

## Original Research Article

# Clinical profile of child and adolescent patients attending a mental hospital OPD

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## ABSTRACT

**Background:** Psychiatric morbidity profile of children and adolescents is very different from that of adults. These problems are rising but largely remain unreported. Very few studies have been carried out in this specialty of psychiatry.

**Methods:** In this retrospective file review study, all child and adolescent patients attending the general psychiatry out-patient between January-August 2014 in a city of central India. Semi-structured socio-demographic and clinical profile collection performa and international classification of diseases-10 (ICD-10) were used as tool and statistical analysis was done by using SPSS 16.

**Results:** The results showed that among total 2544 children presented during study period, 175 children (6.8%) had psychiatric morbidity. Most of them were in the age group of 11-16 years, from middle income group, illiterate, Hindu by religion and residing in urban locality. No significant sexual preference was found regarding distribution of the disorders. Mental retardation was commonest (n=112; 64%), without (n=42; 24%) and with co-morbidities (epilepsy n=42; 24%, behavioural disturbance n= 28; 16%) found to be the most prevalent disorder followed by epilepsy (7%), ADHD (5.7%), schizophrenia and other psychosis (5.7%), depression (4%) and autism 1.1% and then others.

**Conclusions:** Mental and psychiatric services for children lag behind those for adults in developing countries. Also, a community based study can be a better study design in future.

**Keywords:** Child, Clinical profile, File review, Prevalence

## INTRODUCTION

Psychiatric morbidity is ubiquitous, affecting children adolescents and adults. Age factors play a great role in pattern of morbidity profile. Psychiatric morbidity profile of children and adolescents may indicate different needs and priorities. It is greatly influenced by the environmental factors and life events like adverse family circumstances, maternal separation or deprivation, birth of a sibling, parental divorce, bereavement, physical handicap, urbanism and maternal depression may

influence the mental health of a child. Various studies from developing countries including India show that a significant percentage (ranging between 7-35%) of child and adolescent population suffers from mental illness.<sup>1-5</sup>

Psychiatric problems in children in India are rising and only a small number of cases present in psychiatric OPD mainly due to sparse mental health services, stigma and less awareness to psychiatric problems. So, large number of cases remains unreported. Kim-Cohen et al, in their follow back study from New Zealand reported that 50%

of adult psychiatric disorder cases had onset by age of 15 years.<sup>6</sup> Costello et al in their updated review of epidemiology of childhood psychiatric disorders have opined that onset before adulthood may be a characteristic of the majority of adult psychiatric disorders. Early intervention for these has the potential to substantially alter the developmental course of these adult disorders, significantly reducing the morbidity.<sup>7</sup>

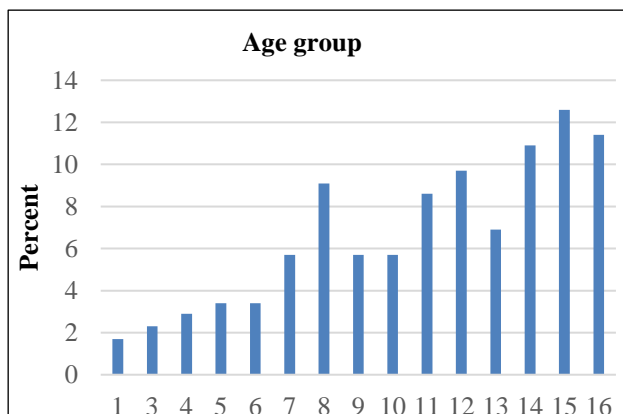
## METHODS

This retrospective file review study was conducted in a mental hospital setting during the period between January-August 2014 in a city of central India. The Study was conceptualized, protocol was prepared and then initiated. The study population comprised of all the patients of age group (16 years and below) who presented to the general psychiatric outpatient department directly or were referred by pediatricians or other specialists. Sample's hospital OPD No. were traced from registration record. Semi-structured socio-demographic and clinical profile collection performa and international classification of diseases-10 (ICD-10) 8 were used as tool. After review, appropriate statistical analysis was done by using SPSS 16.

