

Psychiatric Morbidity in Preparatory School Girls

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Abstract:

Both emotional and behavioural disorders in adult life start in childhood age. The adolescent girls whose ages ranged between 11 and 15 years are an important sector of our community. This study attempts to investigate the psychiatric morbidity in preparatory school girls. A preparatory school for girls was chosen randomly from the free state schools, in East Cairo, Ain Shams Educational Department. All the students were included in the study (1500). Their ages ranged from 11 to 15 years with a mean age of 13.67 ± 3.88 years. All the students included in the study subjected to semi-structured psychodemographic list and the general health questionnaire (GHQ). Then all the students who scored higher than 9 at the GHQ (340) were subjected to children's anxiety scale (CAS), children's depression inventory (CDI) and clinical interview to detect anxiety and depression based on DSM-III-R criteria. Students who scored less than 9 on GHQ were considered a control group (1160). The results showed that the prevalence of probable minor psychiatric morbidity was 22.7%. The prevalence of anxiety symptoms in the preparatory school girls was found to be 17.9% by clinical assessment and 17% in psychometrically assessed cases. The prevalence of depression was 16.7% in clinically assessed cases and 18.7% in psychometrically assessed cases by CDI. It was found also in this research that psychometric testing proved to be a good screening test for identification of possible clinical cases with anxiety and depression.

Introduction

Both emotional and behavioral disorders in adult life start in childhood age. Such integrated psychiatric complexity is currently affected by age, sex, life events, school period (psychosocial factors), somatic disorders, biological factors and others (Bendek et al., 1990).

The adolescent girls, whose ages ranged between 11-15 years, are considered to be an important sector of our community in Egypt. The mid-year population estimates by age group in July 1996-2001 done by the Central Agency for Public Mobilization and Statistics, presumed that the number of adolescent females of age 11-15 years in Egypt are about 3,601,000 females (Statistical Year Book, 1994). This vital and dynamic phase of life is an important sector of the society, that have not been yet enough studied in Egypt in spite of their importance in the development of the community.

The term "adolescence" generally refers to psychosocial growth and development.

Whereas the term "pubescence" refers to physiological growth and development (Enright et al., 1979).

The psychosocial growth tasks of adolescence have been described from various perspectives. Erikson (1968) characterizes adolescence in terms of identity formation. Freud (1966) marks adolescence as a time of battle between a relatively strong "Id" and a relatively weak "Ego", and Blois (1967) writes about adolescence as a second individuation process. The developmental growth tasks commonly attributed to the adolescent age group are summarized in the following items:

I. Gradual development as an independent individual. II. Mental evolution of a satisfying, realistic body image. III. Handling sexual drives. IV. Social growth: (i) Expansion of relationship outside the home. (ii) Implementation of a realistic plan to achieve social economic stability. V. Cognitive growth (Transition from concrete to abstract conceptualiza-

tion). VI. Moral growth (Integration of a value system applicable to life events).

Only in 1980s was depression clearly acknowledged as a clinical phenomenon occurring in children and adolescents (Matson 1989). This acknowledgment occurred primarily with the advent of more behavioral indices of depressive symptoms. Prior to that time there was controversy as to whether children and adolescents suffered from such a syndrome as depression, and how to view depressive symptoms shown by these affected individuals. Pfeffer (1986) reviews a number of studies, beginning in the 1960s, that attempt to examine the phenomenon of depression in children. She identifies controversies described in this early research as focusing on three propositions:

- 1- That the clinical syndrome called depression in adults does not exist in children.
- 2- That depression does exist in children in the form of symptoms that mask overt depression
- 3- That childhood depression has symptoms similar to those found in adults as well as symptoms unique to children.

