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Association between Spiritual Health and Depression in Students

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Abstract

Background and Objectives: Depression, as one of the common mental disorders, has a main contribution to the burden of diseases. Regarding the adverse effects of depression on different aspects of life, this study was conducted to study association between depression and spiritual health among students.

Methods: This cross-sectional, descriptive, and analytical study was conducted on the students of faculties of health and Quranic Sciences in 2015-2016. A demographic questionnaire, Spiritual Health Scale, and Beck's Depression Inventory were used to collect data. Sampling was conducted by census. The data were analyzed by chi-square test, Pearson correlation coefficient, Mann-Whitney test, and Spearman's correlation coefficient in SPSS 16. For all analytical tests, the level of significance was considered 0.05.

Results: Statistically, spiritual health and depression were significantly and inversely correlated among the students ($p \leq 0.001$, $r=-0.619$). Spiritual health was significantly different between the faculties.

Conclusion: High level of spiritual health is associated with relieved depression. Therefore, spiritual health can be used to prevent and control depression.

Keywords: Depression, Spiritual Health, Students.

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Introduction

Depression is one of the common mental disorders that has a main contribution to the burden of diseases, and a common non-life threatening disease across the world (1) that can adversely affect social functions of the people and impose a considerable burden on individual, health care system, and community (2). Studies conducted in a number of countries have indicated that the prevalence of depression is 18.1-36.1% (3). In Iran, the prevalence of depression in different populations is high (5.7-73%) (4). A study conducted in Tehran, 34.2% of people aged 15 years and over had suspected psychiatric disorder (5).

In addition, different studies have reported the prevalence of depression in the students of universities in Iran was 10.5-53% and in the students of Yasouj University was 69.2% (6). The prevalence of psychiatric disorders in the students of Kermanshah University of Medical Sciences was derived 28.38% (7). Spiritual health is a process that can be useful to treat patients mentally and psychologically as well as physically, and more importantly; it can enhance social health and contribute to perfection and excellence in all aspects of man and humanity (8).

Spirituality is considered an important predictor of anxiety and depression among students. A study demonstrated that people who have higher levels of spirituality had lower levels of anxiety and depression (9). Moreover, happiness among the students increases with enhancement of spiritual health (10). Depression has many adverse effects on life and disturbs many individual and social functions (11). Decline in individual

efficiency, family problems, economic costs, and associated negative consequences are some of the most important problems due to depression. In the recent years, emphasis has been placed upon spiritual treatments to reduce these effects (12).

Increased religious beliefs cause relief of anxiety and depression in the students and somehow prevent development of psychiatric disorders. Therefore, it can be argued that knowledge about religious approaches, in-depth mystical insights, and valuable Islamic fundaments is highly important to maintain health (13). Memorization of Quran can help people promote their mental health through influencing endogenous factors and be an effective source to cope with stresses and challenges of the contemporary life (14). People who have more inner relationship with religion experience have less depressive moods (15). Therefore, regarding this issue and elimination of its triggering factors, it is necessary to investigate depression and spiritual health in the students not only in Iran but also in other countries. The present study was conducted to investigate the association between spiritual health and depression.

Methods

The study population of this cross-sectional, descriptive, and analytical study was all students of faculties of health and Quranic Sciences of Kermanshah in academic year 2015-2016. To calculate the required sample size at 95% confidence interval (CI) and according to 0.80 test power and similar studies (16), 125 students of faculty of Quranic Sciences and 246 students of health faculty (total number: 371) were studied. Sampling was conducted by census. Three questionnaires were used to collect the data:

1. Demographic questionnaire consisted of 10 items about age, gender, marital status, employment, degree of education, field of study, interest in field of study, housing, grade point average (GPA), and income.

2. Paloutzian and Ellison's Spiritual Well-Being Scale is a 20-item questionnaire. Ten items measure religious well-being and the rest investigate existential well-being. Spiritual health score is the sum of the scores for these two subscales with minimum and maximum possible score of 20 and 120, respectively. The items are rated by 6-point Likert scale from absolutely disagree to absolutely agree. For items 3, 4, 7, 8, 10, 1, 14, 15, 17, 19, and 20, absolutely disagree represents score 1 and for items 1, 2, 5, 6, 9, 12, 13, 16, and 18, absolutely disagree represents score 6. The scores for spiritual health were divided into three levels: low (20-40), moderate (41-99), and high (100-120). For this questionnaire, correlation coefficient of spiritual health has been derived 0.82 (17).

