Socio-demographic and Clinical Profile of Children and Adolescents Attending the Psychiatry Outpatient Service of a Tertiary Level Hospital in Eastern Nepal

Srijana Bhurtel [a*], Rinku Gautam [b],
Baikuntha Raj Adhikari [b], Dhana Ratna Shakya [b],
Rajesh Kumar [b], Binod Deo [b] and Asmita Rana [c]

[a] *Department of Neuropsychiatry, Bharatpur Hospital, Chitwan, Nepal.*
[b] *Department of Psychiatry, BP Koirala Institute of Health Science, Sunsari, Nepal.*
[c] *Department of Cancer Prevention, Control and Research, BP Koirala Memorial Cancer Hospital,*
Chitwan, Nepal.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Aims: This study aims to find out the socio-demographic and clinical profile of children and adolescents attending psychiatry outpatient service of a tertiary-level hospital in Nepal.
Study Design: Descriptive cross-sectional study.
Place and Duration of Study: The study was carried out in the psychiatry outpatient department from Sep 2017 to Sep 2018.

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*Corresponding author: E-mail: drsriza@gmail.com;

Methodology: All children and adolescents, aged 6 years to 18 years, visiting the psychiatry outpatient department registered as new cases were included in the study. Epidemiological profiles and clinical characteristics (psychiatric diagnosis, age, sex, ethnicity, occupation, education geographical areas, family characteristics) were noted using a semi-structured questionnaire. Psychiatric diagnosis was made based on ICD-11 criteria. Descriptive statistics were used to analyze the data.

Results: The mean age of the patients was 14.07 years ± 3.43 (mean ± SD). Psychiatric disorders were most common in children and adolescents of 16-19 years of age group followed by the 11-15 years of age group. Majorities of the patients were male (52.1%), and Hindu (87.2%). More than 85% of the patients had received some level of education. Most resided in rural areas (43.2%) and nuclear families (54.7%). The most common psychiatric diagnosis was depressive disorder (21.6%) followed by Dissociative disorder (16.15%.), and Panic disorder (10.16%). Thirteen percent of the patients presented with a history of intentional self-harm, 19.5% had a positive family history of mental illness, and 18% had emotional difficulties with their parents. There was a history of alcohol use in the family in 17.2% and family conflicts in 14.1% of cases.

Conclusion: Depression is the most common psychiatric disorder in the pediatric age group. Adolescents of the elder age group and male gender constitute the major proportion of patients with psychiatric morbidity. Positive family history of mental illness and emotional difficulties with the parents were the most commonly seen family characteristics.

1. INTRODUCTION

Children and adolescents constitute almost a third of the world's population. Almost 90% of them live in low and middle-income countries and they constitute up to half of the total population [1]. Studies have shown that mental health problems globally affect 10–20% of children and adolescents [2]. The World Health Organization (WHO) has reported that 20% of children and adolescents suffer from different types of mental disorders worldwide and, suicide is supposed as the major cause of death among adolescents [3]. Studies have also shown that the emergence of early onset emotional/behavioral problems in young children is related to various health and behavior problems in adolescence and about half of all adult mental disorders have their onset in adolescence [4].

Recognizing mental health issues as early as possible could be a critical step to reducing the prevalence of psychiatric problems among older individuals, managing them more effectively, and preventing negative outcomes. Early identification of disorders provides access to evidence-based intervention with psychotherapies and medication [5,6].

There are some studies conducted in Nepal to look into the epidemiology of mental disorders in the pediatric population. Their finding shows the proportion of children and adolescent cases to total psychiatric outpatients to be 3.34% to 8% [7,8]. The commonest diagnosis in the clinical sample is mental retardation, epilepsy, or dissociative disorders in different studies [7-10]. The variations in the findings are partly due to differences in the operational definition of children and adolescents and also to differences in methodology in how the studies were carried out.

The risk factors for the development of mental disorders in children have been considered based on two perspectives: the characteristics of the child and those of the family or environment. Child characteristics include gender, age, ethnicity, physical health, cognitive and psychological function, pre- and perinatal exposures to illness, physical stress, alcohol, drugs, nutrition, infections, etc. Familial/environmental characteristics include parental education, age, social class, employment, psychiatric and medical history, family function, structure, etc. [11,12].

Existing literature from Nepal has not looked into the socio-demographic and clinical characteristics especially family-related factors of this population. Knowing about common types of psychiatric illness and their clinic-demographic profile help to define and identify needs [13,6]. It would also help to increase awareness about the problem and address their different priorities. Our study aims to provide baseline data for further studies on psychiatric illness in Children and adolescents in Nepal.

2. MATERIALS AND METHODS

Study Design: Hospital-based cross-sectional study.

Study Period: September 2017 - September 2018.

Study Setting: Outpatient unit of Department of psychiatry, BPKIHS, Dharan.

