# A Retrospective Study of Quality and Pattern of Psychiatry Referrals in a Tertiary Care Teaching Hospital

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#### **ABSTRACT**

**Background:** General hospital psychiatric unit of tertiary care teaching hospital plays an important role by providing psychiatry care to physically ill patients through referral system from various departments and for consultation liaison training of postgraduate residents. The aim of the study was to assess the quality and pattern of inpatient psychiatry referrals received in tertiary care teaching hospital.

**Methodology:** This retrospective study reviewed all inpatient referrals to psychiatry department by other departments in past 6 months (January-June 2023). Data was obtained from referral register and included demography, referring department, content of referral notes, history of patient, DSM V diagnosis and follow-up. Descriptive analysis was done with MS Excel.

**Results:** Of 150 referrals, majority were from emergency medicine (49%) followed by medicine department (26.7%) and common reasons for referrals were substance use disorder (28.7%) followed by depressive disorder (22.7%) and deliberate self-harm (15.3%). Considering quality of referral notes, 34.6% had mentioned probable diagnosis with 84.3% accuracy and related clinical notes, majority being from medicine department (41.86%) followed by orthopaedics (32.56%). 33.3% had written 'psychiatry reference', without any clinical notes. Out of those referred, 35.9% were lost to follow-up, majority lost to follow-up were from emergency medicine and orthopaedics (12% each).

**Conclusion:** Consultation liaison with psychiatry department was maximum seen with emergency medicine and medicine department, most commonly for substance use, depression and self-harm. Poor referral write-up and lost to follow-up indicates need for proper psychiatry training to medical students, interns, residents and supervising faculties.

Keywords: consultation liaison, psychiatry referrals, retrospective, referral write-up

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### **INTRODUCTION**

Health is a state of complete physical, mental, social and spiritual well-being and not merely the absence of disease or infirmity. Brain and body are inseparable; there is a bidirectional relationship between psyche and soma, each influencing the other. Psychological factors must be considered while managing physical illness. Physical diseases have a large overlap with mental disorders [1]. Often mental health is not prioritized, ignored or not detected due to lack of knowledge, stigma or time constraints due to responsibilities in one's life. In most hospitals, the psychiatry units function as General Hospital Psychiatry Units (GHPU) after the first establishment in the 1930s by Dr. Girindra Shekhar of R. G. Kar, Medical College and Hospital in Calcutta who introduced consultation liaison (C-L) psychiatry as a subspecialty [2]. C-L psychiatry as a subspecialty has been defined as the area of clinical psychiatry that encompasses clinical, teaching and research activities of psychiatrists and allied mental health professionals in the non-psychiatry divisions of a general hospital [3]. Moreover, most of the post graduate psychiatry studies take place in General Hospitals.

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This helps to bridge the gap between psychiatry and other medical and surgical departments, thus strengthening the consultation liaison psychiatry model.

According to the National Mental Health Survey of India 2015-2016, the overall prevalence for any psychiatry morbidity was 13.7% (lifetime) and 10.6% (current) mental morbidity [4]. Data from previous studies have suggested that the referral rates in India are very low (0.06%-3.6%), considering the higher psychiatry morbidity rates [5] and the most common cause for inpatient referrals to psychiatry are deliberate self-harm, delirium and substance use disorder [6]. Referral notes with adequate clinical details reflects the knowledge and attitude of referring department towards psychiatry illnesses so this study aims to provide insight about the quality and current pattern of psychiatry referrals in a tertiary care teaching hospital.

The aim of the study was to evaluate pattern of psychiatry referrals received by psychiatry department based on the demographic details, referring department, reason for referrals and quality of referral notes.

#### **METHODOLOGY**

Study Design: Retrospective, Cross sectional, Descriptive study

Study Period: Data from referral registers for the period of January-June 2023 (6 months).

**Study Population:** Inpatient referrals obtained by psychiatry department in a tertiary care teaching hospital.

Inclusion Criteria: Inpatient psychiatry referrals with complete details.

