

## MENTAL HEALTH MORBIDITY IN CHILDREN: A HOSPITAL BASED STUDY IN CHILD PSYCHIATRY CLINIC

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### ABSTRACT

**Objectives:** To determine the frequency and pattern of mental health morbidity in children attending "Psychiatry Clinic" in Paediatric OPD of a tertiary care hospital.

**Methodology:** This was a cross-sectional study conducted at psychiatry clinic of Paediatric OPD at civil hospital Karachi. Two hundred children upto the age of 14 years were included in the study. These children were assessed by a semi-structured interview based on P-CHIPS (Child Interview for Psychiatric Syndrome) and diagnosis of various psychiatric illnesses was further confirmed by DSMIV diagnostic criteria.

**Results:** Psychiatric disorders were more frequent in males 126 (63%) compared to females 74 (37%). Majority of patients affected were between 5-10 years of age (62.5%). Among the psychiatric disorders, oppositional defiant disorders were (20%), ADHD were (17%), elimination disorders and anxiety disorders were (11%) each. Other less frequent psychiatric problems were mood disorder, somatoform disorders, specific developmental disorders, emotional and habit disorders.

**Conclusion:** Mental health morbidity is an important issue in children attending the psychiatry clinic in the Paediatric OPD. Sensitization of parents, teachers and physicians is required, so that timely referral for psychiatric consultation is ensured before a critical illness develops.

**KEY WORDS:** Mental Health, Morbidity, Children.

Pak J Med Sci October - December 2009 (Part-II) Vol. 25 No. 6 982-985

### How to cite this article:

Sarwat A, Ali SMI, Ejaz MS. Mental health morbidity in children: A hospital based study in child psychiatry clinic. Pak J Med Sci 2009;25(6):982-985.

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- \* Received for Publication: June 22, 2009
- \* Revision Received: October 24, 2009
- \* Accepted: October 25, 2009

### INTRODUCTION

It is a general assumption that children do not suffer from psychiatric disorders. However, it has been observed that childhood psychiatric disorders are more common than expected in the general population.

According to the WHO statistics, prevalence of disabling mental illnesses among children and adolescence attending urban health care centers ranges between 20-30% and 13-18% in rural areas. Out of these children 3-4% are suffering from serious mental illnesses and require treatment.<sup>1</sup> Western studies have showed prevalence of 10-12%.<sup>2</sup> Most studies from developing countries reported higher prevalence rates

for psychiatric problems in children and adolescent than those in western countries. Common psychiatric problems reported in various studies are attention deficit hyperactive disorder (ADHD), Oppositional defiant disorders, conduct disorders, psychosomatic disorders, anxiety and elimination disorders.<sup>3-5</sup> ADHD is one of the most frequent psychiatric illnesses reported in the psychiatry clinics. In a study done in Pakistan, ADHD was found in 34% children whereas data from India reported that 6-9% children suffered from this disease.<sup>6,7</sup>

In developing countries like Pakistan, child and adolescent psychiatric problems are very often neglected. There is lack of specialized in-patient child psychiatric units and awareness regarding mental illnesses at community as well as at the level of medical practitioners and other health care providers is limited. The objective of this study was to determine the frequency and pattern of mental health morbidity in children attending "Psychiatry Clinic" in the Paediatric OPD of a tertiary care hospital.

#### METHODOLOGY

This is a cross-sectional study conducted at the "Psychiatry Clinic" in Paediatric OPD in Civil Hospital Karachi. The hospital is a tertiary care center providing health services to urban and peri-urban areas of Sindh. Approximately 600 to 800 patients are seen in the OPD daily. Psychiatry Clinic was conducted as a sub-specialty clinic by the authors in Paediatric OPD. Patients were referred from the General Paediatric OPD by the medical officers and the paediatricians.

Two hundred children upto the age of 14 years were seen during the study period of six months. The selected children were interviewed through P-CHIPS (Child Interview for Psychiatric Syndrome). CHIPS is a highly structured interview based on DSM-IV criteria, it screens for presence of 20 psychiatry disorders as well as psychosocial stressors. It can be administered in any setup.<sup>8</sup> In this study P-CHIP was administered which is parent version of the interview and useful in cases where child cannot be interviewed. The authors helped the parents in administration of the interview.

Children with suspected Psychiatry problems referred from General Paediatric OPD were included in this study. Children with mental retardation, chronic physical illnesses and neurological diseases viz epilepsy, leukodystrophies, muscular dystrophy were excluded from the study. Patients were provided medicines from the clinic and counselling of patients and families were done in the same setup separately keeping the privacy and confidentiality of patients. Disorders which are not assessed by CHIPS example, pervasive developmental disorders were diagnosed clinically based on DSM-IV criteria. Data analysis was done on SPSS version (10.0). Results are presented as frequencies and percentages where required.

#### RESULTS

Two hundred children upto the age of 14 years were included in the study. The gender distribution showed that psychiatric disorders are more common in males as compared to females. There were 63% males and 37% females. The age group affected more was between 5-10 years (Table-I).

