RESEARCH ARTICLE

PREVALENCE OF DEPRESSION, ANXIETYAND STRESS AMONG SECONDARY SCHOOL STUDENTS IN JEDDAH CITY, SAUDI ARABIA

Maryam Mohammed Al-Shehri*[*], *Nouran Mohammed Harazi*[*], *Manal H Abo Elmagd*[**], *Maram Alghabbashi T*[#], *Mohammed Alshmemri*[***]**

[*]Department of Health Nursing, Staff Nurse in King Abdullah Medical Complex-Jeddah, KSA; [**]Department of Psychiatric and Mental Health Nursing, Umm Al Qura University, KSA& El Minia University, Egypt; [***]Department of Nursing Sciences and Research, Umm Al Qura University, KSA.

Abstract

Background: The World Health Organization identified mental health as "essential to human health" in its plan for preventing, treating, and conquering mental health diseases. It is believed that anxiety and depression, according to the American Psychological Association (APA), are both emotional responses that cause a comparable cluster of characteristics, such as sleep problems, exhaustion, muscular tightness, and restlessness. The study aimed to assess the prevalence of depression, anxiety, and stress among high school students in Jeddah city. Methods: A cross-sectional study; was carried out at selected secondary schools in Jeddah city from different districts (North-South-West-East); during the period from January 2022 to May 2022. The population sample for this study included female secondary students. Sample calculation was done by Stephen Thompson formula. Results: It was found that more than half (57.1%) of the participants are free from depression; (53.4%) are free from anxiety; while (81.0%) are not suffering from stress. There was a statistically significant correlation between depression and stress among students and their academic achievement. Moreover, there was a significant association between anxiety among students and their parent's status. Conclusion: School students' stress, anxiety, and depression prevalence are relatively high. Several variables were significantly associated with secondary school students suffering from stress, anxiety, and depression, such as academic achievement, family income, and marital status of students and their parents. *ASEAN Journal of Psychiatry, Vol. 23(6), June 2022: 1-12.*

Keywords: DASS-21, Depression, Anxiety, Stress, Adolescent, Secondary school students.

Introduction

The World Health Organization identified mental health as "essential to human health" in its plan for preventing, treating, and conquering mental health diseases. Although these perspectives, mental health issues remain the leading cause of disability and a significant public health concern worldwide due to illness evolution, treatment challenges, and growing incidence. Depression, anxiety, and stress, in particular, are crucial measures of mental health that, if left untreated, may severely impact people [1].

It is believed that anxiety and depression, according to the American Psychological

Association (APA), are both emotional responses that cause a comparable cluster of characteristics, such as sleep problems, exhaustion, muscular tightness, and restlessness. Unlike stress, which is generally brought on by an external influence and can be short-lived, anxiety persists even with no external stressor. A disinterest in regular activities, considerable weight or increase, sleeping pattern changes, decreased energy, and inability to focus, feelings of hopelessness or regret, and even repeated thoughts of death or suicide are all indicators of depression.

According to [2], anxiety is widespread and potentially debilitating as depression has gotten less attention and is frequently undiagnosed and inadequately treated in the general public, especially secondary school and college students. Anxiety patients may have different psychological and physical symptoms, such as tiredness, disorientation, headache, nausea, stomach discomfort, palpitations, breathlessness, incontinence, and intense terror or panic. Moreover, anxiety can also affect objective attention and focus, cognitive function, and conceptual performance, which are critical factors for students' success in school [3].

Adolescence is a significant developmental stage widely considered one of the most rapid periods of human development. Dramatic physical, interpersonal, and cognitive development, along with changes in self-confidence, characterize it. During adolescence and adulthood, self-esteem substantially influences crucial life consequences such as health and social implications. Higher levels of self-esteem, for particular, are linked to favorable outcomes such as vocational success, stronger social connections, a feeling of wellbeing, positive peer perceptions, higher grades, and an excellent ability to cope [4]. Depression, drug misuse, antisocial behaviour, and suicide are linked to low self-esteem. The literature shows that children with poor self-esteem have lower social functioning, such as peer acceptance [5].