The problem of identifying depression in adolescents is compounded, because most studies do not examine adolescents separately from children or adults. There is a tendency to extrapolate findings from a younger group to an older one or to treat the adolescents as adults for diagnostic purposes. This difficulty in separating developmentally distinct groups produces considerable confusion regarding the occurrence of depression in teenagers. Regardless this consideration, a few studies have addressed the clinical features; incidence, etiology, and treatment of adolescent depression comprehensively. However the processes of occurrence and Co-morbidity of depression had been refred to many studies as Weller and Weller (1990) cite a number of stud-

ies of the comorbidity of depression and attention-deficit disorders, anxiety disorders, and conduct disorders in their review. In addition, studies The co-occurrence of depression and anxiety disorders was also studied. In many ways the preceeding taxonomy attempts to distinguish whether symptoms manifested by adolescents constitute depression. Symptoms that adolescents manifest, however, need to be acknowledged because of their potential for dysfunction or self destructiveness, not just because of their significance in terms of diagnostic formulation. There is rarely a clear and focused picture of depression in the adolescent.

Not-with standing this confusion, Nissen (1983) describes a study of depressed adolescents in which he differentiates three common depressive syndromes: (1) quietness and resignation, (2) retardation and loss of drive, and (3) agitation and anxiety. Symptoms of quietness and resignation could include grief, over adjustment, shyness, self-isolation, enuresis, nail-biting, unmotivated weeping, bouts of aggressiveness and suicidal behavior. Retardation and Loss of drive might cause symptoms of psychomotor sluggishness, apathy, insecurity, difficulty in learning, mutism, and passivity. Symptoms of agitation and anxiety could feature auto-and hetero-aggressiveness, insecurity, compulsive eating, unmotivated weeping, and suicidal behavior. There is considerable overlap in the symptoms in the three groups, partially because the symptoms of depression may vary widely from one adolescent to another.

Curran (1987) in his description of symptomatology, believes that adolescents desire or are able to mask depressive affect for a number of reasons including capacity for denial, tendency to act out feelings, and avoidance of dependence and helplessness (e.g., running away, sexual acting out, boredom and

restlessness, disturbance of concentration, aggressive behavior, delinquency). Also Greydanus (1986) differentiates a number of categories of depression that are present during adolescent development, including reactive depression as a result of moving or other loss, depression associated with medical or psychiatric disorders, continuation of a preexisting childhood depression, adolescent development, occurrence of mood disorder, regarding prevalence. The prevalence data will vary, depending on a number of criteria used to identify depressed adolescents as well. Adolescent depression has been studied as it occurs in psychiatric and medical settings, and in samples of "normal" population. The one-year prevalence of separation anxiety in prepubertal children has been reported at 3.5 to 4.1 per cent. The prevalence of overanxious disorder among prepubertal children has been estimated at around 2.9 to 4.1 per cent its equivalent in adolescents, generalized anxiety disorder, has been found in 3.7 percent. The male to female ratio has been reported as 1.7:1 among prepubertal children, but approaches 1:3 among adolescents (Anderson et al., 1987). Family history of anxiety disorder is associated with Overanxious Disorder in children. Fears are quite common among children. Among children aged 7 to 11, The prevalence of simple and social phobias is 2.4 and 0.9 per cent, respectively, particularly the latter, have a marked female preponderance. Beyond the evidence of a verbal report, it is difficult to determine the presence and intensity to anxiety reaction. The classical literature on anxiety is misleading because it gives the impression that anxiety is such an obvious phenomenon that measurement is unnecessary. Additionally, current reports of comorbidity among the anxiety disorders also support the notion of the complexity of children's fears and anxieties (Last et al., 1987). Anxiety is expressed through three modalities: behavior, subjective ex-

perience, and physiological responses. Direct observation of anxious behavior can be made in the laboratory when the controlling stimulus is available for presentation. However, the predominance of such studies seems to have faded even further, probably due to ethical constraints. When the anxiety-arousing stimulus is not available for direct laboratory study, behavior can be evaluated in the field. Such observations are often the only alternative to the child's report of his or her anxious behavior, and may include trained field observers; parents or a participant observer for bed time behaviors, reactions to certain fears, and illness in the family; and teachers for the observation of behavior on academic tests, or while speaking in front of the class. Observers, whether parents, teachers, or participant observers who record observations of children's behavior directly, require training and frequent retraining to ensure collection of good data (Mansdrof and Lukens, 1987). Lastly there is another area of assessment in understanding child and adolescent anxiety disorders is that of peer relations and friendships. Goodyer et al., (1989) found that children with emotional disorders were more likely to have experienced moderate-to-poor friendships in the 12 months prior to symptom onset than were control subjects. Further, prepubertal children with moderate to poor friendships were classified predominantly as anxious or depressed, whereas postpubertal children with poor friendships were diagnosed as predominantly anxious.

