



P-ISSN: 2789-1623
E-ISSN: 2789-1631
IJRP 2024; 4(1): 01-07
www.psychiatrypaper.com
Received: 03-10-2023
Accepted: 07-11-2023

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Expert's preference on escitalopram and clonazepam for treating depression and anxiety in Indian diabetic and hypertensive patients

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DOI: <https://doi.org/10.22271/27891623.2024.v4.i1a.45>

Abstract

Objective: The present study aims to identify the prevalence of anxiety and depression in patients with diabetes mellitus (DM) and hypertension (HTN) in India and assess the expert opinion on the treatment choices for these patients, specifically involving escitalopram and clonazepam.

Methodology: The cross-sectional, questionnaire-based study collected data through a multiple-response questionnaire. The questionnaire comprised 38 questions, covering various aspects such as the prevalence, symptoms, and treatment options for anxiety and depression in patients with HTN and DM.

Results: Of the 242 respondents, 52% and 41% reported that anxiety and depression are the most common psychiatric conditions reported in HTN and DM patients. The majority of respondents (66.53%) preferred using selective serotonin reuptake inhibitors (SSRIs) for treating these patients. In patients who were unresponsive to initial treatment with an anxiolytic medication, approximately 35% of specialists recommended switching to another anxiolytic medication within the same class. According to 36% and 32% of respondents, around 51-75% of these patients reported improvement in anxiety or depressive symptoms after receiving either escitalopram or clonazepam. To prevent dropout in these patients, nearly 42% of responders recommended initiating low-dose combination medications.

Conclusion: In HTN and DM patients, SSRIs and benzodiazepines are recommended for the treatment of anxiety and depression. The experts highly recommend escitalopram and clonazepam medications in these patients for improvement in depression and anxiety levels. However, experts suggest initiating treatment with low-dose combination medications to prevent dropout and for the management of anxiety and depression.

Keywords: Diabetes mellitus, hypertension, depression, anxiety, clonazepam, escitalopram

Introduction

According to the World Health Organization (WHO), depression is one of the most common mental disorders characterized by symptoms such as sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, and poor concentration ^[1]. It is a major contributor to the overall global burden of disease and a primary cause of disability, affecting around 264 million individuals globally ^[1]. According to United Nations International Children's Emergency Fund, one in seven Indian youths aged 15 to 24 is experiencing a lack of interest or motivation in accomplishing tasks ^[2].

Depression is considered a negative prognostic marker in several chronic medical conditions. Studies have reported that depression impairs the quality of life and functioning of patients with diabetes mellitus (DM) and hypertension (HTN) ^[3]. In such patients, it results in poor compliance with lifestyle adjustment, loss of follow-up, and lack of treatment adherence ^[4]. However, the coexistence of mental health problems in these patients is often inadequately recognized and addressed. When depression and diabetes coexist, there is an increased likelihood of diabetes complications, compromised glycemic control, reduced self-management, and diminished overall quality of life and life expectancy ^[5, 6]. Understanding the severity of the contributing factors to depression in patients with DM/HTN is extremely important, as it helps physicians in decision-making and adopting effective management strategies.

Studies are exploring the relationship between depression and anxiety in DM and HTN patients in Indian settings ^[7-10]. Apart from studying the prevalence and correlation of these

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psychological factors, current scientific research is also focused on identifying factors that can predict the effectiveness of antidepressant treatments. Developing personalized treatment approaches helps to reduce the need for trial-and-error approaches and alleviates the burden of selecting appropriate antidepressant treatments.

Selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine, fluvoxamine, and sertraline, are currently recommended for use in conjunction with clonazepam as an antidepressant; the recommended dosage is 2.5-6.0 mg per day [11]. Several trials have noted that escitalopram (an SSRI) is superior to other SSRIs in patients who had severe depression at baseline [12, 13]. On the other hand, clonazepam, a benzodiazepine, is considered the most effective medication in its class for treating anxiety disorders [14]. Some studies have indicated that combining benzodiazepine and antidepressant medications may yield better results in certain patients compared to monotherapy [15]. Additionally, clonazepam enhances the effects of SSRIs, making their concurrent use an effective therapy option for depression [16]. However, there is insufficient data regarding the effectiveness of utilizing SSRI and benzodiazepine treatments and the effect of disease severity on their efficacy, especially within the Indian population. Therefore, the current study aims to bridge these lacunae by gathering expert opinions and insights on the prevalence of anxiety and depression in patients with DM and HTN and the prescription patterns of different treatment options involving escitalopram and clonazepam in Indian outpatient settings.

