

ORIGINAL ARTICLE

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF PATIENTS REFERRED TO PSYCHIATRIC UNIT IN A TERTIARY CARE HOSPITAL

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Background: Very few studies from Pakistan have examined the profile of patients seen by psychiatrists in general hospital. The aim of this research is to describe the clinical and demographic characteristics of patients referred to the psychiatric unit of a general hospital over a one year period. **Methods:** This cross-sectional study was conducted at the Ayub Teaching Hospital, Abbottabad, from January 1st to December 31st 2012. All patients being referred to psychiatry were included in the study over one year period. The information was recorded on a structured questionnaire and analysed the data using SPSS-19.0. **Results:** Out of the 105 patients referred to the psychiatric unit, 74 (72.3%) were females. A total of 69 (68.5%) patients were married. More than half were uneducated and only number 4 (3%) patients had university qualification. Housewives made up 64.4% of the patient population followed by students (11%). Majority 55 (53%) had less than Rs. 5000/ monthly income. About 30% patients were shifted to psychiatry ward while, nearly one tenth were discharged. In 35% cases the psychiatrist was asked to help in the management, while in 50% cases only opinion was sought. Aggressive and threatening behaviour was source of concern in majority of patients for the primary team while 34% exhibited suicidal behaviour. Depression was most frequent diagnosis in 45 43% patients, followed by conversion disorder 19 (17%) and delirium 16 (14%). **Conclusion:** The rate of psychiatric referrals is dismal with only one third of the patients being transferred to the psychiatric ward. The major psychiatric diagnosis was depression. Patients with aggressive and threatening behaviour were more frequently referred.

Keywords: General hospital, psychiatry, psychiatric referrals, consultation liaison psychiatry

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INTRODUCTION

Psychiatric diseases are on the rise with an alarming 7.4% of the global burden of disease being attributed to them. In developing countries an estimated 75% people battling mental health disorders do not receive any kind of treatment.¹ In Pakistan, with the advent of growing threat of terrorism, economical decline and unemployment among other factors, neuropsychiatric disorders have reached new heights. While some ground has been gained in creating awareness, it is the need of the hour that magnitude of the problem is realized, and steps be taken to close the growing gap between mental health patients and psychiatric treatment.²

With recent advancement, psychiatry has become an essential part of general hospitals, providing in and out-patients services. In addition to this it also provides specialist input to other patients admitted to a general hospital. Magnitude of psychiatric co morbidity in patients admitted to general hospital is huge. About 27% of the patients admitted to medical wards, are fulfilling DSM criterion for psychiatric diagnosis. Anxiety, affective and substance abuse disorder are more prevalent in patients with chronic illnesses compared to general population.³ It has been found that significant numbers of patients in general hospital require

specialist psychiatric opinion. Not only psychiatric conditions are independent risk factor for diseases like Myocardial infarction and diabetes mellitus ,but also adversely affect the prognosis of the these illnesses.⁴ Moreover, hospital stay has been shown to be prolonged with concurrent psychiatric comorbidity. This further leads to increased hospital costs and burden on resources.⁵

To the best of our knowledge there are few studies in Pakistan looking at psychiatric co morbidities in inpatients with general medical condition.

MATERIAL AND METHODS

This cross sectional, descriptive study was carried out in at the Ayub Teaching Hospital (ATH), Abbottabad, from 1st January 2012 to 31st December 2012. This institute is a 1000 bedded teaching hospital. Ethical approval was granted by ethics review board of the institution.

The Psychiatric inpatient unit of ATH is a 24-bed unit that operates twenty four-hours a day, seven days a week. It accepts both voluntary and involuntary patients. Patients may be admitted through the Emergency Room, through clinics and as direct or voluntary admissions. Patients are also transferred from other units.

All patients referred to the psychiatric unit from the emergency department and the inpatient departments were included in the study. Data was collected using a structured Performa consisting of: demographic data, ward from which the patient was referred, psychiatric diagnosis, medical diagnosis, prior psychiatric history, history of psychiatric in patient treatment and use of psychotropic medicine. Data was analysed using SPSS-19.0.

RESULTS

A total of 105 patients were referred in one year. About 78 patients were females and 67.3% were married. In almost 35% cases specific questions regarding the management of patient were asked from psychiatry team. More than half were uneducated and only 3% patients had university qualification. Significantly large number 68.4(64%) were house wives followed by students (11.9%).Majority (53%) had an income less than Rs; 5000/month. Details of demographics are given in table-1.

