**Cultural sensitivity and its relationship with the level of work interaction among pre-hospital emergency staff of Shahid Beheshti University of Medical Sciences in Tehran in 2019**

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**Abstract**

**Introduction:** Pre-hospital emergency is a profession in which role-playing is formed through communication, interaction and consensus, which means that the proper implementation of primary medical care requires proper interaction between staff and the patient. Cultural sensitivity refers to acceptance, openness, respect for colleagues and patients regardless of their culture and ethnicity. Considering the importance of cultural sensitivity in pre-hospital emergency, the aim of this study was to investigate the status of intercultural sensitivity among pre-hospital emergency staff and its relationship with the level of their work interaction in the workplace.

**Methodology**: This descriptive correlation study was performed with the participation of pre-hospital emergency staff of Shahid Beheshti University of Medical Sciences in Tehran in 1398. The sampling method was stratified random. Data were collected through three-part tools including cognitive demographic information (WDQ-II) and cultural sensitivity scale. To determine the validity of the content (opinions of experts and specialists) and to check its reliability, a retest was used. Data analysis was performed using SPSS statistical software version 25.

**Results:** The findings of this study showed that cultural sensitivity was not significantly different among pre-hospital emergency staff but work interaction was significant compared to the mean. Also, the results of Pearson correlation coefficient test indicated that there is a significant inverse correlation between the intercultural sensitivity variable and work interaction.

( r=0/412 , p<0/001).

**Conclusion:** Based on the results of the study, in order to reduce intercultural sensitivity, it is necessary to make people more aware of each other, transfer information and awareness of different cultures in the region. Therefore, it seems logical that creating cultural sensitivity and improving cultural interaction between the treatment team, especially among pre-hospital operatives, should be given more attention as one of the factors affecting patient safety and care.

**Keywords:** Intercultural Sensitivity, Work Interaction, Prehospital Emergency Staff

Introduction

Pre-hospital emergency (EMS) is an important part of the health care delivery system and plays a key role in providing pre-hospital services and transferring patients to medical centers and is a subset of the Medical Emergency and Accident Management Center. One of the goals of pre-hospital emergency is to provide appropriate treatment at the right place and time, using available resources and appropriate cultural interaction between staff. Prehospital care includes care that begins at the patient's bedside and ends at the hospital emergency room (1). Pre-hospital emergency work is a profession in which role-playing is shaped by communication, interaction and like-mindedness, which means that the proper implementation of primary medical care requires proper interaction between staff and the patient. (2). Cultural sensitivity refers to acceptance, openness, respect for colleagues and patients regardless of their culture and ethnicity (2).

As the world becomes a global village and more people interact with different cultural backgrounds, it is important to examine what factors can help overcome racism and lack of intercultural sensitivity. (3).

People's culture plays an important role in shaping health-related behaviors and beliefs. Effective interactions in the medical environment while increasing organizational effectiveness play an important role in achieving cultural synergy in organizations. Interaction between pre-hospital emergency staff, whose staff and clients are of different ethnicities and cultures, is very important. Pre-hospital emergency work is a profession in which role-playing is shaped by interaction, meaning that the proper implementation of primary medical care requires proper interaction between staff and with the patient, because interaction. In addition to being an important patient need, it is the basis of emergency workers' work in patient care (4).

Bennett proposed the theory of intercultural sensitivity in order to explain the orientations of individuals towards each other. Bennett defines intercultural sensitivity as a process of development through which an individual develops broad abilities and capacities to cope with individual differences (5).

Patient-centered care and sensitive care are culturally diverse, also differ in focus. Patient-centered care emphasizes the improvement of high-quality individual care for all patients, while cultural care emphasizes the equitable distribution of high-quality health care among different and disadvantaged groups (6). Cultural sensitivity is very important in providing health services. Nurses provide medical services to people with different cultural and racial backgrounds (7).

Allen (2009) stated that cultural and linguistic barriers are a common problem that nurses face when dealing with patients from different cultural backgrounds. It is important that health care providers improve cultural sensitivity to ensure the quality of treatment and patient care (8).