Adolescents' depression, anxiety, and stress are major health problems with long-term consequences. Depression can negatively impact many facets of a secondary school student's life. It is a hazardous phenomenon, especially when accompanied by anxiety and stress. Studying depression, anxiety, and stress in secondary school students is critical for overcoming these unpleasant symptoms and moving forward in their academic and intellectual lives. Even though depression, anxiety, and stress are common and have a significant impact, identification and treatment in primary care have been inadequate. During the last five years, there has been little research on the prevalence of depression, anxiety, and stress among teenagers nationally, and very scant for the Kingdom of Saudi Arabia (KSA).

Most research on depression, anxiety, and stress has been conducted on adults and college students, notably medical and nursing students. As a result, the present study will look at the prevalence of depression, anxiety, and stress among secondary school students in Jeddah, Saudi Arabia, as well as the link between depression, anxiety, stress, and other variables. School nurses are usually the first to notice and treat behavioral health difficulties and connect students and families with assistance networks [6]. Model of the whole school, whole community, and whole child, these practice components are used by school nurses to effectively address social, psychological, and physical wellbeing challenges in individual students and populations. Because of the early start of emotional and mental health disorders and their consequences, investments in preventative and early intervention programs are required.

Aim of the Study

To assess the prevalence of depression, anxiety, and stress among high school students in Jeddah city.

Research Question

What is the prevalence of depression, anxiety, and stress among secondary school students in Jeddah city?

Materials and Methods

Research design

A descriptive correctional cross-sectional study.

Research settings

The study was conducted at selected secondary schools in Jeddah city from different districts (North-South-West-East). These schools will be selected based on their characteristics and educational features, and female secondary schools will be chosen [7]. The total number of these schools is 8. The entire duration of this

research was five months, from January 2022 to May 2022.

Research subjects

Study participants recruited in the study are students from governmental female secondary schools studying in the schools of Jeddah. The total number of them is 69306.

Sample Size and Sampling Technique

The sample of the study was calculated using the Stephen Thompson formula (α=0.05, C.I. 95.0%, N=69306). The following formula was used to calculate the sample:

$$n = \frac{N X p(1-p)}{[[N-1X(d^2 \div z^2)] + p(1-p)]}$$

$$n = \frac{69306 X\, 0.50(1-50)}{69306 - 1X\left(\frac{0.0025}{3084}\right) + 0.50(1-0.50)} = 382 student$$

After calculation, 382 students were needed in the current study. The researcher used a convenient sampling method to recruit study participants from each school [8]. In this study, 486 questionnaires were collected. This high response could be attributed to the electronic distribution of the data collection instruments via the link, and the students were encouraged to fill up the questionnaires.

Inclusion criteria

Saudis and non-Saudi female school students aged from 14 to 18 years old who agreed to participate in the current study were included to participate in the present study.

Exclusion criteria

Students with intellectual and learning disabilities were excluded from participation in this study to prevent these interrelated variables.

Tools of Data Collection

The researchers adopted the Depression, Anxiety and Stress Scale-21 (DASS-21) from to collect data for this study. This tool was translated into the Arabic language. The tool has four parts; the first part involves students' demographic factors such as their age, marital status, and parents' status. The second part involves seven questions related to depression. The third part involves seven questions related to anxiety, while the fourth part involves seven inquiries related to stress [9]. The participants were asked to give their responses on a four Likert scale, as the score of zero indicates: It does not apply to us at all; the score of 1 indicates it applies to us a little or a little more; the score of 2 indicates: Applies to us significantly or some of the time, while the score 3 indicates Applies to us very often or most of the time. The higher the score, the higher the level of negative emotions.

The cut-off scores for this tool involve five categories of the scoring system, including normal, mild, moderate, severe, and extremely severe. Regarding depression, participants who got a score of 0-9 were considered normal, the participants who got a score of 10-13 were considered to have mild depression, and the participants who got 14-20 were considered to have moderate depression, 21-27 were considered having severe depression. In contrast, the participants who got s score of 28 or more were considered to have extremely severe depression [10].

