# Clinical and Socio-Demographic Profile of Patients with Alcohol Dependence Syndrome: A Hospital Based Study

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#### Abstract

Background: Worldwide there is a rising trend in number of people who resort to substance use at an early age. The percentage of population that drinks at an early age has increased from 2% to more than 14%. Research is needed to optimize treatment strategies especially in the understudied group of Asian Indians based on local epidemiology of alcohol use. Objectives: To study the clinical and socio-demographic profile of males diagnosed with alcohol dependence syndrome. Materials and Methods: A descriptive study comprising of 50 subjects attending psychiatry de-addiction clinic in a private medical college in Bagalkot, Karnataka during 1st April 2016 to 30th September 2016 was done after taking institutional ethical committee clearance. A semi-structured proforma was used to determine the socio-demographic details and clinical determinants. Descriptive analysis using appropriate statistical test will be done. Results: The mean age of starting drinking was 23.58 years. Most of the patients have not sought any previous help, 48.7% patients were brought by family members for de-addiction, withdrawal symptoms being the reason for seeking help. Most common cause (60%) for initiation of alcohol was peer influence followed by experimentation. Family history of alcoholism was positive in 68% of patients. Conclusion: Results showed an urgent need of interventions that are family centered. Early age of first use of alcohol greatly increases the risk of progression to the development of alcohol dependence and therefore is a valid target for intervention strategies. The dreadful consequences of substance abuse justify the need to evolve a comprehensive strategy.

Keywords: Alcoholism; Peer Influence; Substance Related Disorders.

## Introduction

Substance abuse has become a global phenomenon which is influenced by social, economic, political and psychosocial factors [1]. It not only includes the use of licit substances like alcohol, tobacco but also the illicit substances such as cannabis, heroin etc. [2].

Worldwide there is a rising trend in number of people who resort to substance use at an early age. The worldwide prevalence of alcohol use disorders among the individuals at the age of 15 years and above was estimated to range from 0% to 16% [3]. A

powerful predictor of progression to alcohol dependence is age at first use [4].

Alcohol has been consumed in India for centuries. The pattern of alcohol use in India has changed from occasional and ritualistic drinking to social drinking [5]. The prevalence of use of alcohol ranges from a low of 7% in Gujarat (officially under Prohibition) to 75% in the North-eastern state of Arunachal Pradesh [6].

Alcohol use disorders range from drinking alcohol at hazardous levels to alcohol dependence[7]. Alcoholism is a progressive disease in which individual has been unable to quit drinking and

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continues to drink even after knowing its harmful effects. Individual might face problem in controlling the drinking, might be preoccupied with alcohol, might drink more to get the desired effect and if stops, individual will face alcohol withdrawal symptoms [8].

Substance abuse including alcohol leads to various health problems, social issues, unprotected sex, injuries, violence, road traffic accidents, homicides, suicides, physical dependence, or psychological addiction, deaths [9]. In few of the cases, substance induced psychiatric disorders may persist for a longer period of time even after detoxification, such as psychosis or depression [10]. Increased susceptibility to human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and other sexually transmitted diseases has been reported with alcohol [11].

Considering these facts and lack of such studies from the tertiary hospital in Bagalkot, the study was carried out to determine the socio-demographic and clinical profile of the treatment seekers in the deaddiction clinic, in psychiatry department so as that the problems of alcohol related comorbidities can be prevented with appropriate preventive measures.

## **Aims**

To study the clinical and socio-demographic profile of males diagnosed with alcohol dependence syndrome.

#### Materials and Methods

The study was conducted in De-Addiction Clinic of the Department of Psychiatry at a private medical college in Bagalkot, Karnataka during the period from 1st April 2016 to 30th September 2016. All the subjects fulfilling the inclusion and exclusion criteria during the study period were included in this study.

## **Inclusion Criteria**

All subjects presenting to the de-addiction clinic of a private medical college with alcohol related problems were considered for this study and were enrolled if they fulfill the following inclusion criteria:

- 1. Patient of age 18 years and above
- 2. Patient who fulfills criteria for dependence or substance harmful use, according to ICD-10.
- 3. Willing to give written informed consent.

#### **Exclusion Criteria**

Subjects with any of the following will not be included in the study:

- 1. Presence of any major illness requiring intensive medical/surgical intervention.
- 2. Not giving informed consent.

## Study Procedure

The design and nature of the clinical study was explained to the patients. Informed consent was obtained. All patients were first examined by consultant Psychiatrist to confirm alcohol dependence or harmful use. Socio-demographic details like education, occupation, socio economic status, history of substance use, etc. and various other clinical determinants like age of first use, reasons for substance abuse, age of dependence were collected using a specially designed proforma.

#### Results

A total of 50 patients were included in the study. The mean age at presentation was 37.7 years (SD = 9.47). Minimum age being 20 years and maximum being 65 years. Sixty eight per cent of patients had positive family history of alcohol use. Most of the patients had early onset alcohol dependence. Most common cause (60%) for initiation of alcohol was peer influence followed by experimentation. Most of the patients have not sought any previous help, 48.7% patients were brought by family members for deaddiction, withdrawal symptoms being the reason for seeking help (Figure 1) Psychiatric co-morbidities were found in 10% of individuals (Figure 2).

