# Psychiatric morbidities and socio-demographic profile of patients attending psychiatric OPD in far western region of Nepal

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## Abstract

### Introduction

Majority of the studies are conducted in urban communities of Nepal and there is a paucity of information about the psychiatric cases in rural communities. The present work was undertaken to study the psychiatric morbidities and socio-demographic profile of patients presenting at Psychiatric OPD in three different district hospitals of Far western region of Nepal.

### Methodology

A quantitative descriptive cross-sectional study was conducted in three hospitals namely Baitadi District Hospital, Bajhang District Hospital and Dadeldhura District Hospital of the far western region of Nepal. All new patients reporting to psychiatric OPD from April 2020-May 2023 A.D formed the study population and the follow up cases were excluded from the study. ICD 10 (DCR) was used for diagnosis and verified by two consultant psychiatrists and analyzed using SPSS version 20.

### Results

Out of total 932 respondents enrolled in this study, slight preponderance of male (52.3%) was observed. Majority of the respondents (67.4%) were married. Anxiety disorders (27.6%) emerged as largest group followed by depression (14.6%). Other commonly diagnosed cases were psychotic disorders (11.8%), somatoform disorders (10.6%), primary headache (8.8%), alcohol dependence syndrome (6.4%) and epilepsy (4.7%). Majority of the respondents were from Dadeldhura (52.1%) followed by Bajhang (24.3%). 14.6% of the respondents had family history of mental disorders, and 14.8% had one or more comorbidities.

### Conclusion

The study concludes that there is high proportion of psychiatric morbidities in rural hospitals of Nepal. This also calls the need to strengthen the mental health services in the rural community and to address the psychiatric cases.

### Key Words

District, Far-western region Nepal, Psychiatric morbidities

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## INTRODUCTION

Globally, mental health problems are a serious public health concern accounting for 7.4% of disability adjusted life years (DALY).[1] Neuro-psychiatric disorders are estimated to contribute 11.0% of the global burden of disease in Nepal as per WHO. It is estimated that four out of five people with mental illness in Low and Middle Income Countries (LMIC) receive no effective treatment and mental health is often one of the lowest health priorities in those settings.[2,3] One of the major barriers to scaling up mental health services in LMIC is the scarcity and unequal distribution of specialist mental health professionals.[4] The median number of psychiatrists per 100,000 population in LMIC is 0.05 whereas this number is 8.59 in high-income countries. There is estimated to be a shortage of 1.18 million mental health workers in LMICs alone.[4] Mental health services are concentrated in the big cities, with 0.22 psychiatrists and 0.06 psychologists per 100,000 population.[2,4]

Psychiatric disorders are common but many of them are unrecognized and under treatment due to various reasons. National Mental Health Survey 2020 of Nepal revealed that 10% of the adults and 5.2% of the adolescents were found to have any mental disorder in their life time. Major depressive disorder was found to be prevalent among 2.9% of adults and 0.6% of the adolescents. Alcohol use disorder

and other substance use disorder were found to be prevalent among 4.2% in adults whereas in adolescents it was found to be prevalent among 0.6%. Neurotic and Stress related disorders among adult participants was 3%.[5]

A study among 4,761 new cases attending mental health services in different parts of Nepal (Bajhang, Dadheldhura, Doti, Achham, Surkhet, Dailekh, Salyan, Rolpa, Dhadhing, Okhaldhunga, Morang, Ilam and Palpa) revealed higher morbidity among males (59%) than females (41%) of which anxiety neurosis emerged as the most common (50%) followed by depression (24.88%).[6]

In Sudurpaschim province life time prevalence of any mental health disorders was found to be 3.9% among adolescents and 9.5% among adults.[5] The prevalence of current mental disorders was highest among the adult in Bagmati province (5.9%), among 40-49 years of age (6.3%) and among females (5.1%).[5]

Worldwide the psychiatric cases are prevalent among rural communities.[6] However, researches in psychiatric morbidities in context of Nepal are not well documented. Hence, this study was undertaken to analyze the pattern of psychiatric morbidities and socio demographic profile of the patients attending Psychiatric OPD of district hospitals of far western region of Nepal.

Methodology A quantitative descriptive cross-sectional study was conducted in Baitadi District Hospital, Bajhang District Hospital and Dadeldhura District Hospital presenting in Psychiatric OPD of far western region of Nepal. Data were collected from April 2020- May 2023AD. The study populations were the patient presenting at Psychiatric OPD. Written informed consent was taken from the patient and from the parents in case of child. A convenient sampling technique was used for this study. Diagnosis was made according to ICD-10 (DCR) and verified by two consultant psychiatrists. Inclusion criteria included the patients presented at Psychiatry OPD and willing to participate in the study. Exclusion criteria includes all follow up cases. Socio-demographic factors being independent variables and psychiatric morbidities being dependent variables. Descriptive statistics was made to assess the objectives using SPSS version 20.

