Socio-Demographic and Clinical Profile of Admitted Patients for Psychiatric Illness in a Tertiary Care Military Hospital in Bangladesh

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ABSTRACT

Background: *Mental health problems are becoming a public health issue in all countries around the world. It's often ignored and unnoticed by patients, their relatives and society as well. Treatments for all these disorders are as available as efficacious. The purpose of this study was to assess the socio-demographic and clinical profile of admitted patients for psychiatric illness in a tertiary care military hospital.*

Matraials and methods: *This hospital based retrospective study was performed by analyzing the medical records of admitted psychiatric patients, carried out in the Department of Psychiatry at Combined Military Hospital (CMH), Chattogram from 01 July 2022 to 31 December 2022. For this purpose, 41admitted patients in psychiatry ward of CMH Chattogram were enrolled in the study. Psychiatric diagnoses of the patients were assigned by the consultant psychiatrist as per International Classification of Diseases (ICD) 10th Revision diagnostic criteria. Statistical analyses were carried out by using the Statistical Package for Social Sciences (SPSS)-version 16. The quantitative observations were indicated by frequencies and percentages. Ethical issues were maintained all through the study.*

Results: *The results showed that more than half of (56.09%) patients were in 19-35 years of age with male preponderance (63.41%) and most of the cases reported from urban area (58.53%). The most common psychiatric morbidity among the patients were major depressive disorder (26.82%) followed by Anxiety disorder (17.07%) and Obsessive- compulsive disorders (17.07%). In this study majority of patients stayed 15-28 days (80.48%) on an average of 21.5 days.*

Conclusion: *Neurotic cases were predominant in psychiatric admission. Results of this study may help in the planning for better mental health service integrated with primary healthcare system of our country. Findings of this study will also act as an eye-opener for psychiatrists regarding a wide range of psychiatric diagnoses as well future research in psychiatric fraternity.*

Key words: Medical illness; Psychiatric disorder; Public health.

Introduction

Psychiatric disorders have traditionally been considered as 'mental' rather than 'physical' illnesses as they manifest with disordered functioning in the areas of emotion, perception, thinking and memory. Formerly it had no clearly biological basis. Biochemical and structural abnormalities of the brain are identified in an increasing number of psychiatric disorders and both psychological and behavioural factors are identified in many medical illnesses.[1]

The World Health Organization (WHO) periodically publishes its International Classification of Disease (ICD) that provides definitions for every recognized clinical condition. The 10th Revision (ICD-10) comprises of 22 chapters. The diagnoses listed in Chapter V, 'Mental and behavioural disorders' are used by psychiatrists around the world in everyday clinical practice.[1]

Psychiatric disorders are among the most common of all human illnesses. The WHO's Global Burden of Disease (GBD) study found 'Mental, neurological and substance misuse disorders' to be the leading cause of 'Years Lost to Disability' (YLDs), accounting for almost 20% of global YLDs, with anxiety and mood disorders alone accounting for over 10% as with most clinical conditions, the prevalence of mental disorders varies with the setting. In the general population, depression, anxiety disorders and adjustment disorders are most common (>10%) and psychosis is rare (<2%).[1]

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'Health is a state of complete physical, mental, social and spiritual well-being and not merely an absence of disease or infirmity'.[2] 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 cause of disability.[3]

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 WHO more than 25% individuals show one or more mental disorders in their lifetime. Mental and 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.[4]

A study carried out by WHO at 14 sites in Africa, Asia, Americas and Europe estimated 24% current prevalent of any mental disorders in average without consistent differences between low and high income countries. Depression (Average 10.4%) and generalized anxiety disorder (Average 7.9 %) were the most common diagnoses. Female were 1.89 times higher than male for depression. [4]

Depression is expected to become the leading cause of disability by 2030.[5]

In Bangladesh, prevalence of psychiatric disorder is 16.8%. Out of which Depressive disorder is (6.7%), Anxiety disorders are (4.5%) and Somatic symptom and related disorders are (2.1%). Surprisingly the treatment gap estimated 92.3% and majority are treated by general physicians.[6]

Due to scarcity of epidemiological studies, there was limited data on socio-demographic and clinical profile of psychiatric admission. With the world's eighth largest population with 169 million people, extensive research and studies was required to prepare the country to lessen the silent burden of mental disorders. This study was designed with the aim of determining the socio-demographic and clinical profile of admitted psychiatric patients as well as contributes to mental health and raise awareness among all physicians integrated with primary healthcare system of our country.

