulin is not able to withstand excessive glucose so that the body-metabolized glucose will be wasted unprocessed through the tissues in the body and make the kidneys work harder (Priasmara, 2015).

In accordance with the above data diabetes millitus is a disease that occurs because β cells in the pancreas can not produce the hormone insulin normally.

Diabetes mellitus type 2 is usually found in people aged 40 years with excess body weight. Most people have excess body weight or fat to obesity.

4.3. Relationship of Nutritional Status with Blood Sugar Level of RSI SakinahMojokerto.

From the result of cross tabulation between nutritional status variables with blood sugar level in diabetics millitus. Based on table 4.7 it can be seen that from 49 respondents who have normal body mass index of 16 respondents (32,7%) which have normal blood sugar level as much as 6 respondents (12,2%) and 10 respondents have high blood sugar level (20 , 4%). From the data, respondents who have a body mass index of fat are over 16 respondents (32.7%) of whom have normal blood sugar levels of 3 respondents (6.1%) and 13 respondents (26.5%) have high blood sugar . We can also find many respondents who have weight fat weight index as much as 17 respondents (34,7%) which have normal blood glucose value of 1 respondent (2.0%) and 16 respondent (32,7%) have content High blood sugar.

Based on the results of Spearmen Rho test data obtained the nutritional status in patients with diabetes millitus in RSI SakinahMojokertop = 0.321 with degrees of significance $\alpha = 0.05$ so that it can be deduced $p < \alpha (0.05)$. So for the hypothesis H0 in this study "rejected" means there is a relationship between nutritional status with blood sugar levels in diabetics millitusRSISakinahMojokerto.

In patients with type 2 diabetes millitus that reaches 90-95% of the overall population of patients with DM, this type is usually also often found in people aged over 40 years with excess body weight or fat. Obesity can cause insulin does not work well so that the process of breaking glucose in the blood becomes disturbed causing an increase in blood sugar levels. Factors cause diabetes millitus especially type 2 consists of various factors one of the genetic and environmental factors. In this case, obesity or an excess body mass index, a high-fat diet and a low-fiber diet may be one of the major predisposing factors. Diabetes millitus is a disease that accompanies obesity (Aulia, 2009). So even though diabetes is actually a hereditary disease, it is rare if a person is not overweight (Wirakusumah, 2001).

From the results of the study that respondents who experienced diabetes millitus is one of the diseases that accompany excessive nutritional status. So although diabetes is actually a hereditary disease but the condition rarely arises if a person is not overweight. More than 90% of patients with type 2 diabetes mellitus have an excess nutritional status index. One of the causes of high blood sugar levels that can cause diabetes type millitus 2 is excessive nutritional status is characterized by an overweight body mass index. Obesity can lead to insufficient working of insulin so that glucose breakdown is impaired and increases blood sugar levels. Presumably obesity is one of the major predisposing factors in the rise in blood sugar levels that can cause diabetes millitus type 2..

CONCLUSIONS AND SUGGESTIONS

Conclusion

He results showed there was a relationship between nutritional status with blood sugar levels in diabetics millitus. Excessive nutritional status can lead to inadequate insulin work

Suggestion

1. It is recommended in diabetics avoid foods that lead to obesity and multiply physical activity. Always control blood sugar levels.
2. Further subsequent researchers suggested to explore the trigger factors of diabetes millitus in addition to nutritional status.
3. Suggested at the institution of the hospital

The hospital can provide information about the status of nutrition, sugar levels, experienced by people with Diabetes Mellitus.

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THE EFFECTS OF SOCIAL GROUP DINAMICS TOWARD THE NUTRIENT STATUS OF CHILDREN IN 1-3 YEARS OLD IN KEDIRI CITY

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Abstract

The kids are very precious asset for parents. Every parents hope that their children can grow and develop well, and get good education to maximize their potencies, talent also skill. To reach that hopes, the parents have responsibilities and roles in learning process, and also their growth and development by giving stimulation in order they can grow and develop in line with their ages. One of children's growth period that can be seen is their nutrient status. The aim of this study is to know the effects of social group dynamics toward nutrient status among kids in 1 to 3 years old in Kediri City.

The research method is *pre-experimental* by using research design *pra-post test*. The population in this research are all of the mothers who have children in 1 to 3 years old in Campurejo Village, Mojoroto District of Kediri City. By using *Simple Random Sampling*, it was got 52 respondents. There are 2 variables, namely independent and dependent variables. Independent variable is social group dynamics, and dependent variable is the nutrient status of the children in age 1 to 3 years old. The instruments of this research is the book of "Kartu Menuju Sehat (KMS)". The data were analyzed by using *Wilcoxon Match Pairs Test*, and then data analysis used SPSS v.20 Program.

The result of this research showed that before given social group dynamics, there were 23 respondents (44.23%) have good nutrient status. While after given social group dynamics, there were 27 respondents (51.9%) have good nutrient status. Based on the result of statistical test by using *Wilcoxon Match Pairs Test*, it was got Z value -2.183 with $\alpha \leq 0.05$. H1 is accepted. It means there is influence between social group dynamics and nutrient status in 1 to 3 years old children.

The mother's knowledge about balance nutrient which is needed by the children can give positive effects toward their nutrient status, so the growth of the children can increase in line with their ages. For the health officers, it is suggested to improve the mothers' knowledge by holding special class for the mothers who have children under-five years old. The materials are education about nutrition in general, and it can be done by many ways such as role play, simulation or direct practice to serve food and its creativities

Keywords: social group dynamics, nutrient status, children in 1 to 3 years old

INTRODUCTION

National development in the recent years tends to develop economics and the quality of human resources. The usage of human and nature resources require optimal nutrient status grade and good health. World Health Organization (WHO) states that

nutrient status is the main pillar of health and prosperity during the whole life cycle. The low nutrient status which is still exist in Indonesia will influence directly toward the growth and development of children. It can decrease children's cognitive ability, so that the development of the children delays (Soekirman, 2000 : 6).

Nutrient is one of important factors to determine the quality of human resources. The lack of nutrient will cause serious effects such as the failure of physical growth and the delay of development and intelligence. The other effects are decreasing productivities, and low immunity against diseases that will increase illness and mortality risk (Ariani, 2017:214).

The nutrient problem can be obesity and lack of nutrient (protein calories). The lack of nutrient can be caused direct and indirect factors. The Indirect factors include unavailable of food in households, inappropriated caring pattern, low education, low knowledge and skill of the parents while the directs factors are unbalance of food intake and infectious disease. The effects of low nutrient toward mental and brain development depend on severity, duration and period of brain growth itself. If the lack of nutrient happens in toddler period, especially in the golden period, the brain cannot develop in normal way. Unfortunately, this condition is difficult to be recovered. Thus, it is worried that the children who have lack of nutrient in toddler period will have permanent development disorder in the next years.

A survey of two poor neighborhoods in Kingston, Jamaica is reported that nutritional indicators, weight for age and weight for height, as well as developmental levels declined with the children's age. Multiple regression analysis showed that stunting (ht/age) and weight for age had significant effects on DQ, whereas wasting (wt/ht) did not. (Selvam, 2015).

This study investigates associations between food insufficiency and cognitive, academic, and psychosocial outcomes for US children and teenagers ages 6 to 11 and 12 to 16 years. The results demonstrate that negative academic and psychosocial outcomes are associated with family-level food insufficiency and provide support for public health efforts to increase the food security of American families (Alaima et all, 2001).

The effects of nutritional supplementation, with or without psychosocial stimulation, of growth-retarded (stunted) children aged 9-24 months were assessed in a study in Kingston, Jamaica. These findings suggest that poor mental development in stunted children is at least partly attributable to undernutrition. (Armond, 2004).

Malnutrition in the modern world does not only comprise the consequences of protein energy shortage. There is also recognition of a growing concern for obesity in children and teenagers and insights into the health consequences of vitamin and trace element deficiencies, including iron, vitamin D and vitamin A, although every vitamin and mineral is critical to good health (RJ Green, 2015).

RESEARCH METHOD

The research method is *pre-experimental* by using research design *pra-post test*. The research population are all of the mothers who have children in age 1 to 3 years old in Campurejo Village, Mojoroto District, Kediri City. The sampling technique used is

Simple Random Sampling, and it was got 52 respondents. The research variables consist of 2 variables, namely independent variable and dependent variable. The independent variable is social group dynamics, and the dependent variable is nutrient status of the children in age 1 to 3 years old.

The research is Kartu Menuju Sehat (KMS) book. The data are analyzed by using *Wilcoxon Match Pairs Test.*, and the data analysis used is SPSS v.20 Program.

THE RESULT AND DISCUSSION

Result

Table III.1 The Frequency of Distribution Nutrient Status of the Children in 1-3 Years Old before Implementing of Social Group Dynamics

| | Nutrient Status | | | | | | | | Total |
|--------------|-----------------|----------|----------|----------|----------|----------|----------|----------|--------------|
| | F | % | F | % | F | % | F | % | |
| Bad | 0 | 0 | 2 | 3.85 | 0 | 0 | 0 | 0 | 2 |
| Thin | 0 | 0 | 13 | 25 | 8 | 15.38 | 0 | 0 | 21 |
| Good | 1 | 1.92 | 1 | 1.92 | 19 | 36.5 | 2 | 31.85 | 23 |
| Overweight | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 11.54 | 6 |
| Total | | | | | | | | | 52 |

Based on Table III.1, from 52 respondents there are 23 respondents (44.23%) have good nutrient status, and 2 respondents (3.85%) have bad nutrient status.

Table III.2 The Frequency of Distribution Nutrient Status of the Children in 1-3 Years Old after Implementing of Social Group Dynamics

| | Nutrient Status | | | | | | | | Total |
|--------------|-----------------|----------|----------|----------|----------|----------|----------|----------|--------------|
| | F | % | F | % | F | % | F | % | |
| Bad | 0 | 0 | 0 | 0 | 1 | 1.92 | 0 | 0 | 1 |
| Thin | 2 | 3.85 | 13 | 25 | 1 | 1.92 | 0 | 0 | 16 |
| Good | 0 | 0 | 8 | 15.38 | 19 | 36.5 | 0 | 0 | 27 |
| Overweight | 0 | 0 | 0 | 0 | 2 | 3.85 | 6 | 11.54 | 8 |
| Total | | | | | | | | | 52 |

Based on Table III.2, from 52 respondents there are 27 respondents (51.92%) have good nutrient status, and 1 respondent (1.92%) has bad nutrient status.

Table III.3 The Cross Tabulation of Social Group Dynamics Analysis toward Nutrient Status of the Children in 1 to 3 Years Old

Thin**Nutrient Status_Pre * Nutrient Status_Post Cross tabulation**

| | | | Nutrient Status_Post | | | | Total |
|---------------------|------------|------------------------------|----------------------|--------|-------|------------|--------|
| | | | Badk | Thin | Good | Overweight | |
| Nutrient Status_Pre | Badk | Count | 0 | 2 | 0 | 0 | 2 |
| | | % within Nutrient Status_Pre | .0% | 100.0% | .0% | .0% | 100.0% |
| | Thin | Count | 0 | 13 | 8 | 0 | 21 |
| | | % within Nutrient Status_Pre | .0% | 61.9% | 38.1% | .0% | 100.0% |
| | Good | Count | 1 | 1 | 19 | 2 | 23 |
| | | % within Nutrient Status_Pre | 4.3% | 4.3% | 82.6% | 8.7% | 100.0% |
| | Overweight | Count | 0 | 0 | 0 | 6 | 6 |
| | | % within Nutrient Status_Pre | .0% | .0% | .0% | 100.0% | 100.0% |
| | Total | Count | 1 | 16 | 27 | 8 | 52 |
| | | % within Nutrient Status_Pre | 1.9% | 30.8% | 51.9% | 15.4% | 100.0% |

Based on Table III.3, from 52 respondents it can be seen that before implementing social group dynamics, there are 23 respondents (44.23%) who have good nutrient status. After implementing social group dynamics, there are 27 respondents (51.92%) who have good nutrient status.

Tabel III.4 Statistical Test of Social Group Dynamics Effects toward the Children's Nutrient Status in Age 1-3 Years Old

Ranks

| | N | Mean Rank | Sum of Ranks |
|-------------------------------------|-----------------|-----------|--------------|
| Nutrient Status_Post Negative Ranks | 2 ^a | 10.50 | 21.00 |
| Nutrient Status_Pre Positive Ranks | 12 ^b | 7.00 | 84.00 |
| Ties | 38 ^c | | |
| Total | 52 | | |

- a. Nutrient Status_Post < Nutrient Status_Pre
- b. Nutrient Status_Post > Nutrient Status_Pre
- c. Nutrient Status_Post = Nutrient Status_Pre

Test Statistics^b

| | Nutrient Status Post - Nutrient Status_Pre |
|------------------------|--|
| Z | -2.183 ^a |
| Asymp. Sig. (2-tailed) | .029 |

- a. Based on negative ranks.
- b. Wilcoxon Signed Ranks Test

Based on Table III.4, the result of statistical test by using *Wilcoxon Match Pairs Test* is Z value -2,183 with $\alpha \leq 0,05$. H1 is accepted. It means that there is influence of implementing social group dynamics toward nutrient status of the children in age 1-3 years old.