At the time of review, OPD files were assessed in detail related to socio-demographic (of patient and informants) and clinical (chief complaints, type of onset, course, psychopathology, temperament, developmental history, any dysfunction or co-morbidity, family history, family functioning, physical examination and mental status examination and final diagnoses and treatment initiated) information.

## RESULTS

Among total 175 children presented to mental hospital OPD during the study period, 99 (56.6%) were males and 76 (43.4%) were females. 59% of children were from 11-16 years age group and 31% were from 6-10 years age group, having a psychiatric illness (Figure 1).



**Figure 1: Percentage of samples in various age groups.**

**Table 1: Sociodemographic profile of the sample.**

Variable	N (%)
<b>Age</b>	
0-5 years	18 (10)
6-10 years	54 (31)
11-16 years	103 (59)
<b>Gender</b>	
Male	99 (57)
Female	76 (43)
<b>Religion</b>	
Hindu	135 (77.1)
Muslim	39 (22.3)
Christian	1 (0.6)
<b>Education</b>	
Illiterate	90 (51)
Up to primary	50 (29)
Up to secondary	35 (20)
<b>Occupation</b>	
Unemployed	113 (65)
Employed	2 (1)
Student	60 (34)
<b>Family type</b>	
Nuclear	71 (41)
Extended	32 (18)
Joint	59 (34)
Orphan	13 (7)
<b>Family income</b>	
Up to 5000	54 (31)
5001-10000	74 (42)
Above 10000	34 (19)
Nil	13 (8)
<b>Residence</b>	
Rural	59 (34)
Urban	107 (61)
Sub-urban	9 (5)
<b>Current medical diagnosis</b>	
Absent	166 (95)
Present	9 (5)
<b>Family history</b>	
Absent	135 (77)
Present	27 (16)
Unknown	13 (7)

Maximum children belonged to nuclear type families (71 children, 40.6%) as most of the children attending the OPD were residing in urban area (107 children, 61.1%). Most of them (77.1%) belonged to Hindu religion. About 51% (91 children) were found illiterate because major presentation of children was from mentally retarded group (64%). Most of the children presented with mental retardation because parents of mentally disabled children reach to our facility due to their requirement for disability certification. There were 60 children (34%) who were studying. Most of the children (42.3%) were from the income group of 5000-10000 INR/month. Family history

for psychiatric illness was absent in 135 (77%) cases and a current medical diagnosis was absent in 166 (95%) cases (Table 1).

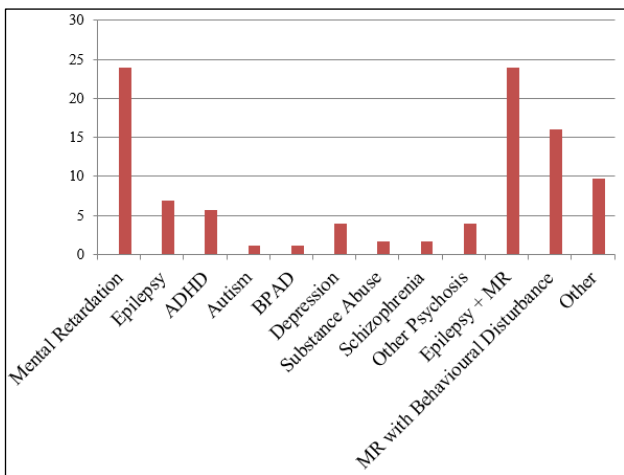
Mental retardation was commonest presentation in this study (112 cases; 64%). Antiepileptics (30%) and antipsychotics (16%) were most commonly used medications in the study group.

**DISCUSSION**

A total of 175 new Child and adolescent cases out of total 2544 patients attended the general psychiatry OPD in Mental hospital Indore during the study having a prevalence of 6.8% which falls in the range of previous studies done in India, but is lower than other foreign studies.