Regarding anxiety, participants who got a score of 0-7 were considered normal, the participants who got a score of 8-9 were considered to have mild anxiety, and the participants who got 10-14 were considered to have moderate anxiety, 15-19 were considered having severe anxiety, while the participants who got s score of 20 or more were considered having extremely severe anxiety. Regarding stress, participants who got a score of 0-14 were considered normal, the participants who got a score of 15-18 were considered to have mild stress, and the participants who got 19-25 were considered to have moderate stress, 26-33 were considered to have severe stress, while the participants who got s score of 34 or more were considered having extremely severe stress [11].

Ethical considerations

The researcher was committed to all required ethical considerations for this study. Ethical approval was taken after permission from the Faculty of Nursing Department. Ethical approval was also obtained from the ministry of higher education by directing a letter from Umm Al-Qura University to educational management in Jeddah Department of Research Studies. Moreover, the study participants were notified that there would be no risk of being included in this study [12]. Participants in the study were anonymous and voluntary as well. Moreover,

confidentiality and privacy were assured for all participants. Data related to the current study were kept secure until the study was finished, and these data will not be used for research purposes.

Data Collection Process

The process of data collection included:

1. Design the Research Questionnaire as an electronic link.
2. The ethical approval for the research was obtained through the Department of Research and Graduate Studies in the Department of Education in Jeddah after receiving the initial approval from the Dean of the College of Nursing and the Deanship of Graduate Studies and Research at Umm Al-Qura University.
3. It was agreed with the manager of the Research Department (Mr Ahmad Al-Shehri) in the Jeddah Education Department, randomly select eight schools in different areas in Jeddah city.
4. The school managers visited and agreed with them to distribute the electronic link among the students after taking the family's consent.
5. Applying inclusion and exclusion criteria based on the proposed study were done.
6. Consent forms were given to the student and informed them about the objective and their participation in the study.
7. Participants were recruited to participate in the study after their voluntary consent.
8. Assuring the participants' ethical considerations by anonymity.
9. Questionnaire was administered to the selected participants through the electronic link, and Data were collected within one month from March 4, 2022, until April 4, 2022.

The researcher used Statistical Package for Social Sciences (IBM, SPSS) version 24 to make an analysis of the data. The statistical tests used included descriptive statistics such as frequencies, means, Standard Deviations (SD), and inferential statistics, such as independent sample t-test, One way ANOVA, Chi-Square test, and Pearson correlation [13].

Results

Table 1 shows the distribution of participants based on their age, nationality, academic achievement, marital status, and family status. The table shows that those who are 15–16 years old constitute (33.9%; n=166) of the study sample, those who are 17–18 years old constitute (30.9%; n=155) of the study sample, while those who are 16–17 years old constitute (26.4%; n=129) of the study sample [14]. Regarding the participants' nationality, most of them, (88.5%; n=433) are Saudi, while (11.5%; n=56) are non-Saudi.

Table 1. Sociodemographic characteristics of study subjects (n=489)

Sociodemographic data	**no**	**%**
Age:		
14-15	43	8.8
15-16	166	33.9
16-17	129	26.4
17-18	151	30.9
Nationality		
Saudi	433	88.5
Non – Saudi	56	11.5
School year		
First year	225	46
Second year	125	25.6
Third year	139	28.4
Academic achievement		

Excellent	365	74.6
Very good	100	20.4
Good	21	4.3
Fail	3	0.6
Marital status		
Single	468	95.7
Married	21	4.3
Parents status		
Living within family	396	81
Divorced / separated	54	11
Deceased mother	27	5.5
Deceased father	7	1.4
Both parents deceased	5	1
Family income		
Excellent	217	44.4
Good	232	47.4
Low	40	8.2

Furthermore, (46.0%; n=225) are in the first year, (28.4%; n=139) of participants are in the third year, and (25.6%; n=125) are in the second year. In addition, the participants who had excellent academic achievement constitute (74.6%; n=365) of the study sample, the participants who had very good achievement constitute (20.4%; n=100), while those who achieved good scores constitute (4.3%; n=21). Moreover, the vast majority (95.7%; n=468) of participants in this study are single [15]. Meanwhile, (4.3%; n=21) of them are married.

