ORIGINAL ARTICLE

Relationship between Spiritual Health and Clinical Competency of Nurses Working in Intensive Care Units

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Abstract

Background: Spiritual health is the newest dimension of health that lies alongside other aspects of health. Since few studies have been conducted on the various effects of spirituality on nurses' clinical competence, this study aimed to determine the relationship between spiritual health and clinical competency of nurses.

Methods: This study is a cross-sectional study. The samples consisted of 135 nurses working in intensive care units affiliated to Iran University of Medical Sciences. According to the number of nursing staff in each ward, the share of each ward was determined, and then nurses selected by random sampling. Data were collected using the Spiritual Well-Being questionnaire and the Critical Care Nursing Competence Scale. After referring to the wards, the questionnaires were compiled by the researchers, and finally, it was analyzed using the Pearson correlation coefficient test. The significance level was considered to be 5%.

Results: The mean age of nurses was 35±6.6 years, their mean clinical experience was 11±7 years and the mean of nurses' work experience was 6.95±5 years. The mean score of spiritual well-being was 79.29±4.33 (medium level), the mean score of clinical competence was 378.53±4.90 (excellent condition) and the mean score of professional competence was 310.95±3.14 (excellent condition). Correlation test results showed no significant statistical relationship between spiritual health and clinical competency dimensions (P>0.05).There was also no significant relationship between dimensions of spiritual health (existential health and religious health) and nurses' clinical competency (P>0.05).

Conclusion: Nurses in ICUs have a relatively high and acceptable level of spiritual health and clinical competence, but nurses' clinical competence is not directly related to their spiritual health.

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Introduction

One of the most critical problems currently present in clinical settings is the lack of clinical competence amid nurses, which can lead to problems in the provision of nursing services, which can endanger community health.[1] Competence is defined by the World Health Organization's definition of a level of performance that represents the application of knowledge, skills, and valid judgment.[2] Evaluation and improvement of clinical competence require new approaches based on the needs of the day nurses.

At present, it is necessary to evaluate the clinical competency of nurses in ways that aim to preserve, guarantee, and promote clinical competence.[3] Also,

in response to the rapid and unpredictable changes in clinical settings, especially in intensive care units, nurses need knowledge and a degree of competence to assist them in critical situations and clinical problems and new equipment.[4] Past studies provide useful information, but few studies have evaluated the clinical competency of intensive care nurses in Iran. The knowledge gap in this area is visible.

Nursing is primarily a clinical discipline, and in the field of nursing, less attention is paid to the spiritual health of the provider. Much of the research programs in this field have focused on clinical practice.[2] Nursing is a knowledge-based profession that utilizes science and art to meet the community's health and logistical care needs. Rapid changes in science and technology and lack of time to communicate with patients have led to increased nurses' concerns about the patient's spiritual and mental health, quality of care, and caregiver competence.[5]

Since spirituality has been introduced as the basis of human existence, its effect on human healing in recent years has received much attention, which has also been integrated in nursing studies so that interest in spirituality and presentation of spiritual care for patients and their training in nursing schools have been increasing.[6] The word spirituality is defined by Piedmont as the inner core of existence, which can comfort individuals, especially in stressful situations, and connect human to a superior force in this universe.[7] Spirituality is also interpreted as spiritual health.[8]

Spiritual health is the newest dimension of health that lies alongside other aspects of health.[9] Some even argue that without spiritual health, other aspects of health cannot achieve the maximum performance desired and that it is impossible to achieve a high level of quality of life.[10] There are few studies about the effects of spirituality on nurses' occupational performance and personal performance. Therefore, the primary purpose of this study was to determine the relationship between spiritual health and clinical competency of nurses.

Methods

This study is a cross-sectional study. The statistical population consisted of all nurses working in intensive care units affiliated to Iran University of Medical Sciences. Inclusion criteria included informed consent of the samples to participate in the study, have bachelor's degree in nursing, working in the intensive care unit, and working experience of at least two years. Nurses were selected by stratified random sampling. Thus, the share of each ward was determined and then selected by random sampling according to the sample size and the number of nursing staff in each ward.

