

ORIGINAL RESEARCH

Patterns of Psychiatric Disorders in an Out-Patient Child and Adolescents Psychiatry Clinic in a Tertiary Care Teaching Hospital in North India

¹Aditya Sharma, ²Sanjay Jain, ³Yogesh Kumar Satija, ⁴Gunjan Solanki, ⁵Lalit Kumar Batra, ⁶Mahak Aggarwal

^{1,6}Junior Resident, ^{2,3}Senior Professor, ⁴Associate Professor, ⁵Senior Professor and HOD, Department of Psychiatry, SMS Medical College & Hospital, Jaipur, Rajasthan, India

Corresponding Author

Mahak Aggarwal

Junior Resident, Department of Psychiatry, SMS Medical College & Hospital, Jaipur, Rajasthan, India

Email: agg.myra@gmail.com

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ABSTRACT

Background: Mental health and its related illness are growing concerns over the world. The early onset of emotional and behavioural problems in young children has related to a variety of health and behaviour problems in adolescence and later life as well. Mental health disorders are the leading cause of morbidity among young people worldwide, accounting for 12% of global psychiatric morbidity and 40% of DALY due to mental health disorders. A variety of psychiatric manifestations are seen in children and adolescents below the age of 17 years. This study aims to find out the prevalence of psychiatric disorders in children and adolescents attending psychiatry outpatient department in a tertiary hospital. **Methods:** A descriptive cross-sectional study was done from 1st October 2022 to 31st January 2023 at Child and Adolescent Psychiatry OPD of SMS Medical College. Proper written informed consent was taken before the start of study. The intelligence quotient (IQ) was assessed by a clinical psychologist as and when required. A semi-structured proforma was used for the socio-demographic profile of patients and the International Classification of Diseases-10 (ICD-10) was used to make the diagnosis. **Results:** A total of 340 participants were analysed during the study period and this study comprised 194 males and 146 females. Most of the children belonged to the age group of 11-15 years (46.48%) followed by the ages of 6-10(27.94%). Most of the children belonged to Rural backgrounds (56%). The most common diagnosis made was Mental Retardation (36.48%), Hyperkinetic disorders (19.12%), Pervasive Developmental Disorders (11.47%), and Dissociative (Conversion) Disorders (6.48%). **Conclusion:** The psychiatric illnesses were found higher in the 11-15 years of age group with male preponderance. Most of the adolescents were from rural areas. Mental retardation and Hyperkinetic disorders were the most common psychiatric disorders reported. Psychiatric disorders are pervasive and troublesome in children and adolescents. Our study supports the findings of other studies in predicting patterns of psychiatric disorders that would help in applying suitable screening procedures and the importance of identification and subsequent management of psychiatric conditions.

Keywords: Children and adolescents, ICD-10, *Outpatient care*, Psychiatric disorders

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INTRODUCTION

According to the WHO reports there is a considerable burden of psychiatric morbidity among children and adolescents. [1] Mental health disorders are the leading cause of morbidity among young people all around the world, which accounts for 12% of global psychiatric morbidity and 40% of DALY due to mental health disorders

Adolescence is the adaptation period marked by physiological signs and rising hormones. Physical, emotional, and social changes predispose them to

mental health problems. The adolescence stage is the most productive duration of life, hence psychiatric morbidity in this age group affects the quality of life of not only the individual itself but also the family and community. [2]

All these mental health and behavioural disorders have been associated with an increased risk of school dropout and interruption of education. This will result in poor academics, which indirectly leads to poor job opportunities and will indirectly affect their health. [3]

Children with mental disorders face stigma, isolation, discrimination, and lack of access to health care and education facilities, in violation of their fundamental human rights. (4), along with the financial burden to the family which in turn is responsible for the poor quality of life of the family altogether. (5)

Various community-based Indian epidemiological studies on the prevalence of psychiatric disorders have reported varying prevalence rates, ranging from 9.5 to 102 per 1000 population. (6,7). A study (Srinath S et al.) concluded that the prevalence of various psychiatric disorders was 12.0% the most common were Enuresis, phobia, attention deficit hyperactivity disorder, stuttering, and oppositional defiant disorder. (2)

The study aims to find out the prevalence of psychiatric disorders in children and adolescents attending child and adolescent psychiatry outpatient department in a tertiary care hospital.

METHODS

The present cross-sectional observational study was conducted at the outpatient clinic of the Department of Psychiatry of our tertiary care hospital. The study duration was three months. Three hundred and forty children and adolescents of either sex attending below 17 years of age visiting the psychiatric clinic were included in the study through purposive and consecutive sampling.

All the patients from October 1, 2022, to January 31, 2023, were included in the study. The objective and

plan of the study were explained and inclusion and exclusion criteria were fulfilled. Informed written consent was taken. The sample includes the patients who visited Psychiatric OPD and referrals from OPDs of other departments. Those who were suffering from serious medical conditions, had impaired consciousness, and were not able to participate were excluded.

