



Investigating the Spiritual Well-Being of Employee Nurses in the Hospitals of Birjand University of Medical Sciences in 2022

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Abstract

Background: In recent decades, spiritual well-being has gained fundamental importance in many healthcare environments. Spiritual well-being is important information about healthcare needs, allowing people to deal with mental stress.

Objectives: The present study aimed to determine the spiritual well-being of nurses working in Birjand University of Medical Sciences hospitals in 2022.

Methods: In this cross-sectional study, 354 nurses working in the hospitals of the University of Medical Sciences in Birjand City in 2022 were selected by proportional stratified random sampling, and they completed the questionnaire related to demographic information and the standard questionnaire of spiritual well-being. Data were analyzed by SPSS v26 software and ANOVA with Tukey's post hoc test, Pearson correlation, and chi-square at 0.05 significant level.

Results: The mean age of the nurses participating was 35.76 ± 7.29 years, and the mean total score of nurses' spiritual well-being was 180.55 ± 16.95 . Most of the people in the field of communication with God (78.5%), self (58.8%), others (75.1%), and nature (78.5%), and the total score (52%) were in the medium level of spiritual well-being. There was a significant direct correlation between all dimensions of spiritual well-being ($P < 0.001$). Also, there was a statistically significant relationship between the mean score of spiritual well-being and age, employment status, and workplace hospital ($z_{age} = 7.76$; $z_{employment} = 18.95$; $z_{workplace} = 18.62$; $P < 0.05$).

Conclusions: Considering that the nurses were medium in terms of spirituality and spiritual well-being, it is suggested to hold educational workshops to improve the level of spiritual well-being of nurses.

Keywords: Spiritual Well-Being, Nurse, Relationship, Spirituality

1. Background

The World Health Organization has defined health from four aspects, including physical, mental, social, and spiritual well-being. It has emphasized paying attention to the opinions and beliefs of patients in healing and the communication of professionals with patients (1). Spiritual health is the newest aspect of health and has been placed next to other dimensions of health, such as physical, mental, and social (2). Proponents of the role of spirituality in improving mental health and interpersonal compatibility have made several efforts to establish a relationship between the concepts of health

and spirituality under the title of the spiritual well-being construct (3-5). Spirituality is a mental, personal, and dependent concept that includes the immaterial aspects of man and is achieved through the relationship of man with God, self, others, and the environment. Spiritual well-being is one of the dimensions and sub-concepts of personal spirituality, which includes such components as a sense of peace and harmony in the relationship with God, self, society, and the environment, as well as a sense of vitality, purposefulness, and happiness in life (6). Spirituality is an essential part of health and wellness. In the last decade, some medical team

workers, psychologists, nurses, and sociologists found that spirituality can significantly affect various aspects of medical care (7). Spiritual well-being can be defined as a sense of relationship with others, meaning and purpose in life, and having a belief and relationship with a supreme power. According to Moberg and Brusek, spiritual well-being is a multidimensional structure that includes both vertical and horizontal dimensions, referring to the relationship with God, a sense of purposefulness in life, and satisfaction with disregarding a particular religion (1).

Nurses' spiritual well-being and attitude towards spirituality can affect nursing care quality. In addition, spirituality and spiritual well-being provide important information about healthcare needs, people's ability to cope with stress, and interventions needed to adapt and cope with caregiving crises (8). Healthcare workers, especially nurses, are exposed to such crises, and paying more attention to spirituality and factors affecting spiritual care in nursing increases the chances of improving healthcare quality in medical centers. Dealing with spiritual well-being is essential to comprehensive nursing care, and most nursing models emphasize its importance. In addition to nursing care skills, competence and skill acquisition in spiritual care are also necessary (9). In recent decades, spiritual well-being has become of fundamental importance in many healthcare environments, and researchers have investigated its effects on health (10).

2. Objectives

Since no study has been conducted to investigate the spiritual well-being of nurses in Birjand City, the current study was conducted to determine the spiritual well-being of nurses working in the Birjand University of Medical Sciences hospitals in 2022.

