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The status of cultural care among nurses working in different wards of teaching hospitals in Ardabil, Iran: A cross-sectional survey study

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Abstract

Introduction: Culture is an important determinant in providing appropriate and coordinated health care for people from different ethnicities. The present study aimed to evaluate the status of cultural care among nurses working in teaching hospitals affiliated to Ardabil University of Medical Sciences.

Methods: In this descriptive-correlational study, 350 nurses completed the Persian version of Cultural Care Inventory (PCCI). This tool consists of 51 items and measures cultural care process in four domains including cultural preparation, cultural attitude, cultural awareness and cultural competence. Data were analyzed by IBM SPSS Statistics for Windows, version 22.

Results: The grand item mean of cultural care was 2.60 ± 0.621, which is considered poor. The grand item mean was 2.64 ± 0.78 in the subscale of cultural preparation, 3.45 ± 0.559 in cultural attitude, 2.81 ± 0.736 in cultural awareness and 2.58 ± 0.834 in cultural competence. Cultural competence was significantly related to cultural preparation ($r = 0.80$), cultural attitude ($r = 0.62$) and cultural awareness ($r = 0.87$).

Discussion: Based on the present findings, cultural care and its dimensions (with the exception of cultural attitude) were at a poor level. It can also be claimed that there is a direct and strong relationship between the dimensions of cultural care including cultural preparation, awareness, attitude and competence, which indicates the interdependence of these dimensions on each other. Nurses need to improve their cultural competence to ensure of providing patient-centered and culturally coordinated care.

Keywords

Culturally competent care, patient-centered care, nurse-patient relation

Introduction

Culture is a complex concept that implies values, patterns, customs, thoughts and beliefs, norms, art and behaviors that can be learned, shared, and transmitted in life and is conveyed from one generation to the next.[1] Culture affects the decision-making, attitudes, performances and lifestyle of individuals, families and the society.[2] Culture is a process that is constantly changing and evolving with time.[3] People's culture is not easily recognizable and cannot be easily observed and perceived in daily interactions with others, and this issue may lead to difficulties in establishing effective communication.[4]

Iran is a country with high cultural diversity, and as a result, patients from diverse cultural backgrounds refer to health centers to receive healthcare services. Literature review reveals that there are two main cultural determinants in the Iranian society. First, the national culture that is shared by all the ethnicities and society groups throughout the country, such as the annual Nowruz celebrations. Second, the culture

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of different ethnicities (Fars, Turk, Kurd, Lor, Baluch and Gilaki) and religions (Shi'a, Sunni, Christian) living in Iran and adhering to their own cultural beliefs and values.[5] In addition, Iran is a major recipient for immigrants from Afghanistan, which increases the diversity of population. Moreover, the growing phenomenon of migration from villages to urban communities in Iran means that different group of the society live together with diverse cultures and each have own specific beliefs and customs.[6] However, the culture of patients not only refers to their ethnicity or race but determinants such as gender, age, level of education, socioeconomic status, occupation, and geographic region should also be considered.[7]

Care is the central and unifying concept of nursing that comprises the essence of nursing. Leininger, the founder of the cultural care theory, believes that nursing is a transcultural profession that focuses on providing coordinated care to individuals, families and community groups. However, the concepts of care and culture have an inseparable bond in nurse-patient interactions.[8] Hence, provision of a holistic and person-centered care should be done based on the cultural characteristics of the clients and this principle may acquire different caring behaviors.[9] Similarly, World Health Organization (WHO) emphasizes on a person-centered and coordinated health care provision. This framework is a holistic approach which sees person as a whole, with many levels of needs that should be satisfied according her/his personal, social and contextual determinants.[10] However, cultural care strongly linked with patient-centeredness and in a patient-centered health system, culturally competent nurses attempt to meet the healthcare needs of diverse populations.[11]

