

## Study on Sociodemographic and Clinical Profile of Substance Dependence Patients in a Tertiary Health Care Center in Central India

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### Abstract:

**Background:** Substance abuse is a global phenomenon and prevalent all over the world in all the cultures. Dependence of alcoholic beverages and tobacco are endemic in many societies, whilst the abuse of other illicit psychoactive substances is growing concern in India. It has severe impact on physical, psychological, social and environmental aspect of life, leads to legal complication.

**Methods:** It was an observational study, which enrolled 280 patients from DTC OPD through purposive sampling for one year duration. After fulfilling inclusion and exclusion criteria patient included in the study, with the help of pretested semi structured questionnaire.

**Results:** Majority of the substance abusers were males (97.5%) and within the age group of 26 to 35 years (47.5%). Most commonly used drug was alcohol (52%), followed by opium (31%) and cannabis (11%). Mean age of initiation of substance 23.1 years.

**Conclusions:** Alcohol is most common consumed substance and high prevalence of illicit substance abuser like opioid and cannabis raising concern as these associated with more serious and fatal outcome. While many of the respondents began using drugs before or at the age of 15. Our results show that India needs management and prevention methods for substance abuse.

**Keywords:** Substance dependence, opioid, Alcohol

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### Introduction

Psychoactive drugs with mood-altering effects have been used by humans for thousands of years. Numerous psychoactive drugs, including alcohol, cannabis, and opioids, have been utilized for hundreds of years in India. Today, however, the frequency and extent of using these psychotropic substances has taken on pathological proportions. A person develops addiction when they consume a substance (such as alcohol, cocaine, or nicotine) or engage in an activity (such as gambling, shopping), both of which have the potential to be pleasurable, but whose continued participation becomes compulsive and interferes with daily responsibilities and concerns, such as work, relationships, or health. Addicts may not be cognizant of the fact that their actions are out of control and harming both themselves and others.

The prevalence of dependent substance vary according to region in India. Like in Madhya Pradesh most people consume tobacco than alcohol followed by other substance. Shows increase trend of illicit substance like cannabis, opioid among adult and children. [1]

One of the main issues with adolescent and young people's behaviour is drug misuse. [2] Adolescent substance abuse is linked to a wide variety of high-risk behaviours. This type of behaviour can have serious negative effects on a person's physical, mental, and social well-being. For instance, some adolescents may engage in peer-group deviance, unprotected sexual activity, interpersonal aggression, property destruction, and poor academic performance.

The United Nations Office on Drugs and criminality (2008) asserts that difficult socioeconomic issues like unemployment, poverty, and criminality in general aggravate substance usage. Numerous families and communities are being destroyed by these social evils. [3]

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.

## Methodology

The Site of the study was Department of Psychiatry, MGM Medical College, Indore, India. It was an observational study, which enrolled 280 patients from DTC OPD through purposive sampling for one year duration. After fulfilling inclusion and exclusion criteria patient included in the study. 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 as per WHO ICD- 10 (International Classification of Disease). [4]

- Patients from OPD of deaddiction
- Patient aged >18 years.
- Patients giving informed consent.
- Patient having reliable informant.

## Exclusion Criteria

- Substance use Other than dependence pattern of substance
- Age less than 18 years
- Polysubstance
- Tobacco dependence
- Refuse to give consent

## Results

**Table 1: Demographic Profile**

Age Group (Years)	Frequency	Percent
18-25 Y	62	22.10
26-35 Y	133	47.5
36-45 Y	56	20.00
46-55 Y	26	9.20
>55 Y	3	1.07
Mean age	33.03	
Gender	Frequency	Percent
Male	273	97.50
Female	7	2.50
EDUCATION	Frequency	Percent
Illiterate	25	8.92
Primary level	55	21.78
Middle Level	84	30.00
Higher secondary	86	30.7
Graduate & Above	30	10.7
Marital Status	Frequency	Percent
Married	189	67.5
Unmarried	78	27.85
Widow/widower	2	0.70
Separated/Divorced	11	3.92
Religion	Frequency	Percent
Hindu	247	88.21
Muslim	33	11.78
Occupation	Frequency	Percent
Employed	187	66.7
Unemployed	83	29.64
Never employed	4	1.4
Retired	1	0.3
Student	5	1.7
Family Type	Frequency	Percent
Joint	184	65.7
Nuclear	91	32.5
Alone	2	0.7
With friend	2	0.7
Not known	1	0.3
Locality	Frequency	Percent
Rural	41	14.7
Urban	239	85.3

