The correlation between Spiritual Health and Loneliness among Students in Shahid Sadoughi University of Medical Sciences, Yazd, Iran

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Abstract

Background and Objectives: Spiritual health is an important aspect of health. Loneliness is an unpleasant emotional experience that causes feelings of emptiness and sadness, and affects social, physical, and psychological health. With regards to specific conditions of students, distance from their families, concerns about educational and career future, social structure of their environment, exposure to risk of loneliness, and the status of spirituality in young people's lives and as there has not been any research about this issue, we decided to investigate spiritual health and its correlation with loneliness.

Methods: This descriptive-correlational study was conducted on 525 students from different faculties. The data were collected using a questionnaire consisting of three sections: demographics questionnaire, UCLA Loneliness Scale, and Spiritual Well-Being Scale (Palutzian & Ellison). Data analysis was conducted by SPSS.

Results: A total of 524 students participated in the study. The average age of the participants was 21.6±2.60 years old. There were 25.2% and 74.8% male and female participants, respectively. The majority of the participants were single (75.2%), living in dorm (72.9%), studied in the Health Faculty (36.3%), and were BSc. students (75.6%). The participants' mean score on spiritual health was 91.48±17.60. Most of the students (60.9%) experienced moderate levels of loneliness. The results showed a significant negative correlation between spiritual health and loneliness.

Conclusion: Regarding the relationship between spiritual health and loneliness and the prevalence of loneliness among these students, it is recommended to pay attention and suggest approaches to improving spiritual health, as a useful strategy to prevent or reduce depression, in this population.

Keywords: Loneliness, Spiritual Health, Students, Iran.

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Introduction

Achieving health is one of the basic human needs. Suggesting inclusion of spiritual health in the concept of health engaged health experts with an important dimension of individual and group life (1). This dimension of health creates a coordinated and integrated relationship among internal forces, and is determined using certain features such as stability in life, peace, balance, and harmony as well as close relationship with self, God, society, and environment (2). Spiritual health is a spiritual experience of human from two different perspectives:

A. Religious health perspective that focuses on how people perceive spiritual health in life when they are associated with a higher power;

B. Existential health perspective that focuses on social concerns; existential health is concerned with how one are compatible with oneself and one's society and environment (3). The concept of spirituality is broader than that of religion. It is a dynamic, personal, and experimental process that includes concepts such as spiritual health, peace, and comfort, faith, and spiritual conformity. Religion and spirituality are important cultural factors that give meaning to and construct human values, behaviors, and experiences (4,5).

Psychologists argue that there is an extraordinary power of faith in God that gives spiritual power to human and helps him tolerate life difficulties, but when spiritual health is seriously endangered, one may develop mental disorders such as loneliness,

depression, and loss of meaning in life (6).

On the other hand, the need for belonging is one of the basic human needs that establish interpersonal relationships. Maintaining at least a few positive and stable interpersonal relationships is a common desire. Satisfying needs in positive and sustainable ways leads to happiness and prosperity of both parties. Therefore, people who are unable to establish such a relationship probably experience a feeling of deprivation that is manifested as loneliness (7,8). Loneliness is a sad state due to the perception that one's social interactions cannot meet some of his/her expectations. In addition to an unpleasant emotional experience (9), loneliness leads to being faced with emptiness, sadness, and non-belonging. It influences social interactions, lifestyle, and social, physical, and mental health through various ways (10,11). Loneliness is significantly associated with depression, poor general health, and performance deficits. Anxiety and depression are problems resulting from the prolonged loneliness (12). Meanwhile, by influencing the immune system, loneliness affects health adversely and may lead to death (13).

High levels of spiritual health are associated with low levels of the variables associated with psychiatric disorders such as depression, hopelessness, and suicidal thoughts among patients with cancer (14). Turning away from religion, breaking off relationship with God, and misguided thoughts can cause and exacerbate mental disorders (15). Extension of religion teaching may lead to a higher level of spiritual health and lower levels of depression and loneliness (16). In addition, religious approaches such as praying can be used to promot spiritual health and relieve depression and anxiety by increasing positive attitude towards religion (16-19).

Currently, students represent a large population of the community's younger population. Therefore, it is clear that considering physical and mental health of this group of people and trying to resolve their problems are particularly important. Given that depression is the leading cause of incapability worldwide and its prevalence among students has been reported 10%-64% (16), we sought to examine spiritual health of students and determine its correlation with loneliness by considering specific conditions of students, distance from their family, concerns about educational and career future, their social-environmental structure, exposure to risk of loneliness and status of spirituality in life of young people as well as with regards to the fact that although religious orientation in mental health of patients has already been investigated, as far as we searched, we did not find any study in this area on students.

