

## Psychiatric Morbidity Profiles of Child & Adolescent Patients Attending A Tertiary Care Centre

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**Abstract:** We have extreme scarcity of mental health services to children & adolescents. Because of ignorance, myths & misconceptions regarding mental illness many parents and their care-takers hesitate to seek help from mental health profession. Child and adolescent mental problems are increasing in frequency, though variable in type among the South Asian and Western population. A variety of psychiatric manifestations can be seen in children and adolescent below the age of 19 years. This study aims to examine the socio-demographic, morbidity profiles, & clinical correlates of child & adolescent patients attending the psychiatry out-patient department Khaja Banda Nawaz Institute of Medical Sciences over a 1 year period. It is a retrospective case record analysis of all child & adolescent patients attending the psychiatry out-patient department between Jan-Dec 2011 in KBNIMS, Kalaburgi, India. Eight hundred and seventy six cases attending the Out patient department were analyzed. Females comprise 508(58%) & males comprise 368(42%) and the mean age of the patients was (15.68±3.73 years). Age range is (4-19 years). Most of the patients (67.0%) were from 16-19 years group. Cases from urban areas (655 or 74.8% out of 876) predominate and majority (587 or 67.0% out of 876) were Hindu. Psychiatric diagnosis was found to be maximum in Dissociative disorder (212 or 24.1%) followed by depression (103 or 11.7% respectively). Majority of the females had a diagnosis of dissociative disorder (170 or 33.4%) followed by depression (69 or 10.03% respectively) whereas among males most (57 or 15.4%) had a diagnosis of mental retardation followed by depression (52 or 14.1% respectively).

**Keywords:** Child & adolescent, psychiatric morbidity, socio-demographic, dissociative disorder, retrospective study.

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### I. Introduction

WHO statistics reveal that the prevalence of disabling mental illness among children and adolescence attending health care centers range between 20-30% in urban areas and 13-18% in rural areas<sup>1</sup>.

It is estimated that 10-20% of children & adolescents are affected annually by psychiatric problems and their psychiatric morbidity accounts for 5 of the 10 leading causes of disability for those aged 5yrs & above. It has been found that mental & psychiatric services for children lag behind those for adults in developing countries<sup>2-6</sup>. Various studies from developing countries including Nepal and India show that a significant percentage (7-35%) of the paediatric population suffers from mental illness<sup>7-11</sup>.

Studies completed at various centers in Nepal show that a great majority of children and adolescents visit other setting of help-seeking before coming to a psychiatric service for different psychological problems<sup>9,11</sup>. The common psychiatric disorders affecting other adults also affect many child & adolescents. Such disorders usually affecting adult also distressing in this age group include mood( affective), neurotic and stress related and somatoform disorders including anxiety and dissociative( conversion) disorders<sup>9,10,12</sup>.

Another group of disorders are commonly diagnosed among child & adolescents. They include mental retardation, disorders of psychological development ( e.g specific learning disorders, autistic disorders ) & behavioral & emotional disorders with onset usually occurring in childhood and adolescence ( e . g hyperkinetic disorders , enuresis)<sup>7,8,9,12</sup>. A study carried out at a tertiary hospital level in Pakistan concluded that there is lack of specialized in-patient child psychiatric units & awareness regarding mental illness at community as well as at the level of medical practioners and other health care providers<sup>13</sup>. Information regarding the morbidity profiles of these young patients would help to define needs and priorities. It will also help to increase the awareness about these problems.

### II. Aim of the study

To assess the socio-demographic , morbidity profiles and clinical correlates of child and adolescent patients attending the Khaja Banda Nawaz Institute of Medical Sciences, Kalaburgi, India over a 1 year period.

### III. Materials & Methods

The study was conducted at the Khaja Banda Nawaz Institute of Medical Sciences, Kalaburgi, India. The inclusion criteria for this study were :complete chart analysis & case record of the patients and both sexes and age 19 yrs and below .Data was analyzed using the Statistical Package for Social Sciences, SPSS for window, version 16

### IV. Procedure

A review of case record of all child & adolescent patients attending the Psychiatry Out-Patient Department , Khaja Banda Nawaz Institute of Medical Sciences hospital between Jan-Dec 2011 was carried out and information regarding socio-demographic characteristic (e. g age, gender, religion, domicile, and diagnosis) was recorded on a proforma designed by the authors. Data were analyzed using the Statistical Package for Social Sciences, SPSS 16 for Windows. Cross tabulation, frequency statistics and chi square test were used for relationship between variables and the level of statistical significance was set at 5%.

