

Sociodemographic characteristics of depressive patients attending medical outpatient department of Combined Military Hospital (CMH), Dhaka

Munira Parveen, Arman Ibne Haq, A S M Kowser, M M Jalal Uddin

Background: Depression is the most common form of mental disorder in Bangladesh.

Objectives: To determine sociodemographic characteristics of depressive patients attending medical outpatient department of Combined Military Hospital, Dhaka Cantonment, Bangladesh.

Methods: It was a cross-sectional study conducted in the internal medicine outpatient department of CMH, Dhaka. Considering the inclusion and exclusion criteria, 444 samples were selected purposefully who were 18 years and above, irrespective of sex. The duration of study was six months starting from September 2018 to February 2019. Socio-demographic data were collected by face-to-face interview using semi structured questionnaire. Patient Health Questionnaire-9 (PHQ-9) score ≥ 5 (Five or more) was applied to screen out the positive cases. Data analysis was done by Statistical Package for Social Sciences (SPSS) version 22.

Results: Overall prevalence of depression in the study was (21.8%). Prevalence of depression was higher among young age groups of 18-40 years (75.2%). Majority of respondents were females (57.7%), came from rural background (71.1%) and achieved education level up to primary (38.1%). This study also found that majority of the participants were unemployed, i.e., housewives (43.3%), 53.6% were not married (i.e., single, widowed, separated or divorced) and were from low-income group (42.3%).

Conclusions: More than one-fifth of the participants showed depression among medical outpatients.

Declaration of interest: None

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Keywords: Depression; Combined Military Hospital (CMH); DSM-5.

Introduction

Behavioral and mental disorders accounted 12% of global burden of disease. 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.¹ Depression is the most common form of mental disorder that leads Years Lived with Disability (YLD).² Etiology of depression is multifactorial which includes combination of genetic, psychological,

environmental and biological factors.³ Depression often occurs due to adverse life events, such as the loss of a significant person-object relationship or loss of health. However, it can also occur with no apparent cause. These problems can become chronic or recurrent and cause substantial impairment in an individual's ability to take care of their everyday responsibility.⁴ It was projected that by year 2020, depression will be 2nd in the ranking of YLDs

and by 2030, it is expected to become the leading cause of disability.⁵

In Bangladesh, there was limited data on the prevalence and other sociodemographic variables of depression due to scarcity of epidemiological studies. With the world’s eighth largest population with 170 million people, extensive research and studies was required to prepare the country to lessen the silent burden of depression. This study was designed with the aim of determining prevalence of depression and contribute to mental health and raise awareness among physicians.

Methods

This was a cross-sectional study and was carried out in internal medicine OPD of Combined Military Hospital (CMH), Dhaka Cantonment, in between September 2018 to February 2019. Patients aged 18 years and above attending internal medicine OPD of CMH, Dhaka were approached by purposive sampling method. The patients who were not interested in participating in the study, suffered from acute physical illness and acute confusional state, had visual or hearing impairment to such an 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, marital status, family type, etc. An informed written consent was taken from each participant of the study population by using consent form. PHQ-9 was used to assess whether the respondents had experienced symptoms associated with depression within 2 weeks before the interview. The PHQ-9 demonstrated acceptable reliability and validity. Sensitivity and specificity of PHQ-9 score ≥ 10 was 88% for major depression.⁶ Depression was measured using PHQ-9 with a 3-point severity scale over the last 2 weeks. Based on the instrument standard, a PHQ-9 score ≥ 5 was considered as significant for meeting the symptoms of depression. It was a very useful tool for accurate as well as rapid diagnosis of depression in clinical settings.⁶⁻⁸ Finally, DSM-5 criteria were applied to diagnose depression.

Results

During the study period, 1050 respondents visited internal medicine outpatient department. We randomly selected 550 out of the 1050 respondents. Among 550 respondents, 90 did not meet the selection criteria and 16 did not agree

to participate in the study. Finally, a total of 444 respondents met the selection criteria and agreed to participate in the study. Overall PHQ-9 positive was 112 (25.22%) among study subjects (Table 1).

Table 1: PHQ-9 finding of the respondents (N=444)

	Frequency	Percentage (%)
PHQ-9 positive (score ≥ 5)	112	25.2
PHQ-9 negative (score ≤ 5)	332	74.7
Total	444	100

Based on the instrument standard, a PHQ-9 score ≥ 5 was considered as significant for meeting the symptoms of depression. PHQ-9 positive (score ≥ 5) respondents were 112. These 112 respondents were assessed by a psychiatrist using DSM-5 criteria to diagnose depression and it was found that 97 out of 112 were PHQ-9 positive respondents. Overall prevalence of depression was 97(21.8%) among study subjects (Figure 1).

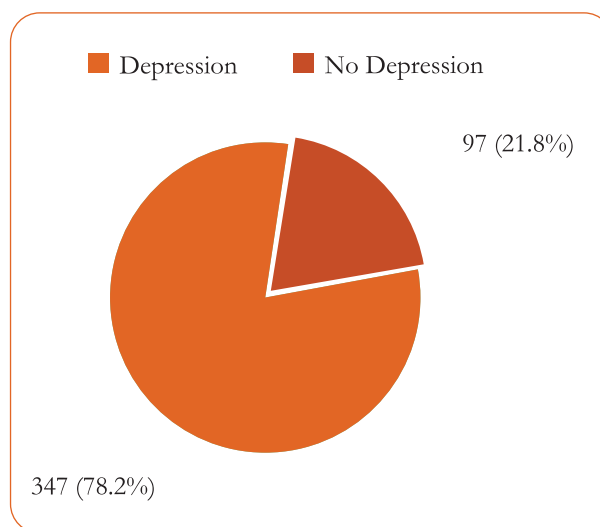


Figure 1: Prevalence of depression among study respondents

Table 2 shows the sociodemographic characteristics of the respondents.

