

Anxiety and Depression among Adolescent Students in Baghdad

Dr. Bushra Abdul Aziz Saeed

M.B.Ch.B., F.A.B.M.S. \ (Psychiatry), Iraqi Ministry of Health, Al-karkh Health Directorate, Central Teaching Hospital of Pediatric, Baghdad, Iraq

Abstract: Background: The common neurotic or emotional responses to stress associated with adolescents are affective symptoms such as irritability, the lability of mood, and anxiety symptoms particularly related to social and environmental situations. Social withdrawal school refusals may present for the first time during early adolescence as a manifestation of inner feelings of anxiety and depression. Aims of study: 1. To determine the prevalence rate of anxiety and depression among adolescent students attending two secondary schools in Baghdad 2. To assess the traumatic events in these students that were exposed to it in the last seven years after the 2003 war. Method: A sample of 108 students from two secondary schools (third intermediate classes) in Baghdad was included in the study and as follows: AL-Bashair for girls and Palestine for boys, their ages ranged between 14 - 16 years old, the data were collected during the period from 21-12-2009 to 24-12-2009. To identify the traumatic events, especially in the last seven years from 2003 to 2009, and to determine the prevalence of generalized anxiety disorder and depression and, these tools were: 1. Modified War Trauma Questionnaire. (WTQ) 2. The Spence Children Anxiety Scale. (SCAS) 3. Birlson's Depression Self Rating Scale for Children. (DSRS-C) Results: The students were exposed to a wide range of traumatic events. 38.9% of the sample had more than 11 traumatic events during the last seven years (from 2003-2009), while those who were exposed to one or two traumatic events were (5.6%) only. The overall prevalence of depression was 38.0%. (For males, 24.6%, female 55.3%) . While that for the generalized anxiety disorder was 49.1%. (Male 37.7%, female 63.8%). Conclusion: The direct and indirect exposure to violent traumas resulted from the 2003 war increased the risk of depression and anxiety among school children. The number of traumatic events were high among adolescent students, and the rate of anxiety and depression was found to be at a higher ratio among girls compared to boys.

Keywords: Anxiety and Depression, Adolescent Student, Anxiety and depression

INTRODUCTION

Adolescence denotes the phase of development that bridges the gap between childhood and adulthood. Adolescence typically spans from approximately 12 until the late teenage years, at which time physical development is largely finished. Puberty is the phase of sexual maturity that transitions a child into a physiologically mature adult. It begins with a period of physical growth known as the adolescent growth spurt, which is accompanied by the development of reproductive organs and secondary sex characteristics.

The onset of puberty and the pace at which it advances might vary significantly where the mean age of girls is approximately 12 years old.

Adolescence is a phase marked by emotional volatility, internal conflict, and defiance. Adolescents who exhibit significant behavioral or emotional issues typically have a background of comparable problems during their youth. A significant proportion of teenagers who experience severe depression had previously experienced anxiety or other forms of psychological distress [Zahn-Waxler, C. *et al.*, 2000].

Anxiety disorder is a prevalent issue among teenagers. Research conducted using community samples indicates that approximately 8-10% of children fulfill the diagnostic criteria for an anxiety

illness that significantly hampers their everyday functioning [Costello, R. J, 1989].

Medical professionals often overlook anxiety disorders, leading to poor outcomes in adolescents and adults. The Diagnostic and Statistical Manual of Mental Disorders, fourth edition, developed a diagnostic criterion for anxiety disorders. Research on adolescent anxiety treatment and prevention is growing due to its significant impact on social and educational outcomes [Costello, E. J. *et al.*, 2004; Woodward, L. J. *et al.*, 2001; American Psychiatric Association, 1994].

Childhood anxiety disorders can persist into adolescence and adulthood if left untreated. Early identification and intervention are crucial. Depressive symptoms in children can be subtle and complex, but secondary prevention can reduce future psychosocial problems. Underdiagnosed depression leads to difficulties in school work and personal adjustment, often persisting into adulthood. Child and adolescent depression is a major public health issue [Spence, S. H, 2001; Strauss, C. C. *et al.*, 1987].