On the other hand, most of the participants (81.0%; n=396) live within a family, and (11.0%; n=54) of the participants' parents are either divorced or separated. The previous table also shows that (47.4%; n=232) of participants have good family income, (44.4%; n=217) have excellent income, and (8.2%; n=40) have low family income [16].

Table 2 shows that more than half (57.1%; n=279) of the participants are free from depression; (53.4%; n=261) are free from anxiety; while (81.0%; n=396) are not suffering from stress.

Table 2. Levels of depression, anxiety, and stress among secondary students (n=489)

Variables	**Normal**		**Mild**		**Moderate**		**Severe**		**Extremely severe**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Depression	279	57.1	109	22.3	93	19	8	1.6	-	-
Anxiety	261	53.4	58	11.9	94	19.2	57	11.7	19	3.9
Stress	396	81	69	14.1	24	4.9	-	-	-	-

Table 3 shows the association between students' educational grade and their depression, anxiety, and stress level. The table shows that there is no significant association between students' grade and the level of their depression (p>0.05; P-

value=0.172), anxiety (p>0.05; P-value=0.319), and stress (p>0.05; Pvalue=0.124).

Table 3. Correlation between educational grade and psychological distress, depression, anxiety, and stress levels among secondary school students (n=489)

Variables	**Depression level**				
	Normal 0-9	**Mild 10-13**	**Moderate 14-20**	**Sever 21-27**	**Extremely sever+28**
Frist grade n=(225)	124	56	41	4	-
Second grade n=(125)	67	28	30	0	-
Third grade n=(139)	88	25	22	4	-
Total	279	109	93	8	-
Pearson Chi-Square test=9.034					
P-value=0.172					
Variables	Anxiety level				
	Normal 0-7	Mild 8-9	Moderate 10-14	Sever 15-19	Extremely sever+20
Frist grade n=(225)	122	21	41	32	9
Second grade n=(125)	62	16	30	14	3
Third grade n=(139)	77	21	23	11	7
Total	261	58	94	57	19
Pearson Chi-Square test=9.284					
P-value=0.319					
Variables	Stress level				
	Normal 0-14	Mild 15-18	Moderate 19-25	Sever 26-33	Extremely sever+34
Frist grade n=(225)	189	28	8	-	-
Second grade n=(125)	96	24	5	-	-
Third grade n=(139)	111	17	11	-	-
Total	396	69	24	-	-
Pearson Chi-Square test=7.237					

P-value=0.124

Table 4 shows the correlation between psychological distress and academic achievement among secondary school students [17]. There is a statistically significant correlation between depression among students and their academic achievement ($p<0.05$; P-value=0.000). At the same time, it is found that students who are free from depression get the excellent academic achievement. In addition, there is a significant correlation between academic achievement and student stress levels ($p<0.05$; P–P-value.000).

Table 4. Correlation between academic achievement and emotional psychological distress depression, anxiety and stress levels among secondary school students (n=489)

Variables	**Depression level**				
	Normal 0-9	**Mild 10-13**	**Moderate 14-20**	**Sever 21-27**	**Extremely sever+28**
Fail n=(3)	0	1	1	1	-
Good n=(21)	7	7	6	1	-
Very good n=(100)	56	29	12	3	-
Excellent n=(365)	216	72	74	3	-
Total	279	109	93	8	-
Pearson Chi-Square test=35.018					
P-value=0.000					
Variables	Anxiety level				
	Normal 0-7	Mild 8-9	Moderate 10-14	Sever 15-19	Extremely sever+20
Fail n=(3)	0	1	1	1	0
Good n=(21)	7	4	4	5	1
Very good n=(100)	53	15	21	5	6
Excellent n=(365)	201	38	68	46	12
Total	261	58	94	57	19
Pearson Chi-Square test=17.077					
P-value=0.147					
Variables	Stress level				
	Normal 0-14	Mild 15-18	Moderate 19-25	Sever 26-33	Extremely sever+34
Fail n=(3)	1	2	0	-	-
Good n=(21)	8	10	3	-	-
Very good n=(100)	80	13	7	-	-
Excellent n=(365)	307	44	14	-	-
Total	396	69	24	-	-
Pearson Chi-Square test=35.484					
P-value=0.000					