Materials and methods

This was a hospital based retrospective and cross sectional study carried out in the Department of Psychiatry at Combined Military Hospital (CMH), Chattogram from 01 July 2022 to 31 December 2022.

Psychiatry ward consists of 20 beds. Out of them, 15 beds for male patients and 5 beds for female patients. Medical records of all admissions with psychiatric disorders treated in Psychiatry ward were reviewed. Data captured includes age, gender, education, occupation, clinical diagnosis, duration of stay etc.

After admission, both physical and mental status examination of the patients were performed in details. Necessary laboratory investigations were done to exclude organic basis of illness. Final diagnosis was made by working psychiatrist according to the International Classification of Diseases (ICD) 10th Revision diagnostic criteria.[7]

Usually patients were discharged after sufficient improvement. A patient was considered to have improved when he was free from all or most symptoms of disorder. Statistical analysis were carried out by using the Statistical Package for Social Sciences (SPSS) version 16. The quantitative observations were indicated by frequencies and percentages. Ethical issues were maintained all through the study.

Results

Recorded data from 41 patients were analyzed in this study. The findings of the study were presented in different tables.

Table I Distribution of the respondents according to age (n=41)

Age (in years)	Frequency	Percentage
0-18	4	9.75
19-35	23	56.10
36-60	13	31.71
Above 61	1	2.44

In the study, among different age groups, maximum (56.10%) patients were in 19-35 years of age.

Table II Distribution of the patients according to socio-demographic variables (n=41)

Socio-demographicvariables	Frequency	Percentage
Sex		
Male	26	63.41
Female	15	36.59
Religion		
Islam	35	85.37
Hinduism	5	12.20
Others	1	2.43
Educational level		
Illiterate	8	19.52
Primary	1	2.43
Secondary	18	43.90
Higher Secondary	11	26.83
Graduation and above	3	7.32

Socio-demographic variables	Frequency	Percentage
Occupational status		
Military Service	28	32.99
Housewife	6	14.63
Student	3	7.531
Unemployed	4	9.75
Marital status		
Married	27	65.85
Unmarried	13	34.14
Divorced	1	2.43
Social background		
Rural	17	41.46
Urban	24	58.53

There were 63.41% male and 36.58% female. Most of the patients were Muslim 85.36%, married 65.85%, reported from urban area 58.53% and completed secondary school education 43.90%. Regarding occupation, highest numbers of patients were military service holder 28(32.99%) followed by housewives 6(14.63%).

Table III Distribution of the patients according to psychiatric disorders (n=41)

Psychiatric disorders	Frequency	Percentage
Major depressive disorder	11	26.82
Anxiety disorders	7	17.07
Obsessive-compulsive disorder	7	17.07
Bipolar affective disorder	5	12.19
Mental retardation	4	9.75
Schizophrenia	3	7.31
Conversion disorder	3	7.31
Substance related disorder	1	2.43

The most prevalent ICD-10 diagnosis was Major depressive disorder 11(26.82%) followed by Anxiety disorder 7(17.07%), Obsessive- compulsive disorders 7(17.07%) and others.

Table IV Distribution of the patients according to duration of hospital stay (n=41)

Duration of hospital stay (In days)	Frequency	Percentage
0-7	5	12.19
8-14	3	7.31
15-28	33	80.48

In this study majority of patients stayed 15-28 days 33(80.48%) on an average of 21.5 days.

Discussion

This study explored to assess the socio-demographic and clinical profile of admitted patients for psychiatric illness in psychiatric Ward of CMH, Chattogram. During the study period, 41 patients recorded data were analyzed.

