

The Relationship between Spiritual Health and Depression in Nursing and Midwifery Students of Estahban Islamic Azad University

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Abstract: Depression is a psychological problem that is known as the fourth cause of social disability. This disorder is a global concern, especially in college students, because in this stage people are under high pressure. The risk of depression incidence in medical students is more than other students. With respect to positive effects of spiritual health on different aspects of life, we examined the relationship between spiritual health and depression in nursing and midwifery students. This is a descriptive-correlational study performed on 78 nursing and midwifery students of Estahban Islamic Azad University in 2017. Data were collected using demographic questionnaire, Beck Depression Inventory and Ellison-Paloutzian spiritual scale. The data were analyzed using SPSS, descriptive statistical method and Pearson's correlation coefficient. The results of this study showed that 50 students had no depression, 7 students suffered from mild depression, 9 with moderate, and 12 had high levels of depression. The spiritual well-being level of 55 students was moderate and in 23 it was high. According to Pearson correlation coefficient, there was a significant negative correlation between depression and spiritual well-being ($r = -0.558$, $P < 0.01$); depression and religious health ($r = -0.365$, $P < 0.01$), and also depression and existential health ($r = -0.606$, $P < 0.01$). On the basis of the results, an increase in spiritual health reduces depression in students. It seems that the improvement of spiritual healthcare of nursing and midwifery students is essential.

Keywords: Depression, Spiritual health, Nursing and Midwifery Students, Iran.

INTRODUCTION

For centuries, depression has been known as a psychological problem in the world[1]. Depression is now the fourth cause of social disability and is anticipated to be the second cause of social disability in 2020[2]. According to the World Health Organization (WHO), 300 million persons, about 4.4 percent of the world's population, suffer from depression. The percentage of people with depression in Iran has been reported 4.9%. In other countries, such as Italy, Canada and America, 5.1%, 4.7%, 5.9% of their population suffer from depression, respectively. [3]

Depression is a common disorder that is not restricted to a particular group. It can affect any race or group of a community, but some people such as adults are more vulnerable due to their special situation[1]. Depression in adult group, especially in students, is a global concern and it seems to be rising. Depression

usually begins during college years because this period is one of the most stressful stages of the life. Adaption to this environment, earning good grades, planning for future, being away from the family competitions and economic problems lead to anxiety for many students. The consequence of this anxiety can be incidence of depression in some students. Hence, they need to receive training and advice in this regard[4-7].

Major depressive disorder (also called polar depression) is a mental disorder occurring without a history of mania, mixed, or hypomania. Major depression lasts at least for two weeks. In addition to depressing mood or a severe loss of interest in hobbies, patients with major depressive disorder show at least four of these symptoms: changes in appetite and weight, changes in sleep habits and activities, lack of energy, feelings of guilt, problems in thinking and decision making, and recurrent thoughts of death or suicide[8].

Without treatment, symptoms of depression may last for weeks, months, and years. However, proper treatment will help most people suffering from depression[9].

Students of medical sciences, in addition to common problems of other students, have their own problems. Among them, psychological stresses dealing with sick or dying patients, long educational period, uncertainty about job status, high volume of educational materials, lack of leisure time, and fatigue due to work in the hospital can be mentioned[7, 9-11]. Accordingly, it seems that medical students are more likely to experience mental health problems like depression than other students[12].

Various studies have been done to determine the degree of depression in medical students. In Iran, prevalence of depression among medical students has been estimated in different cities. In Sabzevar 43% [13], Ardabil 52.6% [14], Birjand 12.1% [15], Kashan 35.8% [16], Zanzan 9.4% [17], Zabul 64.3% [18], Shiraz 45.25% [19], Hamadan 55% [20], Yazd 42.4% [21], Yasuj 69.2% [22], Kurdistan 37.5% [23] and Jahrom 45.4% [24] of people suffer from depression. The occurrence of depression in medical students of other countries has been studied; 41.9% in Malaysia [25], and 30.7% in Brazil [26]. Several studies have been conducted to control and treat the students' depression, including psychotherapy approaches (life skills training), drug therapy, and spiritual and religious approaches [27, 28].

Over the decades, health has been analyzed on the basis of physical, psychological and social dimensions. Spiritual health is the newest dimension of health, some people believe that without considering spiritual health, other dimensions of health cannot have the desired performance [29]. In some studies, a positive relationship between the religious beliefs and activities and physical and mental health has been reported [27, 28]. Researches show that there is a positive correlation between spirituality with satisfaction and purposefulness of life, health and well-being. Therefore, spiritual abilities can have positive effects on people's social and cultural life [30]. These studies have shown positive effects of spiritual health on the quality of life, life satisfaction [31], job satisfaction [32], reduction of depression symptoms [33], and decreased anxiety about death in cancer patients [34].

