

The effectiveness of empathy training on the empathy skills of nurses working in intensive care units

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Abstract

Background: Empathy is an essential condition for effective nursing care. An empathetic relationship between the nurse and the patient leads to positive therapeutic outcomes, increases nurses' adjustment in educational and therapeutic environments and influences their ethical sensitivities.

Aims: The current study aimed to determine the effectiveness of empathy training on the empathy skills of nurses working in intensive care units of Shahid Bahonar Hospital in Kerman, Iran.

Methods: This experimental study was conducted on nurses working in intensive care units of Shahid Bahonar Hospital affiliated to Kerman University of Medical Sciences in Iran. All nurses working in intensive care units of Shahid Bahonar Hospital were selected by randomised sampling. Data were collected by the Davis Empathy Scale (possible range 0–105) and analysed using descriptive statistics and analysis of variance.

Results: Comparison of the mean empathy scores showed the mean scores of empathy skills in the control group were 63.45 ± 8.102 and 63.54 ± 8.05 in the pre- and post-test, respectively, which was not significantly different. But the mean scores of empathy skills in the Experimental

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group were 63.40 ± 8.136 and 67.7 ± 9.027 in the pre- and post-test, respectively, which showed a significant increase ($p < 0.05$).

Conclusions: The present intervention showed the effectiveness of empathy training on the empathy skills of nurses. Empathy can be acquired and learned.

Keywords

empathy skills, empathy training, intensive care unit, nurses

Introduction

Observing patients' rights in healthcare services plays a vital role in improving and regulating the relationship between nurses and patients and is essential in the management of healthcare systems (Hojat, 2006). One of the crucial factors in bedside behaviour is the empathy that is observed in a nurse-patient relationship. Empathy is a critical topic in medicine and increases patient satisfaction, correct diagnosis and treatment (Pedersen, 2008).

The concept of empathy originates from the science of psychology and has integrated with other sciences such as medicine, psychiatry, educative science and nursing (Miller, 2009). Empathy is the skill of perceiving the feelings and views of others and the means to effectively communicate with the patient (Mercer, 2002). Carl Rogers has defined empathy as feeling the patient's world so we consider them close to ourselves. Human beings are social creatures and need to effectively communicate with others for development and to meet their social needs through deep and calm relationships (Rogers, 1975). All human beings require empathy for effective communication, including people such as nurses. In learning empathy skills, the nurse can solve interpersonal and patient problems and prevent injuries that may result from disabilities in this regard (Benner, 2012). Based on scientific research and psychological theories, one should learn basic skills such as self-awareness, interpersonal relationships, reduction of stress, management of emotions, individual and group problem solving, correct decision making and right, creative and critical thinking to create empathy and establish effective and healthy communication (Adler, 2000).

In nursing literature, empathy has been widely considered an essential condition for effective nursing care and has changed the heart of the nurse-patient therapeutic relationship (Mercer, 2002). Empathy should respect the patient's internal world and one should enter the inner world of the patient by focusing on their values and views without any prejudgment (Spiro, 1992). This empathetic interaction includes understanding the correct perception of the patient's experience, concerns and views that lead to positive outcomes for the patient, such as acceptance and greater adjustment to disease (Squier, 1990).

Intensive care units (ICU) are an essential and vital part of hospitals, where patients are at high risk of death. Nurses working in these units must be well trained and psychologically ready to deal with unpredictable conditions and continuously perceive and communicate with the patients they are taking care of (Reynolds, 2000). Nurses have varied duties in different healthcare departments. In environments such as ICUs where the family has limited access to the patient, it is important to deal with the patient's psychological needs, particularly when considering the family role in Iranian culture. A patient admitted to an

ICU often has many problems and requires careful 24-hour care and their family should not be overlooked (Grove et al., 2013).

Empathy training for ICU nurses who have the most interaction with patients and their families can meet the psychological needs of the patients and their companions. It helps nurses understand patients better and make decisions taking into account the condition of the individual (Ançel, 2006). Different studies have presented varied results for the role of factors affecting the level of empathy. Shariat et al. reported that empathy in female doctors was greater than in male doctors, and the higher the level of empathy, the better the physician's practical experience (Shariat et al., 2010). West et al. reported that empathy reduction was associated with an increase in the individual mistakes of assistants (West et al., 2006). The results of many studies have shown that generally, the relationship quality between nurses and patients is low. Iranian nurses have little time to talk to patients, because they have to take care of a large number of patients in their shift work (Deborab and Nadzam, 2009; Browing, 1987; Marlene and Obermeyer, 2006). Despite the importance of empowering nurses with communication and empathy skills, such organised skills are not covered by the nursing curriculum. Nurses take care of many patients during shifts, and nurses working in intensive care units take care of two patients per shift. The patient in the intensive care unit, due to special circumstances, requires multiple and 24-hour care, which may cause the nurse to miss the opportunity to communicate with the patient and their family (Hoyt, 2006).

