# Pattern of Psychiatric Disorders in Child and Adolescents Attending Psychiatry OPD in A Tertiary Care Hospital in Western Uttar Pradesh.

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#### Abstract

**Background:** In India, there is 158.8 million number of children in the age group 0 - 6 years as per the population totals of Census, 2011, which is 13.12% of the total population. Hence, in such a large population of children mental health is an essential component of overall health and its burden is to be recognized. Aim: To study the socio – demographic characteristics and pattern of mental health disorders among children and adolescents attending a child guidance clinic in a tertiary teaching hospital. Method: 100 new cases aged between 6 and 18 attending the child guidance clinic were taken up in the study. The subjects were assessed clinically with detailed history, with a semi structured performa for socio demographic details and Kuppuswami Socio-economic scale for assessing the socio economic status. Diagnoses were made on the bases of International Classification of Diseases 10th edition and MINI International Neuropsychiatric Interview for children and adolescents (Parent Version), English Version 6.0. Result: Majority of patients (n=57, 57%) was among the age group 12-14 years, females were 55 (55%) and most cases were belonging to upper middle socio-economic class (n=54, 54%). Majority of the cases were of Depression/Dysthymia/Adjustment Disorder (n=21, 21%) followed by Oppositional Defiance Disorder (n=13, 13%) and Anxiety disorders (n=13, 13%) and then followed by Conduct Disorder (n=9, 9%) and Attention Deficit Hyperactivity Disorder (n=9, 9%). Conclusion: Depression/Dysthymia/Adjustment Disorders were the most common diagnoses followed by Oppositional Defiance Disorder and Anxiety disorders. Future studies are needed to be using community-based surveys in a larger scale with appropriate sample size to find out the psychiatric problems in children. Keywords: Psychiatric Disorders, Child And Adolescents, MINI Kid.

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#### I. Introduction

In India, the total number of children in the age group 0 - 6 years as per the population totals of Census, 2011, is 158.8 million, which is 13.12% of the total population.<sup>(1)</sup> The percentage of population in 0 - 14 year age group consists 30.9% of total population of the country.<sup>(2)</sup>

Mental health in child and adolescent is an essential component of overall health and its importance is being recognized. Many studies have shown that a large number of young people are getting disabled from various mental illnesses worldwide. Prevalence estimates of mental health problems range mostly between 10% and 20%.<sup>(3,4)</sup>

One of the multicentre study done in 5 developing country including India found the prevalence of self – reported mental health problem as high as 10.5% with conduct and emotional problems being the most common.<sup>(5)</sup>

Similarly, the U.S. Department of Health and Human Services' (DHHS') report estimated that at least one in five (20%) children and adolescents has a mental health disorder at some point in their life from childhood to adolescence and at least one in 10 (10%), or about 6 million children and adolescence, have a serious emotional disturbance at some point in their life.<sup>(6)</sup>

Due to paucity of studies especially in developing countries like India we planned to conduct a study to estimate the presence of psychopathology in children attending the child guidance clinic. With the findings of this study we hope to further improve our understanding and also to provide the framework for future research endeavours.

#### **II.** Materials And Methods

The study was carried out at Outpatient Department of Psychiatry, N S C B Subharti Medical College, Meerut, India from January 2016 to December 2017. The study population was consisted of new cases aged between 6 to 18 years who attended the Outpatient department on specific days. Subjects who were found to be having behaviour symptoms/signs secondary to medical condition were excluded from the study. To rule out medical association(s) appropriate referrals were done e.g. medicine, neurology, paediatrics, rheumatology, etc. In case of non – availability of parent or parent surrogate, those cases were also excluded from the study. Finally 100 such cases made the sample of the study. Written informed consent was obtained from the parents who were agreed upon to participate in the study.

After inclusion the subjects were assessed clinically with detailed history, with a semi structured performa for socio demographic details and Kuppuswami Socio-economic scale (2012) for assessing the socio economic status. Diagnoses were made on the bases of International Classification of Diseases 10th edition and MINI International Neuropsychiatric Interview for children and adolescents (Parent Version) Version 6.0 (M.I.N.I. Kid).

#### **III. Results**

TABLE 1 shows majority of the patients were under 12-14 years of age group (n=32, 32%), females were 55% (n=55), studying in middle secondary school (n=40, 40%), belongs to Hindu religion (n=64, 64%), urban background (n=54, 54%), and nuclear family (n=37, 37%). Majority of the subjects had 2-3 siblings (n=52, 52%) and had second or third birth order (n=57, 57%).

TABLE 2 shows that majority of the family of the subjects had income from Rs. 16020 to Rs. 32049 (n=37, 37%) and 25% (n=25) families had income more than Rs. 32050. Majority of head of the family were in clerical job, shop-owner or farmer (n=49, 49%). Majority of the head of the families were either graduate or post-graduate (n=34, 34%). As for the socio-economic status of the families 12 were belongs to upper class (12%), 54 to upper middle class (54%), 20 to middle/lower middle class (20%), 14 to lower/upper lower class and zero to lower class as per Kuppuswami Socio-economic scale (2012).

TABLE 3 shows the pattern of psychiatric disorders found on assessment of the sample. Most common psychiatric disorder in the sample was of depressive spectrum i.e. depression, dysthymia and adjustment disorder (n=21, 21%). Second most common disorders were Oppositional Defiance Disorder (ODD) (n=13, 13%) and anxiety disorders (n=13, 13%) followed by Conduct Disorder (CD) (n=9, 9%) and Attention Deficit Hyperactivity Disorder (ADHD) (n=9, 9%). Other disorders which were found are Dissociative disorders (n=), Obsessive Compulsive Disorder (OCD) (n=5, 5%), Cannabis dependence (n=3, 3%), Bipolar Affective Disorders (BPAD) (n=2, 2%), Pervasive Developmental Disorders (PDD) (n=2, 2%), psychosis (n=1, 1%) and alcohol dependence (n=1, 1%).