DISCUSSION

1. Nutrient Status of the children in Age 1-3 Years Old before Implementing Social Group Dynamics

Based on Table III.1, from 52 respondents there are 23 respondents (44.23%) who have good nutrient status, 21 respondents (40.38%) who have lack of nutrient, 6 respondents (11.53%) who have overweight, and 2 respondents (3.85%) who have bad nutrient status.

The good nutrient status is needed to in the children's growth and development process from age aspect. If the lack of nutrient in under-five years old children happens continuously, it can decrease the quality of human resources (Shirin S, 2016).

The result of research shows that most of the respondents have good nutrient status. The mothers' knowledge about nutrient necessities has very important role because the fulfillment of adequate nutrient can create the better next generation. However, the awarness of giving adequate nutrient hasn't been understood well.

Based on Table III.1, it is known that there are 2 respondents (3.85%) who have bad nutrient status. Some factors can be causes of nutrient intake disorders. The direct cause is usually inadequate nutrient intake compare with the children's need especially under-five years old kids. The over fondness toward certain kinds of food will cause the body cannot fulfill the complete nourishment (Hasdianah, Siyoto, 2014 :104).

Most of the children in age 1-3 years old have interest of certain food, so their consumption pattern is also only that kind of food. This condition insists the mothers to give that favourite food frequently to the children. As the result, the children will have lack of certain nutrient needed because of less various food consumed.

The Nutrient Status of the Children in Age 1-3 Years Old after Implementing Social Group Dynamics

Based on Table III.2, from 52 respondents there are 27 respondents (51.92%) who have good nutrient status, 16 respondents (30.76%) who have lack of nutrient, 8 respondents (15.38%) who have overweight and 1 respondent (1.92%) who has bad nutrient status.

Information is the main source to get knowledge, because someone's knowledge will increase if he or she gets information. The more information got, the higher knowledge obtained (Wawan&Dewi, 2010).

Giving information or education to the mothers will influence the mothers' knowledge about serving good food intake either the kind of food given or the variety of food so that it influences toward nutrient status of their children. One of nutrient status changings which can be seen is the increasing of weight shown in weighing at Posyandu (Integrated Service Post) for under-five years old children.

According to Liza (2012), a child in under-five years old needs nutrients to help the development of brain optimally, and also to keep the healthy and strong body. Under-five years old age is critical age which a child will grow fast physically and mentally.

Nutrient is a very important part of growth and development, because it has close relation with health and intelligence. Therefore, the mothers must pay attention the nutrient intake of their children, especially the nutrient content of the food given.

2. The Effects of Social Group Dynamics toward Nutrient Status of the children in Age 1-3 Years Old

Based on Table III.3, from 52 respondents before implementing social group dynamics, there are 23 respondents (44.23%) who have good nutrient status, and after implementing social group dynamics there 27 respondents (51.92%) who have good nutrient status.

The result of statistical test by using *Wilcoxon Match Pairs Test* got Z value - 2.183 with $\alpha \leq 0.05$. H1 is accepted. It means there is influence of social group dynamics toward nutrient status of the children in age 1 to 3 years old.

According to Mubarak (2011), the source of information can help to fasten someone in getting new knowledge. It explains that after someone gets the source of information so it will be analyzed further by thinking, processing, asking, classifying and reflecting.

Social group dynamics intervention by giving information to the mothers influences their knowledge and thought pattern about the importance of adequate nutrient for their children. Later, the mothers have more pay attention in giving food to their children so that it can change the nutrient status indicated by the increasing of weight in the next Posyandu visit.

Based on Table III.3, it is known that there are 21 respondents (40.38%) who have lack of nutrient status before implementing social group dynamics, and there are 16 respondents (30.76%) who have lack of nutrient after implementing social group dynamics.

The result of research shows that there is significant difference where the number of the children who have lack of nutrient decrease after implementing social group dynamics, namely 5 respondents (9.62%). It shows there is changing of thought pattern and knowledge from the mothers about nutrient intake for their children, so that it changes the mothers' behavior. At last the mothers give food to their children in line with the portion needed.

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EFFECT OF HEALTH PROMOTION BASED ON THE THEORY PENDER TO MOTHER'S BEHAVIOR ON THE PREVENTION OF ANEMIA IN CHILDREN

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ABSTRACT

Introduction: Anemia is common in children, especially in school-age children, Because The role of parents in the prevention of anemia i s still less so health promotion is needed to Prevent anemia. The purpose of this study i s to identified influence of health promotion models based on Pender's Theory to mother's behavior prevention of anemia in children. **Method:** The study design w as pre- and post-test without control with 15 participant. Indepedent variable model of health promotion was based on Pender's Theory, the dependent variable was the mother's behavior prevention of anemia in children, d ata were analysed with Wilcoxon signed ranks test. **Result:** Results Showed there was an effect of health promotion to mother's knowledge about prevention of anemia in children ($p = 0.003$). There was no effect of health promotion to mother's attitude to Prevent anemia in children ($p = 0.267$). There is an efect of health promotion to the mother's behavior on the prevention of anemia in children ($p = 0.002$). **Discussion:** There were an influence of health promotion to mother's knowledge and behavior about prevention of anemia in children but not to the attitude about prevention of anemia in children and required involvement mother, cadre and health workers to prevention of anemia in children.

Keywords: Health promotion, prevention and health promotion behavior models

INTRODUCTION

Anemia is a blood disorder that occurs because the number of hemoglobin or red blood cells healthy in the body is less than normal. Anemia often occurs in school-age children due to wrong eating habits, unhealthy food snacks and lack of knowledge of the mother in the fulfillment of food consumed by the child.

Researchers conducted observations on 6 primary school children found 3 children experienced weak, lethargic, conjunctiva pale, sleepy and not concentrated while learning, while 3 children conjunctiva not anemis, can focus on learning and good value. From the results of interviews with the mother said not to know about anemia and do not know if the anemia can be experienced by children and only provide vegetables such as spinach and cassava leaves to prevent anemia in children. From the weight measurement on 34 children obtained based on the results of Body Mass Index (BMI) there are 6 children with normal category, 1 child with fat category and 27 children with thin category. On hemoglobin examination of 25 children found 2 children had anemia and 23 normal.

Mothers have not taken an anemic precautions because they do not understand the benefits and effects of anemia. Mother has not received information either from health workers or cadres about prevention of anemia in children so that mother let her child to not breakfast before going to school, mother only give food to child as desired by child without pay attention to nutrition substance. As a result will affect the health of children in the form of growth disorders, decreased endurance and the power of concentration and ability to learn so lower learning achievement in school (Santoso, 2013).

One of the efforts undertaken to facilitate in changing the behavior of a person with a health promotion approach *Health Promotion Model* (HPM). HPM is a nursing theory of Nola J Pender, which in this theory views the importance of health promotion and disease prevention. HPM can help understand individual health behaviors that may serve as guidelines for counseling to promote healthy behavior. Provision of health promotion with the approach of *Health Promotion Model* can provide the benefits of measures to increase the awareness of mothers on preventive measures and increased information to take preventive action where these actions are the barriers are habits and diet and it will also be successful if it is supported by interpersonal influence, including the support of Family so that expected behavior (knowledge, attitudes and actions) in the prevention of anemia will increase and anemia in children does not occur.

HPM theory is also used in research by Dian Laili Azizaah (2014) with the title of lecture media and short films as an effort to prevent diarrheal diseases based on HPM theory, and the result that there is influence between health education lecture and short film method to the students' knowledge about prevention of diarrhea Based on HPM theory. The purpose of the study identified the influence of health promotion based on Pender theory on maternal behavior in prevention of anemia in children.

LITERATUR REVIEW

Health promotion

Health Promotion is effort for improve ability community through learning of, by, for and together communities to could help him own and develop sourced activities from source power community corresponding social culture local and supported by Policy sound public health (Notoatmojo, 2007).

Health Behavior

Health Behavior is response someone to the stimulus or related objects with sick and disease, system service health, food and drinks and environment (Maulana, 2007).

Anemia

Anemia is circumstances decline amount cell blood red and / or the concentration of hemoglobin (Hb) in under normal value (Wong, 2009).

Prevention of anemia

According to Tarwoto (2010), efforts for prevent anemia, among others:

1. Eat foods containing substance iron from ingredients animal origin (meat, fish, chicken, liver and eggs) and from ingredients vegetable (colored vegetables green old and nuts).
2. Many eat food useful source of vitamin C for improve absorption substance Iron, for example, guava, oranges, tomatoes and pineapple.
3. Take 1 tablet enhancer blood every day especially moment experience menstruation.
4. When feel existence sign and symptoms of anemia, immediately consult doctors for searching for cause and given treatment.

MATERIALS AND METHODS

This study uses a quasi-experimental design (pre test and post test without control). Survey respondents as many as 15 respondents were selected based on inclusion criteria. Data analysis using wilcoxon rank test.

RESULTS

Influence of Health Promotion with HPM Approach to Knowledge

Table 1 Effect of health promotion to mother's knowledge on prevention anemia in village Darungan

| Knowledge | Before health promotion | | After Health promotion | |
|---|--------------------------------|----------|-------------------------------|----------|
| | Σ | % | Σ | % |
| Good | 2 | 13.3 | 12 | 80 |
| Enough | 12 | 80 | 3 | 20 |
| Less | 1 | 6.7 | 0 | 0 |
| Total | 15 | 100 | 15 | 100 |
| Test wilcoxon sign ranks test p = 0.003 | | | | |

Based on the above table shows that almost all (80%) knowledge before getting health promotion was good categories and almost all (80%) of respondents after gaining knowledge of health promotion in the category enough. Based on the test with wilcoxon sign ranks test results obtained p = 0.003 means there is influence health promotion to the knowledge of respondents about the prevention of anemia.

The Influence of Health Promotion with HPM Approach to Mother's Attitude in the Prevention of Anemia in Children

Table 2 Effect of Health Promotion with HPM Approach to Attitude Women in the Prevention of Anemia in children in the village Darungan

| Attitude | Before Health Promotion | | After Health Promotion | |
|---|--------------------------------|----------|-------------------------------|----------|
| | Σ | % | Σ | % |
| Positive | 10 | 66.7 | 8 | 53.3 |
| Negative | 5 | 33.3 | 7 | 46.7 |
| Total | 15 | 100 | 15 | 100 |
| Wilcoxon test sign ranks test p = 0.267 | | | | |

Based on the above table shows that most of them (66, 7%) respondents' attitudes before getting health promotion in the positive category and most of them (53, 3%) respondents' attitudes after gaining promotion of health in a positive category. Based on the test with Wilcoxon signed ranks test showed p = 0. 267 means there is no influence of health promotion on respondent's attitude about the prevention of anemia.

Influence of Health Promotion with HPM Approach to Behavior / Mother Action in Prevention of Anemia in Children

Table 3 Effect of promotion of the health of the behavior / action in the prevention of children anemia in village Darungan

| Behavior / action | Before Health Promotion | | After Health Promotion | |
|---|--------------------------------|----------|-------------------------------|----------|
| | Σ | % | Σ | % |
| Good | 6 | 40 | 14 | 93.3 |
| Enough | 8 | 53.3 | 1 | 6.7 |
| Less | 1 | 6.7 | 0 | 0 |
| Total | 15 | 100 | 15 | 100 |
| Test Wilcoxon signed ranks test p = 0.002 | | | | |

Based on the above table shows that the majority (53, 5%) behavior before getting health promotion category fairly and almost all (93.3%) of respondents behavior after getting health promotion in both categories. Based on the test with wilcoxon sign ranks test results obtained p = 0.002 means there is influence health promotion on the behavior of respondents about the prevention of anemia.

DISCUSSION

Effect of theory-based health promotion Pender To mother's knowledge about prevention of anemia in children

Research result suggests that before getting health promotion showed that most (80%) had knowledge of the category enough, a small portion (13, 3%) have a good knowledge and a small portion (6, 7%) have less knowledge, after getting a health promotion obtained Most have good knowledge and a small proportion (20%) have sufficient knowledge of the category. Statistical test results obtained with the Wilcoxon rank test $p = 0.003$ means there is influence between health promotion with mother knowledge about prevention of anemia in child.

The results of this study are in accordance with Kusuma (2014) research on the influence of anemia health education on adolescent girls toward knowledge and attitude in prevention of anemia which shows that there is influence of anemia health education on adolescent girls to knowledge of prevention anemia. Another supporting study is the Saraswati (2011) study on the effect of health promotion on knowledge of cervical cancer which shows that there is an influence between health promotion with knowledge about cervical cancer.

