Research Article

Assessment of Stress, Anxiety and Depression in Female Students Living in Dormitories of Qom University of Medical Sciences

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Abstract

Background: Due to their particular circumstances during this critical period of life, female students living in dormitories of students often face with situations against which experience many emotional reactions. Since the mental health of society largely depends on their mental health and psychological damage in this important part of female can be increased, early determination of depression and anxiety as well as identification of the amount and sources of stress in students can prevent complications and psychological consequences.

Objectives: The present study aimed to determine the assessment of depression, anxiety, and stress among female students living in dormitories of Qom University of Medical Sciences

Methods: This study is a cross-sectional study that was performed in 2015 on 300 students of Qom University of Medical Sciences who were selected using quota sampling. Data collection was performed using the DASS Scale (depression, anxiety, stress scale) included 42 items related to the domains of depression, anxiety and stress. Data were explored via percentage, mean and standard deviation. Statistical data were analyzed with analysis of variance, Pearson correlation coefficient using SPSS software.

Results: The mean age of students was 21.64 ± 3.50 years that most of whom were undergraduate and single students and mean of educational score was 16.17 ± 1.15. The results of this study showed that 24.9% of students suffered from stress, 21.6% from depression, and 20.2% had anxiety. There was no statistically significant correlation between "interest in the field of study" with two areas of depression (P = 0.003) and stress (P = 0.01) and there was also a significant relationship between "economy of families" and depression (P = 0.04). Meanwhile, there was a meaningful relationship between "family relationship status of students" and depression (P = 0.0001) and anxiety (P = 0.05).

Conclusions: The results indicated that stress, anxiety, and depression were prevalent in female students living in dormitories and factors such as interest in the field of education, socioeconomic status of families, and family relationship status of students were associated to stress, anxiety, and depression in students. Therefore, in addition to paying attention to students' mental condition and creating a peaceful environment, effective coping strategies should be taught to students.

Keywords: Stress, Anxiety, Depression, Students

1. Background

Now regarding to the development of universities and higher education centers, a significant number of students are young and adolescence people (1). Due to their particular circumstances during this critical period of life, students, especially female students living in student dormitories often face with situations against which experience many emotional reactions (2). Being in such situations is naturally associated with stress, anxiety, and depression which sometimes will affect their performances (3). Stress is a physical reaction that develops followed by an internal (cognitive) or external (environmental) stimulations (4) and it is generally caused by the need to adapt physically, psychologically and emotionally with changes (5). Anxiety is a condition in which a person feels something threatening is emerging, an event that is unknown to her, and she cannot deal with it. When a person feels depressed constantly, he faces with a threat and the hope of controlling events in this group of people is reduced (6).

Depression, anxiety, and stress of daily life and work are observed in many people today but it seems more intense in student life (7). This is important that if anxi-

ety and stress last for a long time, because of their important role in the onset of psychosomatic diseases, they can cause psychiatric disorders such as depression (8, 9). Absent, somatic complaints, and loss of professional abilities and skills can be noted as the effects of stress on students (10). Accordingly, other studies revealed that there is a direct correlation between stress, anxiety, and depression (11-13). Mohammadzadeh studied the rates of depression in 475 students of Ilam University and found that 76.1% of students in this university suffer from varying degrees of depression (11).

In the study of Lotfi and colleagues on students in Yazd, mild depression was observed in 35.4% of students, 13.4% were considered as moderate and 1.2% were reported with severe depression (12). The study of Sarir Amardi and co-workers which aimed to determine the sources of anxiety and coping strategies of medical students in Nepal suggests that anxiety and stress and their negative effects on the quality of life for students can influence their learning and clinical practice (13). According to other researches, tendency of students to alcohol, drugs, and cigarettes to cope with anxiety and stress is also clearly expressed (14). Since the mental health of society largely depends on their mental health and psychological damage in this important part of life can be increased, early determination of depression and anxiety as well as identification of the amount and sources of stress in students can prevent complications and psychological consequences and improve mental health.

2. Objectives

The present study aimed to determine the assessment of depression, anxiety, and stress among female students living in dormitories of Qom University of Medical Sciences.

3. Methods

This study was a cross-sectional study on female students living in dormitories of Medical Sciences of Qom with the approval of dormitories authorities in the first semester of the academic year of 2015. Based on a pilot study on 10 students and $\alpha = 0.05$, P = 0.44 (major problem), and d = 0.04, the sample size was determined as 300 students. The samples of the study were selected through quota sampling of students of any field. Inclusion criteria included lack of previous history of physical illness (chronic disease) or psychological and agreement of the persons to participate in the study. Data collection tool

was DASS scale (Depression, anxiety, stress scale) consisting of 42 items. In DASS questionnaire, 14 items were related to depression, 14 items to anxiety, and finally 14 items to stress so that items of any questions were scored in the scale including "at all" to "very much" from 0 to 3. Depression severity based on the scoring system included natural (0 - 9), (10 - 13) as mild, (14 - 20) as moderate, (21 - 27) as severe, and 28 and above as too severe and for anxiety (0 - 7) as natural, (8 - 9) as mild, (10 - 14) as moderate, (15 - 19) severe, and 20 and over as severe while for stress (0 - 14) was considered as natural, (15 - 18) as mild, (19 - 25) as moderate, (26 - 33) as severe, and above 34 as too severe.