Douglas et al.'s (2014) Guidelines for the Effective Implementation of Nursing Care state that nurses need to gain an understanding of these; Perspectives, traditions, values, practices, and family systems in the diversity of individuals, families, communities, and populations that are culturally diverse and must also acquire knowledge of the complex variables that affect the quality and success of treatment and recovery ( 9).

Undoubtedly, in the pre-hospital emergency department of Shahid Beheshti University of Medical Sciences in Tehran, the emergence of racial and ethnic, cultural, and climatic diversity and multiplicity has led to the formation of cultural diversity among its staff. Pre-hospital emergency is debatable for research and study, because following the connection of cultures with each other, intercultural sensitivities also arise, and these sensitivities have existed and will exist throughout history. Pre-hospital emergency staff, due to their professional position, face patients daily who have different cultural backgrounds and consequently different cultural needs, so having the necessary knowledge and skills on how to properly and effectively deal with different cultural beliefs and values ​​in communication. And interaction between colleagues is necessary.

Meanwhile, the pre-hospital emergency department of Tehran University of Medical Sciences and the importance of paying attention to it, considering their multi-ethnicity, is more important. Tehran Emergency has provided forces from different ethnic groups such as (Kurds, Turks, Arabs, Persians, Baluchis, Armenians, Lors and Laks) and this issue has changed cultural sensitivities. Therefore, the category of cultural sensitivity provides the necessary opportunity to understand how employees interact and it gives the understanding how their experiences and understanding of this process helps to provide specific solutions to establish work interactions for healthy care with the background of patients of Iranian society with ethnic pluralism.

Due to the fact that so far no study has been conducted to investigate the relationship between work interaction and cultural sensitivity on pre-hospital emergency staff. Therefore, this study was conducted to investigate cultural sensitivity and its relationship with the level of work interaction among pre-hospital emergency staff of Tehran University of Medical Sciences in 1398.

**Methodology**

The present study is a descriptive-correlational study in which the correlation between cultural sensitivity and its relationship with the level of work interaction among pre-hospital emergency staff of Shahid Beheshti University of Medical Sciences in Tehran in 1398 was studied. Shahid Beheshti Medical Sciences of Tehran who work in urban and road bases.

Sampling was performed by available methods and according to the inclusion criteria. The number of samples required for this study was determined using the study of Bastami et al. In 2016 and considering r = 0.30 according to Cochran's formula, 112 samples were determined. Considering the sample loss, the appropriate number of samples to enter the study. It was 120 people.

A questionnaire was used to collect data. To determine the validity of the content, a questionnaire was distributed to 10 faculty members and their opinions were applied. To evaluate the reliability, the retest method was used (in the pilot study, a questionnaire was distributed among 15 pre-hospital emergency staff and redistributed after two weeks and the correlation coefficient was determined to be very strong r = 0.98). The questionnaires consisted of 3 parts: the first part was related to demographic information, the second part was work interaction between employees by adapting the WDQ-II questionnaire containing 28 items on a 5-point Likert scale. For each of these 4 components, 7 items are considered (10). MSS Intercultural Sensitivity Scale which includes 21 items (11).

After approving the plan and obtaining a permit, the researcher referred to the pre-hospital emergency headquarters of Shahid Beheshti University of Medical Sciences in Tehran. After the necessary explanations about the research, he referred to urban and road bases and asked pre-hospital emergency staff working in the relevant bases to participate in Research was invited.

To analyze the data, descriptive and analytical statistics including frequency distribution table, central graphs and indices and scattering and inferential conditions were used by Pearson correlation coefficient and linear regression tests in SPSS software version 25. Significance level in statistical tests was considered p ≥ 0.05. In this study, obtaining informed consent, maintaining anonymity, keeping information confidential and having the right to withdraw from the research at any time, are among the ethical considerations that were observed.