Cultural competence is an ongoing process in which health professionals endeavors to obtain competency to work with patients from different cultures.[12] According to Moulder, there are four main constituting concepts for cultural care including cultural preparation, cultural attitude, cultural awareness and ultimately cultural competence.[13] Cultural preparation is among the main preliminaries of culturally congruent care that is improved by academic education and in-service training. Cultural attitude is the view or perception of an event, behavior or culture. In other words, cultural attitude shows the nurse's sensitivity and desire toward caring for patients from diverse cultural groups. Cultural awareness means the ability to perform measures that imply awareness and knowledge of one's own culture and the ability to understand other people's values, beliefs and lifestyles and recognize the unique attributes of people from different ethnicities in the society.[13,14] Finally, cultural competence means competent performance of nurses in working with patients from diverse cultures, which allows health service providers to provide care that is congruent with the patient's culture.[15]

Several studies have been conducted around the world on cultural competence of nurses and other health care providers.[1,16–19] Some studies performed in the Middle East are briefly looked into cultural care. Halabi and de Beer[20] investigated cultural competence in undergraduate nursing students in Saudi Arabia and showed that the majority of students were culturally aware but one-third wished to have training about cultural care. In Iran, Heidari et al. found that cultural care and establishing effective communication with patients from different cultures are substandard in nurses, and nursing care is not provided in a manner that is congruent with diverse cultures.[21] Bastami et al. conducted a study to evaluate nurses' cultural competence and reported nurses' cultural competence at moderate level.[19] Given that Iran is a multicultural country, the prior studies regarding cultural care of nurses have been mainly done in Persian provinces. Thus, in absence of adequate knowledge on cultural care in the mainly Turk Ardabil Province of Iran, the present study was conducted to investigate the status of cultural care in nurses working in different wards of teaching hospitals affiliated to Ardabil University of Medical Sciences. On the hand, this study aimed to answer the following specific questions:

1. How is the status of cultural care components (preparation, attitude, awareness and competence)?
2. What is the relationship between cultural care and demographic variables?
3. What is the relationship between the components of cultural care (preparation, attitude, awareness and competence)?
4. How the cultural preparation, attitude, awareness and competence and demographic variables predict the cultural competence?

Methods

Design, sample and setting

This study was conducted in 2018 using a descriptive-correlational design. The desired sample size was estimated based on previous studies with considering error level (d) as 5% and the prevalence of the main variable as 50% in the study population.[13,19] Stratified random sampling was used to select 350 nurses working in teaching hospitals in Ardabil (Imam Khomeini, Dr. Fatemi, Boo'ali and Alavi hospitals) as the study subjects. The study inclusion criteria consisted of having a bachelor's degree or higher in nursing and

working as a nurse in the clinical settings of the hospitals.

Study Instrument

The tool used in the present study was a questionnaire containing a demographic part and the Persian version of Moulder's Cultural Care Inventory (PCCI).[19] The first part of the questionnaire included items on demographic characteristics such as gender, age, education and work history. The Cultural Care Inventory was initially designed by Moulder[13] as an adaptation from Campinha-Bacote,[12] Leininger & McFarland[22] and Purnell[23] and consists of 51 items in four subscales, including cultural preparation (19 items; score: 19–95), cultural attitude (9 items; score: 9–45), cultural awareness (11 items; score: 11–55) and cultural competence (12 items; score: 12–60). The items are based on a five-point Likert scale from 'strongly disagree' to 'strongly agree'. The 'strongly disagree' option receives the lowest score (one point) and the 'strongly agree' option the highest score (five points). This self-reporting questionnaire can be completed in approximately 15 minutes. This 51-item cultural care inventory has been translated into Persian in a previous study and its validity and reliability have been confirmed and its Cronbach's alpha has been reported as 0.86.[19]

In the study of Moulder[13] the Cronbach's alpha coefficient was 0.91 for the cultural preparation subscale, 0.76 for cultural attitude, 0.77 for cultural awareness and 0.77 for cultural competence. Additionally, in the current study, 10 faculty members familiar with cultural care assessed the content validity of the questionnaire. The Content Validity Index (CVI) and Content Validity Ratio (CVR) of the questionnaire were 0.94 and 0.89, respectively. Moreover, Cronbach's alpha coefficient was obtained as 0.94 for the cultural preparation subscale, 0.68 for cultural attitude, 0.88 for cultural awareness and 0.93 for cultural competence.