Health promotion can increase mother's knowledge / information about prevention of anemia in children. Knowledge is also a result of remembering a thing, including recalling events that have been experienced either intentionally or unintentionally and this occurs after people make contact or observation of a particular object (Mubarok, 2007). Health promotion is a process to enable the community to maintain and improve health (Ottawa charter, 1986 in Notoatmojo, 2005). The purpose of health promotion activities is to increase knowledge and attitudes about health so that will facilitate the occurrence of healthy behavior (Notoatmojo, 2005).

The result of this research shows the influence of health promotion with the knowledge of the respondent about the prevention of anemia in children because according to the theory explained that with the giving of health promotion will increase the information for the respondent so that the knowledge is increasing, but it also influenced by the support from the cadre in the effort of giving information On the respondents. The result of this research is in accordance with Setyaningsih (2008) research about the influence of interaction, knowledge and attitude of mother to the practice of prevention of iron anemia in balita showing the influence between knowledge and practice of prevention of iron anemia in balita. Prior to the promotion of health most of the mothers have sufficient knowledge because most of them only have junior high school education so that it will influence in mother's knowledge, while after given health promotion most mother have good knowledge.

Effect of health promotion *health promotion models* based on attitudes of mothers in the prevention of anemia in children.

Research result show that before the health promotion obtained the majority (66, 7%) of respondents have a positive attitude and almost half (33, 3%) have a negative attitude, and after getting a health promotion obtained the majority (53, 3%) of respondents have a positive attitude and almost half (46, 7%) of respondents have a negative attitude. Statistical test results obtained with the Wilcoxon rank test $p = 0.267$ meaning there is no influence between health promotion to mother attitude in prevention of anemia.

The results of this study are not in accordance with research Astuti (2012) about the influence of health education on knowledge and attitude of pregnant women in consuming Fe (Ferum) tablets that indicate that there is influence of health education on mother attitude in consuming Fe tablet. Another study was Kusuma (2014) study on the effect of anemia on adolescent health education on knowledge level and attitude in preventing anemia showing that there is influence between anemia health education on adolescent girls with attitude in preventing anemia.

The results showed no effect between health promotion on mother's attitude in prevention of anemia, this is not in accordance with the theory because the respondents still have less interest and concern about the prevention of anemia because they assume that anemia has not become a problem for them and they pay more attention to child preferences , Culture / surrounding environment without regard to its benefits even though their knowledge is good. This is consistent with the theory that attitudes are a tendency to respond (positively or negatively) to a particular person, situation or object. Factors influencing attitudes are internal factors: physical (pain, hunger, thirst), psychological (interests and concerns) and external motives and factors: experiences, situations, norms, barriers and drivers (Sarwono, 1997 in Maulana, 2007). The attitude of the mother before the health promotion was obtained 10 respondents had positive attitude but after given the health promotion got only 8 that have positive attitude because of habit and culture factor which already exist in Darungan village that they only provide food which liked by child only regardless of its nutritional status and Has no experience of children with anemia and has not felt any concern about anemia in children.

The influence of health promotion based on Pender theory approach to mother's action / behavior on prevention of anemia in children

Research result suggests that before getting health promotion gained nearly half (40%) of respondents have good behavior, the majority (53, 3%) of respondents have a behavior enough and a small portion (6, 7%) of respondents have less behavior, after getting a health promotion obtained almost entirely (93, 3%) of respondents have good behavior with categories and a small portion (6, 7%) of respondents have enough behavior. Statistical test results obtained with the Wilcoxon rank test $p = 0.002$ means there is influence between health promotion to mother behavior.

This is in accordance with the theory of health promotion is a process to enable the community in maintaining and improving health (Ottawa charter, 1986 in Notoatmojo, 2005). The purpose of health promotion activities is to increase knowledge and attitudes about health so that will facilitate the occurrence of healthy behavior (Notoatmojo, 2005). Health practices or measures for healthy living are all activities or activities of a person in maintaining health (Notoatmojo, 2005).

Result of research before get health promotion, respondent behavior about prevention anemia got 8 respondent with enough category, while after get health promotion got 14 responden have good behavior in prevention of anemia. The result of the research shows that there is influence of health promotion to respondent behavior, although the respondent's attitude is negative because of the support from the family and health cadres so that the mother take the preventive action of anemia. The family always reminds about the benefits of prevention of anemia and the types of foods that children need to prevent anemia. Cadre also exemplifies foods that can be served in children to prevent anemia. The family and cadres also remind the respondent to always keep a healthy life even though there has not been anemia so respondents also take precautions of anemia in children by fulfilling the nutrition needs of children who are balanced in accordance with their ability, motivate children to breakfast and want to eat vegetables and cook the right way Because they do not want their child sick.

CONCLUSIONS AND SUGGESTIONS

1. Health promotion based on HPM theory can improve the mother's knowledge about the prevention of anemia in children due to health promotion can add more information to mothers about the benefits of prevention of anemia and anemia prevention methods.
2. Health promotion based on HPM theory does not affect the mother's attitude in prevention measures of anemia in children. This happens because it is still influenced by the habits and environment around it.
3. Health promotion based on HPM theory affect the action / behavior of mothers in the prevention of anemia. This happens because with health promotion can improve mother's knowledge about prevention of anemia so that will change mother behavior to the better.

Suggestion

1. The community, especially mothers and health cadres to further improve and seek information about child health problems, especially about anemia in children by further improving communication and interaction with health workers.
2. Puskesmas and health workers especially nurses to be able to give counseling about prevention of anemia in children by involving cadres and society especially mothers.
3. Further research needs to be done with the development of interpersonal interaction model between mother, family and nurse to improve mother attitude in prevention of anemia in child considering the importance of interaction between

mother and family in motivating mother to prevent anemia in child, and interaction between mother and nurse in giving Information / education on prevention of anemia in children.

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**THE EFFECT OF HYPERTENSION AND PREEKLAMPSI OR EKLAMPSI
BEFORE PREGNANCY ON DEGREES PREECLAMPSIA/ECLAMPSIA
IN SURABAYA**

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Abstract

Preeclampsia/eclampsia is one of the main causes of death in women, as well as bleeding and infection. Preeclampsia/eclampsia is a disease which is unique in that it only occurs in pregnant women. Preeclampsia/eclampsia is known as the "disease of theories" because a lot of theories that explain the cause of preeclampsia/eclampsia and until now inni not known with certainty the cause. Several risk factors have been identified can increase the risk of preeclampsia/eclampsia. Increased incidence of 2013-2015 in hospitals Surabaya. This study aimed to analyze the influence of maternal health, the degree of preeclampsia/eclampsia in Surabaya. The study was cross sectional analytical survey. Subjects were maternal preeclampsia/eclampsia were 190 people and a large sample of 77 people comprising 11 eclamptic mothers, 22 mothers mild preeclampsia, severe preeclampsia and 44 mothers, using simple random sampling. The variables in the study were history of preeclampsia/eclampsia and hypertension. Analysis of data using ordinal regression test. Data were obtained from interviews and medical records. The study showed a significant relationship between history of preeclampsia/eclampsia ($p=0.007$), hypertension ($p=0.000$). The incidence of preeclampsia/eclampsia is affected by the hypertension. These risk factors are expected to be of particular concern for health professionals and mothers in pregnancy counseling.

Key words: degrees of preeclampsia/eclampsia; hypertension factors; history of preeclampsia/eclampsia in a previous pregnancy

INTRODUCTION

One indicator of the degree of health of women is through the MMR, MMR in Indonesia is still high in ASEAN [1]. It is estimated that in the world every minute women die due to complications related to pregnancy and childbirth, in other words, 1,400 women die every day or approximately 500,000 women die each year due to pregnancy and persalina [2]. United Nations International Children's Emergency Fund (UNICEF) states that each year nearly 10,000 women die due to pregnancy problems and persalinan [3]. AKI in some developed countries ranges from 20/100,000 live births (KH), whereas in some developing countries this figure is almost 20 times higher ranged between 440/100,000KH. In the region of Southeast Asia there were an

estimated 240,000 maternal deaths each year, in order to obtain the maternal mortality rate of 210/100.000KH [4].

Preeclampsia is a hypertensive disease that occurs in pregnant women that affects 2-10% of pregnancies around the world and include the world's problems. The incidence of hypertension as many as 839 million cases. 2025 higher incidence as much as 1.15 billion, about a quarter of the population dunia [5]. More than 4 million women become pregnant each year occur preeclampsia. An estimated 50,000 to 70,000 women per year die because of preeclampsia and 500,000 infants die. Even preeclampsia is the leading cause of mortality and morbidity in the fetus, as well as the cause of 15-20% of deaths of pregnant women around the world [6].

Indonesia one of the developing countries with maternal and perinatal high enough, which is the third highest in the Association of South East Asian Nation (ASEAN) and the second highest in the region of South East Asian Nations Regional Organization (SEARO) [7].

SDKI (2012) maternal mortality rate in Indonesia increased significantly around 359/100.000KH or about 57%, an increase from 2007 of 228/100.000KH. The figure is still far from the expected to achieve the target of National Medium Term Development Plan (RPJMN) 2010-2014 in the amount of 118/100.000KH and MDG's (Millennium Development Goals) by 2015 ie 102/100,000 KH, while SDG's mentarjetkan 2030 AKI of 70/100,000 KH [8].

AKI in East Java province in 2012 amounted to 97.41/100.000KH, then fell in 2013 to 97.39/100.000KH, and in 2014 amounted to 93.52 / 100.000KH [9]. The cause of maternal deaths in 2010-2012, an increase in preeclampsia / eclampsia (PE/E). In 2010 as much as 26.92%, in 2011 was 27.27%, and increased in 2012 by 34.88%. Factors PE/E is still a dominant factor in the causes of maternal death Timur Java. Surabaya number of maternal deaths in 2013 were 22 cases of 19,614 the number KH or approximately 112.16/100.000KH, increased in 2014 by 23 cases from 19,499 the number KH or about 117,94KH, 2015 decreased, ie 19 cases 20,288 number KH or about 93.65/100.000KH. The cause of AKI in 2015 was dominated by preeclampsia/eclampsia 10 cases, 4 cases of bleeding, heart 3 cases, and others 2 kasus [10].

Regional General Hospital (Hospital) Ibn Sina Surabaya in 2013 the incidence of PE/E as many as 78 cases out of 1,525 deliveries, in 2014 a total of 120 cases of PE / E of 978 deliveries, an increase in 2015 of PE/E 190 from 928 deliveries, with as many as 143 cases of severe preeclampsia, mild preeclampsia and eclampsia 36 cases 11 cases. From the incidence of PE/E seven mothers die [11]. Until now, preeclampsia/eclampsia is still the "the disease of theories", due to the still high incidence and causes of high MMR and MMI [12]. Mothers who experience pregnancy-induced hypertension ranges from 10%, 3-4% of them experienced preeclampsia, 5% had hypertension and 1-2% had chronic hypertension [13]. Preeklampsi/eclampsia occurs because of the complex immunological mechanisms and

blood flow to the placenta is reduced [14]. As a result, the supply of nutrients needed fetus is reduced. The cause is narrowing of vessels darah [15].

Early detection can prevent the development of preeclampsia diagnosis of preeclampsia to eclampsia with appropriate care so as to reduce the incidence of morbidity and complications in the mother and fetus. Early diagnosis can only be made by the antenatal care through the monitoring and assessment as well as the history of special examination on ANC which is one way to decrease MMR and is expected perinatal maternal morbidity and mortality can be prevented [16].

Problems in this study departed from the problem still high maternal mortality rate, especially about preeclampsia/eclampsia , which makes the handling of priority in order Tidar be a complication in childbirth. So it is important to investigate factors preeclampsia/eclampsia by hypertension factor and history of preeclampsia/eclampsia in a previous pregnancy. As it is known that the risk factors for a disease is dependent on geographical conditions and the environmental characteristics of the local area.

MATERIALS AND METHODS

a. Study setting and design

The type and design of this research is analytic survey is a study in a way to explore how and why these health problems can occur , then analyzing the interconnections among issues , both among the risk factors (factors that influence the effect) with effect factor (factors that are affected by the risk) [17] . The effect factor is the impact of the risk, while the risk factor is an event that gave rise securities or pengaruh [17].