Adolescence is a crucial phase for the emergence of depressive symptoms, which are frequently disregarded or dismissed by adolescents themselves. In Iraq, the nation has experienced significant repercussions from armed conflicts, economic embargoes, and interruptions to essential

public services. The incidence of post-war melancholy and anxiety is higher than that of post-traumatic stress disorder, mostly because of the persistent tension and concern of safety, such as the possibility of being shot by Americans or killed in a crossfire. [Pfeffer, C. R. *et al.*, 1988; Lamarine, R. J, 1995]

Violent conflict disrupts public health, leading to famine, disease, and indirect deaths. Afifi *et al.* found that 17% of Oman adolescents have depressive symptoms, indicating a public health problem. Snell and Ali's study on displaced Iraqi adolescent boys found traumatic events such as kidnapping, explosions, violent death, and witnessing dead bodies.

The study aims to assess anxiety and depression prevalence among adolescent students in Baghdad and the rate of traumatic events they experienced following the 2003 war and ongoing violence. [Sawadi, H, 1998; Liu, X. C. *et al.*, 1999; Carlson, G. A. *et al.*, 1980]

METHOD

Study Place: Subjects and Methods

The study was conducted during the period between 21-24 December 2009 at two schools in Baghdad;

1- Palestine Intermediate School for boys in Al-MustanSiryah district. The total number of students at this school was 850.

2- Al-Bashair intermediate school for girls and at about 250 meters from the boy's school. This school had 350 students.

We arranged for a one-day training workshop for the teachers who volunteered at each school. This workshop was attended by seven teachers at Al-Bashair and six at Palestine school.

The teachers received training about the usage of the battery that was going to be used, in addition to lectures on the mental health of adolescence delivered by the supervisor and the researcher.

STUDY DESIGN

The study recruited third-middle-class students from both schools to avoid sampling bias. Two classes from Palestine School and Al-Bashair School were included to avoid bias. All boys in Palestine school were involved, except for those who declined or didn't complete questionnaires. All girls were included in Al-Bashair School. The total number of students was 108, with 61% male and 47% female.

ETHICAL ISSUES:

The study received permission from the education authority in Baghdad and received approval from the Ministry of Education. The study involved meetings with volunteer teachers and students, obtaining verbal consent, and ensuring confidentiality. The researcher had exclusive access to the codes for all questionnaires distributed to the students.

TOOLS

The modified war trauma questionnaire, used in previous studies on adolescents, is a 44-item tool that assesses traumatic events experienced by study subjects, including violence, threats, kidnapping, shelling, attacks, witnessing injuries, torture, helping, carrying, or being in contact with injured or killed individuals and The Birlerson's Depression Self-Rating Scale for Children (DSRS-C) is a self-administered survey created in 1978 to differentiate between children who are clinically depressed and those who are not. The scale comprises 18 items, including eight items that are scored in the opposite way, and it measures responses in the direction of disruption. A cumulative score of 15 or higher suggests the presence of psychopathology or notable environmental stress. The score patterns of younger children closely resemble those of their older peers. The instrument is extensively utilized in the United States, Canada, the United Kingdom, Japan, and China.

Table (1): Type of traumatic events among students
The number of students who are exposed to different types of traumatic events

Type of event	No.	%
Forced by violence to leave your home	16	14.8
Family received threats to life	40	37.0
Been kidnapped	15	13.9
Experienced setting on bombing or a car explosion at every close distance.	70	64.8
Experienced shooting at very close distance	81	75.0
Had been attacked or shelled	7	6.5
Eye witnessed someone who was injured	52	48.1

Eye witnessed someone was killed	49	45.4
Eye witnessed massacres (the killing of many people at the same time)	17	15.7
Eye witnessed that someone was tortured	32	29.6
Helped, carried, or had contact with an injured or killed person	13	12.0
Had you been in a situation during the war when you thought you would be killed	40	37.0

Total number of students: 108

Table (2): Frequency of traumatic events during the past seven years (From 2003-3009)

No. of incident	No. student	%
1 - 2	6	5.6
3 - 4	10	9.3
5 - 6	13	12.0
7 - 8	17	15.7
9 - 10	20	18.5
11 and above	42	38.9

