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A study of the state of spiritual health and its relation to self-efficacy of nurses

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ABSTRACT

Introduction and Objective: Spiritual health is an important and prominent aspect of a healthy life that transforms people's lives from material life to spiritual life. According to the importance of spiritual health and its influencing factors, this study aimed to investigate the state of spiritual health and its relation to self-efficacy of nurses. *Methods:* This study is a descriptive-analytical study. Using multi-stage random sampling, 400 nurses were enrolled from public hospitals of Urmia. Spiritual health was assessed using Palutzian-Elison spiritual well-being questionnaire and self-efficacy questionnaire was assessed by using Scherer general self-efficacy questionnaire. Data were analyzed by using SPSS 20 statistical software. Statistics and statistical methods of variance analysis and regression analysis were used to analyze the data. *Results:* the results of this study showed that the intellectual health score of 55.4 % nurses were moderate and 44.6% of them had high spiritual health score. Spiritual health was significantly correlated with gender, age, and economic status. Also, the results showed that there is a significant relationship between spiritual health and mental health ($r=0.76$). Regression results showed that spiritual health ($p <0.001$) was significantly able to explain 0.64 variance of nurses self-efficacy. *Conclusion:* The results of this study support the importance of spiritual health in predicting the self-efficacy of nurses. Therefore, it seems that the promotion of spiritual health in nurses can lead to an increase in self-efficacy of nurses to make recommendations for improving health and preventing illnesses in hospitalized patients.

Keywords: Spiritual Health, Self-efficacy, Nurses

1. INTRODUCTION

The importance of spirituality and spiritual development in human beings has increasingly and attracted the attention of psychologists and mental health professionals over the past few decades. As the World Health Organization (WHO) refers to the physical, psychological, social and spiritual dimensions of human existence, the fourth dimension, namely the dimension of spirituality is presented in human development and evolution, (Organization 2005, Mohammadi, Pazhoohnia et al., 2018). Alongside other aspects of health (Zareipour, Abdolkarimi et al., 2016) spiritual health is an important aspect of a healthy life that transforms people's lives from material life to spiritual life. (Zareipour, Rezaee Moradali et al., 2017). Spiritual health determines one's integrity and integrity and it is the only force that provides the necessary coordination among the physical, mental and social dimensions (Rahimi, Nouhi et al., 2014). In fact, spiritual health is one of two dimensions of one's spiritual experience: the religious health dimension, which is related to how one perceives one's health in the spiritual life and the other is the existential dimension that focuses on one's social and psychological concerns. Existential health discusses in relation to how individuals adapt to themselves, society, or the environment (Zareipour, Abdolkarimi et al., 2016; Rahdar et al. 2018). Despite numerous studies showing the impact of spirituality on health promotion and adopting healthy behaviors, the exact mechanism of spiritual health impact on adopting healthy behaviors and reducing stress is not known. However, self-efficacy is influenced by individuals (Konopack and McAuley 2012). Self-efficacy emphasizes one's understanding of one's skills and abilities in successful performance accomplishment.

This concept overshadows the level of effort and level of performance of the individual as an agent (Mohammadi, Pazhoohnia et al., 2018). Self-efficacy is the most important prerequisite for behavior in stressful situations of life. Bandura, a renowned psychologist in social learning theory, has defined self-efficacy as the belief and confidence of a person to perform a particular behavior (Konopack and McAuley, 2012). Self-efficacy is the reassurance that one feels about a particular activity and thus it can enable one to adopt health-promoting behaviors and quit harmful health behaviors, thereby it cause to maintain and promote the effective health behaviors. Self-efficacy, on the other hand, influences individuals' motivation and helps the individual to attempt and implement recommended behaviors (Mehrabi, 2014). Many studies have shown that spirituality can improve the strength of coping and play an important role in physical and mental health (Najarkolaei, Haghighi et al., 2015). McCauley and colleagues have found that spirituality is a common way of coping with psychological problems and plays an effective role in the physical and mental health of individuals (McCauley, Tarpley et al., 2008). In a study, Hsiao showed that students' spiritual well-being was moderate and was related to their mental health (Hsiao, Chiang et al., 2010). Mitchell et al. have shown that midwifery students are interested in learning about spirituality and that spiritual well-being and its promoting is one of the major issues of women's care, especially during childbirth (Mitchell and Hall, 2007).

