

# Survey Report

## Escitalopram vs. Desvenlafaxine in Depression Treatment

Version No.: 1.1

The study was conducted according to the approved protocol and in compliance with the protocol, Good Clinical Practice (GCP), and other applicable local regulatory requirements.

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## 1 INTRODUCTION

Depression is a clinically significant and growing public health issue. In 2015, depressive disorders were estimated to be the third leading cause of disability worldwide [1]. Major depressive disorder (MDD) is a heterogeneous condition with diverse presentations and a wide range of associated symptoms. The Diagnostic and statistical manual of mental disorders, fifth edition (DSM-5) provides criteria for diagnosing and rating the severity of MDD [2]. Thus, the effective antidepressant therapies are needed in the management of MDD.

Selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) are reported to be effective in treating anxiety disorders associated with MDD [4].

Among the SSRI's and SNRI's, Escitalopram and Desvenlafaxine are the most efficient drugs in the management of MDD. Desvenlafaxine is an SNRI, received approval from the United States Food and Drug Administration (USFDA) in February 2008 for the treatment of MDD, generalized anxiety disorder (GAD), panic disorder, and social anxiety disorders. In India, the Central Drugs Standard Control Organization (CDSCO) approved desvenlafaxine for MDD in July 2009 [5]. Escitalopram, the (S)-enantiomer of citalopram, is a highly SSRI. The USFDA has approved it for the treatment of major depressive disorder (unipolar) in adults and adolescents (ages 12 to 17) for both the acute and maintenance phases. Recently, the FDA also approved escitalopram for treating generalized anxiety disorder in both adults and children aged 7 and older [6].

Thus, the survey was undertaken to the clinical effectiveness and safety of desvenlafaxine versus escitalopram in patients with depression. This study employs a questionnaire-based survey conducted among physicians across India to gather insights into their perspectives on the comparison of effectiveness and safety of the Escitalopram and Desvenlafaxine antidepressant therapies. Physicians' clinical experiences, patient outcomes, and adherence to treatment protocols are critical factors in assessing the real-world applicability of this antidepressant therapy. By evaluating these perspectives, the study aims to provide valuable data that can inform clinical practice and guide treatment strategies tailored to the Indian population with depression.

## **2 RATIONALE OF THE STUDY**

The rationale for the study was to gather comprehensive insights into the comparison of clinical use and efficacy of antidepressant therapies such as Escitalopram and Desvenlafaxine in managing depression among Indian patients. Understanding the prescribing patterns, treatment preferences, and perceived efficacy among physicians was aimed at optimizing therapeutic strategies and improving patient outcomes.

The purpose of the study was to evaluate the comparative effect of Escitalopram and Desvenlafaxine combination therapy in Indian patients with depression.

## **3 STUDY OBJECTIVE**

The primary objective of this study was to evaluate the comparative effects and clinical benefits of Escitalopram and Desvenlafaxine antidepressant therapy in Indian patients with depression.

## **4 METHODS**

The study employed a cross-sectional, questionnaire-based design to investigate the perspectives of Indian physicians managing patients with depression. A sample of 100 physicians was targeted, selected through professional networks and medical associations. Prior to participation, detailed information about the study was provided to potential respondents to ensure informed consent.

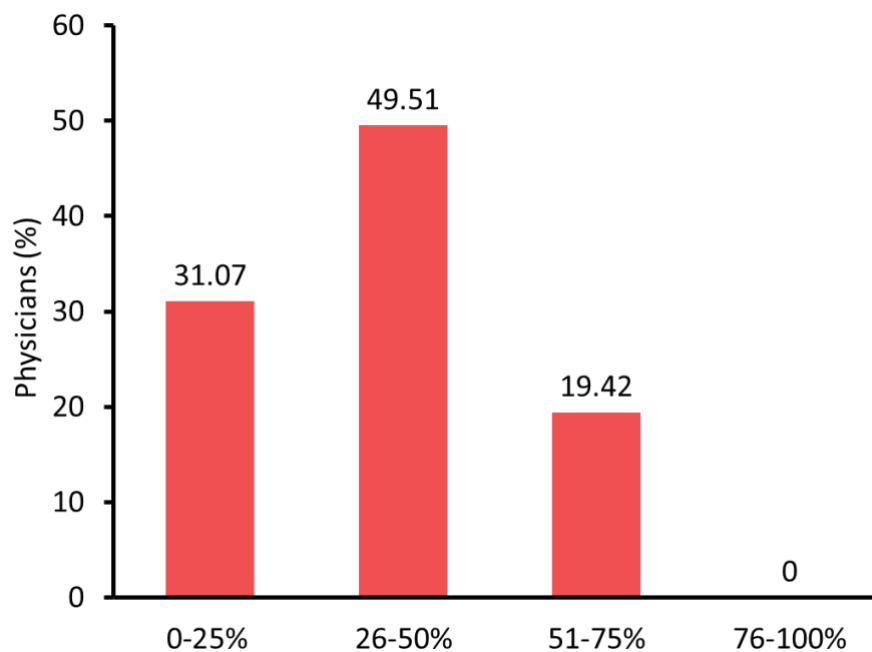
The survey consisted of 15 questions focused on physicians' clinical experiences, prescribing practices, and perceptions regarding the use of Escitalopram and Desvenlafaxine for Indian patients with depression. Data collection was conducted electronically, with responses securely stored and anonymized to protect participant confidentiality. Statistical analysis was subsequently performed to summarize findings and identify significant trends in the data. The results were compiled into a comprehensive report and may be disseminated through scientific publications or presentations at appropriate conferences. Ethical considerations adhered to the principles outlined in the Declaration of Helsinki, with approval obtained from an Independent Ethics Committee. Participants were informed of their right to withdraw from the study at any time without consequences.

## 5 RESULTS

A total of 103 physicians participated in the survey. Below is the summary of the responses.

