# Psychiatric Morbidity Profiles of Child and Adolescent Psychiatry Out-Patients in a Tertiary-Care Hospital

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## Abstract

**Background**: Psychiatric morbidity is ubiquitous, affecting children, adolescents and adults. Age factors play a great role in pattern of morbidity profile. Psychiatric morbidity profile of children and adolescents may indicate different needs and priorities. **Objective**: This study aims to sort out referral pattern, attitude about psychiatric referral and morbidity profile among child and adolescent psychiatric out-patients in a tertiary-care general hospital. **Methodology**: A total of 100 consecutive child and adolescent patients in psychiatry OPD coming into contact with investigator psychiatrist were enrolled during the study period. Diagnoses were made according to the ICD-10. **Results**: Fifty three of the subjects were female, majority of the cases (79) were of age between 13-18 years. Main ethnicity-caste groups seeking care were Mongol, Brahmin, Chhetri and indigenous Terai tribes. People from semi-urban and urban settings predominated in this study. Great majority (more than 80%) had reached this service in the 4$^{th}$ or in more than the 4$^{th}$ step of their help seeking. Most of the subjects were comfortable and happy about psychiatric referral. More than half had presented mainly with physical and somatic complaints. Major psychiatric diagnoses encountered were mood (affective), anxiety, seizure, dissociative conversion disorders and mental retardation. Four percent of subjects had suicidal behaviours and 17% migraine headache. **Conclusion**: Common psychiatric diagnoses among these child and adolescent out-patients are mood, anxiety, seizure, dissociative conversion disorders and mental retardation.

**Key words:** Attitude to psychiatric consultation, child and adolescent, out-patient, psychiatric morbidity.

## Introduction

Various studies from developing countries including India show that a significant percentage (ranging between 7-35%) of child and adolescent population suffers from mental illness[1,2,3,4,5]. They are reported to seek help in psychiatric service facilities for a variety of psychiatric disorders[4,5,6,7,8]. The common psychiatric disorders affecting other adults[9], also affect many child and adolescents. Such disorders usually affecting adult, also distressing in this age group include mood (affective), and neurotic and stress-related and somatoform disorders including anxiety and dissociative (conversion) disorders[2,5,7]. Another group of disorders are commonly diagnosed among child and adolescents. They include: mental retardation, disorders of psychological development (e.g. specific learning disorders, autistic disorders) and behavioral and emotional disorders with onset usually occuring in childhood and adolecence (e.g. hyperkinetic disorders, enuresis)[4,5,6,7]. Seizures[4] and migraine[10,11] are the other common problems in this age group.

Children and adolescents heavily depend on family for their needs. They may not appreciate or may not be able to express psychological distress. They may somatize their symptoms. Also because of other reasons like ignorance, myths and misconceptions regarding mental illness, they like others[11] and their care-takers hesitate to seek help from mental health professionals.

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.

There are few studies and limited data regarding the psychiatric morbidity profile among child and adolescent psychiatry out-patients in Nepal, especially from eastern Nepal.

This descriptive study was conducted to sort out psychiatric referral patterns, to explore the perception/ attitude about psychiatric referral and to see morbidity profiles among child and adolescent patients attending psychiatric OPD of BP Koirala Institute of Health Sciences (BPKIHS), Dharan, a tertiary care general hospital in eastern Nepal.

## Material and methods

This is a hospital based descriptive cross sectional study with convenience sampling.

The subjects for this study consist of 100 consecutive patients of age up to 18 years who had consulted with the investigator psychiatrist (MD-psychiatry) in psychiatry OPD of this hospital since March 2008. A brief explanation about the study was given to the subjects and parents or other accompanying care-takers, if needed. Informed consent was taken. The information was kept confidential.

The socio-demographic profile and information about the illness (source of referral, co-morbid physical conditions and psychiatric diagnosis) were recorded on the sheet designed for the particular purpose. Detailed psychiatric work-up was done in all subjects. Referrals and investigations were advised as per need. The final psychiatric diagnosis was made by a consultant psychiatrist (MD-psychiatry with exposure training on child and adolescent mental health) according to the ICD-10 criteria[12]. The physical diagnoses were recorded as per the particular departments to which the referrals were made (if deemed necessary), or which referred the case to the psychiatric out-patient department. The diagnosis of mental retardation was based on the IQ test advised after clinical assessment. If a psychiatric diagnosis could not be made, which was true in many seizure and migraine cases, the diagnosis was deferred.

