Original Research Article

Expert Opinion on the Prescription Practice of Selective Serotonin Reuptake Inhibitors for Major Depressive Disorder in Indian Settings

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Abstract: ***Objective***: To gather expert opinions and insights on the prevalence of anxiety and depression, along with prescription trends for different therapeutic options based on escitalopram, in Indian outpatient settings. ***Methodology***: The questionnaire-based survey, comprising 28 questions, collected perspectives of experts across India regarding the prescription practice of selective serotonin reuptake inhibitors (SSRIs) with a special focus on escitalopram for treating major depressive disorder. Additionally, information on the symptoms of major depressive disorder and the age range of those affected by the disorder was also collected. ***Results***: About 53% of the 331 participants reported that behavioral symptoms were the most frequent among depressed patients. Among the various classes of antidepressants, about 86% of the participants indicated SSRIs as their preferred choice for treating depression. In comparison to vilazodone, paroxetine, and sertraline medications, approximately 87% of the respondents favored escitalopram as the ideal option for treating depression. According to 64% of the respondents, the use of escitalopram has led to improvements in 50-75% of patients. Around 74% of the respondents reported a significant correlation between early responders to antidepressant therapies and achieving full remission. About 49% stated that it may take 8 weeks for depressive patients undergoing escitalopram therapy to experience remission. Adverse effects and poor response were highlighted as the reasons for depressive patients transitioning from other SSRI medications to escitalopram by approximately 43% of the respondents. ***Conclusion***: The survey emphasizes the significance of the 8-week regimen of escitalopram in achieving full remission in patients with depression. The majority of respondents underscored the superiority of escitalopram among SSRIs when compared to other options like vilazodone, paroxetine, and sertraline, reaffirming its role as a preferred choice for effective depression treatment.
Keywords: Selective serotonin reuptake inhibitors, Escitalopram, Major depressive disorder, Depression, Anxiety.

INTRODUCTION

Approximately 280 million people worldwide are affected by depression, encompassing around 3.8% of the global population. This includes 5.7% of individuals over the age of 60 and 5% of adults (4% of males and 6% of women) [1]. Around 50% increased susceptibility to experience depression has been noted in women than men. More than 10% of women experience perinatal and postpartum depression globally [2]. The annual suicide rate of 700,000 highlights it as a major public health concern. Suicide is the fourth most common cause of death among individuals aged 15-29 years. More than 75% of the individuals in low- and middle-income countries do not receive therapies, despite the availability of established and efficient therapies for mental diseases [3]. According to data, unipolar depression is projected to become the second most common ailment worldwide by the year 2030 [4]. According to the 2019 estimates of the National Mental Health Survey, nearly 23 million adults might require treatment for depressive disorders in India [5].

Evidence-based interventions and affordable treatment alternatives are available to reduce the burden of depression. However, the lack of their implementation has significant socioeconomic effects on both the household and national levels [6-8]. With the provision of readily available, reasonably priced, and high-quality

medical and social services within a framework based on human rights, the National Mental Health Policy and National Mental Health Programme of India optimistically envision lowering the burden of mental illnesses, including depression [8, 9].

Selective serotonin reuptake inhibitors (SSRIs) are a chemically diverse class of drugs with a broad therapeutic range. Among these, escitalopram, fluoxetine, fluvoxamine, paroxetine, and sertraline are commonly used SSRIs for managing depression. Escitalopram has demonstrated its superiority in treating patients with severe depression at baseline in several studies [10, 11]. This drug exerts an antidepressant effect by desensitizing the 5-HT1A auto receptor after chronic treatment in the dorsal raphe nuclei, in addition to inhibiting the serotonin transporter [12]. The serotonergic mechanism employed by escitalopram to treat depression exhibits faster kinetics and contributes to mood improvement, effectively reversing major depressive disorder. Notably, limited studies in India have shown that escitalopram was efficacious and well-tolerated in patients with major depressive disorder [13]. The present study aims to gather expert opinions and insights concerning the prevalence of anxiety and depression, as well as prescription patterns for different treatment options involving escitalopram in Indian outpatient settings.

METHODOLOGY

The cross-sectional, multiple-response questionnaire-based survey conducted between June 2022 and December 2022 included clinical professionals experienced in treating major depressive disorders.

Questionnaire

The questionnaire booklet named CHEER (CompreHensive Evaluation of Escitalopram in DepRession) study was sent to the physicians who were interested to participate. Diagnosis and the clinical characteristics of major depressive disorder, and the range of potential therapy were the three main areas of interest in the 28-item survey. The study was conducted after getting approval from Bangalore Ethics, an Independent Ethics Committee which is recognized by the Indian Regulatory Authority, Drug Controller General of India.