Table 5 shows the association between emotional distress and their parent's status among secondary school students. There is a significant association between anxiety among students and

their parent's status ($p<0.05$; P-value=0.001). The presence of both parents leads to a decrease in anxiety levels. Furthermore, there is a significant association between stress among students and their parent's status ($p=0.001$). The presence of both parents leads to a decrease in stress levels [18,19].

Table 5. Correlation between parents' status and emotional psychological distress depression, anxiety and stress levels among secondary school students (n=489)

Variables	**Depression level**				
	Normal 0-9	**Mild 10-13**	**Moderate 14-20**	**Sever 21-27**	**Extremely sever +28**
Living within family n=(396)	239	81	71	5	-
Divorced / separated n=(54)	24	13	15	2	-
Deceased father n=(27)	11	10	5	1	-
Deceased mother n=(7)	1	4	2	0	-
Both parents deceased n=(5)	4	1	0	0	-
Total	279	109	93	8	-
Pearson Chi-Square test=19.728					
P-value=0.072					
Variables	Anxiety level				
	Normal 0-7	Mild 8-9	Moderate 10-14	Sever 15-19	Extremely sever+20
Living within family n= (396)	221	35	82	46	12
Divorced / separated n= (54)	23	14	6	5	6
Deceased father n=(27)	9	8	4	5	1
Deceased mother n=(7)	4	0	2	1	0
Both parents deceased n=(5)	4	1	0	0	0
Total	261	58	94	57	19
Pearson Chi-Square test=38.990					
P-value=0.001					
Variables	Stress level				
	Normal 0-14	Mild 15-18	Moderate 19-25	Sever 26-33	Extremely sever+34
Living within family n=(396)	327	48	21	-	-
Divorced / separated n=(54)	43	9	2	-	-
Deceased father n=(27)	16	11	0	-	-
Deceased mother n=(7)	5	1	1	-	-
Both parents deceased n=(5)	5	0	0	-	-

Total	396	69	24	-	-
Pearson Chi-Square test=18.869					
P-value=0.001					

According to table 6, post hoc test showed that the highest mean score of depression among students is significantly associated with a decrease in family income. The table also illustrates that a significant difference in the mean score of depression concerning students' family income (P<0.05, P-value=0.000). It is noted from this table those with low family income have the highest mean score of depression significantly.

Moreover, Post hoc test showed that the highest mean anxiety score among students is associated significantly with a decrease in family income. In addition, there is a significant difference in the mean anxiety score concerning students' family income (P<0.05, P-value=0.000). Those with low family income have significantly the highest mean score of anxiety.

On the other hand, the post hoc test showed that the highest mean score of the level of stress among students is associated significantly with a decrease in family income. Moreover, there is a significant difference in the mean stress score about students' family income (P<0.05, P value=0.000). Those with low family income have the highest mean score of stress significantly.

Table 6. Correlation between emotional distress and students' family income (n=489)

Family income	**DASS Subscale**		
	Depression	**Anxiety**	**Stress**
	Mean ± SD	Mean ± SD	Mean ± SD
Low (N=40)	10.53 ± 5.93	8.83 ± 6.51	11.3000 ± 6.35368
Moderate (N=232)	9.78 ± 5.06	8.78 ± 5.71	9.5086 ± 5.55725
High (N=217)	7.41 ± 5.10	6.73 ± 5.38	7.1797 ± 5.76708
F-test	14.421	8.051	14.077
P value	0	0	0

Table 7 shows an insignificant statistical difference of the mean score of depression regarding students' marital status (P>0.05, P value=0.248). In addition, there is an insignificant statistical difference in the mean anxiety score about students' marital status (P>0.05, P-value=0.542). Moreover, there is an insignificant statistical difference in the mean score of stress about students' marital status (P>0.05, P-value =0.789).