The view of patients and or parents regarding psychiatric referral and the steps of help seeking to the present service were explored during the consultation. The overall responses about their view on the referral were sorted out into five categories-dissatisfied, questioning the referral, comfortable, happy and satisfied and no response.

Data were entered into a computer and analyzed using 'Statistical Package for Social Science' (SPSS) - software.

## Results

Most of the cases were between the ages of 13 and 18 (79) and a few were below 10 (9): The mean age of the cases was 14 years, with the age range of 3-17 completed years. Female subjects were 53%. (Table-1)

**Table 1:** Age and Gender distribution

| S. No. | Age Group (in years) | No. of Subjects / % |
|---|---|---|
| 1. | Birth- 3 | 1 |
| 2. | 4 - 6 | 1 |
| 3. | 7 - 9 | 7 |
| 4. | 10 - 12 | 12 |
| 5. | 13 - 15 | 35 |
| 6. | 16 - 18 | 44 |
| **Gender** | | |
| 1. | Male | 47 |
| 2. | Female | 53 |

The main caste-ethnic groups were: Mongols (28%), Brahmins (27%), Chhetri (14%) and indigenous Terai tribes and the disadvantaged/ Dalit (11% each). The cases were mainly from semi-urban (47%) or city (30%) areas. We had 5% paediatric patients from India in this study. (Table- 2).

**Table 2:** Ethnicity-Caste and Place of Domiciles

| Ethnicity-caste | Number/ % |
|---|---|
| Brahmin | 27 |
| Chhetri | 14 |
| Mongol | 28 |
| Newar | 4 |
| Terai tribe-castes | 11 |
| Dalit/ disadvantaged | 11 |
| Indian | 5 |
| **Place of domiciles** | **Number/ %** |
| Urban | 30 |
| Semi- urban | 47 |
| Rural | 18 |
| India | 5 |

A few (2%) cases came on their own, 5% were referred by traditional healers and 15% were referred or brought by their family, relatives, friends, neighbours, other patients or even media. Nearly one fourth (23%) was referred by local health professionals and private practitioners. Referrals were made most commonly by the departments of family medicine and emergency (38%), followed by other departments of the institute-

paediatrics (10%) and internal medicine (3%) mainly.

**Table 3:** Referral Sources (in % of total)

| S. No. | Source of Referral | No; / % |
|---|---|---|
| 1 | Internal Medicine | 3 |
| 2 | Surgery | 1 |
| 3 | Family Medicine & Emergency Service | 38 |
| 4 | ENT/ Eye | 1 |
| 5 | Paediatrics | 10 |
| 6 | Orthopedics | 1 |
| 7 | Dermatology | 1 |
| 8 | Self | 2 |
| 9 | Local, Private, other medical practitioner | 23 |
| 10 | Traditional healers | 5 |
| 11 | Others (family, friends, media, other patients & their relative) | 15 |

Most of the cases usually had visited many sources- three other sources in 40% and four in 38% cases (mean number of different treatment modalities being 4.33, one most common being some sort of home remedies) before coming to this service (Table 4).

**Table 4:** Number of other 'help seeking' steps before reaching this psychiatry OPD

| No. of steps when in Psych OPD of BPKIHS | Number / % |
|---|---|
| < 3rd step (including BPKIHS) | 5 |
| 3rd step | 10 |
| 4th step | 40 |
| 5th step | 38 |
| ≥ 6th step | 7 |

A few of them (2%) were utterly dissatisfied, some (9%) questioned about psychiatric referral, greater percentages (57%) were comfortable, 25% were happy and satisfied about the referral, and the rest 7% did not answer (Figure- 1).

Many subjects (58%) had different physical/somatic complaints. Other common presenting complaints were mood symptoms, altered consciousness, anxiety and abnormal behavior. Four percent needed psychiatric consultation because of suicidal behaviors (Figure 2).