The design is a cross sectional study design that connects between risk factors and the effects of factors which make observations or data collection in the same time . This means that each research subject was observed only one [17] . This research was conducted at Ibn Sina Hospital Surabaya.

b. Population and sample size

The population in this study were all mothers of pre-eclampsia/eclampsia in Ibn Sina Hospital Surabaya in 2015 amounted to 190 people with mild preeclampsia proportion of a total of 36, a total of 143 severe preeclampsia and eclampsia by 11. The sample in this study is a part of the mother preeclampsia / eclampsia in Ibn Sina Hospital Surabaya 2015. Was calculation using the following formula :

$$n = \frac{NZ^2 1-\alpha/2P(1-P)}{(N-1)d^2+Z^2 1-\alpha/2P(1-P)}$$

Based on calculations using the formula , then the required minimum sample size in this study was 53 maternal preeclampsia/eclampsia . In order for a large proportion of samples of the same amount which will be represented at each preeclampsia/eclampsia , then the sample is needed as much as 77 maternal preeclampsia/eclampsia with a

proportion of 22 women with mild preeclampsia. 44 women with severe preeclampsia and 11 women with eclampsia.

c. Sampling procedures

The sampling technique in this study using simple random sampling based on data from maternal preeclampsia / eclampsia in Ibn Sina Hospital Surabaya. This technique is used to capture members of the sample and the population was randomly without regard to strata that exist in the population

d. Date collection instruments

Collecting data in this research using primary data obtained through interviews with informants (mother who was diagnosed with preeclampsia/eclampsia), primary data if the data in the medical record of the mother is not complete and therefore the need for a search to the respondents, the primary data collection is done by conducting home visits. Researchers explain beforehand to potential informants research purposes and benefits in accordance with the explanation sheet.

Candidates informants as respondents understand and agree by signing a consent form in the presence of accompanying family. Further interviews were conducted for 5-10 minutes at the respondent's house. Secondary data is data obtained from a medical record maternal preeclampsia/eclampsia in Ibn Sina Hospital of Surabaya in 2015, data from the book KIA mother, and supported by the Registry book midwife when the mother has no book KIA.

e. Data analysis

This analysis is used to analyze the data in a way know the description and distribution of frequency characteristics used to describe each variable studied. This analysis is used to analyze the sample data and the results applied to population based on sample data. This analysis was conducted to see the effect of the independent variables and the dependent variable. The statistical test used is Regression Ordinal/Logistic Regression Multinomial at 95% confidence level ($\alpha= 0.05$) , when it is found the results of statistical analysis $p < 0.05$ (statistical tests significant/insignificant) means these variables affect the dependent variable.

f. Etical considerations

The research will be conducted with the approval of the hospital ethics committee. All of the respondents in this study gave written informed consent (informed consent) expressed willingness to participate in research, witnessed by the husband/family/health workers and researchers. All of the patient's identity is not completely written yet by initials or medical record number to maintain patient confidentiality. Researchers guarantees the confidentiality of the results , both information and other issues related to the respondent. The data obtained in this study only used for research purposes, except for scientific purposes (scientific publications) and only the group specific data that will be reported on the results of the research.

FINDINGS AND DISCUSSION

a. Findings

Overview distribution factor of hypertension and a history of preeclampsia/eclampsia in a previous pregnancy on the degree of preeclampsia/eclampsia (tabel.1) it can be seen that the majority of respondents did not have a history of hypertension and had a history of preeclampsia/eclampsia in a previous pregnancy.

The bivariate analysis was conducted to determine an exposure (independent variable) on the occurrence of the disease degrees of preeclampsia/eclampsia. The steps are to test bivariate independent variables and if the analysis shows a P value of <0.05 and has significance, then the independent variables can be included in the multivariate model. All variables candidates put together for reconsideration to be a model , if the results of the analysis showed a significant P value is $P<0.05$. This can be seen in ordinal regression multivariate analysis (Table 2,3,4,5,6).

Table 1. The frequency distribution of respondents by factors of hypertension and a history of preeclampsia/eclampsia in Ibn Sina Hospital Surabaya 2015

| No. | Category | Amount | Percentage (%) |
|-----|--------------------|--------|----------------|
| 1 | History of PE/E | | |
| | There is a history | 49 | 63,6 |
| | No history | 28 | 36,4 |
| 2 | Hypertension | | |
| | There hypertension | 35 | 45,5 |
| | No hypertension | 42 | 54,5 |

Table 2. Effect of factors of hypertension and a history of preeclampsia/eclampsia in a previous pregnancy against Degrees Preeclampsia/Eclampsia in Ibn Sina Hospital Surabaya 2015

| No. | Category | Degrees Preeclampsia / Eclampsia | | | | | | Value | Sig |
|-----|--------------------|----------------------------------|-----|-----|------|-----------|------|--------|-------|
| | | PER | | PEB | | Eclampsia | | | |
| n | % | N | % | n | % | | | | |
| 1 | History of PE/E | | | | | | | | |
| | There is a history | 20 | 26 | 23 | 29,9 | 6 | 7,8 | 9.920 | 0.007 |
| | No history | 2 | 2,6 | 21 | 27,3 | 5 | 6,5 | | |
| 2 | Hypertension | | | | | | | | |
| | There hypertension | 20 | 26 | 12 | 15,6 | 3 | 3,9 | 25.667 | 0.000 |
| | No hypertension | 2 | 2,6 | 32 | 41,6 | 8 | 10,4 | | |

Table 3. Factors Affecting the Degree of preeclampsia / eclampsia in Ibn Sina Hospital Surabaya 2015

| No. | Category | Estimate | Std. | Wald | Sig | 95% CI |
|-----|----------|----------|------|------|-----|--------|
|-----|----------|----------|------|------|-----|--------|

| Eror | | | | | | |
|-------------|--------------------|----------|------------|--------|-------|---------------|
| 1 | History of PE/E | | | | | |
| | There is a history | 0.578 | 0.547 | 1.118 | 0.290 | 1.650 – 0.494 |
| | No history | Kelompok | Pembanding | | | |
| 2 | Hypertension | | | | | |
| | There hypertension | 2.231 | 0.607 | 13.505 | 0.000 | 3.421 – 1.041 |
| | No hypertension | Kelompok | Pembanding | | | |

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Table 4. Model Fitting Information

| Model | -2 Log Likelihood | Chi-Square | df | Sig |
|----------------|--------------------------|-------------------|-----------|------------|
| Intercept Only | 51.059 | | | |
| Final | 27.364 | 23.695 | 2 | 0.000 |

Link function: Logit.

In this study, the results of the analysis indicate that the model used is significant with significance value of $0.000 < 0.05$, which means that models with independent variables better than the model without independent variables in other words suitable model used is the model that contains independent variables (final models).

Table 5. Goodness-of-Fit

| | Chi-Square | df | Sig |
|----------|-------------------|-----------|------------|
| Person | 12.014 | 4 | 0.117 |
| Deviance | 10.160 | 4 | 0.138 |

Link function: Logit.

The analysis showed that the model fit (significantly) with a significance value of $0.117 > 0.05$, which means that the model is consistent with predictions ordinal logistic regression models were used and this means that the model used is the regression model fit/good . Deviance shows how much variation can not be explained by the regression model . Which means that the higher the value the less accurate deviance model. Value deviance in this study for 0.138.

Tabel 6. Pseudo R-Square

| | |
|---------------|-------|
| COx and Snell | 0.265 |
| Nagelkerke | 0.311 |
| McFadden | 0.161 |

Link function: Logit

The analysis showed that the value Nagelkerke amounted to 0.311 (3.11%). This indicates that the dependent variable is able to explain the variation in the independent variable is only 3.11%. This value is very large, it is possible because independent variables are being used more .

b. Discussion

Relationship history of preeclampsia/eclampsia in a previous pregnancy on the degree of preeclampsia/eclampsia in Ibn Sina Hospital Surabaya in 2015 is the majority of women with a history of preeclampsia/eclampsia in a previous pregnancy. The analysis showed no effect signifkan between a history of preeclampsia/eclampsia in a previous pregnancy on the degree of preeclampsia/eclampsia ($p=0.007$). Variable history of preeclampsia/eclampsia in a previous pregnancy in this study is a risk factor for preeclampsia/eclampsia. These results are consistent with studies Rozikhan (2007) that a pregnant overlying who have a history of preeclampsia have a tendency to experience severe preeclampsia ($p=0.001$) [21]. Cunningham (2006) says that women at risk of preeclampsia in women who have had preeclampsia in pregnancy advance or who have had hypertension approximately 4 tahun [15] .

Results of this research is that the number of preeclampsia/eclampsia in Ibn Sina Hospital Surabaya 2015 beerdasarkan history of hypertension almost all respondents no history of hypertension. The analysis showed no significant effect on the degree of hypertension, preeclampsia/eclampsia ($p=0.000$). Variable hypertension in this study is a risk factor for preeclampsia/eclampsia. The results of the study according to research conducted by Winda (2012) indicates that there is a significant relationship between a history of hypertension and preeclampsia ($p=0.000$) [23]. Some studies show that women who have the greatest risk of experiencing superimposed preeclampsia are those who have a history of hypertension is more adri 4 years and evidence of abnormalities that underlie the increase in blood pressure before pregnancy. Chronic hypertension is a risk factor for preeclampsia. Chronic hypertension is hypertension that occurred before 20 weeks 'gestation or hypertension was first diagnosed after 20 weeks' gestation and settled to 12 weeks post persalinan [24].

CONCLUSION AND RECOMMENDATIONS

a. Conclusions

The following, conclusions have been drawn from the finding of the study:

From this study it can be concluded that the factor of hypertension ($p=0.007$)and a history of preeclampsia/eclampsia in a previous pregnancy ($p=0.000$) had a significant association to the degree preeklampsia/eclampsia. The most influential factor on the degree of preeclampsia/eclampsia is a factor in hypertension ($p=0.000$).

b. Recommendations

Based on the findings and the conclusions drawn from them, the following recommendations are forwarded:

1. Their related policies and improve socialization program ANC reducing mortality among mothers and infants through the enforcement ANC service delivery 10T to every pregnant women and the importance of prenatal care .
2. To better improve the quality of health services to reduce maternal mortality and infant , for example, conduct special programs for pregnant mothers as do PKM RS , so that treatment as early as possible in this case to do and the risk of severe preeclampsia can be suppressed to be smaller again
3. The need for improved information and insight into the health of the pregnancy , it aims to anticipate in order to avoid delays in the prevention of complications in pregnancy . And the necessity of a good attitude pregnant women , so that pregnant women are more concerned about the condition of the blood pressure during pregnancy . Expected pregnant women were routinely doing a check of blood pressure during pregnancy , to avoid increasing blood pressure . As well as pregnant women should routinely in antenatal visits until the time of delivery .

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SOCIAL SUPPORT AND EXCLUSIVE BREASTFEEDING IN WORK AREA OF HEALTH CENTER OF SRESEH SAMPANG MADURA

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Abstract: This research aims to analyze the correlation of social support and exclusive breastfeeding in the work area of health center of Sresek Sampang Madura. This research uses cross sectional. The population of this research is mother with infant of 6-12 months. The 90 respondents is chosen by purposive sampling technique. Data are collected by using social provision scale questionnaire and exclusive breastfeeding questionnaire. Then it is analyzed by using spearman rank correlation with level of significant $\alpha < 0,05$. Respondents have high social support from its public figure because of its belief. Thus, support from husband is low because the husband is a worker and he does not care too much. But husband has high emotional support for breastfeeding mother such as giving attention, empathy, and attachment, mothers have enough support about exclusive breastfeeding, and enough support about not exclusive breastfeeding. A sufficient information and counselling for public figure and family members can improve adherence to exclusive breastfeeding, so that public health or nurse can train and provide counseling relatives leaders about exclusive breastfeeding.

Keywords: social support, exclusive breastfeeding, Maduresse

INTRODUCTION

Exclusive breastfeeding is the provision of breast milk alone without additional food and other beverages to infants, from birth to 6 months (Ministry Of Health, 2006). Breast milk contains colostrum which is rich in antibody because it contains high protein to maintain immune and germ killers. Breastfeeding ensures good nutritional status, an exclusively breastfed baby can be protected from infections, diarrhea, asthma and allergies moreover morbidity and mortality (Wijayanti & Indrayana nd, 2015.). Based on the result of interviews with X (ten) mothers who have baby aged 6-12 months in Sresek Sampang Madura Village, it was obtained the results that 7 out of 10 mothers did not give exclusive breastfeeding and 3 of them have given exclusive breastfeeding, because there is belief that the baby's nutrition is not enough if it is only given breast milk. There is a factor why mothers do not exclusively breastfeed to the baby, which is: lack of social support. Social support is an important element in one's life because social support is a system which relates and depends on providing support, affection, security and attention that carry out their respective roles to achieve common goals (Friedman, Bowden & Jones, 2003). Therefore, social support is needed for breastfeeding mothers as a *support system* or major support system so that it can develop an effective response to adapt well in solving psychological and social problems (Lasserman & Perkins, 2001).

METHOD

Research Design

This research type is Quantitative. The research design is *cross sectional* that emphasizes the time of measurement or observation of the independent and dependent variable data which is done only once at a time. The prevalence or effect of a phenomenon (independent variables) is connected to the cause (dependent variable) (Nursalam, 2013).