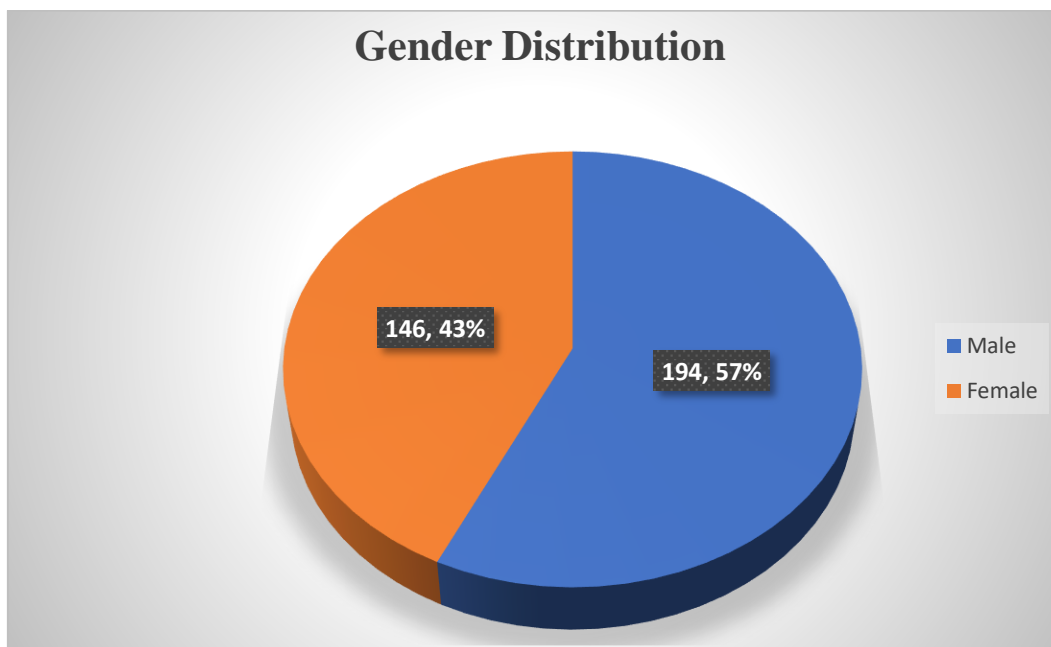
The sociodemographic status of patients was recorded by a semi-structured questionnaire used in the child psychiatry clinic. A thorough clinical assessment was done to assess the mental health state and psychiatric morbidity. The intelligence quotient was assessed by a clinical psychologist as and when required. All the diagnoses were made based on ICD-10 criteria. The diagnoses were confirmed by the consultant in charge of the child psychiatry clinic of the Department of Psychiatry, SMS Medical College, Jaipur.

The data about various parameters are categorized according to age group, sex, residence, and diagnosis. Results were calculated and presented in the form of frequency and percentages. Categorical data was done and presented in tabular form.

RESULTS

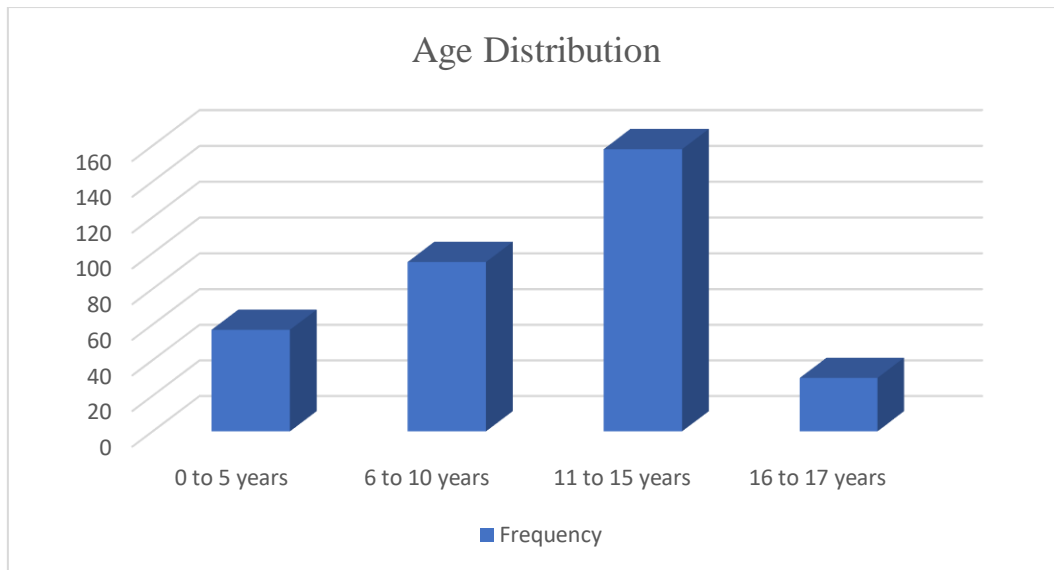
This study comprised a total of 340 children who attended a child and adolescent psychiatric clinic during the study period. The Child and Adolescent OPD is held twice a week in the Department of Psychiatry at our centre.