Table 2: Sociodemographic distribution of the study respondents (N=444)

Sociodemographic factor	Frequency (n)	Percentage (%)
Sex		
Male	286	64.4
Female	158	35.5
Age group (year)		
18-30	122	27.4
31-40	173	38.9
41-50	57	12.8
51-60	92	20.7
Residence		
Urban	324	72.9
Rural	120	27
Religion		
Muslim	365	82.2
Hindu	63	14.1
Others	16	3.6
Occupation		
Service	149	33.5
Housewife	154	34.6
Agriculture worker	100	22.5
Day laborer	41	9.2
Education level		
No formal education	100	22.5
Primary	152	34.2
Secondary	95	21.4
Higher secondary	50	11.2
Graduation	47	10.5
Marital status		
Single	113	25.4
Married	283	63.7
Widowed	28	6.3
Separated	12	2.7
Divorced	8	1.8
Family type		
Nuclear	172	38.7
Joint	272	61.2
Monthly income (in Taka)		
<15,000	113	25.4
15,001-30,000	88	19.8
30,001-45,000	140	31.5
>45,001	103	23.2

Discussion

In the present study, prevalence of depression was found among 21.8% of the 444 participants. This finding was similar to the observation made in a study carried out by Kohli et al.⁹ in which 23.1% patients had depression. Several studies reported that prevalence of depression in primary care settings range from 21-40%.¹⁰⁻¹⁴ An Ethiopian study¹⁵ had showed higher prevalence rate of 24.5% and 49% in Thailand.¹⁶ Different Indian studies had reported prevalence of depression in outpatient department ranging from 4.3%-39.3%.¹⁷ A meta-analysis has reported overall prevalence of depression of 19.5% in various mainly urban primary care practices across more than ten countries.¹⁸

In the present study, depression was found to be more among females, separated/widowed, and those who were unemployed. Different studies have also shown that depression was more common among female gender.^{10,11} Similarly depression was also reported to be more prevalent in widowed or divorced in a study carried out by Poongothai et al.¹⁹

In this study, 57.7% respondents were females and 42.3% were males, similar to the study of Kohli et al.⁹ who detected that depression was more in females. Increased prevalence of depression in females can be explained by hormonal influence who were more likely to experience exposure to sexual abuse and domestic violence.

In this study it was found that among depressive respondents' highest percentage (75.2%) had age group in between 18-40 years. A study conducted in India, in the medical outpatient department (OPD) with a total population of 395, reported a prevalence of unrecognized depression of 23.8% using the Primary Care Evaluation of Mental Disorders (PRIME-MD) questionnaire and noted that depression was seen in a younger age group.²³ In an accordance study of Ponnudurai et al., it was shown that depression was more common among younger subjects.²⁰ Kohli et al.⁹ reported that 66% of the patients belonged to 18-30 years age group which was correlated to the present study.

In this study 73.2% respondents were Muslims and rest 26.8% were Hindu and others. Kohli et al.⁹ reported Hindu participants were significantly associated with depression in their study. This result was not consistent with this study as Bangladesh is a Muslim predominant country.

Education level of this study showed that 38.1% respondents were educated up to primary level, 22.7% up to higher secondary and 16.5% were illiterate. Similar results were reported by Kohli et al.⁹ It showed that

literate used to seek medical care early for depression, perhaps due to greater awareness.

In the present study majority (43.3%) respondents were unemployed 25.8% (i.e., housewife and agriculture worker). Kohli et al.⁹ noted occupation was not found to be significantly associated with depression but unemployment, such as housewife was a risk factor for depression.

In present study, female gender, illiteracy, agriculture worker, semi urban, younger age, widow, separated and divorcee were associated with higher prevalence of depression. The single, widowed, separated and divorced women had no close person to confide in. A published study¹⁵ reported that those women were 1.6 times as likely to have depression compared to men, younger (16-35 years) age was an alarming age group. Another Pakistani study reported the same as they found depression was more prevalent in patients aged less than 40 years, i.e., younger age group, females, lower literacy and low-income group.²¹

Our study found that majority (43.3%) respondents were from lower income group (<15000 Tk), 33.0% respondents had monthly income of 15000-30000 Tk. A study in Ethiopia by Tilahunet al.¹⁵ reported low income was significantly associated with depression. Another study done by Patel and Kleinman²² corresponded similar findings. This might be because an insufficient income led to a feeling of being in a stressful and unsafe situation which triggered depression. People experiencing poverty faced difficulties to fulfill basic needs and was unable to afford the treatment which interfered with their ability to participate in the productive activity. Higher levels of hopelessness towards the present rather than the future and lower level of satisfaction with life were some of the psychological impacts of low socioeconomic status.

Conclusions

Despite a number of limitations, this study provided the baseline information about depression among medical outpatients which was prevalent in the health-care service and often went undiagnosed and unmanaged.

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