**Table 2: Type of substance dependence**

Type of substances used	Number [N=200]	Percentage
Alcohol	146	52.14
Opioid	87	31.07
Cannabis	32	11.4
Volatile substance	7	2.5
Benzodiazepine	7	2.5
Ketamine	1	0.35

**Table 3: Clinical Profile**

Age of Initiation	Frequency	Percent
<18 years	62	22.14
18-25 Years	121	43.21
26-35 Years	75	27.14
36-45	17	6.00
46-55	5	1.78
Mean age of dependence initiation	23.1 years	
Complication	Frequency	Percent
Absent	4	1.42
Medical	76	27.14
Psychological	112	40.00
Occupational	88	31.42
History of Medicolegal Issues	Frequency	Percent
Present	58	20.71
Absent	222	79.28

Table 1 describes demographic profile of the sample. The majority of the enrolled participants were aged between 26-35 years 133(47.5%) with a mean age of 33.03 years. Majority of patients were males 273(97.5%). Majority of the enrolled participants 247 (88.20%) were Hindu, and 33 (11.80%) were Muslim. Majority of the enrolled participants were urban 239 (85.3%) and 41 (14.7%) were rural. Majority of the enrolled participants were educated upto primary and middle class 139 (51.78%), 86(30.7%) educated upto higher secondary, 30(10.7%) were graduated and 25(8.9%) were illiterate. Majority of the enrolled participant's 189(67.5%) were married. 78(27.8%) reported being unmarried and 11(3.7%) separated from their spouse while 1(0.35%) reported being widowed. Majority of the enrolled participant's were employed 187(67%) and 83(29%) were unemployed. Majority of the enrolled participant's had joint family 184(65%) and 91(32%) had nuclear family.

Table 2 describes types of substance dependence. About 50% patient visiting deaddiction OPD have alcohol dependence problem, opioid dependence 31%, followed by cannabis and volatile substance.

Table 3 describes- Clinical Profile of the sample. Majority of the enrolled participants had age of initiation of substance between 18 to 25 years (43.21%), 27% started between 26 to 35 years of age and 22.14% before the age of 18 years. 27% of participants had associated medical complication. Majority had psychological and occupation problem due to substance dependence.

## Discussion

Today drug abuse is epidemic diseases, the effects of which are not in any way limited to just one individual but extends to his or her family and whole society at large. Substance abuse has become an increasingly major socio-medical problem throughout the world. However these studies indicate the local variation and point out local factors which affect the growing problem of substance abuse, hence necessitating the conduct of socio- demographic study of the local population to understand substance abuse. 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 33.03 years, similar to previous studies. [4,5] most of our patients were males. Male preponderance in substance dependence is already a 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 participant's (88%) were Hindu, 12% were Muslim and This finding is concordance with the regional cultural and socio-demographic distribution of the region. [6] Majority of patients (67%) were married, similar to other studies from India. [4] Majority of the enrolled participants were urban (85%) and 15% 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 and primary class (51%). This finding is also

similar to prior studies that most of the patients in similar clinical settings had education less than high school. [4] 66% patient were employed able to maintain their job with substance 29% were lost their job due to substance dependence similar to study in Karachi, Pakistan [7] 29.6% patients were unemployed; whereas in Chennai, India [8] 31.7% were unemployed. While studying pattern of substance abuse in patient we found that majority of our patient consume alcohol(52%) followed by opioid(31%) than cannabis(11%) similar to Murmur S et.al [9] not similar to other study which show higher prevalence of alcohol dependence 72% followed by cannabis in their study. [10] This indicate increase prevalence of opioid among population which is dangerous sign and show failure of our effort to reduce illicit substance trafficking and use. Need stringent law to reduce its use, to protect our population.

Similarly a study among in-patients reported the mean age at first consumption to be 15 years and at regular consumption to be 23.1 years. [11] History of Substance related complication was present in majority of our subjects which was psychological in 40%, occupational in 31% and medical complication in 27% of subject which is relatively higher, reflecting their higher degree of dependence. Also 20 % patients reported legal issues associated with substance, thus these issues should also be regularly enquired and addressed.

### Conclusion

Despite some limitations, this study provides information about recent patterns substance use in central India. Majority of patients were from urban background, belonged to young adult male group, education lesser than secondary level. Alcohol is most common consumed substance and high prevalence of illicit substance abuser like opioid and cannabis raising concern as these associated with more serious and fatal outcome. While many of the respondents began using drugs before or at the age of 15. Our results show that India needs management and prevention methods for substance abuse. To protect our children and the generations, policymakers must act right away. Our study has certain limitations. The study was conducted at a single center, thus results cannot be generalized. 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.

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