



A Study of Socio-demographical Profile and Pattern of Psychiatric Referrals of Patients from Intensive Care Unit (ICU) and Emergency at Medical College, Jaipur

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ABSTRACT

Background: Consultation-liaison psychiatry has a specific place in a hospital setting. Analyzing the consultation-liaison psychiatry service was a goal of this study. **Methodology:** A hospital based descriptive Observational study was adopted and patients were selected using non-probability purposive sampling technique, over a 18 months period, patients who were referred from ICU and Emergency. In accordance with ICD-10 diagnostic criteria, a final psychiatric diagnosis was made after sociodemographic information and the referral source was recorded. **Results:** Among 220 patients, majority was male (n=140, 63.64%), maximum in the age group of 20-30 years (n=108, 49.09%), secondary education (n=120, 54.55%). Out of the 220 referrals in total, 134 (60.91%) were from various intensive care units (ICU) and 86 (39.09%) came from emergency. The most prevalent psychiatric label noted among psychiatric referrals was depression (n=48, 21.8%), followed by bipolar disorder (n=26, 11.8%). **Conclusion:** The present study summarizes that there is a high likelihood of presence of psychiatric manifestations in patients who come to different departments of the hospital. This goal of managing such patients can only be achieved through awareness about psychiatric disorders and in a hospital set-up through the medium of Consultation-Liaison psychiatry. So, that with the help of Consultation-Liaison, a patient is treated holistically and not merely as a bundle of symptoms.

Key Words: Consultation-Liaison Psychiatry, ICU, Emergency, Psychiatric Reference



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INTRODUCTION

In order to achieve holistic health, complete mental wellbeing has to be one of the components (Salve, 2013)¹. Mental disorder entails major clinical syndromes mostly marked by distress caused by psychological and behavior related symptoms which bring about loss in functioning (Tadesse et al., 2017)². Mental wellbeing has been found to be a vital element of an individual general well-being and it enhances one's progress socio-economically. It plays a great role in a number of outcomes for persons and societies which includes: better way of life; enhanced bodily health; rapid recovery from diseases; less challenges in day to day activities; better educational achievements; improved productivity, employment and earnings; it also contribute to amicable relationships within adults and children (WHO, 2010)³

Mental illness has no boundary as it affects both the young and aged in the population (Mbuthia et al., 2018)⁴. However, prevalence of psychiatric disorder has been found to be highest in those aged between 24-44 yrs. This has a serious economic and social impact on the individual, family and community as this is the age where a person is most productive (Haldar et al., 2017)⁵. During adulthood the most prevalent mental disorders include, anxiety, depression, psychotic and cognitive disorders. The amplified probability of developing mental illnesses during adulthood has been associated with many factors including: brain aging and pathologies, delicate physical health, reduced financial stability, changed living arrangements, and family support system breakdown (Kumar et al., 2017)⁶

Consultation-Liaison (CL) 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 nonpsychiatric divisions of a general hospital. CL psychiatry is derived conceptually from the old tradition, which

advocates a ceaseless dynamic interaction between mind and body. It has brought psychiatry out of mental asylums to general hospitals and has also contributed significantly to reduction of stigma associated with mental illness. Over the years, CL psychiatry has contributed significantly to the growth of psychiatry and has brought psychiatry close to the advances in medicine. It has also led to changes in medical education and in providing comprehensive management to the physically ill. It involves both the patient and interdepartmental teams in an active role. It is a mutual process with active care and assessment. According to Lipowski (1975), "Physical illness is a major cause of psychiatric morbidity".

Many reviews suggested that general hospital population, be it inpatient or out patients, suffered from psychiatric co-morbid conditions.

METHODOLOGY

This study is aimed at assessing the patterns of psychiatric referral among referred adult patients emergency room and ICU's attending treatment at Department of Psychiatry, National Institute of Medical Science, Jaipur. Thus, to achieve this objective, a hospital based descriptive Observational study design was adopted.

The study population consisted of 220 male and female first time patients referred from ICU's and Emergency Department to attend treatment at Department of Psychiatry, National Institute of Medical Sciences who were above 18 years, and were able to give an informed consent seen at the Department of Psychiatry, National Institute of Medical Sciences. The study period was from 1st January 2021 to 30th June 2022 [18 Months].