Participants

An invitation was sent to leading physicians in managing major depressive disorders in the month of March 2022 for participation in this Indian survey. 331 doctors from major cities of all Indian states representing the geographical distribution shared their willingness to participate and provided necessary data. Clinical practitioners were asked to complete the questionnaire without discussing with peers. A written informed consent was obtained from each doctors before initiation of the study.

Statistical methods

Descriptive statistics were employed for data analysis. Categorical variables were represented using percentages. The distribution of each variable was displayed through frequency and percentage distributions. Excel 2013 (version 16.0.13901.20400) was utilized to create pie and bar charts.

RESULTS

Out of 331 respondents, approximately 53% reported behavioral symptoms as the most prevalent among patients with depression (Table 1). Interestingly, comorbid with depression, anxiety was identified as a concurrent psychiatric condition noted in patients with depression by 69% of the respondents (Table 2).

Table 1: Response to the symptoms found in individuals with depression

Symptoms noted in individuals with depression	Response rate (n=331)
Behavioral symptoms	174 (52.56%)
Physical symptoms	99 (29.90%)
Cognitive symptoms	37 (11.17%)
Behavioral, physical, and cognitive symptoms	5 (1.51%)
Depressed mood, sleep disturbance	1 (0.30%)
Others	15 (4.53%)

Table 2: Response to the most common psychiatric comorbid condition found in depressive patients

Psychiatric comorbid conditions found in patients with depression	Response rate (n=331)
Anxiety	228 (68.88%)
Panic disorder	43 (12.99%)
Bipolar disorder	25 (7.55%)
Schizophrenia	12 (3.62%)
All the above	6 (1.81%)
Not attempted	17 (5.13%)

Among the various antidepressants, SSRIs were the most preferred class of medication, selected by 86% of the respondents for treating depression (Figure 1a). Notably, 87% of the respondents highlighted

escitalopram as the optimal choice for treating depression when compared to vilazodone, paroxetine, and sertraline (Figure 1b). Additionally, around 64% of the respondents noted significant improvements in 50-75% of patients with the use of escitalopram (Figure 1c).

Approximately 53% of the participants stated that women experience depression more often than men.

Conversely, 36% of the respondents believed that this ratio was equal between male and female patients. Additionally, approximately 39% and 38% of the participants indicated that depression was more prevalent among young adults and middle-aged individuals compared to other age groups.
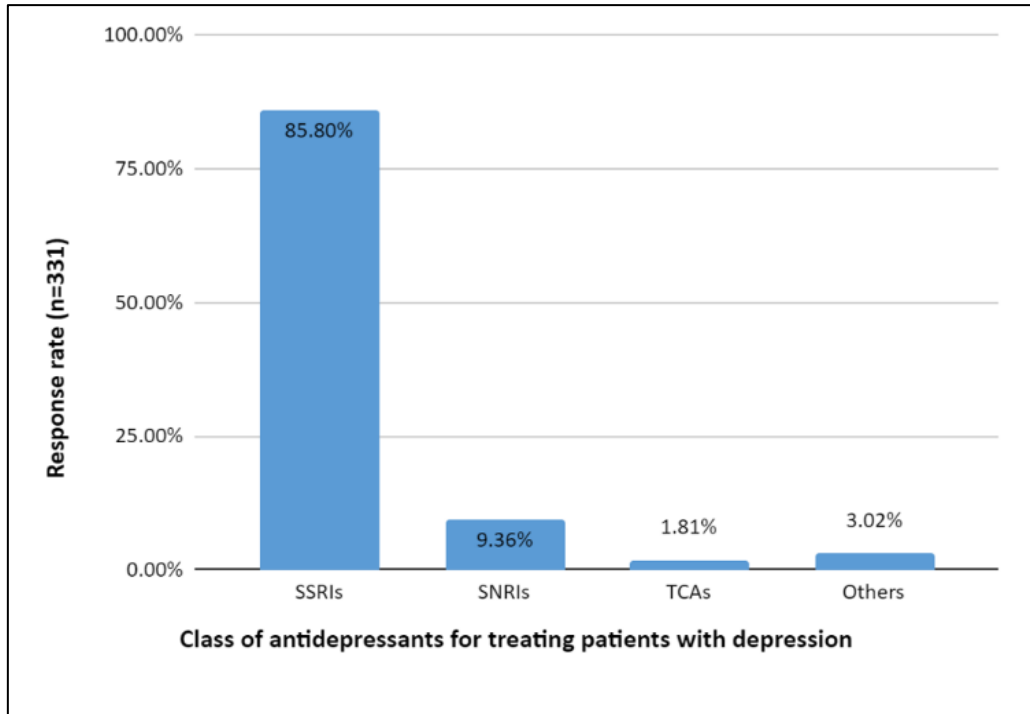