As nurses are the largest provider of health services in all countries and the quality of their services is directly related to the effectiveness of health - therapeutic system. Due to nursing profession's nature, it is always associated with more tension than other occupations. Factors such as death, disease, high demand in the workplace, high work pressure, lack of awareness, lack of support,

and conflicts are the causes of tension and because of the importance of a holistic nursing perspective and the importance of the spiritual dimension and how it affects other aspects of human existence, nurses have to acquire knowledge and essential skills in this regard.

Therefore, considering the importance of spiritual health in nurses and its effects on patients' health, this study examined the spiritual health of nurses. On the other hand, most studies on spiritual health have explored the possible ways in which spiritual health promotes a sense of health and well-being. It was evaluated and analyzed in order to improve mental health and adopt effective behaviors on physical and mental health of nurses.

2. MATERIALS AND METHODS

This is a descriptive-analytical study and the study population includes the hospitals affiliated to Medical Sciences University of Urmia. Multi-stage random sampling method was proportional to the size of staff, which was performed by referring to hospitals of Medical Sciences University of Urmia. Samples were randomly selected from selected hospitals (2 hospitals from north of the province, 2 hospitals from south of the province, 2 hospitals from Urmia) and were invited to interview and complete the questionnaire. According to the studies (Adegbola 2007, Zareipour, Abdolkarimi et al., 2016) and with $\alpha = .05$, d=.04, P = .3, the sample size was 400 persons.

Spiritual well-being was assessed using the Paulottsin & Ellison Spiritual Health Questionnaire (1982). The 10 questions were related to religious health and the other 10 questions were measured one's existential health which the score of religious health was the sum of the score of the two subgroups which its range is between 120 - 120 . Answering the questions was categorized by six-level Likert item from strongly disagrees to strongly disagree.

In the negative questions, the scoring was reversed and at the end, spiritual well-being was divided into three levels of 20-40 low, 40-99, average, and 99-120 high, respectively. This questionnaire has been used in the studies of Farahani Niya (2005) and Mostafa Zadeh (1391) in Iran and its validity and reliability have been confirmed (Sherer, Maddux et al., 1982, Farahaninia, Abbasi et al., 2005).

In the study of Seyyed Fatemi et al., the validity of the spiritual health questionnaire was determined through content validity and its validity and reliability was determined through Cronbach's alpha 0.82 coefficients (Fatemi, Rezaei et al., 2006). The Scherer General Efficacy Scale was used to evaluate efficacy (Sherer, Maddux et al., 1982). This scale consists of four questions, which each of them is based on a Likert scale from a strongly disagree to strongly agree. Scale scoring is given from 1 to 5 points per item. Questions 1 , 3 , 8 , 9 , 13 and 15 are scored from right to left, and the rest of the questions are scored in reverse, i.e from left to right. Therefore, the maximum score which a person can obtain from this scale is 85 and minimum score is 17. This scale has been translated and validated by Barati (1996). In the study of Saffari et al., the validity and reliability of this test were obtained using internal consistency assessment method and test-retest, and Cronbach's alpha was 0.83 (Fatemi, Rezaei et al., 2006). Questionnaires were completed as a report after explaining the objectives of the research and the samples' consent and with the help of a questionnaire. The data were introduced into SPSS 20 software and analyzed by descriptive statistics, ANOVA and regression. Ethical considerations of the study participants were the satisfied and assured of the confidentiality of the study participants.

Ethical considerations

Data were collected after expressing the objectives of the research and obtaining informed consent from the participants. The questionnaires were anonymized and information was confidential.

