

Behavioral Disturbances among School Children in Baghdad Province

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Abstract

Background: Mental health of children has recently been receiving increased attention in many parts of the world. However, such attention has been lacking in developing countries, particularly in the form of systematic research

Aim: The study aimed to find out the frequency of behavior disorders in a sample of primary school children and the different social and demographic factors that might be related to this disorder.

Methods: The study is a cross-sectional one that included 918 primary school pupils in both urban and rural areas of Baghdad. Rutter's questionnaire teacher's version was used to assess the pupils, and the demographic data was obtained by special questionnaire sent to the parents to be completed.

Results: The rate of behavior disorder was found to be 49%, in both rural and urban areas, males had higher prevalence rate than females. The disturbed pupils had higher scholastic failure and their parents of lower educational level and came from highly crowded houses, they had higher rate of disrupted family by either death of one of the parents or their father is married to more than one wife.

Conclusion: There is high rate of behavior disturbances in school aged children in Baghdad, associated with low socioeconomic status, bereaved children and having fathers married to more than one wife. The study shows that these children have low scholastic achievement.

Key words: *behavioral, disturbances. school*

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Introduction

Mental health is absolutely essential for achieving prosperity. Children are the most vulnerable population. Times of disaster and trauma increase their vulnerability. Recognizing children's symptoms of stress is not easy. Low family socio-economic status and disrupted family relations correlated strongly with high rates of symptoms in children⁽¹⁾.

Parentally bereaved children show high levels of psychological disturbance, with boys being more vulnerable than girls. There is an increased psychological disturbance, with a wide range of symptoms including anxiety, depression, withdrawal, sleep disturbance, and aggression⁽²⁾.

Iraqi children had suffered a lot; the years of embargo had led to stressful conditions of living for the families that were inevitably reflected on their children's mental and behavioral health. Poor diet resulting from the embargo and poverty is a cause of severe, chronic iron deficiency in infancy leading to children who continue at developmental and behavioral risk for more than 10 years after iron treatment⁽³⁾. These conditions were aggravated by the stress and fear during the war and the events of violence acts and chaos that followed. Cumulative previous experience of war trauma constitutes a risk factor for continuing psychological disturbances⁽⁴⁾.

Attention deficit hyperactive disorder is the most frequently diagnosed pediatric behavioral disorder and is estimated to affect 3-5% of school-aged children⁽⁵⁾. This problem is frequently diagnosed in children with other behavioral problems or in those who underachieve at school⁽⁶⁾.

This study aims to find out the frequency of psychological disturbances of primary school children in Baghdad and determine some social and demographic factors related to this disorder.

Methods

A cross-sectional descriptive study conducted in both urban and rural areas of Baghdad province and included 918 primary school children aged 9-15 years (4th – 6th grade pupils). The sample was randomly selected during the academic year of 2004-2005 to include 418 pupils from the urban areas (centre of Baghdad City) and 500 pupils from the rural areas of Baghdad.

Special data sheet used to collect two types of information for pupils enrolled in the study:

- Information completed by the pupil's family to include personal and socio-demographic data about the student and his family as regard to age, sex, grade, years of scholastic failure, parental (education, occupation, and death), polygamy, and divorce.
- Information completed by the teacher as regard to her or his response about pupil's behavior (during the last six months of that educational year), according to the Rutter's Teacher Scale for School Children (original version).

Rutter's questionnaire for completion by teacher in its original version consisted of 26 items for conduct and emotional disorders mainly⁽⁷⁾. Teachers started to complete the questionnaire from the first of March and ended at the end of May. Behavior should have been consistently

present during the previous six months in order to be included in the study.

Analysis of data depended on descriptive statistics (**Tables**). Score for each item in the questionnaire was 0, 1 or 2 (does not apply, applies somewhat, and certainly applies). Scores were

added together to get total difficulties (total symptoms). The estimated cut-off score at (50th) percentile was nine. A pupil with a total score of nine or more is considered disturbed i.e. the child had behavioral disorder. Crowding index was calculated by dividing the number of persons living in the house over the room numbers; a figure of 4 and more is considered over crowded. X² test was applied to test significance of results, P value of less than 0.05 was considered significant. This study represents first line assessment and should be followed by specialized psychiatric diagnosis as a second step.

Results

As shown in (**Table-1**), that 49% of the pupils had behavior disturbances, and males had higher rate (61%) of disturbances than females. Results were statistically highly significant as P value was less than 0.05.

(**Table-2**) show that the rate of behavior disturbances in rural areas was 48.4 and in urban areas 49.8%, this result is statistically not significant as P value was more than 0.05.

(**Table-3**) shows that pupils with behavior disturbances have higher rate of scholastic failure than normal pupils as 54.9% of disturbed pupils had failed for 2 years or more while 4.5% of normal pupils had failed for that period and the results were

statistically highly significant as P value was much lower than 0.05.

(**Table-4**) shows that mothers of disturbed pupils had lower level of education as 68.2% of them had less than 6 years of education and 4% had more than 9 years of education, in comparison, only 28.4% of mothers of normal pupils had less than 6 years of education and 25.9% had finished more than 9 years of education. The table also shows that fathers of disturbed pupils had lower education than those of normal pupils as 46% of them had less than 6 years education compared to 13.5% of normal pupils, and only 15% of disturbed pupils' fathers have more than 9 years education compared to 42.7% of normal pupils' fathers. The results were statistically highly significant as P value was much lower than 0.05

(**Table-5**) shows that 47 pupils had one of their parents dead, of these 40.4% were normal and 59.6% were disturbed pupils. There were 39 pupils who had dead father, of these 59% were disturbed pupils and 41% were normal pupils. As for the mother, there were 8 pupils who had a dead mother, 62% of them were disturbed and 37.5% were normal pupils. The results were statistically not significant as P value was more than 0.05.

