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Expert Opinion Article

Prevalence Of Anxiety Disorder In Patients With Substance Use Disorder In Southern Rajasthan

Dr. Shilpa Kakani[1], Dr Ahuti Singh[2], Dr. Abdul Sajid Mansoori[3*]

[1](Senior Resident) Department of Psychiatry, American International Institute Of Medical Sciences, Udaipur, Rajasthan
[2](PG Resident) Department of Psychiatry, American International Institute Of Medical Sciences, Udaipur, Rajasthan
[3*](Associate Professor) Department of Psychiatry, American International Institute Of Medical Sciences, Udaipur, Rajasthan

Abstract

Objective: This study aims to investigate the prevalence of anxiety disorders among patients diagnosed with substance use disorder (SUD). Given the high comorbidity of mental health conditions in SUD populations, understanding the extent of anxiety disorders is crucial for developing comprehensive treatment strategies.

Methods: A cross-sectional study was conducted with 100 patients diagnosed with substance use disorder attending Psychiatry Department of American International Institute Of Medical Sciences Udaipur, Rajasthan. Data were collected using the Generalized Anxiety Disorder-7 (GAD-7) scale for assessing anxiety severity. Sociodemographic information, such as age, gender, type of substance used, and duration of substance use, was also recorded.

Inclusion criteria

- Patients who have given written informed consent.
- Patients of any gender, aged 18 years or old diagnosed with substance use disorder.

Exclusion criteria

- Patients with known psychiatric comorbidity.
- Patients having organic anxiety disorder.

Results: Among the 100 participants, 70% exhibited symptoms of anxiety. Of these, 35% had moderate anxiety, 20% had severe anxiety, and 15% reported mild anxiety symptoms. The remaining 30% showed no significant anxiety symptoms. A significant association was found between the severity of anxiety and the duration of substance use ($p<0.05$), with longer histories of use correlating with higher anxiety severity. Alcohol and opioid users had the highest prevalence of anxiety disorders.

Conclusion: The study demonstrates a high prevalence of anxiety among patients with substance use disorder. The findings suggest that anxiety should be routinely assessed in this population, and integrated treatment approaches addressing both substance use and anxiety are essential for improving overall patient outcomes.

Keywords: Anxiety, Substance Use Disorder, Prevalence, Generalized Anxiety Disorder, Rehabilitation, Comorbid

Introduction

Substance use disorder (SUD) and anxiety disorders are frequently co-occurring conditions that can significantly impact an individual's overall well-being. The relationship between these two conditions has been a subject of increasing interest, as research suggests that individuals with SUD are at a higher risk for developing anxiety disorders.[1,2] Anxiety symptoms, such as excessive worry, restlessness, and difficulty concentrating, can often complicate the treatment and recovery process for those struggling with substance use.[3] This cross-sectional study aimed to explore the prevalence and severity of anxiety among individuals with SUD attending department of psychiatry of American International Institute of Medical Sciences, Udaipur, Rajasthan. The study focused on 100 patients diagnosed with SUD, using the Generalized Anxiety Disorder-7 (GAD-7) scale to assess anxiety levels. The GAD-7 scales,[4] a widely used tool for diagnosing anxiety disorders, categorizes symptoms into different severity levels, allowing for a comprehensive understanding of the relationship between substance use and anxiety severity.

Sociodemographic factors, including age, gender, the type of substance used, and the duration of substance use, were also taken into consideration, as these factors may influence the presence and severity of anxiety symptoms. The findings from this study provide valuable insights into the comorbidity of anxiety disorders and SUD, highlighting the need for integrated treatment approaches that address both conditions simultaneously.

This study aims to investigate the prevalence of anxiety among individuals with SUD attending department of psychiatry of American International Institute of Medical Sciences, Udaipur, Rajasthan. The Generalized Anxiety Disorder-7 (GAD-7) scale was used to assess the severity of anxiety in

patients, and sociodemographic factors such as age, gender, type of substance used, and the duration of substance use were also analyzed.[1,3]

Methods

Study Design:

A cross-sectional study was conducted with 100 patients diagnosed with substance use disorder attending Psychiatry department of American International Institute of medical sciences Udaipur, Rajasthan Data were collected through structured interviews and clinical assessments.

