Pattern of psychiatric referral in a tertiary care hospital

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Abstract

Introduction:

Global mental health challenges persist amidst a rising trend of patients seeking consultations with non-psychiatric specialists, driven by stigma and a lack of awareness. This study aims to study the demographic profile of patients referred to the Department of Psychiatry and Mental Health from other departments, referral sources, prevalent psychiatric disorders, and explores potential associations with co-existing physical conditions.

Methods:

A six-month descriptive cross-sectional study (October 2022 to March 2023) was done at Birat Medical College Teaching Hospital using total enumeration sampling method. Patients referred to Psychiatry were assessed using the International Classification of Diseases, Tenth Revision, Diagnostic Criteria for Research (ICD-10 DCR). Data were analyzed with SPSS version 25, utilizing mean, standard deviation for continuous data, and frequency, percentage for categorical data. Odds ratios were computed for associations.

Results:

Among 160 patients, the majority were male (55%), Hindu (90%), married (78.1%), and educated up to secondary level. Department of Medicine accounted for the highest referrals (50%) primarily for fearfulness (21.3%). Neurotic, stress-related and somatoform disorders were most common (33.1%), followed by mood disorders (28.8%). No significant association was found between psychiatric disorders and physical illnesses.

Conclusion:

The Department of Medicine was the most common referring department, with neurotic stress-related and somatoform disorders being the prevalent diagnosis. Referral to Psychiatry facilitates early recognition and treatment of undiagnosed psychiatric conditions, advocating for routine practice among non-psychiatric specialists. Future research should target barriers and interventions to improve psychiatric service utilization in Consultation-Liaison Psychiatry settings.

Keywords:
Psychiatric referral, Co-morbidities, Liaison Psychiatry

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INTRODUCTION

In the modern world, mental health issues are the most important public health concerns. The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity."[1] Inclusion of mental health in the definition of health has emphasized its importance. However, in many underdeveloped countries, psychiatric disorders are not regarded as life threatening and aren't given priority. As a result, the burden of mental health issues has been increasing globally. [2, 3] It is well known that psycho-social factors influence etiopathogenesis and prognosis of many chronic illnesses like diabetes, HTN, ischaemic heart disease and cancer. Life time prevalence of mental illness in these chronic conditions is estimated to be over 40%. The most common psychiatric diagnosis in physically ill patient is depression and anxiety. Early recognition and treatment of these conditions decreases cost and improves outcome of illness.[4] However, there is trend to visit other specialist doctors before psychiatrists due to the stigma and unawareness of the nature of psychiatric symptoms.[5-7]

The stigma associated with psychiatric disorders has been decreasing due to establishment of independent psychiatric unit in many medical colleges and general hospital. This enhances multidisciplinary approach and allows direct interaction of psychiatrists with physically ill patient. Also, increasing the number of referrals from non-psychiatry departments has led to comprehensive evaluation and management of psychiatric morbidities in physically ill patients. Inspite of its importance, there is not much focus given on this part of psychiatry. From the various published data, it is found that consultation model is followed during referral across different centres, where qualified psychiatrists evaluate the patients who are referred to them by other specialist doctors. This consultation model is followed in both inpatient and outpatient settings.[8] As per studies, the referral rates for inpatient varies from 0.01 % to 3.6%, for emergency setup varies from 1.4% to 5.4% and for outpatients the referral rate varies from 0.06% to 7.17% . [9]

Though psychiatric services are available in almost all teaching hospitals in Nepal, very little is known about the pattern of referral from other department. Literature on the pattern of psychiatric referral is scarce in our setting. None of the available studies have focused on the association of psychiatric disorders and physical illnesses.[10-4]. Lack of awareness regarding coexistence of psychological and somatic symptoms leads to longer hospital stay, poor outcome and increase in treatment cost. Awareness and acknowledgement of psychiatric aspect of disease increases psychiatric referral, which not only recognizes the psychiatric morbidities but also improves awareness towards the discipline of psychiatry.[15]

Considering this background, this study aims to study the profile of patients referred to the Department of Psychiatry and Mental Health from other departments, to identify source of referral and psychiatric disorders in referred patients and to find the association between psychiatric disorders and other physical illness.