**Question 1:** In your clinical practice, of the total OPD patient load what percentage of patients do you encounter patients with anxiety?

Options	Number of physicians (N=103)
0-25%	32 (31.07)
26-50%	51 (49.51)
51-75%	20 (19.42)
76-100%	0
Data presented as n (%).	

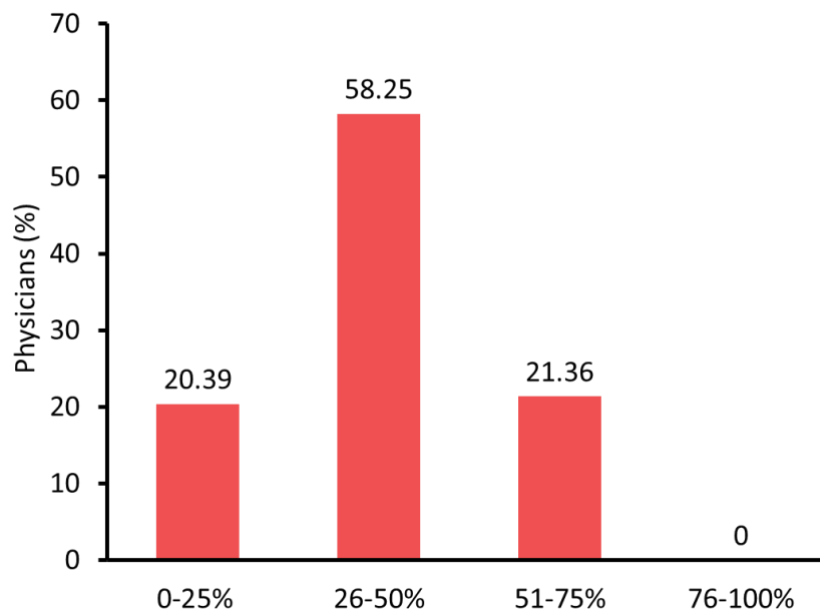


- Anxiety is a prevalent issue among patients in outpatient departments, with nearly half of the physicians encountering it in 26-50% of their patients.
- A significant portion of physicians (19.42%) reported that anxiety affecting more than half of their patients (51-75% range).

- The absence of reports in the 76-100% range reported that none of the surveyed physicians exclusively see anxiety in all of their patients, indicating variability in patient presentations across different practices.

**Question 2:** In your clinical practice, of the total OPD patient load what percentage of patients do you encounter patients with depression?

Options	Number of physicians (N=103)
0-25%	21 (20.39)
26-50%	60 (58.25)
51-75%	22 (21.36)
76-100%	0
Data presented as n (%).	

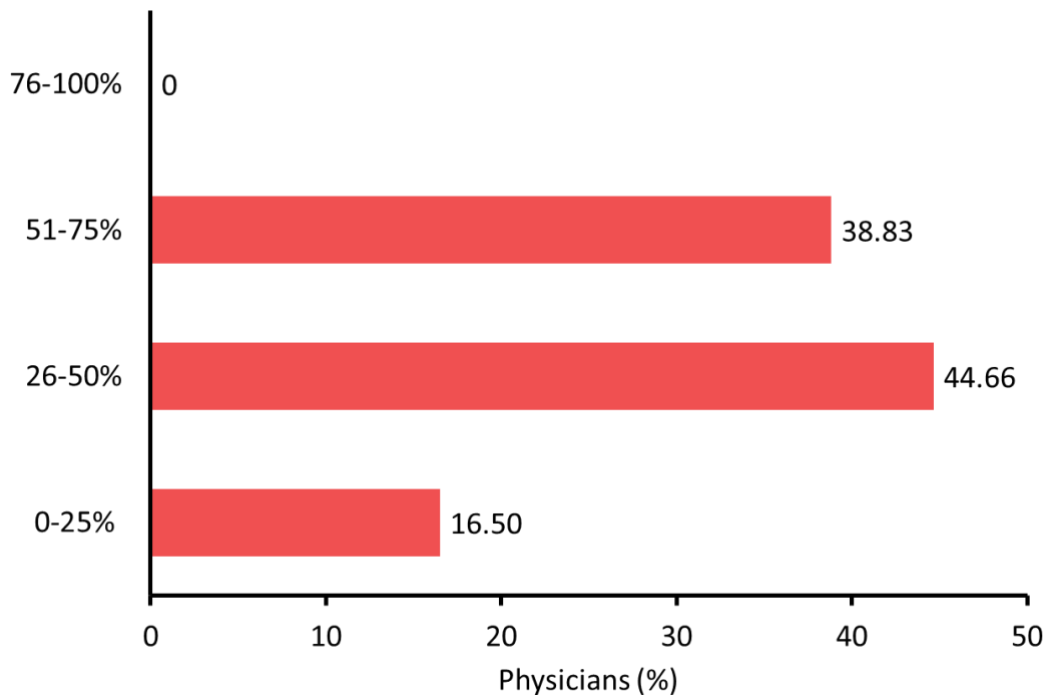


- Depression is prevalent across clinical practices, with a majority of physicians (58.25%) encountering depression in 26-50% of their patients.
- A significant portion of physicians (21.36%) see depression in 51-75% of their patients, indicating a substantial caseload of patients with depression.

- Approximately 20.39% of physicians report encountering depression in 0-25% of their patients, suggesting variability in the prevalence of depression across different clinical settings.
- None of the physicians reported encountering depression in 76-100% of their patients, indicating that very high prevalence rates of depression in clinical practice are rare among the surveyed physicians.

**Question 3:** In your clinical practice, of the total OPD patient load what percentage of patients do you encounter patients with comorbid anxiety and depression?

Options	Number of physicians (N=103)
0-25%	17 (16.50)
26-50%	46 (44.66)
51-75%	40 (38.83)
76-100%	0
Data presented as n (%).	

