

Pattern of psychiatric morbidity among referred inpatients in a tertiary care hospital of Bangladesh

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Summary

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There is a dearth of studies related to consultation-liaison psychiatry in Bangladesh. The psychiatric referral rates in this country are very low, considering the higher rates of psychiatric morbidity in patients who attend various departments of a general hospital. This was a descriptive study consisting of all the cases referred for psychiatric consultation from inpatient units of various departments of BIRDEM General Hospital, Dhaka from July 2017 to June 2018. Patients of any age and of either gender were included. A total of 673 patients (1.97% of total admission) were referred from different departments of the hospital for psychiatric consultation within the study period. Majority of the respondents were female. The mean age of the respondents was 59.47 (± 1.98) years. Among the referred, Generalized anxiety disorder (GAD) was the diagnosis in 24.96%, followed by Major depressive disorder (MDD) in 9.95% cases. Referral from the department of Medicine and allied was 92.86 %, followed by department of Surgery and allied (6.38%) & department of Obstetrics and Gynaecology (0.74%). Frequency of referral was the lowest in the months of November to January. There is a need to encourage multi-disciplinary interaction in the management of patients who attend general hospitals, so as to better identify the psychiatric morbidity.

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Introduction

All illnesses are considered to have both psychological and physical dimensions.¹ Association between physical illness and psychiatric morbidity has been well recognized and evidenced in different studies.²⁻⁴ Consultation-Liaison (C-L) Psychiatry has been considered to be an interface between Psychiatric and Non-psychiatric medicines as practiced in general hospital settings.⁵⁻⁷ There are many definitions of C-L psychiatry and there is persisting confusion about the nature of the sub-specialty. Definition may be based on the place of work, the patient group treated and the specialist knowledge and skills of the practitioners. The most common and traditional definition of C-L psychiatrist is a psychiatrist working in a general hospital and C-L psychiatry is a branch of Psychiatry that deals mainly with deliberate self-harm, medical/psychiatric co-morbidity and medically unexplained illness.⁸ Though it has been shown that the organization of consultation service and its efficiency are factors interfering with the rates of referral, studies looking into psychiatric referral patterns in different hospital settings do not show comparable results.⁹⁻¹¹

It is estimated that 21-26% of the medical outpatients have psychiatric disorder and life time prevalence of mental disorder in chronically physically ill patients is around 42%.¹² The incidence of mental disorders in hospitalized physically ill patients ranges from 5% to 50%.¹³ The medical practitioners of general hospital

see high rates of psychiatric illness compared with rates in the community, as well as acute presentations of psychiatric problems, co-morbid psychiatric and chronic physical illness, and somatization who will not attend a community mental health setting.¹³ Despite this large potential need, liaison psychiatry services are often underdeveloped and provision varies greatly.¹⁵

Pattern of referral for psychiatric evaluation depends on many factors. The pattern also varies to different departments. In a general hospital of Kuwait, the department of general medicine referred 74.4% of patients in contrast to 11.4% referred by the department of general surgery.¹⁶ In other study in India, Belgaum, 83.17% of the patients were referred from general medicine, medicine allied and medical super specialty departments.¹⁷ Similar findings were found in a study done in Bombay, where Physicians referred maximum cases than surgeons and gynaecologists.¹⁸

The causes for referral also vary according to the hospitals. In a tertiary hospital in Austria, the most common psychiatric diagnoses were adjustment disorders (21.4%), depressive disorders (18.5%), and delirium (18.1%).¹⁹ Our study was designed to determine the frequency of psychiatric referrals and the pattern of psychiatric morbidity in a tertiary care general hospital in Bangladesh.

Materials and methods

This was a descriptive cross sectional study carried out in BIRDEM General Hospital, Dhaka Bangladesh. All the cases

referred for psychiatric consultation from inpatient units of various departments of BIRDEM General Hospital, from July 2017 to June 2018, were included in the study. Total respondents were 673 in number. All the respondents enrolled in this study were clinically assessed by consultant psychiatrists and clinical diagnosis was based on Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM 5).²⁰ Ethical issues were maintained properly. Data analysis was done by using SPSS (Statistical Package for Social Sciences), version 19.

Results

Altogether 673 cases were enrolled in the study which was only 1.97% of the total admission (34093 cases) within the study period. Majority of patients was adult between 60-69 years (26.39%) in case of males and 50-59 years (26.98%) in case of female (Table 1). Mean age of the respondents was 58.47 (± 1.98) years. The minimum age of patient referred for consultation was 16 years and maximum was 96 years.

Majority of the respondents (60.03%) were female, from urban areas (78%) and married (79%). Referral from the department of Medicine and allied was 92.86 %, followed by department of Surgery and allied (6.38%) & department of Obstetrics and Gynaecology (0.74%). Among the departments of Medicine and allied, 25.11% cases were referred from the department of Internal Medicine, followed by the department of Endocrinology

(19.76%) (Table 2). Frequency of referral was the lowest in the months of November to January (Table 3).

