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PROPORTION OF UNRECOGNIZED DEPRESSION AMONG PATIENTS ATTENDING MEDICAL OUTPATIENT DEPARTMENT, FEDERAL GENERAL HOSPITAL, ISLAMABAD

Abstract

Background: Depression is a common mental disorder globally and frequently associated with adverse life events, such as the loss of an important person, relationship or loss of health. The current study was carried out to determine the proportion and associated factors of unrecognized depression among patients visiting medical Out Patient Department (OPD at Federal General Hospital (FGH), Islamabad.

Methods: A cross section study conducted during August-October at FGH, Islamabad comprising 290 patients coming to medical OPD with different complaints. PHQ-9 questionnaire was used. Proportion of undiagnosed depression was calculated. Chi-square test was used to find dependence of severity of depression with socio-demographic factors.

Results: Majority of the participants were females 63%. The most affected age group was 16-35 years. Overall prevalence of depression was 236(81%) with severe depression of 3.8%. Women had higher prevalence 158(53%) of all depression symptoms compared with men 78(27%). Participants with education up to metric (p 0.02), females (p .03) and being married (p 0.04) were found to statistically associated with severity of depression.

Conclusion: Proportion of undiagnosed depression is very high and females, low education and being married remained more affected with undiagnosed depression. It is recommended to initiate an awareness complain to make people aware that early diagnosis of depression will lead to better outcome.

Keywords: Depression, adult medical OPD, female, married, Islamabad.

Introduction

Behavioral and mental disorders carry 12% of global burden of disease. Among adults it is estimated that 10% of the population is suffering from some kind of behavioral and mental disorder globally and it is four of the ten leading cause of disability. (1). In Global Burden of Disease study in 2010, Mental and substance use disorders are considered the leading cause of years lived with disability (YLDs) (2).

Depression is the most common form of mental disorder leading to YLDs (3). It present with variety of symptoms like loss of interest, low mood, sleep disturbance, loss of energy, poor concentration, feeling of guilt. Globally it is estimated that 350 million people are suffering from some form of depression and it leads to loss of 850,000 lives every year. (4,5). Lifetime prevalence of depression ranges from 8 to 12 percent. WHO declared depression 4th leading contributor to the global burden of disease (6). It is estimated that by year 2020 depression it will be 2nd in the ranking of YLDs and by 2030 it is expected to become the leading cause of disability (7).

Psychiatric disorders are frequently observed in hospital settings as well. Among patients treated in primary care settings 25 to 33% have some kind of mental disorder (8).

Depression leads to major disability and may delay recovery from any medical illness. (9). Moreover in most of the cases this depression is not recognized so it remains undiagnosed and untreated (10). It was shown in a study that half of the patients who consulted the primary care physician with different complaints have unrecognized depression so never got treatment for that. (11). One such study done in Pakistan showed that more than one third of in patients had unrecognized comorbid depression (11). Data on prevalence of unrecognized depression among Pakistani patients visiting medical outdoor department (OPD) is lacking. This study was carried out to find out prevalence of unrecognized depression in patients coming to medical...
OPD with different medical complaints and to explore the factors associated with depression.

Methodology
A cross-sectional study was done at FGH, Islamabad from August-October 2016 in adult medical OPD Federal General Hospital. FGH is a 200 bedded hospital with multidisciplinary setup, it is located in periphery of Islamabad and catering patients from both rural and urban areas. Medical department is a busy department with both indoor and outdoor facilities. All patients who were attending adult medical OPD during the study period and who gave consent were the study population. Patients already diagnosed with mental illness and those unable to communicate/respond were excluded from the study. A systematic random sampling technique was used to select the subjects for interview. Every second patient of any illness, was enrolled in the study. The first individual was selected using a lottery method, and the rest were selected at a regular interval.

A pretested and validated patient health questionnaire PHQ-9 was used as study instrument. The PHQ-9 has acceptable reliability and validity. The questionnaire was translated into Urdu (local language) and then was back translated in English. The tool assessed the symptoms associated with depression within 2 weeks before the interview. One medical assistant and physician were assigned to interview the patients and mark the responses on questionnaire. According to score achieved by the patients they were labeled as no depression, mild, moderate, moderately severe and severe depression.

PHQ-9 is an instrument developed in 1990 for the purpose to diagnose 5 commonly seen mental disorders which are depression, anxiety, alcohol, eating disorders and somatoform disorders (12). It is a very useful tool for accurate and rapid diagnosis of depression in clinical settings. (14,15, 16). PHQ-9 has 9 questions, which are about different symptoms for last 2 weeks. Answer is in the form of "not at all", "several days" "more than half the day" "nearly every day" and scores as 0, 1, 2 and 3 respectively. Total score is 27 out of which 0-4, 5-9, 10-14, 15-19 and 19-27 are considered as none, mild, moderate, moderately severe and severe depression respectively (15).

Collected data were entered and analyzed using SPSS 16. Descriptive statistics were presented as frequencies and percentages. The proportion of undiagnosed depression was calculated. Person chi-square test was used to see the association between severity of depression and socio-demographic characteristics.

Results
A total of 290 patients with different ailments were enrolled in the study. Majority of the participants were females (184, 63%) and male to female ratio was 1: 1.7. Mean age was 33(±SD 12). The maximum of the respondents were among 16-35 years age group (n=181, 62.4%) and rest of the respondents were distributed as 24.1% among 36-55 years of age group, 7.9% remained up to 15 years and 5.5% were of 55 years and above age group. Among the study population, 93(32%) were illiterate, 124(43%) had education level up to matric while 73(25.2%) were intermediate and above. About 178(61%) were married. Majority of the patient was from adjacent rural areas 212(73%) while 78(27%) were from urban area. (Table 1).

