The Correlation of Self-esteem and Depression in the Students of Kermanshah University of Medical Sciences, Iran

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Abstract

Background: Depression is a common mental disorder, and one of the symptoms is low self-esteem. The study of depression and its correlation with self-esteem in students is paramount.

Objectives: The present study aimed to determine the correlation between self-esteem and depression in the students of Kermanshah University of Medical Sciences (KUMS), Iran.

Methods: This descriptive-analytical, cross-sectional study was performed on 308 students of KUMS in 2018. Data were collected using the questionnaire of self-esteem and Beck depression inventory. The participants were selected via stratified sampling. Data analysis was performed using Chi-square and Mann-Whitney U test.

Results: A significant correlation was observed between self-esteem and depression in the students (P < 0.01). Furthermore, significant associations were denoted between self-esteem, marital status, and interest in the field of study. However, no significant correlations were observed between self-esteem, depression, gender, grade point average, major, education level, and the place of residence.

Conclusions: Due to the correlation between high self-esteem and the lower prevalence of depression in students, it is suggested that students' self-esteem be improved by conducting the necessary interventions, such as lifestyle modification, nutrition, and physical activity.

Keywords: Depression, Self-esteem, Students

1. Background

Depression is a common mental disorder, accounting for a large burden of diseases. It is a prevalent non-fatal disease in the world, which manifests through various symptoms (1), adversely affecting social functioning and imposing a significant burden on the individual, health system, and community (2).

Studies have shown that the prevalence of depression is 18.1 - 36.1% in different regions of the world (3). In a study conducted in Zanjan (Iran), 79% of students were suspected of mental disorders (61.5% mild, 15.3% moderate, 2.3% severe) (4). In another study performed in a public university in Sri Lanka, 51.1% of the students were suspected of a mental disorder (5). The prevalence of depression in Iranian university students has been reported to be 10.5 - 53%, and the rate has been shown to be higher among the students in Ilam (48%) (6). The results of another study indicated that students in Vietnam had moderate self-esteem

and mostly had no depression (7).

Depressive disorders may be the most common psychological condition experienced by students (8). Depression is considered an important issue in students even in case of mild symptoms. Although depression in students is similar to clinical depression, the onset and severity of the symptoms may vary (9). Research suggests that some of the physical symptoms of depression (e.g., changes in sleep and appetite) are not the key indicators of depression in students. Depression in this group manifests as changes in the academic and social progress as an indicator of depression (10).

Self-esteem refers to the inherently personal values of an individual, which indicate the approval or disapproval of the individual toward themselves, as well as the extent to which the individual considers themselves capable, important, and valuable (11). Self-esteem also involves the evaluation of the differences between one's self-image and the ideal self. Self-esteem could be recognized by exam-

ining the differences between how one perceives oneself. Rosenberg defines self-esteem as the positive and negative attitudes of an individual toward themselves, which have been attained through self-evaluation (12). Self-esteem is associated with various areas of psychology, including behavioral, cognitive, personality, and clinical concepts such as depression (13).

Given the importance of this concept, it is essential to identify and eliminate the factors that cause low self-esteem and determine its correlation with depression, which has not been widely investigated so far. To the best of our knowledge, no research has been conducted in this regard on the students of KUMS.

2. Objectives

The present study aimed to determine the correlation between self-esteem and depression in the students of Kermanshah University of Medical Sciences (KUMS), Iran.

3. Methods

This descriptive-analytical, cross-sectional study was conducted on 308 students of KUMS in the 2018 academic year. The participants were selected via stratified random sampling. Data were collected using a checklist including data on age, gender, marital status, field of study, grade point average, interest in the field of study, and place of residence. In addition, the following questionnaires were used to collect data.

(1) Rosenberg Self-esteem Scale: This questionnaire consists of 10 general phrases, five of which are negative, and five are positive. Each item is scored based on a four-point scale (Strongly Agree, Agree, Disagree, Strongly Disagree; score range: 1 - 4), and each subject could achieve a score within the range of 10 - 40. Scores above 30 indicate high self-esteem, scores 20 - 30 indicate moderate self-esteem, and scores less than 20 indicate low self-esteem (14). The validity and reliability of the Persian version of the Rosenberg self-esteem scale have been confirmed. Moreover, the internal consistency coefficient of the materials in the total student sample was estimated at 0.84 in the present study (15).

(2) Beck Depression Inventory: This scale has 30 five-choice items in three subscales of lethargy, cognitive-emotional, and academic motivation. The items are scored within the range of 1 - 5, and the maximum score of the scale is 150. In our study, the students were asked to rate the degree to which each item matched their state of mind over the past two weeks. Notably, the scores of this scale

are divided into four categories, including low, moderate, high, and very high depression. The internal consistency and temporal stability of the student depression scale (USDI) have been confirmed at the Cronbach's alpha of 0.91 (15).

For data collection, the researcher initially explained the objectives of the study and the method of completing the questionnaires, and the participants were assured of confidentiality terms regarding their personal information. After obtaining oral informed consent, the questionnaires were provided to the subjects.

Data analysis was performed in SPSS version 22 using Chi-square and Mann-Whitney U test at the significance level of 0.05.

4. Results

In total, 308 students of KUMS with the mean age of 23.91 ± 4.83 years were enrolled in the study, including 56.2% females and 43.8% males.

In the present study, only a significant correlation was observed between self-esteem and interest in the field of study, and no significant associations were denoted between self-esteem and other demographic variables (Table 1).

In the current research, only a significant correlation was observed between depression and interest in the field of study, and no significant associations were denoted between depression and other demographic variables (Table 2).

Our findings also indicated a significant correlation between self-esteem and depression in the KUMS students (Table 3).

