

ORIGINAL RESEARCH

A Study of Sociodemographic & Clinical Profile of Alcohol Dependence Patients Admitted in a Tertiary care Centre

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ABSTRACT

Introduction: Alcohol abuse is a global health concern, contributing significantly to morbidity, mortality, and societal costs. In India, alcohol dependence affects approximately 2.7% of the population, leading to substantial health, social, and economic consequences. This study aims to investigate the sociodemographic and clinical characteristics of alcohol dependence patients in a tertiary care center, offering insights for more effective preventive and treatment strategies. **Aims & Objectives:** To Study the sociodemographic and clinical profiles of individuals admitted with alcohol dependence in a de-addiction ward at a tertiary care center. **Methodology:** This observational study enrolled 100 male patients using purposive sampling. Inclusion criteria involved patients meeting WHO ICD-10 criteria for dependence syndrome, aged >18 years, admitted as inpatients, providing informed consent, and having reliable informants. Data was collected using a semi-structured proforma, WHO ICD-10 criteria, Severity of Alcohol Dependence Questionnaire (SADQ), and Clinical Institute Withdrawal Assessment of Alcohol Scale (CIWA-Ar). **Results:** The majority of participants were aged 26-35 years (48%), Hindus (94%), urban residents (80%), and educated up to the middle class (49%). Most were married (83%) and had a joint family (53%). In terms of clinical profiles, the majority initiated alcohol use between 15-25 years (59%), had a family history of substance abuse (64%), and experienced complicated withdrawals (29%). About 25% of patients had legal issues related to alcoholism. The mean CIWA score was 9.5 (SD 4.8), and the mean SADQ score was 15.84 (SD 9.2). **Discussion:** The study revealed a male preponderance in alcoholism, possibly influenced by societal stigma regarding female healthcare access. Demographics reflected regional cultural and socio-demographic patterns. Early onset of alcohol use and a family history of substance abuse were prominent. Complicated withdrawals and legal issues underscored the severity of alcoholism. The study's limitations include its single-center nature and potential response bias. **Conclusion:** This study sheds light on the sociodemographic and clinical factors associated with alcohol dependence in a specific region of India. Understanding these factors is crucial for tailoring effective prevention and treatment strategies. Clinicians should focus on early intervention and individualized relapse prevention in this population. Further research with larger sample sizes in diverse settings is recommended.

Keywords: Alcohol dependence, sociodemographic profile, clinical profile, India, de-addiction, prevention strategies, relapse prevention.

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INTRODUCTION

Alcohol is the one of the most abused substance on the planet. Globally, its use ranks among the top 5 risk factors for disease, disability and death each year, it causes 3.3 million deaths^{1,2}. For India, the most recent data suggests that about 2.7% of the population of India (~ 29 million individuals) is affected by alcohol dependence.³

Death and disability caused by alcohol occur relatively early in life. Approximately 13.5 % of the total deaths are caused by alcohol in the age group

20–39 years. The harmful use of alcohol brings significant social and economic losses to individuals and society apart from health consequences.⁴

Alcohol consumption practices in India vary across different regions because of varying socio cultural factors and differences in prohibition laws of individual states. The National Survey on Extent and Pattern of Substance Use in India conducted by NDDTC, AIIMS gives the most recent data about patterns of alcohol use in India. The findings of this survey shows that the prevalence of current alcohol

use for adults above the age of 18 years is 17.1% with the demographic group with the largest prevalence of alcohol use being men over the age of 18 years. Remarkable gender difference is evidenced by the fact that while 27.3% of men use alcohol, the corresponding figure for women is just 1.6%.³ There is dearth of studies in this important aspect from our country, while we have significant mortality and morbidity related to alcoholism. The present study was carried out to look for the demographic and clinical factors associated with alcohol dependence syndrome so that the information can be utilized for planning effective preventive and treatment measures.

AIMS& OBJECTIVES

- To study socio-demographic and clinical profile of subjects admitted with alcohol dependence in deaddiction ward of a tertiary care center.

METHODOLOGY

The Site of the study was department of psychiatry, MGM Medical College, Indore, India. It was an observational study, which enrolled 100 patients through purposive sampling for one year duration. Institutional ethical approval was obtained. Subjects fulfilling Inclusion & Exclusion criteria were interviewed with help of semi structured proforma & study tools.

INCLUSION CRITERIA

- Patients fulfilling criteria of dependence syndrome (F10.2) as per WHO ICD- 10 (International Classification of Disease).⁵
- Patients from inpatient ward.
- Patient aged >18 years.
- Patients giving informed consent.
- Patient having reliable informant.

