Cross-Sectional Study of Psychiatric Disorders in Pediatric Outpatient Clinic

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Mental health problems are a common reason for consultation in pediatric clinics. Many of such disorders go unrecognized and untreated. The objective of this study was to determine the prevalence rate and characteristic features of mental health problems in pediatric outpatient clinic in Zagazig University Hospital.

Children aged between 7 - 14 years asking for medical advice were the subjects of this study. They were subjected to 1- Children behavior questionnaire as screening measure (Arabic translation) 2- Psychiatric interview for high scores and random samples of low scores.

Our study revealed that 17.3% of children examined had at least one specific psychiatric disorder according to the D.S.M-IV classification. The most prevalent disorder was nocturnal enuresis 4.7%, conduct disorder 2.4% and severe mental retardation 1.8%. By the use of Rutter's (children behavior questionnaire), high sores were present more in males than females and in urban children than rural children. Males were more antisocial than females and females were more neurotic than males.

(Egypt. J. Psychiat.,1997, 20: 265-270).

INTRODUCTION

Mental health problems are a common reason for consultation In pediatric clinics (Gure et al. 1994). This is depending on the population studied and the method used, but there is evidence that about 10-30% of consecutive child attenders in primary care may have significant psychiatric morbidity (Giel et al. 1981, Garralda and Bailey, 1986 and Costello et al. 1988).

Many such disorders go unrecognized and untreated (Giel et al. 1981). The characteristics of children with psychiatric disorders seen in primary care pediatric settings are important for psychiatric as well as pediatric specialists, and failure of pediatricians to identify disturbed children can delay or deny their access to specialists care (Costello et al. 1988).

Aim of the Work

The purpose of this work was to: 1- Study the prevalence of psychiatric disorders among children7-14 years seeking medical advice at pediatric outpatient clinic. 2-Study the characteristic features of the psychiatrically disordered children.

SUBJECTS AND METHODS

Subjects: Children asking for medical advice at pediatric outpatients clinic in Zagazig University Hospital. Their ages ranged between 7-14 years. They

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should be accompanied by at least one of their parents. The number of these children was 1074. Sixty eight cases from these did not complete the assessment because of: they were in hurry, they refused the assessment, they were severely ill and in need for urgent help. The total number of children who were assessed was 1006.

Methods:

A) Rutter's children behavior questionnaire (Arabic translation) (Rutter 1976)used as a screening measure. The scale consists of 26 brief statements concerning the children behavior. Each statement has to be checked whether it is "certainly applied-2" "applied somewhat-1" or "does not apply-0" The total score ranged between 0-52.

A "Neurotic sub-score is obtained by summing the scores of items 7, 10, 17 and 24 ("often worried, worried about many things" "often appears miserable, unhappy, tearful or distressed" tends to be fearful or afraid of new things or new situation", "has had tears on arrival at school or has refused to come into the building this year").

An antisocial sub-score is obtained by summing the scores of items 4, 5, 15, 19m, 26 ("often destroy own or other belonging", "frequently fight with other children", "is often disobedient", "often tells lies", has stolen things on one or more occasions", "bullies other children").

The selection of children with neurotic or antisocial disorders by means of the scale is a two-stage procedure: 1-Children with a total score of 9 or more are designated as showing some disorder. 2-of these children those with a neurotic score exceeding the antisocial score are designated "neurotic" and those with an antisocial score exceeding the neurotic score are designated "antisocial" The children with equal neurotic and antisocial sub-score remain undifferentiated.

B) Psychiatric interview with both children and parents. All children scoring 9 or above in the children behavior questionnaire and random samples scoring below 9 were subjected to this second stage procedure which was psychiatric case interview (following the guide lines for resident provided by Psychiatric Department, Zagazig University Hospital).

RESULTS

Pediatricians identified only 20 cases out of the 174 Psychiatric disordered children and so the degree of awareness for psychiatric disorders is low.