As empathy is one of the essential skills for living and communication, it also plays a significant role in improving the health of the community (Davis, 1983a). Regarding the necessity of training nurses in these skills, the current study aimed to investigate the effectiveness of empathy training on empathy skills of nurses working in ICUs of Shahid Bahonar Hospital in Kerman, Iran.

Methods

This experimental study was conducted to determine the effectiveness of empathy training on the empathy skills of nurses working in the ICUs of Karman Shahid Bahonar Hospital in Iran in 2017. The statistical population was all nurses working in ICUs of Shahid Bahonar Hospital in Iran. The total number of nurses working in the ICUs is 150. Due to the limited number of staff, 80 nurses were enrolled in the study by simple randomised sampling. The inclusion criteria were holding a nursing degree and having at least 2 years of work experience in the ICU. The study was done after obtaining ethical approval from Kerman University of Medical Sciences and receiving informed consent from the participants. Participants were randomly divided into two groups, experimental and control, and informed consent was signed by the participants before entering the study. Next, 40 participants who did not take part in the empathy training course were assigned to the control group and 40 to the experimental group that participated in the empathy training course. The Davis Empathy Scale (1983) was used to measure empathy. The scale consisted of 21 items and was scored based on a five-point Likert scale ranging from totally agree to totally disagree (possible range 0–105). The reliability of the questionnaire in Davis's study was found to be over 70% with Cronbach's alpha. The validity has been favourable through factor analysis (Vaziri, 2012). The empathy training programme was conducted with emphasis on the four-factor foundations (visionism, imagination, empathetic attention and personal distress) during eight sessions in 90

Table 1. Demographic profile table.

Variable/group	Experimental	Control
Sex		
Female	33 (82.5%)	35 (87%)
Male	7 (17.5%)	5 (13%)
Age		
<30 years	10 (25%)	8 (20%)
30–40 years	17 (44%)	19 (47.5%)
>40 years	13 (31%)	13 (32.5%)
Marital status		
Married	26 (65%)	27 (67.5%)
Single	14 (35%)	13 (32.5%)

minutes. In collaboration with the Continuing Medical Education Center, a retraining score was provided to encourage participants, so there was no dropout during the sessions.

Finally, the collected data were analysed by SPSS 22 and an analysis of covariance test was used at the significance level of $p < 0.05$.

Results

Demographic information

Of the 80 participants, 68 (85%) were female and 12 (15%) were male. Eighteen (22.5%) of the nurses were under 30 years old, 36 (45%) nurses were between 30 and 40 years old and 26 (32.5%) nurses were over 45 years old. Their mean age was 35.48 ± 7.71 years. Fifty three (66.25%) nurses participating in the study were married and 27 (33.75%) were single (Table 1).

The mean score of empathy in the control group was 63.45 ± 8.102 in the pre-test and 63.54 ± 8.05 in the post-test group, which does not show a significant difference. The mean score of empathy in the experimental group was 63.40 ± 8.136 in the pre-test and 67.7 ± 9.027 in the post-test group, which showed a significant increase ($p < 0.05$) (Table 2).

In the covariance analysis table, given the calculated p value (0.035) is below the significance level of 0.05 ($\alpha = 0.05$), H_0 is rejected (H_1 is accepted), that is, for the post-test, the mean empathy skill level in the experimental group was significantly more than that of the control group. As a result, empathy training had a significant effect on the empathy skills of nurses working in the ICUs of Shahid Bahonar Hospital in Kerman, Iran in 2017. According to the Eta-squared test, the effect of empathy training on the empathy skills of nurses working in ICUs of Shahid Bahonar Hospital in Kerman, Iran was 5.6% and the statistical power in this hypothesis shows that with 0.99% confidence, the null hypothesis has been correctly rejected and type II error has not occurred (Table 3).

Discussion

The current study was conducted to evaluate the effectiveness of empathy training on the empathy skills of nurses working in ICUs in Kerman, Iran. The results of the study showed there is a significant difference between the nurses' practices in the experimental group before

Table 2. Descriptive statistics of the pre- and post-test scores of empathy skill in the control and experimental groups.

Group	Pre-test Mean and SD	Post-test Mean and SD
Control	63.45 ± 8.10	63.54 ± 8.05
Experimental	63.40 ± 8.13	67.70 ± 9.02

Table 3. Covariance analysis of empathy training on the empathy skills of personnel working in intensive care units.