Major psychiatric diagnoses were mood (affective) disorders (in 32% of total subjects), anxiety disorders (in 16%), dissociative (conversion) and childhood and adolescent onset behavioural and emotional disorders (e.g. enuresis, hyperkinetic disorders) (in 13% each), mental retardation (in 8%), obsessive compulsive disorders (in 7%), schizophrenia related and the behavioural syndromes associated with physiological disturbances and physical factors (in 6% each) (Table 5).

**Table 5:** ICD 10 Psychiatric Diagnosis*

| ICD code | Psychiatric diagnosis | No; / % |
|---|---|---|
| F 0- 09 | Organic, including symptomatic | 6 |
| F 10- 19 | Psychoactive substance use | 4 |
| F 20- 29 | Schizophrenia, schizotypal and delusional | 6 |
| F 30- 39 | Mood (affective) | 32 |
| F 30, 31<br>F 32, 33<br>F 34, 38, 39 | Manic episode, Bipolar affective | 12 |
| | Depressive illness | 20 |
| F 40- 42<br>F 43<br>F 44<br>F 45 | Phobic, other anxiety and Obsessive compulsive | 16 |
| | Obsessive compulsive | 7 |
| | Panic disorders | 4 |
| | Stress related/ adjustment | 3 |
| | Dissociative (conversion) | 13 |
| | Somatoform | 2 |
| F 50- 59 | Associated with physiological/ physical factors | 6 |
| F 70- 79 | Mental Retardation | 8 |
| | Developmental- specific learning, autism | 1 |
| F 90- 98 | Childhood and adolescent onset | 13 |
| | Hyperkinetic disorders (ADHD) | 3 |
| | Conduct | 2 |
| | Enuresis | 7 |
| X 60- X 84 | Deliberate self harm/ suicide attempts | 4 |
| | Absent (ICD-10 diagnosis not made) | 19 |

About half of the cases (52%) had different physical diseases along with some psychiatric problems, the main being: migraine (in 18%) and seizure- epilepsies (in 15%). (Table 6)

**Table 6:** Physical Diseases*

| ICD code | Physical diseases related to- | No./ % |
|---|---|---|
| A00- B99 | Infection/ infestation | 3 |
| C00-D48 | Neoplasm/ Cancers | 0 |
| E00-E90 | Endocrine, Nutritional & Metabolic | 3 |
| G00-G99 | CNS- Neurological / primary headaches | 34 |
| | Seizure disorders | 15 |
| | Migraines | 18 |
| H00-H59 | Eye | 2 |
| H60-95 | ENT | 3 |
| I00-I99 | Circulatory/ Cardio-vascular | 1 |
| J00-J99 | Respiratory | 1 |
| K00-K93 | Digestive/ Gastro-intestinal | 2 |
| L00-L99 | Skin diseases | 1 |
| M00-M99 | Musculoskeletal & connective/ Orthopaedics | 1 |
| N00-N99, O00-O99 | Genito-urinary and obstetric/ Gynaecological | 2 |
| X60- X84 | Intentional/ Deliberate self harm, suicide attempts | 4 |
| | Surgical | 1 |
| | Dental | 2 |
| | Absent | 48 |