Depression is an important and relatively prevalent issue in medical students including nursing and midwifery students. Due to the role of this group in process of treatment, prevention and promotion of community health, it is essential to find some strategies for it. Furthermore, limited studies on effects of spiritual well-being on depression in nursing and

midwifery students prompted us to do more investigation on this field.

MATERIAL AND METHODS

The present research was a descriptive-correlational study. The statistical population of this study included nursing and midwifery students of Estahban Islamic Azad University. Samples were collected by simple random sampling. The sample size was determined 100 subjects, of which 78 responded completely to the questionnaires. Inclusion criteria were passing at least one academic semester; studying nursing and midwifery; and willingness to participate in the research. Exclusion criteria were having a history of using antidepressants; severe mental or physical illness; and recently suffering from severe depression.

The data gathering tool was a demographic questionnaire, Beck Depression Inventory and Pulotsin and Ellison Spiritual Health Questionnaire. Before completing the questionnaire, we explained the goals of the questionnaire, the manner of completing the questionnaire and the confidentiality of the information to the participants.

Demographic information

This section included personal information on age, gender, marital status, financial status, place of birth, field of study and academic year.

Beck Depression Scale

Beck questionnaire contains 21 multiple-choice questions about different aspects of depression symptoms. It has been designed for individuals aged over 16 years old. Each question has 4 options and a value of 0 to 3 is assigned for each answer. The subjects must carefully read the sentences of each group and choose only one sentence that expresses his/her current state. These sentences express the mildest to the most severe status of depression. The total score ranges from 0 to 63 and is used to determine the severity of depression. Higher total scores indicate more severe depressive symptoms. The scores 0-13 indicate normal, 14-19 mild depression, 20-28 moderate depression, and 29-63 severe depression.

Politian and Ellison Spiritual Health Scale

Ellison-Paloutzian Spiritual Well-Being Scale was used to investigate the level of spiritual wellbeing. This questionnaire contains 20 questions with two subscales; existential health (meaning of life) as individual questions and religious health (communication with God) as paired questions. The spiritual integrity score is the sum of these two subgroups, which ranges from 20 to 120. The scores to these questions is on the basis of six-point Likert scale; totally disagree, disagree, relatively disagree, relatively agree, agree, and totally agree were given 1 to 6 point,

respectively. Scores of 20-40 indicate a lower level of spiritual well-being, 41-99 moderate spiritual health and 100-120 high levels of spiritual well-being. This questionnaire was standard. It was conducted in Iran by Farahani Nia *et al.* in 2005 on 283 nursing students of Tehran and Shahid Beheshti universities; the reliability was reported 0.82[35].

DATA ANALYSIS

The data were analyzed using SPAS 16. The descriptive statistics (mean, standard deviation, relative frequency) and inferential statistics (ANOVA, Pearson correlation, Chi-square) were used in this research. Statistical analysis was performed at a significance level of 5%.

RESULTS

A total of 100 students in 2013 to 2016 took part in this study. Finally, 22 cases withdrew from the study and 78 subjects were included in the final analysis; 35 midwifery students (44.9%) and 43 (55.1%) nursing students. The mean age of the participants was 21.38 ± 1.45 years old. Most of the subjects were female (70 of 78). The marital status of 84.6 percent of subjects was single. In terms of academic year, 18 freshman, 27 sophomore, 25 third year and 8 fourth year students were involved in this research.

Table-1: Demographic characteristics of 78 midwifery and nursing students of Estahban Islamic Azad University

character		number	percent of frequency
field of Study	midwifery	35	44.9
	nursing	43	55.1
gender	female	70	89.7
	male	8	10.3
marital status	single	66	84.6
	married	12	15.4
having a child	yes	0	0
	no	78	100
academic year	freshman	18	23.1
	sophomore	27	34.6
	third year	25	32.1
	forth year	8	10.3

The mean depression score of the research units was 12.07±13.07; of them. Fifty students were without depression, 70 students suffered from mild depression, 9 with moderate, and 12 had severe depression.

The statistical analysis of the data obtained from the Palutzian and Ellison Spiritual Health

questionnaire showed that the mean and standard deviation of the total score was 15.67 ± 92.32. There was no student with low spiritual level. Fifty five students showed a moderate level of spirituality, and 23 showed high spirituality. The mean and standard deviation of religious health score was 50.02 ± 6.89 and existential health was 42.29 ± 10.27.

Table-2: Combined frequency distribution of spirituality versus levels of depression

			Depression			
			Normal (0-13)	mild (14-19)	moderate (20-28)	severe (29-63)
Spiritual health	Low (20-40)	midwifery	0	0	0	0
		nursing	0	0	0	0
	Medium (41-99)	midwifery	14	4	2	7
		nursing	17	2	6	3
	High (100-120)	midwifery	5	1	0	2
		nursing	14	0	1	0
Total			50	7	9	12

According to Pearson correlation coefficient, there was a significant negative correlation between depression and spiritual well-being ($r = -0.558, P <$

0.01). A significant negative correlation was observed between depression and religious health ($r = -0.365, P < 0.01$) and existential health ($r = -0.606, P < 0.01$), too.