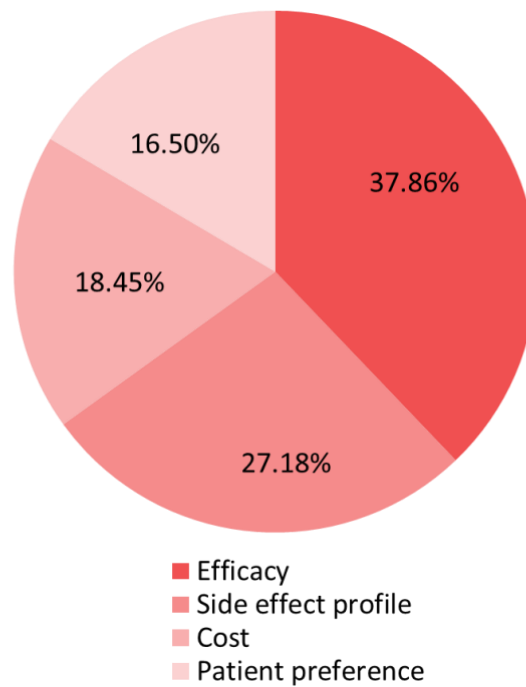


- Comorbid anxiety and depression are frequently encountered in clinical practice, with a majority of physicians (44.66%) encountering this combination in 26-50% of their patients.
- A substantial portion of physicians (38.83%) saw comorbid anxiety and depression in 51-75% of their patients, indicating a significant overlap of these conditions.
- Approximately 16.50% of physicians reported encountering comorbid anxiety and depression in 0-25% of their patients, suggesting variability in the prevalence of this comorbidity across different clinical settings.
- None of the physicians reported encountering comorbid anxiety and depression in 76-100% of their patients, indicating that very high prevalence rates of this comorbidity in clinical practice are rare among the surveyed physicians.

**Question 4:** In your clinical practice, what is your primary consideration when choosing between Escitalopram and Desvenlafaxine for treating depression?

Options	Number of physicians (N=103)
Efficacy	39 (37.86)
Side effect profile	28 (27.18)
Cost	19 (18.45)
Patient preference	17 (16.50)
Data presented as n (%).	

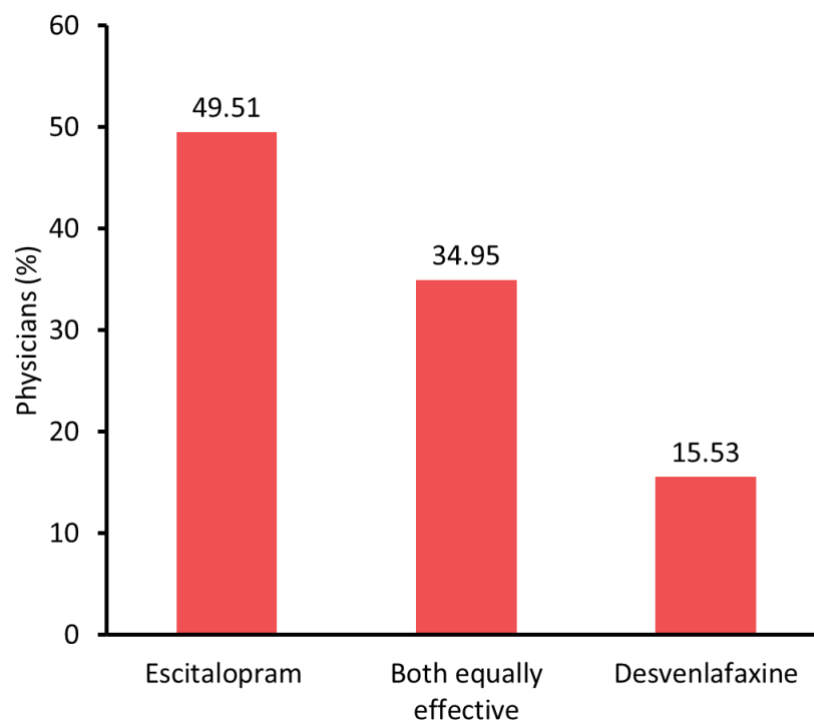




- A majority of physicians (37.86%) reported that efficacy was the primary consideration when choosing between Escitalopram and Desvenlafaxine for treating depression, indicating a focus on which medication was perceived to be more effective in achieving treatment goals.
- The side effect profile was also a significant factor for 27.18% of physicians, suggesting there was a concern for the tolerability and adverse effects associated with each medication.
- Cost played a role for 18.45% of physicians, reflecting their consideration of economic factors in treatment decisions.
- Patient preference influenced the decision for 16.50% of physicians, highlighting the importance they placed on patient-centered care and shared decision-making in treatment selection.

