

## Original Research Article

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

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**Received:** 12 March 2020

**Accepted:** 04 April 2020

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## 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.<sup>1</sup>

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.<sup>1</sup> The psychiatric services for children lag behind than those for adults in developing countries.<sup>2,3</sup> 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.<sup>4,5</sup>

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.<sup>6</sup> 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.<sup>7,8</sup>

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.<sup>9</sup>

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.<sup>10,11</sup> 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.<sup>12-14</sup>

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

## 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.<sup>16</sup>

## 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).

**Table 1: Age Distribution.**

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.**

		Frequency	Percent
Gender	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	73.7
	2	22	19.3
	3	4	3.5
	4	4	3.5

**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 overdosing	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 (15.7%), Mild Mental Retardation 12 (10.5%) 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.<sup>10,17</sup> 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.<sup>18,19</sup> 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.<sup>20</sup> 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.<sup>18</sup>

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.<sup>21,22</sup> The reason for increased psychiatric morbidity could be because of the early responsibility shouldered on the first borne 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%.<sup>23</sup> 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%.<sup>24,25</sup>

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.<sup>17</sup> Our results are also consistent with other studies from India.<sup>26,27</sup> 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.<sup>27,28</sup> 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%.<sup>28,29</sup>

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.<sup>19</sup> 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.<sup>26</sup> Studies from the west report high rates of DBD. Staller reports around 30% children in his study to be having DBD.<sup>30</sup>

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 contrast to the finding of other studies which report isolated tics to be common in school age group to be ranging from 11-20%.<sup>31,32</sup>

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.<sup>33</sup>

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.<sup>34</sup> The studies from the West also reported a high clinical prevalence of up to 50% for ADHD.<sup>35</sup> 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.<sup>10,29</sup> Many other studies,<sup>36</sup> 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.<sup>6,37,38</sup> 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.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. World Health Organization. The World Health Report 2001: Mental health: new understanding, new hope. World Health Organization; 2001.
2. McKelvey RS, Sang DL, Baldassar L, Davies L, Roberts L, Cutler N. The prevalence of psychiatric disorders among Vietnamese children and adolescents. *Medi J Austr.* 2002 Oct;177(8):410-7.
3. Sawyer MG, Arney FM, Baghurst PA, Clark JJ, Graetz BW, Kosky RJ, et al. The mental health of young people in Australia: key findings from the child and adolescent component of the national survey of mental health and well-being. *Australian*