Data collection

After the approval of the research project, the researcher visited teaching hospitals affiliated to Ardabil University of Medical Sciences (Imam Khomeini, Dr. Fatemi, Alavi and Booali) and presented the hospital directors with any necessary permission and visited the various hospital wards and obtained a list of their nursing personnel. She then randomly selected the required number of nurses from different wards, and visited them according to their shift schedule. After briefing them on the study objectives, the researcher distributed printed questionnaires among the nurses to be completed and returned as per the schedule. The questionnaires were merely numbered and did not specify the subjects' identity (first and last name).

Data analysis

Statistical analysis was conducted using the SPSS version 22 (PASW Statistics for Windows,

Chicago: SPSS Inc.). Kolmogorov-Smirnov test was used to check the normality of the data, and if they were not normally distributed, non-parametric tests were used for assessing the association. Spearman's correlation test and the Chi-square test were used to determine the relationship between the quantitative and qualitative variables respectively. The logistic regression was used to predict cultural care. $\alpha < 0.05$ was taken as the level of statistical significance.

In Cultural Care Inventory, the total score of cultural care and its subscales is calculated as the sum of the scores divided by the number of items and the grand mean score is thus obtained, which is used to determine whether the status is acceptable or poor. A grand mean score >3 indicates the nurses' good status in that subscale and a grand mean score ≤ 3 indicates a poor status.[13]

Ethical considerations

The present study was assessed and approved by the research ethics committee of Ardabil University of Medical Sciences (Code: IR.ARUMS.REC.1396.241). The participants were fully informed about the study objectives and their questions were answered. To obtain the nurses' informed consent for participation in the study, they were first ensured that the details of the collected data would remain entirely confidential and have no effect on their evaluation.

Results

In this study, of the 350 participating nurses, 260 (74.30%) were female and 90 (25.70%) were male. Table 1 presents more information on the nurses' demographic characteristics

Research Question 1: How is the status of cultural care (preparation, attitude, awareness and competence) in nurses?

The assessment of the status of cultural care and its subscales showed that the mean score of the cultural preparation subscale (19 items) was 50.33 ± 14.79 with a grand mean score of 2.64, which is considered poor. The status was also deemed poor for cultural awareness and cultural competence. In contrast, the mean cultural attitude score was 31.04 ± 5.03 with a grand mean score of 3.45 which is considered acceptable or good (Table 2).

As formerly noted, the scores for cultural care and its subscales were divided into 'acceptable' and 'poor' statuses and calculated for each of the subscales.[13] Table 3 presents the status of the subscales of cultural care based on frequency and frequency percentage, in which except cultural attitude other dimensions had a poor status.

Research Question 2: What is the relationship between cultural care and demographic variables?

Comparing the male and female participants in terms of the cultural care and subscale scores showed no significant differences between the genders, except in terms of the cultural preparation subscale ($P = 0.03$). The Chi-square test showed a significant relationship between taking courses on cultural care and the status of cultural care, as those who had taken courses performed better in terms of cultural care ($P = 0.001$).

Research Question 3: What is the relationship between the components of cultural care (preparation, attitude, awareness and competence)?

Regarding the correlation between the various dimensions of cultural care (preparation, attitude, awareness and competence), Spearman's correlation coefficient test showed that cultural competence had a high correlation with cultural preparation ($r = 0.8$), attitude ($r = 0.62$) and awareness ($r = 0.87$). Table 4 presents the other correlations observed between the cultural care dimensions.

Research Question 4: How the cultural preparation, attitude, awareness and demographic variables predict the cultural competence?