Methodology

A cross sectional, multiple-response questionnaire-based survey among psychiatrists in the major Indian cities from June 2022 to December 2022.

Questionnaire

The questionnaire booklet titled Essence (Escitalopram and

Clonazepam Comprehensive Evaluation in Comorbid Hypertension and Diabetes with Depression and Anxiety) study was sent to the psychiatrists who were interested to participate. The ESSENCE study questionnaire consisted of 38 questions that focused on the preference for anxiolytic or antidepressant medication for treating depressive and anxious patients with HTN and DM. The study was performed after obtaining approval from Bangalore Ethics, an Independent Ethics Committee which was recognized by the Indian Regulatory Authority, Drug Controller General of India.

Participants

An invitation was sent to psychiatrists across India based on their expertise and experience in treating anxiety and depression in the month of March 2022 for participation in this Indian survey. About 242 clinicians from major cities of all Indian states representing the geographical distribution shared their willingness to participate and provide necessary data. The questionnaire was completed independently by the clinicians without consulting their peers, and each doctor provided written informed consent prior to the study's implementation.

Statistical Methods

The data were analyzed using descriptive statistics. Percentages were used to represent categorical variables. A frequency and percentage distribution was used to represent the distribution of each variable. Using Excel 2013 (16.0.13901.20400), pie and bar charts were made.

Results

Of 242 respondents, 44% reported that about 20-40% of patients with HTN have depression, while 37% reported that the same percentage range of patients suffering from DM has depression. However, around 50% reported that 20-40% of patients with HTN have anxiety problems (Figure 1).

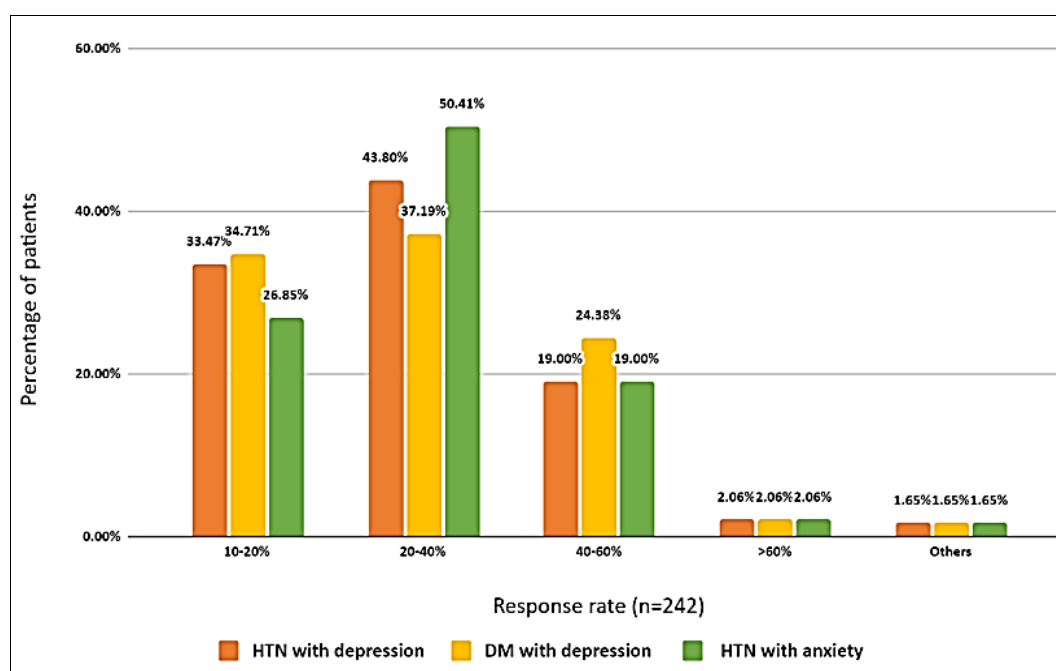


Fig 1: Prevalence of depression and anxiety in patients with HTN and DM

More than half of the respondents (54.95%) indicated that they observed symptoms of anxiety and depression in 6 to