Source of changes	Sum of squares	Freedom degree	Mean squares	F	P	Eta-squared	Statistical power
Pre-test	14.121	1	14.121	0.191	0.663	0.002	0.072
Group	340.742	1	340.742	4.609	0.035	0.056	0.564
Error	5692.054	77	73.923	—	—	—	—

and after empathy training. The results are consistent with those of Lim et al. (2011), Chen et al. (2010), Nunes et al. (2011), Marcysiak et al. (2014) and Sedaghati et al. (2017). Although critical care nursing is a stressful profession and faces serious challenges, a sense of not being disappointed with failures and trusting in personal abilities leads to positive benefits and outcomes that can be seen in nurses' empathetic abilities. Nurses are the cornerstone of improving quality of care, so their practice is very effective in advancing organisational goals, and accountability and treating the patient well have an important role in fulfilling the healthcare system's mission. To provide effective high-quality care, nurses must first be able to communicate with the patient well; empathy is the foundation of effective communication and an essential part of communication skills.

Empathy training enhances the empathy of the nurses and subsequently their social and psychological competence. Increasing empathy may enable nurses to get rid of negative emotions such as anxiety, depression and irritability. Vaziri (2011) also reported that empathy training reduced aggression. According to the results of this study, empathy training was effective in increasing the empathy skills of nurses. Empathy provides the opportunity to improve social relationships by contributing to patients' emotional states and awareness of their emotions and connects them with the social environment. This skill helps one improve the quality of interpersonal relationships. Empathy with the patient removes isolation and affects their recovery. Establishing a nurse-patient relationship based on trust and empathy makes the patient feel relaxed. It changes the brain's response to stress and increases the patient's endurance. Nurses listening carefully leads to patients being more satisfied and better treatment outcomes.

Empathy is the foundation of social skills and increases confidence among individuals. If the patient and their family trust healthcare providers, especially nurses, many problems arising from the crisis of hospitalisation will be solved between patients and healthcare providers. The patient and their family will be assured the healthcare providers are doing their best to treat and return them to the community without inattention and neglect (Ance1, 2006).

Empathy is an important ability that allows one to adjust to what others think about them. Empathy allows a person to make effective contact with the social world around them, visualises helping others and prevents harm to them. When a patient is hospitalised in the ICU, they and their family are in a critical situation. Therefore, a nurse's empathy can reduce the tension of the relationship and a good empathetic relationship can help with the patient's hospitalisation and diagnosis (Williams et al., 2014).

Other results of the research suggest that women's empathy scores may be higher than those of men. Concerning the relationship between the empathy score and gender, the empathy level of females is significantly higher than that of males in nearly all studies (Williams et al., 2014; Hojat et al., 2002; Litvack-Miller et al., 1997). Various theories have been presented on the different level of empathy between the two sexes, for example, the two sexes have different hormones or have a fundamental difference in the environmental perception or an evolutionary justification may be available for some differences (McClure, 2003).

One of the reasons for the higher level of empathy in female intensive care nurses is the female role in the society. Empathy is more often attributed to women than men. Therefore, empathetic characteristics are more highlighted in women than men (Eisenberg and Lennon, 1983). This stereotypical concept implies that women have higher social and interpersonal skills, an idea that is the result of traditional male and female roles, leading to women's dominance in empathetic tests. Based on these roles, women may consider themselves more empathetic than men especially when empathy indicators are evident in these tests. Social and cultural demands cause women to consider themselves more empathetic than men (McClure, 2003).

Apart from the cultural and social demands that impose roles on women and men, women are physiologically and biologically more empathetic than men. Women generally have more empathetic qualities such as higher speech ability, communication skills, more eye contact and social skills (Smith, 2006). Biological and physiological evidence about the superiority of women in empathy has focused on basic emotions; in other words, women are superior to men in empathy when experiencing emotions such as hatred, jealousy, joy and sorrow, which is called emotional empathy; this quality is biological and evolutionary (Aleman and Swart, 2008). Many studies have shown men and women have a different brain structure. The female brain is designed for emotional and social communication and the manifestation of an empathetic cognitive style and, on the contrary, the male brain has been designed to engage with objects and display a systematised cognitive style. Consistent with the empathising-systematising theory that points to gender differences in empathy and systematisation, Baron-Cohen found that women showed a more empathetic profile than men, who showed a more systematised profile, indicating a biological orientation in women to empathise with emotions (Baron-Cohen, 2009).

Another result of this study suggests that married nurses may have higher empathy scores compared to single nurses. These results are consistent with the results of Sedaghati et al. (2017). Such a difference was significant in the study of Shahab et al. but was not significant in the study of Shariat et al. (2010). Because the study of Shahab et al. (2014) was conducted on dental students and that of Shariat et al. (2010) on clinical professionals, different results can be attributed to the study populations in two studies. Singer (2006) studied "The Social Neuroscience of Empathy."