Subjects and Methods

It was necessary to obtain permission from the Ministry of Health and the Ministry of Education. The application for permission to conduct this research included the objectives and the value of the results which may be obtained. The school was selected from the preparatory schools for girls in East Cairo, Ain

Shams Educational Department, The school was taken randomly from the free state schools. A preparatory school for girls was chosen and all the students were included in the study (1525 girl students). Their ages range from 11-15 years with mean age 13.67 ± 3.88 . 25 student were excluded from the study (9 refused to do the test 14 didn't complete the study).

Material and Methods

Before starting, students should know that this questionnaire has nothing with their exams, in order to reduce their apprehension.

Screening for all the students included in the survey using the following tools:

All the students were asked to complete a semi-structural psychodemographic list.

All the students were subjected to General Health Questionnaire (GHQ).

a) All the students who scored > 9 at the GHQ. (340) were subjected to:

1) Children's Anxiety Scale (CAS)

2) Children's Depression Inventory (CDI).

3) Clinical interview to detect anxiety and depression using a semi-structured clinical interview based on the DSM III R criteria.

b) All the students who scored < 9 at the GHQ were considered as a control group (1160).

Table (1) shows 340 girls (22.7%) scored ≥ 9 which are considered as cases and 1160 girls (77.3%) scored < 9 which are considered as control.

Table (2) shows the degree of psychiatric morbidity among the high scores in G.H.Q., it was mild in 234 cases (68.8%), moderate in 75 cases (22.1%) and severe in 31 cases (9.1%).

Table (3) shows the clinical assessment of cases, which reveals that the majority

of cases had combined anxiety and depression, 224 cases (65.9%), meanwhile 44 cases (12.9%) had anxiety alone, 26 cases (7.6%) had depression alone and 46 cases (13.5%) are clinically free.

Table (4) shows psychometric assessment of cases, which reveals that the majority of cases had anxiety and depression, 238 cases (70.0%), meanwhile 16 cases (4.7%) had anxiety alone, 43 cases (12.6%) had depression alone, 43 cases (12.6%) having sub-threshold psychometric record.

Psychometric testing proved to be a very good screening test for the identification of possible clinical cases with anxiety (sensitivity 91%) with a high predictive value of a +ve test 96.5%. However the specificity for psychometry for anxiety was also high (87.5%)

Table (5) showed a high prevalence of neurotic traits among 210 cases (61.8%) and no neurotic traits was detected among 130 cases (38.2%) with psychiatric disorder.

There is no significant difference between the cases and the control as regard the mother's character and the development of psychiatric morbidity of the subject (Table 6)

There is a significant difference between the cases and the control regarding the father's character and the development of psychiatric morbidity of the subject. Subjects with dominant personality of their fathers are less susceptible to psychiatric morbidity (0.6%) than those with different, aggressive and kind personality of their fathers (2.9%), (8.2%) and (88.3%) respectively (Table 7).

There is a highly significant difference between the cases and the control regarding the presence or absence of family harmony and the development of psychiatric morbidity. Cases without harmony between the family members more than twice among the cases than the control

(14.7%) and (6.8%) respectively (Table 8)

There is a highly significant difference between the cases and the control regarding the relationship of the subject with her own family and the development of psychiatric morbidity. Cases with no harmony between her and her family are nearly tripple the control (11.2%) and (3.9%) respectively (Table 9).

There is a highly significant difference between the cases and the control regarding the history of psychiatric morbidity in the family and the development of psychiatric morbidity of the subject. Cases with psychiatric problems at their family are nearly more than 4 times the control (11.2%) and (2.6%) respectively (Table

10).

There is a highly significant difference between the cases and the control regarding the presence of neurotic symptoms (Trait) of the subject and the development of psychiatric morbidity. Cases with neurotic symptoms are nearly tripple the control with neurotic symptoms (61.8%) and (28%) respectively (Table 11).

There is a highly significant difference between the cases and the control regarding whether the subjects having menarche or not and the development of psychiatric morbidity. Cases having menarche are more (62.4%) than the control (45.6%) (Table 12).

