To Study the Clinical and Demographic Profile of Patients Presenting with Depression in Tertiary care Hospital

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Abstract
Background: Epidemiologist, national and international agencies have been sounding an alarm on rapidly rising burden of depression for past many years. According to WHO, in young people neuropsychiatric disorders are the leading causes of worldwide disability and second leading cause of death in 15 - 29 years.

Materials and Methods: Ninety four patients with depression were studied in the Department of Medicine and Department of Psychiatry, JA Group of hospitals and GR Medical college, Gwalior during the period from March 2012 to November 2013. Detailed clinical and demographic parameters including age, sex, residence type, education status and marital status were recorded. Patients of depression were assessed for the severity of depression according to Beck’s Depression inventory (BDI) and were labeled as having mild, borderline, moderate, severe and extreme depression.

Results: Depression was more prevalent among males (54.2 %) belonging to the age group of 15-25 years (30.8%) followed by 36-45 years (24.4%). Majority of the patients were male (54.3%). Majority of the depressive patients were literate (n=84). Prevalence of depression was more in the urban setting (36 males and 27 female). Majority of the male (n=32) and females (n=43) were married. Of all the 94 patients, 30 were smokers and alcoholism was reported by 16 patients. As per the BDI classification, 25.5% of the patients were mildly depressed, 24.5% were borderline clinically depressed, 41.5% were moderately depressed and 8.5% of them were found to be severely depressed.

Conclusion: Depression was more prevalent in young age group males with high educational qualification, belonged to urban area, smokers and were married.

Keywords: Beck’s Depression inventory, severely depressed, preventions, psychiatry.

Introduction
Depression is a disorder of major public health importance in terms of its prevalence and the suffering, dysfunction, morbidity and economic burden. Depression is more common in women than men. The report on global burden of diseases...
estimates the point prevalence of unipolar depressive episodes to be 1.9% for men and 3.2% for women, and the one year period prevalence has been estimated to be 5.8% for men and 9.5% for women.\textsuperscript{2}

The Global Burden of Disease (GBD) study examined and ranked mental disorders and depression as high as cardiovascular and respiratory diseases, surpassing all cancers combined and even HIV infection.\textsuperscript{3,4}

An estimated 3-4% of India’s 100 crore plus population suffers from major mental disorders and about 7-10% of the population suffers from minor depressive disorders.\textsuperscript{5} The prevalence of depression is high (3%-5%) with a life time prevalence of 5-20% with highest findings in urban lifestyle settings.\textsuperscript{6} It also causes substantial disability-disrupting the occupational and social life of an individual. Moderate-to-severe occupational role dysfunction occurs in about half the patients. Depression affects about 7%-18% of the population on at least one occasion in their lives, before the age of 40.\textsuperscript{7,8}

Understanding the clinical and demographic parameters associated with depression is important to decrease the prevalence. Therefore, the current study is an attempt directed towards depression and various demographic variable associated with the patients under depression.

**Materials and Methods**

Present observational, cross sectional study was performed on 94 patients with depression in the Department of Medicine and Department of Psychiatry, J.A Group of hospitals G.R. Medical College Gwalior (M.P) during the period from March 2012 to November 2013. The study was conducted after formal approval of the study protocol by the ethical committee of G.R. Medical College Gwalior (M.P)

All the OPD patients presenting with depression to the Department of Psychiatry were taken as cases. Subsequently, these patients were diagnosed as patients of depression by the Psychiatrist after the screening on the basis of Beck’s Depression Inventory (BDI). Written informed consent was taken from each patient after informing them about the nature of the study and the investigations desired for the study.

Confirmed case of depression as diagnosed by the Psychiatrist of either sex, having age ≥15 years, medically stable contrary to the ones requiring hospitalization and who understand and communicate in either Hindi / English were included.

Patient suffering from psychiatric disorders other than depression, patient already diagnosed for any other known medical diseases/disorders, patients with depression resulting from medicines known to produce, depression due to some underlying disease like Diabetes mellitus, cancer, cardiac ailment etc and patient not willing to provide informed consent were excluded from the present study.

Patients of depression were assessed for the severity of depression according to Beck’s Depression inventory (BDI) and were labeled as having mild, borderline, moderate, severe and extreme depression.

**Interpretation of the Beck Depression Inventory**

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Levels of Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>These ups and downs are considered normal</td>
</tr>
<tr>
<td>11-16</td>
<td>Mild mood disturbance</td>
</tr>
<tr>
<td>17-20</td>
<td>Borderline clinical</td>
</tr>
<tr>
<td>21-30</td>
<td>Moderate depression</td>
</tr>
<tr>
<td>31-40</td>
<td>Severe depression</td>
</tr>
<tr>
<td>Over 40</td>
<td>Extreme depression</td>
</tr>
</tbody>
</table>

All the data analysis was performed using IBM SPSS ver.20 software. Data is expressed as percentage. Categorical data was compare using Chi square test. Level of significance was assessed at 5%.