Empathy includes the ability to share the emotional experiences of others. In recent years, social neuroscience has made significant progress in revealing the mechanisms that make one feel they are experiencing others' feelings. This study provides a profound and critical discussion about these results. Continuous evidence suggests sharing other people's feelings

is associated with activation of the neural structures, which are also active during first-hand experience. It seems that part of the nerves is automatically activated between the experiences of oneself and others (Squier, 1990). However, recent studies also show empathy is a highly flexible phenomenon. Ongoing research is essential for a more accurate assessment of these factors and their neurological grounds. Questions such as whether individual differences in empathy can be explained with the characteristics of a sustainable personality or whether we can persuade ourselves to be more empathetic and how empathy is related to human behaviour are very important for science and society (Kahriman et al., 2016).

The emotional dimension of empathy forms in childhood and does not change, but its cognitive dimension varies over time. Therefore, factors such as age, sex and marriage can be evaluated in a population based on their effects on the cognitive dimension as an effective factor in the appearance of this feature. In explaining this result, it can be said that married nurses, in comparison with those who are single, are trying hard to be in the patients' shoes and see things from their point of view, feel a higher level of anxiety and discomfort for patients' negative experiences and show more empathetic attention to patients (Nash et al., 2010).

Conclusion

Growing attention to medical ethics research has necessitated a thorough examination of structures such as empathy, which is believed to play an essential role in improving the communication quality of nurses and patients. A high level of attention to education that focuses on the empathetic relationships with the patient can be the source of positive changes in nurse-patient relationships and the growing attention to medical ethics. In the field of medical sciences, applying empathy skills, in addition to the general acceptance of nurses and patients, has had many positive outcomes including increasing healthcare service performance, patients' better acceptance of situations, reducing medically legal conflicts, increasing patient satisfaction, collaboration and compliance. When communication among the nurse, patient and family is well established, so information is transmitted to the patient and their family correctly and they will trust healthcare providers more.

Critical nursing care, as an essential component of healthcare services such as hospitals, is an important and sensitive area. For this reason, providing high-quality care and services has become a priority in the healthcare system, especially in ICU nursing care, and in most countries the ratings and accreditations of hospitals are influenced by nursing care and its quality. There is a growing need for professional nurses that work in the ICU to have more ability and take on a wider range of nursing duties; as their decisions are based on ethical principles and values, nurses must have an ability to carry out assigned tasks and be more adaptable to patients and their treatment processes. Creating conditions that promote empathy in ICU nurses can enhance their professional development. The rights of the patients in the ICUs and those of their families, in addition to enjoying high-quality and effective care, must be observed in the areas of personal dignity, self-esteem, respect for culture, attention to mental status and spiritual values. Therefore, paying attention to the empathy skills of nurses working in ICUs increases the quality and quantity of the healthcare they provide. Moreover, training can greatly help nurses' empathy. Nurses can be more useful and helpful caregivers in the healthcare system if they are trained effectively and this will make them more satisfied and relaxed. Listening to the patient, courtesy, respect and kindness, attracting the patient's trust with integrity, confidentiality, empathy rather

than compassion, competence and target in providing care, patient-centeredness rather than activity centeredness and using simple and concise sentences rather than complex medical terms with various interpretations are among the factors contributing to effective communication in a therapeutic and professional relationship. Privacy is essential in establishing an effective relationship between patients and healthcare providers and in keeping the patient calm. In contrast, the consequences of patient privacy violations are significant and unpleasant. Family also has the right to be informed of a patient's condition in a safe and secure environment and this should be done with empathy. Given the importance and the effects of empathy on health care communication, empathy training courses will be a useful step in improving nurse-patient relationships. Investigating the role of empathy in medical ethics can provide valuable guidelines for mental health, from prevention to treatment, and they are available to different individuals and institutions such as the Ministry of Health and the psychological and counselling clinics.

Nurses can better communicate with each other and the patients by receiving effective empathy training, which in turn will help them better diagnose and treat their patients.

Key points for policy, practice and/or research

- Empathy is an acquirable and learnable skill.
- Healthcare organisations, policymakers and educators should address strategies that promote the development of adaptive empathy skills in nurses.
- Nurses need to manage the emotional aspects of empathy and possess well-developed cognitive empathy that includes self-regulation of emotions.
- Due to the acquisitional nature of empathy skills, we can take effective steps for implementation of empathy skills through nurses and consequently increase the quality of nursing care.
- Fundamental nursing is complex to determine but is best understood through providing care for 'whatever the patient needs' in a sensitive way.

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Declaration of conflicting interest

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Ethics

Ethics clearance was obtained from the Ethics Committee (license code: IR.KMU.REC.1396.1742 Kerman, Iran Medical Sciences) prior to the start of the study, informed consent was obtained from participants before the study and training classes, and participants were informed about the purpose, method of study, and time of data release.

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