Original Article

Pattern of psychiatric morbidity in a tertiary care military hospital in Bangladesh

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Background: Behavioral and mental disorders accounted 12% of global burden of disease (GBD). Treatments for all these disorders are as available as efficacious. However, these disorders are remarkably undertreated worldwide.

Objectives: To find out the pattern of psychiatric morbidity of patients attending at the psychiatry outpatient department.

Methods: : This was a cross sectional study carried out in the Department of Psychiatry at Combined Military Hospital (CMH), Chattogram from January 2022 to June 2022. For this purpose, 1297 respondents attending in psychiatry outpatient department of CMH Chattogram were enrolled in the study by using convenient sampling technique. Psychiatric diagnoses of the patients were assigned by the consultant psychiatrist as per Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) criteria. Structured questionnaire was used to collect socio-demographic data. Statistical analyses were carried out by using the Statistical Package for Social Sciences version 23.0 for Windows (SPSS Inc., Chicago, Illinois, USA). The quantitative observations were indicated by frequencies and percentages. Ethical issues were maintained all through the study.

Results: The most common psychiatric morbidity among the respondents was depressive disorder (36.9%) followed by anxiety disorders (19.8%), obsessive-compulsive & related disorder (16.3%) and somatic symptom and related disorder (11.3%). The results showed that majority (26.6%) were from the age group of 31-40 years with female preponderance (59.1%). More than half of the patients were referred from different branches of Medicine (65%). Referral from Internal Medicine was 25.2%, Cardiology 13%, Gastroenterology 12.3%, Nephrology 10.6% and Physical Medicine 3.3%, respectively. The rest were from branches of Dermatology and Venereology, Surgery, Orthopaedics, Paediatrics and Gynaecology and Obstetrics.

Conclusions: Neurotic cases were predominant in psychiatric outpatient department. Referrals patients of psychiatric disorders came mainly from Medicine and allied branches. Results of this study may help in the planning for better mental health service integrated with primary healthcare system of our country.

Declaration of interest: None

Introduction

'Health is a state of complete physical, mental, social and spiritual well-being and not merely an absence of disease or infirmity'.[1] Behavioral and mental disorders accounted 12% of global burden of disease (GBD). It was estimated that 10% of the adult population was suffering from some kind of behavioral and mental disorder globally and it was 4 out of 10 leading causes of disability.[2] Mental disorders are highly prevalent in all regions of the world which causes a significant source of disability and social burden. Treatments for all these disorders are as available as efficacious. However, these disorders are remarkably undertreated worldwide. As per World Health Organization (WHO) more than 25% individuals show one or more mental disorders in their lifetime. Mental & neurological disorders will likely account for 14.4% of all global disability-adjusted life year (DALY) and 25.4% of non-communicable diseases by 2030. WHO also estimates that one mental disorder member in 1 of 4 families worldwide.[3] Depression is expected to become the leading cause of disability by 2030.[4]

In Bangladesh, prevalence of psychiatric disorder is 16.8%. Out of which depressive disorders are (6.7%), anxiety disorders are (4.5%) & somatic symptom and related disorders is (2.1%). Surprisingly the treatment gap estimated is 92.3% and majority are treated by general physicians.[5]

Due to scarcity of epidemiological studies, there was limited data on pattern of psychiatric morbidity. With the world's eighth largest population with 160 million people, extensive research and studies are required to prepare the country to lessen the silent burden of mental disorders. This study was designed with the aim of determining psychiatric morbidity that contributes to mental health and raise awareness among all physicians integrated with primary healthcare system of our country.

Methods

This was a cross sectional study and carried in the outpatient department (OPD) of Psychiatry at Combined Military Hospital (CMH), Chattogram from January 2022 to June 2022. Patients attending Psychiatry OPD of CMH Chattogram were assigned by purposive sampling method. Both male and female who gave consent to participate in the study were included. An informed written consent was taken from each participant of the study population by using consent form. In case of minor, their legal guardians gave written consent. The patients who were not interested in participating in the study, suffered from acute physical illness and acute confusional state, patients who had visual or hearing impairment to such extent that they could not participate in the study were excluded from the study. Pre-designed structured questionnaire was prepared to determine the socio-demographic characteristics such as age, sex, residence, education, marital status etc. The quantitative observations were indicated by frequencies and percentages. Ethical issues were maintained all through the study. Finally, psychiatric diagnoses of the patients were assigned by the consultant psychiatrist as per Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) criteria.[6] Besides pattern of referrals were also counted in this study. Statistical analyses were carried out by using the Statistical Package for Social Sciences version 23.0 for Windows (SPSS Inc., Chicago, Illinois, USA).

Results

In this study, maximum (26.6%) respondents were in 31-40 years of age (Table 1). There were 41% male and 59.1% female. Most of the respondents were Muslims (89%), married (78.6%), reported from urban areas (59.7%) and completed SSC education (40%). Regarding occupation, highest number of respondents were housewives, (36.8%), service holders (33%), followed by students (17.5%). (Table 1)

Table 1: Distribution of the respondents according to sociodemographic characteristics (N=1297)

Variable	Frequency (n)	Percentage (%)
Age group		
0-10	93	7.2
11-20	157	12.1
21-30	256	19.7
31-40	345	26.6
41-50	296	22.8
51-60	121	9.3
Above 61	29	2.2
Sex		
Male	531	41.0
Female	766	59.1

Variable	Frequency (n)	Percentage (%)
Religion		
Islam	1154	89.0
Hindu	110	8.5
Others	33	2.6
Educational level		
Illiterate	51	3.9
Primary	30	2.3
Secondary	110	8.5
SSC	519	40.0
HSC	455	35.1
Graduation and above	132	10.2
Occupational status		
Service holder	428	33.0
Business	51	3.9
Farmer	31	2.4
Housewife	477	36.8
Student	227	17.5
Unemployed	83	4.9
Marital status		
Married	1019	78.6
Unmarried	266	20.5
Divorced	12	0.9
Social background		
Rural	523	40.3
Urban	774	59.7

During the study period and after exclusion criteria a total of 1297 respondents agreed to participate in the study. The findings of the study were presented in different tables. The most prevalent DSM-5 diagnosis was major depressive disorder (36.9%) followed by anxiety disorders (19.8%), obsessive compulsive and related disorders (16.3%), somatic symptom and related disorders (7.5%) (Table 2).

