

## Prescribing pattern of antidepressants in psychiatric unit of a tertiary care hospital

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### ABSTRACT

**Background:** The objective was to study the prescribing pattern of antidepressants in psychiatric unit of a tertiary care hospital.

**Methods:** An observational study was carried out at psychiatry out-patient department (OPD). The data which were collected included information about age, gender, education, occupation, marital status and drug prescription included trade name, generic name, dosage, and frequency of 100 outpatients who attended the psychiatry OPD.

**Results:** Among 100 patients with major depression 66% were females and 34% were males. Depression was more commonly seen between patients with age group 21-40 years. Depression was more common among housewives (44%) and next was students (18%). Percentage of depression was more in educated people with (72%) than in uneducated with (28%). Depression was more commonly seen in married people with (77%) than in unmarried people (23%). Most commonly prescribed antidepressant as monotherapy was fluoxetine and as combination therapy was fluoxetine and escitalopram.

**Conclusions:** Depression is more commonly seen in married people predominantly in females and housewives. Fluoxetine is more commonly used followed by escitalopram. Selective serotonin reuptake inhibitors are preferred over other antidepressant because of their relative lesser side effects.

**Keywords:** Antidepressants, Drug utilization, Fluoxetine

### INTRODUCTION

Depression is an important global public health problem as it has both relatively high lifetime prevalence and the significant disability. In 2002, 4.5% of the worldwide total burden of diseases was depression (in terms of disability-adjusted life years). It is also responsible for the greatest proportion of burden, which is due to the non-fatal health outcomes accounting for almost 12% of the total years, which were lived with disability worldwide.<sup>1</sup>

Depression can be defined as a mental state, which is characterized by feelings of sadness, loneliness, despair, low

self-esteem, and self-reproach.<sup>2</sup> The accompanying signs are psychomotor retardation or withdrawal from interpersonal contact and vegetative symptoms such as anorexia and insomnia.<sup>3</sup>

The symptoms may include low/sad, irritable or indifferent mood, loss of interest and enjoyment in daily life and lack of energy, any or a combination of these, which have been experienced for more than 2 weeks.<sup>4,5</sup>

On an average, 45-60% of all the uncomplicated depression cases respond to the antidepressants, but only 35-50% achieve remission (i.e., virtual absence of the depressive symptoms).<sup>6</sup>

The pharmacological agents used for depression are tricyclic antidepressants (TCAs), serotonin-specific reuptake inhibitor (SSRIs), serotonin–norepinephrine reuptake inhibitors and monoamine oxidase inhibitors. All these drugs have some level of primary effect on the serotonergic or the noradrenergic neurotransmitter system.<sup>7</sup>

Though, TCAs are less popular, they are more effective than SSRIs in the treatment of severe depression.<sup>8</sup>

The newer antidepressants such as duloxetine, escitalopram, sertraline, and mirtazapine accounted for the majority of prescriptions (96.36%).<sup>9-13</sup>

In National institute of Clinical Excellence or the American Psychiatric Association guidelines SSRIs were unanimously regarded as treatment of choice for depression.<sup>14,15</sup>

**Aims and Objectives**

To study the prescribing pattern of antidepressants in psychiatric unit of a tertiary care hospital.

**METHODS**

An observational study was conducted at psychiatry outpatient department in Bapuji Hospital from April to August 2013 (5 months).

**Inclusion criteria**

1. All patients who attend the psychiatry outpatients clinic of the hospital.
2. All patients who were diagnosed with depressive or adjustment disorders or any condition where antidepressants were indicated.

**Exclusion criteria**

1. Depression existing with other disorders like schizophrenia.
2. Patients with cardiovascular or any other comorbidity.

The data which were collected includes information about patient’s age, gender, education, occupation, marital status, and drug prescription included trade name, generic name, dosage, and frequency. Prescription of all patients was entered in a preformed proforma and was analyzed using descriptive statistics.

**Statistical analysis**

An observational study was carried out. A descriptive statistical analysis was performed in the present study using simple counts and proportions.

**RESULTS**

In the present study, depression was more commonly seen in the patients with age group 21-40 years with female preponderance of 66%. Only nine cases were of <20 year age group (Table 1).

Depression was more common among housewives (44%) and next was students (18%). Among male cases students were predominant with 34% (Table 2).

In the present study, 77 patients were married and 23 were unmarried with predominance of married female comprising of 49 cases (Table 3). Depression was more in educated people (72%) than in uneducated (28%).

In our study, it was observed that the combination therapy is preferred over monotherapy with 91% of the cases treated with combination therapy (Figure 1).

Most commonly prescribed antidepressant as monotherapy was fluoxetine and as combination therapy was fluoxetine and escitalopram (49%) (Figure 2). The least prescribed drugs in combination therapy were sertraline and escitalopram (4%).