3. RESULTS

Results showed that the mean age of nurses was 63.7 ± 32.33. In terms of gender, 67 (16%) were male and 352 (84%) were female. Also, the highest age group was related to the age group which were less than 30 (45.1%). Most of the married people were 312 (74.5%) individuals and 276 individuals (65.9%) had average economic status (Chart 1). The relationship between demographic variables and spiritual health was assessed using one-way ANOVA. The results showed that there was a significant statistical relationship between spiritual health and age, gender and economic status ($p < 0.05$). The mean score of spiritual well-being was higher in old female nurses with good economic status than others (Table 1).

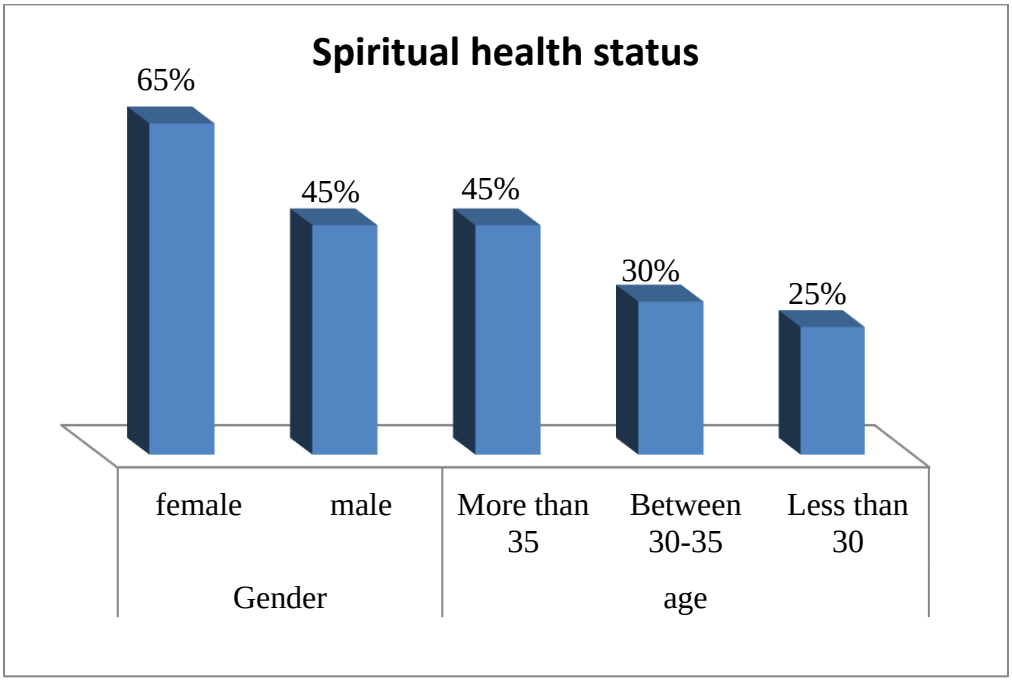

Chart 1 Comparison of Spiritual Health Status by Gender and Age

Table 1 Demographic Characteristics of Nurses of the Study and its Relationship with Spiritual Health

demographic information		Abundance	Percentage	Average	The probability value
age	Less than 30	189	45.1	91.17±15.47	0.04
	30-35	146	20	89.14±14.18	
	More than 35	180	34.9	97.78±16.41	
Gender	male	67	16	89.91±12.11	0.01
	female	352	84	95.18±16.17	
marital status	single	100	23.9	91.23±15.86	0.21
	married	312	74.5	93.64±17.1	
	divorced	7	1.7	88.06±17.54	
Type of employment	conventional	132	31.5	91.63±15.56	0.14
	contractual	67	16	95.32±15.72	
	Official	107	25.5	91.91±16.39	
	projective	113	27	89.43±15/47	
time of work	Fixed	91	621.6	93.17±16.49	0.17
	Variable	328	78.4	88.13±15.17	
The economic situation	good	44	510.5	96.71±17.41	0.02
	average	276	65.9	90.91±14.71	
	weak	99	23.6	89.08±18.16	

The results of this study showed that the mean score of nurses' spiritual health was 95.32 ± 14.98 out of 120. 55.4% of the nurses had moderate spiritual health and 44.6% had high spiritual health. Low spiritual health was found in any of the samples (Chart 2). The results of the investigating the spiritual health dimensions showed that the mean score of religious health 7.91 ± 48.65 was higher than the mean existential health score 8.01 ± 46.7. The mean score of self-efficacy in nurses was 8.21 ± 62.15 and the observed practice scores was in the range of 31-85 (table 2).