**Findings**

Descriptive statistics such as mean, mean, standard deviation, minimum and maximum were calculated and the test of equality of mean scores was performed with a value of 57 (mean value of answers to cultural sensitivity questions was 114 19 6 19 19 divided by 57 = 2).

Data analysis shows that the mean scores of total cultural sensitivity (56.63) are not significantly different from the mean value (57). This means that cultural sensitivity is not significantly different and does not affect their work.

**Table 4-15 Descriptive statistics The total scores of the responses of the participants in the study regarding the determination of cultural sensitivity**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **mean** | **Standard deviation** | **mean** | **minimum** | **maximum** | **(Shapiro-Wilcoxon Test) Mean Comparison Test with 57** | | **(Shapiro-Wilcoxon Test) Mean Comparison Test with 57** | |
| **statistic** | **Significance** | **difference** | **Significance** |
| 56.63 | 13.24 | **54.00** | **31** | 84 | **0.97** | **0.006** | 1.38 | **.2570** |

Regarding determining the amount of work interaction among employees, the total scores of these questions were obtained and descriptive statistics such as mean, mean, standard deviation, minimum and maximum were calculated and the test of equality of mean scores with a value of 70 (average amount of answers to cultural sensitivity questions 28 × 5 = 140 divided by 2 = 70) was performed. Analysis of the data shows that the average score of total work interaction is 95.59, so the average score of total work interaction is 25.59 units significantly higher than the average value of 70 (significance <0.001).

**Table 4-17 Descriptive statistics Sum of the scores of the answers of the participants in the study regarding the determination of the amount of work interaction**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **mean** | **Standard deviation** | **mean** | **minimum** | **maximum** | **(Shapiro-Wilcoxon Test) Mean Comparison Test with 70** | | **(Shapiro-Wilcoxon Test) Mean Comparison Test with 70** | |
| **statistic** | **Significance** | **difference** | **Significance** |
| 59/95 | 98/13 | 00/95 | 58 | 137 | 97/0 | 017/0 | 59/26 | 001/0> |

**Determining the correlation between the level of work interaction and cultural sensitivity among employees**

**Table 4-18 Pearson correlation coefficient between the total level of work interaction score and the total score of cultural sensitivity**

|  |  |  |  |
| --- | --- | --- | --- |
| The 1st variable | The 2nd variable | Pearson | significance |
| Level of cooperation | Cultural senility | 0.295- | 0.001 |

**Discussion**

**The aim of this study was to determine the cultural sensitivity, work** interaction and also to determine the correlation between cultural sensitivity and work interaction among pre-hospital emergency staff of Shahid Beheshti University of Medical Sciences in Tehran.

Research shows that cultural differences between pre-hospital operatives and the treatment team and the patient are significant, and cultural sensitivity is one of the factors that can facilitate or block communication (12-15).

