Psychiatric morbidity in children attending child guidance clinic in a tertiary care teaching hospital

Ramya C.1, Pavan Kumar K.2*, Karthik S.2

1Department of Pediatrics, 2Department of Psychiatry, Chalmeda Ananda Rao Institute of Medical Sciences, Karimnagar, Telangana, India

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*Correspondence:  
Dr. Pavan Kumar K.,  
E-mail: drrag27@gmail.com

ABSTRACT

Background: Mental health and its related problems are growing concerns over the world. The early onset of emotional and behavioral problem in the young children is related to a variety of health and behavior problems in adolescence and later life as well. Most of these children present to Pediatric outpatient clinics owing to the Stigma and lack of awareness. The aim of the study is to find out the pattern and prevalence of psychiatric morbidity in children presenting to pediatric outpatient clinics.

Methods: It is a cross sectional, point prevalence study of children who have attended Child Guidance Clinic of Pediatric Department in a tertiary care teaching hospital October 2019 to January 2020. Clinical and demographic details was collected in a semi-structured proforma and the details were analyzed.

Results: A total of 114 children were analyzed during the study period and this study comprised of 62 boys and 52 girls. Most of the children belonged to the age group of 11-15 years (51%) followed by the ages of 6-10 (29.8%). Most common reason for consultation was change in behavior, school refusal and poor academic performance. The most common diagnosis made was Dissociative Conversion Disorder (17.6%), Nocturnal enuresis (15.7%), Mild Mental Retardation (10.5%) and Seizure Disorder with Behavioral Problems (10.5%).

Conclusions: A significant number of children attending the Paediatric OPD of general hospitals have psychiatric disorders. The emotional and behavioral problems in children often present with physical symptoms. An effective liaison of services will help to identify and treat children with psychiatric morbidity.

Keywords: Behavioral problems, Child guidance clinic, Psychiatric morbidity, Pediatric out patient

INTRODUCTION

Mental and behavioral problems pose a unique challenge in growing years. A pediatrician should have the clinical acumen and knowledge to rule out organic causes and thereby identify various psychiatric illnesses that present to the Pediatric Department. The variety of presentation, lack of awareness among parents and stigma prevalent with regard to acceptance of psychological problems makes it more challenging and it is not uncommon that they present to the departments other than psychiatry. Despite the large number of children who attend primary care settings with mental disorders, their recognition and treatment are generally inadequate.

Early diagnosis and treatment of these issues not only decreases the health care burden on the families but also helps them make necessary changes to understand the child for better upbringing and make them ready for future challenges.

Scope of the problem

Worldwide 10-20% of the children and adolescents experience mental disorders. Half of all mental illnesses
begin by the age of 14 and three quarters by mid 20s. Neuropsychiatric conditions are the leading cause of disability in young people in all regions. If untreated, these conditions severely influence children’s development, their education attainments and their potential to live fulfilling and productive lives. Children with mental disorders face stigma, isolation and discrimination, as well as lack of access to health care and education facilities, in violation of their fundamental human rights.1

World Health Organization said that there is paucity of information on prevalence and the burden of major mental and behavioural disorders in all countries, particularly in developing countries.1 The psychiatric services for children lag behind those for adults in developing countries.2-3 A few surveys conducted in India have revealed that 7-30% of children under the age of 12 years need either evaluation or continuing psychiatric care.4,5

Mental health disorders in children and young people causes them to have low self-esteem, poor adjustment with peers, poor academic performances, economic burden to the family which in turn, in most cases, responsible for poor quality of life of the family altogether.6 Various community-based Indian epidemiological studies on point prevalence of mental and behavioural disorders have reported varying prevalence rates, ranging from 9.5 to 102 per 1000 population.7,8

In a study conducted by Srinath S et al, prevalence of psychiatric disorders was 12.0% with Enuresis, specific phobia, hyperkinetic disorders, stuttering and oppositional defiant disorder being the most frequent diagnoses.9

Various studies from developing countries including Nepal and India show that a significant percentage (7-35%) of the pediatric or adolescent population suffers from mental illness.10,11 The common psychiatric disorders affecting in this age group include mood (affective), neurotic and stress related and somatoform disorders including anxiety and dissociative (conversion) disorders. Results indicated that 10.1% of adolescents had total difficulty levels in the abnormal range, with 9% at risk for emotional symptoms, 13% for conduct problems, 12.6% for hyperactivity/inattention and 9.4% for peer problems.12-14.

In another study conducted in New Zealand, reported that 50% of adult psychiatric disorder cases had onset by age of 15 years.15

METHODS

This cross-sectional study was conducted between October 2019 and January 2020 in the Paediatric OPD of tertiary care teaching hospital of North Telangana. The purposive sampling technique was used and 114 consecutive children presenting to Child Guidance Clinic of Paediatric OPD who were referred to Psychiatrist were included in the study.

A semi-structured questionnaire was used to record the sociodemographic status. The state of mental health and psychiatric morbidity was assessed after a thorough clinical assessment.