## **Study Procedure:**

Approval from Institutional Human Ethics Committee was taken prior to starting the study. As department policy we maintained referral registers for indoor patients. Data of inpatient referrals received in the last 6 months was obtained from the referral registers of the department which included demographic data, referring department, content of referral notes, history of patient, diagnosis as per DSM V and follow-up details.

To capture the content of referral notes following system was used [7]:

- Just 'Psychiatry reference' mentioned without any details
- Examination requested with some clinical notes attached
- Evaluation and intervention requested with probable diagnosis and clinical notes attached.

#### **Statistical Analysis:**

Descriptive analysis was done using mean, standard deviation, frequency, percentage and correlation. Data analysis was done in MS Excel. Correlation between history and referral writing and between referring department and follow-up was done. Appropriate statistical tests were applied. A value of p<0.05 was considered statistically significant.

### **RESULTS**

A total of 212 inpatient psychiatry referrals were received out of the 15618 total admissions made in the hospital during the 6 months (except psychiatry). Referral rate was 1.36% to psychiatry department. Of the total referrals 150 met the inclusion criteria, 75 referrals were excluded because they had incomplete details related to their demographic details. Majority (55.3%) of the referrals belonged to adult age group (21-40 years). Referrals of elderly (>60 years) and children (<10 years) is low, 8% and 1.75% respectively. The minimum age is 10 years and maximum 83 years. Mean age is 36.86 years +- 15.88 SD. Male referrals were more as compared to female. The male to female ratio of referrals is 1.58.

Majority referrals received were on emergency basis (49%). Major referring department was emergency medicine (42%) followed by medicine department (30%) and orthopedics department (16.6%). Referrals were low from pediatrics, surgery, ENT and dermatology department. Out of those referred, 96.7% were advised follow-up. Out of those advised follow-up, 35.9% were lost to follow-up, majority being from emergency medicine and orthopaedics (12% each), and 31.3% follow-ups were seen with emergency medicine.

**Referring Department Total** No of referrals Whether sent for follow referrals indicated up N=150 (%) follow up Yes (%) No (%) 63 47 (31.3) **Emergency Medicine** 63 (43) 18 (12) Medicine 43 29 (19.3) 45 (30) 14 (9.3) Orthopedics 18 (12) 25 (16.7) 24 6(4)Obstetrics and Gynaecology 5 (3.3) 5 3(2)2(1.3)Respiratory medicine 4 (2.7) 4 3(2)1(0.7)3 Surgery 4(2.7)2(1.3)1(0.6)Ophthalmology 2(1.3)1 1(0.6)0(0)**Paediatrics** 2(1.3)2 2(1.3)0(0)

Table 1: Inpatient psychiatry referrals from various departments and their follow-up status

The most common reason for referrals is substance use disorder (28.7%) followed by depressive disorder (22.7%). 15.3% of the total referrals were for deliberate self-harm. 10.7% patients had organic brain disorder. Out of those referred, 7.3% referrals did not have any psychiatry disorder and did not require any active intervention.

Table 2: Psychiatry diagnosis as per dsm-5 of inpatient referrals received

Diagnosis	No. of Referrals			
	N=150, (%)			
Substance use disorder	43 (28.7)			
Mood disorder	34 (22.7)			
Others (OCD, conversion, intellectual disability)	24 (16)			
Organic brain disorder	16 (10.7)			
Psychotic disorder	13 (8.6)			
No Psychiatry diagnosis	11 (7.3)			
Anxiety and panic disorder	9 (6)			

Considering the quality of referral notes, 34.7% referrals had probable diagnosis and clinical notes attached with 84.3% accuracy of diagnosis followed by 33.3% having only 'psychiatry reference' mentioned.