10 patients with DM and HTN. The survey results showed that 24% and 17% of responders reported that 11 to 15 and

<5 of these patient's experience symptoms of anxiety and depression. The survey results showed that 66% and 67% of experts identified depression and anxiety in HTN and DM patients living in urban areas. On the other hand, 24% and 26% of respondents suggested that patients residing in suburban areas are likely to suffer from depression and anxiety.

In HTN and DM patients with anxiety, restlessness was reported as the most common symptom by 64% of responders, followed by panic attacks, rapid breathing, sweating, trembling, feeling weak or tired, difficulty in

concentrating, and insomnia. Similarly, 62% of respondents identified depressive symptoms as the primary manifestation in these patients. However, loss of interest, worthlessness, poor concentration, insomnia, suicidal tendencies, cognitive symptoms, and fatigue were reported by a small proportion of respondents.

Anxiety was identified as the prevalent psychiatric condition in HTN and DM patients. Approximately 41% of respondents cited depression as the primary contributing factor to psychiatric conditions in diabetic patients (Table 1).

Table 1: Prevalence of psychiatric conditions in patients with HTN and DM

Psychiatric conditions	Response rate (n=242)	
	Common psychiatric condition in HTN patients	Common psychiatric condition in DM patients
Anxiety	127 (52.48%)	93 (38.43%)
Panic disorder	44 (18.18%)	30 (12.39%)
Bipolar disorder	16 (6.61%)	8 (3.30%)
Depression	44 (18.18%)	100 (41.32%)
None	6 (2.48%)	6 (2.48%)
Others	5 (2.06%)	5 (2.06%)

Majority of the respondents (66.53%) preferred SSRIs for DM and HTN patients with depression and anxiety. About

30% of respondents recommended clonazepam as the drug of choice for these patients (Figure 2).