A nurse who sees her culture as superior judges others violently. Because he closes his mind on the perception of the other side. In order to communicate properly with colleagues and patients from different cultures, it is essential that pre-hospital operations staff become more familiar with different cultures. Pre-hospital operational staff should work to accept cultural differences between people and seek to identify customs that are common in different cultural groups (16). Awareness of colleagues' cultural backgrounds is important because it helps pre-hospital operatives understand the differences between individuals and how they behave, reduce their prejudices, and accept health care staff and patients as they are (17). Wittig emphasizes on understanding patients' health values, beliefs, and behaviors, and states that holistic care occurs when the nurse understands the patient's cultural care values ​​(18). Another group of researches considers that recognizing cultural contexts causes insight into the patient's attitude towards nursing, health and disease and states that if they do not understand the meaning of the individual's culture or misinterpret it, communication and interaction problems will arise. They emphasize that nurses should avoid bias towards specific cultures while paying attention to interpersonal communication and interactions and respecting patients' value systems (19-21). Studies have shown that nurses who have sufficient knowledge and information about cultural sensitivities can provide interaction that is the best and most appropriate action to promote health and treatment (22-24). Therefore, nurses, by being aware of other religions and cultures, will reduce their cultural sensitivities and will be more successful in establishing appropriate communication. The scores of the total cooperation rate are relatively higher than the average and the work interaction between emergency staff is high. However, in the previous goal of scores, the level of cultural sensitivity does not differ from the average. This finding is somewhat in agreement with other studies (12-15). While Avad et al., reported a higher percentage of the studied units in which cooperation was weak (25). The reason for this discrepancy can be attributed to the type of workplace because stressful situations such as working in the operating room affect the type of interaction. Studies show that more than half of nurses, physicians, and other members of the treatment team report a lack of support, poor teamwork, disrespect, and poor management at work, and less than 10% lack the ability. They have expressed appropriate communication (27-26). Based on the results of this study, it is logical to focus on methods to improve work interaction between staff and treatment team as one of the factors affecting patient safety. By examining and analyzing the relationship between intercultural sensitivity and work interaction using Pearson correlation method, it was found that there is an inverse linear relationship between intercultural sensitivity scores and work interaction. The results show that the correlation coefficient between the level of work interaction and cultural sensitivity is equal to -0.295 and is significant (significance = 0.001). This means that the relationship between the level of work interaction and cultural sensitivity is inverse, and as the amount of cultural sensitivity decreases (increases), it is expected that the amount of cooperation increases (decreases).

Simply, it can be inferred that the lower the intercultural sensitivity among employees, the greater their level of work interaction. This means that the more people get to know each other, the more cultural sensitivity decreases and the interaction between the workforce increases. According to Park's theory, the higher the degree of intimacy and the feeling of closeness or acceptance of individuals, the lower the social distance of individuals and the less intercultural sensitivity, which will lead to cohesion, peace and interaction between the workforce (28).

Intercultural sensitivity is based on internal and external motivations and accompanied by a comprehensive knowledge of oneself and others and causes the nurse to feel responsible and accountable to clients and members of the health team. What personal and belief characteristics a nurse has are effective in guiding her to be sensitive to ethical and cultural issues. Sensitivity to different cultures is mostly based on individual and belief characteristics (29).

Sometimes, due to the abstract nature of cultural issues, it may not be possible to formulate a suitable standard for them, in this case each person may choose sensitivities based on his or her own opinion and the circumstances and context in which he or she grew up. Culture and the context in which culture takes place can influence how interactions take place. Cultural conditions affect nurses' reactions to their work environment. When people are aware of their own and others' contexts and value differences, they will be able to identify the needs of others. This recognition of value differences facilitates the communication of care and treatment between the nurse and the patient and the health team (29).

Therefore, intercultural differences between nurses and treatment teams, in areas with cultural diversity, is a factor that can facilitate or block communication and interaction. A nurse who sees her culture as superior judges others violently; Because it closes its mental valve on the perception of colleagues and patients. As Watson believes, the patient cannot be cared for until the nurse is able to interact properly with the hospital environment (28).

If the nurse is able to adapt to the environment and not confused when faced problems and then eagerly try to solve them, she will develop her professional competencies and therefore will suffer less distress in her work environment.

Therefore, one of the important issues that should be considered in nursing education is adaptation and understanding and understanding of intercultural differences in nursing students. knowledge alone is not enough in nursing care, but understanding human emotions, the ability to reason logically and familiarity with different cultures and contexts are very important as well. A review of the literature shows that recognizing cultural and value differences in a caring relationship facilitates communication (30). The results of Hui et al.'s study showed that nurses have to professionally collect information to solve interactive problems related to culture (31). A study by Sioufi et al. Showed that nurses who interact with patients from different cultures and languages ​​use translators and bilingual health professionals alongside other strategies (24). A number of studies have also shown that communication barriers can impede the development of caring relationships (32-36) and when health workers are not successful in intercultural communication barriers, the result will be inequality in care and stress in nurses ( 23-22).