OBJECTIVES

1. To assess the profile of the patients referred to the Department of Psychiatry and Mental Health in Birat Medical College Teaching Hospital.
2. To identify the source of referral and different psychiatric disorders present in referred and physically ill patient.
3. To find the association between psychiatric disorders and other physical illnesses.

METHODS

Inclusion Criteria:

All patients referred to Department of Psychiatry and Mental Health

Exclusion Criteria:

Patient refusing to give consent

Patient leaving against medical advice before assessment

All patients referred to the Department of Psychiatry and Mental Health in Birat Medical Teaching Hospital (both in-patient and outpatient) were enrolled during the study period from October 2022 to March 2023. Study was carried out after obtaining ethical clearance from Institutional Review Committee of Birat Medical College Teaching Hospital. Details on socio-demographic profile (age, sex, marital status, religion, level of education), source of referral and reason for referral were recorded in a semi-structured proforma. The patients were interviewed and evaluated for the presence or absence of any psychiatric disorder according to International Classification of Diseases, Tenth Revision, Diagnositic Criteria for Research (ICD-10 DCR) by the Psychiatrist. The confidentiality of the information gathered was maintained. Collected data was analyzed using SPSS version 25. Continuous data was analyzed using mean and standard deviation whereas categorical data was analyzed using frequency and percentage. Odds ratio were calculated to explore relationship between different psychiatric disorders and co-morbidities. Binary logistic regression was performed to calculate odds ratio. 95% CI were estimated for odds ratio.

RESULT

The total of 160 referred patients (both in-patients and outpatients) participated in our study. The patients had an average age of 39.2 years, with a range of 12 to 90 years. Majority of the patients belonged to age group 30-39 years as indicated in Table 1.

Table 1: Age distribution of the referred patients

Age group	Frequency (n)	Percentage (%)
10-19	17	10.6
20-29	30	18.8
30-39	40	25
40-49	33	20.6
50-59	18	11.3
60-69	15	9.4
70-79	5	3.1
80-89	1	0.6
90-99	1	0.6

Majorities of the referred patients were male (55%), and identified as Hindu (90%). Furthermore, the study found that 78.1% of the referred patients were married, while 46.3% had an education level up to the secondary level as indicated in Table 2.

Table 2: Socio-demographic characteristics of the referred patients

Sex	Frequency (n)	Percentage (%)
Male	88	55
Female	72	45
Marital status		
Married	125	78.1
Unmarried	35	21.9
Religion		
Hindu	144	90
Muslim	14	8.1
Buddhist	2	1.9
Education		
Illiterate	27	16.9
Primary	25	15.6
Secondary	74	46.3
Graduate	31	19.4
Postgraduate	3	1.9

Table 3 presents the distribution of psychiatric patients across various referring departments. The Medicine department accounted for the highest number of referrals (50%), followed by Surgery (7.5%), Orthopaedics (6.3%) and Urology (6.3%).

Table 3: Referring departments for Psychiatric patients

	Frequency (n)	Percentage (%)
Medicine	80	50
Surgery	12	7.5
Urology	10	6.3
Orthopaedics	10	6.3
Dermatology	7	4.4
Paediatrics	7	4.4
ENT	6	3.8
Cardiology	6	3.8
Gynaecology	6	3.8
Neuromedicine	6	3.7
Nephrology	4	2.5
Neurosurgery	4	2.5
Oncology	1	0.6
Dental surgery	1	0.6
Total	**160**	**100**

Table 4 highlights the reasons for referral to the Department of Psychiatry. Fearfulness was the most common reason (21.3%), followed by known case of mental illness (15%) and disturbed sleep (10.6%).

