

## Pattern of psychiatric morbidity in children and adolescents attending Psychiatric OPD at a tertiary care hospital: A study from Midwestern Nepal

Khan TA

Assistant Professor, Department of Psychiatry, NGMC, Nepalgunj, Nepal

E-mail \*Corresponding author : [tanveernep8834@gmail.com](mailto:tanveernep8834@gmail.com)

### Abstract

**Introduction:** Mental health in child and adolescent is an essential component of overall health. Forty four percent of population in Nepal is under 19 years of age. Majority of lifetime psychiatric illnesses start during child and adolescent stage. Undetected poor mental health has wide range of adverse impact on individual's ability in various domains of achievement. This study is done with the objective to know the pattern of psychiatric morbidity in children and adolescents from a tertiary care hospital.

**Material And Method:** This is a descriptive study comprised of all new cases i.e. 156 participants of child and adolescents visiting to psychiatric outpatients department of Nepalgunj medical college, Nepalgunj, from January 2017 to June 2017. Socio-demographic data and clinical diagnosis based on International Classification of Disease-10 diagnostic research criteria were collected and analyzed.

**Results:** Out of 156 subjects studied, 2/3rd were female. The highest (57.06%) number of participants were from age group of 16 year to 18 years. Most common diagnosis was dissociative disorder in 24.35% followed by seizure disorder in 15.38% and mood disorder in 14.75% of participants.

**Conclusion:** Adolescent female were most commonly affected population. Dissociative disorder was the most common psychiatric morbidity followed by seizure disorder and mood disorder.

**Keywords:** Psychiatric Morbidity, Children, Nepal

### INTRODUCTION

Mental disorders contribute the largest disease burden in young people globally, with estimated rates of one in four.<sup>1</sup> As per National population and housing census 2011, forty four percent of population in Nepal is under 19 years of age,<sup>2</sup> hence making this group important in planning any health care policy.

Despite the fact that half of all lifetime psychiatric cases start by age 14 years and three fourths by age 24 years,<sup>3</sup> most of the patients do not receive psychiatric care either due to lack of awareness or due to difficulty in access specially in developing countries like Nepal. The situation

is worse in places out of Kathmandu because of limited mental health care facilities.

Undetected poor mental health has consequences that are wide ranging and detrimental, including negatively impacting on academic achievement and employment prospects, social, and familial relationships, and an increased risk of health-compromising behaviors. Present study is done with the aim to study the pattern of psychiatric morbidity in child and adolescent patients visiting psychiatric outpatient department at Nepalgunj medical college, a tertiary care hospital from the Midwestern region of Nepal.

**MATERIAL AND METHOD**

This descriptive study was conducted at Nepalgunj medical college, Nepalgunj during the period of January 2017 to June 2017. All new cases of child and adolescent patients of age up to 18 years visiting to psychiatric outpatient department were included in the study. A brief introduction about the study was explained to the subjects and their attendants. Verbal consent was obtained both from subjects and their attendants. Brief socio-demographic information which included name, age, sex and religion was noted. Detailed clinical history of each participant was taken from participants and their attendants. Diagnosis was made based on International Classification of Disease- 10 diagnostic research criteria. Whole information was kept confidential. Data were analyzed using Statistical Package for the Social Sciences (SPSS) software.

**RESULT**

A total of 156 subjects were included in the study out of which about 2/3rd i.e. 103 (66.03%) were females. More than half i.e. 89 (57.06%) of participants were from 16-18 years of age group followed by 45 (28.85%) from 13-15 years age group (Table 1.). Majority of subjects i.e. 147 (94.23%) were Hindu and rest were Muslims (Table 2.).

**Table 1: Distribution of respondents according to age group and gender**

Age group	Male (%)	Female (%)	Total (%)
6-8 yrs	3 (1.92%)	3 (1.92%)	6 (3.84%)
9-12 yrs	5 (3.20%)	11 (7.05%)	16 (10.25%)
13-15 yrs	17 (10.90%)	28 (17.95%)	45 (28.85%)
16-18yrs	28 (17.95%)	61 (39.11%)	89 (57.06%)
Total	53 (33.97%)	103 (66.03%)	156 (100%)

**Table 2: : Distribution of respondents according to Religion**

Religion	Male	Female	Total
Hindu	50 (32.05%)	97 (62.18%)	147 (94.23%)
Muslim	3 (1.92%)	6 (3.84%)	9 (5.76%)

As per ICD-10 diagnosis, almost half i.e. 75 (48.06%) were suffering from neurotic, stress related & somatoform disorders; among which dissociative disorder was the most common i.e. in 38 (24.35%) diagnosis. Seizure disorder was present in 24 (15.38%) subjects followed by mood disorder in 23 (14.75%) where depression was observed in 16 (10.26%) participants. Schizophrenia & other psychotic disorder were seen in 22 (14.10%) subjects and mental retardation was present in 12 (7.69%) cases.

**DISCUSSION:**

Mental health in child and adolescent is an essential component of overall health and its importance is being recognized.