Table 2 Mean deviation of spiritual health scores and self-efficacy of the study subjects

Dimensions and total variables	Mean and standard deviation	domain
Religious health	7.91 ±48.65	60-10
Existential Health	8.01 ±46.7	60-18
mental health	14.98 ±95.32	120-28
Efficacy	8.21 ±62.15	85-31

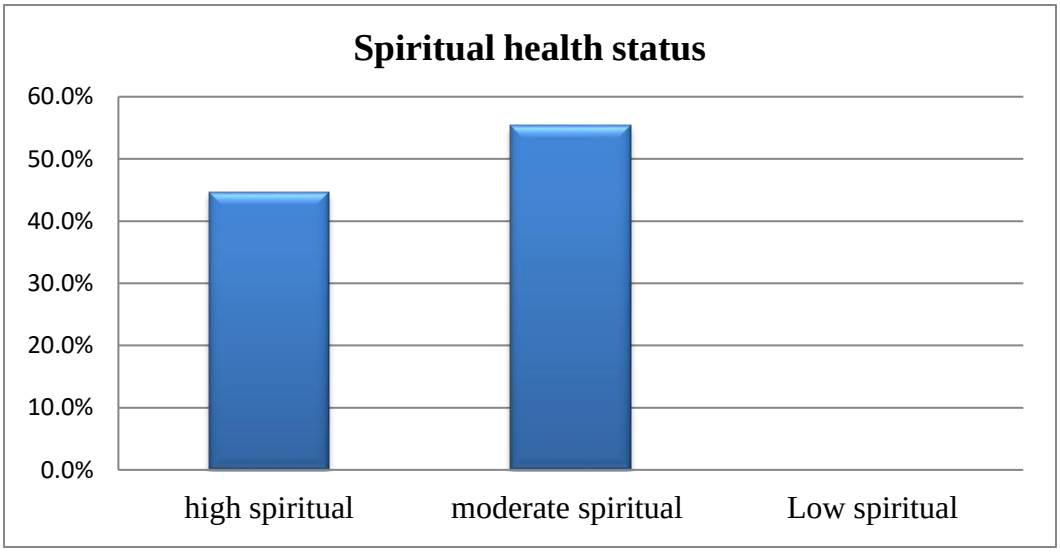

Chart 2 Nurses' spiritual health status chart

The results of regression test showed that spiritual health and its components predicted significantly the nurses' self-efficacy. Increasing the spiritual health predicted 64 % of the variance of self-efficacy of nurses .Beta indicates the relative importance of the independent variables in predicting the dependent variable. Accordingly, existential health score has the highest impact on increasing self-efficacy of nurses. The correlation coefficient in this study showed that there is a relatively strong and significant relation between spiritual spiritual health and self-efficacy score (Table 3).

Table 3 Regression analysis indices to predict self-efficacy in nurses

Independent variables	p	t	Beta	F	r^2 The coefficient of determination	r The correlation coefficient
mental health	p<0.001	17.10	0.776	334.3	0.641	0.768
Existential Health	p<0.001	17.19	0.782	344.7	0.648	0.773
Religious health	p<0.001	14.38	.0681	191.8	0.462	0.681

4. DISCUSSION

In the present study, spiritual health's of the most nurses are in the moderate range (55.4%). In the study of Zareipour et al. (Zareipour, Rezaee Moradali et al., 2017), on Spiritual health of nurses and midwives, none of them were in poor range and many nurses and midwives were in moderate range and which is consistent with the results of this study. And in the study of Hsiao et al. (Hsiao, Chiang et al., 2010), they announced moderate range to their spiritual health which was on the determination of the mental health levels of students.

