Original Article

Nurses' Empathy in Different Wards: A Cross-Sectional Study

Abstract

Background: Empathy is an important component of the nurse-client relationship and nursing care. The current study aimed to compare nurses' level of empathy with patients in critical care units, psychiatric, and emergency wards. **Materials and Methods:** The present cross-sectional study was conducted on 112 nurses selected by convenience sampling in three educational hospitals affiliated with Isfahan University of Medical Sciences, Iran from June to September 2017. Data collection tool was a two-part questionnaire consisting of sociodemographic data (such as age, gender, and work experience) and Jefferson Scale of Empathy (JSE) containing 20 items, scored according to Likert scale from totally agree (7 points) to totally disagree (1 point). In total, the maximum score was 140 and the minimum score was 20. Data were analyzed using SPSS version 16 as well as descriptive and analytical statistical tests (multiple regression). **Results:** The mean (SD) empathy score of nurses working in critical care units, emergency, and psychiatric wards was 87.51 (6.65), 87.59 (4.90), and 90.71 (7.12), respectively. Regarding the regression models, it was observed that only the work experience was a significant predictor for empathy ($\beta = 0.19$, $p = 0.04$). This model predicted 3.50% of variances in the nurses' empathy. **Conclusions:** Nurses' level of empathy in this study was above average with equal scores in different wards. Therefore, increasing the nurses' level of empathy is essential in interventional studies.

Keywords: *Empathy, Iran, nurses, patients*

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Introduction

Health care centers are always involved in providing the best care, keeping costs constant, and one of the creative ways is to establish appropriate communication between health care professionals and clients.[1] Communication is a vital element in nursing practice,[2] because they spend their most time with patients compared to other members of the health care team[3] and nurse-patient communication is an important part of nursing practice.[4] Empathy is an important component of the nurse-client relationship and nursing care.[5] The main task of the nurse is to understand the needs, feelings, and position of the patient, and empathy is fundamental in such perception.[6] There are several definitions of this concept. Empathy is mainly defined as the ability to see the world without judgment from the perspective of others, to understand the emotions, and to share them with individuals.[7] Empathy is effective in the nurse-patient relationship and care outcomes. The concept of empathy in addition to having positive consequences for the patient is[8] associated with some factors such as respect, social behavior, ethical reasoning, and positive attitude toward patients, the ability to obtain good medical history and the promotion of clinical outcomes.[9] Also, the higher the nurse's empathetic abilities, the lower the medication errors[10] and the higher the patient satisfaction and adherence to treatment.[11] Furthermore, patients who face more empathetic behaviors experience less anxiety, better self-concept, and less depression and hostility.[12] Empathetic behaviors also have positive effects on nurses, including the provision of more effective care and experience of less mental stress and job burnout.[13] On the other hand, if empathy is at a low level in a professional relationship with the patient, it can disrupt the diagnosis, treatment, and care of the patient.[14]

Although empathy is important in the patient's care, the results of some studies have shown that the nurses-patients relationship is poor and nurses rarely spend

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time to speak and empathize with patients and, it can be changed in clinical settings and different wards depending on the size and type of nurses' work.[15] Many studies have addressed this variable in different clinical settings. Jafari *et al*. reported that the mean score of empathy with depressed patients in psychiatric wards was moderate in male nurses, and it was at a good level in female nurses. They believed that empathy should be strengthened more in nurses' job requirements.[16] A study showed that emergency nurses had less empathy than those in other wards.[17] Also, effective communication and empathy in nurses working in intensive care units are important because they have to take care of patients who are at risk of death. Empathy is an emotion frequently experienced in the everyday lives of nurses caring for patients and their families in ICU[18] and they often have a high level of empathy to the patients[19] The results of another study showed that nurses' empathy level in ICU was at a good level[20] but still another study found that empathy scores of the nurses working in Intensive Care Units (ICUs) were the lowest.[21] In fact, one of the variables affecting empathy is the nurses' clinical work environment. Nurses in some wards, including emergency, psychiatry, and ICUs, face more challenging situations and responsibilities than nurses in other words, such as dealing with overstressed patients and their relatives, patients with psychiatric disorders, victims, etc.[22] These responsibilities add to the importance of communication skills, including empathy among nurses in the mentioned wards. It is difficult for nurses to establish empathetic communication with patients in stressful work environments and they have inadequate opportunities to deal with patients.[23]