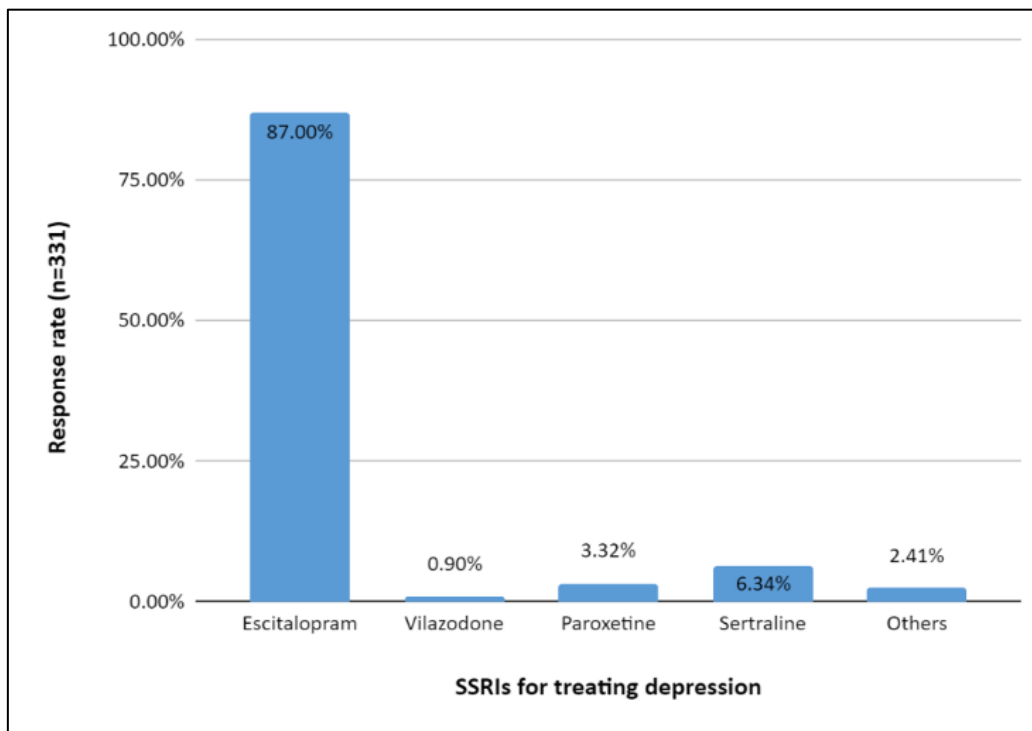**Figure 1a: Response on the best antidepressants used for treating depression**

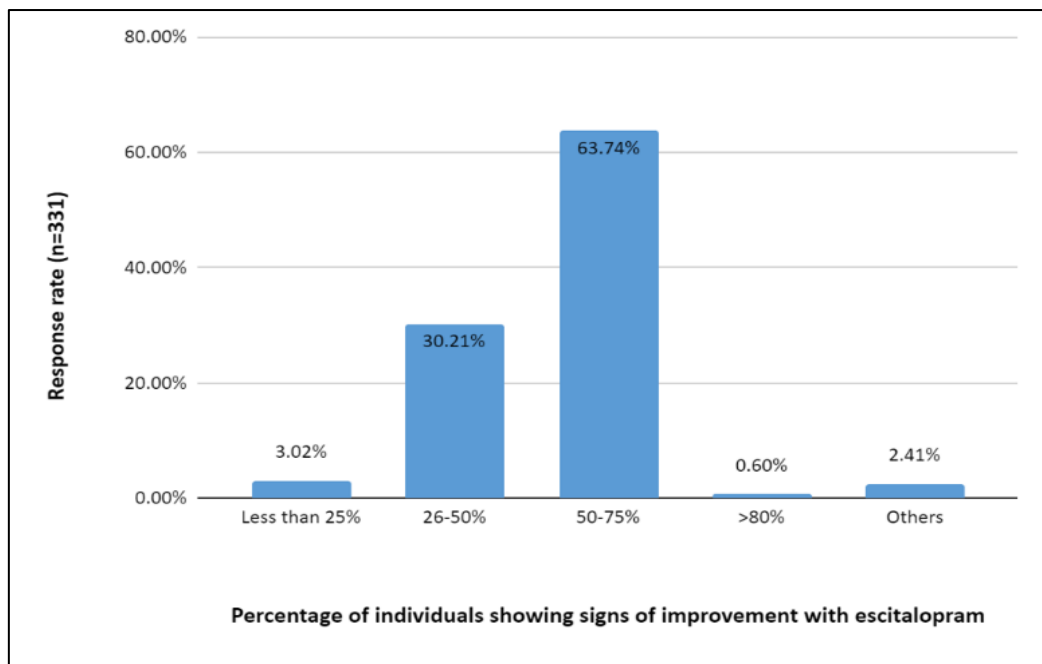**Figure 1b: Response on the preference of SSRIs for treating depression**

Figure 1c: Response on the percentage of patients showing improvement with escitalopram

Approximately 74% of the respondents indicated a strong association between early responders to antidepressant treatments and the achievement of full remission. Among the participants, about 49% noted that patients undergoing escitalopram therapy would require 8 weeks to achieve remission (Table 3).