**Question 5:** In your clinical practice, which medication do you consider more effective in treating depression?

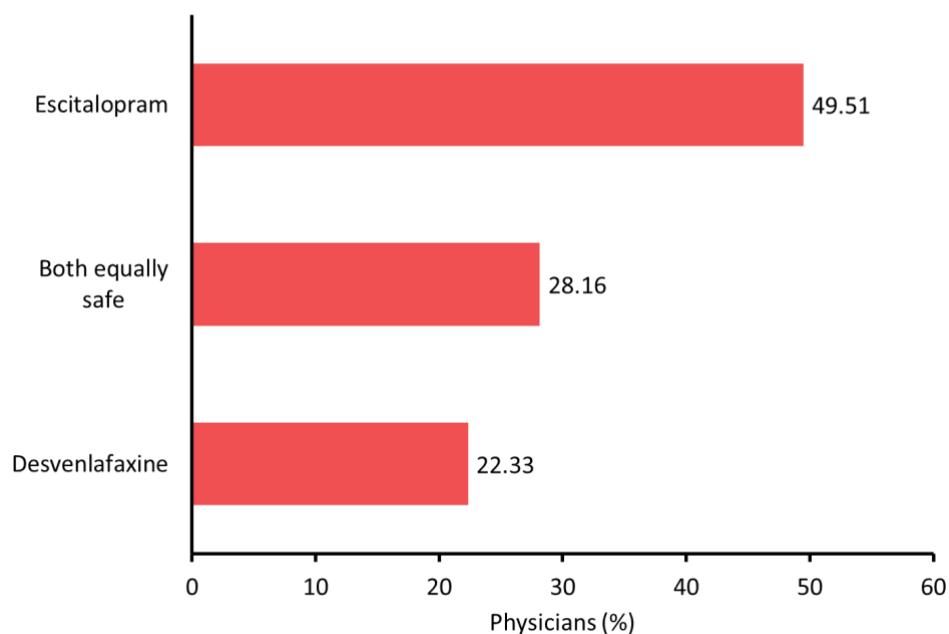
Options	Number of physicians (N=103)
Escitalopram	51 (49.51)
Both equally effective	36 (34.95)
Desvenlafaxine	16 (15.53)
Data presented as n (%).	



- A plurality of physicians (49.51%) preferred Escitalopram for treating depression, indicating a strong perception of its efficacy in clinical practice.
- Desvenlafaxine, while chosen less frequently as more effective, was still favored by a notable minority (15.53%) of physicians.
- A significant proportion (34.95%) of physicians perceived no significant difference in effectiveness between Escitalopram and Desvenlafaxine, suggesting a preference for either medication depending on individual patient factors or tolerability profiles.

**Question 6:** In your clinical practice, which medication do you consider safer in terms of side effects?

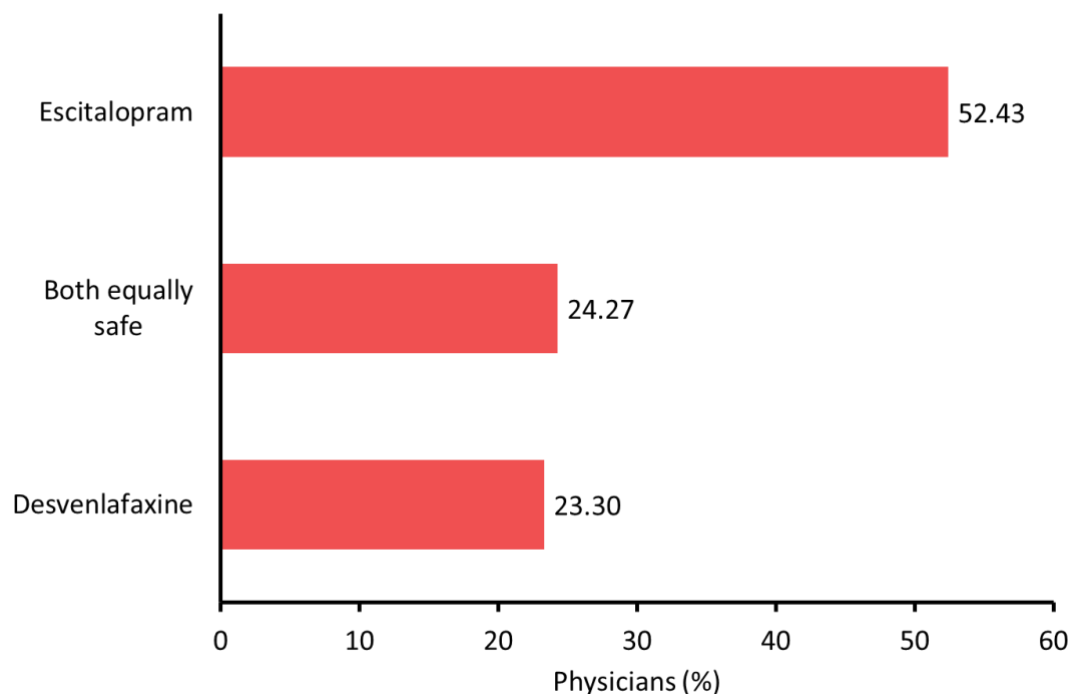
Options	Number of physicians (N=103)
Escitalopram	51 (49.51)
Both equally safe	29 (28.16)
Desvenlafaxine	23 (22.33)
Data presented as n (%).	



- A plurality of physicians (49.51%) preferred Escitalopram for treating depression, indicating a strong perception of its efficacy in clinical practice.
- Desvenlafaxine, while chosen less frequently as more effective, was still favored by a notable minority (22.33%) of physicians.
- A significant proportion (28.16%) of physicians perceived no significant difference in effectiveness between Escitalopram and Desvenlafaxine, suggesting a preference for either medication depending on individual patient factors or tolerability profiles.

**Question 7:** In your clinical practice, do you consider Escitalopram or Desvenlafaxine more suitable for patients with comorbid anxiety disorders?