Table (1)

Prevelance of psychiatric morbidity in adolescent girls in preparatory school according to G.H.Q. score.

G.H.Q.	No.	%
<9 score	1160	77.3
≥9 score	340	22.7
Total	1500	100

Table (2)

Distribution of the degree of psychiatric morbidity among the G.H.Q.high scores.

G.H.Q.	No.	%
Mild (9-14)	234	68.8
Moderate (15-19)	75	22.1
Severe > 20	31	9.1
Total	340	100

Table (3)**Clinical assessment of cases of psychiatric morbidity of adolescent girls in preparatory school.**

Variables	No.	%
Anxiety	44	12.9
Depression	26	7.6
Mixed	224	65.9
Clinically free	46	13.6
Total	340	100

Table (4)**Psychometric assessment of cases of psychiatric morbidity of adolescent girls in preparatory school.**

Variables	No.	%
Anxiety	16	4.7
Depression	43	12.2
Mixed	238	70
Sub-threshold psychometric record	43	12.6
Total	340	100

Table (5)**Frequency of neurotic traits among cases with psychiatric morbidity.**

	With neurotic traits		Without neurotic traits		Total	
	No	%	No	%	No	%
Cases	210	61.8	130	38.2	340	100

Table (6)

Relationship between the mother's character according to the subject perception and the development of psychiatric morbidity among adolescent girls,

Variables	Cases		Cases	
	No.	%	No.	%
Dominant	2	0.6	6	0.6
Indifferent	0	0.0	5	0.4
Aggressive	6	1.8	9	0.8
Kind	332	97.6	1139	98.2
Total	340	100	1160	100

Table (7)

Relationship between the father's character according to the subject perception and the development of psychiatric morbidity among adolescent girls,

Variables	Cases		Cases	
	No.	%	No.	%
Dominant	2	0.6	47	4
Indifferent	10	2.9	22	2
Aggressive	28	8.2	59	5
Kind	300	88.3	1032	89
Total	340	100	1160	100

Table (8)

Relationship between the presence or absence of family harmony and the development of psychiatric morbidity.

Variables	Cases		Cases	
	No.	%	No.	%
Yes (present)	290	85.3	1081	93.2
No(absent)	50	14.7	79	6.8
Total	340	100	1160	100

Table (9)

Relationship between the presence or absence of harmony between the subject and her own family and development of psychiatric morbidity.

Variables	Cases		Cases	
	No.	%	No.	%
Yes (present)	302	88.8	1115	96.1
No(absent)	38	11.2	45	3.9
Total	340	100	1160	100

Table (10)

Relationship between the presence or absence of psychiatric problems in the family of the subject and the development of psychiatric morbidity in the subject.

Variables	Cases		Cases	
	No.	%	No.	%
Yes (present)	38	11.2	30	2.6
No(absent)	302	88.8	1130	97.4
Total	340	100	1160	100

Variables	Cases		Cases	
	No.	%	No.	%
Yes (present)	210	61.8	325	28
No(absent)	130	38.2	835	72
Total	340	100	1160	100

Table (12)

Relationship between the menarche and the development of psychiatric morbidity in adolescent girls.

Variables	Cases		Cases	
	No .	yo	No .	Y
Yes (present)	212	62.4	529	45.6
No(absent)	128	37.6	631	54.4
Total	340	100	1160	100

Table (13)

Risk factors associated with psychiatric morbidity.

	The variables	Odds Ratio
1	Presence of psychiatric disorders in the family of the subject	4.74" (2.89-7.78)
2	Presence of neurotic symptoms in the subject	4.158 (3.22-5.35)
3	Absence of harmony between the family members	2.36" (1.62-3.44)
4	Absence of harmony between the subject and her family	2.33" (1.41-3.74)
5	Started menarche	1.98" (1.5-53)
6	Aggressive personality of the father of the subject	1.64" (1.05-2.67)

* Odds ratio is a measure of risk of developing psychiatric morbidity between those having a risk factor relative to those without this risk factor.

95% confidence limits were calculated to assess the lower and the upper limit is above 1.0. The risk estimate is considered significantly higher for those with the risk factor ($P < 0.05$).