**Table 1: Age and sex wise distribution of cases.**

Age (years)	Male	Female	Total
0-20	4	5	9
21-40	12	37	49
41-60	11	20	31
>60	7	4	11
Total	34	66	100

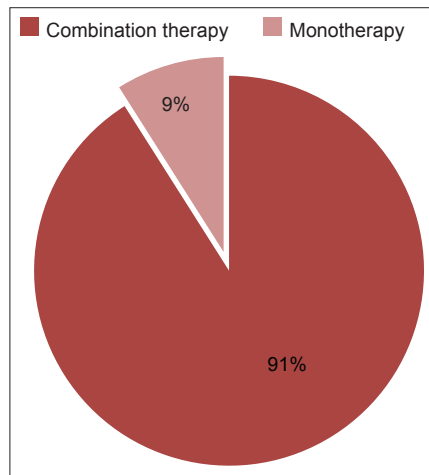
**Table 2: Distribution of cases according to occupation.**

Occupation	Male	Female	Total
Housewife	NA	44	44
Students	10	8	18
Tailor	-	3	3
Coolie	9	4	13
Teacher	5	4	9
Police	2	-	2
Business	8	-	8
Others	-	3	3
Total	34	66	100

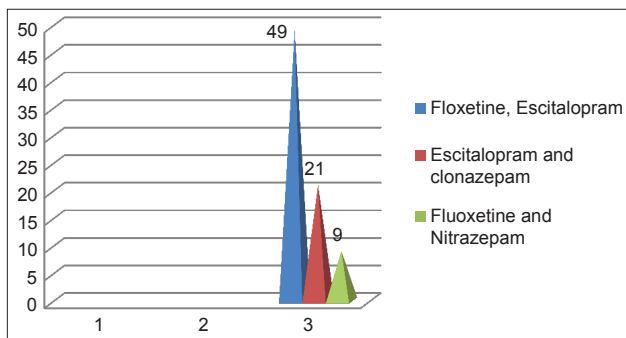
NA: Not applicable

**Table 3: Distribution of cases according to marital status.**

Sex	Married	Unmarried	Total
Male	28	6	34
Female	49	17	66
Total	77	23	100



**Figure 1: Pie diagram showing distribution of prescribing pattern.**



**Figure 2: Chart showing distribution of drugs prescribed in combination therapy.**

Selective serotonin reuptake inhibitors (SSRI's) are preferred over other antidepressant because of their relative lesser side-effects.

## DISCUSSION

Drug utilization study is defined as a study of the marketing, distribution, prescription and use of drugs in a society highlighting on the resulting medical, social and economic consequences.<sup>16</sup>

Worldwide, prevalence of major depression is 2-4% in community, 5-10% of primary care, and 10-14% in medical inpatients.<sup>17</sup> The prevalence of depression in South Indian population was 15.1%.<sup>18</sup>

Of 100 cases of depression 34% of the cases were males and 66% of the cases were females. Our finding is similar to a study done by Mant et al. in Australia, which showed that Psychiatric illness was more common in female patients.<sup>19</sup> Similar findings were found in a study done by González et al. which shows that depression is more prevalent in females than in male.<sup>20</sup>

Most of the patients with depression were below 40 years of age 58%, whereas only 42% of the patients were more than 40 years of age. Similar findings were noted in a study,

which has shown that antipsychotics prescribed in youths have increased significantly.<sup>21</sup> Moreover in the study done by Ramesh et al. it was observed that somatic depression occurs in younger age group of patients.<sup>22</sup>

As far as occupation of the patient is concerned, depression is most commonly seen in Housewives 44%, students 18%, followed by coolie 13% and teachers 9%, this was similar to the observation done by Boehlke that depression is common in housewives.<sup>23</sup>

In our study, it was observed that the combination therapy is preferred over monotherapy with 91% of the cases treated with combination therapy. Most commonly prescribed antidepressant as monotherapy was fluoxetine and as combination therapy was fluoxetine and escitalopram (49%). The least prescribed drugs in combination therapy were sertraline and escitalopram (4%).

Our findings are similar to a study done in UK on drug utilization of antidepressants which was a 10 years study done from January 1, 1992 to December 31, 2001 in children and adolescents with a sample size of 24976. Among the antidepressants SSRI's fluoxetine 9.89%, was the most common drug used.<sup>24</sup>

SSRI's have very few autonomic adverse effects than Tricyclic antidepressants. However, a lag period of 2-6 weeks is there before onset of maximum response is seen with most of the antidepressants.<sup>25-27</sup>

## CONCLUSION

Depression is more commonly seen in married people predominantly in females and housewives. Fluoxetine is more commonly used, followed by escitalopram. SSRI's are preferred over other antidepressant because of their relative lesser side-effects.

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