However, empathy is essential in optimal health care, there is still limited information about nurses' level of empathy.[22] To our knowledge, however, little is known about the assessment of empathy in Iranian nurses and all retrieved studies focused only on specific target groups. Since empathy is essential for ensuring positive outcomes in nursing care, it is useful to conduct a comparative study among nurses working in the ICU, emergency, and psychiatry departments to increase knowledge in this field. Therefore, this study aimed to compare the level of empathy among these nurses. The results of this study can be used to identify differences in empathetic abilities among nurses in these departments and, if necessary, essential documentation can be provided to change the empathy level through different methods such as training.

Materials and Methods

The present cross-sectional study was conducted on 112 nurses working in ICU, CCU, hemodialysis, emergency, and psychiatric wards in three teaching hospitals including Nour and Ali Asghar Hospitals ($n = 46$), Kashani Hospital ($n = 66$) affiliated with Isfahan University of Medical Sciences, Iran from June to September 2017.

The sample size was calculated considering the test power of 80%, the first type error of 5%, confidence level of 95%, and z score of 1.96.

Convenience sampling was used in this study. Nurses who wanted to participate in the study were provided with the questionnaire and they were explained how to return it to the researchers. They showed their consent by returning the completed questionnaires. Data collection tool was a two-part self-reporting questionnaire consisting of sociodemographic data (age, gender, marital status, educational level, type of shift work, having offspring, work experience, working ward) and the Jefferson Scale of Empathy (JSE) health professional version. JSE is a 20-item psychometrically validated measurement of empathy for health care professionals. It has three domains, that is, "perspective-taking," "compassionate care," and "standing in the patient's shoes." Scoring was done using a seven-point Likert scale (totally disagree = 1, totally agree = 7). The maximum and minimum scores were 20 and 140, respectively. The higher the score, the higher the empathetic behavior in patient care. There is widespread support for the English version of JSE in many countries, and it has good reliability and face and content validities. In a large number of national and international studies in which the JSE was used, the alpha coefficients ranged from 0.70 to 0.80 with an average of 0.78.[24] A study in Iran showed that Persian version of JSE had good face and content validities. Also, Cronbach's alpha and Intraclass Correlation Coefficient (ICC) were 0.83 and 0.82, respectively.[25]

The Statistical Package for Social Sciences (SPSS; Version 16.0, Chicago, IL, USA) was used for data analysis. Mean, frequency, one-way analysis of variance (ANOVA), and linear multiple regression were used. The significance level was set at 0.05 for all statistical analyses.

Ethical considerations

The study was approved by the ethics committee of the Isfahan University of Medical Sciences (IR.MUI.REC.1396.1.205). Subjects were explained and informed that participation was voluntary and anonymous. Participants gave their consent by returning the completed questionnaires.

Results

Nurses' demographic characteristics are presented in Table 1. The mean (SD) empathy scores of nurses working in critical care units, emergency, and psychiatric wards were 87.51 (6.65), 87.59 (4.90), and 90.71 (7.12), respectively.