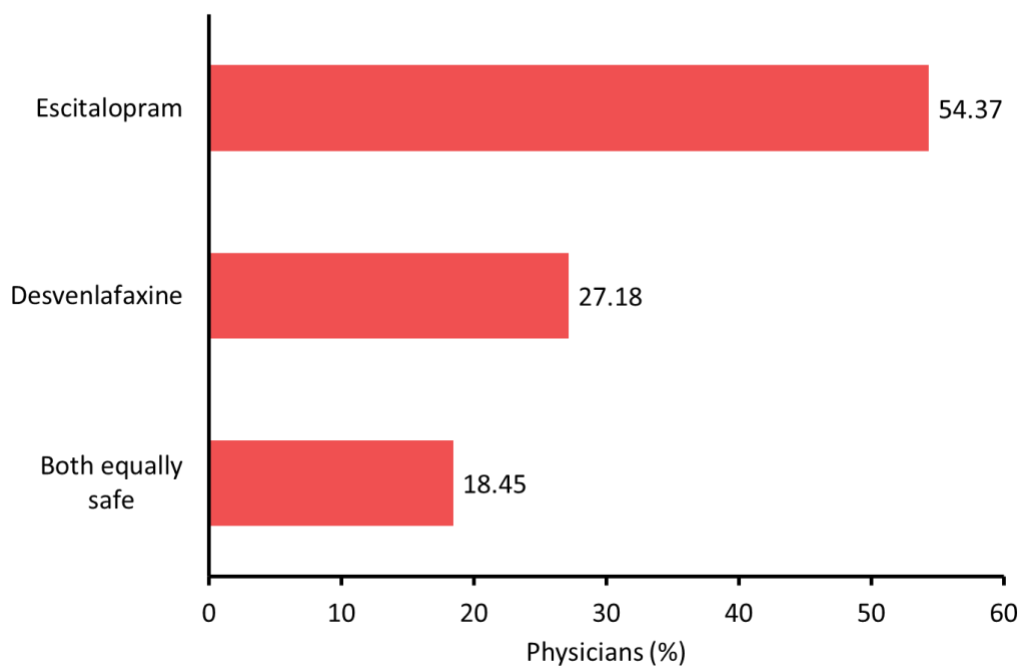
Options	Number of physicians (N=103)
Escitalopram	54 (52.43)
Both equally safe	25 (24.27)
Desvenlafaxine	24 (23.30)
Data presented as n (%).	



- A majority of physicians (52.43%) preferred Escitalopram for patients with comorbid anxiety disorders, suggesting a perceived efficacy or safety advantage in this context.
- A substantial minority (23.30%) of physicians favored Desvenlafaxine, indicating it is also considered suitable for this patient population.
- A notable portion (24.27%) of physicians viewed both medications as equally safe, indicating a cautious approach or preference for either based on individual patient factors or clinical experience.

**Question 8:** In your clinical practice, which medication do you prefer for patients with treatment-resistant depression?

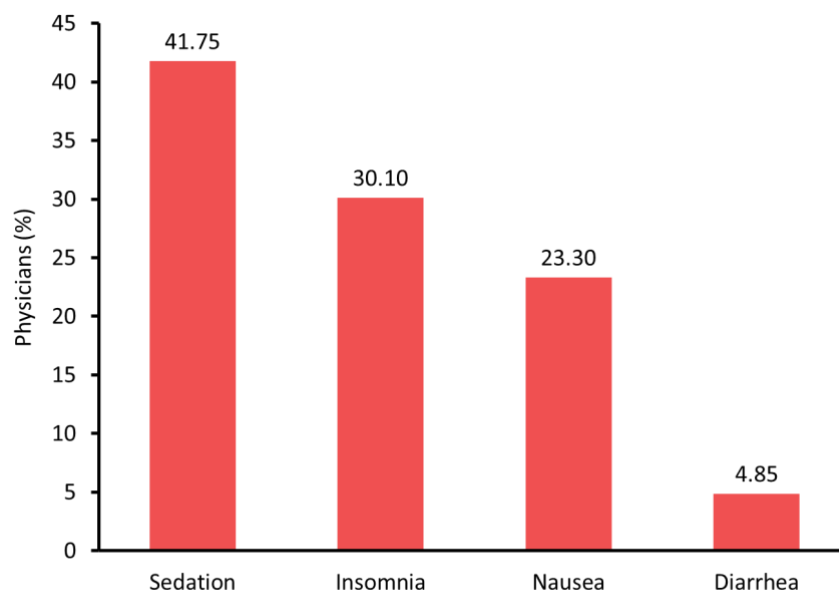
Options	Number of physicians (N=103)
Escitalopram	56 (54.37)
Desvenlafaxine	28 (27.18)
Both equally safe	19 (18.45)
Data presented as n (%).	



- A slight majority of physicians (54.37%) preferred Escitalopram for treating patients with treatment-resistant depression, suggesting confidence in its efficacy or tolerability in this challenging condition.
- A significant minority (27.18%) of physicians opted for Desvenlafaxine, indicating it is also considered a viable option for treatment-resistant depression.
- A portion of physicians (18.45%) reported that both medications as equally safe, indicating a balanced approach or preference for either based on individual patient factors or clinical experience.

**Question 9:** In your clinical practice, Escitalopram is more commonly associated with which side effect?

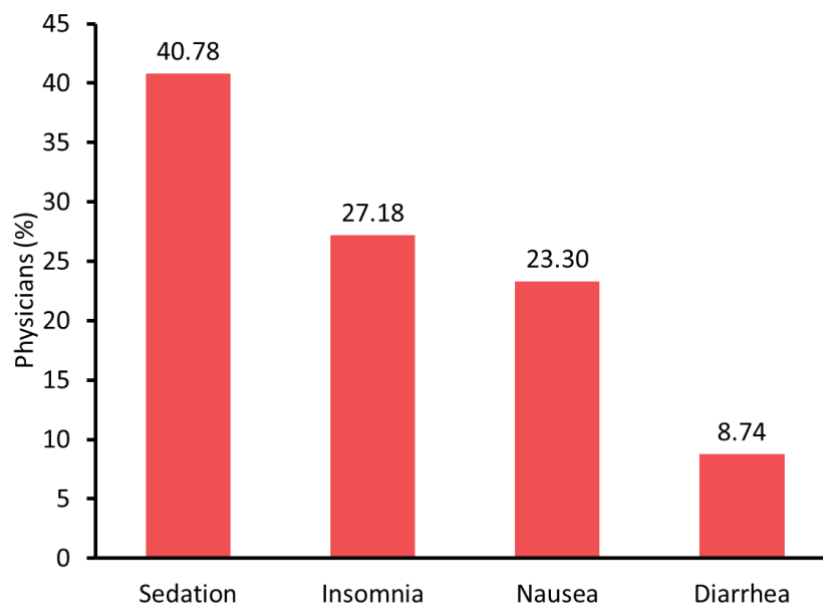
Options	Number of physicians (N=103)
Sedation	43 (41.75)
Insomnia	31 (30.10)
Nausea	24 (23.30)
Diarrhea	5 (4.85)
Data presented as n (%).	