Discussion

Through such brain storming about psychiatric morbidity in adult life and early pathogenesis in adolescence period it was observed that only in 1980s depression was clearly recognized as a clinical phenomenon occurring in children and adolescent symptoms.

Adolescents with severe psychiatric disorders have demonstrated rates of affective disorder 27% in an inpatient / outpatient sample (Carlson and Cantwell 1979)

Weller and Weller (1990) review 18 additional epidemiological studies of depression in children and adolescents from the year 1970 to 1987. Only one of these studies, however, examines normal adolescents, and they demonstrate a depression rate of only 4.6%. Smith et al., (1990) found by routine screening of 300 outpatient clinic of adolescents by Children's Depression Inventory CDI, that 23% had scores > 16 of these patients. Cooper and Goodyer (1993) studied 375 adolescent girls in schools, they were in-

interviewed for depressive symptoms using a Diagnostic Interview Schedule for Children (DISC). It was found that the major depressive disorder within the past year 6%. Scores on the self report questionnaire of mood disturbance on the same sample was 20.7% for the past year.

As noticed, the difference in prevalence of depression may be due to different socioeconomic, age, cultural factors in different countries. As well as, no study of psychiatric morbidity in adolescent school girls was done before in Egypt to compare with.

Another major related disorder that this study has set, is the prevalence of anxiety symptoms in the preparatory school for girls. Anxiety was found to be 268 cases out of 1500 (17.9%) clinically assessed, and 254 cases out of 1500 (17%) psychometrically assessed. It is very difficult to compare our results with other studies because all the available researches regarding the child psychiatric disorders, concentrating mainly on the anxiety not as a symptoms but as a disorder. The prevalence rate for anxiety disorders based on parent interviews alone was only half as high (6.6%) as the rate based on child interviews alone (10.5%). Adolescents generalized anxiety disorder, has been found to be 3.7% of teens by Whitaker et al, (1990).

Psychometry has proved to be a turning point in the development of psychiatry over the past century. This is largely attributed to the possibility of quantitating certain parameters that whole mark a certain figures for points which were previously vague (Wing et al, 1977). In the current study we used Children's Anxiety Scale (CAS) and Children's Depression Inventory (CDI), both psychometries for measuring anxiety and depression respectively. Statistical findings revealed a moderate correlation between anxiety scores and depression scores as shown in earlier

results in this study. This is consistent with Smith et al (1990), who found that strong positive correlation between State-Trait Anxiety Inventory (STAI) and Children's Depression Inventory (CDI) scores. This finding was compatible with adult studies (Stavrakak, and Vargo, 1986) and suggests either an overlap symptomatology or the possibility that both questionnaires are non specific measures of stress rather than specific diagnostic instruments.

It was found also in this research that, psychometric testing proved to be very good screening test for identification of possible clinical cases with anxiety and depression (sensitivity 91%, 96% respectively) The predictive value of a positive test for anxiety was higher (96.9%) than that for depression (85.4%). However, the specificity for psychometry testing for depression was lower (54%) than that for anxiety 87.5%. Achenbach (1978) clears that childhood depression and anxiety are closely associated and are statistically linked through a reliable and valid processes. The importance of clarification of these issues in the diagnostic process to obtain a better understanding of the inter-relationship and distinction between anxiety and depression in adolescent population i.e. that depression has been conceptualized as being masked by other behaviors containing symptoms of manifest anxiety in the same way that manifest anxiety may contain symptoms of depression. In the current study we have seen that the majority of cases had mixed anxiety and depression symptoms which was 65.9% of the minor psychiatric morbidity cases (224 out of 340) clinically assessed. Psychometric assessment of cases reveals that 70% of the minor psychiatric morbidity cases (238 out of 340) were mixed anxiety and depression. These results agreed with the results of different researches as Angold and Costello (1993) whose study was to exam-

ine comorbidity in the context of child and adolescent depression by using standardized interviews and DSM-III-R criteria. There was a high rate of co-morbidity in children and adolescents with major depressive disorder ranged from 30% to 75%. Bernstein and Garfinkel (1986) studied a sample of 26 adolescents who had chronic school refusal. Of the 16 of these patients who were diagnosed with an anxiety disorder 81% had a coexisting major depression. Children who had coexisting anxiety disorder and major depression were found to be older, have more severe anxiety symptomatology, and to manifest different ratios of two anxiety disorder subtypes (i.e., obsessive compulsive disorder and agoraphobia) as compared with patient who had only the anxiety disorder diagnosis.