Table 1: Showing the demography of study population

| Socio-Demographic Factors | Number (%) |
|---------------------------|------------|
| Gender                    |            |
| Male                      | 106 (36.6%)|
| Female                    | 184 (63.4%)|
| Age Groups                |            |
| < 15 Years                | 23 (7.9%)  |
| 16-35                     | 181 (62.4%)|
| 36-55                     | 70 (24.1%) |
| 55 & Above                | 16 (5.5%)  |
| Education Level           |            |
| Illiterate                | 93 (32.1%) |
| Up to Metric              | 124 (42.8%)|
| Intermediate & Above      | 73 (25.2%) |
| Marital Status            |            |
| Married                   | 178 (61.4%)|
| Unmarried                 | 112 (38.6%)|
| Area                      |            |
| Urban                     | 78 (26.9%) |
| Rural                     | 212 (73.1%)|

Using PHQ-9, depression scores were 0-27 with average 9.55 (±5.56 SD). Overall prevalence of depression was 236(81%) with severe depression of 3.8%. However, none of the participant was diagnosed as being a patient of depression by physician previously. Out of nine screened items, feeling bad about yourself (51%) and feelings of tiredness (61.4%) were the most common symptoms reported among women, whereas loss of concentration was the commonest symptom among men. Women had higher prevalence 158(53%) of all depression symptoms compared with men 78(27%). 19% had no depression while 34%, 24%, 17%, 3.8% have mild, moderate, moderately severe and severe depression respectively. (Figure 1)

Figure 1: Distribution of level of depression among study participants (n=290)

Variables like literacy level, gender and marital status were associated (P<0.05) with increased odds of depressive symptoms. Participants with education upto
metric (P 0.02), females (p .03) and being married (p 0.04) were found to statistically associated with depression (Table 2).

Table 2: showing the determinants of depression among study population (p value)

| Variables          | Severity of Depression |
|--------------------|------------------------|
| Socio-Demographic Factors | No Depression N (%) | Mild N (%) | Moderate N (%) | Moderately Severe N (%) | Sever N (%) |
| Gender             |                        |            |                |                           |             |
| • Male             | 28 (20%)               | 34 (25%)   | 27 (23%)       | 16 (15%)                  | 2 (1%)      | 0.03 |
| • Female           | 26 (14%)               | 65 (35%)   | 45 (25%)       | 38 (21%)                  | 10 (5%)     |      |
| Age Groups         |                        |            |                |                           |             |
| • < 15 Years       | 18 (78%)               | 29 (39%)   | 3 (13%)        | 0 (0%)                    | 0 (0%)      | 0.00*|
| • 15-25            | 35 (14%)               | 75 (40%)   | 22 (23%)       | 18 (18%)                  | 6 (6%)      |      |
| • 36-55            | 22 (12%)               | 82 (45%)   | 42 (25%)       | 32 (18%)                  | 6 (3%)      |      |
| • 55 & Above       | 24 (12%)               | 63 (35%)   | 42 (25%)       | 31 (19%)                  | 3 (1%)      |      |
| Education Level    |                        |            |                |                           |             |
| • Illiterate       | 16 (17%)               | 27 (29%)   | 27 (29%)       | 17 (18%)                  | 6 (7%)      | 0.02 |
| • Up to Metric     | 26 (21%)               | 36 (29%)   | 28 (23%)       | 31 (25%)                  | 2 (2%)      |      |
| • Intermediate & Above | 12 (16%)            | 56 (49%)   | 17 (23%)       | 6 (9%)                    | 3 (3%)      |      |
| Marital Status     |                        |            |                |                           |             |
| • Married          | 24 (15%)               | 62 (35%)   | 47 (26%)       | 36 (20%)                  | 6 (5%)      | 0.04 |
| • Unmarried        | 36 (27%)               | 72 (43%)   | 55 (22%)       | 31 (18%)                  | 3 (2%)      |      |
| Area               |                        |            |                |                           |             |
| • Urban            | 15 (14%)               | 36 (42%)   | 17 (22%)       | 12 (15%)                  | 3 (2%)      | 0.03 |
| • Rural            | 30 (18%)               | 66 (35%)   | 55 (28%)       | 42 (20%)                  | 9 (3%)      |      |

* Significant at <0.01

Discussion

Our study showed that unrecognized depression is common among patients visiting medical OPD with different complaints, overall prevalence of undiagnosed depression was 81.37% with male 74% and female 86% so significant difference in gender was observed (p<0.05). Among other demographic characteristics prevalence was common in married patients as compared to unmarried (p<0.05), most patients with depression had education level of up to metric (p<0.05). Literature shows that no study on prevalence of unrecognized depression among general population has been done in Pakistan. Most of the published data report prevalence of depression in patients with specific diseases like patients with diabetes, coronary artery disease, cancer patients (17,18,19) reporting the prevalence of depression at diabetic clinic (59.8%), cancer patients (52%) and coronary artery disease (37%). A study from Karachi showed prevalence of depression 93.4% among patients admitted in medical ward (20). Charu Kohli et al found in their study an overall prevalence of depression 93.4% among patients admitted in medical ward (20). Another Pakistani study reported the same as they found depression was more prevalent in patients aged less than 40 years, a younger age group (20). This is alarming as depression in this age group could be devastating.

Conclusion

There is high prevalence of depression among patients attending medical OPD with different complaints. In patients with medical illness female sex, secondary education level, being married is the socio-demographic factors increase risk to have depression. It is recommended to initiate an awareness complain to make people aware that early diagnosis of depression will lead to better outcome.

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