Among the psychiatric illnesses oppositional defiant disorders were more common, seen in forty (20%) children, followed by ADHD in thirty-four (17%) cases. Elimination and anxiety disorders were present in twenty-two (11%) cases each. Other disorders observed were, mood disorders nineteen (10%), somatoform disorders eighteen (9%), specific developmental disorders ten (5%), pervasive developmental disorders nine (4.5%) and emotional problems eight (4%). Less frequent problems were obsessive compulsive disorders, schizophrenia, tics and tricotillomania (Table-II).

Table-I: Gender and age distribution (n = 200)

<i>Gender</i>	<i>Patients (n)</i>	<i>%</i>
Male	126	63
Female	74	37
<i>Age group</i>	<i>Patients (n)</i>	<i>%</i>
Up to 5 years	25	12.5
5-10 years	125	62.5
>10 years	50	25

Table-II: Diagnosis and gender cross - tabulation (n = 200)

<i>Psychiatric Diseases</i>	<i>Total No.</i>	<i>%</i>	<i>Males</i>	<i>Females</i>	<i>Male: Females Ratio</i>
Oppositional defiant disorders	40	20	32	8	4:1
ADHD	34	17	27	7	3.8:1
Elimination disorders	22	11	10	12	1:1.2
Anxiety disorder	22	11	14	8	1.75:1
Mood disorder	19	9.5	7	12	1:1.7
Somatofom disorders	18	9	9	9	1:1
Specific developmental disorders	10	5	6	4	1.5:1
Pervasive developmental disorder	9	4.5	6	3	2:1
Emotional problems	8	4	2	6	1:3
Habit disorders	6	3	3	3	1:1
Obsessive-Compulsive Personality disorder	4	2	3	1	3:1
Schizophrenia disorder	3	1.5	3	0	3:0
Tics disorder	3	1.5	2	1	2:1
Tricotillomania	2	1	2	0	2:0
Total Cases	200	100	126	74	2:1

## DISCUSSION

Child psychiatry as subspecialty has started gaining considerable recognition in Pakistan, but services available for children are limited to major cities of the country which comprise 30% of the whole population.<sup>9</sup> There are several causes that may contribute to the mental health problems in Pakistan, including inter-family marriages, high rates of birth injuries, economic decline and high rates of unemployment, fragmentation of the family system and loss of religious value.<sup>10</sup> The salient feature of the present study was to determine the frequency, age and gender distribution of psychiatric illnesses in children attending psychiatric clinic.

Oppositional defiant disorders lead to distress which has profound impact on the academic, social and occupational functioning of these children.<sup>11</sup> In our study Oppositional defiant disorders were found in forty cases. They were found more in males than females. (4:1) and were more common between 5 to 10 years of age. A study done in Lahore showed prevalence of 9.3% for behavioral problems<sup>12</sup>, whereas another study done in Al-Ain UAE also reported male predominance and mean age of 10 years.<sup>13</sup>

Another significant disorder was attention deficit hyperactivity disorder (ADHD), it was

observed in thirty four cases of the study group. Prevalence of ADHD as shown in western studies is 3-5%.<sup>14-15</sup> Few epidemiological studies reported male to female ratio of 4:1, while most of the clinical studies showed the gender ratio of 9:1.<sup>16</sup> Data available from Pakistan is scarce but studies from India showed prevalence of 5-10%.<sup>17</sup> Few local studies showed that ADHD is more common between 6-10 years of age<sup>6</sup>, our study also reported the similar findings it was more frequently found between 5-10 years of age.

Elimination disorders were seen in eleven percent children. Mood and anxiety disorders are also one of the common psychiatric problems in children, it is also observed that these disorders are associated with somatization in children and adolescents who cannot express their feelings and depression among them is largely unrecognized and left untreated.<sup>18-20</sup> It has also an impact on the academic performance as well as it leads to depression in adulthood.<sup>22-24</sup> Manifestations of depression as an anxiety disorder were also found in earlier studies, which showed that male to female ratio for these disorders is equal in children<sup>25-26</sup>, present study also showed similar results. Other problems found in the current study were schizophrenia, obsessive compulsive disorders and tics.

*Limitation of the study:* It is a hospital based study which was carried out on a sample size of two hundred. Community based surveys should be carried out on larger scale to find out the depth of the psychiatric problems in children.

## CONCLUSION

Mental health morbidity is an important issue as seen in children attending the "Psychiatry Clinic" in a Paediatric OPD. Most common psychiatric problems found in children are oppositional defiant disorders, ADHD disorders, anxiety and mood disorders.

Community based surveys are required to assess the clear picture of childhood psychiatric problems. Sensitization of parents, teachers and family physicians is required to enable them for playing their role in early recognition and timely psychiatric consultation should be sought before a critical illness develops.

## ACKNOWLEDGEMENT

Authors are thankful to Mr. Furqan Baig for the secretarial assistance.

