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Clinical and demographical profile of inpatient psychiatry referrals in a multispecialty teaching hospital

Abstract

Background: Research in consultation-liaison psychiatry is important clinically because of high incidence of coexistence of psychiatric and medical disorders in patients attending psychiatry and general healthcare systems. In contrast to west, research about liaison psychiatry in India has been minimal. Thus a study about understanding clinical and sociodemographic profile patterns of inpatient psychiatry referrals was undertaken to enhance our knowledge of this field. **Objective:** To describe the clinical and socio-demographic profile of inpatient psychiatry referrals in a multispecialty teaching hospital. **Materials and methods:** The study population comprised all consecutive inpatients who were referred for psychiatric consultation from other departments of a multispecialty teaching hospital over a period of six months. In a semi-structured proforma, socio-demographic profile of patients, referring departments, reason of referral, psychiatric diagnosis, and physical illness diagnosis were recorded and analysed using descriptive statistics. **Results:** A total of 356 patients were referred for psychiatric consultation, 55.9% were males and 44.1% were females. Majority of patients belonged to 20-40 years age group (37.9%). Department of medicine made majority of the psychiatric referrals (50.6%); commonest reason for referral was abnormal behaviour (30.9%), followed by suicidal/self-harm acts (17.9%), and past psychiatric history (10.9%). The most commonly diagnosed psychiatric disorders were delirium (17.9%), followed by organic psychosis/mood disorder (14.8%), substance related disorder (12.9%), and depression (12.9%). **Conclusion:** There is an urgent need for raising awareness among all physicians and medical staff regarding early recognition and prompt referral for psychiatric problems. Also further research is warranted, especially longitudinal studies with outcome variables and various clinical processes related to consultation-liaison psychiatry.

Keywords: Mental Disorders. Stigma. Agitation. General Hospitals. Subspecialty.

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Introduction

Consultation-liaison (C-L) psychiatry is an important subspecialty of psychiatry that has contributed significantly in general hospital psychiatry and has also reduced stigma associated with mental illness among the public as well within the medical professionals and establishments also. It has also led to changes in the medical education and in providing comprehensive management to the physically ill.[1]

There is high incidence of coexistence of psychiatric and medical disorders in patients attending psychiatry and general healthcare systems.[2,3] As many as 30-60% of hospital patients may have diagnosable psychiatric disorders.[4] When medical and psychiatric problems coexist in a patient, they usually lead to complicated assessments, increased healthcare costs, and less satisfactory outcome than in those without comorbidity.[5] In contrast to west, research in C-L psychiatry in India has been meagre and there is paucity of recent Indian data on pattern of inpatient psychiatry referrals in multispecialty hospitals. This study thus was undertaken with aim to describe the clinical and demographical profile of inpatient psychiatry referrals in a tertiary care multispecialty teaching hospital from India.

Materials and methods

It was a descriptive study and included all consecutive psychiatry referrals of inpatients admitted with other clinical departments, within a six-month study duration from October 2013 to March 2014 at Maulana Azad Medical College, New Delhi, India. A semi-structured proforma was constructed for the study which included demographic information, referring department, reason for referral, chief complaints, physical diagnosis, relevant past history of psychiatric illness, family history, substance use history, and psychiatric diagnosis.

The psychiatric diagnosis of the referred inpatients was made as per the tenth revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).[6] Ethical clearance was obtained from the institutional ethical committee of the hospital, and informed consent was obtained from all patients and or/relatives. The data obtained was analysed by using descriptive statistical methods.

Results

A total of 356 patients were referred for psychiatric consultation from various departments during the study period. Out of which 199 (55.9%) were males and 157 (44.1%) were females. Mean age of the patients was 38.67 years (SD 19.03), with a range of 11-92 years. Majority of patients belonged to 20-40 age group (n=135, 37.9%). The number of patients in age group below 20 years and above 60 years were 70 (19.7%) and 48 (13.5%) respectively. Rest of the demographic variables are tabulated in Table 1.

Referring department

Table 2 shows department wise number of psychiatric referrals. Majority of the referrals were made from the department of medicine (n=180, 50.6%). Other major sources of psychiatric referrals were departments of surgery (n=32, 8.9%) and orthopaedics (n=32, 8.9%).

Reasons for referral

Table 3 shows various reasons for which referral were called for. Most common reason cited was abnormal behaviour/agitation (n=110, 30.9%). Other common reasons were suicidal/self-harm acts (n=64, 17.9%), past psychiatric history (n=39, 10.9%), depression (n=36, 10.1%), and medically unexplained symptoms (n=32, 8.9%).