Table 3 shows total 123 patients were referred by doctors of different disciplines and more than half of them (61%) were referred by medicine and allied branches. Out of them (25.2%) were from Internal Medicine, (13%) from Cardiology, (12.3%) from Gastroenterology, Nephrology (10.6%), Dermatology and Venereology (10.6%) and Gynecology and Obstetrics (8.9%).

Table 2: Distribution of the respondents according to psychiatric disorders (N=1297)

Psychiatric Disorders	Frequency (n)	Percentage (%)
Major depressive disorder	479	36.9
Anxiety disorders	257	19.8
Obsessive-compulsive and related disorders	212	16.3
Somatic symptom and related disorders	97	7.5
Seizure disorder	45	3.5
Intellectual disability	45	3.5
Bipolar and related disorders	38	2.9
Schizophrenia spectrum disorders	35	2.7
Autism spectrum disorders	27	2.1
Post-traumatic stress disorder	22	1.7
Attention-deficit/ hyperactivity disorder	14	1.1
Substance related disorders	13	1.0
Functional neurological symptom disorder	13	1.0

Table 3: Distribution of the respondents referred by specialists (n = 123)

Discipline	Frequency (n)	Percentage (%)
Internal medicine	31	25.2
Cardiology	16	13.0
Gastroenterology	15	12.3
Dermatology & Venereology	13	10.6
Nephrology	13	10.6
Gynecology and Obstetrics	11	8.9
Pediatrics	9	7.3
Otolaryngology	6	4.9
Orthopedics	5	4.1
Physical Medicine	4	3.3

Discussion

The aim of this study was to determine pattern of psychiatric morbidity of psychiatry OPD in CMH, Chattogram. During the study period, 1297 respondents agreed to participate in the study. Major Depressive Disorder (MDD) was the most common psychiatric diagnosis found in this study i.e., 36.9% which was similar to other studies.[7,8] Depression is one of the major causes of health burden worldwide affecting approximately 264 million people.[9] In Bangladesh, it is the most common psychiatric diagnosis affecting 6.7% population.[5]

Rests of the disorders were anxiety disorders (19.8%), obsessive compulsive disorder (16.3%), somatic symptom & related disorders (7.5%), and so on. Another study conducted by Firoz et al. also showed that among all psychiatric disorders, depressive disorders are highest in number in Bangladeshi population.[10]

In this study it was found that among the respondents, highest percentage (26.6%) had age group in between 31-40 years. It is comparable with another study done in our country.[7] In our study, majority of the respondents were females (58.7%) which is similar to findings from other studies.[7,8,11] This might be due to distress about the bodily changes resulting from menstruation, pregnancy, childbirth and menopause.

Education level in this study showed maximum 40% respondents were up to secondary level. Similar results reported by Algin et al.[12] It indicated that mental health awareness is increased among literate people.

In the present study, majority respondents were housewives (36.8%). This finding commensurate with several other studies.[7,8,12,13] This pattern might be the reflection of the socio-cultural suppression and somatization of the mental problems of the unemployed females.[8]

Marital status of our respondents shows 78.6% married, 20.5% unmarried and 0.9% divorced cases. Studies done in Bangladesh,[8] Nepal[14] and America[15] reported similar results.

This study found that majority respondents were from urban background (59.7%). Similar finding was reported by Algin et al.[12] Location of hospitals in commercial area made treatment more accessible for urban population group.

In the present study more than half of the patients have been referred from medicine and allied branches (61%) and this finding comparable to other studies done in Bangladesh[8,12,16] and India.[17,18,19,20] The referral is highest from Department of Internal Medicine (25.2%). The reason behind this may be lack of awareness, information about availability of psychiatric services, stigma about psychiatric disorders which lead them to somatize their psychological complaints. Other common sources were from Cardiology (13%), Gastroenterology (12.3%), Nephrology (10.6%), Dermatology and Venereology (10.6%), Gynecology and Obstetrics (8.9%), Pediatrics (7.3%) and Otolaryngology (4.9%) which were consistent with other study.[7]

There are few limitations of the current study including short duration, only military personnel and few serving civilians with their family members (wife, children, batman and parents in law) were included in this study. So, study population might not represent the whole community. Moreover, the psychiatric diagnoses were assigned by the consultant psychiatrist as per DSM-5. If structured interview techniques and standardized rating scales can be used, the reliability and validity of the results were expected to be better.

Conclusions

Despite a number of limitations, this study provided the baseline information about patterns of psychiatric morbidity, sociodemographic correlates and referrals in a tertiary care military hospital of Bangladesh. The morbidity was consistent with the findings of studies done in the Indian sub-continent and other parts of the world as well. More than half of referrals were from Medicine and allied branches. More than one fifth of the participants who had depression among psychiatry outpatients which was prevalent in the health-care service often went undiagnosed and unmanaged. This study may enlighten for a better comprehensive mental health action plan integrated with primary health care system in our country in the future days to come.

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