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Evaluation of Depression and its Related Factors Among Female Students in Fasa, Iran

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Abstract

Background: We aimed to determine frequency of depression among female adolescent students and its related factors in Fasa, Iran.

Methods: In a cross-sectional study, female high school students were evaluated. Depression, mental disorder and family's relative peace were measured using standard scales.

Results: A total of 516 students were evaluated in which 157 (30.4%) students did not suffer any type of depression. The mean depression score of students had significant relationship with history of an addicted family member ($P<0.001$), family relative peace ($P<0.001$), history of any mental-psychological disorder in family ($P<0.001$) and parents' educational level ($P=0.03$).

Conclusion: The prevalence of depression was high in female students and was associated with variables such as drug-addicted family member, relative peace and history of mental-psychological disorders in the family.

Keywords: Depression; Adolescents; Frequency

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Introduction

Transition from childhood to adulthood and adolescence is a period of growth accompanied by significant changes. The way people react to pressures imposed by instinct, anxiety is unique and inevitable for adolescents, thereby increasing the likelihood of more severe emotional pressures, worries, fear and turmoil than other periods of life. Developmental characteristics of this particular phase of life set the grounds for several behavioral and mental disorders.[1]

According to the World Health Organization (WHO) definition, mental health is defined as one of the primary principles of mental healthcare among adolescents. Mental health and psychopathology in adolescence is of utmost importance in the development of the individual. Accordingly, depression has been regarded as the most prevalent, and currently the most serious, disease of the century to the extent that it ranks first among 10 main causes of inability over the globe, hence the current century being called the *Depression Century*.[2]

For years, it has been believed that children catch depression as well. Contrarily, over 20% of adolescents and children in the world suffer mental debilitating diseases such as depression.[2]

Not only does depression hampers adolescents' educational, social, and emotional performance but it is also an endangering factor accounting for absence from school, substance abuse, and suicidal behavior.[2] However, this disorder often goes undiagnosed and even when diagnosed is treated in an inappropriate way.[3] Compared to the past, depression has become more prevalent among adolescents, hence affecting its victims from a far early age.[4] Almost 20% of those who suffer depression during their lifetime have experienced the disorder when they were 12 to 19 years old.[5] According to studies conducted in the recent decade, the degree of depression among adolescents has been reported to range from 8% to 20%.[4]

According to a study performed by Nair, it was indicated that 3% of adolescents aged 13 to 19 suffer depression.[6] Moreover, Chauhan et al found that the prevalence of depression was about 38% in age groups ranging from 16 to 18 years old. Moreover, the same value for boys and girls equaled 35% and 41.8%, respectively.[4] In another study conducted by Verma et al,[2] it was revealed that of 321 students aged 15 to 18, 40.49% and 19% suffered minor and major depression, respectively. The prevalence of depression in men and women equaled 56.24% and 49.59%, respectively.[2] According to a study carried out by

Saluja on 9863 students with an age range of 11 to 15, it has indicated that 25% of girls and 10% of boys showed signs of depression.[7]

In most of the conducted studies, it was clearly shown that girls enjoyed higher degrees of depression prevalence than boys. Moreover, in some other studies, it was reported that girls suffer depression twice as many as boys.[1,5,8-10]

Given the fact that it will lead to disorders in a broad variety of social, educational, and professional performance, prevalence of depression is required to be significantly taken into consideration. Various studies have shown an estimated depression prevalence rate ranging from 10% to 30%. A vast number of factors are capable of generating depression including age, gender, educational level, school type, educational performance, family aspects, birth order, occupation, parents' education, housing conditions, history of mental disorder in parents, and structure of family.

Since over half of Iran's population is comprised of young people aged lower than 18, it is considered a young country as far as population is concerned. Accordingly, it is of crucial importance to address and, moreover, attempt to solve problems regarding adolescents who make up 25% of the population. Subsequently, aiming to determine frequency of depression among adolescents and its related factors, the present study was conducted on female students in Fasa, Iran.

Materials and Methods

This cross-sectional study was performed on female high school students at Fasa, Iran. According to Cochran's formula and stratified random sampling method, the sample size was comprised of 341 female students studying at Fasa, Iran high schools. It should be noted that high schools were selected from all geographical areas of Fasa county.