Table 7. Correlation between emotional distress and students' marital status (n=489)

Marital status	**DASS Subscale**		
	Depression	**Anxiety**	**Stress**
	Mean ± SD	**Mean ± SD**	**Mean ± SD**
Married (N=21)	10.09 ± 5.37	8.62 ± 6.07	8.29 ± 5.72
Single (N=468)	8.73± 5.29	7.84 ± 5.71	8.64 ± 5.88
T-test	1.156	0.611	-0.268
P value	0.248	0.542	0.789

Using the Pearson correlation test, table 8 shows the coefficient correlation between depression, anxiety, and stress. There is a significant strong positive correlation between depression and stress (R value=0.716; p-value 0.000). In addition, there is a significant strong positive correlation between students' depression and

anxiety (R value=0.664; p-value 0.000). The high depression levels are highly correlated with increases in stress and anxiety levels. Furthermore, there is a significant strong positive correlation between students' level of anxiety and stress (R value=0.669, p-value 0.000). Moreover, an increase in anxiety level is highly correlated with an increase in stress level.

Table 8. Coefficient Pearson Correlation between depression, anxiety, and stress domains of DASS scale (n=489)

Variables		Correlations		
		Depression	Anxiety	Stress
Depression	Pearson Correlation R value	1	0.664**	0.716**
	P–value	-	0	0
	N	489	489	489
Anxiety	Pearson Correlation R value	0.664**	1	0.669**
	P – value	0	-	0
	N	489	489	489
Stress	Pearson Correlation R value	0.716**	0.669**	1
	P – value	0	0	-
	N	489	489	489
**Correlation is significant at the 0.01 level (2-tailed).				

Discussion

The current study results are not consistent with the results in Saudi Arabia, which showed that 26.0% of students were not depressed, 34% were mildly depressed, 24.6% were moderately depressed, whereas 10.4% were moderately severe depression and only 5.0% were severely depressed. Differences in the current study results and Alharbi results could be attributed to the measurement tool's difference, sampling process, and sample size. The current results are also not similar to results revealed by Jovanović et al. (2017) in the Asir Region, Saudi Arabia, which showed that more than one-third of the participants (38.2%) had depression while 48.9% had anxiety and 35.5% had stress. In the current study, depression is higher than what has been revealed in the study of Jovanović et al. (2017), as the depression in our study was categorized from mild to severe depression, with 57.1 who do not have any symptoms of depression. In contrast, they also deemed lower anxiety results, categorized from mild to severe. According to a study conducted among secondary students in Malaysia, the overall prevalence of depression was 42.6%, with mild, moderate, and severe depression being 21.5%, 18.1%, and 3.0%, respectively. This study's prevalence of depression is lower than the findings of a survey conducted among adolescents in other countries. It is lower than a study conducted among adolescents in other countries.

Moreover, according to a study conducted among Iranian female teenagers in secondary schools in Western Iran, the prevalence of severe depression as identified by the CES-D was 52.6%, whereas the overall prevalence was 72.6%. High depression, stress, and anxiety among students in this study could be attributed to several factors. One of these factors involves emotional disturbances since they are in their adolescent period and engaged in psychological disturbances. Other factors involve the presence of peer pressure and the teenager's mental health and emotional stability.

Adolescent mental health policy is lacking, mental health services are inadequate, and there is a severe scarcity of adolescent psychiatrists and other relevant human resources, among other factors only a few published studies have looked at the mental health of teenagers in general. Among the few studies conducted, the National Mental Health Survey of Nepal 2020 showed a

5.2% prevalence of mental distress among teenagers in Nepal aged 13–17 years national human rights commission. The current results revealed no significant difference in the mean score of depression, anxiety, and stress about students' marital status regarding marital status. These results are not similar to, which showed that single status was far more anxious than married and divorced/widowed, and its association was strongly positive.

