

## Child And Adolescent Patients attending Psychiatric Out-Patient Department

Poudel R<sup>1</sup>, Shah S<sup>2</sup>, Gupta U<sup>3</sup>

1. Lecturer, Department of Psychiatry, NGMC, Kohalpur, Nepal 2. Assistant Professor, Department Of Psychiatry, UCMS, Bhairahawa, Rupandehi, Nepal 3. Consultant Psychiatrist, Mangal Clinic, Jaunpur, UP, India.

E-mail \*Corresponding author :reet.poudel@gmail.com

### Abstract

**Introduction:** Children and adolescent form significant group of patients in psychiatry. The aim of this study was to identify the prevalence and pattern of different disorders in children and adolescent attending psychiatry OPD.

**Material And Method:** Socio-economic and other data of subjects 19 year and younger visiting the Out Patient Department (OPD) of Department of Psychiatry, Universal College of Medical Sciences (UCMS), Bhairahawa, Nepal was collected from the OPD register retrospectively. The duration of the study was one year, from January 2016 to December 2016. Diagnosis was made using the ICD 10. Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 21.0 for Windows.

**Results:** The total number of subjects enrolled for the study was 591. The mean age of the subject was 14.8 years (SD=2.8). Male constituted 44.67% (n= 264) of the subjects while female 55.33% (n=327). Majority of the subjects were from rural background (66%). The most common diagnosis was epilepsy (17.3%) followed by dissociative disorder (14.6%) and primary headache (11.8%) respectively. There was no statistically significant association of these major three disorders with age of the patient. Dissociative disorder was observed in 68 females compared to 18 males which was statistically significant (p=0.001).

**Conclusion:** Children and adolescent visiting the psychiatry OPD are diagnosed with a variety of disorders.

**Keywords:** Child & Adolescent, Psychiatry, Nepal

### INTRODUCTION

According to World Health Organization (WHO) the worldwide prevalence of child and adolescent mental disorders is approximately 20%.<sup>1</sup> Half of all mental disorders start by the age of 14.<sup>2</sup> One in 6 child and adolescent have a psychiatric disorder at any time while 1 in 3 have one or more psychiatric disorder by age 16.<sup>3</sup> Child and adolescent mental disorders manifest themselves in various domains and in different ways. Onset of mental disorders at a young age may lead to continuing functional

impairment in adult life.<sup>1,3</sup> Children and adolescents with good mental health are able to achieve and maintain optimal psychological and social functioning and well-being.<sup>4</sup>

Children and adolescent (19 years or younger)<sup>5</sup> constitute 45.97% of the population of Nepal.<sup>6</sup> As this represents a significant proportion of the population, mental health is of paramount importance for them in this part of the world. Low and middle income countries including Nepal lacks a system of mental health services

for children and adolescent. They face various challenges including discrimination, stigma and isolation including lack of adequate health care facilities and educational opportunities.<sup>1,4</sup>

Various studies have been conducted in Nepal related to child and adolescent mental disorders. Children and adolescent visiting psychiatry outpatient department (OPD) are diagnosed with a wide range of disorders including epilepsy, mood disorders, psychotic disorders, dissociative disorders and headache; to name a few. The aim of the present study was to identify the prevalence and pattern of different disorders in children and adolescent attending psychiatry OPD.

**MATERIAL AND METHOD**

The present study was conducted at Department of Psychiatry, Universal College of Medical Sciences (UCMS), Bhairahawa, Nepal. The duration of the study was one year, from January 2016 to December 2016. All the subjects of age 19 year and younger visiting the psychiatry OPD were enrolled for the study. Socio-demographic profile and other details of individual patients were collected from the OPD register retrospectively. Diagnosis was made using the ICD10<sup>7</sup>. Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 21.0 for Windows.

**RESULT**

The total number of subjects enrolled for the present study was 591 among which 56 (9.5%) did not receive an ICD 10 diagnosis for mental disorder. The mean age of the subjects was 14.8 years (SD=2.8).

Table 1 shows the sociodemographic profile of the subjects. Male constituted 44.67% (n= 264) of the subjects while female 55.33% (n=327). Majority of the subjects were from rural background (66%) and 91.9% of the subjects were Hindu by religion.