After obtaining written permission and coordination with the authorities of dormitories and obtaining informed consent from the students and ensuring them on the confidentiality of information of the questionnaires, students completed questionnaires in self-reported method. They were also given enough time to answer the questions and finally it was decided that in case of non-completion of the questionnaire, they should be excluded. The reliability and validity of this scale have been previously confirmed (15). The scientific validity of the scale was investigated by face and content validity by seven experts. After ten eligible students filled the form out, the reliability of the scale was (Cronbach's alpha = 0.97). Data were explored via percentage, mean and standard deviation. Statistical data were analyzed with analysis of variance, Pearson correlation coefficient using SPSS software and P < 0.05 was considered as significant level.

4. Results

The mean age of students was 21.64 ± 3.50 years and mean of educational score was 16.17 ± 1.15 that most of which were undergraduate and single students. The results of this study showed that 24.9% of students suffered from stress, 21.6% from depression and 20.2% had anxiety (Table 1). Also a correlation was observed between depression, anxiety, and stress so that by increasing the amount of each variable, the values of two other variables have also increased (P = 0.0001). There was an inverse relationship between educational average and stress (P = 0.0001), and anxiety and depression domains (P = 0.001). Meanwhile no significant correlation was found between the age variable with any of the three areas (P = 0.93). There was statistically significant correlation between "interest in the field of study" with two areas of depression (P = 0.003) and stress (P = 0.01) and there was also a significant relationship between "economy of families" with depression (P = 0.04). There was also a meaningful relation between "family relationship status of students" and depression (P = 0.0001) and anxiety (P = 0.05).

Table 1. Mean and Percentage of Anxiety, Stress and Depression, Student Study

Variable	Normal	Mild	Moderate	Severe and Very Severe	Sum	Mean ± SD
Depression	61.6[a]	9.4	12.5	16.5	100	10.18 ± 9.73
Anxiety	55.6	9.4	15.5	19.5	100	8.83 ± 8.34
Stress	62.3	7.7	13.5	16.5	100	13.7 ± 10.64

[a]Values are expressed as %.

5. Discussion

The results of this study showed that almost one fifth of students suffered from stress, anxiety and depression that is a high amount among students. In Ebrahimiyan (16), Furr (17), Mohammadzadeh (11) Iqbal (18) and Patnaik (19) studies, the rate of depression was reported 57.5%, 53%, 76.1%, 51.3% and 46.86 respectively. The rate of stress and anxiety in Amini and Adriyan's studies were 36.9% and 39.5% (20, 21). In Sharifirad's et al. study (22), the rate of stress prevalence in medical students was shown as 22.7% mild, 23% moderate and 21.4% severe and the result of performed studies in this field showed the existance of stress and anxiety and depression among students which was consistent with the present study.

The results also suggest a correlation between depression, anxiety, and stress so that by increasing the amount of each variable, the values of two other variables have also increased and it was consistent with the findings of Ghasemnezhad (23) Byers (24), Adaryani and colleagues (21). The cause of relationship between these variables can be described as circumstances in which a person is placed so that in that situation an incorrect response of stress is created and if the response is not solved, the created problems are magnified more than what they are in the mind and they have a negative impact on all aspects of life and make the person susceptible to other problems such as anxiety and depression.

In this study, there was an inverse relationship between educational average and anxiety and stress domains while other studies have not found a significant association between stress and anxiety and educational average (20, 25, 26). It is probably due to the fact that one of the affective factors in stress and anxiety of students is concern about improving education and job prospects; therefore, this may cause the significant correlation in this study. Additionally, no significant correlation was found between the age variable and any of the three areas and the results were consistent with the findings of Ghasemnezhad and Barkhordari and also the research of Sharifirad (21, 22). In this study, there was a relationship between "economic statuses of families" and depression and also a significant relationship was found between "family relationship status of students" and depression and anxiety. Amini et al. and Tangada and colleagues in this regard revealed that students who lived with their families had significantly less stress while students living in dorms had more stress (20, 27). Therefore, factors like entering students to new environments, detachment from family, friends, and lack of amenities, and concern about the economic problems must be considered in the development of anxiety and depression. Hence, due to their role in the onset and continuation of mental illness in students, special attention and early detection in reducing or eliminating psychological discomfort, not only can prevent increase in serious diseases, but also they can be effective in development of rapid adaptation of the students.

Limitations of the study include the lack of attention to factors affecting the psychological state of students that are involved in their life continuously. In addition, other limitations of the study include dishonesty of students in completing the questionnaire because of fear of being labeled as having mental health problems. Therefore, it is suggested that in future studies in addition to using self-reporting method, the interviews should also be applied.

Since, according to the studies, God concept is related to the high levels of self-esteem and low levels of depression, in some researches, the role of religion has been considered effective in reducing psychological problems and it can be a source of support and active manner in facing with stressful stimuli (28). Therefore, it is suggested that university counseling centers teach some issues such as increasing spirituality, increasing students' awareness of the skills required for positive interaction with others as well as coping skills including the response to stress, the ability to assess the situation, self-reliance, resourcefulness, adaptability and flexibility, active attitude and ability to seeking peace.

5.1. Conclusions

The results of the present research indicated stress, anxiety, and depression in female students living in dormitories. They also indicated that factors such as interest in the field of education, family economic status, and family

relationship status of students had correlation with stress, anxiety and depression in students. Therefore, considering students' mental condition is essential and necessary actions should be taken in this regard.

Footnotes

Authors' Contribution: Hoorieh Rahiminia and Elaheh Rahiminia were responsible for the study conception and design; Hoorieh Rahiminia performed the data collection; Shahram Arsangjang performed the data analysis; Gholamreza Sharifirad, Elaheh Rahiminia and Hoorieh Rahiminia were responsible for the drafting of the manuscript; Elaheh Rahiminia, Gholamreza Sharifirad made critical revisions to the study for important intellectual content; Elaheh Rahiminia supervised the study.

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