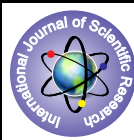


## Prevalence and Pattern of Alcohol Use Disorders Among Males in an Urban Slum Population at Chennai



### Medical Science

**KEYWORDS :** Pattern of alcohol usage, Alcohol dependence, Harmful drinking, Excess use, AUDIT

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### ABSTRACT

*Alcohol consumption and its pattern of drinking to intoxication have been steadily increasing in developing countries. The present study was done with the objectives to identify the pattern of alcohol usage among urban slum dwellers and to assess the risk factors related to alcohol usage. Material and methods: This study was done as a cross sectional study among urban slum field practice area: Adayalampattu during October and November 2012 by house to house survey using preformed and pre determined questionnaire. The questionnaire had general information and risk factors of alcohol usage and WHO - AUDIT questionnaire was used. Results: A total 204 alcohol users were interviewed and the pattern of alcohol usage was low risk alcohol drinking 9 (4.4%), excess use of alcohol 122 (59.8%), harmful or hazardous use of alcohol 50 (24.5%) and alcohol dependants 23 (11.3%). Conclusion: There is no doubt that the alcohol use is increasing but more alarming issue is that the number of persons getting dependant to alcohol.*

### Introduction

By pharmacological definition, alcohol is a drug and may be classified as a sedative, tranquilizer, hypnotic or anesthetic, depending upon the quantity consumed. All alcohol beverages contain the same mood changing agent - ethyl alcohol though in varying percentages like 45.55% in whisky, brandy and rum, 35 to 75% in arrack, 10 to 12% in wine, and 6 to 8% in beer. Of all the drugs, alcohol is the only drug whose self induced intoxication is socially acceptable. Over the past 30 to 40 years, the percentages of young people drinking alcoholic beverages had increased, their alcohol consumption has increased in quantity and frequency, and the age at which drinking starts has declined. (1). Per capita consumption of alcohol in India is increased by 106.7% over the period from 1970 to 1996. (2) Changing lifestyles, urbanization, marketing along with poor level of awareness related to alcohol has contributed to increased alcohol use. Owing to excess use of alcohol, it results in trauma, violence, organ system damage and indirect costs spent on health care, reduced income levels related to heavy alcohol use. Even though many studies have been done in relation to alcohol use and substance abuse, very few studies have concentrated on the high risk population like urban slum dwellers. So this study was done among urban slum population to find out the alcohol usage pattern and its risk factors.

### Aims and Objectives

- To assess the pattern of alcohol usage among adults residing in urban slum field practice area of ACS Medical College and Hospital
- To identify the risk factors associated with alcohol dependence

### Materials and methods

The study was conducted as a community based cross sectional study among 20 years and above age group males residing in Urban Slum Adayalampattu, the field practice area of ACS Medical College and Hospital, Chennai in between October and November 2012. Urban field practice area has approximately 2000 houses. House to House survey was done in this area. The persons of 20 years and above who consume alcohol were selected for the study after getting the informed consent. The study tool which we had used had two parts, one with general informations like socio-demographic profile, risk factors of alcohol use disorders. The second part of questionnaire was Alcohol Use Disorder Identification Test (AUDIT) (3). This was developed in 1982 by World Health Organization international group of investigators as a simple screening instrument which consists of 10 questions about recent alcohol use, alcohol dependence symptoms, and alcohol related problems. Each of the questions

has a set of responses to choose from, and each response has a score ranging from 0 to 4. Scores 0 - 7 refers to low risk drinking, scores between 8 - 15 refers to excess alcohol use, scores between 16 to 19 refers to harmful or hazardous drinking and scores 20 and above refers to as alcohol dependants. It is brief, rapid, flexible, identifies hazardous and harmful alcohol use, as well as possible dependence. AUDIT was developed and evaluated over a period of two decades and it has been found to provide an accurate measure of risk across gender, age and cultures. (4, 5) The data were analyzed with Epi-info software Version 3.5.1(2008) and Chi-square test was used as the test of significance.

### Results

A total of 204 male study participants were interviewed from the house to house survey of the field practice area. Majority of the study participants 101 (49.5%) belonged to 36 to 50 years of age followed by 20 to 35 years 60 (29.4%) and 51 years and above 43 (21.1%). Only 6 (3%) and 5 (2.5%) were migrant population and unemployed respectively. Majority 185 (90.7%) them were married. Approximately 21 (10.3%) of the study participants were intermediate and graduates. As far as the socio economic status was concerned 72 (35.3%) belonged to class III and above and the remaining were 132 (64.7%) class I and II. Most of the study participants 80 (39.2%) were using alcohol for 11 to 20 years, and 40 (20.1%) of them started consuming alcohol at less than 20 years of age. The reasons for consumption of alcohol were body pain, excess money, occupational stress, family stress, pressure from friends, and loss of spouse or lovable person. Many study participants replied multiple reasons and justifications for consuming alcohol. The reasons were grouped as stress (family stress, occupational stress, loss of lovable person) and non stress (excess money, friends) related factors. Approximately 155 (76%) of the study participants were consuming alcohol because of stress related factors, family history of alcoholic consumption was present in 17 (8.3%), peer group pressure was present among 73 (35.8%) of the study participants. There was no history of other drug intake except for some of the study participants 58 (28.4%) were smokers. AUDIT scoring revealed that 9 (4.4%), 122 (59.8%), 50 (24.5%) and 23 (11.3%) were at low risk of drinking, excess use of alcohol, harmful use of alcohol and alcohol dependants.