### V. Results

A total of 876 child & adolescent patients had attended the psychiatry OPD during the period in review .The mean age  $\pm$  SD was  $15.68 \pm 3.73$  with a range of (4-19 years).

Table- 1: Gender

SEX	FREQUENCY	PERCENTAGE
Male	368	42.0
Female	508	58.0
Total	876	100.0

Majority (508 out of 876) of the patients were females (58%). The mean age of females was  $16.2 \pm 3.3$  years while (368 out of 876) were males (42%). The mean age of males was  $14.9 \pm 4.2$  years. Most (587 out of 876 or 67.0% of the patients were between the ages 16-19 years age group followed by the 11-15 years (19.2%) years age group. Majority (655 or 74.8%) of the cases came from a urban background and most (587 or 67.0%) were Hindu by religion.

Table - 2: Age

AGE IN YEARS	FREQUENCY	PERCENTAGE
0-5	14	1.6
6-10	107	12.2
11-15	168	19.2
16-19	587	67.0
Total	876	100.0

Table-3: Locality

LOCALITY	FREQUENCY	PERCENTAGE
Urban	655	74.8
Rural	221	25.2
Total	876	100.0

Table-4: Religion

RELIGION	FREQUENCY	PERCENTAGE
Hindu	587	67.0
Christian	102	11.6
Muslim	187	21.3
Total	876	100.0

Table 5. Different Psychiatric Diagnosis

Psychiatric diagnosis	Frequency	Percent
Dissociative disorder	212	24.1
Depression	103	11.8
Anxiety disorder	79	9.0
Bipolar affective disorder	84	9.6
Schizophrenia	41	4.7
Substance use disorder	58	6.6
Ocd	19	2.2
Ptsd	9	1.0
Alleged assault	6	0.7
Deliberate self harm	20	2.3

Acute transient psychosis	12	1.4
Acute stress reaction	32	3.7
Seizure disorder	65	7.4
Mental retardation	92	10.5
Conduct disorder	16	1.8
Adhd	7	0.8
Stuttering	3	0.3
Autism	5	0.6
Somnambulism	3	0.3
Postencephalitis syndrome	3	0.3
Enuresis	4	0.5
Trichotilomania	1	0.1
Tic disorder	2	0.2
<b>Total</b>	<b>876</b>	<b>100.0</b>

Table 5 shows the different psychiatric diagnosis which was found to be maximum in dissociative disorder (212 or 24.2%) followed by depression (103 or 11.8%), then by mental retardation (92 or 10.5%) and BPAD (84 or 9.6% respectively).

We also compare some of the diagnosis with gender (TABLE- 6). When Dissociative disorder, Depression, Mental retardation, SUD, Seizure disorder, BPAD and Anxiety disorder were compared with gender by the  $\chi^2$ -test, P-value was found to be significant ( $P=0.000/P<0.001$ ).

Majority of female had a diagnosis of dissociative disorder (170 or 33.4%) followed by depression (51 or 10.03%), BPAD (45 or 8.8%) and anxiety disorder (43 or 8.4%), Seizure disorder (49 or 9.6%) MR (35 or 6.8%) whereas among the males most (57 or 15.4%) had a diagnosis of mental retardation followed by depression (52 or 14.1%), SUD (50 or 13.5%), dissociative disorder (42 or 11.4%), BPAD (39 or 10.5%) & anxiety disorder (36 or 9.7% ect).