Study Population: All children and adolescents, aged 6 years to 18 years, visiting the psychiatry outpatient department registered as new cases.

Study tools and procedures: Epidemiological profiles and associated factors (age, sex, ethnicity, occupation, education geographical areas, familial factors, etc.) were noted using a semi-structured questionnaire. Psychiatric diagnosis was made based on ICD-11 criteria which were confirmed by Consultant Psychiatrist. Data was collected using MS excel software.

Data analysis: The data were analyzed using the Statistical package for the social science version 16 for Windows. Descriptive statistic for all demographic and clinical variables is used.

3. RESULTS AND DISCUSSION

Socio-demographic characteristics: A total of 384 children and adolescents visiting the outpatient department of Psychiatry of B. P. Koirala Institute of Health Sciences, Dharan were included in the study. Among the 384 patients, most (43.8%) were of the age group 16 to 18 years, with the mean age being 14.07 years. The majority of the patients were male (52.1%), unmarried (96.1%), and Hindu (87.2%). More than 85% of the patients had received some level of education. Most resided in rural areas (43.2%) and nuclear families (54.7%) (Table 1).

Sixty-seven patients (17.4%) were of the 6-10 years age group, 149 (38.8%) were of the 11-15 years age group and 168 (43.8%) were of the 16-18 years age group. The minimum age of the participants was 6 years and maximum was 18 years. The mean age was 14.07 ± 3.43 years (mean ± SD). The largest age group was of 16-19 years. There were fewer patients of younger ages. This finding is similar to the findings of many other studies conducted in Nepal [10,14,15,16].

The male majority in the patient group in our study is consistent with the findings by Tulachan P et al (male= 60%), Nalugya-Sserunjogi J et al (male=59%) and Col SC et al (male=55.9%) but is in contrast to the study done by Shakya DR (female=53%), Risal A et al (female=71.4%), Malla DP et al (female=60.1%) and Kurian K, et al (female=56.2%) [12,14,15, 16,17,18]. Predominance of males might be due to gender based differential help seeking as more importance is given to male child in Nepal.

In this study, 54.7% of the participants were from nuclear family followed by 39.3% from the joint family. Six percent of the participants were from broken family. Study by Malla et al also had similar finding with majority of patients being from nuclear family [17].

Psychiatric diagnosis: The most common psychiatric illness was mood disorder (includes Depressive disorder, Manic episode and bipolar disorders (41.4%), followed by dissociative disorder (16.15%.), and Panic disorder (10.16%), Depression was diagnosed in 21.60%, manic episodes in 5.21%, and Bipolar affective disorder in 4.69% when we see individual diagnosis inside mood disorders. The proportions of other psychiatric disorders diagnosed are shown in Fig. 1.

There were 50 (13.02%) patients who had attempted suicide or self-harm. Poisoning (n = 42) was the most common mode of suicide attempt followed by hanging and cutting over the wrist. Suicidality and self-harm behavior in Nepali context is a less studied subject. Such a large proportion of children and adolescents with a history of self-harm behavior or suicidal attempts is a serious issue of public health concern.

A study conducted by Shakya D.R at Dharan, Nepal in 2010 among the 100 child and adolescent patients attending psychiatry OPD, depression was found to be in 20% [14]. The result is similar to our study. This may because of study being conducted in a similar place, similar population group, and with similar diagnostic criteria. Studies from other places of Nepal and abroad have shown the prevalence of depression to be in similar figure [15,17,18,19]. One study from Kathmandu has shown only small proportion of patients to be diagnosed as depression [16]. Some of these studies have found epilepsy, mental retardation or dissociative disorders as the most common psychiatric morbidity in their study sample [10,16]. These differences in the pattern of psychiatric morbidity in different studies can be due to differences in methodology.

Table 1. Socio-demographic characteristics of the patients (n = 384)