## REFERENCES

- Hassan Z.K. children mental health problems and prospects using primary health care. Pak J Child Mental Health 1991;2:90-101
- Graham P, Turk J, Verhulst F. Child Psychiatry. A developmental approach; Oxford University Press, 2001.
- Srinath S, Girimaji SC, Bangalore G, Seshadri S, Subbakrishma DK, Bholra P, et al. Epidemiological study of child and adolescent psychiatric disorders in urban and rural areas of Bangalore India, Indian J Med Res 2005;122,67-79.
- Loeber R, Burke JD, Lahey BB, Winters A, Zera M. Oppositional defiant and conduct disorder; a review of the past 10 years, part I. J Am Acad Child Adolesc Psychiatry 2000;39:1468-84.
- Jawaid A, Rehman T. Pediatric mental health in Pakistan: a neglected avenue. J Pak Med Assoc 2007;57:50-1.
- Syed E, Naqvi H, Abdul Hussain S; Frequency, Clinical Characteristics and Co-morbidities of Attention deficit hyperactivity disorder presenting to a child psychiatric clinic at a University hospital in Pakistan; J Pak Psych Soc 2006;3(2):74-77.
- Anonymous; Spectrum of ADHD in children among referral to psychiatric services, J Indian Paediatrics 2003;37;1258-60.
- Weller EB, Weller RA, Fristad MA, Rooney MT, Schecter J. Children's Interview for Psychiatric Syndromes (Chips). J Am Acad Child Adolesc Psychiatry 2000;39(1):76-84.
- Kareem S, Saeed K, Rana MH, Malik MH, Jenkin R, Pakistan Mental Health Country Profile. Int Rev Psychiatry 2004;16:83-92.
- Hussain SA; A review of Global issues and prevalence of child mental health problems: where does CAMH stand in Pakistan? J Pak Psych Soc 2009;6(1):5-13.
- M. Christopher, T.G. Mark, Examining the importance of social relationships and social contacts in the lives of children with high incidence of disabilities. J Special Education 2006;39(4):220-33.
- Javad AM, Kundi MZ, Khan AP. Emotional and behavioral problems among school children in Pakistan. J Pak Med Association 1992;42:181-4.
- Eapen V, Swadi H, Sabri S, Abou-Saleh M. Childhood behavioral disturbance in a community sample Al-Ain United Arab Emirates, East Mediterr Health J 2001;7:428-34.
- Biederman J, Newcorn J, Spirich S, Comorbidity of Attention deficit hyperactivity disorder with conduct, depression, anxiety and other disorders, Am J Psychiatry 1991;148:564-77.
- Jensen PS, Martin D, Cantwell DP, Comorbidity in ADHD implication for research practice and DSM-IV. J Am Acad Child Adolesc Psychiatry 1997;36:1065-79.
- Cantwell DP ; Attention deficit disorder; a review of past 10 years; J Am Acad Child Adolesc Psychiatry 1996;35:978-87.
- Malhi P, Singhi P, Spectrum of Attention deficit hyperactivity disorders in children among referral to psychological services. Indian Paediatrics 2000;37:1256-60.
- Barkely RA, Fischer M; Edelbrock CS, Smallish L, The adolescent outcome of hyperactivity children diagnosed by research. Criteria 1: an 8 years prospective follow-up study J. Am Acad Child Adolesc Psychiatry 1990;29:546-57.
- Klerman GL, Weissman MM, Increase rate of depression; JAMA 1989;26:2229-35.
- Golombek H, Kutcher S, Feeding states during adolescence, Psychiatric Clin North Am 1990;13:443-54.
- Kovacs M, Feinberg T, Crouse-Novak M, Paulauskas SL, Pollock M, Finkelstein R. Depressive disorders in childhood, a longitudinal study of the risk for a subsequent major depression. Arch Gen Psychiatry 1984;41:643-9.
- Weissman MM, Wolk S, Wickramaratne P, Goldstein R, Adams P, Greenwalds Children with pre-pubertal-onset major depressive disorder and anxiety grown up. Arch Gen Psychiatry 1999;56:794-801.
- Pehlivanurk B, Unal F Conversion disorder in children and adolescents, clinical features and co-morbidity with depressive and anxiety disorders. Turk J Pediatr 2000;42:132-7.
- Pine DS, Cohen P, Gurley D, Brook J. The risk for early adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. Arch Gen Psychiatry 1998;55:56-64.
- Ahmed SH, Arif M. Culture and symptomatology in depression. Pak. J Med Res 1982;21:64-7.
- Afridi MI, Haider S, Haider Z, Hussain M; Clinical features of depressive disorder among patients below 18 years of age: J College Physician Surgeon Pak; 2006;16(2):132-135.

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- A.S., Designing, Data Collection, Statistical analysis and editing of manuscript.
- S.M.I.A., Reviewing and final approval of manuscript.
- M.S.E., Collection of references and Manuscript writing and editing.