Of this sample, 194 were males and 146 were females.

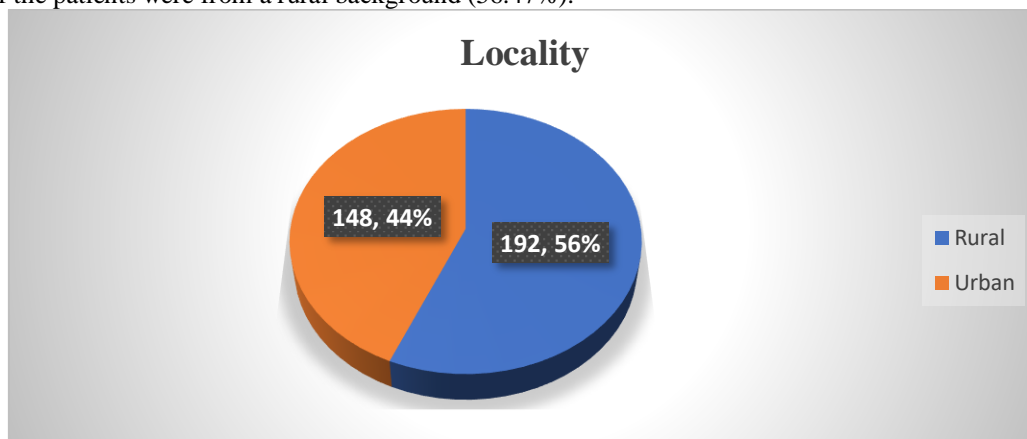


The age distribution of the sample is shown in Table 1.

This study comprised 57 (16.76%) children between the ages of 1-5, 95(27.94%) children between the ages of 6- 10, 158 (46.48%) children between the ages of 11-15, and 30 (8.82%) children between the ages of 16-17years. This suggests that symptom manifestation is more between the ages of 11-15 years, the next most common being 6-10 years of age (Table 1).



Most of the patients were from a rural background (56.47%).



In the present study, based on the clinical profile among study participants it was found that mental retardation was the most common morbidity and present among 36.48% of the study participants which was followed by hyperkinetic disorders present among 19.12% of the study participants. 11.47% had Pervasive developmental disorders (Autism etc.) and 6.48% had Dissociative (Conversion) disorders. Out of the total study participants depressive episode was found in 5.88% of subjects, and conduct disorder was found in 3.83% of subjects.

Distribution based on ICD-10 Diagnosis	Frequency	Percentage
Mental and Behavioural disorders due to psychoactive substance use		
Alcohol	1	0.29%
Cannabinoids	2	0.59%
Multiple drug use	4	1.17%
Total	7	2.05%
Schizophrenia, Schizotypal and Delusional disorders		
Schizophrenia	3	0.88%
Acute and Transient Psychotic Disorders	1	0.29%
Unspecified nonorganic psychosis	2	0.59%
Total	6	1.76%
Mood [affective] disorders		
Manic episode	6	1.76%
Bipolar affective disorder	2	0.59%
Depressive episode	20	5.88%
Total	28	8.23%
Neurotic, stress-related, and somatoform disorders		
Phobic anxiety disorders	5	1.47%
Panic disorder	2	0.59%
Obsessive-compulsive disorder	11	3.23%

Adjustment disorders	3	0.88%
Dissociative [conversion] disorders	22	6.48%
Total	43	12.65%
Behavioural syndromes associated with physiological disturbances and physical factors		
Eating disorders	2	0.59%
Mental retardation	124	36.48%
Disorders of psychological development		
Specific developmental disorders of scholastic skills	3	0.88%
Pervasive developmental disorders (Autism etc.)	39	11.47%
Total	42	12.35%
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence		
Hyperkinetic disorders	65	19.12%
Conduct disorders	13	3.83%
Tic disorders	6	1.76%
Nonorganic enuresis	4	1.18%
Total	88	25.89%

Table 1.

DISCUSSION

Most patients in this study were aged 11-15 years (46.48%) and males were more than females in a 1.32:1 ratio with 57.05 % males and 42.95% females. These findings are similar to previous hospital-based studies by Malhotra et al. (8). The more numbers of males in this study could be due to the more vulnerability of males than females to psychiatric disorders (10,11), due to males being given more importance in India (11,12) or a higher frequency of externalizing disorders in males which are more easily recognized due to their disruptiveness. (13).

