

A Cross-Sectional Descriptive Study to Assess the Prevalence of Depressive Symptoms amongst Alcohol Use Disorders in a Selected Tertiary Health Care Centre

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Abstract: **Material & Methods:** A cross-sectional descriptive study was conducted to assess depression amongst patients admitted with Alcohol Use Disorders (AUD's) in a tertiary health care centre at Panchkula, India from October 2017 to Feb 2018. A total of 100 patients participated in the study. The presence of depression was assessed using Beck's Depression Inventory II (BDI-II). **Background:** According to National Institute on Alcohol Abuse and Alcoholism (NIAAA), depression can arise during a battle with alcoholism and this increase in depression can lead to more drinking. **Aim:** To assess the prevalence of depressive symptoms amongst AUD's. **Results:** The study revealed that amongst the subjects, 46% reported minimal depression, 23% mild depression, 23% moderate depression and 8% reported with severe depressive symptoms. **Conclusion:** This study revealed that there are co-existing depressive symptoms amongst AUD's. A preliminary screening using BDI- II may be made mandatory for all patients with AUD's to rule out co-existing depression so as to improve the outcome of AUD's.

Keywords: AUD, Depressive symptoms

1. Introduction

The consumption of alcohol is a common thing in Indian society. While a large portion of the population imbibes alcohol without issue, many people develop very serious problems related to alcohol. Excessive consumption of alcohol can lead to Alcohol Use Disorder (AUD). AUD is a pattern of alcohol use that involves problems controlling your drinking, being preoccupied with alcohol, continuing to use alcohol even when it causes problems, having to drink more to get the same effect, or having withdrawal syndrome when you rapidly decrease or stop drinking.¹ Some people drink alcohol in an attempt to cope with their depression. While alcohol may temporarily relieve some symptoms of depression, it ultimately serves to worsen depression on a long-term basis.²

Depression is a common mental disorder, characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activity, for at least two weeks². Alcohol abuse brings negative effects on varied aspect of life. As a person begins to experience financial and career consequences as a result of alcohol abuse, their relationship worsens. This often leads to a damaging cycle of abusing alcohol in an effort to self-medicate symptoms of depression, and the depression worsening due to continuous alcohol abuse³.

According to National Institute on Alcohol Abuse and Alcoholism (NIAAA), depression can arise during a battle with alcoholism and this increase in depression can lead to more drinking, thus perpetuating this cycle from the other angle. If a person experiences feeling of depression as a result of alcohol abuse, it is likely that these symptoms

dissipate, at least somewhat, after alcohol consumption has stopped.³

There were links found between the neurophysiologic and metabolic changes brought about by alcohol abuse and the mechanisms for depression to occur. Therefore, it is clear that alcohol abuse can induce depression, and depression can also induce alcohol abuse. This relationship can be cyclic as well; an individual can get caught going back and forth between abusing alcohol and using alcohol to try to quell the resulting depression. It can be an extremely challenging set of co-occurring disorders to address, and professional help is needed.³

2. Materials and Methods

A cross-sectional descriptive research method was adopted for the study. The study was conducted among 100 patients admitted with AUD's in a tertiary health care centre at Chandigarh, India from October 2017 to Feb 2018.

The subjects who were diagnosed as AUD's, as per ICD-10 criteria by a qualified psychiatrist over a period of two weeks evaluation as in-patients were selected for the study by convenient sampling method.

The presence of depressive symptoms were assessed in the patients using Beck's Depression Inventory II (BDI-II) which is a self-administered tool to assess their level of depressive symptoms over the past two weeks. The BDI-II scale used was a revised version of BDI 1996 inventory. This is a self-report inventory with 21 items rated on a 4 point scale ranging from 0-3 based on the severity of each item. The maximum total score is 63. Score of 0-9 indicates minimal

depression, 10-16 indicates mild depression, 17-29 indicates moderate depression and 30-63 indicates severe depression.

The data was then analyzed using SPSS-17 software.

3. Results

The objectives of the study was to assess the prevalence of depressive symptoms in persons with AUD's and to also to assess the association of selected demographic variables and depressive symptoms amongst AUD's.