### Discussion

In the present community based study, we have studied the pattern of alcohol use and the prevalence of alcohol dependants were found to be 11.3%, which is similar to the studies conducted by Meena et al6 which showed 10.34% and Lal and Singh et al7 reported 11% of the total population were dependant on

alcohol. In a study conducted as a community survey in Chandigarh by B.S.Chavan et al8 covering both urban and rural areas showed that 6.88% which is low compared to our study. However, Ghulam et al9 reported a higher figure of 20.5% of substance dependence in the survey carried out on urban population of Madhya Pradesh. In Our Study, the Mean age at which alcohol use started was 25.5 which is similar to B.S. Chavan et al10 study where the mean age at regular alcohol use was 24.12 in urban slum population. It is surprising that, this study had explored that a proportion 49 (24%) of person reported the reason for alcohol use were excess money in spite being from slum area, which can be attributed to the economic stability. The persons being aware about the health effects of the alcohol use, they are not being motivated by the health care staffs for abstaining from alcohol use or seeking health care when there is a need. This study had explored that creating awareness on chronic use of alcohol and early diagnosis using the simple screening tool will be a necessary first step in reducing the alcohol related problems.

**Limitations**

1. This was done as a cross sectional study, no scope for follow up.
2. This study did not include the female study participants, so data on female alcohol users cannot be generated from our study.

**TABLE - 1 - DISTRIBUTION OF VARIABLES AMONG THE STUDY PARTICIPANTS**

VARIABLE	FREQUENCY (n = 204)	PERCENTAGE
Age group		
20 to 35 years	60	29.4%
36 to 50 years	101	49.5%
51 years and above	43	21.1%
Mother tongue		
Non Tamil (Hindi, Nepal, Telugu)	6	3%
Tamil	198	97%
Marital status		
Married	185	90.7%
Single (unmarried and widowed)	19	9.3%
Occupation		
Unemployed	5	2.5%
Unskilled	87	42.6%
Semiskilled	76	37.3%
Skilled	36	17.6%
Education		
Some schooling	51	25%
Middle school	80	39.2%
High school	52	25.5%
Intermediate and graduate	21	10.3%
Socioeconomic status		
Class I	49	24%
Class II	83	40.7%
Class III	56	27.5%
Class IV and V	16	7.8%
Duration of alcohol use		
Up to 10 years	64	31.4%
11 to 20 years	80	39.2%
21 years and above	60	29.4%

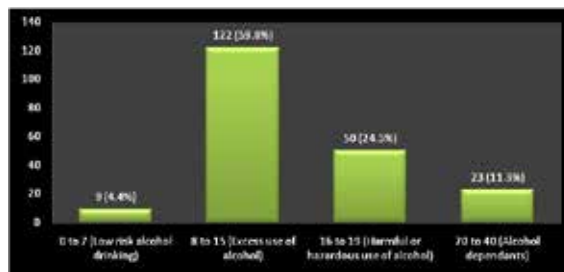
Age at which alcohol drinking started		
Less than 20 years of age	41	20.1%
21 to 30 years of age	127	62.3%
31 years and above	36	17.6%
Reasons for drinking alcohol		
Stress related factors (family stress, work stress)	155	76%
Non stress related factors	49	24%
Family H/O of alcohol use		
Present	17	8.3%
Absent	187	91.7%
Peer group pressure		
Present	73	35.8%
Absent	131	64.2%
Chronic illness		
Present	13	6.4%
Absent	191	93.6%
Smoking history		
Non smoker	58	28.4%
Smoker (current and ex smoker)	146	71.6%
AUDIT scoring (classification of alcohol use)		
0 to 7 (Low risk alcohol drinking)	9	4.4%
8 to 15 (Excess use of alcohol)	122	59.8%
16 to 19 (Harmful or hazardous use of alcohol)	50	24.5%
20 to 40 (Alcohol dependants)	23	11.3%

**Table - 2 - Means and Standard deviation**

Variable	Mean	Standard deviation
Age group of the study population	42.4	10.07
Age at which drinking of alcohol started	25.5	6.02
Duration of alcohol	14.29	5.02
AUDIT scoring	16.87	9.38

**Figure - 1 (Classification of alcohol use among the study participants) n = 204**

X axis - showing - AUDIT scoring and Y axis showing - Frequency



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