Total number of students: 108

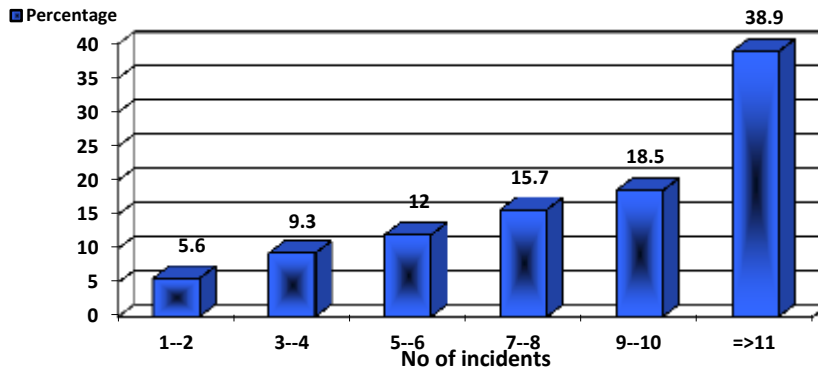


Figure 1: The frequency of traumatic events during the last seven years (2003-2009)

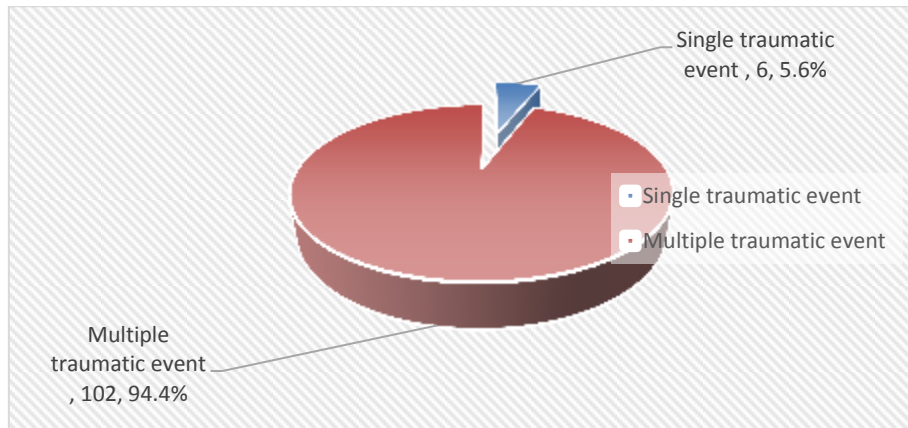


Figure 2: The type of event, whether single or multiple.

Table (3): Number of students with GAD

Generalized anxiety disorder	No. of students	%
Positive	53	49.1%
Negative	55	50.9%
Total	108	100%

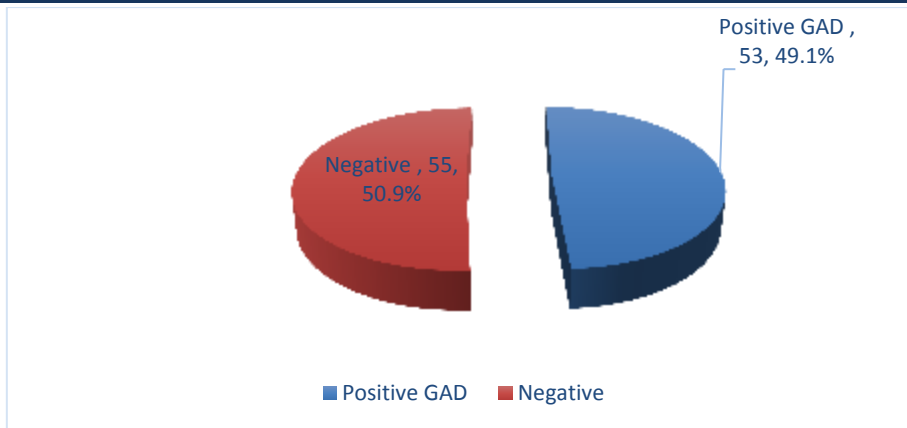


Figure 3: The number of students with GAD.