3. Methods

3.1. Design Study

This descriptive-analytical study was conducted on 354 employee nurses in Birjand University of Medical Sciences hospitals in 2022. The sample size in this study was determined using Najarkolaei et al. (11) and the sample size estimation equation for the mean (Equation 1).

$$n = \frac{Z_{1-\frac{\alpha}{2}}^2 \times s^2}{d^2} \quad (1)$$

The stratified sampling method was conducted according to the number of subjects. This way, governmental hospitals include four hospitals considered

stratifications ($n_{\text{valiasr}} = 120$; $n_{\text{razi}} = 116$; $n_{\text{emamreza}} = 104$; $n_{\text{iranmehr}} = 14$). Inclusion criteria included informed consent, willingness to participate in the study, and employment in one of the hospitals affiliated with the University of Medical Sciences in Birjand City. The subjects who didn't answer all the questions of the questionnaire were excluded from the study.

3.2. Data Collection

The data collection tool was a two-part questionnaire, the first part of which was demographic information (i.e., age, education level, marital status, work experience, employment status, workplace hospital, and the number of children), and the second part was the spiritual well-being questionnaire developed, designed and validated by Dehshiri et al. (12). This questionnaire included 40 questions in 4 dimensions including the relationship with God (10 questions), relationship with self (10 questions), relationship with nature (10 questions) and relationship with others (10 questions) with a 5-point Likert scale from completely agree to disagree. The score of each question was from 1 to 5. The Cronbach's alpha coefficient of the whole questionnaire was 0.94, and the alpha coefficients of the subscales were found to be 0.91, 0.92, 0.93, and 0.85, respectively. Also, the retest reliability coefficient of the whole questionnaire was 0.86, and its subscales were found to be 0.81, 0.89, 0.81, and 0.80, respectively. The convergent and divergent validity of the questionnaire was acceptable.

3.3. Data Analysis

Data were analyzed in IBM SPSS Statistics software ver. 26. Mean and standard deviation were used to describe quantitative variables, and number and percentage were used to describe qualitative variables. A comparison of the mean score of spiritual well-being according to demographic variables was made using a one-way analysis of variance and Tukey's post-hoc test. In addition, Pearson's correlation coefficient was used to examine the relationship between dimensions of spiritual well-being. In all cases, a significance level of 0.05 was considered.

3.4. Ethical Consideration

This study was carried out after approval and obtaining permission from the Research Vice-Chancellor of Birjand University of Medical Sciences under the code of ethics [IR.BUMS.REC.1401.373](#) complying with the standards of research ethics in all stages. The researcher kept all information confidential, and participation in the study was voluntary.

4. Results

In this study, the average age of the subjects was 35.76 ± 7.29 years old. Most of the participants had a BSc degree (286 (80.8%)), were married (282 (79.7%)), and had 5 to 10 years of work experience (143 (40.4%)). Most of them were official employees and had one child. The distribution of other variables is presented in [Table 1](#). There was a statistically significant difference in the spiritual well-being score between age groups ($P = 0.02$). Post-hoc tests showed that participants aged 30 - 39 had a statistically significantly higher well-being score than those younger than 30 (P -value = 0.02). The score of spiritual well-being between different employment groups also showed a statistically significant difference ($P = 0.001$), and the post-hoc test showed that the score of spiritual well-being in the group employed in a plan is significantly lower than that of corporate, contractual, and official employees. Also, there was a statistically significant relationship between the spiritual well-being score and the workplace hospital ($z = 18.62$; $P = 0.001$), so the mean spiritual well-being score of the nurses working in Valiasr Hospital is significantly lower than other hospitals. However, there was no statistically significant difference in the mean score of spiritual well-being in different educational groups, marriage status, work experience, and number of children ($P > 0.05$) ([Table 1](#)).

