

Original Research Article

CLINICAL CORRELATES AND PATIENT/CAREGIVER PERSPECTIVES IN CONSULTATION-LIAISON PSYCHIATRY: A CROSS-SECTIONAL STUDY

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Received : 04/12/2024
Received in revised form : 27/01/2025
Accepted : 13/02/2025

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DOI: 10.70034/ijmedph.2025.1.152

Source of Support: Nil,
Conflict of Interest: None declared

Int J Med Pub Health
2025; 15 (1); 817-822

ABSTRACT

Background: Psychiatric disorders are common among hospitalized patients, and consultation-liaison psychiatry plays a vital role in addressing the mental health needs of these patients. Despite its importance, there is limited research on the clinical correlates of psychiatric consultations in general hospital settings. This study aimed to explore the demographic, clinical, and referral characteristics, psychiatric diagnoses, interventions provided, and patient/caregiver reactions to psychiatric referrals in a hospital setting.

Materials and Methods: This cross-sectional study was conducted at Department of Psychiatry at Pandit Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences (PGIMS), a tertiary medical institute in Rohtak, Haryana. A total of 200 patients who were referred for psychiatric consultations during hospitalization were included. Data were collected through interviews with patients and caregivers, focusing on demographics, reasons for referral, psychiatric diagnoses, interventions, and patient/caregiver reactions. Descriptive statistics were used to analyse the data, and Pearson correlation coefficients were calculated to examine relationships between referral knowledge and other variables.

Results: The majority of patients referred for psychiatric consultation were between 31-45 years of age (70.5%), with a higher prevalence of males (59.5%). Most patients received pharmacological treatment (63%), while 22.5% received psychotherapy. A majority (91%) expressed satisfaction with the psychiatric consultation, but 54.5% of caregivers reported inadequate explanation of the referral. Cultural factors played a significant role in the perception of psychiatric symptoms, with 74% of patients attributing symptoms to physical or supernatural causes rather than psychiatric illness.

Conclusion: This study highlights the importance of early psychiatric consultation, effective communication about the referral process, and addressing cultural misconceptions regarding psychiatric illnesses. While patient satisfaction with psychiatric consultations was high, there are significant gaps in awareness and education regarding mental health, both for patients and caregivers. Future efforts should focus on improving referral pathways, increasing access to psychotherapy, and reducing stigma related to mental illness in hospital settings.

Keywords: Consultation-liaison psychiatry, hospital referrals, depression, cultural perceptions, healthcare communication.

INTRODUCTION

Consultation-liaison (C-L) psychiatry bridges the gap between psychiatry and other medical

specialties by addressing the psychiatric needs of patients in non-psychiatric settings. This subspecialty plays a crucial role in improving patient outcomes by identifying and managing

psychiatric comorbidities that often remain underdiagnosed in general medical and surgical wards. Globally, the prevalence of psychiatric disorders among hospitalized patients is estimated to range between 30% and 60%.^[1] In the Indian context, studies report a similar burden, with approximately 40%–50% of inpatients presenting with psychiatric issues that complicate their medical treatment.^[2,3]

Among the most commonly reported psychiatric disorders in C-L psychiatry are mood disorders, anxiety disorders, substance use disorders, and somatic symptom disorders.^[4] Chronic medical conditions often exacerbate these psychiatric comorbidities. For instance, patients with diabetes mellitus are 2–3 times more likely to experience depression than the general population.^[5] Similarly, up to 50% of stroke survivors develop depressive symptoms, significantly impacting rehabilitation outcomes.^[6] Neurological conditions such as epilepsy are also associated with high rates of psychiatric morbidity, with depression and anxiety affecting 30%–50% of patients.^[7]

Demographic patterns of referrals to C-L psychiatry services vary significantly. Indian studies have reported a male predominance among referred patients, with most referrals occurring in the age group of 35–50 years.^[8] Socioeconomic and cultural factors also influence the nature and timing of referrals. For example, women, particularly in rural areas, are less likely to be referred for psychiatric evaluation due to stigma and gender biases.^[9] Additionally, alcohol use disorders contribute to a significant proportion of referrals, particularly among male patients, accounting for up to 30% of cases in some studies.^[10]

Despite its importance, C-L psychiatry remains underdeveloped in many Indian healthcare settings. Barriers such as limited access to mental health professionals, inadequate training among primary care physicians, and poor integration of psychiatric services within general hospitals contribute to underutilization. Moreover, stigma associated with mental illness often leads to delayed diagnosis and treatment, worsening patient outcomes.^[11]

Understanding the clinical and demographic correlates of patients referred to C-L psychiatry is essential for addressing these challenges. Identifying patterns of psychiatric morbidity and their association with medical conditions can help develop targeted interventions and improve the integration of psychiatric care into general hospital settings. This study aimed to analyse the clinical and demographic profiles of patients referred to the C-L psychiatry unit in a tertiary care hospital in India. By exploring the predictors and correlates of psychiatric consultations, the findings will contribute to enhancing the efficiency and accessibility of C-L psychiatry services in resource-limited settings.