Table (4): Sex distribution of generalized anxiety disorder among the sample

Sex	Positive	Negative	%
Male	23	38	37.7%
Female	30	17	63.8%

P=0.007 (Significant using Pearson chi-squared test)

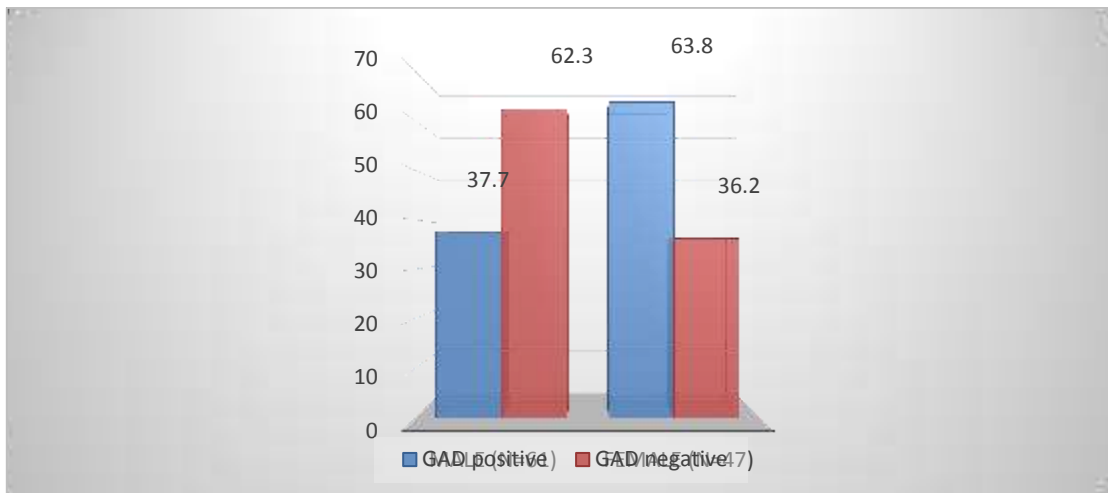


Figure 4: The sex distribution of generalized anxiety disorder among the sample

Table (5): Total no. of students who had depression

Depression	Total no. of students	%
Positive	41	38.0%
Negative	67	62.0%
Total	108	100%

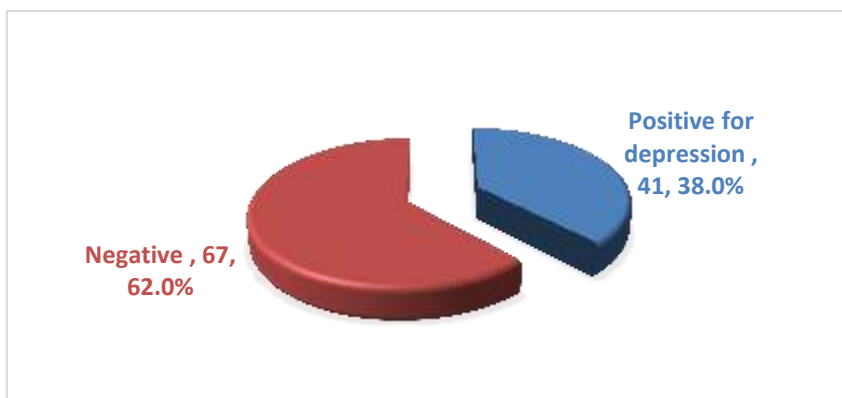


Figure 5: The total number of students had depression

Table (6): No. Of students with depression according to sex

Sex	Total no. of students positive	Total no. of students negative	%
Male	15	46	24.6%
Female	26	21	55.3%

P=0.001 (Significant using Pearson chi-squared test)