Table-1: Demographics

Demographics	Frequency (n=105)	Percentage (%)
Gender		
Male	27	25.7
Female	78	74.3
Marital Status		
Married	71	67.6
Single	34	32.4
Education		
Uneducated	56	53.3
Primary	24	22.9
Secondary	17	16.2
Intermediate	5	4.8
Graduation	3	2.9
Occupation		
Student	12	11.4
Professional	4	3.8
Housewife	68	64.8
Skilled Labourer	10	9.5
Business	4	3.8
Unemployed	7	6.7
Income (Rupees)		
<5000	54	51.4
5,000-7,000	9	8.6
8,000-10,000	8	7.6
11,000-13,000	4	3.8
14,000-16,000	3	2.9
20000 And Above	2	1.9
Not Disclosed	25	23.8

About 60% of the patients were referred from the Medical department. More than 40% remained admitted to primary floor from which psychiatric opinion was sought. About, 30% were shifted to psychiatry ward and nearly one tenth were discharged.

In 35% psychiatrist was asked to help in the management, while in 52 patients (50%) cases only

opinion was sought. Details of Consultation are given in table-2.

Aggressive and threatening behaviour was source of concern in majority of patients for the primary team while 34% exhibited suicidal behaviour. Depression was most frequent (39.1%) diagnosis, followed by conversion disorder (13.6%) and delirium (6.4%). Table-3 gives a summary of the most common diagnosis.

For 49 patients (44.3%) Selective Serotonin Reuptake Inhibitors (SSRIs) while benzodiazepines (12%) and anti-psychotics (12%) were also frequently prescribed. Details of intervention by the psychiatric team are given in table-4.

Half of the patients had previous psychiatric illness while 30% had a family history of psychiatric illness. About 20% were previously hospitalized in inpatients psychiatry facility and 43% had history of previous visit to emergency while 37% were having medical co morbidity as shown in table-5.

Table-2: Details of Consultation

Patients seen in	N	%
Emergency	4	3.8
Ward	98	93.3
Out patients	3	2.9
Mode of Admission		
Emergency	57	54.3
Out patients	37	35.2
Clinics	11	10.5
Specific question asked by primary team		
Yes	50	47.6
No	55	52.4
Outcome of consult		
Management	38	36.2
Opinion was sought by primary team only	52	49.5
Psych iatric Diagnosis	15	14.3
Disposal		
Inpatient	50	47.6
Transferred to psychiatry ward	33	31.4
Discharged by primary team	19	18.1
Left Against Medical Advice	3	2.9

Table-3: Psychiatric Diagnoses

Diagnosis	(n)	(%)
Psychosis	6	5.5
Conversion disorder	15	13.6
Mood disorder	1	0.9
Delirium	10	6.4
Anxiety Disorder	6	5.5
Acute Psychotic Episode	4	3.6
Depression	43	39.1
Deliberate Self Harm	4	3.6
Epilepsy	2	1.8
Mental retardation	2	1.8
Panic disorder	1	0.9
Pathological grief reaction	1	0.9
Post natal depression/psychosis	4	3.6
Somatization	7	6
Psychotic Depression	2	0.9
Post-Traumatic Stress Disorder	2	1.8
Schizophrenia	2	2.7

Table-4: Psychiatric intervention

Intervention	N	%
Benzodiazepines	16	12.0
Antidepressants	49	44.3
Hypnotics	5	3.8
Anti-Psychotics	16	12.0
Mood Stabilizers	4	3.0
Counseling	5	3.8
Psychotherapy	13	11.8
No advice given	10	9.3

Table-5: Details of Past History

	Gender		Total (n)
	Male	Female	
Previous Psychiatrist History			
Yes	17	39	56
No	12	37	49
Family Psychiatry History			
Yes	9	24	33
No	21	51	72
Previous Psychiatric Contact			
Inside	18	20	38
Outside	20	47	67
Previous Psychiatrist Inpatient			
Yes	6	17	23
No	21	61	82
Previous Emergency Visit			
Yes	17	32	49
No	18	38	56
Previous Medical/Surgical Admission			
Yes	11	32	43
No	14	48	62