Population

In this study the population is a mother who has children aged 6-12 months in the Health Centre of Sresek Sampang area. The working area 12 villages. While the affordable population is a mother who has children aged 6-12 months from 2 villages in the working area of health center, at 184 mothers.

Sample

Samples are part of an affordable population that can be used as research subjects through sampling (Nursalam, 2013).

The samples in this study are breastfeeding mothers having children aged 6-12 months in the Health Center of Sresek Sampang area. Sampling must meet inclusion criteria and inclusion material. The inclusion and exclusion criteria are as follows:

1. Inclusion Criteria

There is general characteristics of the subject which is affordable target population and investigated (Nursalam, 2013). The inclusion criteria of this study is:

1. Mother has the ability to read and write.

2. Exclusion Criteria

It means that the subject can not represent the sample because it is not qualified as a sample of research (Hidayat, 2007). Exclusion criteria in this research are:

1. Mothers who have children aged 6-12 months who are sick.
2. Children aged 6-12 months coming to posyandu but they are not with their biological mother.
3. The frequency distribution sources of social support to respondents in Health Center of Sresek Sampang Madura, in July 2017.

RESULT

Sources of social support

Table 1 The Frequency Distribution Sources of social support to respondents in Health Center of Sresek Sampang Madura, in July 2017.

| Support sources | Percentage % |
|-----------------------------------|--------------|
| Husband | 12.7 |
| Family | 23.4 |
| Health worker | 19.2 |
| Friend / neighbor | 17.9 |
| Religious public figure community | 26.8 |
| Total | 100% |

The table shows that respondents got social support sources from religious public figure/community leader at 26.8%. In Madurese culture, religious public figure is a role model for the community. Husband and family are a supporting factor. Eventhough husband and family are the closest people in providing support, husband support is only at 12.7%. It is caused by less information and understanding in providing support moreover husband as a worker. However, husband is superior in providing emotional support, which are empathy, attention, love, care and concern. Family support, such as their mother-in-law support, is at 23.4%.

Table 2 The Frequency Distribution of exclusively breastfeeding level in Health Center of Sresek Sampang Madura, in July 2017.

| Social support | Frequency | Percentage % |
|----------------|-----------|--------------|
| Good | 5 | 5.6 |
| Enough | 84 | 93.3 |
| Less | 1 | 1.1 |
| Total | 90 | 100% |

Table 5.3 shows that respondents got enough social support for 84 people (93.3%). The less of social support is 1 (1.1%), it shows that there is lack of trust among them. The highest domain is the domain of reliable relationships and guidance. Respondents got social support can be seen from how religious public figure can be relied on when they need help and can provide opportunities or responsibilities in exclusively breastfeeding for up to 6 months.

Table 3 Frequency Distribution of exclusive breastfeeding in Health Center of Sresek Sampang Madura Community, in July 2017.

| Exclusive breastfeeding | Frequency | Percentage % |
|-------------------------|-----------|--------------|
| exclusive breastfeeding | 16 | 18 |
| Not exclusive | 74 | 82 |
| Total | 90 | 100% |

Table 3 shows that respondents who gave exclusive breastfeeding are 16 people (18%) and they who did not exclusive breastfeeding are 74 people (82%), Madurese community in giving ASI is based on socio-culture as well as confidence in giving exclusive breastfeeding.

Table 4 Cross-tabulation of social support and exclusive breastfeeding in the Health Center of Sampang Madura Community, July 2017.

| Social Support | Exclusive breastfeeding | | Frequency | % |
|----------------|---------------------------------------|-------------------------|-----------|------|
| | Not providing exclusive breastfeeding | exclusive breastfeeding | | |
| Less | F 1 | % 1,1 | F 0 | % 0 |
| Enough | 73 | 81,1 | 11 | 13,1 |
| Good | 0 | 0 | 5 | 5,6 |
| Total | 74 | 82,2% | 16 | 18,7 |
| | | | % | 90 |
| | Spearman Rho r= 0,493" p = 0,00 | | | |

Table 4 shows that 73 out of 90 respondents (81.1%) had sufficient level of social support but they did not exclusively breastfeed for 6 months, it is caused by the lack of experience. The primiparous mother had low education so providing breastfeeding is ineffectiveness. Mostly, they only graduated from elementary school.

There are of 11 respondents (13.1%) who give exclusive breastfeeding with enough support. Eventhough they got an average support, they had higher education and productive maternal age range, 20-35 years. This condition could be the factor causing success in giving exclusive breastfeeding. 5 Respondents (5.6%) provided exclusive breastfeeding with good support. Respondents got good support from religious and family leaders, religious public figure plays an important role as role model who are respected by the Madurese community. As a role model, religious public figure participates in activities organized by Puskesmas so it influences respondents to give exclusive breastfeeding. Furthermore, people who are at 20-35

years are the factor making success in giving exclusive breastfeeding. No exclusive breastfeeding and social support is less than 1 (1.1%), it shows that there are untrustiness with others, not participating in activities, and the reciting holy quran will affect the level of support.

Based on *Spearman Rank* p value = 0.000 with significance level α (0.05), $P < \alpha$. So H_0 is rejected and H_1 is accepted. There is a relationship between social support and exclusive breastfeeding in the Health Centre of Sresek Sampang Madura area. The correlation coefficient value is (r) = 0.493, it means a strong relationship level with a positive correlation direction between social support and exclusive breastfeeding. This shows that the better social support, the better exclusive breastfeeding.

DICUSSION

Actually, the social support received by mothers in giving exclusive breastfeeding from husband is weak, at 12,7%. Nevertheless, husband support more affects on providing emotional such as giving attention, expression of empathy, compassion, and care. Husband can give more attention to nursing mothers, as well as the affection that husbands give to their wives and babies. The lack of husband support is caused by the less knowledge about exclusive breastfeeding, the husband should not have advised the mother to give food to infants at the age of 0-6 months.

According to Paramita (2007), the lack of husband support in the practice of breastfeeding due to cultural habit. One of them is the function and division of roles, where the father has to earn money to live while household are all taken care by the wife including breastfeeding. Research in Pakistan shows that a wife should ask permission to her husband and family if she wants to consult/visit a health centre. The success of a wife in giving exclusive breastfeeding depends on the husband. The lack of husband education will have an impact on the mother's success in exclusively breastfeeding. In village, media access is still very low. Religious public figures often provide wrong explanations about visiting health facilities so that people have a negative attitude with healthy behavior including the role of husband in improving the mother's ability to provide exclusive breastfeeding (Mahmood, 2010).

Akram & Abbas, (2014) states that the support from religious public figure will help mother to succeed breastfeeding, so that care and awareness of that figure are expected to be able to make breastfeeding activities as a movement or culture. By educating the importance of breastfeeding in their culture, it will enforce an effort to continue breastfeeding baby until 6 months.

AIMI, (2013) also describes about breastfeeding that it is considered important based on religious perspective, religious public figures/ustadz often meet the community and they are believed able to answer many questions including

breastfeeding. In Indonesia, the conscious behavior of exclusive breastfeeding does not only depend on mothers, but also it depends on support from husbands, parents and the environment to create behavioral change. In addition, support from religious public figure who are close to the daily life of the community is also important.

The results shows that most respondents did not give exclusive breastfeeding at 82% and the remaining did exclusive breastfeeding at 18%. Most respondents who are productive age with a range of 20-35 years and housewives did not breastfeed exclusively because of lack of mother's knowledge about breastfeeding benefits and adequate level of social support. Maduranese did not provide exclusive breastfeeding until 6 months because they also give *pre lactal* food in infants aged 0-6 months. There are also belief that giving water, scraping banana and giving formula will make baby full, healthier, and not fussy.

Breastfeeding Support Group (KP-ASI) is already exist but this activity is still strange in Helth Centre of Sampang Madura area because mother visit KP-ASI once only the they were absent or did not participate breastfeeding group. So the KP-ASI does not affect because the difficulty to visit the breastfeeding support group. They states that they could not leave their house/visit the health facility on certain days, if the husband works and wife has to stay at home. Exclusive breastfeeding is giving breast milk alone without any other additional meals such as formula, water, honey or banana, porridge and rice (Roesli, 2000).

Breastfeeding has become a culture, but the practice of breastfeeding (breast milk) is still bad. As seen from the results of research, repondents who give exclusive breastfeeding were only 16 respondents (18%). The level of public awareness to provide breastfeeding (breast milk) is still very concerning, infants are still given formula, water, solid foods or mixed milk and formula (Malau, 2010).

Based on the last education, 22 respondents (24%) did not finish primary school and 32 respondents (36%) graduated from elementary. The low education of the respondents caused the low level of knowledge of attitude. In contrast, a high level of education will make the attitude of the respondents very well. Low level of education causes the knowledge obtained is also less to form a negative attitude (Widyastuti, 2005)

According Notoatmodjo (2010), explains that knowledge is an important domain for the formation of attitudes. The good knowledge that respondents have has become the basis for determining attitudes, so that respondents with good knowledge tend to be nice to give exclusive breastfeeding.

In developing country, particularly in areas where the population is low-educated and low-level economic, maternal knowledge on infant care and feeding especially on the benefit of breast milk is lacking. Generally, knowledge about the care and feeding

of baby is obtained from people around (Sibuea, 2003). But in this study both mothers who have low education and high education still did not give exclusive breastfeeding, Maduranese in breastfeeding infants depend on culture that provides pre lactal food in infants aged 0-6 months so that Maduranese are difficult to breastfeed exclusively.

Ida (2012) states that mothers with multiparity status have a chance 3 times greater in exclusive breastfeeding compared with primiparous mother. According to research Hajijah (2012) states that there is no significant relationship between the number of parity of mothers and exclusive breastfeeding practices. This is assumed that mothers who have children <3 will have more free time to come to the health care facility because they have the opportunity to obtain information related to exclusive breastfeeding practices. In this study the number of children does not affect the level of exclusive breastfeeding, Maduranese, in breastfeeding, depends on the culture and tradition.

The results shows, there were 73 people received sufficient social support and did not give exclusive breastfeeding, while 11 people received enough social support and exclusive breastfeeding, and 1 person gained less social support and did not give exclusive breastfeeding. This shows that good social support will increase the mother's exclusive breastfeeding.

There is a relationship between social support and exclusive breastfeeding, which is shown by statistical analysis test with $r = 0.493$, it indicates that the relationship is significant. The level of relationship is strong enough with the direction of positive correlation between social support and exclusive breastfeeding. Thus, the better the support given, the higher the level of exclusive breastfeeding. This is in line with the theory of Green (1980) which states that social support is one of supporting factors or *reinforcing factors*. It has a relationship with a person's behavior, which is exclusive breastfeeding. The exclusive breastfeeding strategy requires support or cooperation between mother, husband, family, health care workers, and religious public figure. Religious public figure is one of social support in society, in this case support for exclusive breastfeeding. According to Johnson and Jhonson (1991) in Safitri (2011), social support is the existence of other who can be relied upon to provide assistance, spirit, acceptance and attention, so it is to improve the welfare of life for the individual concerned.

Social support according to Russell and Cutrona (1987) are concern (*attachment*), social relationship (*social integration*), awards (*reassurance of worth*), the reliable relationship (*reliable alliance*), guidance (*guidance*), the opportunity to maintenance (*opportunity for nurturance*). The most influencing social support is a reliable relationship domain (*reliable alliance*) and *guidance*. According to Brunson, J (2010), mother getting social support can be seen from how religious public figure can be relied upon when they are needed to help as well as how they provide opportunities for mothers to be responsible in giving exclusive breastfeeding to baby up to 6 months so

that mother gets the idea that Success in exclusive breastfeeding depends on each respondent.

Further study by Sarason (1994) in Maharani (2012), that social support is interaction result of situational contexts (the specific life impact), interpersonal context (how she sees herself and the existence of important people around her, and expectation in her relationship), and the interpersonal context (subject relationship with social support sources).

According to Mahmood, A (2010), the action and advice of community leader and religious public figure always have influence in society. Their role is so great in disseminating policies, science and norm education. They can persuade respondent to provide breastfeeding which is stated in holy qur'an. Their role can be a key to breastfeeding success as they can assure the good value of breastfeeding from the side of shariah. Most mothers prefer religious public figure or community leader who is respected in comparison to the health worker or lactation experts. Therefore, if information about breastfeeding is given by religious public figure, it will be more useful on the community / mother.

According Sarason (1994) in Maharani (2012), that social support is the result of one's interpersonal interaction, it is how he/she sees him/herself, the presence of important people around him/her, and also hope..