The relationship of cultural preparation, attitude and awareness and the demographic variables with cultural competence was assessed using the logistic regression analysis, which showed that the nurses' cultural preparation and cultural awareness increased their odds of joining the ranks with a good cultural competence, as those with a good cultural preparation performed 3.92 times better in terms of cultural competence compared to those with unacceptable or poor cultural preparation. Table 5 presents further data on the relationship between cultural competence and the predictive variables.

Table 1. The absolute and relative frequency of the nurses' demographic characteristics.

Variable	Scale	Frequency	Percentage
Gender	Male	90	25.70
	Female	260	74.30
Education	Bachelor's degree	334	95.40
	Master's degree	16	4.60
Work experience (year)	<5	119	34.00
	5–9	89	25.40
	10–14	82	23.40
	>15	60	17.10
Ethnicity	Turk	324	92.60
	Fars	26	7.40
Ward	Intensive care	74	21.10
	General	276	78.90

Table 3. The frequency distribution of the cultural care dimensions based on the grand mean scores in the responders.

Stat. Cultural Care Dimension	Measuring Scale	Frequency	Percentage
Preparation	Poor	225	64.30
	Acceptable	125	35.70
Attitude	Poor	89	25.40
	Acceptable	261	74.60
Awareness	Poor	206	58.90
	Acceptable	144	41.10
Competence	Poor	231	66
	Acceptable	119	34

Table 2. The status of the dimensions of cultural care (cultural preparation, cultural attitude, cultural awareness and cultural competence) among the nurses.

Dimension/descriptive statistics	Preparation	Attitude	Awareness	Competence
Frequency	350	350	350	350
Mean	50.33	31.04	30.96	30.96
Median	51.00	32.00	32.00	33.00
Standard deviation	14.79	5.03	8.10	10.01
Minimum	19.00	15.00	11.00	12.00
Maximum	86.00	44.00	53.00	57.00
Range	67.00	29.00	42.00	45.00
Range of scores	19–95	9–45	11–55	12–60
Mean Grand	2.64	**3.45***	2.81	2.58
Scoring	1–5	1–5	1–5	1–5

*the only subscale with acceptable status

Table 4. The correlation matrix between preparation, attitude, awareness and competence among the participants.

	Preparation		Attitude		Awareness	
Dimension	r	P-Value	r	P-Value	r	P-Value
Attitude	0.54	<0.001	–	–		
Awareness	0.74	<0.001	0.70	<0.001	–	–
Competence	0.80	<0.001	0.62	<0.001	0.87	<0.001

*The correlation test was performed using grand scores.

Table 5. The prediction of cultural competence in relation to cultural preparation, attitude and awareness and demographic variables.

Variable	Variable status	Odds ratio Exp(B)	Confidence interval	Significance level
Preparation by the mean grand	3 and below (poor)	1	–	<0.001
	Above 3 (acceptable)	3.92	2.11–7.24	
Attitude by the mean grand	3 and below (poor)	1	–	0.16
	Above 3 (acceptable)	1.89	0.77–4.58	
Awareness by the mean grand	3 and below (poor)	1	–	<0.001
	Above 3 (acceptable)	8.75	4.56–16.77	
Hospital	Fatemi	1	–	0.002
	Imam	1.13	0.52–2.40	
	Alavi	1.67	0.67–4.17	
	Booali	4.72	1.96–11.50	
Familiarity with other religions	No	1	–	0.02
	Yes	2.15	1.08–4.22	

Discussion

The present study was conducted to investigate the status of cultural care and its dimensions (cultural preparation, attitude, awareness and competence) in nurses. The results showed that the status of cultural care or culturally congruent nursing care is overally poor. These results are largely different from those obtained by Bastami and et al.[19] In the present study, the status of the subscales was highest for cultural attitude, followed by cultural awareness, preparation and competence. In contrast, Bastami et al. found that nurses' cultural preparation was at an excellent level, cultural competence at an average level and cultural attitude of nurses at the poor level. Meanwhile, the present study showed that the attitude of nurses was at an acceptable level compared to the other dimensions of cultural care. The optimal status of cultural attitude is congruent with a study from Eche and Aronowitz[17] in which they reported a high average score of cultural desire among cultural care subscales.