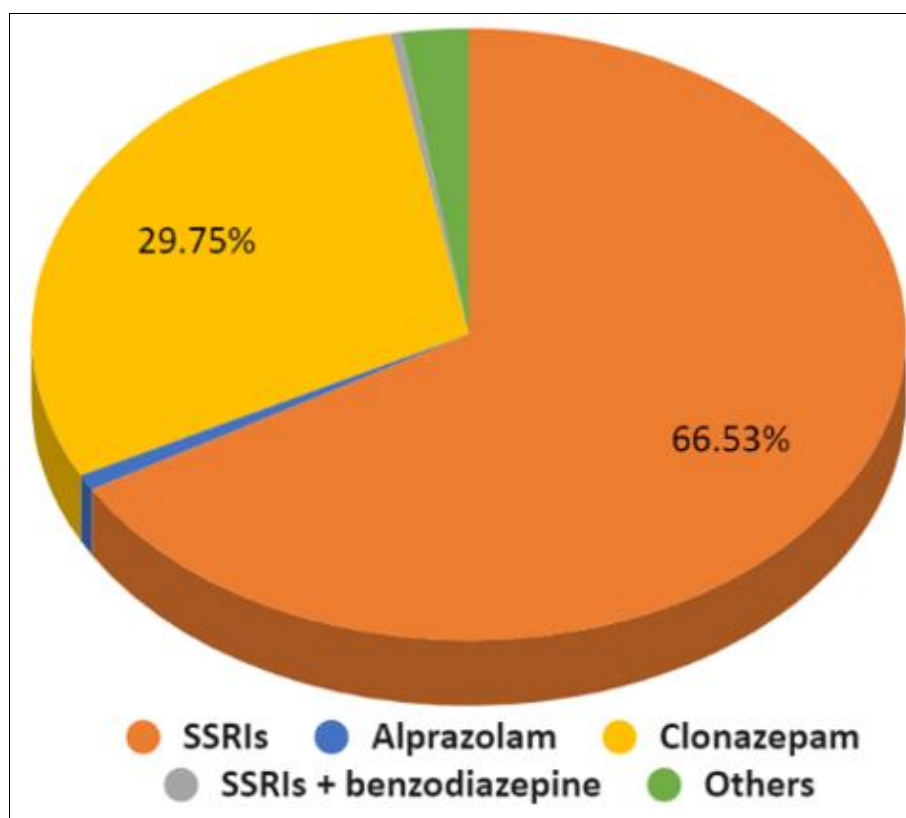


Fig 2: Commonly prescribed medications for treating depression and anxiety in DM/HTN patients

About 47% and 30% of respondents reported sexual disturbance and weight gain as the major side effects of either quitting or switching over to another drug after using SSRIs. Insomnia, dry mouth, and gastritis are the other common side effects reported by respondents in HTN and DM patients. The causes for the experts to switch from different medications include adverse effects of using the drug, efficacy, addiction, dose titration, and inter-dose anxiety. Among these, 38% of respondents preferred switching from alprazolam to clonazepam due to drug

addiction in these patients with anxiety. About 56% of respondents preferred switching from antidepressants to escitalopram due to the efficacy of the medication in these patients with depression.

According to 53% of respondents, <10% of patients with HTN and DM who suffer from either anxiety or depression fail to respond to the initial therapy. Besides, around 36% of the responders reported the proportion of patient's refractory to treatment as 10-30% (Figure 3a).

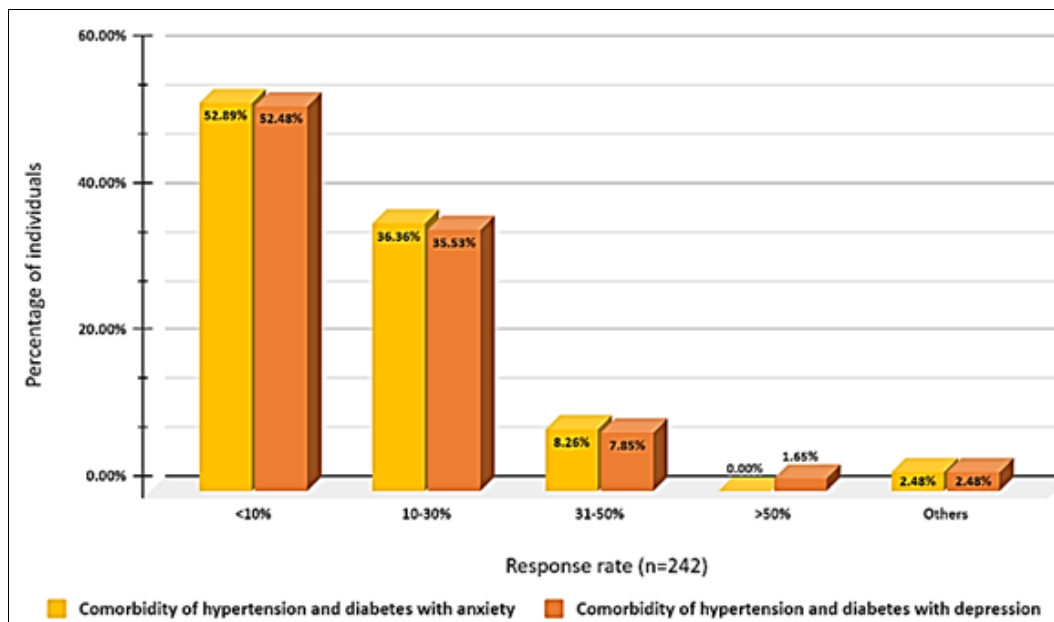


Fig 3a: Percentage of patients with HTN and DM who fail to respond to the initial therapy for anxiety and depression

Around 35% of experts opted for switching to another anxiolytic drug of the same class in patients who are refractory to the initial treatment with an anxiolytic drug. Additionally, 30.58% of experts suggested that this approach can also be followed for patients suffering from

depression who fail to respond to antidepressants. Furthermore, 30% and 28% of respondents preferred a combination of two drugs from different classes to treat patients experiencing either anxiety or depression (Figure 3b).