According to Faridvand, F & Malakout (2017), if there is a good relationship between respondent and religious public figure, the good cooperation in exclusive breastfeeding will be easily done. In contrast, there are many respondents who give water or breastfeeding mixed with formula instead give exclusive breastfeeding in infants. Respondents who receive sufficient social support but do not exclusively breastfeed are caused by their lack of knowledge of mothers and families about food and drink that should be given to infants aged 0-6 months. Social support from other people is very important to success exclusive breastfeeding. The greater the support gained to continue breastfeeding, the greater the ability to survive in breastfeeding (Proverawati, 2010).

CONCLUSION AND SUGGESTION

Social support received by mothers is mostly enough category in Health center of Srseseh Sampang Madura and the largest source of social support received by mothers comes is from religious public figure or local community leader. It is assumed that the religious public figure or powerful community leader gives significant impact or change for the area he/she leads.

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**CARE PATTERNS IN UNDER FIVE CHILDREN NUTRITION BY
MOTHER OF *POSITIVE DEVIANCE***

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Abstract: Low socioeconomic families have nutritional problems in their children, but in some areas there are also families with lower middle-income socioeconomic having healthy children without any nutritional problems. The study purpose is to know the pattern of care in the mother of positive deviance in providing nutrition adequacy in under five children. The research approach used is qualitative in the form of case study. Subjects studied in this study were three poor mothers with healthy under five children and three poor mothers with nutritional problem under five children. Data collection techniques used by researchers is the method of non structured interviews and nonparticipant observation. While the research data collection tool uses interview guides, observation guides, recording equipment and stationery. The research was conducted in Mojokerto regency. Based on this research, three participants of positive deviance mothers provide good feeding and the children's food is presented separately from other family members, the father and grandmother are involved in the feeding. In three mothers with nutritionally malnourished children show that food is given with other families, the father and grandmother rarely involved in feeding process. Feeding with great care and affection will increase the growth and development of under five children.

Keyword : Care pattern, under five child nutrition, under five child, mother of positive deviance.

**INTRODUCT
ION**

In general, the problem of child nutrition is the impact of the imbalance between intake and nutrient output (nutritional imbalance), which is the intake that exceeds expenditure or vice versa, in addition to the selection of food to eat [1,9,16]. Nutrition problems are often related to the shortage of food, the problem solution of it is not always in the form of increased production and

food procurement, in certain cases, such as in a state of crisis (drought, war, social turmoil, economic crisis), nutritional problems arise from food security problems at the household level, which is the ability of households to obtain food for all members of his family [16,20,27,33]. In general, low socioeconomic families have nutritional problems in their children, but in some areas there are also families with lower middle-income socioeconomic groups having healthy children without any nutritional problems. Under five children who are free from malnutrition problem is what eventually called positive deviance, deviant actors have other behavior from the-surrounding environment that makes them free from Malnutrition problem. There have not been many theories that reveal why positive deviations can occur, despite several studies.

Based on the research done by H Baker-Henningham, C Powell, S Walker and S Grantham Mc-Gregor year 2003 in Jamaika, it is obtained that The beliefs of poor families or parents on the proper feeding of their children also affect the nutritional condition of a child, whereas according to Aboud, Frances, E Shafique, Sohana, Akhter and Sadika in his 2009 study in Bangladesh, The mother will intensively improve the self-feeding of children, thus reducing the risk of disease and malnutrition of children. The study of Godwin S. Ashiabi, Keri K. O'Neal In 2002 in America, the results were found that poverty, parental care and income can directly affect the nutritional status of their children. The research conducted in Indonesia related to the problem of poverty that affects the nutrition of the under five children is a study conducted by Lisbet Rimelfhi Sebataraja, Fadil Oenzil, Asterina in Padang City Year 2014 the results obtained the status of children in the city center with good socioeconomic level have 84.2% Good nutrition and 6% less nutritional status, whereas families with low socioeconomic level obtained 15.7% good nutritional status and 0% less nutritional status. In suburban areas with good economic status,

15.8% were found to have good nutritional status and 64.7% less nutritional status, whereas in low economic status families, 84.3% had good nutritional status and 100% less nutritional status. The research conducted by Dian Handini, Burhannudin Ichsan, Dona Dewi Nirlawati at Kalijambe Central Java Health Center In 2012 the nutritional status of under-five children with weight index according to age (BB / U) with less nutrition as much as 13.8% while the rest have good nutrition as much 86.2%; And based on index of height according to age (TB / U) which have less nutrition as much

46.2% while the rest have good nutrition 53.8%; Whereas based on weight index according to height (BB / TB) which suffered less nutrition as much as 13.8% while the rest have good nutrition as much 86.2%. The analysis results obtained p count is-0.009 for the sample distribution

based on BB / U age, and 0.010 for the sample distribution based on TB / U, and 0.009 for the sample distribution based on the BB / TB. It can be conclude that there is correlation between family income level with nutritional status of under five in work area of Kalijambe Health Center. Nationwide, the prevalence of underweight in 2013 was 19.6 percent, comprised of 5.7 percent malnutrition and 13.9 percent less nutrition. Compared with the national prevalence rate in 2007 (18.4%) and 2010 (17.9%), it is seen increasing. Changes are primarily in the prevalence of malnutrition, from 5.4 percent in 2007, 4.9 percent in 2010, and 5.7 percent in 2013. While the prevalence of malnutrition is less than 0.9 percent from 2007 and 2013. To achieve the MDG target In 2015 that is 15.5 percent then the prevalence of malnutrition-less nationally should be lowered by 4.1 percent in the period 2013 to 2015 [12]. Based on BAPPEDA Kabupaten Mojokerto In 2013, poor families spread evenly from 18 sub-districts. The number of poor households in Mojokerto Regency in 2013 is 91,686 households, for Dlanggu District there are 3,901 poor families from 58,278 people with income Rp 600.000, - per month is 3,338 head of household and income less than Rp 600.000,- per month is 563 heads family. The most livelihood is farm laborers. Based on the explanation of Nurses of Village Health Center and Village Midwife in the work area of Puskesmas Dlanggu, the efforts are still recovering, such as the provision of additional food that has not been well distributed and the provision of medication if the child is sick, while the development of mother's behavior in nutrition fulfillment of malnourished under- five children is not done yet. From the 91,686 poor families, some of them have under-five children with less nutrition and some have healthy children, for example Segunung village currently has 247 children under five, where 31 (12.5%) are from poor families with good nutritional status and 3 (1 , 2%) under five children from poor families but less nutritional status. In Punggul village there were 333 children under five, of which 46 (13.8%) were from poor families with good nutritional status and 10 (3%) of underfives from poor families but lack of nutritional status. Mothers from poor families who have children under five with less nutrition can imitate the behavior of mothers from poor families who have healthy children under five, because by imitating the mother easier to understand and implement it, let alone figure is neighbor and from the same family. Mothers of poor families and have healthy toddlers are referred to as positive deviations. Positive deviations are Individuals who have a unique or unusual way that proves successful in solving the problem despite having the same resources and risks [6,8,17]. Mothers as a member of the family who is closer to their children is as the holder of a very important role in the fulfillment of nutrition in their children [27]. Maternal behavior in the fulfillment of nutritional needs in their children very influential on the nutritional status of children under five, so it is necessary efforts to improve the behavior of mothers in order to provide care

for their children properly, especially in terms of fulfillment of nutritional needs. As an approach that has been done is a program of nutrition accompaniment in under five years

of poor nutritional status of poor families in Sri Dara Ayu research in 2008 in Mangarabombang District Takalar Regency South Sulawesi where the results of research is with nutritional approach of mother's knowledge increased, parenting patterns increased and the incidence of infection decreased. Another approach is to provide counseling about the pattern of feeding as has been done research by Sri Susanti Tidora in 2010 Ramunia Deli village obtained the results there is influence nutrition counseling on the mother's behavior in the provision of a balanced menu, which is an increase in knowledge, attitude and action in the provision of menus balanced for children. In this research, the researcher will find the mechanism of positive deviance occurrence from the mother in giving food to under five children, why it can happen, whereas in general in Indonesia the under-five children who have bad nutritional status or worse come from poor and less knowledge family. In contrast to previous research in which the researcher only looked for positive deviance characteristics, this research intends to find positive deviance mechanism and model so that the model can eventually be used for example for mother or family with same status so that the child can be healthy and have no nutritional problems.

Every parent is obliged to provide safe and comfortable care and protection for the child. The first five years is a period that will determine the formation of physical, psychological, and intelligence of the brain so that this child must receive care and intensive protection [13,18]. Positive deviance approach is more emphasis on system approach that is looking for solution problem from within system itself. The system will be more tolerant of solutions found when applied on a wider scale. In this case the meaning of positive deviance family members is the mother comes from poor families but have healthy children under five.

The purpose of this research is to know the description of the pattern of nutritional parenting in under-five children by positive deviance mothers in the working area of Puskesmas Dlanggu Tumapel Village, Mojokerto regency. The problem of the research is how to illustrate the pattern of nutritional parenting in under-five children by positive deviance mothers in the working area of Puskesmas Dlanggu Tumapel Village, Mojokerto regency?.

LITERATUR REVIEW

1. Care Pattern of Under Five Children Nutrition

Care Pattern or parenting comes from foster words (to rear) which has the

meaning of keeping, nurturing, and educating children who are still small, caring it includes guarding and providing guidance towards growth toward maturity. Another notion expressed by Webster is that the nurture leads to growth toward maturity by providing education, food, and so on those cared for. Foster care is the ability of families and communities to provide time, attention and support in meeting the physical, mental and social needs of growing children and other family members.

2. Factors that Affect Care

Pattern

a. Factor of Education

Parents education is one of the important factors in the growth of children, because with good education, the parents can receive all the information from the outside, especially on how to care for good children, how to maintain the health of children, education and so forth.

b. Factor of Knowledge

Maternal knowledge about health and nutrition has a close relationship with education. Children of mothers with a high educational background may be able to attend and grow well. Raising a healthy child is not just a mere affection but a mother needs good skills. Lack of knowledge about nutrition will be the ability to apply information in everyday life is the cause of the incidence of malnutrition disorders.

c. Factor of Job

All the mothers who work both at home and outside, both will leave their children for most of the time.

d. The Income

The more income obtained means the better the food source of nutrients is obtained. Adequate family income will support the growth of children, because parents can provide all the needs of children both primary and secondary [32,36,].

e. Family

Families influence and make final decisions to give opinions to wives. This has become a tradition that everything must be with the approval of the husband or the-ruler at home. So that this can affect a mother to provide the pattern of nurturing nutrition in their children [36].

f. Socio-economy

Families with adequate socioeconomic conditions, will be better able to meet the nutritional needs of their children. They are more aware of the cleanliness of the environment and they understand what is good for the baby. While poverty of families, making more limited nutrition choices for their children. Then, environmental health is usually

neglected. Therefore, children are more often attacked disease that will inhibit their growth [13,24,26].

3. Concept of Under-Five Children

a. The Definition of Under Five Children

Under five years old children are children who have been above the age of one year or more popular with the understanding of the age of children under five years [12]. Meanwhile, according to [36]. Under five years old children is a general term for children aged 1-3 years (toddler) and preschoolers (3-5 years). At the age of toddlers, children are still fully dependent on parents for important activities, such as bathing, defecating and eating. The development of speech and walking has improved but other capabilities are still limited [2,5,7,13].

b. The Characteristic Of Under Five Children

According to the characteristics, under five children are divided into two categories namely children aged 1-3 years (toddler) and preschool children [36]. Children aged 1-

3 years is a passive consumer, meaning the child receives food from what provided by their mother. The toddler's growth rate is greater than the pre-school age, so a relatively large amount of food is needed. But the smaller stomach causes the amount of food that can be received in one meal smaller than the older child. Therefore, the given diet is a small portion with frequent frequency. At the age of preschool the child becomes an active consumer. They can already choose the foods they like. At this age the child begins to associate with his environment or playgroup school so that children experience some changes in behavior. At this time the child will reach the protesting phase of protest so that they will say "no" to each invitation. At this time the child's weight tends to decrease, the result of a lot of activity and the selection and rejection of food. It is also estimated that girls are relatively more susceptible to nutritional status when compared with boys [18,24].

c. The Growth of Under Five Children

Growth in infants and under five children is a quantitative symptom. In this context, there are changes in the size and number of cells, as well as the intracellular tissues of the child's body. In other words, the process of multiplication of the child's organs, along with the addition of body sizes. It is characterized by, Increased weight and height; Increasing the size of the head circumference; Appear and increase of teeth and molars; Strengthening of bone and enlargement of muscles; The increase of other body organs, such as hair, nails, and so on [24,26,30]. The addition of these body sizes certainly does not have to be drastic. Instead, it progresses slowly, gradually, and patterned proportionately on a monthly basis. When found the addition of body size, it means the growth process is going well.

Conversely, if the visible symptoms decrease in size, it signals the occurrence of disturbances or barriers to the growth process.