Therefore, in order to reduce intercultural sensitivity, creating a platform for people to get to know each other better, transfer information and awareness of different cultures in the region is necessary. Therefore, it seems logical to care about the improvement of cooperation between the treatment team, especially among nurses as one of the factors affecting the safety and care of patients.

**Research Limitations**

The use of self-reporting tools also leads to bias and more or less estimation of consequences. Biasing the effect of the favorable response, which is the tendency of some people to report desirable individual characteristics and less reporting of undesirable social characteristics, was another limitation that was beyond the control of the researcher; However, by emphasizing the confidentiality and anonymity of the questionnaires, the bias of the desired response and the concern caused by the error report were controlled to some extent.

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**Authors share:**

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**Conflict of interest:**

The authors hereby state that there is no conflict of interest in the present study.

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**References**

1. Panahi F, Mohebbi HA, Farahani MA, Vishteh HR, Assari S. Prehospital emergency service for internal medicine problems in pediatrics; Causes, time indices and outcomes. Iranian Journal of Pediatrics. 2007;17(Suppl 2):179-85.
2. Bahadori M, Ghardashi F, Izadi AR, Ravangard R, Mirhashemi S, Hosseini SM. Pre-hospital emergency in Iran: A systematic review. Trauma monthly. 2016 May; 21(2): e31382.
3. Zülküf Altan, M. 'Intercultural Sensitivity: A Study of Pre-service English Language Teachers', *Journal of Intercultural Communication*, no. 2018; 46.
4. Kafami F, Mousavi S, Ghanbari V. Survey the relationship between delegation and job satisfaction in nurses. Journal of Health Promotion Management 2012; 1 (2): 29-34. [Persian].
5. Ameli, S & Molaei, H. 'Two Globalization and Intercultural Sensitivity Case Study of Sunni and Shia Intercultural Relations in Golestan Province', 2009; vol. 6, pp. 1-29.
6. Teal, C & Street, RL. 'critical elements of socio cultural environment competent communication in the medical encounter:A review and model'. 2009; *Social Science&Medicine*, pp. 533-543.
7. Yilmaz, M, Toksoy, S, Direk, ZD, Bezirgan, S & Boylu, M. 'Cultural sensitivity among clinical nurses: A descriptive study'. 2017; *Journal of Nursing Scholarship*, vol. 49, no. 2, pp. 153-161.
8. Chang, H-Y, Yang, Y-M & Kuo, Y-L. 'Cultural sensitivity and related factors among community health nurses'. 2013; *Journal of Nursing Research*, vol. 21, no. 1, pp. 67-73.
9. Kafami, F, Mousavi, S, Mohsenpoor, M & Ghanbari, V. 'Survey the relationship between delegation and job satisfaction in nurse. 2012.
10. Larkey, LK.'The development and validation of the workforce diversity questionnaire: An instrument to assess interactions in diverse workgroups. Management Communication Quarterly'. 1996; vol. 9 (3), pp. 296-337.
11. Jibaja-Rusth, ML, Kingery, PM, Holcomb, JD, Buckner Jr, W & Pruitt, B. 'Development of a multicultural sensitivity scale'. 1994; *Journal of Health Education*, vol. 25, no. 6, pp. 350-357.
12. Zialame, L, 2016. Cultural Sensitivity and its Relationship with Level of Work Interaction among Nurses Working in Tabriz Health Centers, Tabriz University of Medical Sciences. [Persian].
13. Nordgren L, Olsson H. Palliative care in a coronary care unit: a qualitative study of physicians’ and nurses’ perceptions. Journal of Clinical Nursing. 2004; 13(2):185-93.
14. Ferrand E, Lemaire F, Regnier B, Kuteifan K, Badet M, Asfar P. et al. Discrepancies between perceptions by physicians and nursing staff of intensive care unit end-of-life decisions. American Journal of Respiratory and Critical Care Medicine. 2003; 15;167(10):1310-5.