Inclusion criteria

- Patients who have given written informed consent.
- Patients of any gender, aged 18 years or older diagnosed with substance use disorder.

Exclusion criteria

- Patients with known psychiatric comorbidity.
- Patients having organic anxiety disorder.

Data Collection:

The Generalized Anxiety Disorder-7 (GAD-7) scale was administered to assess anxiety severity. This scale classifies anxiety symptoms into four categories:

- **Mild anxiety**: GAD-7 score 5-9
- **Moderate anxiety**: GAD-7 score 10-14
- **Severe anxiety**: GAD-7 score 15 or higher

Sociodemographic information such as age, gender, type of substance used, and duration of substance use was also recorded.

Results

Out of the 100 participants, 70% exhibited some level of anxiety. The breakdown of anxiety severity is shown in the table below:

Table : 1 Case according to Anxiety severity

Anxiety Severity	Number of Participants (n=100)	Percentage
Mild Anxiety	15	15%
Moderate Anxiety	35	35%
Severe Anxiety	20	20%
No Significant Anxiety	30	30%

Among those exhibiting anxiety symptoms, 35% had moderate anxiety, 20% had severe anxiety, and 15% had mild anxiety. The remaining 30% showed no significant anxiety symptoms. A significant association was found between the severity of anxiety and the duration of substance use ($p<0.05$).

Patients with longer histories of substance use were more likely to report higher levels of anxiety. This correlation was particularly prominent among individuals using alcohol and opioids, who had the highest prevalence of anxiety symptoms.

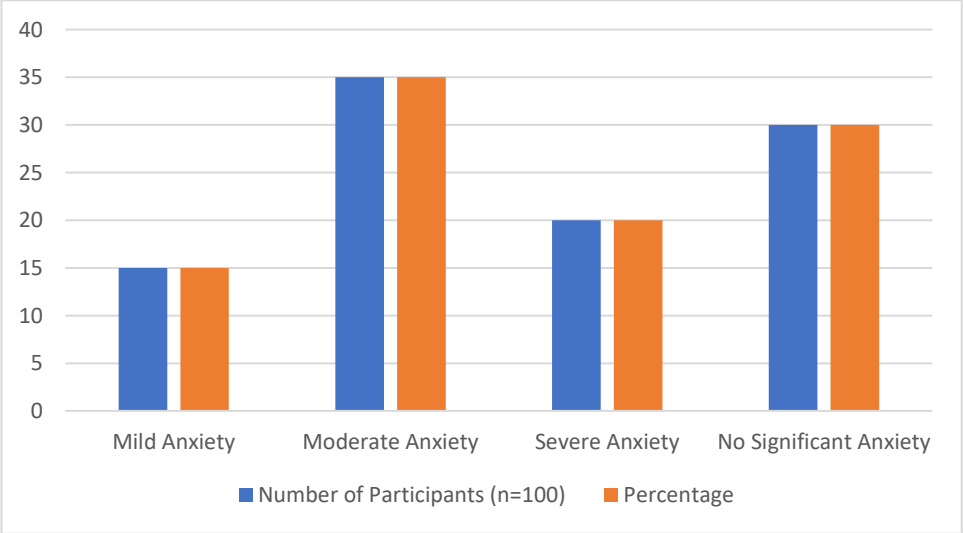


Table : 2 Case according Type of Substance

Type of Substance	Prevalence of Anxiety (n=70)	Male	Female
Alcohol	40%	26	2
Opioids	30%	18	3
Stimulants	10%	7	0
Other Substances*	20%	9	5

***Cannabis, Benzodiazepines, Prescription drugs, Inhalants, Nicotine.**

This table shows Anxiety was observed in association with various substances of abuse. Among individuals with anxiety, alcohol was the most commonly implicated substance, accounting for 40% of cases (n = 28), with a male predominance (n = 26 males, 2 females). Opioid use was identified in 30% of anxiety cases (n = 21), comprising 18 males and 3 females. Stimulant use was less frequently associated, observed in 10% (n = 7), all of whom were male. Other substances, including cannabis and sedatives, accounted for the remaining 20% (n = 14), with 9 males and 5 females affected.