Methods

The study population of this descriptive-correlational and cross-sectional study consisted of all students of Shahid Sadoughi University of Medical Sciences, Yazd. Inclusion criterion was studying, the desire to participate in the study; and exclusion criteria were suffering from depression or other mental illnesses and having history of substance abuse. In this research, stratified sampling was conducted using convenience method. A total of 525 students were selected, considering the formula of sample size calculation, $\alpha=0.05$, and $\beta=0.2$ as well as considering the minimal difference (d=4) between two levels of mean score on spiritual health. Spiritual health scores were divided into three categories: low, average, and high.

According the faculties and the number of the students per each faculty, the samples were assigned to the faculties of public health (n:190), medicine (n:112), paramedicine (n:124), and nursing &midwifery (n:100). After referring to the participants in dorms or faculties and considering the inclusion criteria as well as obtaining informed consent from them to participate in the study, the researchers selected samples by convenience sampling.

The data were collected using a questionnaire consisting of three sections: Demographics questionnaire, UCLA Loneliness Scale, and Spiritual Well-Being Scale (Palutzian & Ellison). The questionnaires were distributed among the students and they completed them. Sampling phase lasted for about six months.

Then, the questionnaires were collected and the data were analyzed using SPSS 16.

To assess spiritual health in this research, Spiritual Well-Being Scale (Palutzian& Ellison, 1982) was used. This scale consists of 20 items 10 of which are about religious health and the rest are concerned with existential health. Spiritual health score is the sum of the two subscales ranging between 20 and 120. The items are rated by six-point Likert scale; from strongly disagree to strongly agree. Strongly agree is scored 1 in items 3, 4, 7, 8, 10, 11, 14, 15, 17, 19 and 20; while Strongly disagree is scored 6 for in items 1, 2, 5, 6, 9, 12, 13, 16 and 18. The scores on spiritual health were divided into three categories: low (20-40), moderate (41-99), and high (100-120). Rezai et al. (2006) determined the validity and reliability of the Persian version of the questionnaire. The questionnaire was translated into Persian and then its validity was determined by content validity and its reliability was measured by Cronbach's alpha coefficient (0.82)(19).

The loneliness questionnaire, used in the current study, was the revised version of the UCLA Loneliness Scale, developed by Russell, and has been revised several times (8). It contains 20 questions. This scale has been designed to measure one's self experiences and assessments related to loneliness including the perceived loneliness, social isolation, and impaired interpersonal relationships. This version consists 10 negative phrases (to represent loneliness) and 10 positive phrases (representing lack of loneliness), and positive phrases are scored inversely. The items are scored 1, 2, 3 and 4 for options "Never", "Rarely", "Often" and "Always", respectively. Hojjat et al. examined the reliability and validity of the Persian version of this questionnaire to assess students' loneliness. To determine the validity and reliability of the Persian version, the following steps were performed: The data on two groups of Iranian students were analyzed. Group I consisted of 232 Iranian students (156 males, 76 females) who were studying in the US universities. Group II comprised 305 Iranian students (168 males, 137 females) who were studying in the universities in Iran. The obtained correlations between each item of the scale and the total score were mostly in the upper fifties and the lower sixties. The coefficient alpha estimates of reliability were 0.89 and 0.88 in the group I and group II, respectively. Significant positive correlations were observed between the scores of the UCLA Loneliness Scale and measures of other conceptually related variables such as depression, anxiety, and neuroticism. Besides that, negative correlations were observed between the Loneliness Scale and measures of self-esteem and extroversion. Factorial structure of the UCLA Loneliness Scale tended to support the multidimensionality of the scale. The obtained results provided evidence supporting the validity and reliability of the scale for Iranian university students (20).

The first obtaining permission from the authorities, the investigator introduced myself to participant and gave necessary explanations about the study purposes, care of personal information private. After receiving an informed consent from participants in the study, the questionnaire was presented to them. The data were analyzed by SPSS 16 using descriptive statistics, independent t-test, one-way ANOVA, and Pearson correlation coefficient. In all tests, the significance level was considered to be less than 0.05.

The protocol's this study was approved at the Scientific Research committee (1558) and the Ethics Committee of the Yazd University of Medical Sciences (approval code: IR.SSU.REC.1394.144).

