



Original article

Is Socioeconomic Status an Important Predictor of Alcohol use?: A cross-sectional study in an urban slum of Meerut

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ABSTRACT

Background: Of all addictions like opioids, cannabinoids, sedatives, cocaine, caffeine, hallucinogens, tobacco and other psychoactive drugs, it is the addiction to alcohol that remains the most important. Perhaps, this is because alcohol is probably the most commonly used drug. The main purpose of the indexed study is to acknowledge whether the socio-economic status affects the alcohol use or not as a step to curb this evil prevailing in the society. **Materials and Methods:** A cross-sectional study was conducted in the catchment area of UHTC (Urban Health and training Centre) among 324 males aged > 15 years. The modified Kuppuswamy scale was used to assess the socioeconomic status of the families. Data was analyzed by chisquare test using SPSS 19.0 version. **Results:** There were 3.1% of the current drinkers in the lower socioeconomic group as compared to 0.9% of the teetotallers. No statistically significant association was found between alcohol use and socioeconomic status. **Conclusions:** It can be very well concluded that income and socioeconomic status have no relationship with indulgence into alcohol use.

KEYWORDS: Socio-economic status, alcohol use, Kuppuswamy scale

INTRODUCTION

Alcohol has been consumed in India at least since the Vedic period of 2000–800 BC [1]. It was allowed in Hinduism, particularly among the ruling classes. However, Buddhism, Jainism, and Islam did not allow their followers to drink. Although alcohol became more freely available in the Indian subcontinent under British rule, Indians did not generally incorporate drinking alcohol into their social or religious activities[2]. When India

became independent in 1947, Mahatma Gandhi and the Indian National Congress Party campaigned against liquor production and sales on the grounds that it was injurious to health[2]. Industrially produced beverages, particularly large style beer, are gaining popularity in many developing countries, perhaps due to issues of prestige attached to international brands

and increasing marketing efforts by multinational companies[3].

MATERIALS AND METHODS

A Community based cross-sectional study was conducted in an urban slum, Multan Nagar in the field practice area of the department of Community Medicine, SMC (Subharti Medical College), Meerut. The study population were all males aged ≥ 15 years residing in the study area. The study period was from September 2010 to October 2011. Sample size for the proposed study was calculated according to National Family Health Survey-III [4] where prevalence of alcohol use in U.P. was given as 25.3% in males, therefore the adequate sample size calculated was approximately 324 assuming 10% non-response and considering 5% absolute error. Simple Random Sampling Technique was used.

The study was conducted in the Urban slum of Multan Nagar in the field practice area of the Department of Community Medicine, SMC, Meerut. First approval from the ethical committee was obtained. Written consent was obtained from each participant after explaining about the study. The required sample was taken using Simple random sampling technique. Sampling universe was 2112 registered families in the study area and the sampling unit was a family in this study. All male members aged ≥ 15 years were taken from each household, where on an average there were 2 males aged ≥ 15 years based on the

demographic profile of the area, therefore $324/2=162$ households were taken in order to cover the required sample size.

Individual unit (family) constituting the sample was randomly selected by Random number table method. All the male members aged ≥ 15 years were taken from each family. The purpose of screening was clearly stated in terms of its relevance to the individual's health status assuring the maintenance of confidentiality. The data was analysed using SPSS and the results were expressed in proportions using the chi-square test to know the association of socio-economic status with alcohol use.

RESULTS

The current drinkers were 77.1% in the income range of Rs.0-9999 while 81.6% of the teetotallers belonged to the same income group. Among current drinkers, 2.2% were in the Rs.20000-29999 income group while teetotallers being 5.2%. No statistically significant association was found between alcohol use and income of the respondent (Table 1). There were 3.1% of the current drinkers in the lower socio-economic group as compared to 0.9% of the teetotallers and 41.7% of the current drinkers and 36.8% of the teetotallers belonged to Upper Lower group of socio-economic status. No statistically significant association was found between alcohol use and socio-economic status (Table 2).

Table 1: Association between alcohol use and the income of respondent

| Income(Rs.) | Teetotallers (Audit score=0) n=228 | | Current Drinkers (Audit score >0) n=96 | | Total n=324 | |
|--------------|--|------|--|------|----------------|------|
| | No. | % | No. | % | No. | % |
| 0-9999 | 186 | 81.6 | 74 | 77.1 | 260 | 80.2 |
| 10000-19999 | 36 | 15.8 | 15 | 15.6 | 51 | 15.7 |
| 20000-29999 | 2 | 0.9 | 5 | 5.2 | 7 | 2.2 |
| ≥ 30000 | 4 | 1.8 | 2 | 2.1 | 6 | 1.9 |
| Total | 228 | 100 | 96 | 100 | 324 | 100 |

$\chi^2 = 6.076$, $df = 3$, $p\text{-value} = 0.100$

Table 2: Association between alcohol use and Socio-economic status

| SES (Socio-economic status) | Teetotallers (Audit score=0) n=228 | | Current Drinkers (Audit score >0) n=96 | | Total n=324 | |
|-----------------------------------|--|------|--|------|----------------|------|
| | No. | % | No. | % | No. | % |
| Lower | 2 | 0.9 | 3 | 3.1 | 5 | 1.5 |
| Upper Lower | 84 | 36.8 | 40 | 41.7 | 124 | 38.3 |
| Lower Middle | 69 | 30.3 | 28 | 29.2 | 97 | 29.9 |
| Upper Middle | 69 | 30.3 | 25 | 26.0 | 94 | 29.0 |
| Upper | 4 | 1.8 | 0 | 0 | 4 | 1.2 |
| Total | 228 | 100 | 96 | 100 | 324 | 100 |

$\chi^2=4.749$, $df=4$, $p\text{-value}=0.310$

DISCUSSION

The association between alcohol use and income was not found to be statistically significant ($p\text{-value}>0.05$) in the present study. Sundaram K.R. et al (1984) [5], Medhi G. et al (2006) [6], D'Costa et al (2007) [7], found no statistically significant association like our study. On the contrary, inconsistent results with our study were reported by Sathya Prakash M. et al (2008) [8].

The association of alcohol use with the socio-economic status was not found to be statistically significant in our study which is consistent with the findings of the study of Ahmad A. et al (2009) [9]; Results of Tomkins S. et al (2007) [10] are also consistent with our findings. Royo-Bordonada M.A. et al (1997) [11], and Van Oers J.A.M. et al (1999) [12], reported that excessive drinking was more prevalent in the lower socio-economic groups which is not in agreement with our findings.

Though this study is a small attempt to define the association of the possible determinants like income and socio-economic status with alcohol use but still more elaborate and wide effort is

required to increase its generalisability and external validity to reach to any such conclusion.

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