The study revealed that amongst the subjects, 46% reported minimal depressive symptoms, 23% mild depressive symptoms, 23% moderate depressive symptoms and 8% reported with severe depressive symptoms (Fig1). The mean BDI Score was 12.36 with SD 9.882.

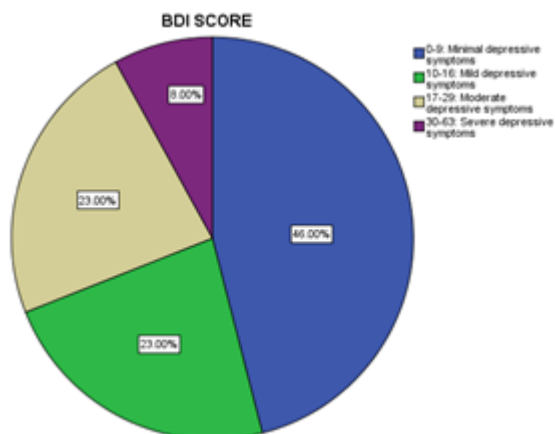


Figure 1: Distribution of subjects with respect to BDI-II score

The demographic data of the subjects are given in Table 1.

The majority of the subjects (58%) fell in the age group of 31-40 years and also were educated only up to 10th standard. The nature of work amongst the participants was that majority (42%) had general area of work and 20% were drivers.

Table 1: Demographic Data, (n=100)

Parameters		No of cases	(%)
Age (Yrs)	21 – 30	10	10
	31 – 40	58	58
	41 – 50	30	30
	51 – 60	2	2
Sex	Male	100	100
Academic qualification	Up to 10 th	58	58
	10+2	35	35
	Degree & above	7	7
Marital Status	Single	2	2
	Married	95	95
	Estranged	3	3
Trade/ Nature of Duty	General Duty	45	45
	Driver	20	20
	Mess duty	12	12
	Clerk	5	5
	Telecommunication	4	4
	House keeper	3	3
	Miscellaneous	11	11
Place of Origin	Punjab	16	16
	Uttar Pradesh	11	11

	Haryana	8	8
	Himachal Pradesh	8	8
	Jammu & Kashmir	8	8
	Uttarakhand	7	7
	Maharashtra	6	6
	Miscellaneous	36	36
Psychiatric Co-morbidities	Ac Psychosis	1	1
	Adjustment Disorder	2	2
	Substance Abuse	1	1
	No Co-morbidities	96	96
Med-Surg Co-morbidities	Hypertension	7	7
	Seizure Disorder	7	7
	Pancreatitis	3	3
	Miscellaneous	21	21
	No Co-morbidities	62	62
Family History of Alcoholism	Alcoholism Present	8	8
	No Alcoholism	92	92
Age at First Drink	11-20yrs	13	13
	21-30yrs	65	65
	31-40yrs	20	20
	41-50 yrs	2	2

There was family history of alcoholism in 8% subjects and 65% subjects had their first drink at age between 21-30years. There were psychiatric co-morbidities in 4% subjects and 38% subjects had medical-surgical co-morbidities like hypertension, seizure disorder and pancreatitis. Majority (73%) of the subjects were drawing a salary of Rs 30,000- 40,000 per month.

The mean duration of years of alcohol use in the subjects was 9.23 years (SD-6.119). The average use of alcohol use per week was 8.79 units of alcohol per week with a SD of 19.062. This high average may be due to one subject reporting with an average use of 175 units of alcohol per week.

However, demographic variables did not have any statistically significant association with the level of depressive symptoms amongst the subjects.

4. Discussion

The present study revealed that there is presence of depressive symptoms in varying levels amongst subjects diagnosed with AUD's. The limitation of the study was that all the subjects were male. The subjects diagnosed with AUD's were majorly from physically exhausting trade like drivers and those on general duty and also those for whom alcohol was easily accessible like chef and mess duty.

5. Conclusion

This study revealed that there are co-existing depressive symptoms amongst AUD's. A preliminary screening using BDI-II may be made mandatory for all patients with AUD's to rule out co existing depression so as to improve the outcome of AUD's. Early detection of depressive symptoms in AUD's will thus help in preventing future relapses and better outcomes in AUD's.

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