* *Multiple response category: One respondent may have one or more responses.*

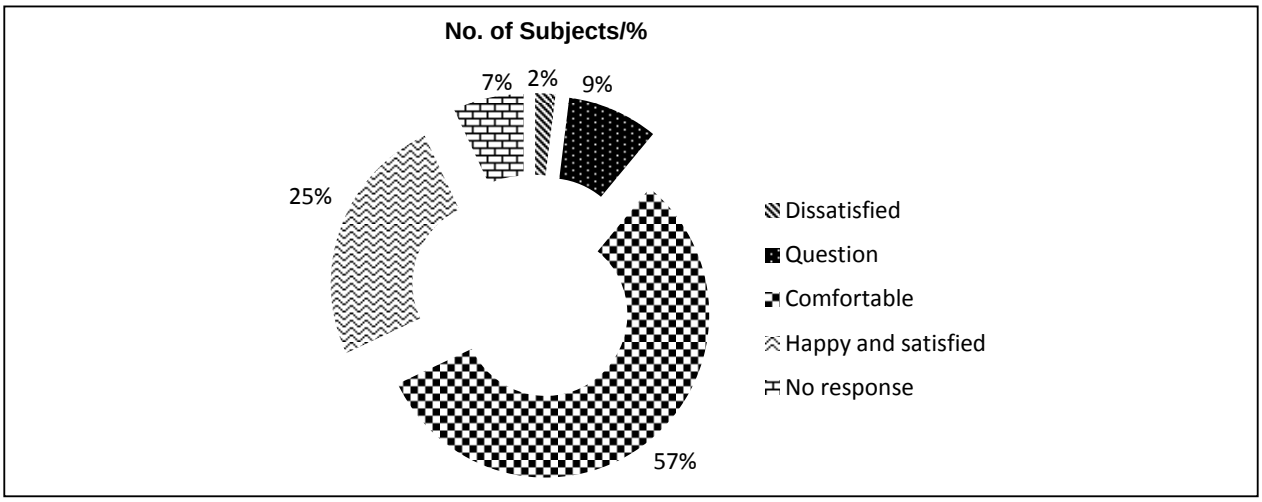


**Fig 1:** Perception/ Attitude among the Referred cases about the Psychiatric referral.

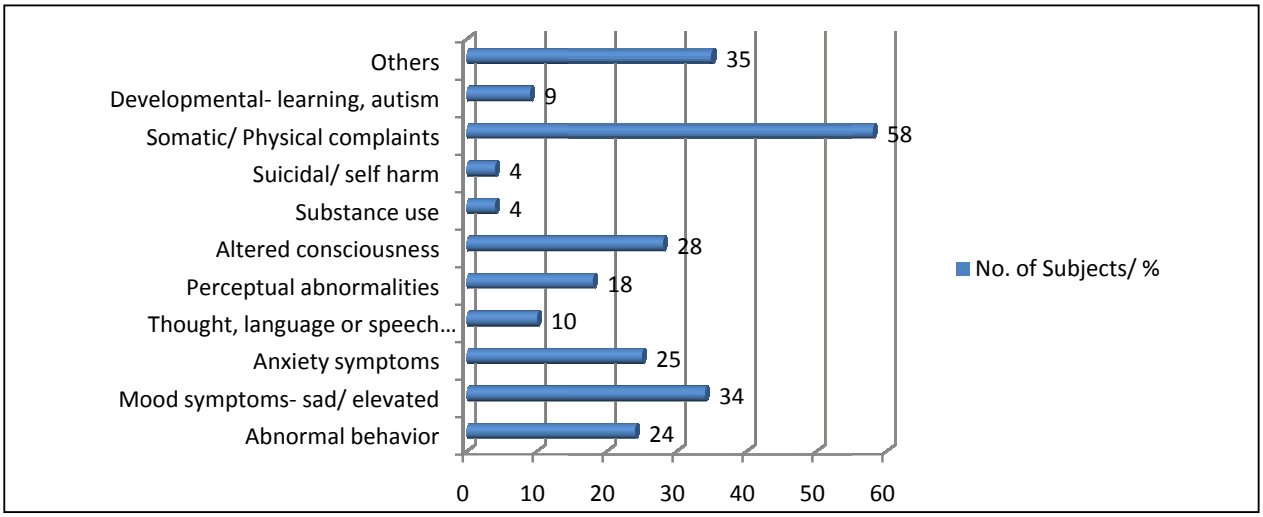


**Fig. 2:** Presenting Complaints.*

## Discussion

Nepal looks forward to a formal child psychiatric service. We have extreme scarcity of child mental health resources. However, major teaching institutes, mainly TU teaching hospital in Kathmandu and BP Koirala Institute of Health Sciences in Dharan provide mental health services also offering child and adolescent psychiatric services. With the considerable progress in Nepalese psychiatric service scenario because of the establishment of medical institutes, both in and outside the capital city[13]. child psychiatric service is also trying to reach different corners of the country through general psychiatrists. Psychiatric service integrated into a general hospital has extra advantages like easier access, less stigma and visible acceptance to other medical departments[14]. There are very few centers in Nepal which provide mental health services to children and adolescent. It is not surprising in such an infancy stage of Nepalese child psychiatry to lack data, particularly from eastern Nepal. Though there are some reports from Nepal[3,6,7]. Keeping in mind the paucity of the data in this regard, this study was carried out here with the hope that it would open avenues for further studies.