Table 2 shows the distribution of subjects based on age group and diagnosis. More than 96% (n=568) of the subjects in our study were adolescents. More than fifty percent of the subjects were from 16-19 years age group, followed by 40.4% from 11-15 years and 8.3%

**Table 1: Distribution of Socio-Demographic Characteristics**

Characteristics		Frequency	Percentage
Sex	Male	264	44.7%
	Female	327	55.3%
Place of Residence	Urban	184	31.1%
	Rural	390	66%
	India	17	2.9%
Religion	Hindu	543	91.9%
	Muslim	34	5.8%
	Christian	7	1.2%
	Buddhist	7	1.2%

from 6-8 years age group. Subjects of age 5 years and less constituted 0.5%. The most common diagnosis was epilepsy (17.3%) followed by dissociative disorder (14.6%) and headache (11.8%) respectively. There was no statistically significant association of these three disorders with age of the patient. Psychotic disorders including acute and transient psychotic disorder and schizophrenia was found in 14.7% of the subjects. Dissociative disorder and anxiety disorder was more common in the younger subjects (11-15 years) compared to older subjects (16-19 years). Mood disorders were diagnosed in 16.75% of the subjects.

Table 3 shows the distribution of subjects based on diagnosis and sex. Dissociative disorder was observed in 68 females compared to 18 males which was statistically significant (p=0.001).

**Table 2: Distribution of Subjects According to Diagnosis & Age**

Diagnosis	Age Range in years; N				Total (%)	p value
	0-5 years	6-10 years	11-15 years	16-19 years		
No diagnosis	0	6	18	32	56(9.5)	
Epilepsy	0	7	40	55	102(17.3)	0.749
Dissociative Disorder	1	7	46	32	86(14.6)	0.142
Primary Headache	0	6	27	37	70(11.8)	0.927
Mental Retardation	0	3	5	4	12(2)	
ATPD	0	2	15	26	43(7.3)	
Schizophrenia	0	0	16	28	44(7.4)	
RDD	0	0	4	2	6(1)	
Depression	0	4	24	25	53(9)	
BPAD	1	0	9	18	28(4.7)	
Mania	0	1	4	13	18(3)	
Alcohol abuse/dependence	0	0	3	1	4(0.7)	
Anxiety Disorder	0	1	19	13	33(5.6)	
Conduct Disorder	0	5	1	2	8(1.4)	
Opioid abuse/dependence	0	0	0	1	1(0.2)	
ADHD	0	4	4	1	9(1.5)	
Somatoform Disorder	0	0	0	1	1(0.2)	
Learning Disorder	1	0	1	0	2(0.3)	
Adjustment Disorder	0	0	0	4	4(0.7)	
Insomnia	0	1	0	0	1(0.2)	
OCD	0	0	1	2	3(0.5)	
Organic disorder	0	1	0	0	1(0.2)	
Anorexia Nervosa	0	0	1	1	2(0.3)	
ISH	0	0	0	1	1(0.2)	
Dhat syndrome	0	0	1	1	2(0.3)	
Acute stress reaction	0	1	0	0	1(0.2)	
Total(%)	3(0.5)	49(8.3)	239(40.4)	300(50.8)	591(100)	

**DISCUSSION:**

Majority of the subjects in the present study were female. Shakya et al<sup>8</sup> and Risal et al<sup>9</sup> observed female predominance in child psychiatry cases but the study sample included children of 0-18 years while in our study the sample age was 0-19 years.<sup>8</sup> A study from India with same sample age of that of ours have supported our finding of female predominance in children and adolescent attending psychiatry

OPD.<sup>10</sup> Other studies with similar methodology from Nepal<sup>11-13</sup>, India<sup>14</sup> and Bangladesh<sup>15,16</sup> have found male predominance in child psychiatry cases. The variation in the findings may be due to the difference in the sample age group enrolled in these studies. Some studies have included subjects upto 18 years of age,<sup>13</sup> some 5-16 years of age,<sup>16</sup> and others; all the cases visiting child guidance clinic.<sup>12,14</sup>