# RESULTS

**Personal variables**

Out of the 932 respondents enrolled in this study, the mean age of the subjects is 32.2± 5.99 years. Majority were male (52.3%) and married (67.4%). Most of the respondents were farmers by occupation (59.4%) and more than half (57%) were Chettri by caste. Majority of the respondents were from Dadeldhura (52.1%) followed by Bajhang (24.3%) and Baitadi (16.5%). Most of the respondents have completed Proficiency Certificate level (63.4%).

**Tabel 1. Distribution of the cases according to age (n=932)**

| Age group | Frequency(n) | Percent |
|---|---|---|
| 0-10 | 8 | 0.9% |
| 11-20 | 113 | 12.2% |
| 21-30 | 234 | 25.1% |
| 31-40 | 303 | 32.4% |
| 41-50 | 138 | 14.9% |
| 51-60 | 66 | 7.1% |
| 61-70 | 35 | 3.6% |
| 71-80 | 24 | 2.6% |
| 81-90 | 11 | 1.2% |
| Total | 932 | 100% |

**Table 2. Distribution of sample according to Sex (n=932)**

| Sex | Frequency(n) | Percent |
|---|---|---|
| Male | 487 | 52.3% |
| Female | 445 | 47.7% |
| Total | 932 | 100% |

**Table 3. Distribution of cases according to Marital status (n=932)**

| Marital status | Frequency(n) | Percent |
|---|---|---|
| Married | 628 | 67.4% |
| Unmarried | 300 | 32.2% |
| Divorced | 4 | 0.4% |
| Total | 932 | 100% |

**Table 4. Distribution of cases according to caste (n=932)**

| Caste | Frequency(n) | Percent |
|---|---|---|
| Chettri | 487 | 52.3% |
| Brahmin | 342 | 36.7% |
| Dalit | 64 | 6.9% |
| Others | 39 | 4.1% |
| Total | 932 | 100% |

**Table 5. Distribution of the respondents according to residence (n=932)**

| District | Frequency(n) | Percent |
|---|---|---|
| Dadeldhura | 486 | 52.1% |
| Bajhang | 227 | 24.3% |
| Baitadi | 154 | 16.5% |
| Others | 65 | 7% |
| Total | 932 | 100% |

**Table 6. Distribution of the sample according to occupation (n=932)**

| Occupation | Frequency(n) | Percent |
|---|---|---|
| Farmers | 551 | 59.4% |
| Students | 216 | 23.2% |
| Unemployed | 127 | 13.7% |
| Business | 38 | 4.1% |
| Total | 932 | 100% |

**Psychiatric Morbidities**

Among the 932 respondents, 27.6% (N=257) were diagnosed of anxiety disorders. Beside anxiety disorders the second most common diagnosis was depressive disorder 14.6% (N=136) followed by psychotic disorders 11.8% (N=110), somatoform disorders 10.6% (N=99), primary headache in 82 respondents (8.8%) and alcohol dependence syndrome (6.4%).

**Table 7. Diagnosis profile of Respondents as per IC10 (DCR) (n=932)occupation (n=932)**

| Diagnosis | Frequency(n) | Percent |
|---|---|---|
| Anxiety disorders F40-41 | 257 | 27.6% |
| Depressive episode F32 | 136 | 14.6% |
| Psychotic disorders F20-29 | 110 | 11.8% |
| Somatoform disorders F45 | 99 | 10.6% |
| Migraine and other headache syndromes G43-44 | 82 | 8.8% |
| Alcohol use disorder F10 | 65 | 6.4% |
| Bipolar Affective Disorder /Manic episode F30-31 | 39 | 4.2% |
| Seizure disorders G40-G41 | 44 | 4.7% |
| Childhood Mental disorders F70-F79, F80-F89, F90-F98 | 35 | 3.8% |
| Other mental disorders due to brain damage and dysfunction to physical disease F06 | 17 | 1.8% |
| Others | 39 | 4.2% |
| Total | 932 | 100 |

# DISCUSSION

In our study the mean age of onset is 32.2± 5.99 years. Maximum cases were reported above the age of 30 years in the current study. This is in accordance with the most of the studies which showed the mean age in the range 31-40 years.[5,6]

Present study showed out of total 932 attended in the OPD, a slight male preponderance (52.3%) was noted which is consistent with the findings from these studies.[7-9] It might reflect upon the gender bias in psychiatric help seeking. Under reporting of mental disorders among females may be linked to the inferior social position, social stigma, problems with marriage. However in other studies most of the subject were females.[7,10-12]

Married people have a higher rate of psychiatric cases than unmarried group (32.6%) in the current sample and 35.0% have completed Proficiency certificate level in education. Several studies conducted in Nepal had shown similar results.[7,8,10,13] The meta-analysis done in India also found higher prevalence of psychiatric illness in married person than single.[13]

