

Original Article

Profile of Patients with Alcohol Dependence admitted to a Drug De-addiction Center in a Tertiary Care Hospital

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Received : 15 August, 2023

Accepted : 23 August, 2023

Published : 15 September 2023

DOI:

10.25259/ABMH_5_2023

Quick Response Code:



ABSTRACT

Objective: To examine the profile of patients admitted to a drug de-addiction center of a tertiary care center or hospital with alcohol dependence.

Material and Methods: The study was held in the Department of Psychiatry, Assam Medical College and Hospital, Dibrugarh, Assam during the period from August 2020 to September 2021. 120 patients who fulfilled the criteria for alcohol dependence according to ICD-10 were included. Alcohol Use Disorder Identification Test (AUDIT) and Michigan Alcoholism Screening Test (MAST) were applied.

Results: Around 13.3% of the study participants started drinking alcohol at the age of 15 years. The average age at which the patients initiated drinking alcohol was 24.02 ± 7.19 years, and patients who had started drinking at an early age became dependent within 15 years of regular drinking. The most common cause of initiation of drinking was found to be curiosity, peer pressure, and familial disharmony (68.8%). Most of the patients (80%) were from the lower socio-economic class, educated till middle school, and majority (80.9%) of the participants had an AUDIT score of >20 indicating alcohol dependence.

Conclusion: Alcohol use is seen to begin at a young age (about 15 years), primarily in individuals with less education and in rural communities of this region of the state. Hence, public awareness campaigns and school-based educational initiatives should be undertaken.

Keywords: Global problem, peer pressure, tolerance, withdrawal

INTRODUCTION

Alcohol consumption is a global health problem, with various psychosocial, economic, legal, and medical complications. Around 160 million Indians consume alcohol.^[1] According to the National Family Health Survey-4 (NFHS-4), 29.2% of men and 1.2% of women consume alcohol in India.^[2] More than half of the drinkers meet the criteria for alcohol dependence, and the pattern of drinking has evolved from infrequent and ritualistic use to being a social event.^[3] Alcohol consumption by both men and women is high in North-Eastern part of India, but due to a lack of awareness and stigma surrounding people, only a few people turn up for psychiatric help. As the population structure and ethnicity are different in this region of the state, this study is carried out to look for the profile of patients affected by alcohol dependence syndrome seeking help in this part of the state.

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Objective

To examine the demographics of patients admitted to a drug de-addiction center of a tertiary care center or hospital with alcohol dependence.

MATERIALS AND METHODS

The study was conducted in the Department of Psychiatry, Assam Medical College and Hospital, Dibrugarh, Assam during the period from August 2020 to September 2021. All the subjects fulfilling the inclusion and exclusion criteria during the study period were included in this study.

The study included patients of alcohol dependence admitted to the de-addiction center at Assam Medical College and Hospital. Participants with concurrent presence of other substance dependence except tobacco and with the presence of any significant illness requiring intensive medical or surgical management were excluded.

A total of 120 patients who fulfilled the selection criteria were admitted after obtaining informed consent. Demographic details, history, general physical examination, and mental status examination were recorded on a semi-structured proforma designed for the study. The presence of alcohol dependence was diagnosed using ICD-10 criteria, and it was assessed using Alcohol Use Disorders Identification Test (AUDIT) and Michigan Alcoholism Screening Test (MAST). The patients were then detoxified according to the standard clinical practice.

RESULTS

The study included 120 inpatients of alcohol dependence syndrome at the Department of Psychiatry, Assam Medical College. The average (SD) age of the patients at presentation was 37.5 ± 7.47 years.

In this study in Table 1, it was observed that most (34.2%) of the study subjects were from the age group of 26–35 years, followed by 32.5% of the study participants in the 36–45 years range. 90% of the subjects were males, and majority (40.8%) were educated till middle school. Most of the study participants were married (75%), belonged to nuclear families (68.4%), from rural backgrounds (64.2%), and belonged to upper–lower (IV) socioeconomic status (51.6%).

In Table 2, it was seen that 60% of the study participants had initiated their drinking between the ages of 15 and 25 years, with mean age (\pm SD) at first drink being 24.02 ± 7.19 years. 13.3% (16) had their first drink at the age of 15 years. On an average, patients became dependent within 15 years of regular drinking.