(**Table-6**) shows that the rate of polygamous marriage is higher in case of disturbed pupils (11.6%) than normal pupils whose rate was 8%. The results were statistically not significant as P value was more than 0.05.

(**Table-7**) shows that 22.2% of the disturbed pupils live in houses with a crowding index of 4 or more and only 10.5% of them live in houses of 1-1.9 crowding index. Normal pupils live mostly in houses of crowding index of 2-2.9 and only 18% of them in 4 or more. The results were statistically significant as P value was lower than 0.05.

(Table-1)

Distribution of sample according to the gender

Gender	Normal	%	Disturbed	%	Total	%
Male	198	38.9	311	61.1	509	100
Female	270	66	139	34	409	100
Total	468	51	450	49	918	100

P < 0.000

(Table -2)

Distribution of sample according to residency

Residence	Normal	%	Disturbed	%	Total	%
Rural	258	51.6	242	48.4	500	100
Urban	210	50.2	208	49.8	418	100
Total	468	51	450	49	918	100

P>0.05

(Table -3)
Distribution of sample according to the years of failure

Years of failure	Normal	%	Disturbed	%	Total	%
None	400	85.5	101	22.4	501	54.6
1 year	47	10	102	22.7	149	16.2
2 years & more	21	4.5	247	54.9	268	29.2
Total	468	100	450	100	918	100

P < 0.000

(Table- 4)
Distribution of sample according to the mother' and father' education

Item	Normal	%	Disturbed	%	Total	%
Mother's education						
<6 years	133	28.4	307	68.2	440	47.9
6-9	214	45.7	125	27.7	339	36.9
> 9	121	25.9	18	4	139	15.2
Total	468	100	450	100	918	100
P < 0.000						
Father's education						
<6 years	63	13.5	207	46	270	29.5
6-9	205	43.8	180	40	385	41.9
> 9	200	42.7	63	14	263	28.6
Total	468	100	450	100	918	100
P < 0.000						

(Table-5)
Distribution of the sample according to parental death

Parent's death	Normal	%	Disturbed	%	Total	%
Father	16	41	23	59	39	100
Mother	3	37.5	5	62.5	8	100
Total	19	40.4	28	59.6	47	100

P > 0.05

(Table- 6) Distribution of sample according polygamy

No. of marriages	Normal	%	Disturbed	%	Total	%
One	431	92	398	88.4	829	90.3

More than one	37	8	52	11.6	89	9.7
Total	468	100	450	100	918	100

P > 0.05

(Table -7) Distribution of sample according to the crowding index

Crowding index	Normal	%	Disturbed	%	Total	%
1-1.9	69	14.7	47	10.5	116	12.6
2-2.9	201	42.9	158	35.1	359	39.1
3-3.9	114	24.4	145	32.2	259	28.2
4- >	84	18	100	22.2	184	20.1
Total	468	100	450	100	918	100

P < 0.05

Discussion

Behavior problems in childhood are very common, any one who deals with children is likely to face many of these problems, early identification, and management of the problems will be likely to increase the chance of correction of these behavioral disorders.

In this study there was a high rate of behavioral disturbances in primary school children of Baghdad both rural and urban reaching up to 49% i.e. about half the pupils, and when we compare this rate with other rates in different parts of the world we find that no similar or close rate was reported in other parts of the world except for Gaza where the rate in males was 54.5%, and in girls was 46.5%⁽⁸⁾. In Saudi Arabia the rate ranged between 6.9-13.4%⁽⁹⁾ and 13.9% in Finland⁽¹⁰⁾. The high frequency of behavior disorder in this study is probably related to great stress of living that most Iraqi's families had faced for the last 15 years or more and this will certainly be reflected on their children, causing this disturbed behavior. The fearful event of the war had added to their misery as there is cumulative risk on child's behavior outcomes⁽¹¹⁾, and so aggravating their problems.

The study shows that there is higher frequency of behavior disturbances among males, unlike the findings of a study in United Arab Emirates that found a higher rate among females⁽¹²⁾.

The absence of differences between behavior disturbances in rural and urban pupils indicates that the local environment is not responsible for their disturbances but a more general condition of the country as mentioned above.

As for pupils' achievement at school it was obvious that the behaviorally disturbed pupils had a much lower achievement than normal pupils and this coincide with the findings of other studies that disturbances were more frequent among the

intellectually disabled children as compared to the non-disabled children⁽¹³⁾.

Pupils with high rate of behavior disturbances in this study had descended from families of low socio-economic status evident by lower educational levels of both parents, and living in highly crowded houses with polygamous fathers^(14, 15).

The presence of higher rate of orphans among the behaviorally disturbed pupils is in agreement with the findings of other researchers⁽²⁾. These socioeconomic and demographic factors when added to the stressful condition of living during war and chaos thereafter had rendered these pupils behaviorally disturbed and in rates higher than other parts of the world.

Conclusion

This study reveals that there is high rate of behavior disturbances in school aged children in Baghdad and this disorder is associated with low socioeconomic status, bereaved children and having fathers married to more than one wife. The study shows that these pupils have low scholastic achievement.

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