5. Discussion

The results of the present study demonstrated significant correlations between self-esteem, marital status, and interest in the field of study. Furthermore, significant associations were denoted between self-esteem and gender, academic degree, field of study, grade point average, and place of residence. These findings are inconsistent with the previous studies in this regard (16-18). The current research indicated a significant positive correlation between marital quality and self-esteem (19). It seems that in today's society, the attitude of parents as the most important form of self-esteem does not differ significantly between the two genders.

In our study, only a significant correlation was observed between depression and interest in the field of study, while no significant associations were denoted between depression with gender, type of degree, field of

Table 1. Comparison of Frequency Distribution and Percentage of Demographic Variables with Self-esteem [a]

Variables	Self-esteem			P-Value
	Low	Medium	High	
Gender				0.38
Female	5 (38.5)	97 (58.1)	71 (55.5)	
Male	8 (61.5)	70 (41.9)	57 (44.5)	
Marital status				0.05
Single	13 (10.0)	157 (95.2)	113 (88.3)	
Married	0	8 (4.8)	15 (11.7)	
Level of education				0.50
BS and less	10 (79.9)	138 (82.6)	99 (77.3)	
MS and above	3 (23.1)	29 (17.4)	29 (22.7)	
The field of study				0.14
Medical	4 (30.8)	23 (13.8)	31 (24.2)	
Nursing and Midwifery	3 (23.1)	30 (18.0)	24 (18.8)	
Paramedical	2 (15.4)	47 (28.1)	48 (37.5)	
Health	4 (30.8)	47 (28.1)	25 (19.5)	
Grade point average				0. 20
≥ 16	12 (92.3)	115 (68.9)	89 (19.5)	
> 17	41 (7.7)	97 (54.2)	78 (43.6)	
Interest in the field of study				< 0.01
Yes	2 (15.4)	118 (70.7)	100 (78.1)	
No	11 (15.6)	49 (29.3)	28 (21.9)	
Place of living				0.57
Dormitory	9 (99.2)	135 (80.8)	100 (78.1)	
Non-dormitory	4 (30.8)	32 (19.2)	28 (21.92)	

[a] Values are expressed as No. (%).

study, grade point average, and place of residence (20-22). Regarding interest in the field of study, it is notable that having a clear goal, will power, and determination could decrease the risk of depression. Moreover, the significant correlation between academic disciplines and depression could be explained by the fact that due to the difficulty of courses in some disciplines and the substantiality of the taught educational material, mental conflicts are common among students, which may eventually give rise to depression.

The results of the present study showed a significant correlation between self-esteem and depression as the students with higher self-esteem had lower depression scores. Several studies conducted on different sample populations have confirmed the effect of self-esteem on depression and mental disorders, which is consistent with our findings. One of the key symptoms of depression is low self-

confidence, and the depressed patient often has a negative view of themselves, the environment, and the future. The thoughts of a depressed individual are more focused on blaming themselves, underestimating their achievements, and relying on their disabilities. Furthermore, they tend to imagine a dark future, assuming that any activity is difficult and impossible to do. This feeling of inability and lack of self-confidence cause the person to avoid ordinary activities and communication (23, 24). Therefore, it seems that attention to the concept of self-esteem and taking measures to improve this quality could effectively reduce the prevalence of depression.

Based on the results of the present study, it is suggested that more investigations be conducted on the students of other universities in Kermanshah province in this regard. It is also recommended that the findings of similar studies in Iran be reviewed through a meta-analysis.

Table 2. Comparison of Frequency Distribution and Percentage of Demographic Variables with Depression [a]

Variables	Depression			P- Value
	Low	Medium	High	
Gender				0.10
Female	75 (52.1)	59 (55.1)	39 (68.4)	
Male	69 (47.9)	48 (44.9)	18 (31.6)	
Marital status				0.20
Single	129 (89.6)	98 (93.3)	56 (98.2)	
Married	15 (10.4)	7 (6.7)	1 (1.8)	
Degree of education				0.23
BS and less	111 (71.1)	86 (80.4)	50 (87.7)	
MS and above	33 (22.9)	21 (19.6)	7 (12.3)	
The field of study				0.10
Medicine	31 (21.5)	18 (16.8)	9 (15.8)	
Nursing and Midwifery	28 (19.4)	17 (15.9)	12 (21.1)	
Paramedical	61 (42.4)	39 (36.4)	17 (28.8)	
Health	24 (16.7)	33 (30.8)	19 (33.3)	
Educational Grade point average				0.19
$\geq$ 16	94 (65.3)	78 (72.9)	44 (77.2)	
$\leq$ 17	50 (34.7)	29 (27.1)	13 (22.8)	
Interest in field of study				< 0.01
Yes	116 (80.6)	76 (71.0)	28 (49.1)	
No	28 (19.4)	31 (29.0)	29 (50.9)	
Place of living				0.5
Dormitory	115 (79.9)	87 (81.3)	42 (73.7)	
Non-dormitory	29 (20.1)	20 (18.7)	15 (26.3)	

[a] Values are expressed as No. (%).

Table 3. Comparison of Self-esteem and Depression in Students [a]

Variables	Self-esteem			P- Value
	Low	Medium	High	
Depression				< 0.01
Low	0	50 (16.2)	94 (30.5)	
Medium	1 (0.3)	79 (25.6)	27 (8.8)	
High	12 (3.9)	38 (12.3)	7 (2.3)	

[a] Values are expressed as No. (%).

Some of the limitations of our study were data collection by only two questionnaires and the subjective answers of the participants, which could not be verified.

5.1. Conclusions

Given the correlation between high self-esteem and the lower prevalence of depression in students, it is suggested that students' self-esteem be improved by necessary interventions such as positive correct affirmations, identifying and developing competencies, learning to accept compliments, eliminating self-criticism, introducing self-compassion, and affirming real worth.

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