EXCLUSION CRITERIA

- Dependence/harmful use of other substance except tobacco.
- Presence of any significant illness requiring intensive medical/Surgical management.

ASSESSMENT TOOLS

- Socio demographic and clinical data sheet.
- WHO ICD 10
- Severity of alcohol dependence questionnaire (SADQ)⁶
- Clinical institute withdrawal assessment of alcohol scale (CIWA-Ar)⁷

RESULTS

Table 1 describes demographic profile of the sample. The majority of the enrolled participants were aged between 26-35 years 48 (48%) with a mean age of 36.5 years. All patients were males. Majority of the enrolled participants 94 (94%) were Hindu, and 6 (6%) were Muslim. Majority of the enrolled participants were urban 80 (80%) and 20 (20%) were rural. Majority of the enrolled participants were educated upto middle class (49%), 23% educated upto primary class, 12% educated upto high school, 9% were graduated and 7% were illiterate.

Majority of the enrolled participant's (83%) were married. 8% reported being separated from their spouse while 5% reported being widowed. 4% reported never being married. Majority of the enrolled participant's were skilled/semiskilled(49%), 20% were unskilled, 26% were professional/semi-professional and 5% were unemployed. Majority of the enrolled participant's had joint family (53%) and 47% had nuclear family.

Table 2 describes Clinical Profile of the sample. Majority of the enrolled participants had age of initiation of substance between 15 to 25 years (59%), 27% started between 25 to 40 years of age and 14% before the age of 15 years. 13% of participants had associated medical condition. Majority of the enrolled participant's had history of substance abuse in family (64%) and in 36% history was absent. Majority of the enrolled participants had maximum duration of abstinence less than 1 month (45%), 32% had 1-6 months, 17% had 7-12 months and 6% had more than 12 months. 29% participants had history of complicated withdrawal symptoms like delirium tremens, seizures and alcoholic hallucinosis. 25% patients had history of legal or criminal cases. The Mean CIWA Score was 9.5 (SD 4.8) and Mean SADQ score was 15.84 (SD 9.2).

Table 1 - Demographic Profile

Age Group (Years)	Frequency	Percent
15-25 Y	3	3.0
26-35 Y	48	48.0
36-45 Y	36	36.0
46-55 Y	13	13.0
EDUCATION	Frequency	Percent
Illiterate	7	7.0
Primary level	23	23.0
Middle Level	49	49.0
High School	12	12.0
Graduate & Above	9	9.0
Marital Status	Frequency	Percent

Married	83	83.0
Unmarried	4	4.0
Separated/ Widowed	13	13.0
Religion	Frequency	Percent
Hindu	94	94.0
Muslim	6	6.0
Occupation	Frequency	Percent
Professional/Semiprofessional	26	26
Skilled/Semi-skilled	49	49
Unskilled	20	20
Unemployed	05	05
Family Type	Frequency	Percent
Nuclear	47	47
Joint	53	53
Locality	Frequency	Percent
Rural	20	20.0
Urban	80	80.0

Table 2 - Clinical Profile

Age of Initiation	Frequency	Percent
<15 years	14	14
15-25 Years	59	59
25-40 Years	27	27
Medical Comorbidity	Frequency	Percent
Present	13	13
Absent	87	87
Family history of Substance	Frequency	Percent
Present	36	36
Absent	64	64
Maximum Abstinence (Months)	Frequency	Percent
<1	45	45.0
1-6	32	32.0
7-12	17	17.0
>12	6	6.0
Past Complicated Withdrawal	Frequency	Percent
Present	29	29
Absent	71	71
History of Medicolegal Issues	Frequency	Percent
Present	25	25
Absent	75	75
MULTIPLE	15	15.0
Variable	Mean	Standard Deviation
CIWA SCORE	9.5	4.8
SADQ SCORE	15.84	9.2

DISCUSSION

Index study was conducted at a tertiary care centre from central India, this centre is a major healthcare centre which caters to a large population from Madhya Pradesh and neighbouring states.