The current study found no significant association between anxiety among students and their academic achievement. Thus, there was no significant effect of students' academic achievement on secondary students' anxiety. This is in contrast to findings, which found that a considerable proportion of students were impacted by anxiety, which resulted in poor performance. This result is also not similar to, which showed that different grades of anxiety were present among the majority of the school students, and students' academic performance has been affected by anxiety. Mild anxiety is usually good as it helps a person perform their duty sincerely and timely. Very little anxiety often makes a person detached from self, others, and the real world. Banga also found different anxiety levels in private senior school students.

In this study, school grades did not affect students' anxiety, stress, and depression. This could be attributed to the unified level of emotional distress among different grades, and they have the same level of depression, anxiety, and stress. Regarding depression, the association between depression and students' grades was not significant. This result was similar to what was revealed by, which showed no significant association between students' grades and school grades.

It was also noted that parents' status in this study has no effect on depression, but a significant impact was on students' anxiety and stress. This result is similar to what has been revealed by, which showed that parents' status had no relation to students' depression. Regarding family income and its association with depression, stress, and anxiety, a significant association was noted between low income and high depression, stress, and anxiety scores among school students. A similar result was noted in study in Abha, Saudi Arabia, which showed that parents' marital status and socioeconomic status were the main risk factors for social anxiety among students.

In the current study, depression and stress were associated with academic performance. This result is different from the results of which showed that academic performance is negatively correlated with mild to severe anxiety symptoms. The link between depression, stress, and school performance could be attributed to a person's financial situation being critical to them. Unavailability or insufficient income to meet human needs is strongly linked to depression symptoms.
The current results regarding the association between stress, anxiety, and depression with marital status are not similar to the results obtained in the study by, which showed that there was a significant difference between the symptoms of depression, anxiety, and stress and marital status. The current findings contradict the findings of the Noorbala et al. study, which found that the risk of mental disorders rises with divorce.

Recommendations

- The school managers could implement appropriate interventions, such as student monitoring and support, student counselling and periodic workshops for encouraging students to share their problems and seek help when they are experiencing psychological distress.
- There is a crucial need for a professional school nurse to provide counselling and stress management training programs aimed at minimizing anxiety and stress among students.
- Maintaining a positive teacher-student connection will prove advantageous in the long term. Teachers should monitor their pupils' attitudes and behaviours when they are under their supervision at school during exams, marks, friendship, general health, and interest.
- Parents should be more mindful of their children's mental health, especially throughout adolescence, because the frequency of mental disorders has grown dramatically over time.
- Parents' involvement in encouraging children's positive behaviour would reduce the prevalence of sadness, anxiety, and stress among students in contemporary society.
- Improving the perceived degree of social support and self-esteem among these teenagers via various resources may help

decrease depression and mental suffering in them.
- Further research should be conducted to reveal other factors affecting psychological distress among school students.

Future studies should focus on other social factors and social support received by the family and its correlation with stress, depression, and anxiety.

Research Limitations

- The sample used in this study was convenient, limiting the generalization of study results to other populations.
- The current study was conducted on female students only.

Conclusion

The current study findings concluded that school students' prevalence of stress, anxiety, and depression is relatively high. It is proved that the secondary female students who participated in this study are facing emotional distress. Several variables were significantly associated with secondary school students suffering from stress, anxiety, and depression, such as academic achievement, family income, and marital status of students and their parents.