The research instrument employed in this study was Beck's questionnaire, whose validity and reliability were confirmed.[1] It encompassed 21 four-option items, each of which was scored from 0 to 3. Also, each subject's total score ranged from 0 to 63. Scoring 0 to 13, 14 to 19, 20 to 28, and 29 to 63 signified no depression, minor depression, mild depression and finally major depression, respectively.

Demographic information like stature, weight, father's occupation, parents' educational level, number of family members, history of divorce, and parents' addiction were recorded. Moreover, subjects completed 2 other standard questionnaires measuring mental disorder and family's relative peace.

Finally, the data were analyzed using descriptive statistics including frequency, percentage, mean, and standard deviation conducted using the SPSS software version 18.0 for windows (SPSS Inc., Chicago, IL). *P* values <0.05 were considered statistically significant. Also, *t* test, chi-square and analysis of variance (ANOVA) were used.

Results

Overall, the present study evaluated a total of 516 students. The demographic information of the subjects is presented in Table 1. In the present study, a total of 436 students (84.5%) reported having no mental-psychological disorder in their families and a number of 337 subjects (65.3%) asserted that they enjoy relative peace in their families. In the present study, a number of 157 (30.4%) students did not suffer any kind of depression. The students' depression severity is shown in Figure 1.

The mean scores of students with and without an addict in their family were 26.46 ± 12.03 and 19.24 ± 11.45, respectively. It showed a significant difference ($P<0.001$). Moreover, it was revealed that family's relative peace and history of mental-psychological disorder in family ($P<0.001$) were factors affecting depression. Table 2 showed factors related to depression.

In the present study, the students' depression mean score had a significant relationship with their parents' educational level ($P=0.03$). Nonetheless, depression was not reported to have the same significant link with stature, weight, and father's occupation ($P>0.05$).

Discussion

The present study was performed with the aim of determining the frequency of depression and its related factors among female high school students of Fasa county, Iran. The prevalence of depression among the students was 69.6%, which is confirmed by other studies

Table 1. Students' Demographic Information

Variables	
Weight (kg), mean ± SD	54.42 ± 9.68
Stature (cm), mean ± SD	158.75 ± 8.88
Family aspect, No. (%)	
4 Individuals	125 (24.2)
5 Individuals	192 (37.2)
6 Individuals	58 (11.2)
Other cases	141 (27.4)
Parents' education, No. (%)	
Lower than diploma	430 (83.3)
Diploma	30 (5.8)
Associate degree and higher	56 (10.9)
Father's occupation, No. (%)	
Self-employed	369 (71.5)
Retired	29 (5.6)
Clerk	22 (4.3)
Other	96 (18.6)
Addict in family, No. (%)	
Yes	59 (11.4)
No	437 (84.7)
History of divorce, No. (%)	
Yes	58 (11.2)
No	445 (86.2)

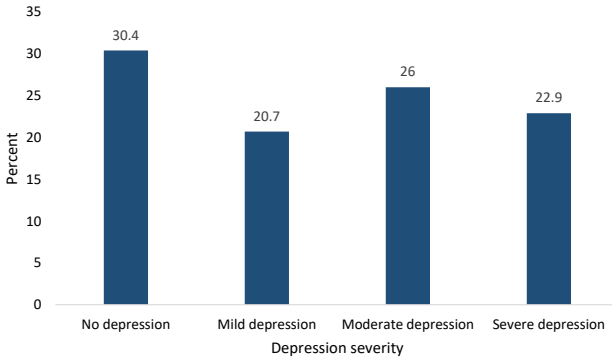

Figure 1. Students' depression severity.

