

## Original Article:

# Alcohol Withdrawal Cases As a Consequence of COVID-19: A Clinical Analysis



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## ABSTRACT

**Background:** The COVID-19 pandemic has been followed by the shutting down of bars and liquor shops. This condition has led to the acute unavailability of alcohol, and subsequently increasing the number of cases of alcohol withdrawal.

**Objectives:** This paper reports the clinical profile of cases of alcohol withdrawal presented to the psychiatry department following the non-availability of alcohol due to the COVID-19 lockdown.

**Methods:** The patients were referred to the psychiatry department from the emergency medicine department and some of them directly to the psychiatry department. Thirty-two patients with alcohol use disorder and alcohol withdrawal were included in the study. The study data were collected using a semi-structured proforma and then were tabulated. The obtained data were assessed by the Chi-square test and unpaired t-test where appropriate.

**Results:** The Mean±SD age of the study patients were 38.84±11.64 years. The Mean±SD years of consumption of alcohol was 13.50±7.8 years in the sample (range 1-30 years) and Mean±SD days of last consumption of alcohol was 3.88±1.8 days (range 2-10 days). There were no significant differences between stockers and non-stockers in various parameters.

**Conclusion:** Alcohol and substance withdrawal have increased in the wake of the lockdown and COVID-19 pandemic and there is a need for non-COVID-19 setups to be created to cater to the needs of these patients.

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## Introduction

The COVID-19 pandemic has created huge implications for mental health in India. One area with a surge of cases was alcohol and other substances withdrawal [1]. The lockdown has resulted in restricted movement, shutting of non-essential businesses, and closure of all alcohol shops [2]. There has been an inadvertently foreseeable consequence of this global “dry period” leading to a surge in cases of alcohol withdrawal syndrome presenting to the emergency department and psychiatry outpatient department [3]. Indian studies have reported that precipitous alcohol ban in the context of elections increases the incidence of patients with acute alcohol withdrawal [4]. The lockdown in India was initiated for 21 days starting on March 24, 2020, and was extended for another 2 weeks till May 3, 2020. Alcohol sale had been prohibited during this period and all psychiatry non-emergency services had been closed because of the lockdown and access to mental health care was a concern for many patients in India [5].

While it is prudent that all patients presenting with alcohol withdrawal would have to be evaluated to rule out COVID-19 infection, they would also need treatment of alcohol withdrawal. We report in this paper the cases of alcohol withdrawal presented to the psychiatry department following the non-availability of alcohol due to the COVID-19 lockdown. The clinical profiles of these patients are discussed with a focus on sociodemographic profile and clinical features.

## Materials and Methods

The study was conducted in the psychiatry department of a tertiary general hospital in Mumbai. All patients meeting the DSM-5 [6] criteria for alcohol use disorder and presenting with symptoms of alcohol withdrawal comprised the study sample. The study was conducted between March 24, 2020, and April 15, 2020. The patients were referred to the psychiatry department from the emergency medicine department and some of them directly to the psychiatry department. Only patients with alcohol use disorder and alcohol withdrawal were included in the study. Seven patients in the study had occasional cannabis users and were part of the study. The patients had no other substance use except tobacco use disorder. Patients with polysubstance use disorder were excluded from the study. The data were collected using a semi-structured proforma and were tabulated. The collected data were assessed using the Chi-square test and unpaired t-test where appropriate. The study was a clinical non-interventional study and

was assessed in a departmental review board meeting as no Institutional Ethics Committee approvals are currently being processed during the COVID period.

## Results

Table 1 presents the sociodemographic and clinical profiles of the patients in the study. The Mean±SD age of the study patients was 38.84±11.64 years. The Mean±SD duration of alcohol consumption was 13.50±7.8 years (range 1-30 years) and Mean±SD days of last alcohol consumption was 3.88±1.8 years (range 2-10 days). The majority of patients were stockers of alcohol.

Table 2 compares the stockers and non-stockers of alcohol from a phenomenological perspective. The two groups did not show statistically significant differences in any of the parameters.

## Discussion

The COVID-19 pandemic shall have significant ramifications on the epidemiology of all addictive disorders in general and the access to care for patients with substance abuse [7]. The abundant literature on COVID-19 has focused on its effects on patients with opioid addiction [8] but alcohol withdrawal disorders are also an important phenomenon in countries like India. It was expected that there would be a rise in the number of cases of alcohol withdrawal following the lockdown. There have been similar reports from Asian countries with regard to alcohol dependence [9]. None of the patients in our study underwent complicated withdrawal and all presented early for treatment. Normally, it is expected that patients with alcohol withdrawal would have electrolyte abnormalities, vitamin deficiencies, and delirium tremens (as seen in routine practice). All patients in the study were screened for COVID-19 symptoms. An important consideration would be the onset of COVID-19 symptoms and alcohol withdrawal at the same and the need for a psychiatrist to monitor the alcohol withdrawal in these cases. It is worthwhile noting that patients with alcohol and substance use disorders are more prone to contracting COVID-19 as they may not follow protective measures as suggested. Patients with alcohol dependence and respiratory symptoms may not get treatment as psychiatrists may be reluctant to examine them in the absence of personal protective equipment. To protect these patients from contracting COVID-19 in a hospital environment, there may be a need for planning safe domiciliary detoxification in many cases [10]. Thus, alcohol and substance withdrawal has increased in the wake of the lockdown and COVID-19 pandemic.

**Table 1.** Demographic parameters

Parameter		Mean±SD/No.(%)
		n=32
Age (y)		38.84±11.64 (range: 18-56)
Religion	Hindus	22 (68.8)
	Non-hindus	10 (31.2)
Marital status	Married	24 (75)
	Unmarried	7 (21.9)
	Divorced	1 (3.1)
Education (y)		6.75±3.37
Alcohol consumption in years		13.50±7.8 (range: 1-30)
The time of the last drink (d)		3.88±1.8 (range: 2-10)
Regular stocker of alcohol	Yes	11 (65.6)
	No	21 (34.4)
Consumption of other substances	Yes	7 (21.9)
	No	25 (78.1)
History of past withdrawal	Yes	11 (65.6)
	No	21 (34.4)

**PBR**

**Table 2.** Comparison between stockers and non-stockers of alcohol

Parameter	Mean±SD		Statistical Inference
	Regular Stocker (n=11)	Non-stocker (n=21)	
Age (y)	39.09±12.65	38.71±11.39	0.086, 0.93 <sup>a</sup>
Education (y)	5.73±4.2	7.29±2.7	-1.25, 0.22 <sup>a</sup>
Alcohol consumption (y)	12.82±8.7	13.86±7.4	-0.35, 0.72 <sup>a</sup>
History of past withdrawal	Yes	2	1.94, 0.16 <sup>b</sup>
	No	9	
Other substance use	Yes	3	0.28, 0.59 <sup>b</sup>
	No	8	

<sup>a</sup>Statistical analysis done using t-test (values in the form of t value and P-value);

<sup>b</sup>Statistical analysis done using the Chi-square test;

Values in the form of  $\chi^2$  value and P-value.

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## Ethical Considerations

### Compliance with ethical guidelines

The study was clinical non-interventional study and was assessed in a departmental review board meeting as no Institutional Ethics Committee approvals are currently being processed during the COVID period.

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### Authors' contributions

Data collection and literature search: Aditi Hinge and Pawan Gadgile; Data analysis, Writing revieve, and methodology: Sagar Karia; Writing introduction and discussion: Avinash De Sousa; Revising and editing final manuscript: Nilesh Shah.

### Conflict of interest

The authors declared no conflict of interest.

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