| Characteristics	Categories	Frequency	Percentage (%)
Mean age ± SD (in years) = 14.07 ± 3.43			
Age group (in years)	6-10	67	17.4
	11-15	149	38.8
	16-18	168	43.8
Gender	Male	200	52.1
	Female	184	47.9
Marital Status	Married	15	3.9
	Unmarried	369	96.1
Education	Yes	327	85.2
	No	57	14.8
Religion	Hindu	335	87.2
	Kirat	21	5.5
	Muslim	11	2.9
	Buddhist	9	2.3
	Christianity	8	2.1
Socio-economic status	Upper	77	20.1
	Middle	173	45.0
	Lower	134	34.9
Residency	Rural	166	43.2
	Urban	140	36.5
	Semi-urban	78	20.3
Family type	Nuclear	210	54.7
	Joint	151	39.3
	Broken	23	6.0
No. of Children	Single	48	12.5
	More than one	336	87.5
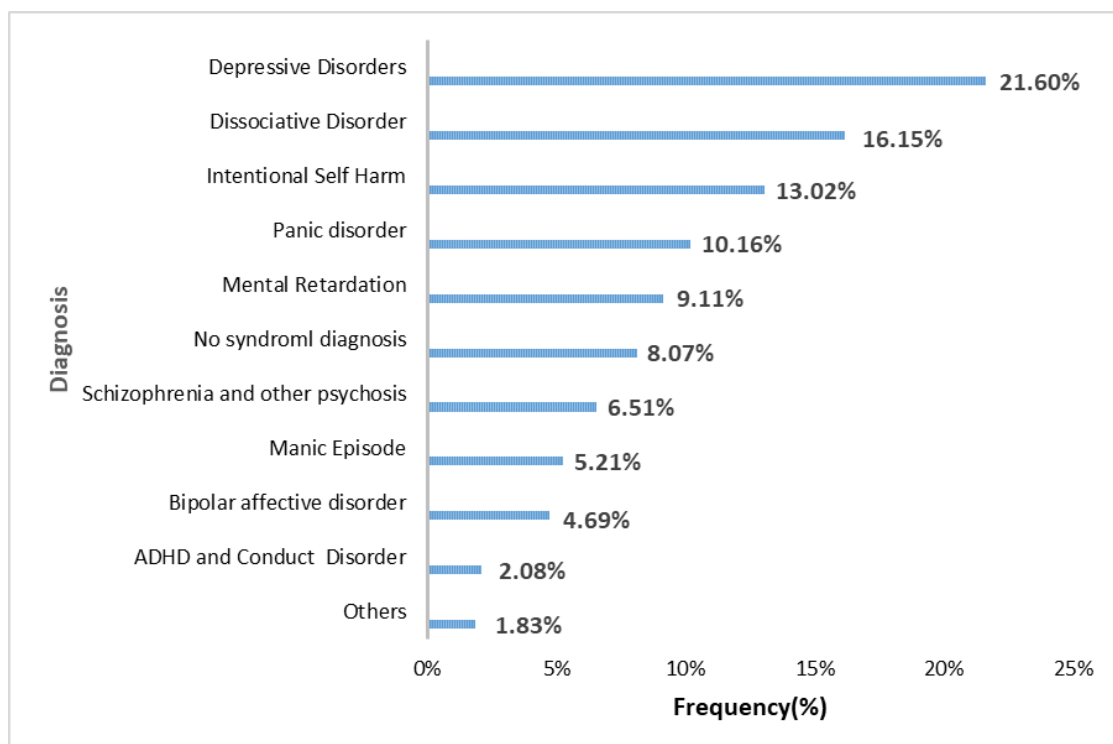
Fig. 1. Distribution of patients according to diagnosis (n = 384)

Table 2. Study of the patients according to familial factors (n = 384)

Familial factors	Frequency	Percentage (%)
Family History of Mental illness	75	19.5
Emotional difficulties	69	18.0
Alcohol use in family	66	17.2
Death of family member	59	15.4
Family conflict	54	14.1
Child Abuse	29	7.5
Sibling Rivalry	8	2.1

Family characteristics: Our study showed that 19.5% of the study subjects had a family history of mental illness whereas 18% had emotional difficulties. We sound 17.2% had alcohol use in the family, 15.4% had the death of a family member, 14.1% had a family conflict, 7.5% had child abuse and 2.1% had sibling rivalry. These findings are consistent with various international studies where the lifetime risk for psychiatric illness in children of depressed patients has been estimated to range from 15% to 45% [20,21]. The risk is more in cases where both parents had mood disorders [22]. As in our study, other studies have also linked mental illness in children with emotional difficulties with their parents [23]. Parental loss is recognized as one of the important risk factor for children to develop psychiatric disorders. It is hypothesized that adolescents who had lost a parent would experience significantly more severe psychosocial problems compared to those having their both parents alive. Parental loss may bring emotional suffering like separation anxiety disorder and depression [24]. Adolescents whose both parents are alive have a better ability to form a friendly relationship, had a better social adjustment, and are less likely to be mentally ill, compared to those who had their parents died. There is an assumption that bereavement has an adverse effect on a child's life, leaving them at increased risk for significant psychological problems. Family conflicts, parental divorce, and alcohol use in the family are also well-studied in various other places as factors associated with mental illness among the younger population [25,26].

4. CONCLUSION

Depression was the most common psychiatric disorder in the pediatric age group followed by dissociative disorder and panic disorder. Self-harm behavior and suicidal attempts were seen in a large number of cases which is a matter of concern. Adolescents of the elder age group, male gender, and those from nuclear families constituted the major proportion of patients with psychiatric morbidity. Positive family history of mental illness, emotional difficulties with the parents, and the presence of family conflicts were commonly seen as familial and environmental characteristics of these patients.

CONSENT

As per international standard or university standard, parental(s) written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

Ethical approval was taken from the Institutional Review committee of BP Koirala Institute of Health Science prior to the conduct of the study (IRC No: IRC/1157/017).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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