MATERIALS AND METHODS

Study Design and Setting

This cross-sectional study was conducted in the Consultation-Liaison (C-L) Psychiatry Unit of the Department of Psychiatry at Pandit Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences (PGIMS), a tertiary medical institute in Rohtak, Haryana. The institute provides specialized healthcare services to the residents of Haryana and neighbouring states, including Punjab, Rajasthan, Delhi, and western Uttar Pradesh. The study period spanned from June 2020 to May 2021. Ethical approval for the study was obtained from the Institutional PG Board and Ethics Committee of PGIMS.

Study Population and Sample

The study included 200 consecutive patients referred for psychiatric consultations from various departments of the institute. Written informed consent was obtained from all participants or their legal representatives when required. No exclusion criteria were applied, ensuring all referred patients were included.

Procedure

Each participant underwent a general physical and systemic examination. Psychiatric diagnoses were established based on the International Statistical Classification of Diseases, 10th Revision (ICD-10) criteria. Clinical assessments were conducted using the Mini-Mental State Examination (MMSE) for cognitive evaluation and the M.I.N.I. 6.0.0 (Mini-International Neuropsychiatric Interview) for comprehensive psychiatric evaluation. Referral patterns were documented using a specially designed proforma.

Data Collection

A structured proforma was employed to gather sociodemographic information, which included age, gender, marital status, education, occupation, and socioeconomic status, with the latter determined using the Modified Kuppaswamy Scale. The residence location (urban or rural) was also recorded. Clinical data collected encompassed the primary medical or surgical diagnoses, reasons for psychiatric referral, duration of hospitalization prior to referral, and the type of referral (routine or emergency). Psychiatric diagnoses and treatments (both pharmacological and psychotherapeutic) were also documented thoroughly.

Statistical Analysis

Data were entered into Microsoft Excel and analysed using SPSS version 16. Descriptive statistics were used to summarize continuous variables (mean and standard deviation) and categorical variables (frequencies and percentages). Pearson correlation was used to assess the relationship between knowledge about referral, perception of symptoms as psychiatric illness, and satisfaction with the consultation. A p-value of <0.05 was considered statistically significant.

Ethical Considerations

Ethical approval was obtained from the Institutional PG Board and Ethics Committee of PGIMS, Rohtak. Informed consent was obtained from all participants or their relatives, as appropriate. Patient confidentiality was ensured, and all data were anonymized prior to analysis.

RESULTS

The study population primarily consisted of individuals aged 31-45 years (70.5%), followed by those aged 46-60 years (14.0%), 18-30 years (13.5%), and >60 years (2.0%). In terms of gender, 59.5% of participants were male, while 40.5% were female. [Table 1]

Table 1: Patient's age and gender distribution

Variable	Category	Frequency	%
Age	18-30 years	27	13.5
	31-45 years	141	70.5
	46-60 years	28	14.0
	>60 years	4	2.0
Gender	Male	119	59.5
	Female	81	40.5

The MMSE score distribution revealed that 19.5% of participants had severe cognitive impairment (0-10), 12.0% had moderate impairment (11-20), and the majority, 68.5%, exhibited normal to mild impairment (21-30). Regarding interventions, 63.0%

of participants received drugs only, 22.5% received psychotherapy, 0.5% were transferred to psychiatry, and 14.0% did not receive any psychiatric intervention. [Table 2]

Table 2: MMSE score and types of intervention

Variable	Category	Frequency	%
MMSE Score Range	0-10 (Severe impairment)	39	19.5
	11-20 (Moderate impairment)	24	12.0
	21-30 (Normal/Mild impairment)	137	68.5
Intervention Provided	Drugs Only	126	63.0
	Psychotherapy	45	22.5
	Transfer to Psychiatry	1	0.5
	No Psychiatric Intervention	28	14.0