- and New Zealand J Psychiat. 2001 Dec;35(6):806-14.
4. Banerjee T. Psychiatric morbidity among rural primary school children in West Bengal. *Ind J Psychiat.* 1997 Apr;39(2):130.
5. Malhotra S, Kohli A, Arun P. Prevalence of psychiatric disorders in school children in Chandigarh, India. *Indian J Medi Res.* 2002 Jul 1;116:21.
6. Pahwa MG, Sidhu BS, Balgir RS. A study of psychiatric morbidity among school going adolescents. *Ind J Psychiatr.* 2019 Mar;61(2):198-203.
7. Surya NC, Datta SP, Krishna GR, Sundaram D, Kutty J. Mental morbidity in Pondicherry. *Transaction-4, Bangalore: All India Inst Ment Health.* 1964;50-61.
8. Nandi DN, Ajmany S, Ganguli H, Banerjee G, Boral GC, Ghosh A, et al. Psychiatric disorders in a rural community in West Bengal An epidemiological study. *Indian J Psychiatr.* 1975 Apr 1;17(2):87.
9. Srinath S, Girimaji SC, Gururaj G, Seshadri S, Subbakrishna DK, Bhola P, et al. Epidemiological study of child & adolescent psychiatric disorders in urban & rural areas of Bangalore, India. *Indian J Medi Res.* 2005 Jul 1;122(1):67-79.
10. Chadda RK. Pattern of psychiatric morbidity in children attending a general psychiatric unit. *The Indian J Pediatr.* 1994 May 1;61(3):281-5.
11. Mishra A, Sharma AK. A clinico-social study of psychiatric morbidity in 12 to 18 years school going girls in urban Delhi. *Indian J Comm Med.* 2001 Apr 1;26(2):71-82.
12. Sinha UK, Kapur M. Psychotherapy with emotionally disturbed adolescent boys: Outcome and process study. *Nimhans Journal.* 1999 Apr;17:113-30
13. Bhola P, Kapur M. Prevalence of emotional disturbance in Indian adolescent girls. *Indian J Clini Psychol.* 2000;27(2):217-22.
14. Patel V, Flisher AJ, Hetrick S, McGorry P. Mental health of young people: a global public-health challenge. *Lancet.* 2007 Apr 14;369(9569):1302-13.
15. Kim-Cohen J, Caspi A, Moffitt TE, Harrington H, Milne BJ, Poulton R. Prior juvenile diagnoses in adults with mental disorder: developmental follow-back of a prospective-longitudinal cohort. *Arch Gen Psychiatr.* 2003 Jul 1;60(7):709-17.
16. World Health Organization. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. WHO. Geneva. 1992. Available at: <http://apps.who.int/iris/handle/10665/37958>.
17. Malhotra S, Chaturvedi SK. Patterns of childhood psychiatric disorders in India. *Indian J Pediatr.* 1984 Mar 1;51(2):235-40.
18. Chadda RK. Psychiatric morbidity in preschool children-A clinic based study. *Indian J Pediatr.* 1995 Jan 1;62(1):77-81.
19. Bhat BA, Hussain A, Dar MA, Dar SA, Jabeen N, Rasool S, Shafi S. The pattern of psychiatric morbidity in an outpatient child psychiatry clinic: A cross-sectional, descriptive study from a tertiary care hospital in Kashmir, North India. *Indian J Psycholog Medi.* 2018 Jul;40(4):349-55.
20. Rahim DA, Ali SM, Rabbani MG, Rahman MA. Analysis of psychiatric morbidity of outpatient children in Mitford Hospital, Dhaka. *Bangladesh Medi Res Council Bulletin.* 1997 Aug;23(2):60-2.
21. Hussain J. Birth order and psychiatric morbidity. *Eur Psychiat.* 2017 Apr 1;41:S356.
22. Risal A, Tharoor H. Birth order and psychopathology. *J Family Medi Primary Care.* 2012 Jul;1(2):137.
23. Leary PM. Conversion Disorder in Childhood—Diagnosed Too Late, Investigated Too Much?. *J Royal Soc Medi.* 2003 Sep;96(9):436-8.
24. Solanki AN, Desai SG. Prevalence and risk factors of nocturnal enuresis among school age children in rural areas. *Int J Res Med Sci.* 2014 Jan 1;2(1):202-5.
25. Reddy NM, Malve H, Nerli R, Venkatesh P, Agarwal I, Rege V. Nocturnal enuresis in india: Are we diagnosing and managing correctly?. *Ind J Nephrol.* 2017 Nov;27(6):417.
26. Chaudhury S, Prasad PL, Zacharias R, Madhusudan T, Saini R. Psychiatric morbidity pattern in a child guidance clinic. *Medi J Armed Forces India.* 2007 Apr 1;63(2):144-6.
27. Malhotra S, Biswas P, Sharan P, Grover S. Characteristics of Patients Visiting the Child & Adolescent Psychiatric Clinic: A 26-Year Study from North India. *J Indian Assoc Child Adolescent Mental Health.* 2007;3(3):53-60.
28. Nawarathna SC, Subba SH, Guha A. Clinico-epidemiological profile of psychiatric disorders among children in a tertiary care hospital of Southern India. *J Clini Diagn Res. JCDR.* 2016 Mar;10(3):VC05.
29. Vogel W, Holford L. Child psychiatry in Johannesburg, South Africa. A descriptive account of cases presenting at two clinics in 1997. *Eur Child Adolescent Psychiatr.* 1999 Oct 1;8(3):181-8.
30. Staller JA. Diagnostic profiles in outpatient child psychiatry. *Am J Orthopsych.* 2006 Jan;76(1):98-102.
31. Knight T, Steeves T, Day L, Lowerison M, Jette N, Pringsheim T. Prevalence of tic disorders: a systematic review and meta-analysis. *Pediatric Neurol.* 2012 Aug 1;47(2):77-90.
32. Cubo E, y Galán JM, Villaverde VA, Velasco SS, Benito VD, Macarrón JV, et al. Prevalence of tics in schoolchildren in central Spain: a population-based study. *Pediatr Neurol.* 2011 Aug 1;45(2):100-8.
33. Saha R, Srivastava MK, Anand KS. Psychiatric presentation of childhood epilepsy: Case series and review. *J Pediatric Neurosci.* 2016 Oct;11(4):367.
34. Jayaprakash R. Clinical Profile of Children and Adolescents Attending the Behavioural Paediatrics



- Unit OPD in a Tertiary Care Set up. *Journal of Indian Assoc Child Adolescent Mental Health*. 2012;8(3):51-66.
35. DeBar LL, Lynch F, Powell J, Gale J. Use of psychotropic agents in preschool children: associated symptoms, diagnoses, and health care services in a health maintenance organization. *Arch Pediatr Adolescent Medi*. 2003 Feb 1;157(2):150-7.
36. Sarwat A, Ali SI, Ejaz MS. Mental health morbidity in children: A hospital based study in child psychiatry clinic. *Pak J Med Sci*. 2009 Oct 1;25(6):982-5.
37. Chapagai M, Dangol KM, Tulachan P. A study of psychiatric morbidity amongst children attending a child guidance clinic at a tertiary level teaching hospital in Nepal. *J Nobel Medi Coll*. 2013 Mar 3;2(1):55-63.
38. Grover S, Raju VV, Sharma A, Shah R. Depression in children and adolescents: a review of Indian studies. *Indian J Psychol Medi*. 2019 May;41(3):216.

**Cite this article as:** Ramya C, Kumar PK, Karthik S. Psychiatric morbidity in children attending child guidance clinic in a tertiary care teaching hospital. *Int J Contemp Pediatr* 2020;7:1313-8.