4. Nutritional Needs of Under Five Children

Nutrition needs in under five children is an amount that estimated sufficient to maintain health. Nutritional needs are determined by age, sex, weight, activity and height. Needs of nutrients in infants should be sufficient and balanced because children under five are experiencing a process of rapid growth and development. The energy and protein needs of children under five per day recommended by Widyakarya Pangan dan Gizi (1998).

5. Concept of Positive Deviance

a. The Definition of positive deviance

Positive deviation is a process that identifies acceptable and long-lasting practices that have been used in the community by those with limited resources. The term "deviation" is generally interpreted negatively especially if it is against the customs and culture . Sternin (2007) states, positive deviance is a community-based development approach, based on the fact that problem solving faced by society in principle can be found within the community itself.

b. The Approach of Positive Deviance and Nutritonal Post.

Positive Deviance is based on the assumption that some solutions to community problems already exist in society and need only be discovered. As behavioral changes progress slowly, a large number of public health practitioners agree that solutions found in a society can be more enduring than external solutions brought into the society. Positive Deviance & POS Nutrition process utilizes local wisdom that successfully treats and prevents malnutrition and disseminates the wisdom to the whole community.

Positive Deviance is an approach based on "strength" or "capital" based on the belief that in every society there are certain individuals ("Positive Deviance Actor") who have special or unusual habits and behaviors that enable them to find ways of working, A better way to prevent malnutrition than their neighbors who have resources and face the same risks. Through a dynamic process called Positive Deviance Inquiry (PDI) investigation, program staff invite community members to discover unique habits that contribute to improved child nutritional status. Furthermore, program staff and community members design an intervention program that enables families with undernourished children to learn and practice these beneficial

behaviors.

METHOD

Research method with qualitative approach. The research process are to observe the mother in her daily life, interact with her and try to understand the mother nature of nutrition sufficiency in infants. Qualitative approach is chosen because researchers want to interpret and understand the actual phenomenon that occurs in the mother positive deviance in providing nutrition adequacy in under five children. How to obtain such information through participant observation, in-depth interviews and other methods that generate descriptive data to reveal the cause and process of the occurrence of the events studied.

1. Informant of Research

At this stage the researcher uses informants from mothers from poor families who have a child either having nutritional problems or not, who are in the working area of Puskesmas Mojoanyar Kabupaten Mojokerto. Sources of data in this study are primary data

that is obtained directly from the original source or from the mother who has a under five child. Primary data are specifically collected by researchers to answer research or research questions. While secondary data sources are written records (KMS, KB Books etc) and photos. The number of informants is 6 people consisting of 3 positive deviance mothers with healthy toddlers do not experience nutritional problems and 3 positive deviance mothers with toddlers who have nutritional problems. These 6 mothers were taken from one village, with similar socioeconomic conditions.

2. Sampling Technique (Informant)

The sample of research / informant is taken by using purposive sampling technique that is sampling based on criteria that fulfill the requirement, so that fulfill the interest of the researcher. The criteria of informants at this stage are:

- 1) Mothers of positive deviance with healthy child do not experience nutritional problems with the number of 3 mothers
- 2) Poor mothers with child who have nutritional problems with the number of 3 mothers
- 3) The six mothers are in one village Tumapel District Dlanggu Mojokerto regency
- 4) If in a family there are 2 under five children then the selected data source is the smallest child because the focus of attention is on the child's smallest mother.

3. Technique of Collecting Data

In this study the main instrument is the in-depth interview guide means researchers ask several questions in depth related to the focus of the problem, so that the data needed in the research can be collected maximally. Data collection techniques in this study are interviews by researchers themselves, observation and documentation because the phenomenon can be understood well, if the interaction with the subject through in-depth interviews and observations on the field of research, where the phenomenon took place and besides that to complete the required documentation data (about materials written by or about the subject).

4. Technique of Data Analysis

After all the data collected, then the next step is processing and data analysis. Data analysis in this case using qualitative data analysis, then in data analysis during field-research using spradley model, that is data analysis technique which is adjusted with stages in research, that is:

1. Stages of exploration with data collection of grand tour question techniques, first by choosing a social situation (place, actor, activity),
2. Then after entering the field, started by setting a person informant "key informant" who is believed to be able to "open the door" to the researchers to enter the object of research. After that the researcher interviewed the informant, and recorded the interview result. Then the researcher's attention is on the object of research (mother who has an under-five child) and start asking a descriptive question, followed by an analysis of the interview results. Based on the results of the analysis of subsequent interviews the researchers conducted a domain analysis, which includes the characteristics of mother, mother internal factors, mother care patterns, environment, foster care output, the incidence of illness, and nutritional status of children.
3. Stage of focus determining (done with focused observation) where data analysis is done by taxonomic analysis.
4. At the selection stage (done with selected observation) then the researchers asked the contrast question, which is done by component analysis.
5. The results of the component analysis, through theme analysis of researchers found cultural themes. Based on these findings, the researcher then wrote a qualitative research report.

5. Focus Group Discussion (FGD)

At this stage a deep discussion was held in the form of Focus Group Discussion (FGD). Discussion discusses the conditions or circumstances of the mother and family associated with problems that appear in mothers with malnourished children under five. The result of Focus Group Discussion (FGD) in the form of recommendations which become the basis in the preparation of nutrition fulfillment implementation module of under-five children suffering

from malnutrition. This FGD aims to get input from decision makers and those involved in malnourished toddler care [21,40].

Implementation Procedure of Focus Group Discussion (FGD)

- a. After the survey results were combined with a relevant literature review to construct a model of maternal behavior in providing the nutrition to their under five children based on Social cognitive theory (SCT), the model was used as an in-depth discussion involving experts in nursing, nutrition, midwifery.
- B. The results of the discussion resulted in several matters related to the pattern of nutritious feeding by poor mothers in under five child to be used as guidance in stage 2 research.
- C. Implementation of Focus Group Discussion (FGD) at Tumapel village hall with mini-class sitting model led by researchers
- D. Participants of Focus Group Discussion (FGD) are:

Consisting of local health personnel (nurses, nutrition officers and midwives), the head of the hamlet for a work area of Dlanggu Puskesmas 8 people. [10,31,38].

RESULT

From the research results above can be explained several things as follows:

1. Care Pattern of Child Nutrition

Nutritional care of underfives by 3 poor mothers with healthy children (positive deviance) found that they provide food special for their underfive even with a simple and tailored to the child's favorite so that children always want to eat. It is always done by involving the father or grandmother. For 3 poor mothers with nutritionally malnourished children in the presentation of food for the average child they serve meals together with other family members. Fathers and other family members are rarely involved in the selection of eating, processing, serving up to underfive feeding.

2. Health care pattern of underfive child

Healthy underfive children raised by poor mothers (positive deviance) found that they get health services from the local health center area in plenary as well as children with nutritional problems nurtured by poor mothers in the village Tumapel District Dlanggu Mojokerto regency. The difference between the two is to provide care for their children at home. Mother of positive deviance always helps child bathing and brushing teeth, clothes are always replaced after every bath, nails are always cut in one week. When children out of the house always use sandals, hair cut short and always washed every

two days. In underfives with nutritional problems, the poor mother's treatment is almost the same but if the child out play outside the house the child does not wear sandals and have dirty hair, also long nails that look black.

3. Pattern of love (mother- underfive child interaction)

The interaction of children and mothers of positive deviance is very good, especially in terms of feeding. Mother always accompany the child until the food is completely swallowed by the child. Father and grandmother also help feeding children to eat if they have time to do it. Mother also accompany the children when they want to play even until they finish the game. Mothers with nutrition problem children, interaction between mother and child is also going well, but mothers are rare to accompany their children eat, let alone father or grandmother had never been involved in feeding the children.

4. Pattern of teas (mother- underfive child stimulation)

Stimulation by mother of positive deviance to under five children especially in feeding. Mother always teach and give example of eating procedure, sometimes mother tells story so that child will eat. It seems that mothers and other family members are eager to provide parenting for children under five, in contrast to poor mothers with malnourished underfives, mothers do not communicate with children while eating for unethical reasons which is not in accordance with Javanese culture.

DISCUSSION

The intake of nutritious foods is very important for under five children in order to grow and develop optimally. Therefore make sure that the menu is served for your child to meet the daily nutritional needs. At this age children enter the age of five and have a greater risk of malnutrition. At this age the child grows and develops rapidly, requiring more nutrients, while they experience a decrease in appetite and body resistance is still vulnerable so it is more susceptible to infection than children with older age [27,33,35]. Nutrition they need is Carbohydrate serves as a producer of energy for the body and support the activities of children who start moving actively. They usually require 1300 kcal per day. Protein works to build and repair body cells and generate energy. They need 35 grams of protein per day. The essential minerals and vitamins in child food are iodine, calcium, zinc, folic acid, folic acid, iron, vitamins A, B, C, D, E and K. These minerals and vitamins play a role in the development of motoric system, growth, and intelligence of children and keep the child's body condition to stay healthy. While the physical growth of the body slightly slows down, hence the child needs to eat foods that provide nutritional intake that supports the growth of his brain. Maternal care of the mother, the pattern of

love, the pattern of care and the pattern of grinding especially in the case of feeding is influenced by several things such as education, knowledge, work, income, family and socioeconomic factors [2,5,7]. The higher the level of education, the easier the mother understand about the information obtained, so that they will be more able to understand the needs of eating in children, as well as knowledge, work, income, participation of other family members and good socio-economic will increase the consumption of children. Adequate understanding of mother and support from father or grandmother will greatly help improve the intake of food in underfives, so hopefully with good intake of food in underfives, their growth and development will be getting better too. Optimal growth and development of children will impact their quality of life in the future [11,30].

CONCLUSION

Nutrition problem is a health disorder of a person or society caused by the unbalance of nutrients need fulfillment that is obtained from food. The nutritional problem in English is called malnutrition, divided into two groups: under nutrition and over nutrition, either macro-nutrient or micro-nutrient. Health problems that is caused by macro-nutritional problems can be in the form of malnutrition, under nutrition, or over nutrition. Meanwhile health problems caused by micro nutritional problems are only known in the form of under-nutrition of certain micronutrients, such as lack of iron, iodine, and vitamin A. Macro nutrient problems, especially less energy and protein problems (PEM). Maternal care of the mother, the pattern of love, the pattern of care and the pattern of grinding especially in the case of feeding is influenced by several things such as education, knowledge, work, income, family and socioeconomic factors.

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**THE INFLUENCE MODEL OF COMMUNICATION, INFORMATION AND
EDUCATION IN THE FAMILY (CIEF) ON ABILITY TO INSIDE EARLY
DETECTION AND HANDLING OF EMERGENCY IN PREGNANCY
(PREECLAMPSIA)
IN DARUNGAN VILLAGE, PARE, KEDIRI REGENCY**

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1. Introduction

The maternal mortality rate (MMR) in Indonesia remain high at 359 per 100,000 live births, the main cause is preeclampsia afterward hemorrhage postpartum and infection (SDKI, 2012). The most common cause of maternal mortality is preeclampsia and largely due to delays in the decision-making families to bring high-risk pregnant women to a referral center. Preeclampsia disease is generally suffered by weaker socio-economic groups. As we know the people of Indonesia is currently experiencing an economic crisis, especially with the continued rise in the price of food, fuel, and many natural disasters that have an impact on the socio-economic communities, thus making the number of poor families in Indonesia is growing and the health of pregnant women to be neglected (Roeshadi, 2007). Preventive solution effectively lowers the impact of problems resulting from emergencies in pregnancy if it involves many parties, community based using a model of Communication, Information and Education on the Family (CIEF). These researchers to determine the effect on the ability CIEF Model in early detection and treatment of emergency in pregnancy (preeclampsia).

2. Subjects and Method

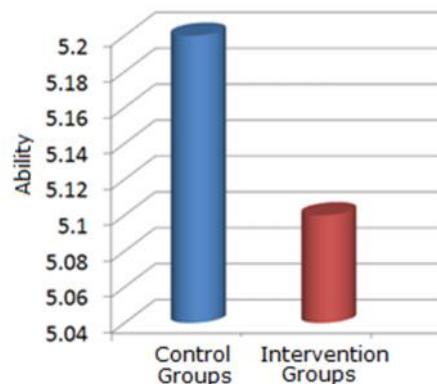
The study design pre-post test with control group in the Darungan village, Pare, Kediri Regency. The population is a family that has a pregnant with a random sampling techniques. Independent variables is CIEF Model and the dependent variable is family capabilities in early detection and treatment of emergency in pregnancy (preeclampsia). Confounding variables controlled by taking respondents who met the inclusion criteria (family has pregnant willing to become respondent and not the background of medical health personnel/paramedics). The operational definition CIEF Model is a model of health education to families with pregnant who aim to pursue the family in order to realize or know how early detection and handling of emergency in pregnancy with the approach to the local culture, involving participants and community leaders selected concern, intelligence conscience and concerned about the health of mothers and children. While the ability of the family in the early detection and treatment of emergency in pregnancy (Capability interpretation, analysis, evaluation, inference) presentation of work. Measuring instruments used questionnaire and analyzed using T-test.