Result

A total of 525 questionnaires were distributed among the students, and 524 students completed the questionnaires. Their mean age of the students was 21.6±60.2 years old. There were 25.2% and 74.8% male and female respectively. Of the participants, 24.8% and 75.2% were married and single, respectively, 19.1%, 36.3%, 23.5% and 21.1% were studying in the Nursing& Midwifery Faculty, Health Faculty, Faculty of Medical Sciences, and Faculty of Medicine, respectively, 72.9%, 23.9% and 3.2% lived in dorms, with family, and their own homes, respectively, and 75.6%, 8.2%, 15.1% and 1.1% were studying in BSc., MSc., professional doctorate, and PhD courses, respectively.

The correlation between Spiritual Health and Loneliness

Results showed that 0.8%, 63% and 36.2% of the students had low, moderate, and high levels of spiritual health respectively. Overall, the participants' mean score on spiritual health was 91.48±17.60 (Table 1).

Table1- Frequency and central tendency and dispersion subjects in terms of levels of spiritual well-being

Levels of spiritual well-being	Number	Percent	Mean±SD
Down(20-40)	4	0.8	27±3.37
Medium(41-99)	330	63	82.41±13.07
Top(100-120)	190	36.2	108.58±5.55
Total	524	100	91.48±17.57

The married female students, students living in dorms, students studying at MSc courses, and the students of the Health Faculty attained the highest scores on spiritual health. The participants' mean score on spiritual health showed statistically significant difference in terms of location, school, and gender (Table 2).

Table 2- the mean score of spiritual health of subjects in terms of location, the school of education and Sex

Variable		Number	Mean±SD	P Value
Place of life	Dorm	382	91.81±17.43	<0.006
	Family	125	91.45±17.99	
	Independent	17	84.18±17.02	
The school of education	Health	190	92.83±14.40	<0.006
	Medicine	111	92.20±20.23	
	Paramedical	123	90.78±19.26	
	Nursing & Midwifery	100	88.96±17.67	
Sex	Male	132	87.49±20.78	<0.001
	Female	392	92.82±16.16	

The results also showed that most of the students (60.9%) experienced moderate levels of loneliness (Table 3).

Table 3- Frequency distribution and central tendency and dispersion subjects in terms of levels of loneliness

Levels of loneliness	Number	Percent	Mean±SD
Low(20-34)	73	13.9	30.08±3.42
Medium(35-49)	319	60.9	42.21±3.99
Much(50-64)	123	23.5	54.46±3.53
Very Much(65-80)	9	1.7	71±4.90
Total	524	100	43.89±9.04

Although males and unmarried students with independent living place, MSc students, and the students of Nursing & Midwifery Faculty had the highest score on loneliness, there was no statistically significant difference in the mean scores of loneliness among different groups.

Finally, Pearson correlation coefficient showed a significant negative correlation between spiritual health and loneliness so that the students with the highest levels of spiritual health experienced the lowest levels of loneliness (Table 4).

Table 4- Frequency distribution of levels of loneliness in term of spiritual well-being

levels of loneliness	levels of spiritual well-being, percent(Number)			
	Down	Medium	Top	Total
Low	0(0)	23.3(17)	76.7(56)	100(73)
Medium	0(0)	61.4(196)	38.6(123)	100(319)
Much	2.4(3)	88.6(109)	8.9(11)	100(123)
Very Much	11.1(1)	88.9(8)	0(0)	100(9)
Total	8(4)	63(330)	36.3(190)	100(524)

r=-0.549   P<0.0001

Discussion

The research results showed that loneliness had a significant inverse correlation with spiritual health. In other words, loneliness level increased by reducing the levels of spiritual health and vice versa. Heidari et al (2016) found that there is a significant correlation between religiosity and depression (p<0.05) (21). A sense of belonging to a sacred source, hope for God's assistance in solving problems of life, and benefiting protecting intellectual resources cause to promote physical and mental health. Heidari et al. (16) conducted a study to determine the correlation between depression and religious attitude among students in Qom University of Medical Sciences. They found that 44.8%, 37.2%, 14.8% and 2.4% of the samples had no, mild, moderate, severe, and very severe levels of depression, respectively. Regarding religious beliefs, 82% of the samples had positive religious attitudes and 18% had negative religious attitudes. A significant negative correlation between depression and attitudes was observed so that depression decreased by increasing positive religious

attitudes (p>0.05). Considering the positive effects of religious attitudes and beliefs on mental health, the authors suggested using the capabilities for planning for promotion of mental health, especially for youths. Loneliness is a factor of depression with a mutual relationship with this factor. In other words, loneliness can cause depression and vice versa. Loneliness is intensified when a person feels that others do not understand him or he has no proper social partners for his activities especially those that lead to social integration and opportunities for sincerity. It can be therefore argued that loneliness is an important factor in depression (22). Accordingly, spiritual health, living a meaningful life, and sense of belonging to an infinite source are important factors to increase physical and mental health; and these factors help to decrease loneliness among youths.