As can be seen in [Table 2](#), the average score of nurses' spiritual well-being was 180.55 ± 16.95 . There was a significant linear correlation between all dimensions of spiritual well-being with each other ($P < 0.001$). In order to categorize and analyze the score of spiritual well-being dimensions and the total score, first, the quartiles for each were calculated and categorized as follows: (1) the scores below the first quartile in the poor group, (2) those between the first and third quartile in the average group and, (3) those above the third quartile in the good group. Then, using the chi-square test, the proportion of people in the three mentioned groups in each dimension and the total score were compared. As can be seen in [Table 3](#), most of the people were at the average level in the field of relationship with God (78.5%), self (58.8%), others (75.1%), and nature (78.5%), as well as the total score (52%) of spiritual well-being ($P < 0.001$).

5. Discussion

Since spiritual well-being is of fundamental importance in healthcare environments, the present study was conducted to determine the spiritual well-being of nurses working in hospitals affiliated with Birjand University of Medical Sciences in 2022.

The results of the present study showed a significant relation between age and spiritual well-being, so younger nurses had lower spiritual well-being, which was consistent with Zare and Jahandideh (8). Other studies also showed that higher levels of spiritual well-being were associated with increasing age (11, 13, 14).

The study's findings indicated a statistically significant relationship between spiritual well-being, employment status, and workplace hospital. Also, in another study, there was a significant relationship between workplace and spiritual well-being, which aligns with the present study (14).

In the present study, no significant relationship was found between education and nurses' spiritual well-being, consistent with Najarkolaei et al. (11). However, Kim and Yeom. (14), those with a higher education level had better spiritual well-being.

The study found no significant relationship between spiritual health and nurses' marriage status, contrary to other studies (11, 14). In previous studies, it was observed that married people had higher spiritual well-being than single ones. One of the factors is that family restrictions generally overlap and converge with the religious restrictions that define by humans. Also, some biological needs are answered in the family environment for married people, and therefore they do not see spirituality versus their needs (11).

In Taghizadeganzadeh et al. (13), work experience had no significant relationship with spiritual well-being, consistent with the present study. However, some studies showed that work experience was effective on spiritual well-being, and the more experience nurses have, the higher their spiritual well-being, which is contrary to the present study (8, 11, 14). In a situation where it is expected that nurses' spiritual well-being will increase with the increase in clinical records, the findings of this research showed different results that require more investigations to identify the professional obstacles that threaten the spiritual well-being of nurses with increasing years of service.

In previous similar studies, the spiritual well-being of the studied subjects was average, consistent with the current study (2, 15-19). In Rahimi et al. (20), the mean score of students' spiritual health is 93.01 ± 13.78 , which is in the average range and is in line with the present study. Also, in the study by Tavan et al. (21), 83% of nurses score an average level of spiritual well-being, consistent with the present study.

In Zare and Jahandideh (8) and Rafiei et al. (22), nurses' spiritual well-being score was average. Therefore, the studies have not reported low spiritual well-being scores, indicating that nurses have favorable spiritual well-being.

Table 1. Descriptive Statistics and the Relationship Between Spiritual Well-Being and Demographic Variables of the Studied Nurses (N = 354)

Variables	No. (%)	Q ₂ (Q ₁ - Q ₃)	Kruskalwallis Test Statistic (P-Value)	Post Hoc
Age			7.76 (0.02 ^a)	(1) & (2), P = 0.02
Younger than 30 (y), (1)	83 (23.4)	177 (165 - 194)		
30 - 39 (y), (2)	157 (44.4)	187 (170 - 198)		
≥ 40 (y), (3)	114 (32.2)	182 (169 - 194.25)		
Educational level			7.56 (0.06)	
Diploma	19 (5.4)	169 (160 - 199)		
Associate degree	24 (6.8)	194.5 (168.75 - 199.5)		
Bachelor of science	286 (80.8)	182 (169 - 195.25)		
Master and PhD	25 (7.1)	190 (173 - 199.5)		
Marriage status			0.18 (0.91)	
Married	282 (79.7)	183 (189 - 196)		
Single	63 (17.8)	179 (167 - 199)		
Divorced & widow	9 (2.5)	173 (168.5 - 195)		
Work experience			2.01 (0.37)	
Less than 5 (y)	82 (23.2)	184.5 (167 - 199)		
5 - 10 (y)	143 (40.4)	185 (169 - 195)		
< 10 (y)	129 (36.4)	180 (168.5 - 193)		
Employment status			18.95 (0.001 ^a)	(1) & (5) P = 0.002; (3) & (5) P = 0.023; (4) & (5) P = 0.035
Official (1)	213 (60.2)	187 (171.5 - 198)		
Contractual (2)	53 (15)	178 (169 - 190)		
Based on the agreement (3)	41 (11.6)	183 (170.5 - 195)		
Corporate (4)	39 (11)	179 (160 - 200)		
Based on the plan (5)	8 (2.3)	164 (152.25 - 165.75)		
Workplace hospital			18.62 (0.001 ^a)	(1) & (2) P = 0.004; (1) & (3) P ≤ 0.001
Valiasr (1)	117 (33.1)	178 (164.5 - 189.5)		
Imam Reza (2)	116 (32.8)	187.5 (172.5 - 198.75)		
Razi (3)	116 (32.8)	185 (169 - 199)		
Iranmehr (4)	5 (1.4)	184 (171 - 193)		
Number of children			3.72 (0.29)	
No child	99 (28)	187 (165 - 199)		
1	115 (32.5)	185 (173 - 196)		
2	93 (26.3)	178 (196 - 194)		
≥ 3	47 (13.3)	179 (169 - 190)		