In this study in Figure 1, it can be seen that curiosity, peer pressure, and family disharmony were the major causes of

Table 1: Socio-demographic details of study participants.

Socio-demographic details	N (%)
Age group (years)	
15–25	10 (8.3)
26–35	41 (34.17)
36–45	39 (32.5)
46–55	23 (19.16)
56–65	7 (5.83)
Gender	
Male	108 (90)
Female	12 (10)
Education	
No formal education	5 (4.17)
Primary school certificate	21 (17.5)
Middle school certificate	49 (40.8)
High school certificate	35 (29.2)
Graduate/Post graduate	10 (8.3)
Type of family	
Nuclear	82 (68.4)
Joint	38 (31.6)
Domicile	
Rural	77 (64.2)
Urban	43 (35.8)
Marital status	
Married	90(75)
Unmarried	22 (18.3)
Separated	6 (5)
Divorced	2 (1.66)
Socioeconomic status	
Upper (I)	Nil
Upper–Middle (II)	14 (11.6)
Lower–Middle (III)	36 (30)
Upper–Lower (IV)	62 (51.6)
Lower (V)	8 (6.66)

Table 2: Distribution of study participants according to age at first drink.

Age groups (years)	N (%)	Mean \pm SD
15–25	72 (60)	19.6 \pm 3.20
26–35	31 (25.8)	29.4 \pm 2.57
36–45	11 (9.16)	39.6 \pm 2.35
46–55	5 (4.16)	50.2 \pm 3.31
56–65	1 (0.83)	-

initiation of drinking among most of the study participants (68.8%). A few (9.16%) participants cited financial issues and work pressure as the causes.

Concomitant tobacco use was found in 74.16% of the patients.

In this study in Table 3, it was found that 92.5 and 90% of the study participants, respectively, had developed tolerance and withdrawal symptoms during presentation.

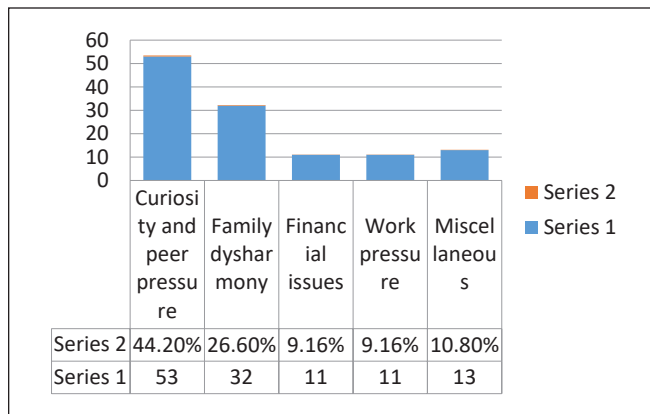


Figure 1: Distribution of patients according to the cause of initiation of drink.

Table 3: Presence of symptoms of withdrawal and tolerance.

	N (%)
Withdrawal symptoms	
Present	108 (90)
Absent	12 (10)
Tolerance	
Present	111 (92.5)
Absent	9 (7.5)

Distribution of patients according to AUDIT and MAST score

The majority of patients (80.9%) had an AUDIT score > 15 signifying alcohol dependence, and only 19.1% were harmful drinkers (scoring between 8 and 14). All patients (100%) had MAST scores ≥ 7 indicating alcohol dependence.

DISCUSSION

In this study, it is seen that a majority of respondents (34.2%) were from the age group of 26–35 years, with an average age at presentation being 37.7 years. Similar results were observed in the study conducted by Dewani *et al.*^[4] in 2018.

In this study, it is seen that majority (40.8%) of the subjects were educated till middle school, and 64.2% were from a rural background and belonged mostly to nuclear families (68.4%). This mirrors the population served by the tertiary care center where the study was conducted, urban location, with a sizable rural area. The findings are in line with the study conducted by Johnson *et al.*^[5] and Reddy *et al.*^[6] where it was seen that the greatest number of subjects in similar clinical background had education less than high school and belonged to rural background and nuclear families.