3. Result

1. Characteristic the identity of respondents

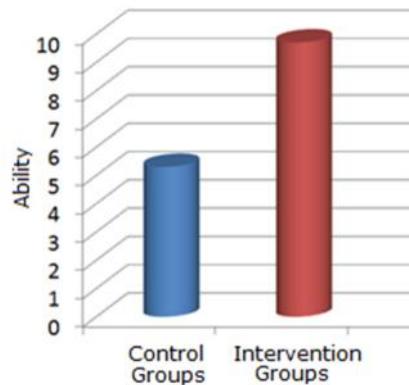
| Characteristic | n | % | Total |
|------------------------------|----|----|-------|
| Age : 20-30 years | 5 | 25 | (20) |
| 30-40 years | 8 | 40 | 100% |
| 40-50 years | 5 | 25 | |
| >50 years | 2 | 10 | |
| Education: Elementary School | 2 | 10 | (20) |
| Lower secondary school | 8 | 40 | 100% |
| upper secondary School | 9 | 45 | |
| Collage | 1 | 5 | |
| Job : No Job | 5 | 25 | (20) |
| Enterpreneur | 12 | 60 | 100% |
| PNS/TNI/Polri | 3 | 15 | |
| Penghasilan : < 1 juta/bl | 5 | 25 | (20) |
| 1-2 juta/bl | 9 | 45 | 100% |
| >2 juta/bl | 6 | 30 | |

2. Identification of the family's ability to detect early and handling emergencies in pregnancy (preeclampsia) before being given education with CIEF Model



The results of the study before it be taught by CIEF Model on the family found the ability to detect early and handling emergencies pregnancy (preeclampsia) in the control groups was higher than the intervention groups.

3. Identification of the family's ability to detect early and handling emergencies in pregnancy (preeclampsia) after being given education with CIEF Model



The results of the study before it be taught by CIEF Model's on the family found the ability to detect early and handling emergencies pregnancy (preeclampsia) in the intervention groups was higher than the control groups.

4. The influence of CIEF Model on the ability of early detection and treatment of emergency in pregnancy (preeclampsia)

| Groups | \bar{x} before | \bar{x} after | SD | CI 95% | OR | P |
|--------------|------------------|-----------------|-------|---------------------|------|-------|
| Control | 5.2 | 5.9 | 2.708 | -1.937 until 1.937 | | |
| Intervention | 5.1 | 9.2 | 2.321 | -6.161 until -2.839 | 0.25 | 0.000 |

Result of research got a significant influence of the CIEF Model given to improving the ability to detect early and handling emergencies in pregnancy (preeclampsia) in families with pregnant women in the village of Darungan, Pare, Kediri Regency.

In accordance with the findings Shahrawat, Meitei & Joon (2014) that the lower socio-economic affects the behavior of pregnant women to antenatal care (ANC). They are rare and do not routinely perform the ANC thus more at risk of complications of pregnancy, the causes of maternal mortality. In this study, 45% of respondents income 1-2 millions rupiah per month, 40% of secondary school education and 45% of high school education. Income and education indicates socioeconomic status are relatively weakly to the present era. Thus, they underutilization ANC and at last lack of information about both normal pregnancy care and danger signs in pregnancy. Besides socioeconomic factors, cultural factors, individual factors (socio-economic status, gender, race) and the environmental dimension (composition of the population, the social environment, physical environment) interacting affects the health of individuals (Beard, 2009).

Research Andersen et al. (2013) in Nepal have also reported success of the training program in community health volunteers in detecting early pregnancy using urine pregnancy tests, counseling, and referral for appropriate antenatal services, safe abortion, or family planning. The results showed that the cadre is forefront promising for early pregnancy detection and referral. Given the respondents of this study has not been conducted education / training, then the result is that they are still less capable of early detection and handling of emergencies of pregnancy (preeclampsia). Preeclampsia is detected early with the ANC, will be more easily managed so that the lower the risk of maternal and infant mortality.

While the results of the study be taught by CIEF Model after the family found the ability to detect early and handling emergencies pregnancy (preeclampsia) in the intervention group was higher than the control group. The increase in this ability may be influenced by health education model is based on the integration of conceptual point of view and dimensional medical health community will more easily understand as promotive and preventive aspects. Seen from the education level of most 45% upper secondary School and 5% Collage indicating levels of education were quite good and easy to receive information. The model is based on the integration of health education conceptual point of view and dimensional medical health community will more easily understand as promotive and preventive aspects (Sørensen, K. et al., 2012). Besides the involvement of cadres in the process of health education also affect the success in improving the ability of the intervention group. This is consistent with the findings of the Saville in 2014, where the involvement of health workers by providing training on how to measure birth weight neonates will improve the identification of high risk, the result is effective for detecting LBW and act fast treatment in rural areas of Nepal. Andersen et al., 2013 also reported the success of the Posyandu cadre training program in detecting early pregnancies and referrals.

The result showed a significant effect of the CIEF Model given to improving the ability to detect early and handling emergencies in pregnancy (preeclampsia) in families with pregnant women in the village of Darungan, Pare, Kediri Regency.

This model is appropriate because Indonesia is geographically large and a lot of the population that automatically requires equality in health based on geographic location. For the management of risk pregnancies, which requires regular monitoring, the right solution is to enable the capability of monitoring and diagnosis, as well as support for the mother, will be available remotely at any time which allows problems to be detected early so that appropriate interventions can be provided if required (Masek et al., 2009). Positive factors affecting the success of basic antenatal care (BANC) is the availability and accessibility of services BANC, policies, guidelines and protocols; means of communication; Primary health care services are integrated; training and education; human resources and material; support and supervision of primary health care by the supervisor;

experience/approach midwife involved in the implementation of BANC (Ngxongo & Sibiya, 2013).

Community based participatory research, it is appropriate to bridge science, practice and health policy so as to help achieve the changes in health policy promotion (Minkler, 2010). Liu et al, 2015 also explained that health education can increase the awareness of parents to change their behavior towards health. Additionally in providing the necessary health education teaching approach and philosophy of social and cultural factors that combine health, beliefs, and practices of patients (Vaughn, Jacquez & Baker, 2009).

The main limitation of this study lies in the mastery of the material by the study sample were less than the maximum. Another limitation is in describing the findings of the study, there are still many aspects that are not quantized and presented as research findings that affect the CIEF Model variables. Based on the above limitations, the results of the study apply only to populations whose characteristics are similar to the study sample.

In the practical implications of this research intended for developing a CIEF Model with a constructivist approach where the cadres and community leaders play a role in constructing their own knowledge.

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THE INFLUENCE OF PAPAYA JUICE TO BLOOD PRESSURE CHANGES OF MENOPAUSE WITH HYPERTENSION

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Abstract : The aims of this research is to know the influence of papaya juice to blood pressure changes of menopause that having hypertension in posyandu Teratai Kediri. It was done by using experimental design with approach by pretest posttest one group design. From 16 sample which analyze using paired T test showed that p value is 0,000 in systole and 0,001 in diastole that $< 0,05$. The result can be conclude there are influence of papaya juice to blood pressure changes of menopause that having hypertension. It was decreased to 17 mmHg in systole and 11,68 mmHg in diastole. So, papaya juice can be choose as one of alternative method to decrease the blood pressure especially to menopause that having hypertension.

Keywords : papaya juice, blood pressure

INTRODUCTION

Hypertension usually called silent killer because it can be killed people without any symptoms. Hypertension is not only among the common and leading causes of morbidity and mortality throughout the world but also is the most important modified risk factor for life-threatening disease [1,2]. Hypertension in Indonesia almost 17-21% is not detected and 60% of it becomes stroke, 6-15% held on elder [3].

There are many factor can caused hypertension, namely age, gender, family history, ethnic, obesity, medicine, natrium sensitivity and low potassium which can be complicate on brain, heart, eyes and kidney [4,5]. The most important treatment of Hypertension is nutrition. Nutrient that needed for hypertension is contain of potassium that it can be found in fruits [6,7,8,9]. One of the fruits is papaya. Papaya contain of folic acid that is needed for the conversion of homocysteine into amino acid. If unconverted, homocysteine can damage blood vessel walls directly , is considered a significantly risk factor for stroke or heart attack [10,11].

LITERATURE REVIEW

According [12,13,14] ,there is decreasing blood pressure in systolic and diastolic on hypertension woman. Juice contain of octanoid acid especially linolenic that can avoid the heart attack. The consumption of papaya juice can reduce blood pressure significantly and reduced rates of heart disease.[12,9].

METHOD

Research approach

This research used quasy experimental design with pretest posttest two group design approach [15].

Respondent

Respondent of this research is menopause woman who had pre hypertension and hypertension stage 1 numbered 16. Respondent did not have any other severe illness like diabetes melitus.

Data collection

The instrument used observation sheet. The blood pressure is measured daily at the same hour before meals using digital sphygmomanometer. Before drank the juice, measured the blood pressure first. After consumed 5 days, in sixth day measured the blood pressure again.

Data analysis

The data is analysis using SPSS 20. After normality it was tested by using Sapiro wilk, data tested using paired T test.

RESULT

The blood pressure before consumed papaya juice is 155,69 mmHg in systole and 93,06 mmHg in diastole. Blood pressure after consumed papaya juice is 138,69 mmHg in systole and 81,38 in diastole. It was decreased 17,00 mmHg in systole and 11,68 mmHg in diastole. P value of blood pressure changes in systole is 0,000 and 0,001 in diastole. P value < 0, 05 showed that there is influence of papaya juice to blood pressure changes of menopause with hypertension.

DISCUSSION

According to the result of the research showed that there is the influence of papaya juice to blood pressure changes of menopause with hypertension. Hypertension is not only among the common and leading causes of morbidity and mortality throughout the world but it also the most important modified risk factor for life-threatening disease so consumed fruits and vegetables became choices to avoid the hypertension [1,2,9]. Papaya contains folic acid like cysteine and methionine that needed to conversion homocysteine to amino acid. If it unconverted, homocysteine can damage blood vessel walls directly [10]. Papaya contain of alkaloid like carpaine that can be slow the heart rate and thus reduces blood pressure. If it consumed the juice there are contain of octanoid acid as linolenic that can avoid the heart attack [11,14]. Papaya also contain of high potassium that can be vasodilate blood vessels, muscles and regulated the balance of sodium in the cell as well as being a natural diuretic. [16]

CONCLUSION

The result showed that papaya juice can decrease blood pressure in menopause who got pre hypertension or hypertension stage 1, so it can be one alternative treatment for hypertension.

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CONFERENCE SCHEDULE

Suturday, 26th August 2017

| | |
|----------------------------|---|
| 07.00 am - 08.00 am | Registration Committee |
| 08.00 am - 09.30 am | Opening Ceremony Welcome Speechs 1. The head of committee 2. The chairman of the PPNI east-Java 3. The Chairman IPEMI Pusat |
| 09.30 am -09.45 am | Tea Break |
| 09.45 am -10.30 am | Key Note 1 (30' presentation, 15' discuss) The Role of Female in ensuring the success SDGs Goverment/Stake holder: Dra. Khofifah Indar Parawangsa |
| 10.30 am -11.15 am | Key Note 2 (30' presentation, 15' discuss) The impact of violence against women on reproductive health and child mortality Ners Ina: Prof. Dra. Setyowati, S.Kp., M.App.Sc., Ph.D., DBO., RN. |
| 11.15 am -12.00 am | Key Note 3 Building Interprofessional Simulations That Emphasize Flexibility and Teamwork in Treatment Planning Public Health Thailand: Prof. Dr. Wongsa Laohasiriwong (Faculty of Public Health Khon Kaen University Thailand) |
| 12.00 am -13.00 am | Pray and lunch |
| 13.00 am -13.45 am | Key Note 4 Low-calorie diet and exercise could improve kidney function in patients pregnancy with NASH (Nonalcoholic steatohepatitis) WHO-Nutrition Dr. Sugeng Eko Irianto (Indonesian Representatif WHO) |
| 13.45 am -14.30 am | Key Note 5 Older first-time mothers may have increased chances of living longer Midwife Malaysia Rose Nanju (Faculty of Medicine and Health Science) Universiti Sarawak Malaysia |
| 14.30 am -15.15 am | Key Note 6 The siloed social network: Three ways to overcome the failures of interprofessional teams Ners/Sosial Worker: Sarah Sandy S.M, PhD. (Philippines) |

Suday, 27th August 2017

| | |
|--------------------|--------------------------|
| 08.00-10.00 | Oral/Poster Presentation |
| 10.00-10.15 | Tea Break |
| 10.15-11.15 | Oral presentation |
| 11.15-11.30 | CLOSING |