In index study the mean age of the patients was 36.5 years, similar to previous studies.^{8,9} All of our patients were males. Male preponderance in alcoholism is already an established finding, but here it could also be reflective of stigma barrier in healthcare access of female gender, influenced by local culture & custom. Majority of the enrolled participants (94%) were Hindu, 6% were Muslim and This finding is

concordance with the regional cultural and socio-demographic distribution of the region.¹⁰ Majority of patients (83%) were married, similar to other studies from India.⁸ Majority of the enrolled participants were urban (80%) and 20% were rural. Our study centre being a tertiary care centre situated in an urban area this is an expected finding. Majority of the enrolled participants were educated upto middle class (49%) and primary class (23%). This finding is also similar to prior studies that most of the patients in similar clinical settings had education less than high school.⁸ Apart from 5% unemployed patients rest

were employed in various occupational categories , similar to study by reddy et al .⁸

Majority of the enrolled participants had age of initiation of substance between 15 to 25 years (59%). similarly a study among in-patients reported the mean age at first consumption to be 15.4 years and at regular consumption to be 23.1 years.¹¹

Majority of the enrolled participant's had history of substance abuse in family (64%) .Prior study has shown that students with parental history of alcoholism drink more and have more alcohol related problems than their counterparts from non-alcoholic families.¹²

History of Alcohol related complicated withdrawal was present in 29 % of our subjects - which is relatively higher, reflecting their higher degree of alcoholism . Also 25 % patients reported legal issues associated with alcoholism , thus these issues should also be regularly enquired and addressed .

Alcohol is a relapsing and remitting disorder , which is also reflected in our findings that our subjects though tried for abstinence but Majority of the enrolled participants had maximum duration of abstinence less than 1 month (45%) and relapsed. Thus individualised relapse prevention strategies are required.

Our study has certain limitations . The study was conducted at a single center, thus results cannot be generalised. Since the information was collected based on self-reporting using a semi-structured proforma, there is a possibility of response bias in reporting as well.

CONCLUSION

Majority of patients were from urban background, had young onset of drinking , belonged to male gender , had family history of alcoholism and education lesser than secondary level. Thus these demographic variables should be more focussed upon while formulating effective prevention strategies . Clinical characteristics reflected history of higher frequency of complicated withdrawal and short abstinence period . Thus clinicians should enquire about and manage these factors essentially. Lastly further research with larger sample size and in multiple settings is warranted.

REFERENCES

1. Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk

factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet Lond Engl.* 2012 Dec 15;380(9859):2224–60.

2. World Health Organization. Global Status Report on Alcohol and Health 2018 [Internet]. World Health Organization; 2018. Available from: <https://apps.who.int/iris/handle/10665/274603>
3. Ambekar A, Chadda RK, Khandelwal SK, Rao R, Mishra AK, Agarwal A. Magnitude of Substance Use in India (National Survey on Extent and Pattern of Substance Use in India). New Delhi: Ministry of Social Justice and Empowerment, Government of India; 11–16 p.
4. Alcohol [Internet]. Who.int. 2021 [cited 21 November 2021]. Available from: <https://www.who.int/news-room/fact-sheets/detail/alcohol>
5. ICD-10, the ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research (Geneva: World Health Organization, 1993
6. Stockwell T, Murphy D, Hodgson R (1983). "The severity of alcohol dependence questionnaire: Its use, reliability and validity". *British Journal of Addiction.* 78 (2): 45–156. doi:10.1111/j.1360-0443.1983.tb05502.x.
7. Sullivan JT, Sykora K, Schneiderman J, Naranjo CA, Sellers EM. Assessment of alcohol withdrawal: the revised clinical institute withdrawal assessment for alcohol scale (CIWA-Ar). *Br J Addict.* 1989 Nov;84(11):1353-7. doi: 10.1111/j.1360-0443.1989.tb00737.x.
8. Reddy MP, Babu RS, Pathak SM, Venkateshwarlu S. The clinical and demographic profile of male patients with alcohol dependence syndrome. *Indian J Psychol Med.* 2014 Oct;36(4):418-21. doi: 10.4103/0253-7176.140735. PMID: 25336776; PMCID: PMC4201796.
9. Dewani K, Mutalik NR, Choudhari SB. Clinical and Socio-demographic Profile of Patients with Alcohol Dependence Syndrome: A Hospital Based Study. *Psychiatry and Mental Health.* 2017 July-December; 1(2):61-65.
10. Religion Data - Population of Hindu / Muslim / Sikh / Christian - Census 2011 India [Internet]. Census2011.co.in. 2021 [cited 12 December 2021]. Available from: <https://www.census2011.co.in/religion.php>
11. Driessen M, Veltrup C, Wetterling T, John U, Dilling H. Axis I and axis II comorbidity in alcohol dependence and the two types of alcoholism. *Alcohol Clin Exp Res.* 1998;22:77–86
12. Gupta PC, Saxena S, Pednekar MS, Maulik PK. Alcohol consumption among middle-aged and elderly men: a community study from western India. *Alcohol and Alcoholism.* 2003 Jul 1;38(4):327-31