It was also observed that 75% of the study participants were married. Similar results (90%) were found in the study conducted by Vignesh *et al.*^[7]

Around 51.6% (majority) of the study participants belonged to the upper–lower (IV) group of the socio-economic class. This finding was similar to that of the study conducted by Karandikar *et al.*^[8] However, in a study conducted by Sarkar *et al.*^[9] it was found that the majority of participants belonged to upper–middle (II) group.

It was observed that 60% of the study participants initiated drinking between 15 and 25 years of age. Around 13.3% of the study participants had their first drink at the age of 15 years, followed by 25.8% of participants between 26 and 35 years of age. The average age at which the first drink of alcohol was taken is 24.02 ± 7.19 years. These findings are in line with that of the study conducted by Sarkar *et al.*^[9] where they found that 82.67% of the study subjects had started drinking before 20 years of age.

The present study found that on average, patients who initiated drinking at an early age became dependent within 15 years of regular drinking (Mean ± SD = 14.96 ± 7.32). This data is similar to the finding of the study conducted by Hingson *et al.*^[10] where it was found that those who start to drink before the age of 14 years are likely to develop alcohol dependence only after 10 years of the first drink.

In the present study in Figure 1, it can be seen that curiosity, peer pressure, and family disharmony were the major causes of initiation of drinking among majority of the study participants (68.8%). A fewer (9.16%) participants cited financial issues and work pressure as the causes. The findings were in line with that of the study by Girish *et al.*^[11] where they found that the most common (52%) cause of drinking alcohol was to ease various types of pain and to help get sleep. This was found to be greater in rural areas (58%) with adaptation and peer pressure (when with acquaintances or in social events or occasions) to be the significant causes of alcohol use in 45 and 48% of the study subjects, respectively.

Concomitant tobacco use was established in 74.2% of the patients in our study. People who drink are more prone to smoke and vice versa, and alcohol and tobacco uses are observed to be highly associated behaviors; moreover, nicotine dependence is a common comorbidity among alcohol-dependent individuals.

In this study, it was found that 92.5 and 90% of the study participants, respectively, had developed tolerance and withdrawal symptoms when they presented to us. Reddy *et al.*^[6] in their study also found similar findings (97 and 95%, respectively), thus representing a greater severity through the entire group.

The current study also observed that the majority (81.9%) of participants had an AUDIT score of > 15 indicating alcohol dependence and the rest 19.1% were harmful drinkers. However,

in a similar study conducted by Mane *et al.*,^[12] the findings were inconsistent with that of our study where it was found that the majority (63%) of participants were harmful drinkers and no one had alcohol dependence. This difference might be due to the cultural variations, wherein in this part of the country it is quite common for rural households to prepare country-made liquor and use it in rituals and even on a daily basis starting from a fairly young age, thus developing dependence.

The results of this study have to be construed in light of the following limitations.

Firstly, because it is a cross-sectional study, the findings could not be generalized to the whole population of India, and there was no possibility for following up with the study participants for assessing any alterations in the pattern of drinking habits. Secondly, as this study had been conducted during the COVID-19 pandemic, the sample size was limited to 120. Thirdly, the study did not include confounding factors such as family history of alcohol intake and childhood environment of the study subjects. These factors should be considered in future studies to provide a profound insight into the issue.

CONCLUSION

Alcohol consumption is seen to start at a fairly young age, mostly in those with less education and in rural areas, as evidenced from this study. Educational programs for school children and campaigns for general public should be undertaken in this regard. Strategies for demand reduction should focus on the younger age groups to stop its commencement. Awareness among the population and necessary rehabilitation and self-help programs will help in bringing down the prevalence of alcohol-use disorders.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Use of Artificial Intelligence (AI)-Assisted Technology for manuscript preparation

The author(s) have confirmed that there was no use of Artificial Intelligence (AI)-assisted Technology for assistance

in writing or editing of the manuscript, and no images were manipulated using the AI.

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How to cite this article: Dutta A, Nayek S, Deka B. Profile of patients with alcohol dependence admitted to a drug de-addiction center in a tertiary care hospital. *Acad Bull Ment Health* 2023;1:26-9.