A study by Goodman and et al.[24] in Iraq reported a lack of nurses' cultural awareness, which approves the finding in the present study. Kardong-Edgren et al.[25] showed that nurses' cultural attitude and competence were at an average level and their cultural awareness was moderate to high. Similarly, in the present study, nurses' cultural attitude was at good level and their cultural competence and awareness were poor. Moreover, a study conducted by McElroy et al.[18] to investigate cultural awareness in nurses showed that nurses had moderate to high cultural awareness but in the present study, nurses had poor cultural awareness.

Although there was no a regular in-service training program about cultural care in the hospitals where the study was conducted, the present study showed that nurses who had taken a course on cultural diversity also achieved significantly better cultural care scores. This finding concurs with the results obtained by Halabi and de Beer[20] who found that the cultural care level differs significantly between nursing students who have taken cultural educational courses about cultural care and those who have not. Therefore, continuous in-service education can lead to positive outcomes in cultural competency of nurses. As well, the results of a quasi-experimental study conducted by Bunjitpimol et al.[26] showed significant differences between the intervention and control groups in terms of cultural knowledge after the intervention and also revealed that continuous training courses are needed for cultural attitude, performance and competence. In the study conducted by Goodman et al. to investigate cultural awareness in Iraqi nurses, the results suggested that

nurses require training about cultural customs and values of patients[24]; in the present study, too, nurses' cultural awareness was poor and they require cultural care education.

In addition to the status of cultural care dimensions, the present study assessed the correlation between the dimensions of cultural care (preparation, attitude, awareness and competence) which showed a moderate to high correlation between them. The highest correlation was observed between cultural competence and awareness. Given the significant correlation between cultural competence and its prerequisites (i.e. cultural preparation, awareness and attitude), it can be inferred that nurses' cultural competence can be improved by promoting these prerequisites. Besides, Moulder[13] reported modest and significant correlations between cultural competence and other dimensions of cultural care.

Cultural competence was found to have a weak and negative relationship with age and work experience. The Chi-square test also showed a significant association between cultural competence and prior educational courses about cultural care ($P < 0.001$). The results obtained by Heitzler[16] on the relationship of cultural competence with age and educational courses in nurses agree with those of the present study, but disagree with regard to the relationship between cultural competence and job experience. Congruent with the current study, Moulder[13] found no significant relationship between age and the four dimensions of ethnocare in senior nursing students. According her findings, there was a positive association between clinical experience and cultural competence and awareness. But in congruence with our study, there was no significant relationship between years of experience and preparation of ethnocare or attitudes toward patient diversity.[13] These findings altogether suggest that work experience is not enough factor for improving cultural care competencies and nurses need adequate academic training, and retraining during career activities.

This study assessed the relationship of cultural preparation, attitude and awareness and demographic variables with cultural competence using the logistic regression analysis, which showed that nurses' cultural awareness and preparation increase their odds of joining the ranks with good cultural competence, as one unit of increase in cultural preparation increases the probability of showing a good cultural competence by 3.92 units, and one unit of increase in cultural awareness increases the probability of showing a good cultural competence by 8.750 units. According to Moulder's study, the strongest variables predicting cultural competence out of the three variables including cultural preparation, attitude and awareness were awareness about cultural care and cultural preparation, in respective order, and cultural attitude was not a significant predictor of cultural competence in their study.[13] In the present study, the logistic regression analysis showed that the strongest predictors of cultural competence were cultural awareness, preparation and ultimately attitude, in respective order, and these results agree with Moulder's findings. An interesting finding of the present study is that, although the nurses' cultural attitude score was higher than their scores in the other dimensions of cultural care, the regression analysis showed that cultural awareness and preparation are stronger predictors of cultural competence. It can therefore be argued that nurses' cultural competence does not improve by merely improving their cultural attitude, and it is rather required for nurses to improve their cultural care preparation and awareness through appropriate educational methods and leadership strategies.