- Sedation is the side effect most commonly associated with Escitalopram, according to 41.75% of physicians.
- Insomnia is the second most commonly associated side effect with Escitalopram, reported by 30.10% of physicians.
- Nausea is reported as a less common side effect, associated with Escitalopram by 23.30% of physicians.
- Diarrhea is the least commonly reported side effect associated with Escitalopram, noted by only 4.85% of physicians.

**Question 10:** In your clinical practice, Desvenlafexine is more commonly associated with which side effect?

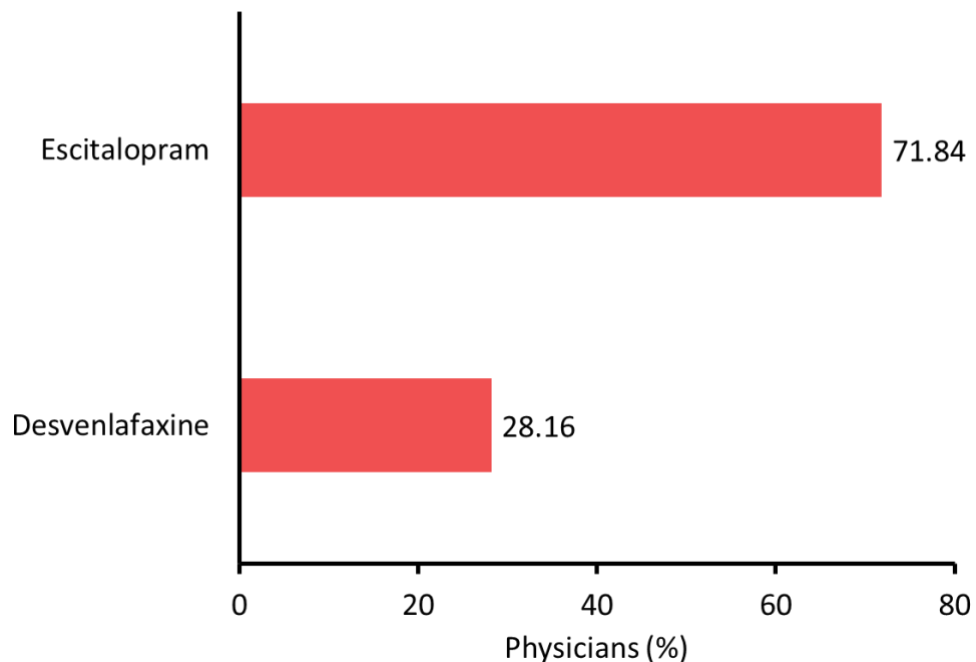
Options	Number of physicians (N=85)
Sedation	42 (40.78)
Insomnia	28 (27.18)
Nausea	24 (23.30)
Diarrhea	9 (8.74)
Data presented as n (%).	



- The majority of physicians (40.78%) reported that sedation as the most commonly associated side effect with desvenlafaxine in their clinical practice.
- A significant minority of physicians (27.18%) also reported that insomnia as a frequently reported side effect of desvenlafaxine.
- Nausea is reported by 23.30% of physicians as another common side effect associated with desvenlafaxine.
- Diarrhea is the least commonly reported side effect, reported by 8.74% of physicians.

**Question 11:** In your clinical practice, regarding side effects, which medication do you perceive to have a more favorable side effect profile?

Options	Number of physicians (N=85)
Escitalopram	74 (71.84)
Desvenlafaxine	29 (28.16)
Data presented as n (%).	

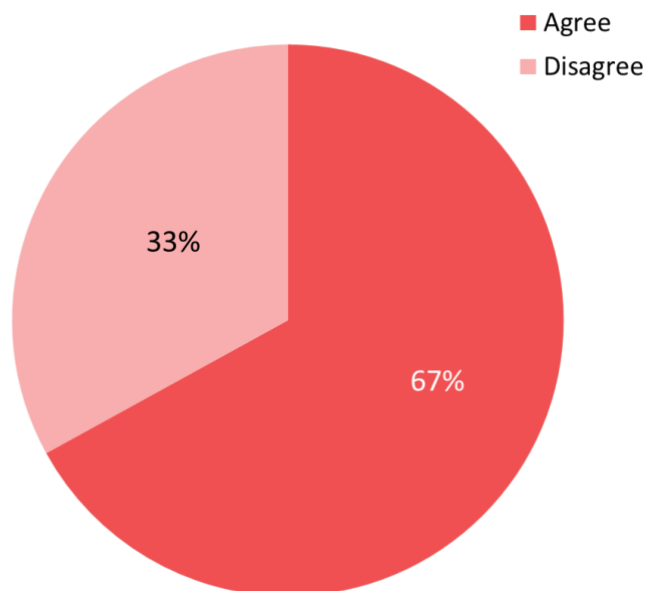


- A significant majority of physicians (71.84%) perceived escitalopram to have a more favorable side effect profile compared to desvenlafaxine.
- A minority of physicians (28.16%) perceived desvenlafaxine to have a more favorable side effect profile.
- It indicating differing professional opinions or clinical experiences regarding these medications' tolerability and side effects.