Of 207 nurses working in intensive care units, 135 were estimated according to the Cochran formula with a 5% error rate and a 95% confidence interval. Data were collected using The Spiritual Well-Being (SWB) questionnaire[11] and the Critical Care Nursing Competence Scale (ICCN-CS-1).[12]

Spiritual health questionnaire is a standard questionnaire with 20 questions. In this questionnaire ten items measure "religious health," and the other ten items measure "existential health." The items were scored on a six-point Likert scale. Scores from one to six are respectively given "strongly disagree, disagree, moderately disagree, moderately agree, agree, and strongly agree". In this questionnaire, nine items were scored inversely. Existential health is endowed with a sense of purpose and satisfaction with life and religious health with the pleasure of being associated with a higher power or God. The overall spiritual health score is divided into three levels: high (100-120), medium (41-99), and low (20-40).

The ICCN-CS-1 questionnaire consists of two parts. The first part contains 80 questions assessing basic clinical competence in terms of nursing care principles (16 questions), clinical guidelines (16 questions), and nursing interventions (64 questions). The second section assesses 48 questions of professional competence in terms of ethical activity and familiarity with health care (16 questions), decision making (16 questions), job development (16 questions), and collaboration (16 questions). Each question is designed as a Likert, and its score range is 1 (Minimum Status) to 5 (Maximum Status). The total score of clinical qualification is from 80 to 400. Also, the overall score of a professional qualification is from 64 to 320. In basic clinical competence, the division score is as follows: poor status (80-160), moderate status (161-240), good status (241-320) and excellent status (321-400). In professional competence the division score is as follows: poor condition (64-128), moderate condition (129-192), good condition (193-256) and excellent condition (257-320). In total, its score range is from 144 to 720, where score from 144- 288 is poor clinical competence status, score from 289-432 is moderate clinical competence status, score from 433-576 is functional clinical competence status and score from 577-720 is excellent clinical competence status.

The Spiritual Health Questionnaire has been used, and its validity and reliability have been confirmed in the Iranian population.[13] To confirm the validity of the clinical competency questionnaire, the questionnaire was given to 10 expert faculty members, and their recommendations were implemented and approved after editing., A questionnaire was administered to 20 nurses in intensive care units and was re-administered after one week to evaluate its reliability. The correlation coefficient was 0.86.

Researchers in intensive care units gave each patient two questionnaires of clinical competence and spiritual health, and the samples did not mention their names for confidentiality. The data were analyzed statistically. Finally, after data entry into the SPSS version 25, the data were analyzed using the Pearson correlation coefficient test. The significance level was considered to be 5%.

Results

The study participants were 135 nurses. The mean age of nurses was 35±6.6 years, and the mean of work experience in ICU was 6.95±5 years. The status of participants' demographic variables, as well as the spiritual health status and clinical competence of participants, are summarized in Tables 1 and 2.

Correlation test results showed no significant statistical relationship between the spiritual health and clinical competency dimensions. There was also no significant relationship between aspects of spiritual health (existential health and religious health) and nurses' clinical competency (P>0.05) (Table 3).

Discussion

The findings of this study show that nurses in intensive care units have an acceptable level of spiritual health and clinical competency. Data analysis showed that there is no significant relationship between the two dimensions of existential health and religious health from the components of spiritual health with clinical competency and professional competence of nurses. In Hekmat Afshar's study, which was conducted in 2014 to investigate the relationship between spiritual health and job performance of nurses working in health centers in Golestan province, the results showed that by increasing the spiritual health score of nurses, their job performance score increased.