15. Heydarikhayat E, Masror D, Joolaee S. Assessing patient safety events and it’s correlation with nurse - physician interaction from nurses’ view. Quarterly Journal of Nursing Management. 2012; 1(2): 37-45.
16. Harkreader H. Fundamental of Nurse Caring and Clinical Judgement. Philadelphia Pensilvania: W.B. Saunders Publishing. 2000; 316.
17. Lahoti V. Evaluation of Communication Barriers in Nurse-Patient Interactions; Nurses perspective. A Thesis Presented for the Degree of M.Sc in Nursing Education. Shahid Beheshti University. Faculty of Medical Science. Department of Nursing Education. 1996.
18. Heydari M, Anooshe M, Azadarmaky T, Mohammadi I. Exploration of context of the cultural care education in Iran. Journal of Nursing Education 2013; 1(2): 8-19 [Persian].
19. Seelye HN. Teaching Culture: Strategies for Intercultural Communication. 3st Editon, National Textbook: Lincolnville, 1994.
20. Giger JN, Davidhizar R. Culturally competent care: emphasis on understanding the people of Afghanistan, Afghanistan Americans, and Islamic culture and religion. International Nursing Review 2002; 49:79-86.
21. Pauwels A. Health professions' perceptions of communication difficulties in cross-cultural contexts. Annual Review of Applied Linguistics 1990; 7:93-111.
22. Murphy K, Clark JM. Nurses' experiences of caring for ethnic-minority clients. Journal of Advanced Nursing 1993; 18:442-50.
23. Pergert P, Ekblad S, Enskar K, Bjork O. Bridging obstacles to transcultural caring relationships-tools discovered through interviews with staff in pediatric oncology care. European journal of Oncology Nursing 2008; 12:35-43.
24. Cioffi RN. Communicating with culturally and linguistically diverse patients in an acute care setting: nurses' experiences. International Journal of Nursing Studies 2003; 40:299-306.
25. Awad SS, Fagan SP, Bellows C, Albo D, Green-Rashad B, De la Garza M. et al. Bridging the communication gap in the operating room with medical team training. American Journal of Surgery. 2005;190(5):770-4.
26. Risk Management, Quality Improvement, and Patient Safety .. [Internet]. [Cited January 2009]. Available from: [www.ecri.org/Documents/Secure/Risk\_Quality\_Patient\_Safe](http://www.ecri.org/Documents/Secure/Risk_Quality_Patient_Safe)....
27. Cullen DJ, Bates DW, Small SD, Cooper JB, Nemeskal AR, Leape LL. The incident reporting system does not detect adverse drug events: a problem for quality improvement. The Joint Commission journal on quality improvement. 1995; 21(10): 541-548.
28. Meleis A. Theoretical Nursing: Development and Progress, 4th ed. USA, Lippincott Williams and Wilkins, 2007.
29. Smith, J. Reflective practice: A meaningful task for students. Nursing Standard. 2005; 19 (26): 33-7.
30. Fricker, M. Epistemic justice and a role for virtue in the politics of knowing. Metaphilosophy 2003; 34 (1/2): 154-173.
31. Hoye S, Severinsson E. Professional and cultural conflicts for intensive care nurses. Journal of Advanced Nursing 2010; 66: 858-67.
32. Donnelly PL. Ethics and cross-cultural nursing. Journal of Transcultural Nursing 2000; 11:119-26.
33. Covington LW. Cultural competence for critical care nursing practice. Critical Care Nursing Clinics of North America 2001; 13:521-30.
34. Lavizzo-Mourey RJ, MacKenzie E. Cultural competence--an essential hybrid for delivering high quality care in the 1990's and beyond. Transactions of the American Clinical and Climatological Association 1996; 107:226-35.
35. Richardson A, Thomas VN, Richardson A. Reduced to nods and smiles: experiences of professionals caring for people with cancer from black and ethnic minority groups. European Journal of Oncology Nursing 2006; 10:93-101.
36. Trill MD, Holland J. Cross-cultural differences in the care of patients with cancer. A review. General hospital psychiatry. 1993; 15:21-30.