In the current study, the group of adolescent girls with probable minor psychiatric morbidity (340 cases out of 1500) were subjected to analysis regarding any risk factors suspected to share in the development of these minor psychiatric morbidity. As regard the parent's characters according to the subject perception and its relationship to the development of psychiatric morbidity among adolescent girls, our study showed that, there is no significant difference between the cases and the control as regard the mother's character. Meanwhile, there is a significant correlation between the father's character and the development of psychiatric morbidity among girls. Subjects with dominant personality of their fathers are less susceptible to psychiatric morbidity (0.6%) than those with indifferent, aggressive or kind personality of their father's (2.9%), (8.2%) and (88.3%) respectively, i.e. the dominant personality of the father is protective to his adolescent girls from psychiatric morbidity, and this can be explained as the father in our culture is considered to be the main **source of** the finan-

cial support and security for the family, and his well being image is essential for supporting the whole family members.

One of the important risk factors for the development of psychiatric morbidity among adolescent girls is the disturbance that may be present in the home environment (Bowlby, 1989). In the current study, there is a highly significant association between the harmony between the family members and the development of psychiatric morbidity among adolescent girls. Cases without harmony between their family members were 50 out of 340 (14.7%) in comparison to the control group, 79 out of 1160 (6.8%). There is a highly significant association as regard the relationship between the mother and the father and the development of psychiatric morbidity. Cases recorded to have a bad relationship between their parents, or have divorced parents were 45 out of 340 (13.2%) in comparison to the control group, 80 out of 1160 (6.9%). There was also a highly significant association between the relationship of the subject and her own family. Cases with no harmony between them and their own families were 38 out of 340 (11.2%) in comparison to the control group, 45 out of 1160 (3.9%).

Goodyer et al., (1985) reached to the relation between life events and psychiatric disorders in adolescence, parental divorce is one of them. Bowlby (1961) states that divorce usually stimulate separation anxiety with feelings of rejections and helplessness in the children, this was agreed by King (1992). Marital dysharmony, which does not lead to separation or divorce is also a potent factor in the etiology of psychiatric disorder in children. This was approved by Richman et al., (1982) and Pearce and Nicole (1990), as they found a strong association between marital dysharmony and behavior disorders in their children.

This current study revealed a highly significant association between adolescents and depression. The term "depressive equivalent", where the core symptoms of depression are equalized by clusters of either somatic or physiological and sometimes behavioral changes is to be underlined. This term is now reviewed thoroughly, especially when focusing on adolescence and childhood sectors. Most of literatures discussed these terms as differential diagnostic items with enuretic disorder, Conduct disorder even school truancy, and other adolescent related disorders (Matson 1989).

This distinction between state and trait anxiety suggests either that the individual may manifest a temporary condition of anxiety, or that anxiety may represent a rather constant condition. In children however, this distinction between state and trait is complicated by the interplay of developmental factors.

On the highlights of previous review about the occurrence of psychiatric morbidity in general and anxiety and depression in particular among adolescent girls, our discussion is aiming at clarifying thoroughly the data obtained from this field study among adolescent girls in preparatory school age, addressing The following questions:

(I) What is the prevalence rate of psychiatric morbidity among adolescent-girls in a preparatory school for girls?. (II) What is the prevalence rate of (a) Anxiety and (b) depression of adolescent girls in a preparatory school for girls?. (III) Is there is Co-morbidity between anxiety and depression?. (IV) What are the risk factors and psychosocial factors related to production of psychiatric morbidity of adolescent girls in a preparatory school for girls?

