Prevalence of depression among patients visiting medicine outpatient department

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Background: Depression is one of the most common forms of mental disorders. It frequently goes unrecognized and unmanaged in outpatient department.

Objectives: To determine the prevalence of depression among patients visiting medicine outpatient department.

Methods: This cross-sectional study was conducted in the Internal Medicine Outpatient Department of Combined Military Hospital, Dhaka, Bangladesh. Considering the inclusion and exclusion criteria, 444 samples were selected purposefully who were 18 years and above. The duration of the study was six months starting from September 2018 to February 2019. Sociodemographic data were collected by face-to-face interview using a semi-structured questionnaire. Patient Health Questionnaire-9 (PHQ-9) score of ≥5 (five or more) was used to detect positive cases. Data analysis was done by Statistical Package for Social Sciences (SPSS) version 22.

Results: Prevalence of depression found in the study was 21.8%. Majority of the respondents were females (57.7%), came from rural background (71.1%), completed education level up to primary (38.1%), were unemployed (43.3%), unmarried 53.6%) and were from low-income group (42.3%).

Conclusions: More than one-fifth of the participants seeking medical outpatient services showed signs of depression.

Declaration of interest: None

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Keywords: Depression; prevalence; medicine outpatient department.

Introduction

Behavioral and mental disorders accounts for 12% of global burden of disease. It is estimated that 10% of the adult population is suffering from some kind of behavioral and mental disorders and these are 4 of the 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 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 2020, depression will be 2nd in the ranking of YLDs and by 2030 it is expected to become the leading cause of disability. $^{\rm 5}$

Bangladesh has 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 depression. This study was designed with the aim of determining prevalence of depression and subsequently raise awareness among physicians.

Methods

This was a cross-sectional study, carried out in the Internal Medicine Outpatient Department (OPD) of Combined Military Hospital (CMH), Dhaka, Bangladesh in between September 2018 to February 2019. Patients aged 18 years and above attending Internal Medicine OPD of CMH, Dhaka were enrolled by purposive sampling method. The patients who were suffering from acute physical illness, 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.

A semi-structured questionnaire was prepared to collect the sociodemographic information like age, sex, residence, marital status, family type, etc. Bangla version of Patient Health Questionnaire-9 (PHQ-9) was used to assess whether the respondents had experienced symptoms associated with depression within 2 weeks before the interview. Sensitivity and specificity of PHQ-9 score ≥ 10 is 88% for major depression.⁶ It is a very useful tool for accurate as well as rapid diagnosis of depression in clinical settings.⁶⁻⁸ Based on the instrument standard, a PHQ-9 score of ≥ 5 (five or more) was considered as significant for depression. PHQ-9 positive individuals were further assessed by psychiatrists for diagnosis of depression according to DSM-5 criteria.

Results

During the study period, 1050 respondents visited the Internal Medicine OPD. 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. Table 1 shows the sociodemographic characteristics of the participants.

Table 1: Sociodemographic characteristics of the participants attending Internal Medicine OPD of CMH (N=444)

Characteristic	Frequency (n)	Percentage (%)
Sex		
Male	286	64.4
Female	158	35.5
Age group (years)		
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		
Islam	365	82.2
Hinduism	63	14.1
Others	16	3.6
Occupation		
Service	149	33.5
Housewife	154	34.6
Agricultural worker	100	22.5
Day laborer	41	9.2
Education level		
Illiterate	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

Characteristic	Frequency (n)	Percentage (%)
Family type		
Nuclear	172	38.7
Joint	272	61.2
Monthly income (in T	'aka)	
<15,000	113	25.4
15,001-30,000	88	19.8
30,001-45,000	140	31.5
>45,001	103	23.2

Based on the instrument standard, a PHQ-9 score of ≥ 5 (five or more) was considered significant for meeting the symptoms of depression. PHQ-9 positive (score ≥ 5) respondents were 112 in number (25.2%). These 112 respondents were assessed by psychiatrists using DSM-5 criteria to diagnose depression and found depression in 97 out of 112 (21.8%) PHQ-9 positive respondents. Overall, prevalence of depression was 21.8% among the study participants who were attending OPD.

Table 2: PHQ-9 finding of the study participants attending Internal Medicine OPD of CMH (N=444)

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

Discussion

The aim of this study was to determine prevalence of depression in patients attending medicine OPD of CMH, Dhaka. During the study period, 444 respondents agreed to participate in the study.

In the present study, depression was present in 21.8% of the participants. This finding is similar to the observation made in the study carried out by Kohli et al.,⁹ where 23.1% patients had depression. Several studies reported prevalence of depression in primary care settings ranging from 21-40%.¹⁰⁻¹⁴ An Ethiopian study¹⁵ had showed higher prevalence of 24.5% and 49% was found in a Thai study.¹⁶ Several 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 urban primary care practices across more than ten countries.¹⁸

Conclusions

Despite a number of limitations, this study provided a baseline information about the prevalence of depression in medicine outpatient departments. More than one-fifth of the participants showed depression which often go undiagnosed and unmanaged in the outpatient units. The prevalence was consistent with the findings of the studies done in the Indian sub-continent and other parts of the world as well.

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