3. Beck's Depression Inventory: This scale has 21 four-choice items. The choices are rated as 0-3. Total score is divided as follows: normal (1-10), lowly depressed (12-16), needing consultation with psychologist (17-20), relatively depressed (21-30), severely depressed (31-40), and excessively depressed (over 40). If the score is over 17, the respondent is recommended to seek out psychological or psychiatric counseling. For this questionnaire, correlation coefficient of depression has been derived 0.85 (18).

First, the researcher gave necessary explanations about the research purposes, how the questions are responded, and keeping personal information private. After the participants provided informed consent to participate in the study, the questionnaire was administered to them. The data were analyzed by chi-square test, Pearson correlation coefficient, Mann-Whitney test, and Spearman's correlation coefficient in SPSS 16. For all analytical tests, the level of significance was considered 0.05.

Result

A total of 371 students of faculties of health (66.3%) and Quranic Sciences (33.7) were studied. The mean age of the students was 23.91±4.83 years and 77.1% of them were female. The findings demonstrated that depression and spiritual health were inversely and significantly correlated ($p<0.001$, $r=-0.62$). Besides that, spiritual health was significantly associated with marital status, field of study, and interest in field of study, but was not

significantly associated with gender, employment, degree of education, and housing (Table 1).

Table 1. Comparison of spiritual health based on demographic variable

Variables		Spiritual health N (%)		P-value
		Moderate	high	
Gender	Female	175 (61.2)	111 (38.8)	0.607
	Male	54 (64.3)	30 (35.7)	
Marital status	Single	201 (66.3)	102 (33.7)	<0.001
	Married	27 (40.9)	39 (59.1)	
Job	Yes	35 (9.5)	31 (8.4)	0.102
	No	194 (52.4)	110 (29.7)	
Degree of education	BA/BSc	181 (48.9)	101 (27.3)	0.104
	MA/MSc	48 (13.3)	40 (10.8)	
Field of study	Public health	47 (13.2)	22 (6.2)	0.002
	Environmental health	51 (14.3)	18 (5.1)	
	Occupational health	34 (9.6)	30 (8.4)	
	Food Sciences	24 (6.7)	5 (1.4)	
	Quranic Sciences	29 (8.1)	23 (6.5)	
	Quranic interpretation	36 (10.1)	37 (10.4)	
Interest in field of study	Yes	153 (55.4)	123 (44.6)	<0.001
	No	76 (80.9)	18 (19.1)	
Housing	Dormitory	123 (62.4)	74 (37.6)	0.876
	Owned	84 (60.4)	55 (39.6)	
	Rented	22 (64.7)	12 (35.3)	

In this study, depression was found to be significantly associated with marital status, employment, degree of education, and interest in field of study, but was not associated with gender and housing (Table 2).

According to Pearson correlation coefficient, spiritual health and GPA were significantly correlated but spiritual health was directly yet insignificantly correlated with age and income. Depression was inversely and significantly correlated with age and GPA, but was inversely yet insignificantly correlated with income (Table 3).

Table 3: Comparison of Pearson correlation coefficient (r) of spiritual health and depression with age, grade point average, and income

Variables	Spiritual health		Depression	
	r	P- value	r	P- value
Age	0.082	0.114	0.186-	0.001
Mean Score	0.144	0.016	0.159-	0.008
Income	0.072	0.625	0.175-	0.229

The present study demonstrated that spiritual health of the students of the two studied faculties, health and Quranic Sciences, was significantly associated but depression of the students at these two faculties was not significantly associated (Table 4).

Discussion

The present study demonstrated that depression and spiritual health were significantly and inversely correlated such that with increase in the spiritual health, lower levels of depression were seen in the students. Different studies