Also in the study Asarrodi et al. (Asarrodi, 2011) it is stated that students' spiritual health was in good level which is in line with the results of the present study. Nurses, as a professional group, should accompany the patient during the patient's stay in the

hospital, so high spiritual health can lead to increase the general health by promoting nursing and meeting spiritual needs in addition to promote intellectual health .

In the present study, there was a significant relation between spiritual health and gender as the spiritual health score was higher in women than men. This was consistent with the results of the study of Fernsler et al. (Fernsler, Klemm et al., 1999). Who showed that spiritual health was higher in females; perhaps the reason that spiritual health is higher in females is linked to the different roles and characteristics of women and their greater consistency with spiritual principles. However, the results of the study by Zareipour, et al. indicate that spiritual health was higher in men (Zareipour, Mahmoodi et al., 2016).

The results of the present study indicate that there is a relationship between spiritual health and age. Various studies have also shown that the effects on spiritual health are increasing with age (Hsiao, Chiang et al., 2010; Asarrodi, 2011; Wu and Lin, 2011). Other finding of the present study is that, there was a significant relationship between variables of economic status with nurses' spiritual health. Nurses who were in good economic condition had higher levels of spiritual health. This finding is in line with a study by Lynch (Lynch, Hernandez-Tejada et al., 2012), Habibi et al. (Habibi, Nikpour et al., 2006) who found that spiritual health had a significant relation with financial income status. The results of this study showed that there was a positive and significant correlation between spiritual health and its components (existential and religious health) with self-efficacy. There was also a significant positive correlation between spirituality and self-efficacy in researches such as Takeda and Kara et al. (Takeda, Futoyu et al., 2009). In addition, our study showed that spiritual health can predict self-efficacy.

In this study spiritual health and its dimensions were able to predict self-efficacy and existential health had the highest effect on nurses' self-efficacy prediction. Zareipour et al. (Zareipour, Abdolkarimi et al., 2016) showed that there is a significant relationship between spiritual health and self-efficacy of pregnant women. Thus, spiritual health is significantly able to explain the self-efficacy of pregnant women. In the study of Siddes, existential health had the greatest impact, and the religious health had failed to predict the self - efficacy. Adegbola also found that self-efficacy had a positive relationship with spirituality (Adegbola, 2011), and the study of Reicks et al. showed that spiritual practices such as praying can enhance self-efficacy and set goals (Reicks, Mills et al., 2004).

However, several studies have focused on the impact of spiritual health on overall outcomes such as quality of life or disability. But few studies have examined the impact of spiritual health on self-efficacy, which is one of the effective factors in controlling life in stressful situations. However, there is some evidence to support the role of self-efficacy as a mediating factor between spiritual health and outcomes such as enhancing quality of life. The study of Konopack et al. (Konopack and McAuley, 2012) showed that spiritual health can cause a shift in health-related behaviors such as physical activity in the elderly through impact on self-efficacy. In addition, numerous studies have shown that spirituality and religious beliefs are as factors in effective coping with stressful events and stress reduction (Romero, Friedman et al., 2006). According to Bandura's theory, stress is one of the affecting on self-efficacy factors (Bandura, 1977). Of the limitations of this study, of course, may be referred to the the lack of consideration of factors that may re-emerge themselves as the interface between spiritual health and self-efficacy, such as stress and adjustment. However, this study revealed the relationship between the spiritual dimension of health and self-efficacy as one of the influencing factors on the performance of pregnant women.

5. CONCLUSION

The results of this study showed that the majority of nurses had moderate spiritual health and on the other hand, spiritual health and its dimensions were able to predict self-efficacy as a known factor for behavior. Therefore, it seems that examining spiritual health and implementing programs to enhance its dimensions can enhance the self-efficacy and motivate individuals to implement health promoting behaviors in this sensitive group.

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Ethical approval

The ethical code of the study in ethics committee is: 1863

Availability of data and materials

All raw data will be available on the editor request.

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Conflict of interest

No conflicts have been reported by the authors.

Authors' contributions

The authors proclaim that this work was done by the authors named in this article and all responsibilities concerning to claims relating to the content of this article will be borne by them.

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