References

1. Alharbi R, Alsuhaibani K, Almarshad A, Alyahya A. Depression and anxiety among high school student at Qassim Region. Journal of Family Medicine and Primary Care 2019; 8(2): 504–510.
2. Alsamghan AS. Social Anxiety Symptoms and Quality of Life of Secondary School Students of Abha, Saudi Arabia. The Journal of Genetic Psychology 2021; 182(1): 18–30.
3. Bhattarai D, Shrestha N, Paudel S. Prevalence and factors associated with depression among higher secondary school adolescents of Pokhara Metropolitan, Nepal: A cross-sectional study. BMJ open 2020; 10(12): e044042.
4. Choo CC, Harris KM, Chew P, Ho RC. What predicts medical lethality of suicide attempts in Asian youths?. Asian journal of psychiatry 2017; 29: 136–141. [Crossref],[Google Scholar]
5. Gomaa MA, Elmagd MH, Elbadry MM, Kader RM. Depression, Anxiety and Stress Scale in patients with tinnitus and hearing loss. European archives of oto-rhino-laryngology 2014; 271(8): 2177–2184.
6. Jovanović VR, Đonović N, Dutina A. Factors associated with the depression, anxiety and stress among high medical school of professional studies students. Medicinski časopis 2017; 51(1): 7-14.
7. Kambuga Y. Anxiety and Academic Performance among Secondary School Students in Tanzania. İnternational Journal of İnnovative Psychocol &amp 2016; 1-8.
8. Keane L, Loades M. Low self-esteem and internalizing disorders in young people–a systematic review. Child and Adolescent Mental Health 2017; 22(1): 4–15.
9. Latiff LA, Tajik E, Ibrahim N, Abubakar AS, Ali SS. Depression and its associated factors among secondary school students in Malaysia. Southeast Asian J Trop Med Public Health 2016; 47(1): 131.
10. Lovibond PF, Lovibond SH. The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. Behaviour Research and Therapy 1995; 33: 335 –338.
11. Lun KW, Chan CK, Ip PK, Ma SY, Tsai WW. Depression and anxiety among university students in Hong Kong. Hong Kong Med J 2018; 24(5): 466–472.
12. Mirzaei M, Yasini Ardekani SM, Mirzaei M, Dehghani A. Prevalence of Depression, Anxiety and Stress among Adult Population: Results of Yazd Health Study. Iranian journal of psychiatry 2019; 14(2): 137–146.
13. Moeini B, Bashirian S, Soltanian AR, Ghaleiha A, Taheri M. Prevalence of depression and its associated sociodemographic factors among Iranian female adolescents in secondary schools. BMC psychology 2019; 7(1): 1-11.
14. Nag K, Ghosh B, Datta A, Karmakar N, Bhattacharjee P. A cross-sectional study on the prevalence of anxiety among school students in Teliamura municipality area of Tripura. Indian journal of psychiatry 2019; 61(5): 491–495.
15. Noorbala AA, Faghihzadeh S, Kamali K, Bagheri Yazdi SA, Hajebi A T, et al., Mental Health Survey of the Iranian Adult Population in 2015. Archives of Iranian medicine 2017; 20(3): 128–134.

16. Quek TTC, Tam WWS, Tran BX, Zhang M, Zhang Z, et al., The global prevalence of anxiety among medical students: A meta-analysis. International Journal of Environmental Research and Public Health 2019; 16(15): 27-35.
17. Ramón-Arbués E, Gea-CaballeroV, Granada-López JM, Juárez-Vela R, Pellicer-García B, et al., The Prevalence of Depression, Anxiety and Stress and Their Associated Factors in College Students. International Journal of Environmental Research and Public Health 2020; 17(19): 7001.
18. Runswick OR, Roca A, Williams AM, Bezodis NE, North JS. The effects of anxiety and situation-specific context on perceptual-motor skill: a multi-level investigation. Psychological research 2018; 82(4): 708–719.

Corresponding Author: ***Maram T.Alghabbashi, Department of Nursing Sciences and Research, Umm Al Qura University, KSA.***

Email: mtghabbashi@uqu.edu.sa

Received: 24 May 2022, Manuscript No. AJOPY-22-69210; **Editor assigned:** 25 May 2022, PreQC No. AJOPY-22-69210 (PQ); **Reviewed:** 10 June 2022, QC No AJOPY-22-69210; **Revised:** 17 June 2022, Manuscript No. AJOPY-22-69210 (R); **Published:** 27 June 2022, DOI: 10.54615/2231-7805.47264.