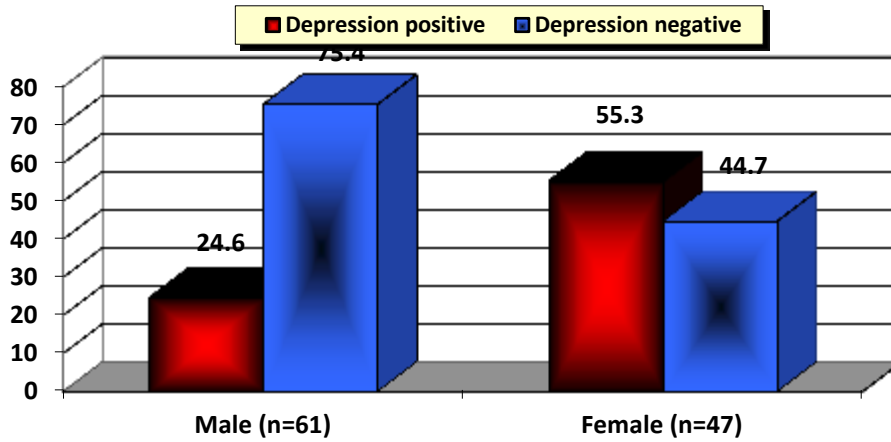


Figure 6: The number of students with depression according to sex

Table (7): shows the overall rate of students who had only depression, only G.A.D., and both depression and G.A.D. was:

Students with	No. of students	%
Depression only	10	9.3
G.A.D. only	23	21.3
Both Depression and G.A.D.	29	26.9

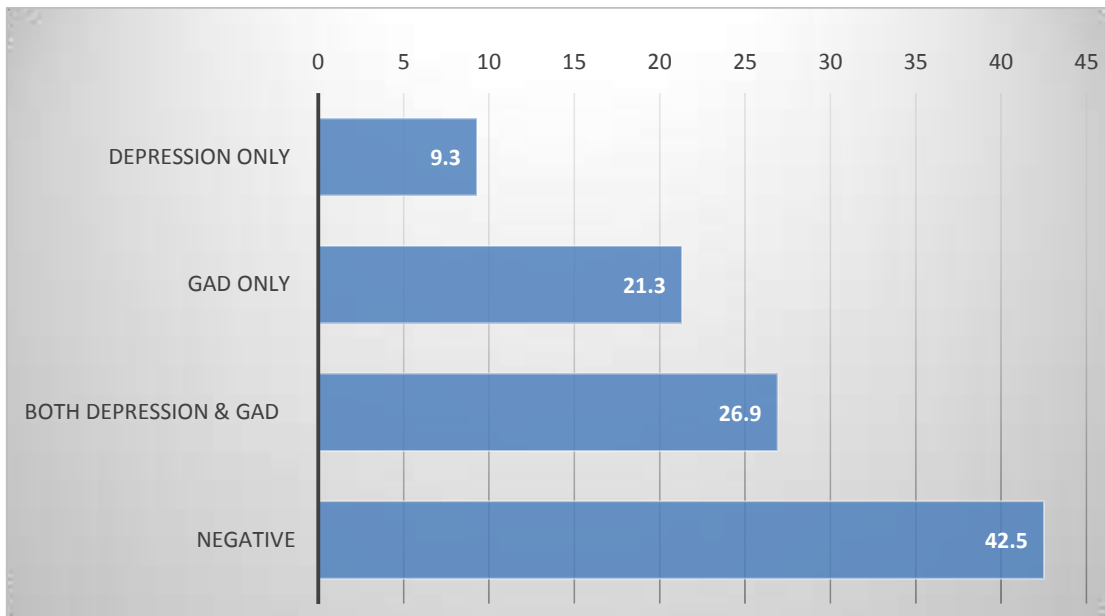


Figure 7: The overall rate of students who had only depression, only G.A.D., and both depression and G.A.D.

DISCUSSION

An important consideration for researchers and clinicians is the likelihood that multiple traumatic exposure will be a common experience. For many researches on displaced Iraqi adolescents reported between 4-5 high-magnitude stressors per individual, for example, experiences of

bombardment, physical assault, attempted kidnapping, and witnessing dead bodies [Liu, X. C. *et al.*, 1999; Carlson, G. A. *et al.*, 1980; Krause, K. *et al.*, 2005].

Post-traumatic stress disorder is co-morbid with other mental disorders, including acute stress

disorder, generalized anxiety disorder, and depression [Afifi, M, 2000].

There is a high number of students exposed to different types of traumatic events, especially in the last seven years following the war in 2003.