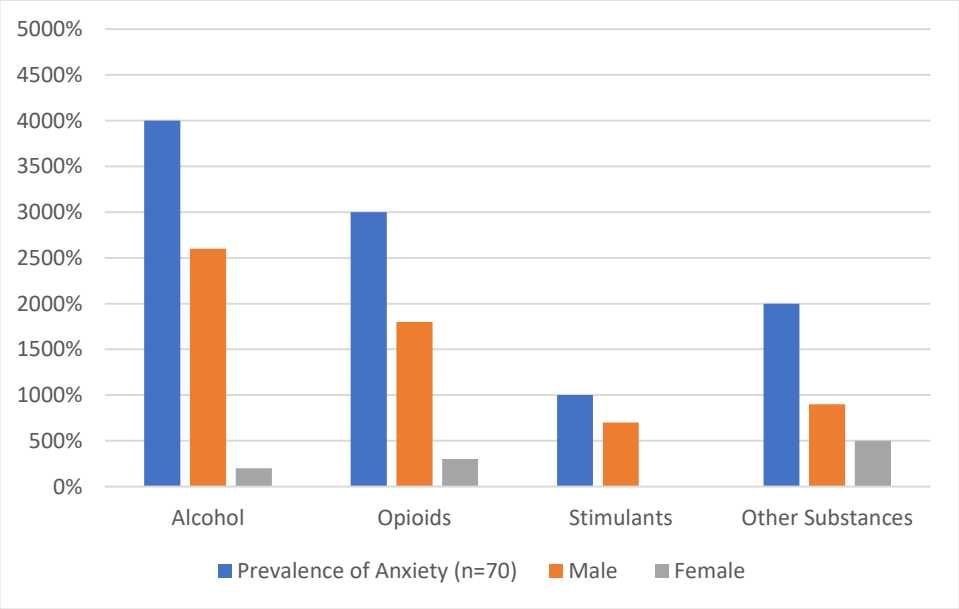


Table : 3 Case according Type of Substance and user with Anxiety

Type of Substance	Total Users	Users with Anxiety	Prevalence of Anxiety (%)
Alcohol	30	28	93.33%
Opioid	25	21	84.00%
Stimulant	10	7	70.00%
Other Substances	35	14	40.00%
Total	**100**	**70**	**70.00%**

This table shows that among the 100 individuals with substance use, 70% exhibited comorbid anxiety. The highest prevalence of anxiety was observed among alcohol users (93.33%), followed by opioid users (84%), stimulant users (70%), and users of other psychoactive substances (40%). These findings underscore the significant burden of anxiety symptoms among individuals with substance use disorders, particularly among those consuming alcohol and opioids.