Table-3: Correlation between depression anxiety and spiritual health in cases of the study (Pearson test)

	total spiritual health	religious health	existential
Depression score	r = -0.558	r = -0.365	r = -0.606
	P = 0.000	P = 0.001	P = 0.000

Chi-square test (Fisher exact test) showed that there were no significant differences between depression scores of age ($P = 0.597$), body mass index ($P = 0.876$), birth place ($P = 0.518$), gender ($P = 0.342$),

marital status ($P = 0.795$), history of disease ($P = 0.081$) groups. The statistical results showed a significant correlation of depression with field of study ($P = 0.027$) and academic year ($P = 0.033$).

Table-4: Comparison of depression score based on the field of study

field of study	Depression score					P-value
	group 1	group 2	group 3	group 4	total	
midwifery	19	5	2	9	35	0.033
	24.4%	6.4%	2.6%	11.5%	44.9%	
nursing	31	2	7	3	43	
	39.7%	2.6%	9%	3.8%	55.1%	
total	50	7	9	12	78	
	64.1%	9%	11.5%	15.4%	100%	

Table-5: Comparison of the depression scores based on the academic year

academic year	Depression score					P-value
	group 1	group 2	group 3	group 4	total	
freshman	14	1	1	2	18	0.033
	17.9%	1.3%	1.3%	2.6%	23.1%	
sophomore	20	4	1	2	27	
	25.6%	5.1%	1.3%	2.6%	34.6%	
3 rd year	10	1	6	8	25	
	12.8%	1.3%	7.7%	10.3%	32.1%	
4 th year	6	1	1	0	8	
	7.7%	1.3%	1.3%	0%	10.3	
total	50	7	9	12	78	
	64.1%	9%	11.5%	15.4%	100%	

DISCUSSION

The results of this study showed that 35.9% of students had some levels of depression and 64.1% had no depression. The mean depression score of the students was 12.53 ± 13.07 . 9% had mild depression, 11.5% had moderate depression and 15.4% had severe depression.

In a study on 285 medical students in Iran, the mean score of Beck Depression Test was 45.8[36]. In the study in Sabzevar University of Medical Sciences, it was shown that 43.6% of the students suffered from varying degrees of depression, 29.3% had mild depression, 7.8% had moderate depression, 6.5% had severe depression[13]. According to the results of a study in Birjand University of Medical Sciences, 45% suffered from depression; 21% with mild depression, 16% with moderate depression and 8% with severe depression[37]. In a research in Qom University of Medical Sciences, 55.2% had depression: 37.2% mild depression, 14.8% moderate depression and 2.4% severe depression[38]. The prevalence of depression in

some students in Turkey has been reported moderate and above 27.1%[39].

By comparison of the above studies, it is noteworthy that the prevalence of depression in medical students is relatively high. However, there is a difference in frequency of depression in different cities and universities, which can be due to the different statistical population, the study of various medical sciences and the different means of measurement.

The prevalence of depression in this study was consistent with the study of Birjand and Sabzevar University of medical sciences, but the prevalence of severe depression in this study is higher than these universities. This statistical difference can be due to more financial pressures in this university and worries about job-seekers in students of the open university. In this study, most of the students were placed in the range of moderate spiritual health. These findings are consistent with those of the studies by Rahimi *et al.* in Kerman, and Ghareh Baghloo *et al.* in Qom and Kashan, and Jauchu *et al.* in Taiwan, in which most of their students had moderate spiritual health [2, 29, 40].

On the basis of the findings, it seems that the mean spiritual health score can be attributed to parental easing and less attention to spiritual health in the upbringing of children than in previous generations. Therefore, attention to the inclusion of some education, such as the promotion of professional ethics for students, can be helpful. The findings of this study showed that there was a significant relationship between spiritual health and reverse depression in students. In other words, the higher the level of spiritual health of students, the less the depression they suffer. In the study of Aghakhani *et al.* conducted on Urmia medical students, there was a significant reverse correlation between depression and spirituality[14] which is in agreement with the present study. With regard to the above points, it is concluded that spiritual support reduces the severity of mental disorders. In order to generalize the results, we need more studies to be conducted. The combination of specialized courses and spiritual dimensions can reduce mental harms, particularly in nursing and midwifery students who have many psychological stresses.

CONCLUSION

According to the present study, it can be concluded that spiritual health is one of the factors that reduces depression in students. Since depression is more prevalent in students, especially medical students, development of spiritual well-being in students can reduce the incidence of depression in this group.

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