# Morbidity Pattern in Psychiatry Ward in a Tertiary Care Hospital

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#### Abstract

#### Introduction:

Worldwide mental health conditions are in increasing trend. South Asian countries report the highest prevalence of common mental disorders globally, which accounts for 8.8% to 16.6% of the total burden of disease. In Nepal, the prevalence of mental disorders among adults and children is 13.2% and 11.2%, respectively. In Nepal, there is limited data on the pattern of morbidity in inpatient psychiatric wards. Hence, the need is felt to carry out this study to monitor the psychiatric morbidity patterns of patients admitted to the psychiatric ward.

#### Method and Methodology:

This is a retrospective, cross- sectional study conducted in Kist Medical College. After ethical approval from Institutional Review committee, the data of all patients admitted to Psychiatry Ward of Kist Medical College Teaching Hospital from 14 th April, 2022 to 13 th April, 2023 were collected from Record section. We used ICD-10 and CDDG criteria for the diagnosis of mental and behavioral disorders. Data was analyzed using SPSS version 16.

#### **Results:**

Out of 285 patients 70.40% patients belonged to age group 25-54 years .The mean age with standard deviation was 55.4±72.3 years. Most of the patients were Male (72.60%) and Janajati (44.80%). The most common diagnosis was Alcohol Dependence Syndrome. The duration of hospital stay of most (46.90%) of the patient was 1-2 weeks.

#### **Conclusion:**

The most common diagnosis for which admission was made in Kist Medical College was Alcohol Dependence Syndrome. This indicate that the alcohol related disorder may have important implications for care and planning in the community. The overall outcome was satisfactory.

### **INTRODUCTION**

Worldwide mental health conditions are in increasing trend. South Asian countries report the highest prevalence of common mental disorders globally, which accounts for 8.8% to 16.6% of the total burden of disease.<sup>1</sup> According to the WHO report, 1 in every 8 people around the world were living with a mental disorder in 2019. However, in 2020, the number of people living with anxiety and depressive disorders rose significantly because of the COVID-19 pandemic.<sup>2</sup> Mental health conditions now cause 1 in 5 years of disability. It is a known fact that mental health conditions cause a significant source of disability and social burden in terms of poor school or work performance, relationships with family

and friends, and the ability to participate in the community. So, it is crucial to recognize the importance of mental health issues to reduce the disease burden.

In the context of Nepal, the prevalence of mental disorders among adults and children is 13.2% and 11.2%, respectively. <sup>3</sup> Surprisingly, according to Health Research and Social Development Forum 2016, the gap between the treatment and the estimated magnitude of the mental health problem is 85%.

Psychiatric services in Nepal started almost 50 years ago. Inpatient psychiatric services are being provided mainly in the psychiatric units of medical colleges, university hospitals and some private hospitals. A report from a recent study of 2015 has stated that the total of 1.5 beds per 100,000 population, which is not adequate to meet the demand for increasing psychiatric illnesses.<sup>4</sup> In Nepal, there is limited data on the pattern of morbidity in inpatient psychiatric wards. Hence, the need is felt to carry out this study to monitor the psychiatric morbidity patterns of patients admitted to the ward to better plan and provide better services.

### **MATERIAL AND METHODS**

This is a retrospective, cross-sectional study conducted at Kist Medical College, Imadole, Lalitpur. Kist Medical College is a tertiary referral center in the Kathmandu Valley. The psychiatric department of this medical college provides inpatient (20-bed) outpatient, 24-hour emergency services, and consultation liaison services.

After ethical approval from the Institutional Review Committee, the data of all patients admitted to the Psychiatry Ward of Kist Medical College Teaching Hospital from April 14, 2022, to April 13, 2023, were collected from the Medical Record section using all precautions to conceal any identity of the patients. The psychiatric diagnoses of all admitted patients were made according to ICD-10 and CDDG criteria by consultant psychiatrists after detailed work. Data were entered into MS Excel, cleaned, and processed for analysis using SPSS version 16. There were a total of 285 admissions during the study periods.

## RESULTS

Table 1: Distribution of subjects according tosocio-Demographic characteristics (n=285)

Characterstics	Categories	Frequency	Percentage (%)
Age	0-14	1	0.35
	15-24	57	20.5
	25-54	195	68.42
	55-64	25	8.80
	65 and above	7	2.45
Sex	Male	205	71.93
	Female	80	28.07
Caste	Chhetri	39	13.68
	Brahamin	71	24.91
	Janajati	124	42.50
	Madhesi	22	7.71
	Others	29	10.17

A total of 285 patients were included. Majority of the patients were in the age group of within the 25-54 years (n=195, 70.40%) followed by the age group of 15-24 years

(n=57, 20%).The mean age with standard deviation was 55.4±72.3. Male patients outnumbered females (71.93%% vs. 28.07%). Majority of the patients were Janjati (n=124, 43.50%) followed by Brahmin (n=71, 24.91%) and Chhetri

#### Table 2: Distribution of subjects by diagnosis (n=285)

(n=39, 13.68%) by caste.