Results show many participants were from rural backgrounds. (56%). This is consistent with the study by Bhat et al (10) and in opposition to the results of the study by Chadda and Maan et al, which found that children from urban backgrounds predominate. (9,14)

In the present study, based on the clinical profile among study participants, it was found that mental retardation was the most common disorder and present among 36.48% of the study participants. The high prevalence of mental retardation in the present sample is due to the mandatory testing of students before admission to special schools for handicapped children or due to the issue of medical certificates in our tertiary care hospital. This high prevalence is consistent with the earlier studies by Bhat, Choudhary, and Shreshtha et al [10,15,16]. In a study by Malhotra and Chaturvedi, Mental retardation was found in 28-33% of all cases. (8). Our results are also consistent with other studies from India. (15,17). Various epidemiological studies on the general population have reported high percentages of MR, and this study's results are also comparable with other hospital-based studies as well.

Mental retardation was followed by Hyperkinetic Disorders present among 19.12% of the study participants. Our study showed less incidence than another study, which found 29.01% having hyperkinetic disorder (Jayaprakash et al.) (18).

Various studies done in the West have reported a high clinical prevalence of up to 50% for ADHD. Childhood problems being less readily recognized and treated results in lower clinical prevalence in India.

11.47% of the participants had Pervasive developmental disorders (Autism etc.) which is consistent with a study by Malhotra et al [17]. Dissociative (Conversion) Disorders were found in 6.48% of the cases. Few studies have demonstrated the prevalence of Dissociative conversion disorder around 10%. (19).

Depressive episode was found in 5.88% of subjects, and most of the studies from India reported a low prevalence of depression. (17,20). But studies from the western part of the world have found variability in rates of affective disorders. The increasing rates of diagnosis of Depression in children are reflective of a worldwide trend toward an earlier onset and increased prevalence of affective illnesses. This study also yields results that are consistent with the other studies, in which depression was found to be ranging from 3-26%. (20,21)

Conduct disorder was found in 3.83% of subjects. Previous studies also report Conduct disorder being more prevalent or reason for consultation than Oppositional Defiant Disorder. (15). Staller reports around 30% of children in his study to be having Disruptive behavioural disorders (Conduct disorders etc.). (22)

Anxiety disorders, like OCD and Phobic disorders, were found to be around 3.23% and 1.47% respectively which is consistent with the study done by Bhat et al. (10). The fact that Emotional disorders are less readily recognized and treated results in low frequency of anxiety disorders in Indian children. Tic disorders were found in 1.76%. This finding is consistent with previous studies which report the prevalence of Tic disorders to be around 3% but in contrast to the finding of other studies which report

isolated tics to be common in the school-age group to be ranging from 11-20%. (23,24)

Manic episodes and Bipolar Affective Disorder (BPAD) were present in 2.35% of our patients. This low prevalence is consistent with studies in [10] and outside [25] India. Schizophrenia and other psychotic disorders were present in 1.76% of this study. The low prevalence of schizophrenia in this study is consistent with other Indian studies. (9,21) Many other studies (26) conducted outside India have also shown a varying but lower prevalence of schizophrenia ranging from 0.5-5%.

Most studies done in South Asian countries like India have yielded results similar to this study with Mental Retardation, being more common while the studies from the West have Disruptive behavioural disorders more common. (5,27,28). The cultural differences, living standards, family system, and barriers to mental health care might be a few reasons for this differential presentation.

LIMITATIONS

There were some limitations in the study.

The sample size in our study is small and the study population was not representative of the whole child and adolescent population, which may limit the generalization of the results, and comorbid diagnosis was not made as there is evidence to suggest that single disorders often progress to complex comorbid disorders that are difficult to treat and more likely to recur. Along with this, there are incomplete data about educational qualification, socioeconomic class, and religion and hence could not be compared.

Further community-based surveys on a larger scale with an appropriate sample size are needed to find out the depth and patterns of psychiatric problems in children.

CONCLUSIONS

Around the world, literature in multiple studies points toward the increased prevalence of psychiatric disorders in children and adolescent patients. Child and Adolescent Psychiatry is gaining acceptance now. This will prioritize the need for screening of all children in preschool and educating their families about psychiatric disorders and their warning signs, so early identification and management.

In our study, we concluded that psychiatric illnesses were found higher in the 11-15 years of age group with a male preponderance. Most of the participants were from rural areas. Mental retardation and hyperkinetic disorders were the most common psychiatric disorders reported. Since the present study is hospital-based, hence the results cannot be generalized to the general population

There is a need to bring about effective utilization of available resources to help diagnose and manage such children.

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CONFLICT OF INTEREST

None declared

ETHICAL APPROVAL

Not required

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