Psychiatric evaluation was done once the referred patients were medically stable and the diagnosis was considered as per the DSM 5 criteria. Generalized anxiety disorder (GAD) was the diagnosis in 24.96 % of the cases followed by Major depressive disorder (MDD) in 9.95 % and Obsessive compulsive disorder (OCD) in 9.06% (Table 4). Among Schizophrenia spectrum and other psychotic disorders, Psychosis due to another medical condition (53 cases) frankly stood out as the dominant condition followed by Schizophrenia (51 cases). Among the persons with Schizophrenia, a large number was already diagnosed and having treatment. The large numbers of Somatic symptom disorders and Dissociative disorders were referred by the department of Neurology. Anxiety disorder and Psychosis due to another medical condition were major referral of the department of Internal medicine. Stress-related and Somatic symptom disorders were highest among 30-40 years age group and majority of the persons with Delirium and Dementia were above the age 60 years. Referral from the department of Surgery was mainly for persons with Anxiety and Stress related disorder and from Critical care medicine for Neurocognitive and Medication induced movement disorders (Table 5). However, only one of the respondents was found to have no psychiatric illness and was diagnosed as having Migraine.

Table 1: Distribution of respondents according to age and sex (n=673)

Age range (years)	Male (n=269)		Female (n=404)	
	Frequency	Percentage (%)	Frequency	Percentage (%)
10-19	9	3.34	7	1.73
20-29	17	6.31	20	4.95
30-39	30	11.15	60	14.85
40-49	44	16.35	88	21.78
50-59	46	17.10	109	26.98
60-69	71	26.39	85	21.03
70-79	39	14.49	25	6.18
80-89	11	4.08	7	1.73
90-99	2	0.74	3	0.74

Table 2: Distribution of respondents according to department of referral (n=673)

Department of referral	Specialty	Frequency	Percentage (%)
Medicine and allied	Internal Medicine	169	25.11
	Endocrinology	133	19.76
	Nephrology	95	14.11
	Neurology	91	13.52
	GHPD	80	11.88
	Cardiology and CCU	41	6.09
	Critical care medicine (ICU and HDU)	14	2.08
	Pediatrics	2	0.29
	Total	625	92.85
Surgery and allied	General Surgery	25	3.71
	Plastic Surgery	5	0.74
	Orthopedics	5	0.74
	Urology	3	0.44
	Surgical ICU	5	0.74
	Total	43	6.38
Obstetrics and Gynaecology	Total	5	0.74

Table 3: Distribution of respondents by month of referral (n=673)

Month of referral	Total number	Male (n=269)	Male (%)	Female (n=404)	Female (%)
July,17	69	33	47.82	36	52.17
August,17	52	22	42.30	30	57.69
September,17	51	16	31.37	35	68.62
October,17	67	31	46.26	36	53.73
November,17	42	11	26.19	31	73.80
December,17	36	12	33.33	24	66.66
January,18	40	12	30.28	70	
February,18	63	19	30.15	44	69.84
March,18	69	31	44.92	38	55.07
April,18	65	34	52.30	31	47.69
May,18	67	31	46.26	36	53.73
June,18	52	17	32.69	35	67.30

Table 4: Diagnosis of respondents according to DSM 5 (n=673)

Diagnosis	Frequency (n=673)	Percentage (%)	
Schizophrenia spectrum and other psychotic disorders	Psychosis due to another medical condition	53	7.87
	Schizophrenia	51	7.57
	Brief psychotic disorder	14	2.08
	Schizophreniform disorder	3	0.44
	Delusional disorder	3	0.44
	Schizoaffective disorder	2	0.29
	Total	126	18.72
Bipolar and related disorders	Bipolar I	48	7.13
	Bipolar and related disorder due to another medical condition	4	0.59
	Total	52	7.72
Depressive disorders	Major depressive disorder	64	9.50
	Depressive disorder due to another medical condition	3	0.44
	Total	67	9.95
Anxiety disorders	Generalized anxiety disorder	170	25.26
	Panic disorder	10	1.48
	Agoraphobia	4	0.59
	Anxiety due to another medical condition	2	0.29
	Total	186	27.63
Obsessive compulsive and related disorders	Obsessive compulsive disorders	61	9.06
	Trichotillomania	2	0.29
	Total	63	9.36
Trauma and stressor related disorders	Adjustment disorder	35	5.20
	Acute stress disorder	12	1.78
	Post-traumatic stress disorder	5	0.74
	Total	52	7.72
Somatic symptoms and related disorders	Conversion disorder	20	2.97
	Somatic Symptom disorder	18	2.67
	Illness anxiety disorder	6	0.89
	Total	44	6.53
Neurocognitive disorder	Dementia	20	2.97
	Delirium	15	2.22
	Total	35	5.20
Medication induced movement disorder	Tardive dyskinesia	2	0.29
	Neuroleptic malignant syndrome	1	0.14
	Total	3	0.44
Dissociative disorders		4	0.59
Substance related disorder		27	4.01
Personality disorder		7	1.04
Other condition that may be a focus of clinical attention		6	0.89
No psychiatric diagnosis	Migraine	1	0.14