In my study, majority of patients i.e. 103 (66.03%) were females and more than half i.e. 89 (57.06%) of the participants were from 16-18 years of age group followed by 45 (28.85%) from 13-15 years age group. Similar data was found in study done by Risal A. et.al. in which out of 168 participants, 71.4% were female and 66.7% of the total study population was from the age group of 15-18 years.<sup>4</sup> Another study done among 100 pediatric patients at BPKIHS, Dharan, found similar results with the predominant age group being 13-18 years (79%) and the majority being female (53%).<sup>5</sup> The reason of female predominance could also be due to the finding that the commonest diagnosis in my study is neurotic, stress related & somatoform disorders. As studies have reported that women are significantly more likely than men to develop an anxiety disorder throughout the lifespan.<sup>6,7,8</sup>

Classification	Diagnosis	Male	Female	Total
Psychoactive substance use disorder (F10-F19)	Cannabis dependence syndrome	2 (1.28%)	0	2 (1.28%)
Schizophrenia & other psychotic disorder (F20-F29)	Psychotic disorder	8 (5.13%)	14 (8.97%)	22 (14.10%)
Mood disorder (F30-F39)	Depression	7 (4.49%)	9 (5.77%)	16 (10.26%)
	BPAD	3 (1.92%)	4 (2.56%)	7 (4.49%)
	Total	10 (6.41%)	13 (8.33%)	23 (14.75%)
Neurotic, stress related & somatoform disorders (F40-F48)	Other anxiety disorder	10 (6.41%)	23 (14.74%)	33 (21.15%)
	Obsessive compulsive disorder	0	1 (0.64%)	1 (0.64%)
	Reaction to severe stress, and adjustment disorders	1 (0.64%)	2 (1.28%)	3 (1.92%)
	Dissociative disorder	4 (2.56%)	34 (21.79%)	38 (24.35%)
	Total	15 (9.61%)	60 (38.45%)	75 (48.06%)
Sleep disorder & sexual dysfunction (F51-F52)	Somnambulism	2 (1.28%)	0	2 (1.28%)
Mental retardation (F70-F79)		5 (3.20%)	7 (4.49%)	12 (7.69%)
PDD (F84)	Autism Spectrum disorder	1 (0.64%)	0	1 (0.64%)
Nonorganic enuresis (F98.0)		1 (0.64%)	1 (0.64%)	2 (1.28%)
Headache (Migraine & Tension type)	Migraine	1 (0.64%)	4 (2.56%)	5 (3.20%)
	Tension type Headache	4 (2.56%)	2 (1.28%)	6 (3.84%)
Seizure Disorder		13 (8.33%)	11 (7.05%)	24 (15.38%)

Dissociative disorder was found the most common i.e. in 38 (24.35%) diagnosis which is in accordance with the finding of Risal A et.al. who found 15% of subjects suffering from dissociative disorder.<sup>4</sup> Some of the other studies have reported higher rate of dissociative disorder in Indian population<sup>9, 10</sup> as well in contrast to the studies conducted among western populations.<sup>11, 12</sup> Since the disorder has physical symptoms, it is brought to medical attention more often.

#### CONCLUSION:

The majority of child and adolescent population visiting to psychiatric outpatients department were from 16 to 18 years of age with predominance of females. Dissociative disorder

was the most common diagnosis followed by seizure disorder, mood disorder and schizophrenia and other psychotic disorder. Future studies needed using community-based surveys in a larger scale with appropriate sample size to find out the depth of the psychiatric problems in children.

ONFLICT OF INTEREST: None

#### REFERENCES:

1. Patel V, Flisher A, Hetrick S, McGorry P (2007). Mental health of young people: a global public-health challenge. *Lancet* 369 (9569):1302–1313.
2. National population and housing census 2011 (National report), Volume 01, NPHC 2011, page 65.

3. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62 (6) pp. 593-602. doi:10.1001/archpsyc.62.6.593.
4. Risal A, Sharma PP. Psychiatric Illness in the Paediatric Population Presenting to a Psychiatry Clinic in a Tertiary Care Centre. *Kathmandu University Medical Journal*. Vol.8 |No. 3 |Issue 32 |Oct-Dec, 2010
5. Shakya DR, Psychiatric Morbidity Profiles of Child and Adolescent Psychiatry Out-Patients in a Tertiary-Care Hospital. *J. Nepal Paediatr. Soc. May-August, 2010/Vol 30/Issue 2*
6. Angst J, Dobler-Mikola A. The Zurich Study: V. Anxiety and phobia in young adults. *European Archives of Psychiatry and Neurological Sciences*. 1985;235(3):171-178.
7. Bruce SE, Yonkers KA, Otto MW, Eisen JL, Weisberg RB, Pagano M, Shea MT, Keller MB. Influence of psychiatric comorbidity on recovery and recurrence in generalized anxiety disorder, social phobia, and panic disorder: A 12-year prospective study. *American Journal of Psychiatry*. 2005; 162:1179-1187.
8. Regier DA, Narrow WE, Rae DS. The epidemiology of anxiety disorders: The Epidemiologic Catchment Area (ECA) experience. *Journal of Psychiatric Research*. 1990; 24(suppl 2):3-14.
9. Chaudhury S, Prasad PL, Zacharias R, et al. Psychiatric Morbidity Pattern in a Child Guidance Clinic *MJAFI* 2007;63:144-46.
10. Chandrasekaran R, Goswami U, Sivakumar V, Chitralekha J. Hysterical neurosis: a follow-up study. *Acta Psychiatr Scand* 1994;89:78-80.
11. Lehmkuhl GB, Lehmkuhl V, Scharm BH. Conversion disorder (DSM-III 300.11): symptomatology and course in childhood and adolescence. *Eur Arch Psychiatry Neurol Sci* 1989;238:155-60.
12. Tomasson K, Kent D, Geryell W. Somatization and conversion disorder: comorbidity and demographics at presentation. *Acta Psychiatr Scand* 1991; 84:288-93.