Psychiatric diagnosis

Table 4 shows distribution of various psychiatric diagnoses in the sample. The most common diagnosis was of delirium (n=64, 17.9%), followed by organic psychosis/mood disorder (n=53, 14.8%), substance related disorder (n=46, 12.9%), depression (n=46, 12.9%), and deliberate self-harm (n=28, 7.8%).

Physical diagnosis

Table 5 shows distribution of various physical (medical/surgical) diagnoses in the referred sample. As there were numerous diagnoses, they were grouped as per organ systems involved/aetiology. The most common group belonged to

Table 1: Demographic variables

Demographic variables	Frequency (n%)
Marital status	
Married	234 (65.7)
Single	122 (34.3)
Education	
Uneducated	71 (19.9)
Primary	78 (21.9)
High school	110 (30.9)
Intermediate	61 (17.2)
Graduation	36 (10.1)
Occupation	
Professional	20 (5.6)
Shop-owner/farmer	39 (10.9)
Skilled work	4 (1.1)
Semi-skilled work	47 (13.3)
Unskilled work	15 (4.2)
Unemployed/dependent	231 (64.9)
Background	
Urban	303 (85.1)
Rural	53 (14.9)
Family	
Nuclear	309 (86.8)
Joint	47 (13.2)
Religion	
Hindu	224 (62.9)
Muslim	117 (32.9)
Sikh	11 (3.1)
Christian	4 (1.1)

Table 2: Department wise distribution of referrals

Referring department	Frequency (n=356) (%)
Orthopaedics	32 (8.9)
Medicine	180 (50.6)
Surgery	32 (8.9)
Paediatrics	7 (1.9)
ENT	7 (1.9)
Dermatology	4 (1.1)
Burns and plastic surgery	11 (3.1)
Neurology	18 (5.1)
Neurosurgery	25 (7.0)
Cardiothoracic surgery	11 (3.1)
Gastrosurgery	11 (3.1)
Gynaecology and obstetrics	18 (5.1)

Table 3: Reasons for referral

Reason for referral	Frequency (n=356) (%)
Abnormal behaviour/agitation	110 (30.9)
Disorientation	14 (3.9)
Suicidal/self-harm act	64 (17.9)
Depression	36 (10.1)
Anxiety	18 (5.1)
Substance use	28 (7.9)
Unexplained symptoms	32 (8.9)
Past psychiatric history	39 (10.9)
Others	14 (3.9)

Table 4: Psychiatric diagnosis of referrals

Psychiatric diagnosis	Frequency (%)
No psychiatric diagnosis	18 (5.1)
Delirium	64 (17.9)
Dementia	11 (3.1)
Organic psychosis/mood disorder	53 (14.8)
Substance related disorder	46 (12.9)
Schizophrenia- psychotic disorder	39 (10.9)
Depression	46 (12.9)
Bipolar affective disorder	14 (3.9)
Adjustment disorder	14 (3.9)
Other anxiety disorder	25 (7 0)
Somatoform disorder	4 (1.1)
Personality disorder	7 (1.9)
Deliberate self-harm	28 (7.8)
Sleep disorder	4 (1.1)
Dissociative disorder	18 (5.1)

Table 5: Distribution of physical diagnosis in the referred sample

Physical diagnosis	Percentage
Infectious/parasitic disease	17
Neoplasm	4
Endocrine disorder	11
Metabolic disorder	4
Nervous system disorder	29
Cardiovascular disorder	16
Respiratory illness	5
Gastrointestinal disorder	19
Connective tissues disorder	2
Genitourinary	2
Haematological disorder	4
Obstetrical and gynecological complaints	4
Burns/injury/poisoning	30
Others	5

burns/fracture/poisoning (30%), followed by nervous system disorders (29%), gastrointestinal disorders (19%), infectious/parasitic illness (17%), and cardiovascular disorders (16%). As patients were diagnosed with multiple physical illnesses also, so the sum of proportions shown is more than 100.

Discussion

The present study aimed at describing the clinical and demographical profile of inpatient psychiatry referrals in a tertiary care multispecialty teaching hospital. Majority of referred patients belonged to 20-40 years' age group (37.9%); similar findings were reported by Bhogale *et al.*[7] about psychiatric referrals that two-thirds of the patients belonged to age group of 16-45 years and Avasthi *et al.*[8] reported that 63.9% of their cases were in the age range of 16-45 years.