Table 5: Distribution of the respondents according to diagnosis and department of referral (n=673)

Diagnosis	Medicine and allied	Surgery and allied	Obstetrics and Gynaecology
Schizophrenia spectrum and other psychotic disorders	119	5	2
Bipolar and related disorders	47	4	1
Depressive disorders	62	5	0
Anxiety disorders	177	9	0
Obsessive compulsive and related disorders	62	0	1
Trauma and stressor related disorders	42	9	1
Dissociative disorders	3	1	0

Discussion

Though it has been shown that the organization of consultation service and its efficiency are factors interfering with the rates of referral, studies looking into psychiatric referral patterns in different hospital settings do not show comparable results.^{9-11,13,21} Besides, literature looking into the factors leading to the lower referral rates in Psychiatry is sparse and inconclusive.²¹ Keeping this in mind, this study was undertaken in a tertiary hospital setting with the aim to evaluate the patterns of referral of inpatients from other specialties to the department of Psychiatry and describe the apparent psychiatric morbidity patterns of those patients.

This study was a modest attempt to recognize the pattern of psychiatric referrals in a tertiary care general hospital in Bangladesh. The referral rate of 1.97%, which was found in this hospital, was comparable to the findings of most of the previous studies, which had shown a referral rate of 0.06% to 3.6%.²

The liaison psychiatry service at a general hospital provides a natural experiment in which the impact of the work of a single liaison team on patterns of referral could be investigated. In spite of different number of referral cases in different study, the demographic characteristics of the population of this study are similar to other studies; the mean age (58.47) of this study is not consistent with the other studies. Majority of the patients belong to younger and middle age group in many other studies.^{18,21} It is understood that middle aged individuals have a lot of tension in their daily life and they usually seek help. This study was conducted in a tertiary care general hospital providing treatment for mainly diabetic patients so the patients are mostly aged in this study.

Very few children were referred for consultation-liaison, it may be because of a separate child guidance clinic running in this hospital & Department of Obstetrics and Gynaecology and Pediatrics Department being situated in a distant location from the main hospital. Similar to the findings of some other studies,^{22,23} female was higher in our study. Majority of the referrals were from internal medicine, which is consistent with other studies.^{18,22,23} This may be due to high chance of comorbidity with chronic physical illness. Moreover, social stigma

on psychiatric illness is very high in our society. People of this society are very less aware about the psychology and its related problems. Because of this social stigma, persons with probable or recognizable psychiatric problems prefer to visit a general physician first rather than psychiatrists. Referral from Surgery and allied was only 6.38% in this study which may be due to short stay of patients in this specialty & less awareness of surgeons about psychological symptoms. Only 0.74% cases were referred from Obstetrics and Gynaecology department and this finding is similar to a study conducted in India.¹⁸ Gynecologists and Obstetricians are aware about the appearance of emotional disturbance during menstruation period, gender variation, and hormonal effect during pregnancy but they may not consider referring the women with those problems to psychiatry. Another reason of poor number of referral from the department of Obstetrics and Gynaecology may be the distance of the department from the department of psychiatry in BIRDEM General Hospital, which has a distant separate building for Women and Children.

Anxiety and stress related disorders were the commonest in this study which is similar to other studies.^{17,18} The proportion of depressive disorder found in our study is less than neurocognitive, psychosis due to general medical condition and substance induced disorder all together. In many studies, Mood or Depressive disorder is the commonest referred disorders whereas neurotic is the second commonest disorder in liaison psychiatry.^{22,23} In this study Generalized anxiety disorder was the commonest followed by Major depressive disorder.

There are some limitations of this study. The study was done among patients referred for consultation-liaison within a period of 12 months period so may not represent overall psychiatric referral. Standardized structured interview and rating scales were not used in the study, rather, diagnosis was made by a consultant psychiatrist on the basis of DSM 5.

Conclusion

The psychiatric referral rate is very low, considering the higher rates of psychiatric morbidity in patients who attend various departments of a hospital. Studying the pattern of psychiatric referrals may pave the way for interventions to improve the

current scenario. There is a need to encourage multi-disciplinary interaction in the management of patients who attend general hospitals, so as to better identify the psychiatric morbidity. Further studies should focus on interventions that can improve referral rates through early recognition of the common psychiatric conditions.

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