The current study found that the prevalence of probable minor psychiatric mor-

bidity was 340 cases out of 1500 (22.7%). All the available researches regarding the adolescent psychiatric disorders was not done by G. H. Q. but using other measures. National Commission On Excellence In Education (1983), has an estimate of 20% psychiatric morbidity by a survey done on school children in California. kashani et al., (1987) stated that the prevalence of psychiatric disorders may be as high as 18.7% in the adolescent population. An Egyptian study done by El Sherbini, et al., (1981) and Abdel-Baky et al., (1988), both on primary school children, where they found the prevalence of psychiatric disorders are 10% and 4.6% respectively. Compared to our results, the previous studies showed some differences. This may be due to the difference in age, sampling source, location of studies, and instrumentation. Although several studies all over the world in varying populations have been carried out to estimate the prevalence of depression. Okasha et al., (1988) reported that the overall estimates of depressive disorders in Egypt is 15.3%, the point prevalence seems to be not much higher than in the third world country. The current work determined the prevalence rate of depression among preparatory school for girls. As a result, 250 cases out of 1500 (16.7%) clinically assessed, 281 cases out of 1500 (18.7%) psychometrically assessed, were found to have depression sen the history of psychiatric morbidity in the family and psychiatric morbidity among the adolescent girls. Cases with history of psychiatric family problems were 38 out of 340 (11.2%) in comparison to the control group, 30 out of 1160 (2.6%). As a result, psychiatric disorder in the family plays as an important role as a risk factor of the development or association of psychiatric morbidity of adolescent girls, asserted by odds ratio 4.7 (2.89-7.78). This results agreed with; Rutter (1990)

and Sayed et al., (1994), However our results are inconsistent with the work done by El-Sherbini et al., (1981).

Our results showed high prevalence rate of neurotic traits among the cases with psychiatric morbidity, 210 out of 340 (61.8%) in contrast to the control group, 325 Out of 1160 (28%). This was statistically highly significant. The most common trait was nail biting 57.1%, then night mares 32.4%, thumb suckling 14.3%, enuresis 7.6%, stuttering 4.8% and somnambulism 4.8%. From the above data, most of the cases with minor psychiatric disorders experienced one or more neurotic traits. These results agreed with Moussa et al., (1990), i.e., that adolescent girls who had history of neurotic traits are more susceptible to develop minor psychiatric disorders than those without neurotic traits.

There is a highly significant association between subjects having menarche and the development of psychiatric morbidity. Cases having menarche were 212 out of 340 (62.4%) in contrast to the control group, were 529 out of 1160 (45.6%). This explained by Erfan et al., (1989), where females are subjected to all kinds of psychiatric illness, throughout their whole lives, but there are certain times in which the females are under the influence of hormonal changes such as menarche, that can precipitate the onset or exaggeration of psychiatric disorders, this is agreed by Dorn-bush et al., (1981).

Therefore, from the current study and others, it is obvious that the presence of risk factors is associated with a higher incidence of psychiatric morbidity among the adolescent girls. The magnitude of the role played by the different risk factors in precipitating psychiatric morbidity varies from a factor to another, and from a community to another.

This can be noticed from the variations of

some of our results when compared to the results of other studies done abroad in different communities. For example, the significant protective effect of the dominant character of the father against psychiatric morbidity of adolescent girls, and meanwhile, the non-significant effect of the mother character for her adolescent girl psychiatric state, is related to the culture of our community which may be different from other communities.

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**الاضطرابات النفسية بين
طالبات المدارس الاعدادية**

تم اختيار المدارس بطريقة عشوائية من المنطقة التعليمية التابعة لعين شمس في شرق القاهرة ثم تم درج كل التلاميذ في الدراسة و كان عدد هم ١٥٠٠ و تتراوح اعمارهم بين ١١ و ١٥ عاما.

اجرى على التلاميذ اختبار الصحة العامة و من سجل منهم اكثر من تسع نقاط في هذا الاختبار اجرى له مقياس القلق النفسى للاطفال ومقياس الاكتئاب للاطفال الي جانب التقييم الاكلينيكي لهؤلاء الاطفال.

الاطفال الذين سجلوا اقل من تسع في اختبار الصحة العامة اعتبروا عينة ضابطة. وكانت النتيجة كما يلي: معدل انتشار القلق بين طالبات الاعدادي يساوي ١٧.٩٪ ومعدل انتشار الاكتئاب يساوي ١٦.٧٪. كما وجد ان الاختبار الاكلينيكي مقارب للمقياس النفسى.