Over 60% of the participants stated that enhancing patient awareness regarding the transient nature of certain side effects, including temporary worsening of depression/anxiety, contributes to patients discontinuing treatment. In terms of specific conditions, about 30% and 27% of respondents mentioned that escitalopram was effective for patients with panic disorder and obsessive-compulsive disorder, respectively. Around 40% of the experts suggested dose escalation as a strategy for achieving better improvements in patient's refractory to initial depression therapy.

Table 3: Response on the average time for a patient on escitalopram to achieve remission

Average time for a patient on escitalopram to achieve remission	Response rate (n=331)
8 weeks	162 (48.94%)
12 weeks	110 (33.23%)
16 weeks	28 (8.46%)
Others	
2 weeks	1 (0.30%)
2-4 months	1 (0.30%)
3-4 weeks	2 (0.60%)
4-6 months	2 (0.60%)
4-6 weeks	2 (0.60%)
8-12 weeks	3 (0.90%)
20 weeks	1 (0.30%)
Undefined	1 (0.30%)
Not attempted	18 (5.43%)

Adverse effects and poor response were reported as the primary reasons by 43% of the respondents for depressive patients to switch from other SSRI medications to escitalopram (Table 4).

Table 4: Response on the reasons for patients to switch from other SSRIs to escitalopram

Reasons for patients switching from other SSRIs to escitalopram	Response rate (n=331)
Adverse effects	81 (24.47%)
Poor response	84 (25.37%)
Both adverse effects and poor response	143 (43.20%)
Not attempted	23 (6.94%)

DISCUSSION

The current survey noted among the various antidepressants such as SSRIs, SNRIs, and TCAs used for treating depression, SSRIs stand out as the most commonly recommended option by the majority of the participants in the current survey. For numerous anxiety and depressive disorders, SSRIs are considered the first line of treatment. It is important to note that SSRIs may initially exacerbate insomnia or anxiety before gradually ameliorating both conditions [14]. This finding underscores their efficacy, safety, tolerability, and lower risk of mood swings noted in SSRI treatment [15]. Escitalopram, due to its significant advantages, is the most frequently prescribed SSRI. This aligns with the present study outcomes, where a substantial proportion of respondents favored escitalopram from the group of SSRIs as the optimal choice for treating depression over vilazodone, paroxetine, and sertraline. Owens *et al.*, conducted a comparison of escitalopram with other antidepressants such as fluoxetine, paroxetine, fluvoxamine, or sertraline. They reported that escitalopram demonstrates remarkable selectivity for serotonergic transport proteins in comparison to noradrenergic or dopaminergic binding sites [16]. Moreover, when tested *in vitro*, escitalopram exhibited minimal to no binding affinity for more than 100 receptor or binding sites, including α-adrenergic receptors, muscarinic receptors, and histamine receptors [17].

Escitalopram (10-20 mg) demonstrated a lower incidence of side effects than the SSRIs fluoxetine, sertraline, paroxetine, or citalopram among patients who have switched owing to unpleasant events. A noteworthy number of respondents pointed out adverse effects and poor response as the primary reasons for patients with depression to transition from other SSRI medications to escitalopram [18]. The timing of medicine and the potential for agitation and anxiety at the initial phase of the therapy are two drawbacks of SSRIs that may result in lower treatment adherence and less desirable outcomes [19]. The survey results indicate that 49% of the respondents reported achieving remission after 8 weeks of using escitalopram in patients with depression. Moreover, numerous studies have consistently demonstrated that, in comparison to other SSRIs, escitalopram is associated with higher rates of remission regardless of the baseline severity of depression. It has also proven successful in treating severe depression [10, 11, 20].

The outcomes of the current survey underscore the significance of tailoring individualized treatment plans for the management of depression. The collection of expert opinions using a meticulously created and validated questionnaire-based survey was the major strength of the study. The survey findings can help in making knowledgeable judgments to achieve optimal treatment outcomes in patients with depression. However, it is important to recognize that the present study has several shortcomings. The modest sample size of 331 participants may have restricted the generalizability of the results. Additionally, since the conclusions were based on expert opinions, there is a possibility of bias influencing the findings. Therefore, further research with larger sample sizes and randomized controlled procedures is necessary to validate the findings of this study.

CONCLUSION

The survey underscores the importance of the 8-week course of escitalopram in attaining complete remission among patients with depression. A significant majority of respondents highlighted the superiority of escitalopram over other SSRIs in terms of therapeutic response and reduced side effects. This reaffirms the position of escitalopram as a favored option for achieving effective depression treatment.

DECLARATIONS

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