In the preliminary analysis with Pearson test, there was no significant correlation between age and empathy ($r = 0.17$, $p = 0.08$). Also, independent *t*-test showed no significant difference in empathy scores in terms of gender ($t_{110} = 0.36$, $p = 0.72$), having offspring ($t_{110} = 1.20$, $p = 0.23$), marital

Table 1: Demographic characteristics of the nurses, Isfahan, Iran (*n*=112)

Characteristic	Mean (SD) or number (%)
Age mean (SD)	33.47 (6.68)
Gender *n* (%)	
Female	89 (79.50%)
Male	23 (20.50%)
Marital status *n* (%)	
Single	37 (33%)
Married	75 (67%)
Educational level *n* (%)	
BS	91 (81.20%)
MA	21 (18.80%)
Type of shift work *n* (%)	
Fixed	17 (15.20%)
Rotated	95 (84.80%)
Having offspring *n* (%)	
Yes	49 (43.80%)
No	63 (56.20%)
Years of work experience *n* (%)	
Less and equal than 10 years	67 (59.80%)
more than 10 years	45 (40.20%)
Working ward *n* (%)	
Psychiatric	14 (12.50%)
Critical units (CCU, ICU, and hemodialysis)	64 (57.10%)
Emergency	34 (30.40%)

status (t_{110}= -0.20, $p = 0.84$), type of shift work ($t_{110} = 0.63$, $p = 0.53$), education status ($t_{110} = -0.73$, $p = 0.47$), and work experience ($t_{110} = -1.99$, $p = 0.04$). Also, one-way ANOVA showed that there was no significant difference in the mean score of empathy among nurses in terms of the working ward ($F_{2,109} = 1.49$, $p = 0.23$).

Stepwise multiple regression analysis was employed to assess the association between the potential predictors of the empathy scores. The work experience was a significant predictor of this model. The higher the work experience, the higher the empathy (ß = 0.19, $p = 0.04$). This model explained 3.50% of the variance of empathy ($R^2 = 0.03$) [Table 2].

Discussion

Empathy is the most vital component in nurse-patient relationships and patient care.[26] The results of this study also showed that the nurses' mean scores of empathy were above average. In addition, the highest mean level of empathy was observed in nurses working in psychiatric, emergency wards, and then in ICUs, but the overall results indicated no significant difference in the level of empathy among the nurses in mentioned wards, and they had similar scores in this regard.

Some reasons for a poor level of empathy might include workload, time constraints, and ignorance of the role of empathy in patient care. In fact, these factors cause less attention to human dimensions in patient care. Scott has also considered the work environment as one of the important features of the state of empathy.[27] For example, some conditions such as acute psychiatric disorders, suicide attempts, or aggressive behaviors of patients admitted to psychiatric wards may lead to prejudgment behaviors and create a sense of fear and anxiety, concern, sense of insecurity, and job burnout in this group of nurses. Such conditions lead to a gap between nurses and patients and thus they are reluctant to show empathetic behaviors.[28] Also, most patients with severe, complicated, and acute conditions are admitted to ICUs and, on the other hand, nurses working in these departments involved with emotional stresses when facing dying patients. Therefore, such challenging and complicated situations affect the level of empathy perceived by these patients.[29] This issue may be due to the impact of variables such as nurses' working conditions and attitudes toward empathy.[30]

It is also expected that the nature of departments or working conditions, such as high occupational stress, will affect the level of empathy of nurses working in health care departments. The results of a study showed that nurses' stress could explain 27% of empathy variances, and nurses' exposure to work-related stress is associated with reduced empathetic communication.[31] Bodenheimer believes that the increased workload and job stress among nurses working in emergency departments will reduce the ability of nurses to empathize.[32] The results of a study in Canada also showed that there was no significant relationship between psychological distress and empathy level among nurses in the emergency department, although the level of empathy in this group of nurses was significantly lower than those in other departments,[17] The result is not consistent with the results of the present study.