102 students had been exposed to more than three traumas at the rate of (94.4 %) While six students were only exposed to a single trauma at the rate of (5.6 %)

The types of traumatic events and the number of students exposed to them are as follows;

81 (75.0 %) students experienced shooting at a very close distance

70 (64.8 %) students experienced setting on bombing or car explosion at a very close distance

52 (48.1 %) students had eye witnessed someone who was injured

49 students (45.4 %) had eye witnessed someone who was killed

40 (37.0 %) students their families received threats to life, and another 40 students had been in a situation during the war when they thought they would be killed

32 (29.6 %) students had eye witnessed that someone was tortured

17 (15.7%) students had witnessed massacres (the killing of many people at the same time)

16 (14.8%) students had been forced by violence to leave the home

15 (13.9% .) students had been kidnapped

13 (12.0%) students who helped carried or had contact with an injured or killed person

7 (6.5%) students had been attacked or shelled

This gives to us an idea that a high number of these students have been exposed to different and ongoing types of traumas, especially in the last seven years.

This exposure to trauma causes different psychiatric sequel from these: generalized anxiety disorder and depression.

We noticed that 53 students of the total 108 students had generalized anxiety disorder at a rate of (49.1%).

Thirty female students, at a rate of (63.8%) had generalized anxiety disorder.

Twenty-three male students, at a rate of (37.7%) had generalized anxiety disorder.

Using Spence Children Anxiety Scale (SCAS).

Also, we noticed that 41 students had depression at a rate of 38.0%.

26 female students had depression at a rate of (55.3%)

15 male students had depression at a rate of (24.6%)

Using Burleson's Depression Self Rating Scale for Children DSRSC.

The overall rate of students who had only depression was ten students (9.3%).

The overall rate of students who had only generalized anxiety disorder was (23) students (21.3%).

While the overall rate of students who had both depression and generalized anxiety disorder was (29) students (26.9%), which is a significant finding indicate a high number of students was suffering and had both anxiety and depression.

Approximately the same results as compare with other study done by Snell and Ali, (2008) on 100 displaced Iraqi adolescent boys living in Amman and who have been arrived in Jordan after the war in 2003; they found that ;

- 6% kidnapped, 20% attempted kidnapped
- 42% had a close family member kidnapped.
- 96% witnessed explosions
- 52% witnessed violent death.
- 64% witnessed dead bodies.
- 36% had a close family member killed.

They found also that 43% of the sample had more than four traumatic events during the preceding three years. The rate of anxiety and depression among this group of adolescents were as follows;

Anxiety 9% were above the cut-off point of 17 on the Revised-Children Manifest Anxiety Scale (R-CMAS)

The difference between the two studies is due to the different instruments. Also, those people who live in Amman get some relieve as compare to our students who live in a continues ongoing trauma.

Depression is 26% above the cut-off point of 15 on the Birlerson Depression Inventory. which is approximately the same result to our study and other study during the period from 2006-2007 in 10 secondary schools for girls in Abha city in Saudia Arabia using the Arabic version of the symptom – Revised Chicklist 90 (SCL 90-R)

The sample consist of 545 female students, show that the prevalence of anxiety was (14.3%).

Dr. Mahmoud S.'s (2000) study on depressive symptoms among teenage girls in Baghdad used the Beck Depression Inventory (BDI) to detect symptoms. The results differed significantly due to Saudia's stability and lack of ongoing trauma, and the use of a different instrument.

The study found that 81.3% of the sample had significant depressive symptoms, with 20% having mild symptoms, 37.9% having moderate symptoms, and 23.4% having severe symptoms. The study differed from a previous one, which used Birlson, a more detailed instrument, and a larger sample size, resulting in a 17% depressive rate in Oman, a stable country with no violence.

A study in Spain found a high frequency of negative mood states among adolescents, with girls experiencing more frequent negative mood states than boys. The results differed from a Sudanese study using the Beck Depression Inventory, which found that 11% of adolescent girls reported severe depression, and the differences may be due to different situations and instruments used in the studies [Snell, T. *et al.*, 2009; Mahmoud, H. S, 2000; Ali, N; Farhood, L. *et al.*, 2006].

CONCLUSION

The study found that 49% of students suffer from generalized anxiety disorder and 38% from depression, and this is primarily due to exposure to traumatic events following the 2003 war.

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