Intelligence and other psychometric tests were carried out by a clinical psychologist where indicated. All the diagnoses were made according to ICD-10 criteria.16

Inclusion criteria

- Children up to 18 years who were referred to Psychiatrist and Clinical Psychologist.

Exclusion criteria

- Children below three years of age
- Children with Severe Physical illnesses
- Children who were accompanied by family members other than Parents
- Children brought by NGOs and Orphanages or other institutions where history is unreliable or inadequate.

RESULTS

This study comprised a total of 114 children who attended child guidance clinic during the study period. The Child Guidance Clinic is held once a week in the Department of Pediatrics. Of the total children presenting, 114 cases needed examination by Psychiatrist as well. Of this sample, 62 were boys and 52 were girls. The age distribution of the sample is shown in Table 1. This study comprised of 34 (29.8%) children between the ages of 6-10 and 58 (50.9%) children between the ages of 11-15 years. This suggests that symptom manifestation is more between the ages of 11-15 years, next common being 6-10 years of age (Table 1).

| Age in Years | Frequency | Percent |
|--------------|-----------|---------|
| <5 Years     | 4         | 3.5     |
| 6-10 Years   | 34        | 29.8    |
| 11-15 Years  | 58        | 50.9    |
| 15-18 years  | 18        | 15.8    |
| Total        | 114       | 100     |

The demographic distribution of the sample shows study comprised of 62 boys and 52 girls. Most of the children belonged to Nuclear family (93%). The study comprised almost 51% (58) children from Low Socio-Economic group and 31.6% (36) belonged to middle class. Most the children come from Hindu (70.2%) as a religious background, next being Muslim religion (19.3%).
Majority of the children were first children 84 (73.7%) and 22 were second in the birth order (19.3%) and around 4 children each (3.5%) being the third and fourth child in the family respectively (Table 2).

**Table 2: Demographic Distribution.**

| Gender             | Frequency | Percent |
|--------------------|-----------|---------|
| Male               | 62        | 54.4    |
| Female             | 52        | 45.6    |
| Type of family     |           |         |
| Nuclear family     | 106       | 93      |
| Joint family       | 8         | 7       |
| Socio economic status |        |         |
| Lower class        | 58        | 50.9    |
| Middle class       | 36        | 31.6    |
| Upper middle class | 20        | 17.5    |
| Religion           |           |         |
| Hindu              | 80        | 70.2    |
| Muslim             | 22        | 19.3    |
| Christian          | 12        | 10.5    |
| Birth order        |           |         |
|                    | 1         | 84.1    |
|                    | 2         | 22.2    |
|                    | 3         | 4.3     |
|                    | 4         | 4.3     |

**Table 3: Distribution of Diagnosis.**

| Psychiatric Disorders                          | Count | %  |
|------------------------------------------------|-------|----|
| Dissociative conversion disorder               | 20    | 17.6|
| Non organic nocturnal enuresis                 | 18    | 15.79|
| Depression                                     | 10    | 8.77|
| Conduct disorder                               | 08    | 7.02|
| Mild mental retardation                        | 12    | 10.53|
| Attention deficit hyperactivity disorder       | 06    | 5.26|
| Obsessive compulsive disorders                 | 06    | 5.26|
| Seizure disorder with behavioural problems     | 11    | 9.65|
| Somatoform disorders                           | 05    | 4.4|
| Phobic disorders                               | 04    | 3.51|
| Tic disorder                                   | 04    | 3.51|
| Schizophrenia and other psychotic disorders    | 02    | 1.75|
| Substance use disorders                        | 02    | 1.75|
| Specific learning disorders                    | 02    | 1.75|
| Deliberate self-harm/ intention drug overdose  | 02    | 1.75|
| Psychiatric disorder due to general medical condition | 02 | 1.75|
| Total                                          | 114   | 100.00|

The most common diagnosis made was Dissociative Conversion Disorder 20 (17.6%), Non-organic Nocturnal enuresis 18 (15.79%), Mild Mental Retardation 12 (10.53%) and Seizure Disorder with Behavioral Problems 11 (9.65%). In the study sample assessed, 8 (8.8%) children were diagnosed with Conduct disorder and ADHD and OCD was diagnosed in 6 (5.2%) cases respectively. Depression was found in 10 (8.7%) of the children. Phobic disorders and Tic disorders were found in 3.5% (4) cases each (Table 3).

**DISCUSSION**

Most patients in this study were aged 6-15 years (81.5%) and boys were more than girls in 1.12:1 ratio. This findings are similar to previous hospital-based studies by Malhotra et al. The high proportion of boys in this study could be because of a general trend for boys to be more vulnerable than girls to psychiatric disorders, but the difference in this study seeking help was not much which is in contrast to previous studies. This study shows many of these children, 93% (106) to be from nuclear families. The changing trends in the family system could be one of the reasons for having such a high numbered nuclear family. This finding is also consistent with previous studies. Results show many children were from rural background and low socio-economic status (58%). This could be explained by the fact that the study was conducted in a tertiary care teaching hospital located in semi-urban area and the catchment area of this hospital comprises predominantly rural population and caters mainly to lower class population. This is in contrast to the results of the study by Chadda and Maan et al, which found that children from urban background predominate.