**Table 6.** comparing diagnosis with gender.

DIAGNOSIS	SEX		Total
	MALE	FEMALE	
DISSOCIATIVE DISORDER	42(11.4%)	170(33.4%)	212
DEPRESSION	52(14.1%)	51(10.03%)	103
ANXIETY DISORDER	36(9.7%)	43(8.4%)	79
BIPOLAR AFFECTIVE DISORDER	39(10.5%)	45(8.8%)	84
SCHIZOPHRENIA	16(4.3%)	25(4.9%)	41
SUBSTANCE USE DISORDER	50(13.5%)	8(1.5%)	58
OCD	8(2.1%)	11(2.1%)	19
PTSD	1(0.2%)	8(1.5%)	9
ALLEGED ASSAULT	0	6(1.2%)	6
DSH	6(1.6%)	14(2.7%)	20
ACUTE TRANSIENT PSYCHOSIS	6(1.6%)	6(1.1%)	12
ACUTE STRESS REACTION	6(1.6%)	26(5.1%)	32
SEIZURE DISORDER	16(4.3%)	49(9.6%)	65
MR	57(15.4%)	35(6.8%)	92
CONDUCT DISORDER	12(3.2%)	4(0.7%)	16
ADHD	6(1.6%)	1(0.1%)	7
STUTTERING	2(0.5%)	1(0.1%)	3
AUTISM	4(1.08%)	1(0.1%)	5
SOMNAMBULISM	3(0.8%)	0	3
POSTENCEPHALITIC SYNDROME	2(0.5%)	1(0.19%)	3
ENURESIS	3(0.8%)	1(0.19%)	4
TRICHOTILOMANIA	1(0.2%)	0	1
TIC DISORDER	0	2(0.3%)	2
368	508	876	

Chi-Square Tests			
		df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.591E2 <sup>a</sup>	22	.000
Likelihood Ratio	172.036	22	.000
Linear-by-Linear Association	19.923	1	.000
No. of Valid Cases	876		

#### IV. Discussion

The maximum diagnosis was in (16-19 years) group (67.0%) followed by 11-15years age group (19.2%). The observed finding of female dominance (508 or 58%) in this study was similar to various studies. This finding was similar to the findings of Risal Aand Sharma PP<sup>14</sup> which reported that (66.7%) of the

total study population was in the age group of 15-18 years and shows more female dominance (71.4%) than males (28.6%). Majority (587 or 67.0%) belongs to Hindu religion, (21.3%) were Muslims, (11.6%) were Christians. This significantly high percentage found among Hindus may be because of majority of people inhabiting being Hindus. 655 (74.8%) were from urban background and 221 (25.2%) were from rural background. Shakya DR<sup>15</sup> also found that patients from urban areas were more prone to psychiatric illness. This may be due to less frustration tolerance and more stressful life in urban areas.

In this study the maximum number of patients were dissociative disorder (212 or 24.2%) which was maximum in female patients (33.4%). This finding is comparable with the findings of Risal A and Sharma PP<sup>14</sup>. This may be related to the possibilities that Indian culture discourages direct expression of emotional distress and physical symptoms are a common way of expressing psychological distress. Next came depression (103 or 11.7%) and this was more in male patients (14.1%). Mental retardation (92 or 10.5%), BPAD (84 or 9.6%), followed the above two diagnoses while the former was more in male (57 or 15.4%) and the latter was more in female (45 or 8.8%). The findings of predominance of mental retardation in males is similar with the findings of CS Chaudhury et al<sup>16</sup>.

- One interesting finding is that conduct disorder, ADHD, Autism, enuresis, somnambulism, trichotillomania, tic disorder were much less common compared to other disorders like dissociative disorder, depression, mental retardation, BPAD. This is no way an indication of low prevalence of these disorders. This appears to be due to the fact that these disorders are treated mostly in the OPD setting.

## VI. Conclusion

The majority of patients were in the age group 16-19 years, female sex, Hindu and from urban background. Commonest psychiatric diagnoses was dissociative disorder (24.20%), followed by depression (11.75%), mental retardation (10.50%), BPAD (9.58%), anxiety disorder (9.01%) etc. There are fewer patients of younger ages. It indicates the need of raising awareness about psychological problems of this age group. The observation that psychiatric morbidity is highest in the age group (16-19 yrs) as revealed in this study may help in better planning of mental health services, with special focus towards this vulnerable age group. Further studies need to be using community-based surveys in a larger scale with appropriate sample size to find out the depth of the psychiatric problems in children.

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