The results were summarized in the following Tables:

Fig.(1)

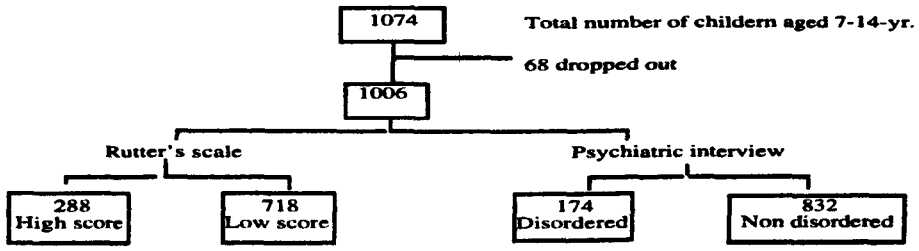

Table 1
Psychiatric Disorders among the Children According to the DSM-IV

Disorder	No.	%	Male	Female
Nocturnal enuresis	48	4.7	20	28
Conduct disorders	24	2.4	18	6
Stuttering	14	1.4	8	6
Chronic motor tic	14	1.4	10	4
Specific Phobia	12	1.2	6	6
Attention deficit hyperactivity	12	1.2	6	6
Oppositional deviant	8	0.8	4	4
Transient tic disorders	8	0.8	4	4
Grand - Male epilepsy	8	0.8	6	2
Adjustment with depressed mood	6	0.6	4	2
Mental retardation	24	2.4	14	10
Generalized anxiety	4	0.4	4	0
Separation anxiety	2	0.2	2	0
Brief psychiatric	2	0.2	0	2
Stereotypic movement	2	0.2	2	0
Conversion	2	0.2	0	2
Petit - male epilepsy	2	0.2	0	2

N.B.: 18 Children carried more than one diagnosis.
(D.S.M- IV) the diagnostic and statistical manual of mental disorders (American Psychiatric Association 1994). Nocturnal enuresis due to general medical condition was excluded.

Demorgraphic characteristics of psychiatrically disordered and non psychiatrically disordered children were summarized in the following tables.

Table 2
Age Distribution of theTwo Groups

Age	Psychiatrically disordered group		Non Psychiatrically Disordered group		X2	P
	No.	%	No.	%		
7-10 Yrs.	84	48%	466	56%		
10-12 Yrs.	56	32%	241	29%	1.79	N.s
12-14 Yrs.	34	20%	125	15%		

This table shows that there is no statistically significant difference between the two group as regards the age distribution.

Table 3
Sex Distribution of the Two Groups

Sex	Psychiatrically disordered group		Non Psychiatrically Disordered group		X2	P
	No.	%	No.	%		
Males	90	52%	408	49%		
					0.212	N.s
Females	84	48%	424	51%		

This table shows that there is no statistically significant difference between the two groups as regards the sex distribution.

Table 4
Residence of the Two Groups

Residence	Psychiatrically disordered group		Non Psychiatrically Disordered group		X2	P
	No.	%	No.	%		
Rural	108	62%	474	57%		
Urban	66	38%	358	43%	0.822	N.s

Table 5
Education of the Two Groups

Education	Psychiatrically disordered group		Non Psychiatrically Disordered group		X2	P
	No.	%	No.	%		
Educated	125	72%	724	87%		
Non educated	49	28%	108	13%	10.82	N.s

This table shows that there is a statistically significant difference between the two groups as regards the education.

Table 6
Neurotic and Antisocial Children among the 288 with High Score in Rutter's Scale

	Number	%	Male	Female
Antisocial	196	68%	132	64
Neurotic	64	22%	30	34
Equal neurotic and antisocial	28	10%	14	14

This table shows that males are more antisocial than females and females are more neurotic than males.

DISCUSSION

A multi-center study in S.E Asia found that 10-15% of children presenting with somatic symptoms had functional complaints (Sell et al. 1991).

Parents are anxious about physical illness in children and accustomed to seek treatment for such problems. Pediatric clinic populations include a significant number of children with mental health problems (Singh et al. 1989).

This study demonstrated that 174 out of 1006 screened showed at least one specific psychiatric disorder according to DSM-IV classification at the time of the study. This represents a weighted prevalence of 17.3% for total psychiatric morbidity. This prevalence was in accordance with the four country study done in primary health care setting in Sudan, Columbia, India and philippines (Giel et al. 1981), who gave a prevalence rate which varied from 12% to 29% for child psychiatric disorders.

Also the prevalence rate of our study was in agreement with the study done by Gure et al. (1994) in Nigerian primary care setting, who gave a prevalence rate of 19.6%.

The most prevalent psychiatric disorder was nocturnal enuresis being present in 4.7%, this was comparable to the prevalence rate 4.4% given by Costello et al. (1988).

The conduct disorder was present in 2.4%. This was comparable to Costello et al. (1988) who gave a prevalence rate of 2.2% for conduct disorders. Conduct disorders are commoner in boys and neurotic disorders in girls. Incidence increases with age. It would appear that the mechanisms by which individual differences in children modify response to environmental experiences may be stable across cultures.