**Table 3: Distribution of Subjects According to Diagnosis & Sex**

Diagnosis	Sex; N		Total (%)	p value
	Male	Female		
No diagnosis	23	33	56(9.5)	
Epilepsy	53	49	102(17.3)	0.103
Dissociative Disorder	18	68	86(14.6)	0.001
Primary Headache	28	42	70(11.8)	0.346
Mental Retardation	9	3	12(2)	
ATPD	22	21	43(7.3)	
Schizophrenia	28	16	44(7.4)	
RDD	4	2	6(1)	
Depression	27	26	53(9)	
BPAD	11	17	28(4.7)	
Mania	10	8	18(3)	
Alcohol abuse/depn	1	3	4(0.7)	
Anxiety Disorder	14	19	33(5.6)	
Conduct Disorder	3	5	8(1.4)	
Opoide abuse/depn	1	0	1(0.2)	
ADHD	6	3	9(1.5)	
Somatoform Disorder	0	1	1(0.2)	
Learning Disorder	0	2	2(0.3)	
Adjustment Disorder	2	2	4(0.7)	
Insomnia	1	0	1(0.2)	
OCD	0	3	3(0.5)	
Organic disorder	1	0	1(0.2)	
Anorexia Nervosa	0	2	2(0.3)	
ISH	0	1	1(0.2)	
Dhat syndrome	1	1	2(0.3)	
Acute stress reaction	1	0	1(0.2)	
Total	264(44.67%)	327(55.33%)	591(100%)	

The definition or the criteria for defining adolescence may differ among institutions and countries which also might have led to the variation in the sample age group for these studies and hence difference in finding of male or female predominance.

Adolescent (10-19 years) constituted 96% of the subjects whereas 50.8% of the subjects were from 16-19 years age group. High incidence of psychiatric disorders has been observed in

upper extreme of age in child and adolescent in most of the studies.<sup>8-10</sup> Jesmin et al found higher incidence of psychiatric disorder in 5-10 years age group but the sample included children from 5-16 years only.<sup>16</sup> Similarly Chapagain et al found almost similar number of subjects in 0-9 year age group and 10-19 year age group.<sup>12</sup>

Majority of the Nepalese population being Hindu by religion, our finding of 91.9% of the subjects being Hindu was expected and it has

been observed in almost all the studies from Nepal.<sup>8,9</sup> Sixty six percent of the subjects belonged from rural background. Place of the residence of subjects has not been discussed in some studies<sup>9,13,14</sup> while a single study from Nepal found higher number of subjects from semi-urban background<sup>8</sup> though it used a different mode of classification of place of residence than that of ours. A study from India found 74.8% of the child and adolescent from urban areas.<sup>10</sup> This variation may be entirely due to the specific geographical location where the study was conducted.

The most common diagnosis was epilepsy (17.3%) followed by dissociative disorder (14.6%). Higher prevalence of epilepsy in child and adolescent was supported by studies from Nepal<sup>8,9</sup> and that of dissociative disorder by studies from both Nepal<sup>9,12</sup> and India<sup>10</sup>. Primary headache (PH) was diagnosed in 11.8% of the subjects and it was the third most common diagnosis in the present study. Shakya et al found high incidence of migraine headache (17%) in their study which is in favour of our finding while other studies from Nepal<sup>12,13</sup> and India<sup>14</sup> observed the incidence of PH to be very less ranging from 0.94-1.5%. Psychiatry OPD of UCMS handles neuropsychiatry cases like headache and epilepsy and majority of these cases are referred from other departments of the institution. Aich et al reported a total of 486 subjects visited the headache clinic in department of psychiatry at UCMS in a duration of three months alone.<sup>17</sup> Thus a higher incidence of these disorders in our institution observed in the present study is justified.

Most of OPD based studies have found mental retardation (MR) as the most common diagnosis<sup>12-15,18</sup> while in the present study MR was observed in only 2% of the subjects. Heikura et al<sup>19</sup> and Drews et al<sup>20</sup> suggested that maternal/familial sociodemographic factors like socioeconomic disadvantage, maternal multiparity and pre-pregnancy maternal obesity are associated with variation in the incidence of MR. These factors might have contributed to the low prevalence of MR in the present study.

#### **CONCLUSION:**

The present study tried to analyze the sociodemographic profile and pattern of

disorders with which children and adolescent visit psychiatry OPD. We found high attendance of neuropsychiatric disorders including epilepsy and primary headache in the subjects. Dissociative disorder and psychotic disorder were also observed in abundance. The authors hope that the present study will add more insight to the importance of child and adolescent psychiatry and will motivate other researchers to carry out studies in this sub-speciality of psychiatry in community and national level.

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