Table 2. Factors Related to Students' Depression

	Mean ± SD	*P* Value
History of an addicted family member		
Positive	26.46 ± 12.03	<0.001
Negative	19.24 ± 11.45	
Family relative peace		
Positive	17.97 ± 11.50	<0.001
Negative	24.68 ± 10.92	
History of any mental-psychological disorder in family		
Positive	28.6 ± 10.8	<0.001
Negative	18.87 ± 11.36	
History of divorce in family		
Positive	23.70 ± 8.92	0.07
Negative	19.65 ± 7.44	

conducted to examine the same issue in Iran's various geographical regions, reporting a high prevalence ratio ranging from 53 to 78%.[1, 11-13] The findings of these studies reveal the greater family support for their adolescents. The prevalence of mild to major depression in female adolescents has been reported 16% to 21.9%, a value far lower than that achieved by this study.[10] According to another study carried out by Saluja et al, the prevalence of depression among a sample made up of adolescent girls in America has been reported to be 25%, which is lower than our study.[7] However, Verma et al[2] and Chauhan et al[4] reported high prevalence of depression (59.49% and 42.8%, respectively) in female adolescents in India. Their value is closer to our results.

The experienced disparity of results is due to distinct ways, in which girls experience social stresses in various cultures. As an instance, in Iran, the significance of pursuing education has created a more competitive atmosphere to gain better scores among students. Different methods of measurement are important to achieve such different results.

In the present study, it was shown that 26%, 22.9%, and 20.7% of students suffered mild, major and minor depression, respectively. A study conducted by Rostamzadeh and Khalilzadeh yielded results resembling to those of this study to the extent that the scores for minor, mild, and major depression were 19.3%, 32.5% and 16.4%, respectively.[11]

A study performed by Riahi et al[1] revealed that major depression, mild depression and minor depression were shown in 26.5%, 23%, and 15.5% of female students, respectively, and that total prevalence of depression was 65%. Similar to high prevalence of our study.

Rahimian et al[12] reported that, respectively, 25%, 9.1%, and 3.8% of students suffered minor, mild and major depression. Moreover, total depression prevalence was 37.9%, which is lower than that of our study. Note that in this study, male and female students were examined whereas the present study only evaluated female ones, a factor likely to be the cause of the disparities between results because girls are more prone to depression. Geographical differences should be considered. Moreover, Kordi et al indicated that 55.5% of female students suffered various degrees of depression.[13]

In the present study, presence of drug-addicted family member, relative family peace, and history of mental-psychological disorders in family environment have been reported to be significantly associated with students' depression. Nonetheless, the same significant link was not shown between depression and history of divorce in family. Tensions in the atmosphere of family shatter adolescents' peace and influence their psyche, thereby presenting the grounds for mental and psychological disorders. Subsequently, a deeply peace-embedded family as well as training parents to maintain such an atmosphere are among the measures highly effective in alleviating these disorders. Similar to students' demographic variables, parents' educational level was related to their depression scores such that the higher the parents' educational level, the more students' depressive conditions improved. Contrarily, parents' stature, weight and occupation showed no association with depression. Most studies reported no relationship between patients' age and depression.[1,3,7]

In line with the present study is another one carried out by Riahi et al,[1] which revealed that students' depression levels are related to their parents' educational levels. In another study conducted by Hallfors et al was shown that the higher the parents' educational levels, the lower the likelihood of depression will be expected.[14]

Consistent with the present study, Riahi et al[1] reported that parents' struggle is a factor leading to depression in children as marital conflicts increase, cooperation, affiliation and feelings of attachment among family members will decline. As a result of which parents tend to more aggressively and violently behave towards their children. The study conducted by Ghaffari et al,[15] in line with the present one, indicated that students with history of mental-psychological disorders as well as depression are far more susceptible to depression than those with no history of such disorders.

The present study showed no significant difference

between degrees of students' depression and number of family members. In contrast, Adewuya et al[16] indicated that the number of family members is a predictor of depression among university students. This difference is perhaps due to the disparity in age range of the studies' samples. Fatiregun and Kumapayi,[9] inconsistent with the present study, reported that the number of adolescent brothers and sisters is directly related to occurrence of depression symptoms since in densely populated family's children are usually deprived of sufficient parental attention and resources.

In conclusion, the present study disclosed that the prevalence of depression is high in the population under examination and that it is associated with variables such as drug-addicted family member, relative peace and history of mental-psychological disorders in the family.

Conflict of Interest Disclosures

The authors declare that they have no conflict of interests.

Ethical Statement

Student information was confidential.

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