In addition, 36.2% of the students had high levels of spiritual health, while low levels of spiritual health was observed in 0.8% of them. Statistically, spiritual health had a significant correlation with gender, education course, and residence place so that males and the single students with independent living place, MSc students, and students of Nursing& Midwifery Faculty had the highest score on loneliness, but there was no statistically significant difference in the mean scores on loneliness among different groups. The study conducted by Mostafazadeh and Asadzade (2012) (23) on spiritual health of midwifery students showed that their mean score on spiritual health was 73.65±1.5. There was not any correlation between the score of spiritual health and demographic characteristics. It is consistent with this study as the students of Nursing& Midwifery Faculty attained the lowest score on spiritual health. Rahimi et al. (2013) (24) reported the mean score of spiritual health in students of Kerman Nursing and Midwifery Faculty 93.01±13.78, and only gender had significant correlation with spiritual health such that, consistent with the present study, the mean score of spiritual health in women was higher than that in men. Farahaninia et al. (2005) (25) conducted a research to investigate spiritual health of nursing students and their views about

spirituality and spiritual care. They found that 98.8% of the students had moderate levels of spiritual health; and spiritual health had no significant correlation with admission year, age, marital status, and place of residence. Tavan et al. (2015) (26) reported 81.4 and 91.13 to be the mean scores of spiritual health of male and female students, respectively. They also reported that the mean score of spiritual health of girls who did not live in dorms was lower than girls who lived in dormitory, which is consistent with the present study. In general, high levels of spiritual health scores in this study can be due to the spiritual culture of Yazd as most students were native. However, unfortunately due to low average score of midwifery and nursing students on spiritual health and considering the fact that the stronger inner spirituality, the more likely it is to provide pastoral care to the students (25), officials of this faculty should pay special attention to promote spiritual health of the students and teaching pastoral care.

Regarding loneliness levels, 13.9%, 60.9%, 23.5% and 1.7% of the students reported to experience low, moderate, high, and very high levels of loneliness, respectively. In general, the mean score of their loneliness was 43.89±9.04 and although males, unmarried, independently living, and undergraduate students are studying in faculty of nursing earned the highest scores in loneliness, but loneliness had no significant correlation with gender, marital status, place of residence, educational level and college statistically.

Deniz et al. (2005) (27) conducted a study on 383 students from five schools with average age of 20 years old in Turkey. They reported the average scores 32.12±8.54 and 33.94±9.14 on loneliness for women and men, respectively. Heidari et al studied the relationship between religiosity and depression among medical students in 120 Medical students by using stratified random sampling. They reported the students' average score on depression was 43.1 ± 10.71. Their results showed a significant correlation between religiosity and depression of students (21). Tan et al. (28) examined the correlation between loneliness and using cell phone in 527 male and female students. The

students attained the average score 37.2±9.7 on loneliness. Tan et al. found that loneliness was significantly related to increased use of cell phone. Sarikam et al. (29) examined the correlation between loneliness and self-esteem among 369 students of physical education faculty in Turkey. They reported 39.60±11.20 to be the average score on loneliness of the students. They found that loneliness was significantly associated with low self-esteem and loneliness among male and female students. Ahadi (30) examined the correlation of loneliness and self-esteem with attachment styles among 323 students in Mohaghegh Ardebili University. They reported 41.93±9.54 to be the mean score on loneliness of the students. They also reported a significant correlation between low self-esteem and loneliness. Serine et al (9) examined predictors of loneliness among the students of a university in Turkey. They assessed levels of loneliness using UCLA Loneliness Scale and examined several factors. They found a significant correlation between loneliness and gender, education level, socioeconomic status, strategies of coping with stress, and attachment style of students. According to the results, the mean scores of students' loneliness in Iranian and non-Iranian studies were 41-44 and 32-39, respectively, which indicates higher levels of loneliness among Iranian students.

Conclusion

Given the significant correlation between spiritual health and loneliness and as loneliness is preclude of depression. Regarding the relationship between spiritual health with loneliness and the prevalence of loneliness among these students, the need to pay attention and suggest ways to improve their spiritual health is recommended as a useful strategy to prevent or reduce depression in this group.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

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