Table 2: Comparison of spiritual health based on demographic variable

Variables		Depression, N (%)					P-value
		Normal	Low depressed	Need to counseling	Moderate depressed	Severe depression	
gender	Female	125 (33.7)	71 (19.1)	24 (6.5)	41 (11.1)	25 (6.7)	0.586
	Male	45 (12.1)	16 (4.3)	8 (2.2)	10 (2.7)	6 (1.6)	
Marital status	Single	122 (40.1)	76 (25.0)	32 (10.5)	46 (15.1)	11 (3.6)	<0.001
	Married	48 (72.7)	11 (16.7)	32 (8.6)	5 (7.6)	1 (1.5)	
Employment	Yes	43 (11.6)	10 (2.7)	6 (1.6)	4 (1.1)	3 (0.8)	0.008
	No	127 (34.2)	77 (2.8)	26 (7.0)	47 (12.7)	28 (7.5)	
Degree of education	BS	112 (39.6)	75 (26.5)	24 (8.5)	45 (15.9)	27 (9.5)	<0.001
	MS	58 (65.9)	12 (13.6)	8 (9.1)	6 (6.8)	4 (4.5)	
The field of study	Public health	32 (45.7)	13 (18.6)	11 (15.7)	8 (11.4)	6 (8.6)	0.001
	Environmental health	22 (31.9)	19 (27.5)	3 (4.3)	17 (24.6)	8 (11.6)	
	Occupation health	37 (57.8)	17 (26.6)	(3.1) 2	6 (9.4)	2 (3.1)	
	Food sciences	7 (24.1)	10 (34.5)	3 (10.3)	9 (31.0)	0	
	Quranic Sciences	29 (58.8)	10 (19.2)	6 (11.5)	3 (5.8)	4 (7.7)	
	Quran interpretation	34 (46.6)	17 (23.3)	5 (6.8)	7 (9.6)	10 (13.7)	
The interest to major	Yes	144 (38.8)	61 (16.4)	22 (5.9)	32 (8.6)	18 (4.9)	0.001
	No	26 (7.0)	26 (7.0)	10 (2.7)	19 (5.1)	13 (3.5)	
Housing	Dormitory	87 (43.9)	41 (20.7)	22 (11.1)	29 (14.6)	19 (9.6)	0.459
	Owned	66 (47.5)	37 (26.6)	10 (7.2)	17 (12.2)	9 (6.5)	
	Rent	17 (50.0)	9 (26.5)	0	5 (14.7)	3 (8.8)	

Table 4: Comparison of spiritual health and depression between the students of faculties of health and Quranic Sciences

Variables		health	Quranic Sciences	P-value
		N (%)	N (%)	
Spiritual health	Moderate	164 (66.9)	65 (52.0)	0.005
	High	81 (33.1)	60 (48.0)	
Depression	Normal	107 (43.5)	63 (50.4)	0.108
	Low	60 (24.4)	27 (21.6)	
	Need to counseling	21 (8.5)	11 (8.8)	
	Depressed	41 (16.7)	10 (8.0)	
	Severe	12 (4.9)	7 (5.6)	
	High	5 (2.0)	7 (5.6)	

conducted on different study samples have demonstrated that spiritual health is effective on depression and psychiatric disorders and reported consistent findings (13, 19).

Given the findings of the current study and other studies, it can be proposed that spiritual health can prevent incidence of psychiatric disorders including depression. Therefore, faculties should give priority to promotion of spiritual health among the students.

In the current study, depression was not statistically significantly associated with gender and housing, which is consistent with some studies (20,21). In addition, depression was significantly associated with employment, marital status, degree of education, field of study, and interest in field of study, which is in agreement with some studies (20,22). Regarding field of study, it should be noted that keeping up internal and external stimuli, motivation, defining goals, and having will and determination reflect relief of depression.

Moreover, significant association between field of study and depression can be explained by difficult lessons in some courses and heavy load of the taught subjects that make students become more engaged with mental and psychological issues and therefore depression occurs more frequently among them.

In the current study, spiritual health statistically was not significantly associated with gender, employment, degree of education, and housing, which is consistent with a number of similar studies (20,23,24), but spiritual health statistically was significantly associated marital status, field of study, and interest in field of study, which is consistent with some studies (10,24).

In this study, spiritual health was directly yet insignificantly associated with age and income, but had a direct and statistically significant association with GPA, which confirms the findings of other studies (24,25). Moreover, depression was inversely and significantly associated with age and GPA, but had an inverse yet insignificant correlation with income, which is in agreement with some studies (20-22). In this study, spiritual health was significantly different between the students of the two studied faculties but depression was not, which is consistent with a study (26).

Conclusion

High level of spiritual health is associated with relieved depression. Therefore, spiritual health can be used to prevent and control depression.

Recommendations

-Taking different educational, cultural, recreational, artistic, etc. measures to promote spiritual health;

-Providing a peaceful environment free from any stressor; and

-Faculties should make efforts to help students achieve spiritual health among the students.

Conflict of interest

The authors declare no conflict of interest.

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