As regards the age distribution, the greater proportion of disordered children were present in the age 7- 10 years

(48%) and there was a gradual decline to (28%) at the age of 10 - 12 years and to 17% at the age of 12 - 14 years.

Our results are in agreement with that reported by Goldberg et al. (1984). Younger children are more vulnerable in situations where the traditional caring patterns do not include attempts to help young children adapt to or understand changes (Al- Issa 1989).

Concerning sex distribution our study included more boys (52%) with mental health problems than girls (48%). Goldberg et al. (1984) gave a remarkable excess of boys with mental health problems.

The higher rates observed in urban sample may indicate that influence of urban living increases the vulnerability of children, despite possible advantages such as easier access to health care and educational facilities (Rahim and Cederblad 1984).

However in our study there was no significant differences between psychiatrically disordered and non-disordered groups regarding the residence. 62% of psychiatric disordered group came from rural area. This may be explained by the fact that, most of children sough medical advice at the outpatient's clinic were more or less rural.

Our study revealed that 28% of psychiatrically disordered children were non educated, and 72% were educated; while only 13% of non disordered were non educated and 87% were educated. This can be explained by the fact that non educated group is subjected to psychological impact of enforced work.

The observation that more than 17% of children seeking medical advice at pediatric outpatient clinic have psychiatric disorders suggests that the pediatricians must pay more attention to detect psychological disorders in children and we conclude that psychiatric education really deserves much more attention.

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Une étude sur la propagation des troubles psychiatriques chez les eufants visités le clinic paediatric

dans cette étude nons avons évaluer la prévalence ainsique, les caractéres des problémes mental présentant au paediatric clinic de'l 'hôpitàl de l' université du Zagazig les enfants ont passé une questionnaire pour évaluer les conduités des enfants (Royter Scale) et aussi, une entretien semistructuré Nos résultats ont montré que 17.3% ont des troubles psychatriques diagnosé selon DSM-IV ainsique, Nocturnal énuéritique le plus présentant 4.7% er le diagnostique le plus courant, 2.4% désordre de conduite, 1.8% trouble mental .

دراسة مدى انتشار الإضطرابات النفسية لدى الأطفال المترددين علي عيادة الأطفال الخارجية

تنتشر الأمراض النفسية في الأطفال المترددين على العيادات الخارجية وتدل الشواهد على أن ما بين ١٠-٣٠٪ من الأطفال المترددين على العيادات الخارجية يعانون من أمراض نفسية محددة . وبالرغم من ذلك فإن معظم هذه الأمراض تمر دون التعرف عليها أو علاجها . وكان الهدف من هذا البحث هو تحديد مدى انتشار الأمراض النفسية في الأطفال المترددين على عيادة الأطفال الخارجية والذين تتراوح أعمارهم مابين ٧-١٤ سنة وكذلك تحديد المواصفات الخاصة في هؤلاء الأطفال وقد خضع هؤلاء الأطفال إلى :

١- مقياس سلوك الأطفال (مقياس رتر).

٢- مقابلة طبية نفسية خاصة مع كل الأطفال الذين حصلوا على درجة ٩ أو أعلى باستخدام مقياس رتر وعينات عشوائية من الذين حصلوا على درجة أقل من ٩ وقد خلص البحث إلي ما يلي :

بلغ عدد الأطفال الذين تم اخضاعهم لطريقة البحث ١٠٠٦ طفلا . وقد وجد أن عدد ١٧٤ طفلا من هؤلاء يعانون من أمراض نفسية محددة باستخدام التقسيم الأمريكي الاحصائي الرابع للاضطرابات الطبية النفسية - ويمثل هذا العدد نسبة ١٧,٣٪ وكانت أكثر الأمراض النفسية شيوعا مرض التبول اللاارادى (٤,٧٪) ومرض اضطرابات السلوك (٢,٤٪) والتخلف العقلى (١,٨٪) والتهتهة (١,٤٪) .

ويناقش البحث هذه النتائج حيث أن أكثر من ١٧٪ من الأطفال المترددين على العيادة الخارجية يعانون من أمراض نفسية محددة ولذلك فإن الدراسة توصى بمزيد من الاهتمام بتدريس هذه الأمراض النفسية خصوصا لطلبة كليات الطب مع الاهتمام بالأمراض النفسية للأطفال اهتماما خاصا.