Variables	Frequency (N=100)	n %	
Age			
6 – 8	17	17	
9-11	26	26	
12 - 14	32	32	
15 - 18	25	25	
Sex			
Male	45	45	
Female	55	55	
Education			
Primary	24	24	
Secondary	40	40	
Higher Secondary	36	36	
Religion			
Hindu	64	64	
Muslim	33	33	
Sikh	3	3	
Domicile			
Urban	54	54	
Rural	46	46	
Family Type			
Nuclear	37	37	
Extended	30	30	
Joint	33	33	
Number of Siblings			
0-1	17	17	

**IV. Tables** 

## Pattern Of Psychiatric Disorders In Child And Adolescents Attending Psychiatry Opd In A Tertiary ...

2-3	52	52		
4-5	24	24		
> 5	7	7		
Birth Order				
0-1	23	23		
2-3	57	57		
4-5	16	16		
> 5	4	4		

#### **Table 2:** Details as per Kuppuswamy's socioeconomic scale.

Kuppuswamy's Classification	Number of cases (N = 100)	n%			
Monthly Family Income in Rs	Monthly Family Income in Rs				
≤1600	0	0			
1601-4809	0	0			
4810-8009	8	8			
8010-12019	21	21			
12020-16019	9	9			
16020-32049	37	37			
≥32050	25	25			
Occupation					
Professional	12	12			
Semi-Professional	1	1			
Clerical, Shop-owner, Farmer	49	49			
Skilled worker	22	22			
Semi-skilled worker	6	6			
Unskilled worker	10	10			
Unemployed	0	0			
Education					
Profession or honours	8	8			
Graduate or post graduate	34	34			
Intermediate or post high school diploma	15	15			
High school certificate	15	15			
Middle school certificate	10	10			
Primary school certificate	12	12			
Illiterate	6	6			
Socioeconomic Class					
Upper (I)	12	12			
Upper Middle (II)	54	54			
Middle/Lower middle (III)	20	20			
Lower/Upper lower (IV)	14	14			
Lower (V)	0	0			

#### **Table 3:** Distribution of subjects based on their Diagnosis

Psychiatric Diagnosis*	Frequency N = 100	n%
Depressive/ Dysthymia/ Adjustment disorders	21	21
Oppositional Defiance Disorder	13	13
Anxiety Disorders	13	13
Other psychiatric disorders	13	13
Conduct disorder	9	9
Attention Deficit Hyperactivity Disorder	9	9
No diagnoses/ Under Evaluation	8	8
Obsessive Compulsive Disorder	5	5
Cannabis dependence	3	3
Bipolar Affective Disorders	2	2
Pervasive Developmental Disorder	2	2
Psychosis	1	1
Alcohol dependence	1	1

\*Not mutually exclusive.

### V. Discussion

We tried to study the pattern of psychiatry morbidity in children visiting the child guidance clinic in a tertiary care university hospital taking into consideration the scarcity of databases particularly in developing countries like India.

In our study, the maximum number of patients (57%) was among the age group 12-14 years and 55% of the total pediatric population was female. Similar finding in regards to age group was found in a study by Malhotra *et al.* who studied the socio-demographic and clinical profile of patients, who presented to the child

and adolescent psychiatric services of a tertiary care centre over a 26-year period (1980-2005).<sup>(7)</sup> Female predominance has also been seen in Indian studies such as by Prabhuswamy *et al.* (2006).<sup>(8)</sup>

Majority of the children (64%) in our study were studying in middle school a fact which can be attributed to highest number children from 12 - 14 age group (57%). As the geographic location of the hospital where the study was conducted is in a Hindu majority region, these numbers are replicated in the religious beliefs of the subjects with majority being Hindus (64%).

Majority of the children in the study (54%) were from upper middle socio-economic class, a finding which is not similar to other studies conducted which showed relation of childhood psychiatric disorders with low socio-economic class.<sup>(9,10)</sup> This finding in our study may be due to high level of awareness in higher economic classes and high level of ignorance in lower economic classes regarding childhood mental health disorders leading to high detection and consultancy sought by parents belonging to higher economic classes.

8% of the children and adolescents attending the Child Guidance Clinic were either under evaluation and no provisional diagnosis was made on the first visit or there was no psychiatric or medical diagnosis in the subject.

Majority of the cases were of Depressive, Dysthymic and Adjustment disorders (21%) which are followed by ODD (13%) and Anxiety disorders (13%), and then CD (9%) and ADHD (9%). These findings are consistent with findings of a study conducted by Shakya DR (2010)<sup>(11)</sup> and also similar with findings of Bhoge ND *et al.* (2017)<sup>(12)</sup>. 13% of the patient had other psychiatric disorders not specified in M.I.N.I. Kid interview and majority was Dissociative and Conversion Disorder. Other clinic-based studies from different countries such as India, Sri Lanka and Pakistan have reported high rates of dissociative disorders in the south Asian population<sup>(12)</sup> when compared to the studies conducted among western populations<sup>(13-14)</sup>.

#### **VI.** Conclusion

The majority of the pediatric population presenting to a psychiatry clinic were in the age group 12-14 years, of female sex and belonging to Hindu religion. Depressive, Dysthymia and Adjustment disorders were the most common diagnosis. Future studies are needed to be using community-based surveys in a larger scale with appropriate sample size to find out the psychiatric problems in children.

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