Table 4: Reason for referral of patients

	Frequency (n)	Percentage (%)
Fearfulness	34	21.3
Known case of mental illness	24	15
Disturbed sleep	17	10.6
Others	16	10
Substance use	14	8.8
Sadness	9	5.6
Abnormal Behaviour	8	5
Headache	8	5
Multiple complains	7	4.4
Poisoning	6	3.8
Non specific Pain	6	3.8
Disorientation	3	1.9
Hanging	2	1.3
Irritability	2	1.2
Erectile dysfunction	1	0.6
Chest pain	1	0.6
Irrelevant talk	1	0.6
Suicidal thought	1	0.6
Total	**160**	**100**

Table 5 outlines the psychiatric diagnoses among the referred patients. Neurotic stress-related and somatoform disorders were the most prevalent (33.1%), followed by Mood disorders (28.8%).

Table 5: Psychiatric diagnosis of referred patients

	Frequency (n)	Percentage (%)
Neurotic stress related and somatoform d/o	53	33.1
Mood disorder	46	28.8
Mental and behavioral disorders due to substance use	18	11.3
Diagnosis deferred	13	8.1
Organic including symptomatic mental d/o	12	7.5
Schizophrenia, Schizotypal and delusional disorder	7	4.4
Behavioral syndrome associated with physiological disturbance and physical factors	7	4.4
Others	4	2.5
Total	**160**	**100**

Table 6 examines co-morbidities among the referred patients. 49.4% referred patients had some co-morbidities. Among those with co-morbidities, endocrinological conditions were the most common (16.3%) , followed by others which included conditions like Alopecia areata, Hansen's disease, Oral submucus fibrosis, sensorineural hearing loss and fractured limb (11.03%). 7.5% of the referred patients had multiple co-morbid conditions present together like Diabetes Mellitus, hypertension, hypothyroidism, hyperlipidemia, Urinary tract infection, Chronic kidney disease, Benign prostatic Hyperplasia.

Table 7 provides insight into the co-morbidities associated with different psychiatric disorders. There was no significant association between different psychiatric disorders

and co morbidities of referred patients as indicated in Table 8.

Table 6: Co-morbidities of referred patients

	Frequency (n)	Percentage (%)
No co-morbidities	81	50.6
Endocrinology	26	16.3
Others	18	11.03
Multiple	12	7.5
Gastrointestinal	9	5.6
Cardiovascular	9	5.6
Respiratory	3	1.9
Renal	1	0.6
Hematological	1	0.6
Total	**160**	**100**

Table 8: Association between psychiatric disorders and medical co-morbidities

Psychiatric disorders	n	OR	95% CI	p-value
Neurotic Stress related and somatoform d/o	53	0.782	0.404 -1.515	0.467
Mood disorder	46	1.694	0.847 -3.388	0.136
Mental and behavioral disorder due to				
Substance use	18	0.800	0.298-2.145	0.657
Diagnosis differed	13	0.617	0.193 -1.973	0.415
Organic including Symptomatic mental d/o	12	3.343	0.870-12.842	0.079
Schizophrenia, Schizotypal and delusional disorder	7	0.395	0.074-2.098	0.275
Behavioral syndrome associated with physiological disturbance and physical factors	7	1.387	0.300 - 6.405	0.675
CI: Confidence Interval; OR: Odds Ratio				

Table 7: Distribution of co-morbidities among patients with different psychiatric disorders