DISCUSSION

With the rise in mental health problems, psychiatric referrals are becoming increasingly important in the proper care and management of a hospitalized individual. Unfortunately, in developing nations the trend for psychiatric referrals remains very low. In our study we found that slightly more than hundred patients were referred for psychiatry evaluation in a period of one year. This is in accordance with a similar study done in Pakistan⁶ as well as a recent study done in India which also showed an abysmal referral rate of 0.42%.⁷ Compared to the high prevalence of mental disorders (41.3–46.5%) among inpatients in general, this indeed is a worrying figure.⁸

Female population, mostly housewives consisted of majority of the referrals in our study but data available on this subject is conflicting. Some studies suggest that referrals are more common in the males^{9,10} while others favor females^{5,11} it has been shown that women are more likely to suffer from psychiatric disorders like depression in the wake of a stressful life event.¹² This could account for the higher inpatient referrals among women.

Majority of the referrals came from the inpatient medicine department. Similar studies showed a referral rate of 83.17% in India and 73% in Uganda.^{8,13} The high rates of referral among medicine

department can be attributed to the fact that chronic illness contribute to the burden of mental disorders. A large scale study done by Gilli M *et al* showed that 56.8% of patients with chronic somatic disease had some kind of mental disorder particularly those suffering from neurological, oncological or liver disease.¹⁴

Data shows that in the presence of obvious medical disease psychiatric issues are often over looked.¹⁵ This may be the reason why in majority of the cases in our study only psychiatric opinion was sought as opposed to being included in the management plan. It is important to realize that in certain common chronic medical diseases like heart and lung disease, diabetes and arthritis, psychiatric co morbidity can contribute to worsening of symptoms as well as prognosis.^{16,17} In light of this, untreated psychiatric co morbidity could be attributed to repeated emergency visits in our study. Thus, it is crucial that psychiatrists be included in management plan of patients.

Research by Hansen *et al* has shown that the prevalence of mental disorders in internal medical inpatients was 38.7%. The most common diagnoses were somatoform disorders (17.6%), phobias (12.9%), substance use disorders (10.9%), and depression (8.3%), respectively.¹⁸ In contrast; our study shows that the most common diagnoses are, in order: depression (39.1%), conversion disorder (13.6%), and delirium (6.4%). Although depression is the most frequent diagnosis in our study, depression is the third-leading diagnosis in the Hansen study. Depression is almost five times more prevalent in our study than in the Hansen study. This may be due to the lower socioeconomic status of the population and poorer facilities available in most Pakistani cities, which leads to higher rates of depression.

In a study in a tertiary care hospital in North India, the most frequent psychiatric diagnoses were depressive disorder (25%), anxiety disorder (15%), and substance-related disorder (13%), respectively.¹⁹ This data is comparable to the Pakistani data in that depression is the most frequent psychiatric diagnosis. However, in our study depression was diagnosed proportionality more frequently in the patients than in this study (39.1% in our study, 25% in the North India study). In addition, the second and third most frequent psychiatric diagnoses in the North India hospital were different than those for Pakistan.

In a small urban general hospital in Toronto, the most frequent interventions for psychiatric disorders included prescription of a selective serotonin reuptake inhibitor (SSRI) antidepressant, detoxification from psychoactive substance, psycho-educational, and behavioural interventions. Brief psychotherapy was recommended for almost 80% of the patients.²⁰ In our study, the most frequent

interventions included medications: antidepressants (44.3%), benzodiazepines (12%) and anti-psychotics (12%). Psychotherapy and counselling was recommended for 9.8% and 3.8% of the patients, respectively. Although antidepressants were the main intervention in both studies, there is a difference in the recommendation of psychotherapy. Since the study was conducted in Toronto, perhaps there is greater public awareness and resources available for conducting effective psychotherapy, and so many patients are referred to psychotherapists. In Pakistan, however, there is little awareness and availability of psychotherapists, and therefore referrals to psychotherapists is minimal.

Though we capture all referrals in one year of a tertiary care hospital, still the result could not be generalized.

CONCLUSION

The rate of psychiatric referrals is dismal with only one third of the patients being transferred to the psychiatric ward. The major psychiatric diagnosis was depression. Patients with aggressive and threatening behaviour were more frequently referred. Given the rising incidence of psychiatric illness globally and its contribution to prognosis of many medical diseases, steps should be taken to create a proper system/criteria of referral. Studies should be carried out in which effectiveness of psychiatry referrals is assessed.

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