Most Indian studies report lower psychiatric morbidity than large-scale studies from other countries. A mean prevalence rate of 29% is found in studies from France, Germany, New Zealand, Puerto Rico, USA, Canada and the Netherlands.<sup>6,9-13</sup> This difference may not necessarily imply truly lower rates of psychiatric disorders in Indian children and adolescents.

Other reasons could include poor awareness and psychological sophistication leading to lower sensitivity to certain disorders, higher threshold of tolerance for certain symptoms and other socio-cultural factors. In the present study, mental retardation was commonest (n=112; 64%), without (n=42; 24%) and with comorbidities (epilepsy n=42; 24%, behavioural disturbance n= 28; 16%) (Figure 2).



**Figure 2: Diagnosed conditions in the review group.**

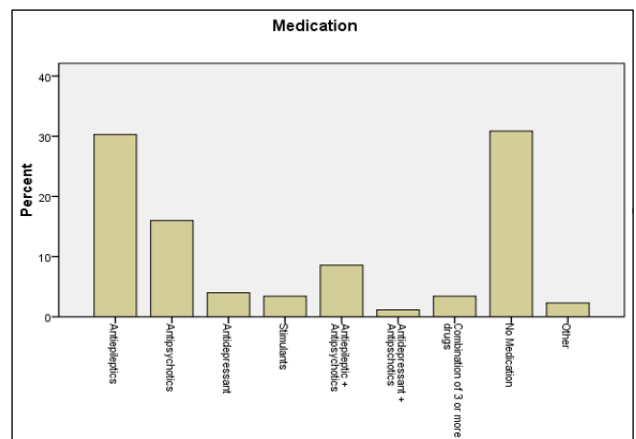
It was comparable with study by Malhotra et al, in case of without comorbidities but overall prevalence was higher in present study.<sup>14</sup> It may be due to this institute was authorised for issuing disability certificate through which they can avail various benefits from government schemes.

Next more common diagnosis was Epilepsy (7%) followed by ADHD (5.7%). Epilepsy prevalence was lower than study by Malhotra et al, but it was comparable to it with comorbid mental retardation. The ADHD prevalence was comparable with the same study.

In case of depression, prevalence in this study was 4% while it was higher (6%) in study by Malhotra et al.<sup>14</sup> In this study, substance use disorders were found 1.7%. In a study by Costello et al, substance use disorders were found 5%. This difference was due to that comparing study sample was from developed country. Other diagnosis were schizophrenia and other psychosis 5.7%, autism 1.1% and BPAD 1.1% which were comparable to 4.7%, 1.4% and 0.94% respectively in study by Chaudhary et al.<sup>15</sup>

In a study done by Srinath et al, anxiety disorders were prevalent among the children of age group 0-16 years.<sup>16</sup> In current study, only one case of OCD was found which was included in other disorders. The difference of prevalence may be due to that our samples were from mental hospital setting and child with anxiety disorder may prefer to consult paediatrician for their complain. The studied population were not prescribed medication (31%) mostly in cases of mental retardation as they were psychoeducated about the illness and referred to concerned centres for further psychosocial management.

Most commonly used medications were antiepileptics (30%) as many of them were suffering from epilepsy or behavioral disturbance associated with organic brain insult. Next common medication were antipsychotics (16%) which were prescribed to control aggression or psychotic symptoms (Figure 3).



**Figure 3: Various medication classes used during the study period.**

**CONCLUSION**

Child and adolescent psychopathology is a major concern among health professionals and educators in the developed countries. Mental and psychiatric services for

children lag behind those for adults in developing countries.

The study was aimed at assessing the prevalence and clinical profile of patients attending mental hospital OPD as a step forward for gathering data which is lacking in our region. This study has shown that there is a 6.8% prevalence of child and adolescent related disorders of which mental retardation form a major bulk so there is an intense need for raising human resources and specific programmes including CGC clinics in psychiatric and general hospital settings.

As this study was a retrospective file review future studies can be done using prospective or cross-sectional study design which are better study design. This study is a hospital based study therefore results cannot be generalized for community population, so, a community based study can be design in future.

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