	Behavioral syndrome associated with physiological disturbance and physical factors	Diagnosis differed	Mental and behavioral disorder due to Substance use	Mood disorder	Neurotic Stress related and somatoform d/o	Organic including Symptomatic mental d/o	Others	Schizophrenia, Schizotypal and delusional disorder
Cardiovascular	0	1 (7.7%)	1 (5.6%)	4 (8.7%)	2 (3.8%)	0	0	1 (14.3%)
Endocrinology	2 (28.6%)	3 (23.1%)	2 (11.1%)	10 (21.7%)	8 (15.1%)	1 (8.3%)	0	0
Gastrointestinal	0	0	2 (11.1%)	4 (8.7%)	3 (5.7%)	0	0	0
Hematological	0	0	0	1 (2.2%)	0	0	0	0
Renal	0	0	0	1 (2.2%)	0	0	0	0
Respiratory	0	0	0	2 (4.3%)	1 (1.9%)	0	0	0
Multiple	0	0	1 (5.6%)	2 (4.3%)	4 (7.5%)	5 (41.7%)	0	0
Others	2 (28.6%)	1 (7.7%)	2 (11.1%)	3 (6.5%)	6 (11.3%)	3 (25%)	0	1 (14.3%)
None	3 (42.9%)	8 (61.5%)	10 (55.6%)	19 (41.3%)	29 (54.7%)	3 (25%)	4 (100%)	5 (71.4%)
Total	7 (100%)	13 (100%)	18 (100%)	46 (100%)	53 (100%)	12 (100%)	4 (100%)	7 (100%)

DISCUSSION

A total of 160 patients (both in-patients and out patients) were referred to the Department of Psychiatry and Mental Health during the study period. In our study maximum patients belonged to age group 30-39 years with the mean age of 39.2 years. The finding was consistent with the study done by Keertish N and Brown A.[16,17] This reflects that middle aged people tend to have lot of stress in their life and they visit non psychiatrist doctors first and get referred.[18]

In our study Department of Medicine contributed to maximum referrals to psychiatry (50%). This finding was similar to previous studies which have shown that 51.1% and 54.3% of cases were referred to the Department of Psychiatry from Department of Medicine.[19,20] The reason could be because the patient with complain of fearfulness, multiple somatic complains and known case of mental illness, who formed a majority of referred patient sample in the present study were also managed in the Department of Medicine. The most common psychiatric diagnosis in referred patients was neurotic, stress related and somatoform disorder similar to findings in other studies.[21,22] The reason could be because this category includes psychiatric conditions which are common in our settings like panic disorder, generalized anxiety disorder, adjustment disorders and somatoform disorders.[23] The common reason for referral in these patients were fearfulness, known case of mental illness, disturbed sleep which is different from other studies.10,13 The difference could be due to variations in the patient demographics, cultural and geographic factors that influences the symptoms in psychiatry.

It is well known that in comparison to general population, those with chronic physical conditions tend to have high psychiatric comorbidities.[24, 25] Various studies have found that 70% of psychiatric patients had co-morbid physical illness.[26, 27] The most common co-morbid physical illness in patient with psychiatric disorders include cardiovascular illness, diabetes, metabolic syndrome and problems related to obesity.[28] Similar finding was seen in another study where the most common co-morbid conditions were cardiovascular (40.8%), infections (30.8%) followed by neurological (13%) and endocrine (5.4%).[29] In contrast to this, findings from our study revealed that 49.4% of referred patients had co-morbid physical conditions and endocrinological disorders were the most common co-morbid physical condition (16.3%). The difference could be because of less sample size in our study. This reflects the current epidemiological transition towards non-communicable disease.

CONCLUSION

This study sheds light on the critical role of liaison psychiatry within the framework of a tertiary care center. Maximum referrals from the Department of Medicine highlight the importance of a collaborative approach to healthcare that acknowledges the interconnectedness of physical and mental health. Neurotic, stress related and somatoform disorder being the most common psychiatric diagnosis of refereed patient emphasizes on the wide range of symptoms exhibited by psychiatric patients and need for comprehensive assessment and personalized treatment approach. Liaison psychiatry not only facilitates early identification and intervention for patients experiencing psychiatric symptoms but also ensures a holistic approach to healthcare that addresses both physical and mental well-being. Future studies are needed to identify barriers and guide interventions to improve psychiatric service utilization and address existing gaps in the Consultation-Liaison Psychiatry setting.

CONFLICT OF INTEREST

none

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