The distribution of patient/caregiver reactions to referral showed that 54.5% had no information about the referral, 34.5% were okay with it, 6.0% did not wish to consult psychiatry, and 5.0% felt shocked or tense. A significant majority (91.0%) were satisfied with the psychiatric consultation, while 9.0% were unsatisfied. Regarding the explanation about the referral, 31.0% were explained about it, whereas 69.0% were not. In terms of perceptions, 26.0% of participants considered their symptoms as part of a psychiatric illness, while 74.0% did not. Time taken for

consultation was predominantly within 3 days (57.5%), followed by a week (18.0%), a month (13.5%), 1-6 months (8.5%), and more than 6 months (2.5%). A small proportion (16.0%) believed their symptoms were related to physical/supernatural causes or black magic, while 84.0% did not. The mean scores for knowledge about referral, perception of symptoms as psychiatric illness, and satisfaction with consultation were 1.69 ± 0.46 , 1.74 ± 0.43 , and 1.09 ± 0.28 , respectively. [Table 3]

Table 3: Reaction, Satisfaction, Explanation and Perception About Referral to Psychiatric Department

Variable	Category	Frequency/	%
		Mean \pm SD	
Patient/Caregiver Reaction to Referral	No Information	109	54.5
	Ok with Referral	69	34.5
	Didn't Wish to Consult Psychiatry	12	6
	Shocked/Tensed	10	5
Satisfaction with Psychiatric Consultation	Satisfied	182	91
	Unsatisfied	18	9
Explanation About Referral to Psychiatric Department	Explained	62	31
	Not Explained	138	69
Perception of Symptoms as Psychiatric Illness	Consider Symptoms as Psychiatric Illness	52	26
	Do Not Consider Symptoms as Psychiatric Illness	148	74
Time Taken for Consultation	Within 3 days	115	57.5
	Within a week	36	18
	Within a month	27	13.5
	1-6 months	17	8.5
	More than 6 months	5	2.5
Perception of Symptoms	Physical/Supernatural or Due to Black Magic	32	16

	Not Related to Physical/Supernatural or Black Magic	168	84
Knowledge about Referral		1.69 ± 0.46	-
Consider Symptoms as Psychiatric Illness		1.74 ± 0.43	-
Consider Symptoms as Physical/Supernatural or Due to Black Magic		1.85 ± 0.37	-
Satisfaction with the Consultation		1.09 ± 0.28	-

The Pearson correlation analysis revealed that there was a significant positive correlation between knowledge about referral and considering symptoms as psychiatric illness ($r = 0.367$, $p = 0.001$). However, there was no significant correlation

between knowledge about referral and the perception of symptoms as physical/supernatural or due to black magic ($r = 0.079$, $p = 0.565$), nor with satisfaction with the consultation ($r = 0.022$, $p = 0.772$). [Table 4]

Table 4: Perception of Symptoms as Psychiatric Illness by Patients and Caregivers

Variable (Knowledge about Referral)	Pearson Correlation (r)	p-value
Consider Symptoms as Psychiatric Illness	0.367	0.001
Consider Symptoms as Physical/Supernatural or Due to Black Magic	0.079	0.565
Satisfaction with the Consultation	0.022	0.772

DISCUSSIONS

This study aimed to investigate the clinical correlates of patients referred for psychiatric consultation in a hospital setting. The study revealed that the majority of patients referred for psychiatric consultation were in the age group of 31-45 years (70.5%), followed by 18-30 years (13.5%). This finding aligns with the research conducted by Tiwari et al., who found a similar trend of higher psychiatric morbidity in the productive age group.^[12] Younger adults are more likely to experience stress due to work and family obligations, potentially leading to increased psychiatric referrals. The predominance of individuals in their midlife years also points to the psychological impact of chronic medical conditions that often require hospitalization. In a similar vein, Shah et al., found that younger to middle-aged adults, especially those experiencing major life transitions, are more susceptible to psychiatric distress during hospitalization.^[13]

Regarding gender distribution, 59.5% of the patients were male, which is consistent with the studies Maestre-Miquel et al., and Mudgal et al., which also showed a higher proportion of males seeking psychiatric consultations.^[14,15] This male predominance could be related to the higher recognition of psychiatric symptoms in males in some hospital settings, but it may also reflect underlying cultural biases or differences in the way psychiatric symptoms manifest in different genders. Moreover, societal stigma surrounding mental health may contribute to gender disparities in seeking psychiatric care.^[16] These findings underscore the need for further research into gender-specific mental health needs and access to care.