**Results**

Out of 94 patients who presented for the study, 29(30.8%) belonged to age group 15-25 years, 21(22.3%) belonged to age group 26-35 years and 23(24.4%) belonged to age group of 36-45 years with mean age being 36.06 years. There were 54.2% were males and 45.7% were females.
Distribution of patients presenting with depression in psychiatry OPD showing level of education in which 10 patients were illiterate and 84 patients were literate. Out of 10 illiterates all were females and out of 84 literates, 51 were males and 33 were females. Out of all the literates maximum patients were educated upto higher secondary level (28.5%) and minimum numbers of patients were graduates (21.4%). Among the 51 males in the study group, 36 were from urban locality and 15 from rural. On the other hand among the total 43 females, 27 were from urban locality and 16 from rural area, emphasizing yet again the prevalence of depression being more in the urban setting.

Among the total 51 males in the study, 32 were married and 19 unmarried, on the other hand out of the total 43 females in the study, 39 were married and 4 were unmarried.

Of all the 94 patients, 30 were smokers and the rest 64 were nonsmokers. Alcoholism was reported by 16 patients.

Distribution of the patients of depression evaluated through various categories of Becks depression inventory revealed 24 (25.5%) of the patients to be mildly depressed, 23 (24.5%) to be borderline clinically depressed, 39 (41.5%) were moderately depressed and 8 (8.5%) of them were found to be severely depressed. Although, none of them were found to be extremely depressed.

**Graph 1: Distribution of patients according to severity of depression (Beck’s Depression Inventory)**

![Graph 1](image)

Discussion
There are several factors responsible for depression, viz. biological, social, economic and cultural factors, out of all strongly associated factors with mental disorders are social deprivation and poverty. The rise in prevalence of depression in recent years is due to demographic shifts to urban areas, rapid social and economic changes and sedentary lifestyles.

Maximum number of patients belonged to age group 15-25 and minimum number of patients belonged to age group 66-75. The mean age of patients of depression in our study was 36.06 years which is close to the mean age found in the studies by Weissman and colleagues in which the mean age is ranged from 24.8 to 34.8. Andrade et al found the median age at onset of depression between early and mid 30s which is similar to that in our study.

In our study, males outnumbered females in depression with a male to female ratio of 1.2:1. However, among specific age groups, females predominated males in three age groups. This finding of our study was inconsistent with conventional findings of female preponderance in depression. The most probable explanation for this paradoxical result lies in difference in social and cultural experience of males and females as
well as difference in psychological and social attributes. Moreover, this contrary finding may be the consequence of Berkesonian bias which refers to number of admissions in the hospital at particular point of time.

Majority of patients in the present study were married 71 (75.5%) out of which 32 (45.1%) were males and 39 (54.9%) were females. Whereas 23 cases were unmarried out of which 19 (82.6%) were males and 4 (17.4%) were females. Thus, depression was more prevalent among married people.

Locality in our study refers to rural and urban distribution. In our study, out of 94 patients, 31 (32.9%) patients belonged to rural background and 63 (67.1%) belonged to urban population. Among the 51 males in the study group, 36 were from urban locality and 15 from rural. On the other hand among the total 43 females, 27 were from urban locality and 16 from rural locality emphasizing yet again the prevalence of depression being more in the urban scenario.

This finding is consistent with other studies, justifying the fact that stressful urban life is the harbinger of depression.

Out of 94 patients presenting for study, 89.4% were literate and 10.6% were illiterate out of which all of the illiterates belonged to female gender. Out of all the literates maximum patients were educated upto higher secondary level (28.5%) and 21.4% patients were graduates. So majority of patients were of higher educational status. This finding is inconsistent with earlier studies which suggested that depression is more common with lower educational and socioeconomic status.

The probable reason is that our study area is a tertiary care centre with a large catchment area which caters to rural as well as urban population so amalgamation of both educated as well as uneducated patients visit OPD for treatment.

In present study, 31.9% of the patients with depression were smokers and 17% were alcoholics and that were males, it is worth emphasising that none of the females in the study group confessed either to smoking or alcoholism per se due to social stigma attached to it. In agreement to present study findings Poongothai et al reported similar results. Distribution of the patients of depression evaluated through various categories of Becks depression inventory revealed 24 (25.5%) of the patients to be mildly depressed, 23 (24.5%) to be borderline clinical depressed, 39 (41.5%) were moderate depressed and 8 (8.5%) of them were found to be severely depressed. Although none of them were found to be extremely depressed during case findings. Thus, maximum numbers of patients in the study were found to be moderately depressed. On the contrary, a large chunk of patients belonged to mild and borderline clinical level of depression. Similar reports were depicted in the study done by Danesh et al and Safwi et al.

Conclusion
Depression was more prevalent among males. Depression was more prevalent among patients of high educational qualification. Maximum number of patients suffering from depression was from urban locality. Maximum number of patients were moderately depressed. Prevalence of depression was more among married population. Smoking and depression coexisted together.

References