The study included those aged 18 years and was able to give an informed consent, Patients who are referred from ICU and emergency room to psychiatry department.

The study excluded all patients under 18 years of age, patients from OPD & IPD and who doesn't give informed consent for the study.

Patients were selected using non-probability purposive sampling. This method is limited to a group of people who can provide the wanted information either because they are the only ones who have it or conform to some criteria set by the researcher.

Each patient underwent a detailed psychiatric evaluation by a consultant psychiatrist once they were medically stable. The details recorded include socio-demographic profiles, the department referred from, reason of referral, presenting complaint, and final diagnosis. Psychiatric diagnosis was made according to ICD-10 diagnostic criteria. The data obtained were analyzed using the SPSS software package (version 24, SPSS, inc., Chicago, USA).

RESULTS

Table 1: Frequency distribution of age of patients

Age Interval	n = 220	%
< 20	43	19.55%
20 - 30	108	49.09%
30 - 40	46	20.91%
40 - 50	15	6.82%
50 - 60	6	2.73%
60 - 70	2	0.91%

Table 2: Gender distribution of patients

Gender	n=220	%
Male	140	63.64%
Female	80	36.36%

Table 3: Frequency distribution of religion of patients

Religion	n=220	%
Hindu	148	67.27%
Muslim	72	32.73%

Table 4: Frequency distribution of educational status of patient

Educational status	n = 220	%
Primary	32	14.55%
Middle	49	22.27%
Secondary	120	54.55%
Graduate & above	19	8.64%

Table 5: Frequency distribution of marital status of patients

Marital status	n = 220	%
Married	119	54.09%
Unmarried	90	40.91%
Widow / Divorce	7	3.18%
Separated	4	1.82%

Table 6: Frequency distribution of occupational status of patients

Occupational status	n = 220	%
Homemaker	50	22.73%
Students	90	40.91%
Businessman	29	13.18%
Skilled worker	18	8.18%
Unskilled worker	33	15.00%

Table 7: Frequency distribution of type of family of patients

Family type	n = 220	%
Nuclear	59	26.82%
Joint	137	62.27%
Extended	24	10.91%

Table 8: Distribution of family history of patients

Family history	n = 220	%
Yes	117	53.18%
No	103	46.82%

Table 9: Distribution of substance abuse of patients

Substance abuse	n = 220	%
Yes	79	35.91%
No	141	64.09%

Table 10: Distribution of patients referred from emergency and ICU

Referred from	n = 220	%
Emergency	86	39.09%
ICU	134	60.91%

Table 11: Frequency distribution of diagnosis of patients

ICD-10 Diagnosis	n = 220	%
No psychiatric disorder	18	8.2%
Alcohol dependence	14	6.4%
Bipolar Disorder	26	11.8%
Acute psychosis	17	7.7%
Mixed anxiety depression	14	6.4%
Generalized anxiety disorder	22	10.0%
Delirium	21	9.5%
Depression	48	21.8%
Severe Depression/ Self Harm	16	7.3%
Conversion Disorder	12	5.5%
Schizophrenia	12	5.5%

DISCUSSION

Age distribution of the study population showed that the younger age groups of 20-30 years and 30-40 years had higher rate of referrals than the rest. This is similar to the findings seen in many previous studies such as done by Grover *et al*^[7]. Whereas, De & Kar^[8] suggested through their study that the eldest age groups (46- 55 years & 56-65 years) showed the highest rates of psychiatric morbidity. Singh *et al*^[9] & Sriram *et al*^[10] also reported similar observations in their study. In relation to gender basis, the present study showed more referrals amongst the male population. This is similar to the findings seen in studies done by Bhogale^[11] found higher rates of psychiatric morbidity in male patients as compared to female patients. In another study by Sriram *et al*^[10] it was reported that psychiatric morbidity was prevalent more amongst females as compared to males. Also Bagadia *et al*^[12] had reported a higher psychiatric morbidity rate in women. This disparity could be owing to the fact that the number of referrals from out- patients and in-patients were more of female patients. Also, this could be due to social factors such as interpersonal stressors, household work stress, family related stress, lesser education and poor condition of women in rural setup.