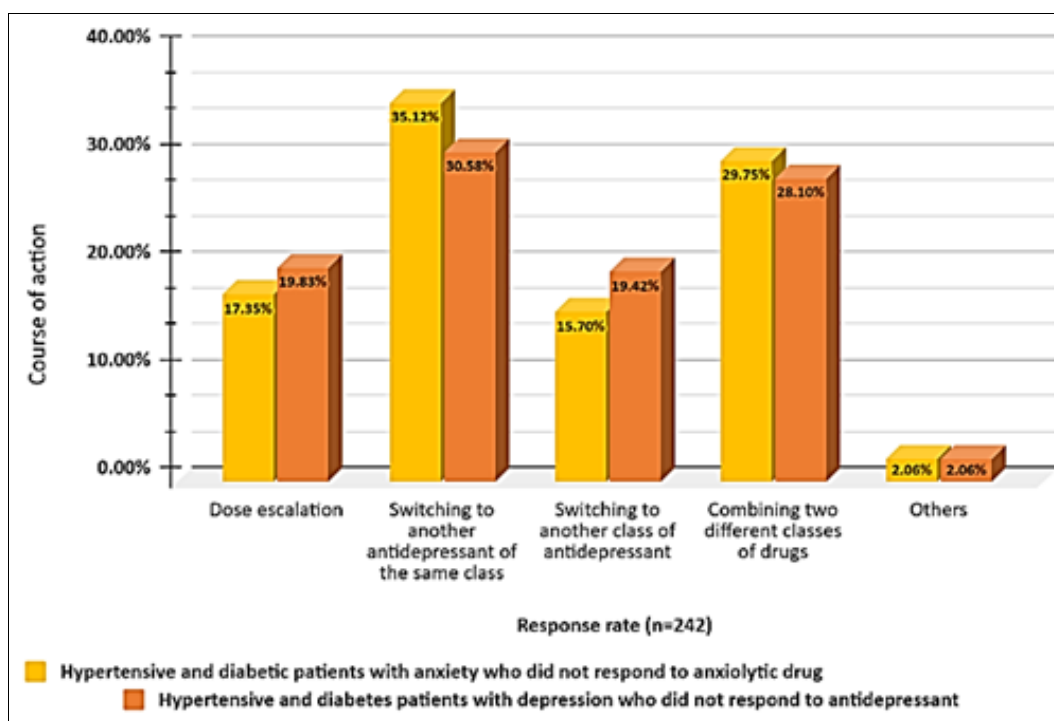


Fig 3b: Preferred approach for HTN/DM patients with anxiety or depression unresponsive to initial treatment

Of the 242 respondents, 36% and 32% of responders reported that 51-75% of patients with DM and HTN experience an improvement in their depression status or anxiety levels after taking either escitalopram or

clonazepam. Additionally, approximately 29% and 32% of respondents reported that 26-50% of HTN and DM patients suffering from depression or anxiety levels show recovery after taking either escitalopram or clonazepam (Table 2).

Table 2: Proportion of HTN/DM patients with depression and anxiety reporting improvement after using escitalopram or clonazepam

Percentage of individuals	Response rate (n=242)	
	Improvement in individuals with co-occurring depression, DM, and HTN after receiving escitalopram	Improvement in individuals with co-occurring anxiety, HTN, and DM after receiving clonazepam
<25%	14 (5.78%)	12 (4.95%)
26-50%	71 (29.34%)	77 (31.81%)
51-75%	86 (35.53%)	77 (31.81%)
>80%	66 (27.27%)	71 (29.34%)
Others	5 (2.06%)	5 (2.06%)

Approximately 41% of respondents recommended initiating low-dose combination drugs as a strategy to minimize the dropout rate among patients with HTN and DM who also experience depression and anxiety. Other suggestions, such as the use of low-dose drugs, enhancing patient awareness, and addressing other aspects, were proposed by 35%, 22%, and 32.89% of the respondents respectively.