**Question 12:** Escitalopram and desvenlafaxine have similar efficacy in the treatment of depression.

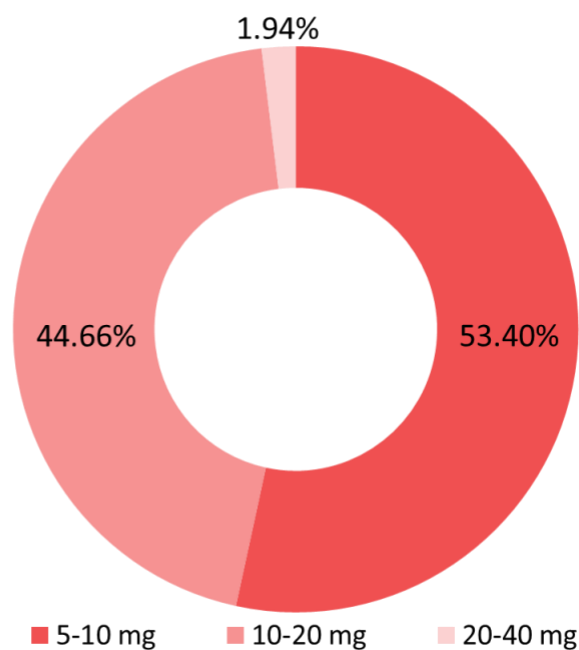
Options	Number of physicians (N=100)
Agree	67 (67.00)
Disagree	33 (33.00)
Data presented as n (%).	



- A significant majority of physicians (67%) reported that Escitalopram and Desvenlafaxine have similar efficacy in treating depression.
- A minority of physicians (33%) disagree with this statement, suggesting differing professional opinions or experiences regarding the comparative efficacy of these medications.

**Question 13:** In your clinical practice, which of the following is a common initial dose range for escitalopram in the treatment of depression?

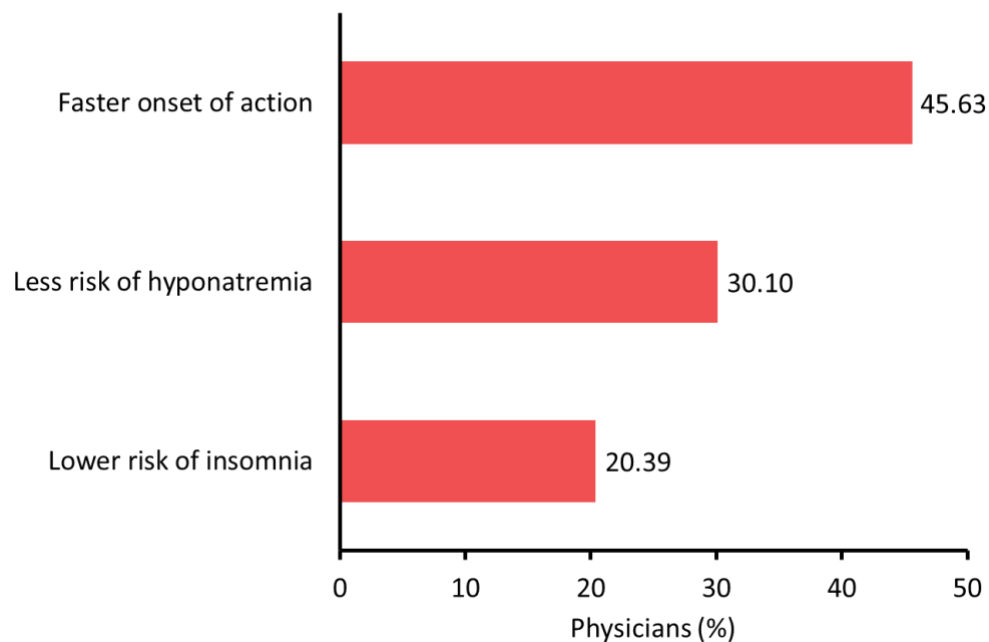
Options	Number of physicians (N=103)
5-10 mg	55 (53.40)
10-20 mg	46 (44.66)
20-40 mg	2 (1.94)
Data presented as n (%).	



- The majority of physicians (53.40%) commonly initiate treatment with Escitalopram at a dose range of 5-10 mg for patients with depression.
- A significant number of physicians (44.66%) also opted for a slightly higher initial dose range of 10-20 mg.
- A very small percentage (1.94%) of physicians start with a higher dose range of 20-40 mg, which is less common as an initial dose for Escitalopram in clinical practice.

**Question 14:** In your clinical experience, which of the following is a potential advantage of desvenlafaxine over escitalopram?

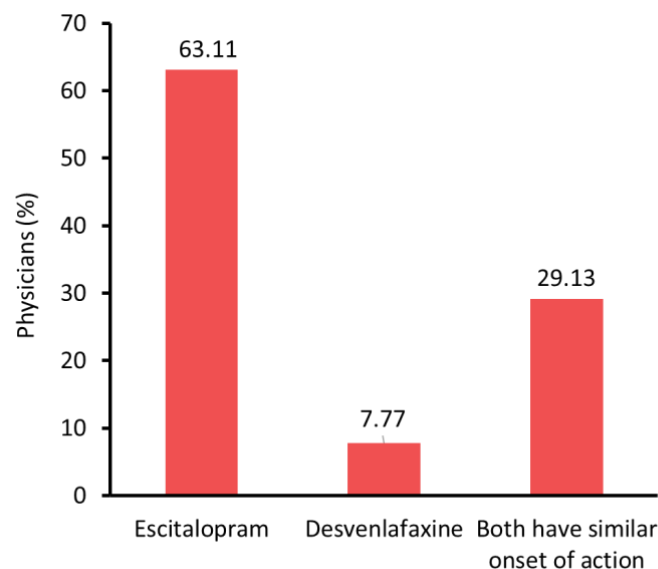
Options	Number of physicians (N=103)
Faster onset of action	47 (45.63)
Less risk of hyponatremia	31 (30.10)
Lower risk of insomnia	21 (20.39)
None of the above	4 (3.88)
Data presented as n (%).	