This study was limited to nurses working in hospitals of Ardabil, a city located in north-west of Iran and therefore the findings may not be generalizable to all other provinces of Iran where people speak with other languages such as Persian, Kurdish, Arabic and etc. In Ardabil, the main language is Azerbaijani Turkic language with special cultural characteristics that may differ the subjects' cultural attitudes. Another limitation of this study was that some of nurses included in the study did not return the completed questionnaire, which may have resulted in validity threats. The study was conducted with bachelor degree nurses and finding may not be representative of all nurses such as nurses with associate degree, MSc and PhD degrees.

According to the findings of the current study, different kinds of recommendations are possible to improve the status of cultural competency among nurses working in the hospitals. Immediate interventions would be improving of cultural knowledge, cultural awareness, cultural attitude and cultural competence. These can become practical through clinical workshops, conferences, in-service continuing education and cross-cultural mentoring. Clinical tutors and faculty members are key and model persons for teaching cultural care. Employment of transculturally prepared faculty members in nursing schools can positively influence the status of cultural competence among future nurses. Moreover, special courses are needed for empowerment of faculty members in the schools and academic institutions. Faculty members should be familiar with fundamental concepts of transcultural care.

In health ministry of Iran, the integrated system for Iran Continuous Medical Education (IRCME) provides and certifies continuing education courses for medical professionals nationwide. Therefore, comprehensive cultural competence courses would be available

in this online system. There is no specific course content about cultural diversity in bachelor degree nursing curriculum of Iran, therefore integration of concepts of cultural diversity into nursing curriculum is essential. This can be integrated to community health nursing with a service-learning approach. Furthermore, nursing organizations such as the National Iranian Nursing Organization (INO), National Board of Nursing and schools of nursing should adopt and integrate the concept of cultural care to their mission, practice books and guidelines, quality assurances and other identical activities.

The future studies would focus on curricular change, barriers and facilitators of transcultural care, establishment of strategies for improving cultural care competence and exploring the cultural structure of Iranian population from viewpoint of cultural care and health.

In Iran, nursing schools and colleges use similar national curriculums for nursing degrees and there is no specific modules or course credits about cultural care, specifically in bachelor degree. Because, bachelor degree constitutes more than 95 percent of clinical nurses. Therefore, integration of transcultural nursing into undergraduate and post-graduate nursing curriculum is essential. This can be integrated as a specific course credit or into all parts of the curriculum.

Based on the findings in the present study, cultural care and its dimensions (with the exception of cultural attitude) were at a poor level. It can also be claimed that there is a direct and strong relationship between the dimensions of care including cultural preparation, awareness, attitude and competence, which indicates the dependence of these dimensions on each other. In other words, to improve nurses' culturally coordinated care, the cultural care and its process should be reinforced, namely cultural preparation, cultural awareness, cultural attitude and cultural competence. The acceptable cultural attitude can initiate be positive motivation to empower nurses through specialized cultural education. Given that the status of cultural care was more acceptable in nurses who had taken cultural care courses, improving nurses' performance in relation to patients from different cultures can be enhanced by effective learning methods.

This study and its findings are strongly relevant to patients' care quality and can improve the knowledge of coordinated and patient-centered care. In fact, the findings documented the status of an important aspect of care coordination and can lead the policy makers and nurse managers to prepare their organizations for providing culturally appropriated care. By translation of the findings to the patient care practice besides the similar evidences, positive consequences are possible; such as: decreasing of inequalities, facilitating access to appropriate care, satisfaction with care, improving nurse-patient communication, appropriate nurse allocation to patients, respecting patients' religious and etc.

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