Discussion

The current study demonstrated that approximately 20-40% of HTN and DM patients experience depression and anxiety, as reported by nearly half of the study participants. This finding is consistent with existing literature, which suggests that patients with DM are nearly twice as likely to experience anxiety and depression compared to the general population [17, 18]. Most patients with HTN and/or diabetes had greater anxiety and depression scores, which indicated a poor quality of life [19]. Consequently, early detection of these mental health conditions in HTN and DM patients with depression and anxiety becomes crucial in facilitating early comprehensive care.

The majority of respondents reported restlessness and other symptoms such as panic episodes, shallow breathing, sweating, shaking, a sensation of weakness or exhaustion, trouble concentrating, and insomnia in patients with HTN and DM who experienced anxiety. On the other hand, the persistent depressive mood was reported in those HTN and DM patients with depression. While there is no specific evidence linking poor sleep quality to anxiety or depression symptoms in the general population or individuals with chronic diseases, patients with DM were reported to experience it more frequently compared to individuals without DM [20-22].

A significant number of respondents recommended the use of SSRIs for treating depressive and anxiety symptoms, while some suggested clonazepam medication for HTN and DM patients. SSRIs are considered as first-line treatment for various anxiety and depressive disorders. It is important to note that SSRIs may initially worsen anxiety or insomnia before gradually alleviating depression and anxiety [23]. Escitalopram is the most preferred SSRI due to its high efficacy, safety, tolerability, and lower risk of mood fluctuations [24]. This is in good agreement with the present study in which a significant number of respondents have preferred switching from antidepressants to escitalopram due to the efficacy of the medication in these patients with depression. One drawback of SSRIs is the timing of medication and the potential for agitation and anxiety at the beginning of treatment, which can lead to lower treatment adherence and less favorable outcomes [25].

Benzodiazepines are frequently administered to provide more immediate symptom alleviation [26]. More than one-third of respondents in the current survey have preferred switching from alprazolam to clonazepam (a

benzodiazepine) due to concerns about drug addiction in HTN and DM patients with anxiety. The use of benzodiazepines alone in the treatment of depression is not recommended, as they primarily improve sleep disorders and restlessness, rather than addressing the core symptoms of depression such as sadness, anhedonia, and low energy [27, 28]. However, when added to an SSRI, benzodiazepines have been reported to provide more rapid relief of depressive symptoms and faster stabilization of panic or social phobia symptoms compared to the use of SSRI alone [29, 30].

Therefore, the current survey findings recommend the use of either escitalopram or clonazepam (SSRIs or benzodiazepine), or a combination of both in lower dosages, as a strategy to minimize treatment drop-out rates in the management of depression and anxiety among patients with HTN and DM.

The available data suggest that treatment with escitalopram or clonazepam leads to improvements in depressive status or anxiety levels in a majority of patients with DM and HTN, ranging from 51-75%. However, experts recommend giving antidepressant medication a few weeks before evaluating its effectiveness, as withdrawal symptoms are more likely to occur when less-effective medications are abruptly discontinued. Tapering off anxiolytic or antidepressant therapy has been suggested as a strategy to make the discontinuation process less challenging.

The current survey findings highlight the importance of personalized treatment approaches for managing anxiety and depression in patients with HTN and DM. The survey had a small sample size of 242 respondents, which may introduce bias and limit the generalizability of the findings. Therefore, further research with larger sample sizes is necessary to accurately assess the prescription practices of both medications in the treatment of anxiety and depression.

Conclusion

Anxiety and depression are prevalent psychiatric conditions among patients with HTN and DM. The majority of experts recommend the use of SSRIs such as escitalopram, or benzodiazepines such as clonazepam for the treatment of these conditions. If initial treatment with an anxiolytic medication is ineffective, switching to another medication within the same class is suggested. Additionally, combining different classes of drugs or initiating low-dose combination medications can help prevent treatment dropout.

Acknowledgment

We would like to thank all the consultants who were participated in this study.

Conflict of Interest

Not available.

Financial Support

Not available.

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How to Cite This Article

Manjula S, Krishna Kumar M. Expert's preference on escitalopram and clonazepam for treating depression and anxiety in Indian diabetic and hypertensive patients. *International Journal of Research in Psychiatry*. 2024;4(1):01-07.

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