A significant proportion of patients (19.5%) in our study had severe cognitive impairment as measured by the MMSE score range of 0-10, which reflects the psychiatric and cognitive burden often observed in hospitalized patients, especially those with chronic comorbidities. Cognitive impairment and psychiatric illness frequently co-occur, particularly in older adults and those with neurological

conditions.^[17] The high rate of severe cognitive impairment in our cohort highlights the importance of comprehensive psychiatric assessments that include both mood and cognitive domains, as untreated cognitive impairments can exacerbate medical outcomes and hinder rehabilitation efforts. As per the findings of this study, the majority of patients (63%) received pharmacological treatment alone, followed by psychotherapy (22.5%). The reliance on pharmacological treatments, primarily antidepressants and anxiolytics, reflects current clinical practice, where these medications are commonly prescribed as first-line interventions for conditions such as major depressive disorder and generalized anxiety disorder. This is consistent with a study by Kamenov et al., which found that pharmacotherapy remains the most common intervention in consultation-liaison psychiatry, especially in settings with limited access to psychotherapists.^[18] However, psychotherapy was provided to only 22.5% of the patients in our study, which is concerning, as suggested by McHugh et al., have shown that combining pharmacological and psychotherapeutic interventions significantly improves treatment outcomes in psychiatric patients, particularly those with complex medical conditions.^[19]

The low proportion of patients receiving psychotherapy could be attributed to factors such as limited availability of trained therapists, logistical challenges, or a preference for pharmacological treatment. As noted by Wan et al., increasing access to psychotherapy within hospital settings is essential, particularly for patients with chronic conditions who may benefit from coping strategies and stress management techniques in addition to pharmacotherapy.^[20]

Regarding the time taken for psychiatric consultation, the majority of patients (57.5%) sought psychiatric help within 3 days of referral. This prompt referral time is promising and suggests that many patients and caregivers are becoming more aware of the need for early psychiatric intervention. However, the remaining patients who experienced delays in consultation (24.5% delayed by more than

a month, 11% beyond 6 months) point to a gap in psychiatric service utilization. van den Broek et al., reported similar delays in psychiatric consultation, attributing them to the lack of awareness about psychiatric conditions, the stigma associated with mental illness, and poor communication between medical teams and patients.^[21]

Interestingly, 54.5% of caregivers reported not being adequately informed about the referral to psychiatry, which echoes findings from Sood et al., who found that poor communication regarding psychiatric referrals led to delays in treatment initiation.^[22] Improved communication strategies, such as clear explanations about the need for psychiatric consultation, could enhance patient and caregiver understanding and lead to more timely interventions.

One of the most significant findings in this study is that 74% of patients and caregivers did not perceive psychiatric symptoms as being related to psychiatric illness, and instead attributed them to physical causes or supernatural influences. This finding is consistent with research by Faruk et al., who found that many individuals from non-Western cultures, including those in India, often perceive psychiatric symptoms as being related to physical illness or external forces such as black magic.^[23] Such cultural perceptions can delay appropriate psychiatric treatment, as patients may seek alternative treatments such as traditional medicine or spiritual healing before turning to psychiatric care.^[24]

In line with this, educating patients and caregivers about the biological and psychological causes of psychiatric disorders is crucial in reducing stigma and fostering a more accepting attitude toward psychiatric treatment. As noted by Gureje et al., psychoeducation should be an integral part of psychiatric care, especially in settings where misconceptions about mental illness are prevalent.^[25]

In our study, a significant majority of patients (91%) expressed satisfaction with the psychiatric consultation, which aligns with findings from Herrera et al., in a similar hospital setting. High levels of patient satisfaction are often associated with improved treatment outcomes, as satisfied patients are more likely to adhere to treatment plans and report better psychological well-being.^[26] The positive response in our study suggests that psychiatric consultations, once initiated, are perceived as beneficial by patients, highlighting the importance of incorporating psychiatric services into routine medical care.

Limitations and Future Research

Despite its valuable contributions, the study has several limitations. As a cross-sectional study, it only provides a snapshot of the referral patterns and psychiatric diagnoses without allowing for causal inferences. Additionally, the study relied on self-reported data, which may be prone to biases such as social desirability bias or recall bias. Furthermore, the findings may not be generalizable to all hospital

settings, as the study was conducted at a single tertiary care hospital. Future research should consider longitudinal studies to assess the impact of psychiatric intervention on long-term outcomes and explore factors that influence delays in psychiatric consultation. Additionally, expanding the study to include a more diverse sample across different regions and healthcare settings could provide a more comprehensive understanding of the factors influencing psychiatric referrals in India.

CONCLUSION

In conclusion, this study emphasizes the importance of early psychiatric intervention, effective communication with patients and caregivers, and the need for reducing stigma and misconceptions about psychiatric illness. Our findings suggest that while psychiatric consultations are generally well-received by patients, there are significant barriers to timely referrals and adequate psychoeducation. Addressing these barriers, particularly through improved communication strategies and increasing access to psychotherapeutic interventions, could enhance patient outcomes and facilitate the integration of psychiatric care in hospital settings. As the awareness of mental health issues grows, integrating psychiatry more seamlessly into routine medical practice will be essential for improving the overall quality of care for hospitalized patients.

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