In this study it was found that among patients highest percentage 56.59% had age group in between 19-35 years. It is comparable with the study done in our country.[8]

Among admitted patients more men, 63.41% than women 36.58% were admitted to the psychiatric ward for treatment. This finding supported the study carried out to find the pattern of psychiatric illness admitted in psychiatric units in abroad and national level.[9-13]

Education level of this study showed maximum 18(43.90%) patients were up to secondary level. Similar results reported by Algin et al.[14] It indicated that mental health awareness are increased among literate people.

Among the occupation, majority belonged to military services (32.99%) which were not commensurate any study as it is a Military hospital. Most of them were government service holder. But in this study, 14.63% patients were housewife which commensurate with one of the national studies.[12]

Marital status of the patients showed 65.85% were married and 34.14% unmarried which was similar result with the earlier mentioned study.[14]

Urban populations were represented more than half of patients 58.53%. Similar finding was reported by Algin et al.[14] Location of hospital in commercial city made more accessible for urban population group.

Major depressive disorder and Anxiety disorder were the most common psychiatric diagnosis found in this study i.e. 43.89% which was similar to other study of England.[9] Depression is one of the major causes of health burden worldwide affecting approximately 264 million people.[15] In Bangladesh, it is the most common psychiatric diagnosis affecting 6.7% population.[6]

Another study conducted by Firoz AHM et al. also showed that among all psychiatric disorders, depressive disorders are highest in number in Bangladeshi population.[16]

Obsessive-compulsive disorder (17.07%) secured next common diagnosis. It showed similar study done by Algin et al.[14] Besides two recent studies done in Bangladesh marked the prevalence of OCD 9.06% and 5.66% respectively.[12-13] The OCD patients did not accept it as disorder and as well as not liked to share their symptoms till it was severe and hampering his/her day to day activities.[14]

The next common frequency was Bipolar affective disorder 5(12.19%) which was almost similar to another study.[17]

Mental retardation 4(9.75%) found relatively higher than two studies 5.62% Algin et al. and 2.09% in Mullick et al. works which was dissimilar.[14,13] It may be due to access to "Proyash School" which is a Special school for special children, located inside Chattogram Cantonment. Parents of mentally retarded children preferred to stay in and around Proyash School for valid reason i.e, to take support of speech therapy, occupational therapy, physiotherapy etc.

Schizophrenia 3(7.31%) shared next diagnosis. Findings of this study was in accordance with another study.[10] Patients of Conversion disorder accounted for 7.31% which was almost similar to the finding of study.[13] The prevalence of Substance use is gradually increasing in Bangladesh. This study revealed that 2.43% patients admitted due to Substance related disorder. This finding also correlated with national study done in NIMH.[8]

In this study, median hospital stay was found 21 days which was consistent with other study that was carried out at an inpatient department of NIMH, where median hospital stay was found 19 days.[8,18,19]

Limitation

There are few limitations of the current study including relatively short study period and small sample size as only military personnel and few serving entitled 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. Due to scarcity of data, unipolar depression and bipolar depression could not be estimated separately.

Conclusion

Despite a number of limitations, this study provided the baseline information about patterns of psychiatric morbidity, sociodemographic correlates and hospital stay 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. The most common psychiatric diagnosis was major depressive disorder among psychiatry inpatients 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 of this country in future. Findings of this study will also act as an eye-opener for psychiatrists regarding a wide range of psychiatric diagnoses as well future research in psychiatric fraternity. It will also benefit the policy makers for future planning and decision making process in the field of mental health.

Recommendations

Nationwide advertisement and co-operation from government and non-government organization will be needed to increase people's awareness in respect to mental health services. Besides all government, private medical colleges and tertiary level hospitals should maintain database/software incorporated with birth identification number for every person irrespective of age and sex to maintain records of each patient. Data should be correctly filled up, recorded and scrutinized by the respective departments in that database/software which can be used as and when require.

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