- The most commonly perceived advantage of Desvenlafaxine over Escitalopram, according to 45.63% of physicians, is its faster onset of action.
- A substantial number of physicians (30.10%) also saw Desvenlafaxine as having a lower risk of hyponatremia compared to Escitalopram.
- A smaller percentage (20.39%) perceived Desvenlafaxine to have a lower risk of causing insomnia.

**Question 15:** In your clinical practice, which medication do you consider to have a faster onset of action in alleviating depressive symptoms?

Options	Number of physicians (N=103)
Escitalopram	65 (63.11)
Desvenlafaxine	8 (7.77)
Both have similar onset of action	30 (29.13)
Data presented as n (%).	



- The majority of physicians (63.11%) perceived Escitalopram to have a faster onset of action in alleviating depressive symptoms, indicating a strong preference or observation of quicker symptom relief with this medication.
- Only a small minority (7.77%) perceived Desvenlafaxine to have a faster onset of action, suggesting it is less commonly perceived as rapid-acting compared to Escitalopram.
- A significant proportion (29.13%) believe both medications have similar onset of action, reflecting a balanced view among some clinicians who may not see a clear distinction in speed of symptom improvement between the two drugs.

## 6 SUMMARY

The study aimed to compare the clinical effectiveness and safety profiles of Escitalopram and Desvenlafaxine in the management of depression among Indian patients. Conducted through a questionnaire-based survey involving 103 physicians, the research focused on understanding prescribing patterns, treatment preferences, and perceptions regarding these antidepressant therapies.

Findings revealed that both Escitalopram and Desvenlafaxine are widely used and perceived as effective treatments for depression. Escitalopram was favored by a plurality of physicians (49.51%) for its perceived efficacy, while Desvenlafaxine was preferred by a notable minority (15.53%). A significant proportion (34.95%) of physicians perceived no significant difference in efficacy between the two medications, indicating variability in treatment preferences likely influenced by patient-specific factors and tolerability.

Regarding safety profiles, Escitalopram was perceived as safer by a majority (49.51%) of physicians compared to Desvenlafaxine (22.33%), with 28.16% considering both drugs equally safe. Sedation was identified as the most common side effect associated with both medications, though more frequently attributed to Escitalopram (41.75%) than Desvenlafaxine (40.78%).

Physicians' choice between Escitalopram and Desvenlafaxine for treating depression was primarily influenced by efficacy (37.86%), followed by side effect profiles (27.18%), cost considerations (18.45%), and patient preferences (16.50%). The majority of respondents (67%) agreed that both medications have similar efficacy in treating depression, suggesting clinical equipoise in the absence of clear superiority of one drug over the other.

## **7 DISCUSSION**

The discussion highlighted several key points: the prevalent use of SSRIs and SNRIs in managing depression in India, variability in prescribing practices influenced by perceived efficacy and safety profiles, and the impact of patient comorbidities such as anxiety on treatment choices. Physicians' considerations in selecting between Escitalopram and Desvenlafaxine underscored the complexity of balancing efficacy with tolerability in clinical decision-making.

The study findings suggested that while Escitalopram was generally perceived as more effective and safer, Desvenlafaxine offered advantages such as a potentially faster onset of action, particularly noted by 45.63% of physicians. Insights into initial dosing preferences and perceived advantages of each medication (e.g., faster onset of action for Desvenlafaxine) provided nuanced perspectives on treatment strategies tailored to varying patient needs.

## **8 CLINICAL RECOMMENDATIONS**

Based on the study outcomes, clinical recommendations include personalized treatment approaches that consider individual patient profiles, including the presence of comorbidities and previous treatment responses. Monitoring for common side effects such as sedation and insomnia, and adjusting treatment based on patient tolerability and response, is crucial. Further research into long-term outcomes and comparative effectiveness studies could provide additional insights into optimizing depression management strategies.

## **9 CONSULTANT OPINION**

Expert opinions gathered from the survey highlighted the need for continued education among healthcare providers on the nuances of antidepressant therapy selection. Consulting with specialists and incorporating patient preferences into treatment decisions were emphasized to enhance treatment adherence and outcomes. Recommendations included regular assessment of treatment response and side effect profiles to refine therapeutic approaches.

## **10 MARKET OPPORTUNITIES**

The survey findings underscore significant market opportunities for antidepressant therapies in India, particularly focusing on Escitalopram and Desvenlafaxine. With depression affecting a substantial portion of the population and anxiety commonly co-occurring, there is a growing demand for effective pharmacological interventions.

Escitalopram, recognized for its perceived efficacy and favorable safety profile among Indian physicians, holds a prominent position in the market. Its approval for both depression and anxiety disorders across varied age groups enhances its market potential.

Desvenlafaxine, noted for its potential advantages like a faster onset of action, presents another compelling option, especially in treating patients with treatment-resistant depression. These market dynamics suggest a robust landscape for pharmaceutical companies to explore, focusing on optimizing therapeutic outcomes and addressing unmet needs in depression management.

## **11 MARKET POSITIONING**

In the Indian market, Escitalopram and Desvenlafaxine occupy distinct yet complementary positions based on their efficacy profiles and perceived advantages. Escitalopram enjoys widespread acceptance among physicians due to its established efficacy in treating both depression and generalized anxiety disorder across diverse patient demographics. Its favorable safety profile further solidifies its position as a first-line therapy for many clinicians.

On the other hand, Desvenlafaxine appeals to physicians seeking alternatives with potentially faster therapeutic onset and effectiveness in treatment-resistant cases. Despite its slightly lower adoption rate compared to Escitalopram, Desvenlafaxine's unique attributes make it a valuable option in the antidepressant market.

Strategic positioning of these medications involves leveraging their respective strengths—Escitalopram's broad applicability and safety, and Desvenlafaxine's niche appeal in challenging cases—to effectively meet the varied needs of healthcare providers and patients alike.

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