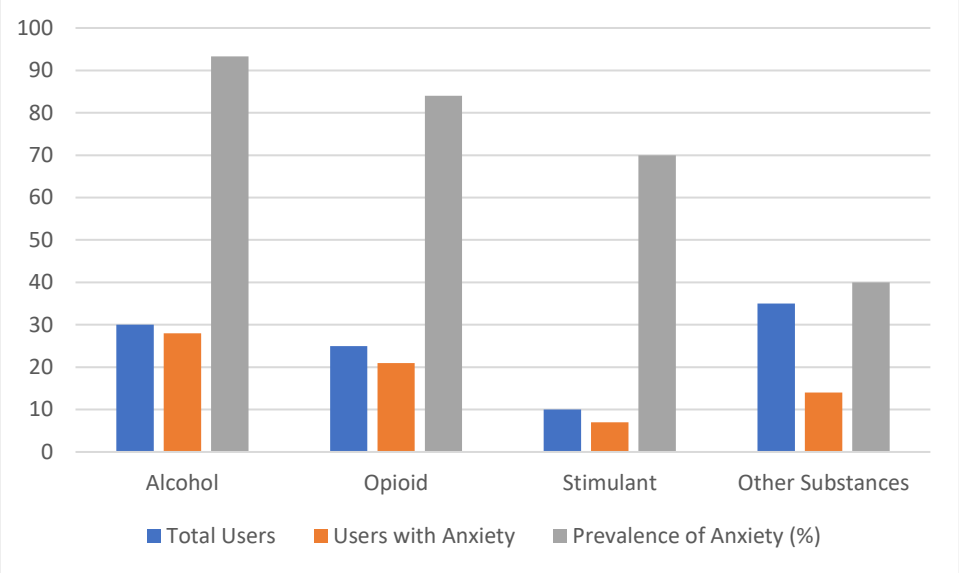


Table:4 Correlation Between Severity of Anxiety and Duration of Substance Use

Duration of Substance Use (in years)	Mean Anxiety Score (± SD)	Anxiety Severity Level	P-value
< 1 year	6.2 ± 3.1	Mild	<0.05
1 – 3 years	9.8 ± 4.5	Moderate	<0.01
> 3 years	14.7 ± 5.2	Severe	<0.001

This table shows that as the duration of substance use increases, the mean anxiety score also rises, indicating a positive correlation between chronic substance use and the severity of anxiety symptoms. The increase is statistically significant, with those using substances for more than 3 years exhibiting moderate to severe anxiety levels.

Discussion

The present study demonstrates a high prevalence of anxiety symptoms among individuals diagnosed with substance use disorder (SUD), with 70% of participants exhibiting anxiety of varying severity. A significant positive correlation was observed between the duration of substance use and the severity of anxiety symptoms. Individuals with a longer history of substance use reported higher anxiety scores, suggesting that chronic substance use may contribute to the intensification of anxiety-related psychopathology. Notably, participants with a substance use duration exceeding three years predominantly exhibited moderate to severe levels of anxiety, a relationship that was found to be statistically significant. These findings underscore the potential impact of prolonged substance use on the worsening of anxiety symptoms, emphasizing the importance of early psychiatric screening and intervention in this population.[1,2]

Furthermore, alcohol and opioid users showed the highest prevalence of anxiety disorders, which may be linked to the neurobiological effects of these substances. Chronic alcohol and opioid use can alter brain chemistry, potentially leading to or exacerbating anxiety disorders.[2,3]This finding is consistent with previous research indicating that alcohol and opioid use are frequently associated with high rates of psychiatric comorbidities, including anxiety.[3,4,5]

The high prevalence of anxiety in this population underscores the need for integrated treatment approaches that address both substance use and mental health disorders. Many rehabilitation facilities primarily focus on treating the substance use disorder itself, but the presence of comorbid anxiety may hinder recovery. Addressing anxiety through counselling, medication, and other therapeutic interventions can improve treatment outcomes and reduce relapse rates in patients with SUD.[1,3,6]

Conclusion

This study adds to the growing body of literature emphasizing the high prevalence of anxiety symptoms among individuals with substance use disorders (SUDs). The findings underscore the clinical importance of identifying and managing co-occurring anxiety symptoms in patients undergoing treatment for substance dependence. Given the adverse impact of comorbid anxiety on treatment adherence, relapse risk, and overall recovery outcomes, it is imperative that rehabilitation protocols integrate comprehensive mental health assessment and intervention. The observed data

demonstrate a statistically significant positive correlation between the duration of substance use and the severity of anxiety symptoms, with individuals engaged in substance use for more than three years showing predominantly moderate to severe anxiety levels. These results highlight the need for integrated, dual-diagnosis treatment approaches that address both substance use and underlying psychiatric comorbidities in a coordinated and concurrent manner.

Limitations

This study has several limitations, including its cross-sectional design, which limits the ability to infer causal relationships. The sample was also drawn from Psychiatry department of American International Institute of medical sciences, Udaipur Rajasthan, which may not be representative of the broader population of individuals with SUD. Future studies should aim to include larger and more diverse samples and consider longitudinal designs to better understand the relationship between substance use and anxiety over time.

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