In our study, Anxiety disorders being largest constitutes (27.6%), followed by depressive episode (14.6%), psychotic disorders (11.8%), somatoform disorders (10.6%), primary headache (8.8%), alcohol dependence syndrome (6.4%) and epilepsy (4.7%). Study conducted by Shrestha M et al in Nepal found similar results with neurotic stress related and somatoform disorders (38.1%) followed by anxiety disorders (26.3%), depressive episode (15.3%), somatoform disorders (10%), primary headache (9.4%), schizophrenia (6.3%), alcohol dependence (4.5%) and epilepsy (3.9%).[8]

A study on "A mental health prevalence survey in two developing towns of western region" Nepal showed that most of the participants were those who were suffering from neurotic, stress-related and somatoform disorders (23.45%), followed by the mood disorders (18.75%), headache (14.07%), schizophrenia, schizotypal, delusional disorders (11.72%) and mental and behavioral disorders due to use of psychoactive substance (11.72%).[10]

Similar study conducted in other parts of Nepal showed most of the service seekers were suffering from neurotic, stress-related and somatoform disorders (35.4%), followed by the patients suffering from mood disorders (18.3%), schizophrenia, schizotypal and delusional disorders (17.4%) and mental and behavioral disorders due to use of psychoactive substance (9.7%).[11]

Another cross sectional study done by Singh GP in rural areas of India found that psychotic disorders comprises (9.6%), alcohol dependence (8.1%), migraine (4.6%) and epilepsy (3.9%).14 Our study had shown psychotic disorder comprised of (11.8%), alcohol dependence syndrome (6.4%), migraine (8.8%), and epilepsy (4.7%). Similar findings has been found in the study done by Dube et al conducted at the rural hospital of Uttar Pradesh showed

(44%) of the respondents were suffering from neurotic and stress related disorders and schizophrenia (9.15%).[13] Similarly a study done in Nepal showed neurotic, stress related and somatoform disorder form major group consisting (24.2%), followed by mood disorders (29%) and psychotic disorder (10.5%).9 Similar results is found in study done at Nobel medical college.[15]

A study in Isaac et al on "Mental health delivery through rural primary healthcare developments" found the prevalence of schizophrenia 11% [16] which is similar to our study (11.8%). Others study conducted in various part of world [11,12] had shown different prevalence of psychosis which might me due to lack of awareness, superstitious, difficult to bring patient to health care due to the aggressive behavior, lack of mental health facilities than other studied.

Our study had shown anxiety disorders were most common followed by depression and psychosis. Various studies had shown similar results.[8,9,11,13] Most of the studies have shown anxiety is the most common mental health disorders. It is also likely that with increasing awareness more patients with neurotic and other minor mental disorders will report for treatment. The anxiety symptoms are associated with significant distress including concern about implication and consequences and are, therefore, more likely to come for treatment.

Other study conducted in various part of Nepal had shown varying prevalence of mental health disorders. The largest number of psychiatric disorders in OPD was depressive disorder (46.96 %), followed by somatoform disorder (10.75%), bipolar affective disorder (10.17%), anxiety disorders (3.9 %) and psychosis (3.33%).[17] Similarly in other study conducted in Nepal had shown depressive disorder as a most common (33.45 %) followed by tension/migraine headache (15.33%), schizophrenia (5.92 %), anxiety disorder (5.57 %) and somatoform disorder (5.57 %). [18]

Few studies on mental illness have been carried in Nepal however diagnostic profile is different among studies.[6,17-19] A study done by Arora M. et al showed most patients have epilepsy (32%), psychosis (25%) and depression 13%.[20] All those inconsistencies may be because of the difference in methods, methodology used and the setup.

## CONCLUSION

Majority of the respondents were diagnosed to have anxiety disorders which were followed by depressive episode, psychosis and somatoform disorders. The study concludes that there is a high proportion of psychiatric cases in the district hospitals of far western region of Nepal and majority of respondents being the age above 30 years, males and married population.

## IMPLICATION

In Nepal, large-scale systematic community based psychiatric morbidity surveys are conspicuous. Depending upon the findings of this study, the planning of an adequate mental health program in rural settings of Nepal should be regarded as a national priority. This also emphasizes the need for extending the mental health services into the rural areas in order to reach in the unreached population by justifying the allocation of resources for mental health prevention and promotion programs. This shall pave the way for policymakers and planners to design state-specific plans for dealing with mental disorders and related issues.

## LIMITATION

This study is carried out in an OPD setting in a District Hospitals of far western part of Nepal. Owing to the different socio and cultural parameters, the findings of this study might not likely to be generalized throughout the country. In addition the study is conducted only at Hospitals so the findings cannot be generalized to whole communities.

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