^a P < 0.05 is significant.

In Dehshiri et al. (12), the mean score of such dimensions as relationship with God, self, nature, and others was in the average range, consistent with the present study.

5.1. Conclusions

The findings showed that nurses' spirituality and spiritual well-being were average, and young nurses had lower spiritual well-being. According to the results and the

Table 2. The Correlation Between Aspects of Spiritual Well-Being

Dimension	1	2	3	4	Mean ± SD
1. Relationship with God	1				4.37 ± 46.37
2. Relationship with self	0.590 ^a	1			5.64 ± 43.79
3. Relationship with others	0.696 ^a	0.711 ^a	1		4.47 ± 45.45
4. Relationship with nature	0.693 ^a	0.718 ^a	0.729 ^a	1	4.88 ± 44.94
Total score					16.95 ± 180.55

^a P < 0.001 is significant.

Table 3. Comparison of Dimensions and Total Score of Spiritual Well-Being According to Levels in the Studied Nurses

Dimension	Spiritual Well-Being			Chi-Square Statistic	P-Value
	Poor, No. (%)	Average, No. (%)	Good, No. (%)		
Relationship with God	76 (21.5)	278 (78.5)	0 (0)	115.27	< 0.001 ^a
Relationship with self	75 (21.2)	208 (58.8)	71 (20.1)	103.03	< 0.001 ^a
Relationship with others	88 (24.9)	266 (75.1)	0 (0)	89.5	< 0.001 ^a
Relationship with nature	76 (21.5)	278 (78.5)	0 (0)	115.27	< 0.001 ^a
Total score	86 (24.3)	184 (52)	84 (23.7)	55.39	< 0.001 ^a

^a P < 0.001 is significant.

effect of spiritual well-being in healthcare environments on the health and its dimensions and the job productivity of individuals, it can be concluded that during their years of service, young nurses need to be retrained and take educational workshops in the field of spirituality and spiritual well-being. Also, the attention of hospital officials should be directed to the issue of spiritual well-being.

5.2. Limitations

Spiritual well-being has different definitions in different societies, and the type of spiritual care differs; the results cannot be generalized to other societies.

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Footnotes

Authors' Contribution: Study concept and design: M.K., M.M., E.A. and MR.M; acquisition of data: M.K. and T.A.; analysis and interpretation of data: E.A.; drafting of the manuscript: M.K., M.M., E.A., and MR.M; critical revision

of the manuscript for important intellectual content: MR.M and M.M.; statistical analysis: E.A.; administrative, technical, and material support: MR.M and M.M.; study supervision: MR.M

Conflict of Interests: The authors declared no competing interest in the study.

Ethical Approval: This study was carried out after approval and obtaining permission from the Research Vice-Chancellor of Birjand University of Medical Sciences with the code of ethics [IR.BUMS.REC.1401.373](#) complying with the standards of research ethics in all stages.

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