In the present study, there were 56% males and 44% females, showing a male preponderance. The data from previous studies has not been conclusive in this aspect. Some studies have shown a male preponderance,[9,10] while others have reported female preponderance.[11,12] In the current study, 20% of the patients were illiterate and rest of them educated to various degrees; overall patients educated between classes fifth to 12th were 67%. The data is in accordance with the literacy and education distribution of the region.[13]

Majority of the patients were married (64%). In the study by Costanzo Gala *et al.*[14] from Italy, it was reported that 50.8% of the cases were married. The occurrence of more number of married patients in current study can be explained on the basis of 67% of cases falling into 21-60 years age group. Majority of the patients belonged to nuclear family (87%), urban background (85%), and were of Hindu religion (63%). It reflects the pattern of inhabitant population in the catchment area.

When referring departments were analysed, it was found that maximum number of referrals were received from department of medicine (51%). This was in conformity with almost all the other previous studies.[7,9,10] This finding may be the result of the lesser awareness and stigma associated with psychiatric symptom, alongside tendency to put emphasis on physical symptoms, and seeking treatment for them.

In the current study, the most common reasons stated for referral was of abnormal behaviour and agitation (31%), followed by reason of suicidal/self-harm act (18%). The findings are similar to the study done by Rastogi *et al.*[15] among inpatients in a tertiary hospital, that reported the commonest reason for referral was abnormal behaviour, altered sensorium, and psychosis related behaviour that was present in 31.9% of reasons for referral. A substantial proportion of psychiatric morbidity among admitted patients is neither recognised nor referred to psychiatrists by physicians in general hospitals,[16] and there is a low index of suspicion in them for psychopathology coexisting with medical problems. So, usually when the behaviour of patients gets deranged to a certain threshold then it becomes recognisable to the staff and management problems arise then the patient is referred for psychiatric consultation; mild psychological and emotional disturbances get unnoticed especially in a busy tertiary hospital.[17] This can explain the reason of abnormal behaviour/agitation being the commonest reason of referral in our study. The medico-legal factors attached with suicidal and self-harm attempt result in psychiatric consultation of almost all the cases admitted, which is reflected in it being the second most common cited reason of referral.

Analysing the psychiatric diagnoses in the current study, the most common diagnosis was of delirium (18%), followed by organic psychosis/mood disorder (15%) and substance related disorder (13%). Delirium as described in literature is a frequent condition in general hospitals with a high prevalence on admission (11-33%) and incidence during hospital stay (three to 56%).[18-21] Also organic psychosis and mood disorder are commonly coded psychiatric diagnosis in medical setting as reported in the study by Parkekh *et al.*[22] that organic psychosis were present in 41.6 % of their cases and the study by Peh and Tay[23] reported organic psychiatric

disorders in 22% of their cases. Substance related disorders was the third most common diagnostic category and was diagnosed in 13% of cases. These included various substance related conditions like intoxication, dependence, withdrawal syndromes, and substance induced mental disorders. This data is in accordance with majority of previous studies, as Keertish *et al.*[24] reported substance use disorders in 12.7% of cases and Bourgeois *et al.*[25] reported it in 18.6% of the referred patients.

Analysing the physical (medical/surgical) diagnoses of the referred sample, in the current study the most common group belonged to burns/fracture/poisoning (30%). The current study's findings are in accordance with the study of Christodoulou *et al.*[26] who reported that both in their cases and control group the most common physical illness was of injuries and poisoning. Infectious diseases are listed as the commonest physical diagnosis in some studies.[25,27] In the current study also it was one of the major physical diagnosis, present in 17% of the referred cases.

However, there are few limitations in our study which should be considered while interpreting the results, like purposive sampling, short duration, and absence of longitudinal study. So, the results cannot be generalised to all settings.

Conclusion

Compared to the west, where C-L psychiatry is approved as a subspecialty in psychiatry, it is still in developing phase in India. Previous studies have shown very low psychiatry referral rates in proportion to the psychiatric morbidities in medical setting. As found in this study, a significant proportion of young productive age group was referred, also patients suffering from almost all type of medical or surgical illnesses were referred for some or other behavioural complaint. Thus, there is an urgent need for raising awareness among all physicians and medical staff regarding early recognition and prompt referral for psychiatric problems. Also further research is warranted, especially longitudinal studies with outcome variables and also with respect to various clinical processes, such as interviewing, length of visits, and follow up activities.

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