This study yielded most children to be from Hindu 80(70.2%) community followed by Muslim 22 (19%) and Christians 12 (10.5%). Many of the children 84 (73%) in the study were the first child of the family. There is very limited data on relation between birth order and psychiatric morbidity, but studies to date show contrasting evidence from each other. This study yielded results which concur with study carried out by Hussain J, where a lower birth order, a first-born child, has high psychiatric morbidity but it is in contrast to the findings of another study carried out by Risal A et al, where they did not find any association between birth order and psychopathology. The reason for increased psychiatric morbidity could be because of the early responsibility shouldered on the first born child. But this study comprised mostly nuclear families with family size of 3 or 4 and the results should be viewed with this confounding bias.

**Clinical profile**

The most common diagnosis made was Dissociative conversion disorder. According to few studies the prevalence of Dissociative conversion disorder is around 10%. This study resulted in a greater number of children presenting to us with dissociative conversion disorder.

The second most common diagnosis was non organic nocturnal enuresis. This study showed 15.8% children presenting to us with nocturnal enuresis. Though there is
limited data available on its incidence and prevalence in India, but most studies report it to be between 7.6% to 16.3%.24,25

Mental Retardation (MR) was the third most frequent diagnosis, with 10.5% having this disorder. In a study by Malhotra and Chaturvedi, found MR in 28-33% of all cases.15 Our results are also consistent with other studies from India.26,27 Most epidemiological studies on general population have reported high figures of MR, and this study results are also comparable with other hospital-based studies as well.

Depression was found in 8.7% of the cases. Most of the studies from India reported low prevalence of depression.27,28 But studies from the western part of the world have found variable rates of affective disorders. The increasing rates of diagnosis of Depression in children is reflective of a worldwide trend towards an earlier onset and increased prevalence of affective illnesses. This study also yields results which are consistent with the other studies, in which depression was found to be ranging from 3.26%.28,29

Anxiety disorders, like OCD and Phobic disorders were found to be around 5.2% and 3.5% respectively. This was comparable to the study done by Bhat et al.19 Low frequency of anxiety disorders can be explained by the fact that in Indian children, emotional disorders are less readily recognized and treated.

Conduct disorder was found to be the most common diagnosis (8.7%) amongst Disruptive Behavioral Disorders (DBD). Previous studies also report Conduct disorder being more prevalent or reason for consultation than Oppositional Defiant Disorder.20 Studies from the west report high rates of DBD. Staller reports around 30% children in his study to be having DBD.20

Tic disorders and Somatoform disorders were found in 3.5% and 4.4% respectively. This finding is consistent with previous studies which report the prevalence of Tic disorders to be around 3% but in in contrast to the finding of other studies which report isolated tics to be common in school age group to be ranging from 11-20%.31,32

Behavioral problems arising out of Seizure disorder was diagnosed in 12(10.5%) of patients, while epilepsy occurs in 0.5-2% of the general population, the incidence of epilepsy in childhood is more than twice that in the adult population.33

Attention Deficit and Hyperactivity Disorder (ADHD) was found in 6 (5.6%) of cases. This study showed less incidence of ADHD than studies by Jayaprakash et al, which found externalizing disorders in 34.09%, with 29.01% having pure hyperkinetic disorder.34 The studies from the West also reported a high clinical prevalence of up to 50% for ADHD.35 Lower clinical prevalence in India could be because of childhood problems being less readily recognized and treated in India.

Schizophrenia and other psychotic disorders were present in 1.75% of this study. Low prevalence of schizophrenia in this study is consistent with other Indian studies.10,29 Many other studies.36 conducted outside India have also shown varying but lower prevalence of schizophrenia ranging from 0.5-5%.

Most studies done in South Asian countries like India, Nepal, Bangladesh, Pakistan have yielded results similar to this study with Mental Retardation, Dissociative Conversion Disorders being more common while the studies from west have DBD more common.6,37,38 The cultural differences, living standards, family system and barriers to mental health care might be few reasons for this differential presentation.

Limitations of the study is the study was conducted in a tertiary care teaching hospital with a relatively small sample size. 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 at present and as there is evidence to suggest that single disorders often progress to complex comorbid disorders that are impervious to treatment and more likely to recur than less complex conditions.

**CONCLUSION**

This study indicates that a significant number of children attending the Pediatric OPD of general hospitals have psychiatric disorders. Emotional and Behavioural problems are frequent in Paediatric OPD and they often present with physical symptoms. This result suggests the need for effective hospital-based Paediatric–Psychiatric liaison services, which would result in early identification through screening, appropriate referral, and subsequent management.

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