This hospital based study enrolled 100 consecutive psychiatry-OPD patients of age up to 17 completed years i.e. up to 18 years (not above). Age distribution of this study clearly showed that we had fewer patients of younger ages than in other studies made in child-guidance clinics of Nepal and India[4,5,7,8] though the age range was 3-17 completed years. This was probably because it was carried out in an adult psychiatry general out-patient service where there is a separate 'Child and Adolescent health department'. Lack of awareness that mental health problem exists in this population could be another factor. It also indicated the need of raising awareness about psychological problems of this age group.

The ethnicity distribution of this study was approximately similar to the population distribution of this region. We had subjects coming from all residential settings- urban, semi-urban and rural though relatively more from semi-urban and urban areas. This finding was consistent with the fact that the study site i.e. this institute is situated in a city surrounded by villages. We had many Indian paediatric patients (5% in this study), reflecting the close relationship between the two neighboring countries.

The patients were asked what other services they had received prior to visiting our facility. Majority of the cases had visited many sources (mean number of different treatment modalities being 4.33, one most common being some sort of home remedies) before coming to this service. Fifty five percent of the total subjects were advised to consult a psychiatric service by other departments of the Institute (main being family medicine and emergency, paediatrics and internal medicine) and 45% by other sources, e.g. friends, relatives, neighbors, other patients, traditional healers, private practitioners, self and even the media. The small number of people directly coming for psychiatric consultation (without being referred by other medical specialties) indicated the need for increased public awareness. This need was also reflected in the finding that despite visiting many places before the psychiatric service, many people (11%) were not happy and questioning, and 7% were reluctant to give their perception about the referral. The referral from local practitioners and health professionals were nearly one-fourth which was a welcome sign. The attitude of the people will improve with the positive view and explanation by non-psychiatrist medical professionals about the psychiatric referral and repeated demonstration of benefit from the service.

The preponderance of physical and somatic, emotional and mood, behavioral symptoms and altered consciousness were consistent with the diagnostic profiles of this survey showing mood, anxiety-spectrum and seizures as main diagnoses. The physical and somatic symptoms as presenting complaint were more in this age-group in this study as seen in a similar study carried out among adult referred-OPD cases in the same institute[9]. This was mainly because of the great physical comorbidity in these ill people.

We had the predominance of mood (affective) disorders, mainly depressive illness, followed by phobic and anxiety, dissociative and conversion disorders along with behavioral and emotional disorders of onset usually occuring in childhood and adolescence (e.g. enuresis, hyperkinetic, conduct). This finding of predominance of mood disorders is different from that of child guidance clinics of Nepal and India[4,8]. Eight percent of cases were diagnosed as mental retardation, the figure being lesser than that of similar studies in child-guidance clinics[4,5,8]. These findings could partly be due to the fact that this survey was conducted in a general adult-psychiatry clinic setting and we had more subjects of teen ages than younger ones.

The contribution of changing social structure, ongoing conflicts, frequent natural disasters, unemplyment, abroad work, education and impact of media to psychiatric morbidity patterns needs further studies. Some child and adolescent patients (4%) were brought to the clinic primarily for suicidal tendencies. In

52% of total cases, physical diseases were co-morbid with psychiatric disorders, hence emphasizing the importance of closer integration of psychiatric services with other specialties like paediatrics.

## Conclusion

A great majority of children and adolescents visit other sources of help-seeking before coming to a psychiatric service for different psychological problems. Physical and somatic symptoms were common presenting complaints of these psychiatric out-patients. We had majority of older children as subjects in this study. Common diagnoses among those child and adolescent psychiatry-OPD-cases were mood (affective), anxiety, seizure, dissociative conversion disorders, mental retardation and enuresis. Many of them also suffered from co-morbid physical illness besides psychiatric disorder.

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**Limitations of this study:** Since this study was carried out in a general adult-psychiatry out-patient setting by a general psychiatrist, no supplementary tools were used and the study subjects were possibly not true representation of Child guidance clinic, the findings may not be generalized.

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**Conflict of Interest:** None.

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