Therefore, showing empathy to patients is influenced by many factors, including the patient, the type of disease, and the workplace. Among the factors related to the work environment of nurses, one can point to the presence in different wards of hospitals with different working conditions. For example, working conditions in psychiatric wards are such that most patients with psychiatric disorders experience a sense of alienation with other people and their behavior and speech are neglected, and the nurses working in these wards cannot communicate with them due to differences in the words, the behaviors, and thinking of hospitalized patients, and the only way to fill this communication gap is to try empathetically to enter their world.[33] Our results showed that the psychiatric nurses' empathy score was higher than in other groups, although this difference was not significant. Similarly, the results of a cross-sectional study in Taiwan showed that the level of empathy in nurses working in psychiatric wards was significantly higher than that of other nurses.[34]

Table 2: Multiple linear regression analysis of empathy among nurses, Isfahan, Iran (*n*=112)

Independent variable	Unstandardized β	SE*	Standardized β	*t*	*p*
(Constant)	84.77	1.75		48.49	<0.001
Age	0.05	0.14	0.05	0.38	0.70
Gender	−0.51	1.59	−0.03	−0.32	0.75
Marital status	−1.02	1.63	−0.08	−0.63	0.53
Educational level	0.26	1.59	0.02	0.16	0.87
Type of shift work	0.15	1.87	0.01	0.08	0.94
Having offspring	−1.38	1.63	−0.11	−0.85	0.40
Years of work experience	2.35	1.18	0.19	1.99	0.04
Working ward	0.09	0.44	0.02	0.23	0.80

*SE: Standard Error. R^2=0.03. Dependent variable: Empathy; the years of work experience was coded as: 1=equal and lower than 10 years; 2=more than 10 years

Furthermore, the mean level of empathy in nurses working in ICU was much lower than those in other departments, while this difference was not significant. A study in Taiwan showed that the level of empathy perceived by ICU patients was far fewer than those who were hospitalized for the first time and also in critical care units such as the surgery department.[35] The results of studies that are not consistent with that of the present study showed that most nurses working in ICUs had high levels of empathy for hospitalized patients.[19] Also, nurses working in ICUs, especially Neonatal Intensive Care Unit (NICU), witness the pain and suffering of the patients and show a high sensitivity to this phenomenon, thus they have higher rates of empathy than other members of the health care team.[36]

Therefore, according to the results of previous studies, given the differences in working environments, including the type of hospitalized patients and the workplace conditions (such as the level of occupational stress or burnout) and their impact on the empathy, we expected a statistically significant difference in the level of empathy among nurses working in ICUs, psychiatry, and emergency departments but in the present study, the level of empathy among nurses was not different. This similarity can be due to the more favorable situation of the departments, the favorable attitude of nurses toward the working conditions and the general condition of the patients or even the lower sample size compared with some studies.

Moreover, the results showed that the most influential demographic factor on empathy was work experience, but, there was no correlation among empathy, gender, having offspring, type of shift work, education status, and marital status of nurses, which is in line with Taleghani *et al*.,[37] and Gleichgerrcht and Decety[38] who reported that nurses with a high work experience had a higher empathy score, but there was no correlation among empathy, age, gender, educational level, and marital status. Concerning the relationship between gender and empathy, some studies have shown that women are more empathetic than men,[39,40] but in this study, sex did not affect the empathy score. In general, nurses with higher work experience paid more attention to communication with the patient and used more effective communication skills. This study suggests that nurses should learn how to empathize with patients in different wards.

This study had some limitations. As the information gathering tool is a self-reporting questionnaire, it may, like all other self-reporting scales, incorporate restrictions such as inaccurate and incorrect reports by research samples. In addition, the study sample was further restricted to only nurses who agreed to fill out the questionnaire, so conducting a study with a larger number of samples is suggested.

Conclusion

According to the results of this study and the absence of significant difference in the levels of empathy among nurses working in different departments, it seems that the work environment and its conditions are only one of the factors affecting the level of empathy and the severity of this effect with other existing factors can be moderated and they are not very important. Therefore, a set of factors should be considered in examining the level of empathy in addition to environmental factors. It is also necessary to strengthen the empathy level of nurses during the provision of health care, and since empathy capabilities can be learned and trained, we hope that they can be promoted in nurses as an important communication skill. It is also suggested that the level of empathy among nurses working in other health care departments be studied. Concerning the complex concept of empathy and its multidimensional nature, it would be better to conduct qualitative studies so that the concept is measured from the perspective of nurses.

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Conflicts of interest

Nothing to declare.

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