Nursing units were not separated in this study, and due to the convenience sampling method, some nurses did not participate in the study. The Paterson job performance scale is also a measure that does not measure all aspects of occupational and professional performance and is a general measurement.[13] The results of Hamid and Dehghanizadeh study in Ahwaz aimed at investigating the relationship between

Table 1: Demographic characteristics of nurses working in intensive care units

Variables		Frequency	Percent
Gender	Male	33	24.40
	Female	102	75.60
Marital status	Single	59	43.70
	Married	72	53.30
	Divorced and widowed	4	3
Educational level	Bachelor degree	121	89.60
	Master degree	14	10.40
Job history in ICU ward	5 years and less	72	53.30
	6-10 year	28	20.70
	11-15 year	26	19.30
	>15 years	9	6.70
Ward	Internal ICU	20	14.80
	Surgical ICU	52	38.50
	Neurological ICU	17	12.60
	Emergency ICU	10	7.40
	CCU	17	12.60
	PICU	19	14.10

Table 2: Descriptive statistics of spiritual health and clinical competency scores of nurses working in intensive care units

Variables	Potential range of scores	Calculated range	Mean±SD
Religious health	10-60	32-48	41.62±2.84
Existential Health	10-60	31-44	37.66±2.99
Spiritual health (total score)	20-120	67-89	79.29±4.32
Clinical competence	80-400	363-391	378.53±4.90
Professional competence	64-320	303-317	310.95±3.14

Table 3: Correlation between dimensions of spiritual health, clinical and professional competence

Variables	Clinical competence			Professional competence		
	Number	Correlation coefficient	P value	Number	Correlation coefficient	P value
Existential Health	135	0.060	0.468	135	-0.045	0.600
Religious health	135	-0.128	0.139	135	-0.052	.0550
Spiritual health (total score)	135	0.045	0.607	135	0.045	0.605

spirituality, public health, and job performance of nurses showed that spirituality was positively related to job performance, and it was a more reliable predictor for nurses' job performance.[14]

Perhaps the reason for this difference in results is the use of the Spirituality and Spiritual Care Rating Scale designed by McSherry, Draper, and Kendrick,[15] since it measures spirituality solely as religious beliefs, and does not address different aspects of one's spirituality. Assarroudi et al. also investigated the relationship between spiritual health and quality of life in nurses working in Shahid Hashemi Nejad Hospital in Mashhad. Their results showed that the mean scores of religious, existential, and spiritual health, in general, were not significantly different between males and females. Spiritual health and quality of life in nurses were in the moderate range, and a high level of spiritual health was related to a better quality of life in different aspects of these nurses.[9]

The mean of spiritual health in nurses working in intensive care units showed that spiritual health in nurses working in intensive care units affiliated to Iran University of Medical Sciences was higher than average. Spiritual health generally assesses the core philosophy of life as having a purpose and meaning in life, love, and forgiveness. Spiritual health consists of two parts: existential health and religious health. The results of this study showed that the mean score of religious health nurses in ICU was higher than their average existential health score.

Religious health is one of the dimensions of spiritual well-being and refers to the satisfaction of being associated with a higher power or God. The existential health is our relationship with others, our environment, and our interconnectedness, which can be seen as the ability to integrate different dimensions of existence and make different choices.[11] Also, according to the findings of this study, the level of clinical competence in nurses working in intensive care units is above average.

Dimensions of clinical competence include skills such as: analyzing the patient's health status in different ways, being able to determine the needs of the patient and his or her family to provide emotional and spiritual support, prioritizing specialized assistance to the patient in emergencies, being able to collaborate with other members, the team's treatment, guidance and staff direction on correct patient observation skills, leadership and direction on the use of diagnostic tools, improvement of patient status reporting. These skills are best expected from the nurse in intensive care units.

Fear of answering questions and their consequences, individual judgments in completing questionnaires, the amount of commitment and accountability in the workplace, the atmosphere, and the organizational culture impress nurses' perceptions of clinical competence and spiritual health. To solve these problems, the researchers attempted to nurture nurses to collaborate by giving explanations about the research. The researchers also assured nurses that the results of the study would be published without mentioning the nurses' names, and all of the individuals' characteristics would be kept confidential at all stages of the research.

Patients' mental and psychological conditions were the limitations of this study, which was beyond the control of the researchers. Personal, family, and social characteristics of nurses influence their response, which makes data generalization difficult in other situations. Therefore, future studies on spiritual health and its relevance to clinical competence in other parts of hospitals and different cities need to be explored.

Conclusion

According to the results of this study, nurses in ICUs have a relatively high and acceptable level of spiritual health and clinical competence. Still, nurses' clinical competence is not directly related to their spiritual health.

Conflict of Interest: None declared.

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