Diagnosis	Frequency	Percentage (%)
Alcohol Dependence syndrome	124	43.51
Opioid Dependence syndrome	7	2.45
Multiple substance dependence	5	1.75
Bipolar affective Disorder	64	22.46
Major Depressive disorder	15	5.26
Acute and transient psychotic disorder	23	8.07
Schizophrenia	13	4.56
Psychosis not otherwise specified	9	3.16
Schizoaffective disorder	10	3.50
Anxiety disorder	8	2.80
Dissociative disorder	6	2.10
Temporal lobe epilepsy	1	0.35

Alcohol dependence syndrome was the most common diagnosis (n=124, 43.51%), followed by Bipolar Affective Disorder (n=64, 22.46%) and Acute and Transient Psychotic Disorder (n=23, 8.07%).

# Table 3: Distribution of the subjects by clinicalCharacteristics (n=285)

Characteristics	Categories	Frequency	Percentage (%)
Length of stay	< 1 week	107	37.54
	1-2 weeks	127	44.60
	>2 weeks	51	17.90
Outcome	Improved	250	87.71
	LAMA	28	9.82
	Referred	2	0.70
	Transfer out to SICU	5	1.74

The length of the stay of majority of the patients were 1-2 weeks (n=127, 44.60%) followed by < 1 week (n=107, 37.54%).

This study revealed that two hundred fifty patients (87.71%) were discharged in improved condition. 28% left against medical advice

### DISCUSSION

Overall findings from this retrospective, cross-sectional study provide some descriptive insight into morbidity patterns in psychiatric wards inside Kathmandu Valley as the hospital caters the patient residing nearby.

In our study, most of the patients belonged to the age group of 25–54 years (n = 195, 70.40%), followed by the age group of 15-24 years (n = 57, 20%). This finding is consistent with the study conducted in the eastern part of Nepal, which revealed the majority of the admitted patients in the psychiatric ward were in the age group of 20–59 years.<sup>5</sup> We have found that male subjects outnumbered female subjects by almost triple, which might be due to the existing gender bias in Nepalese society, where male problems are paid more attention by family members. This finding is in accordance with different studies from Asian countries, where the majority of the patients were male. 5,6 This finding also keeps parallel with the study by Addisu F. et al. from Ethiopia, where 58.3% of the subjects were male7. However, these findings are not consistent with the study from Hong Kong, where the majority of subjects were female (53.7%).8

The ethnicity distribution of this study revealed that the most predominant cast was Janajati (43.50%), followed by Brahmin (24.91%). This might be because of the presence of a large population of these ethnic groups in the proximity of this study site.

By diagnosis distribution, our sample showed the most common diagnosis was Alcohol Dependence Syndrome (43.51%), followed by Bipolar Affective Disorder (22.46%), and Acute and Transient Psychotic Disorder (8.07%). This finding is in accordance with another study, which reported that the most common diagnosis was Alcohol dependence syndrome (34.04%).<sup>9</sup> We believe that the reason the majority of patients with substance dependence sought help could be because of the high level of social and occupational dysfunction in individuals with substance dependence and could also be explained due to the seasonality and prevalence of substance use in the region, which can influence psychiatric admission patterns. However, this study is in contrast with other studies from Europe, India, and Nepal, where the most common diagnoses were psychosis and mood disorders, respectively.<sup>10,11,5</sup> The lower prevalence of neurotic spectrum disorder in the present study could be due to the fact that these disorders are treated mostly in outpatient settings, and in our study we

have included only inpatients.

In this study, for the majority of the patients, the duration of hospital stay was 1-2 weeks, and the median duration of hospital stay was 12 days, which is quite similar to other studies.<sup>12,13,14,15</sup> This reflects the trend toward shorter admissions and higher turnover. However, the current study is not consistent with the study from Ethiopia, where the median length of the inpatient stay was 22 days. 7

# LIMITATION

Seasonal variations of illness may also have an impact in the data which we did not examine. We also did not examine the correlation between the length of the stay and the diagnosis per se. Our study is from a single center so the findings may not represent the whole tertiary level hospitals inside Kathmandu valley.

# CONCLUSIONS

The most common diagnosis for which admission was made in Kist Medical College was Alcohol Dependence Syndrome followed by Bipolar Affective Disorder. The abundance of alcohol related disorder may have important implications for care and planning in the community. The overall outcome was satisfactory. Majority of the patients were discharged in improved state.

### CONFLICT OF INTEREST: None

# SOURCE OF SUPPORT:

None

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