Table 3: Quality of inpatient psychiatry referral note details

Reason of Reference	No. of Referrals N=150	%
No reason mentioned	50	33.3 %
To examine and give expert opinion	48	32 %
To examine, mentioned history with probable psychiatry diagnosis for the patient	52	34.7 %

38.5% patients had history of psychiatry illness and among them 39.7% were referred with just 'psychiatry reference' mentioned. The p value is <0.05 for association between past history and referral writing which is statistically significant

Parameter		Reason for Reference						Total		Statistics
		A	%	В	%	С	%	N=150		
Past	Yes	23	39.6	20	34.4	15	25.8	58	38.7%	Chi
History	No	28	30.4	28	30.4	36	39.1	92	61.3%	squared=2.9136 P< 0.05

Table 4: Relationship of past psychiatry history to inpatient psychiatry referral note details

#### **DISCUSSION**

150 inpatient psychiatry referrals from January- June 2023 in a tertiary care teaching hospital were studied retrospectively. We found very low inpatient psychiatry referrals from various departments in our study which were like previous studies in the same institute [8] and other studies [5]. This was due to lack of knowledge and skills to identify symptoms of a psychiatry disorder or the symptom profile not amounting to urgency as per referring physician. The percentage of males referred were more than females, as in our study the most common reason for referral was substance use which was more prevalent in males. This agreed to various other studies [6, 8-10] but this contrasted with a study where female patients were being referred more for psychiatry consultation because of different population composition [11]. Substance use being the most common cause for referral was followed by depressive disorders, deliberate self-harm and others which includes disorders like OCD, conversion, intellectual disability, etc. This contrasted with study done in southern India where somatic disorders and abnormal behaviours were the leading cause [12]. Most common referring department was medicine which was like studies [8] and previous studies [13] in the same institute. This may be explained by the fact that patients tend to consult physicians first for their symptoms. Emergency referral system has improved over time in the institute gradually due to establishment of PG in various departments leading to increased psychiatry references on emergency basis. There was an increase in number of referrals with detailed clinical notes attached and probable diagnosis mentioned with higher diagnostic accuracy, as compared to previous study [11] in the same institute before PG psychiatry department establishment. There were decreasing number of patients being diagnosed as not having psychiatry illness on referral. This suggested increasing orientation and skills in identifying psychiatry symptoms. In comparison with study done by Rastogi et al, [8] the number of patients being referred for history of psychiatry illness was higher in our study. On evaluating referral notes of those patients, higher numbers were seen with just 'psychiatry reference' mentioned in notes. Referring departments might believe that because of past psychiatry history there was no requirement for any additional clinical notes.

In our study, majority of the lost to follow-ups were from emergency medicine and orthopaedics as there was a relief of symptoms after primary treatment in emergency set-up. Most common reason of referral from orthopaedics department was substance use and their requirement of treatment pre-operatively. But low motivation among these patients was the reason for higher rate to lost to follow-up. So, overall, in our study there was an increasing number of total number of referrals, emergency set-up referrals, improvement in referral note quality and decrease in referrals being diagnosed with no psychiatry illness as compared to previous same institute study [11]. This suggested that establishment of PGs in various departments improved the orientation towards psychiatry.

## **CONCLUSIONS**

There were low inpatient psychiatry referral rates, with maximum referrals from emergency medicine and medicine. Substance use was the most common reason for psychiatry referrals. There was an overall improvement in referral note quality but higher lost to follow-ups. Post graduate psychiatry department establishment in the institute played a major role in improving C-L psychiatry services by increasing the orientation towards psychiatry and communication amongst various departments. But C-L psychiatry still has a long way to go and needs proper training of PGs as part of their academics and sensitisation of other specialties regarding psychiatry disorders. Substance use disorder being the leading cause of referral and

having highest loss to follow-ups indicates the need for setting up specialized de-addiction center and creating awareness about substance use among other medical professionals. Higher number of referrals for deliberate self-harm highlights the need for establishment of suicide helplines and proper crisis management teams / centers. Proper psychiatry training of medical students, interns, non-psychiatry residents and supervising faculties to improve referral write-ups. This study highlights that there should be regular interdepartmental meetings to sensitize regarding psychiatry disorders, increase referral rate, improve quality of referral note and discuss significance of follow-ups, thus helping in providing complete care. Referral note contents should include details of person seeking opinion, patient's demographic details, anticipated language barriers, location in hospital, patient's primary diagnosis, reason for admission, psychiatry concerns and reason for referral and the urgency of the assessment

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