## Discussion

The mean age at presentation was 37.7 years (SD = 9.47). Mean age at presentation in various studies with similar design have ranged between 37 and 43 years [4,5]. A majority of individuals belonged to above poverty level group socio-economically. Most of the individuals had education more than secondary level. Previous studies showed lower education status associated with alcohol dependence [5]. Seventy-two percent of patients were married and living with spouse. Most western studies found the marital status of the patient to be being separated or divorced [12]. The difference is probably due to Indian customs and culture. Only 6% of

Table 1: Socio-demographic details

Socio-Demographic Details	N (%)
No. of Participants	50
Age (average) at presentation	37.7 years
Education	
No Formal Education	3(6)
Primary	3(6)
Secondary	18(36)
Higher Secondary	12(24)
Graduate	12(24)
Post Graduate	2(4)
Marital Status	
Single	9(18)
Married and living with spouse	36(72)
Separated	5(10)
Occupation	
Unemployed	3(6)
Unskilled/Farmer/Clerical	22(44)
Semi-skilled/Skilled work	18(36)
Professional/Business	7(14)
Socio- economic status	
Above Poverty Line	39(78)
Below Poverty Line	11(22)

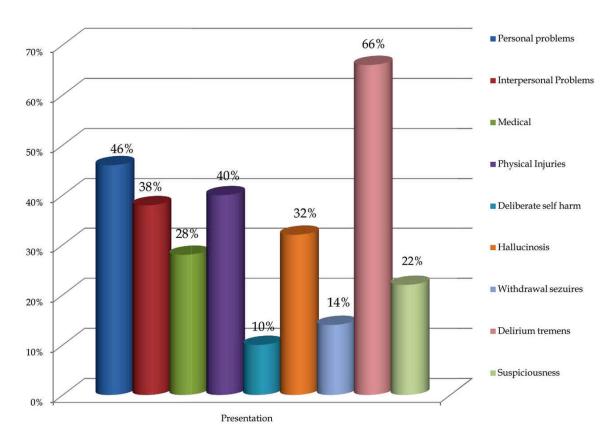


Fig. 1: Complaints at the time of presentation

RFP Indian Journal of Medical Psychiatry / Volume 1 Number 2 / May - August 2018

Table 2: Drinking history

Age	Mean (SD) (Years)	Minimum-Maximum (years-years)	
At first use	23.58 (6.92)	11-42	
Regular use	25.82 (6.90)	15-47	
Development of tolerance	28.3(8.8)	18-50	
Development of craving	28.92(11.46)	18-51	

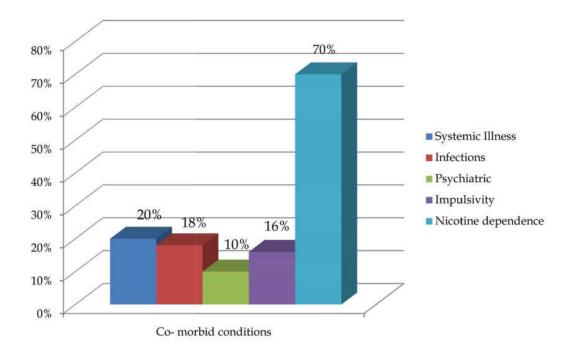


Fig. 2: Co-morbidities associated with alcohol dependence

individuals were unemployed, but most of them i.e. 44% were involved in work not requiring much education. Study done by Vignesh BT et al [3] found 58% employment in skilled work in alcohol dependent patients.

Positive family history of alcohol use was found in 68% of patients. 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 [13]. Another study revealed that a significantly higher number of adolescents resort to substance abuse when both parents are abusers (46.7%) [14]. Another study showed that 15% of the participants consumed alcohol due to familial status or peer pressure [15]. The most common purpose of substance abuse in the study by Sarangi Let al was found to be peer pressure (52.8%) [14], whereas Bansal et al [16] found the most common purpose of substance abuse to be curiosity or experimentation (34.3%). In our study, most common cause (60%) for initiation of alcohol was peer influence followed by experimentation.

In our study mean age of first drink of alcohol was

found to be 23.6 years. Previous studies have found early age (18.9 years) of onset of drinking.<sup>[5]</sup> The difference could arise due to unwillingness of the patients to tell the age at first drink and due to the demographic differences present.

The Collaborative Study of the Genetics Alcoholism (COGA) group found the mean age at onset of alcoholism was 25 years. The mean age of onset of tolerance was 28.3 years which was same as the age of development of dependence found in previous studies [5]. Singh et al. found that 44% of the subjects developed dependence between 15 and 25 years [17].

In our study,98% of individuals seek care due to withdrawal symptoms either delirium tremens or withdrawal seizures. In study by Reddy MPK et al [5], majority of patients had presence of withdrawal symptoms (95%) and financial strain due to alcohol use was most commonly attributed for current treatment seeking by key informants (92.5%).

Higher prevalence and intensity of smoking among drinkers [18] was found in previous studies

and was replicated in ours (70%). Systemic illnesses like hypertension and diabetes was found in 20% of the participants. Tuberculosis was the most common infection associated with alcoholics in our study.

### Limitations

The study had a small sample size and was a case series study as a result a causal relationship cannot be drawn and only associations between the various variables and alcohol dependence can be described. Further the study was limited to one geographical location so the results of the study cannot be generalized.

#### Conclusion

Mean age at first drink was 23.6 years and age at onset of tolerance was 28.3 years. The alcohol dependence was more common in individuals with education more than secondary level. Most of the patients presented with withdrawal symptoms. Measures to improve the knowledge about ill-effects of alcohol use are needed to control the alcohol abuse. Interventions which are family centered and target individuals who are unskilled are required.

#### Acknowledgements

We would like to thank the hospital authorities for permitting us to conduct the study and all the participants involved in the study.

Conflict of Interest: None declared Source of Support: Self

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