Present study showed that younger age groups had a higher prevalence of referrals with the most common age group being 20-30 years old with 49.09% of referrals. It was followed by 30-40 years age group and less than 20 years with a percentage of 20.91% and 19.55% respectively. The least referrals being 60-70 years group with 0.91%. The most referrals according to gender were in males with 63.64%, whereas it was 36.36% in females. In married patients the percentage was the highest with 54.09% which was comparatively higher than single, widowed and divorced subjects. There is nothing much remarkable about these trends and these are in keeping with socio- demographic profile of patients attending the hospital where the study took place.

Out of the 220 patients 40.91% were students, which was the highest number followed by 22.73% homemakers. Unskilled and businessman patients were 15% and 13.18% respectively. The highest number of referred patients was secondary level educated 54.55%. It was followed by middle school educated 22.27%, primary educated that is 14.55% and graduate and above was 8.64%. The highest referrals 67.27% were Hindus, followed by Muslims who comprised of

32.73%. Joint families comprised of 62.27% of the referrals whereas nuclear families comprised of 26.82%. These observations conform to socio- demographic parameters of hospital attendance.

Among 220 participants 53.18% had a positive family history for psychiatric illness followed by 46.82% who had no positive family history.

Participants who participated in the study majority didn't have any history of substance abuse(141) followed by participants having positive history of substance abuse(79).

In a study by Singh et al¹³, most common is alcohol dependence (38.3%), followed by tobacco abuse(26.7%).

Among the participants maximum of them were referred from ICU's(60.91%) followed by emergency (39.09%). In a study by Singh et al¹³, all referrals were from emergency department accounting for most common triage category as yellow(38%), and least common red category.

The most common referred patients were that of depression (21.8%), followed by alcohol withdrawal syndrome (11.8%). Rest of the referrals was respectively: delirium(9.5%), nopsychiatric disorder(8.2%), anxiety (7.7%), severe depression(7.3%) alcohol dependence (6.4%) and mixed anxiety depression(6.4%)

While in study of Singh et al¹³, Schizophrenia(33.3%) was most common psychiatric diagnosis followed by alcohol dependence (25%) and mania(16.7%)

When association was checked between anxiety and family type it was found that people living in joint family (137) are more effected followed by the participants living in nuclear family(59) and then extended family (24). Association of depression checked with family type it was also found that people living in joint family are more effected followed by nuclear families and then extended families.

The study done has a few strong points. The tertiary care hospital and medical college where it took place caters to patients from all walks of life. This variation included patients of both gender, different age groups, different education levels. This decreased the chances of choosing from a pre determined set of people and thus increased the chances of being a proper random study group desired from general population. The presence of different departments in the hospital helped in referral rates being consistent and patient care being better. Thus, consultation liaison was easy in this setup. The close proximity of hospital to both urban and rural set up increased the chances of both sets of population attending its services. The presence of expert consultants in the hospital helped the candidate have proper supervision in all the cases. The patients were interviewed and assessed during the time of referral with appropriate history taken, record kept and with consent. So the time lapsed in referrals sought and done was less. This improved the quality of patient care and lessened the time in treatment of patient.

The time restraint of doing the study in a limited amount of time was the reason of the study group not being large. This could set pace for a further study with a larger group of patients.

CONCLUSION

Consultation pertaining to any patient regarding behaviour, problems was sought by physicians mostly in emergency and ICU's. It clearly indicates the psychiatric morbidity that could co-exist with another illness or a purely a psychiatric manifestation in a patient that is usually missed out. The present study highlights the need of awareness regarding psychiatric manifestations and disorders in patients who are being brought to the hospital and in general population as well. The present study also summarizes that there is a high likelihood of presence of psychiatric manifestations in patients who come to different departments of the hospital. This goal of managing such patients can only be achieved through awareness about psychiatric disorders and in a hospital set-up through the medium of Consultation-Liaison psychiatry. So, that with the help of Consultation-Liaison, a patient is treated holistically and not merely as a bundle of symptoms.

LIMITATIONS IN THE STUDY

1. The anticipated study limitations were: lack of representation of community setting or other health facilities since this study was going in NIMS Hospital, Jaipur and its findings cannot be inferred to the above settings.
2. Language barrier as some scientific language cannot be interpreted in local language and the level of education of the anticipated respondents was not known.
3. Recall bias due to use of questionnaires, as some patients could not recall their symptoms information's from the past, further worsened by lack of corroborative history for the patients who were not accompanied by a relative during the interview.

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