Research Article

Study of alcohol consumption and its sociodemographic determinants in a tribal village in Mandla district

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Abstract

Background: Alcohol consumption is considered a serious public health problem in many countries including India because of the associated health hazards and antisocial consequences. Nearly 70% of Indian population resides in villages, and the main occupation is farming which belongs to lower and lower-middle class. Gender differences in alcohol use have been recognized, but socioeconomic differences remain underresearched. It is, therefore, important in certain population groups such as tribal village population to find the extent of alcohol consumption and its sociodemographic determinants.

Objective: To find the prevalence of alcohol consumption and its sociodemographic determinants.

Materials and Methods: A community-based cross-sectional study was carried out in a tribal village Meera Tola, Madhya Pradesh, during the months of October 14–January 15. A total of 214 villagers were interviewed. The study was conducted by personal house-to-house visits with a pretested oral questionnaire method. The data were collected on sociodemographic profile, occupation, and literacy status of each member of family. The data were collected on sociodemographic profile, use of alcohol, age at initiation, amount and years of consumption, ex-drinker, frequency, and brand of liquor consumed.

Result: Overall prevalence of alcohol use was 8.26% among male and 0.95% among female subjects. Maximum consuming population was found in the age groups of 60 years and older, followed by 30–39 years. Alcohol consumption was more prevalent among illiterate (6.7%) when compared with literate (5.3%). Alcohol consumption pattern according to occupational status was found to be most prevalent among farmers and laborers (13%), followed by unemployed population (8.3%).

Conclusion: Socioeconomic class and education pose direct impact on alcohol consumption in rural tribes. Efforts must be directed toward educational intervention for quitting alcohol among lower class and illiterates.

KEY WORDS: Age at initiation, Alcohol consumption, educational, occupational status

Introduction

Developing countries are thought to be dominated by sociocultural norms, and daily living habits are potentially influenced by class and cultural practices. Health behaviors, such as alcohol consumption, tend to be influenced by education, occupation, sex, religion, dietary habits, festive celebrations, and local rituals. Roughly, 2 billion people globally drink alcohol and an estimated 76 million of whom have been diagnosed with alcohol use disorders.[1] Alcohol consumption is reported to result in 1.8 million deaths per year (3.2% of all deaths) and to be accountable for 4.0% of the disability-adjusted life years lost per year worldwide.[1,2] In addition, it is estimated that 20%–30% of all motor vehicle accidents, homicides, and intentional injuries are alcohol related.[3,4] The per capita consumption of alcohol by adults in India elevated by 106.7% between 1970–72 and 1994–96.[5] The system of drinking in India has transformed from seldom and ceremonial use to social use. Today, the common purpose of consuming alcohol is to get drunk.[6] These developments have raised concerns about the health and the social consequences of excessive drinking.[7]

Nearly 70% of Indian population resides in villages, and the main occupation is farming which belongs to lower and

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lower-middle class. Sex differences in alcohol use have been recognized, but socioeconomic differences remain under-researched. It is, therefore, important in certain population groups such as tribal village population to find the extent of alcohol consumption and its sociodemographic determinants. Hence, this study was planned to find the prevalence of alcohol consumption and its sociodemographic determinants.

Materials and Methods

A community-based cross-sectional study was carried out in a tribal village Meera Tola, PSM Department, Netaji Subhash Chandra Bose (NSCB) Medical College, Jabalpur, for a period of 3 months from October 14 to January 15. Permission was obtained by Institutional Ethics Committee before starting the study. As per Census 2010, population of village was 214, and all the villagers (100%) were approached by house-to-house visits; thus a total of 214 villagers were interviewed. Study was conducted by personal house-to-house visits with a pre-tested oral questionnaire method. The data were collected on sociodemographic profile, occupation, and literacy status of each member of family. Data were also collected on use of alcohol, age at initiation, amount and years of consumption, ex-drinker, frequency, and brand of liquor consumed. Data were entered in Excel and analyzed by SPSS software, version 14. Percentage, proportions, mean, simple and two-way cross tabulations, and χ^2-test were applied to find significance.

Result

In our study, 50.09% were male subjects. About 26.2% of the population was of adolescents in village, and 7.9% were elderly persons (60 years and older). About 43.1% families were nuclear and 56.9% joint. About 81.8% people of village were nonvegetarian. Overall prevalence of alcohol consumption found in our study was 5.39%. Prevalence of alcohol use was 8.26% among male and 0.95% among female subjects. Sex was found to be significantly associated with alcohol consumption. Most common age group for initiation of alcohol drinking was found 20–29 years. Maximum consuming population was found in the age groups of 60 years and older, followed by 30–39 years. Mean age for initiation of alcohol consumption was 20.5 ± 5.6 years. Country liquor was the most common form of liquor consumed by the villagers (90.1%). Alcohol consumption was more prevalent among illiterate (6.7%) when compared with literate (5.3%), but education status was not found to be significantly associated with alcohol consumption. Alcohol consumption pattern according to occupational status was found to be most prevalent among farmers and laborers (13%), followed by unemployed population (8.3%). Occupation was found to be significantly associated with alcohol consumption. Alcohol consumption was more common in nuclear families. All people (100%) who consume alcohol were nonvegetarian by dietary habit, but no significant association was found for alcohol consumption and type of families and dietary habit. Maximum consumption of alcohol was found in lower and lower-middle class. It was more practised in nuclear families (8.4%) when compared with joint families [Tables 1–3].

Discussion

Marketing of alcohol, tobacco, and processed foods are increased in the recent years by multinational companies, with low and middle-income countries their main targets for expansion. The quickest growth has been in developing countries in the Asian subcontinent where the per capita pure alcohol consumption has heightened by more than 50% between 1980 and 2000.[8]

Overall prevalence of alcohol consumption found in our study was 5.39%, while 18.8% of population were consuming alcoholic beverages as suggested by another study done by Gupta et al.[9] The overall prevalence of alcohol consumption was found to be lower in our study when compared with other studies as the study was conducted by selecting whole

Table 1: Distribution of study subjects according to sociodemographic profile

Characteristic	Number (%)
Sex	
Male	109 (50.9)
Female	105 (49.1)
Age (years)	
0–9	39 (18.2)
10–19	56 (26.2)
20–29	38 (17.8)
30–39	26 (12)
40–49	21 (9.8)
50–59	17 (0.94)
60 and above	17 (7.95)
Educational status	
Illiterate	75 (35)
Literate	139 (65)
Occupation	
Labor/farmer	77 (36)
Student	73 (34.1)
Service/profession	7 (3.27)
Housewife	33 (15.4)
Unemployed	24 (11.2)
Socioeconomic class	
<836	176 (82.2)
836–1,670	18 (8.41)
1,671–2,785	17 (7.94)
2,786–5,570	3 (1.4)
Family type	
Nuclear	94 (43.9)
Joint	120 (56.1)

Table 2: Alcohol consumption in association with various sociodemographic determinants

Characteristics	Alcohol consumption					
	Yes	%	No	%	Total	*P*
Gender						
Male	10	8.26	100	91.74	109	0.01
Female	1	0.95	104	99.05	105	
Age (years)						
0–9	0	0.00	39	100	39	0.176
10–19	0	0.00	56	100	56	
20–29	3	7.89	35	92.11	38	
30–39	4	15.38	22	84.62	26	
40–49	1	4.76	20	95.24	21	
50–59	1	5.88	16	94.12	17	
60–69	2	16.7	10	83.3	12	
>70	0	0.00	5	100	5	
Education						
Illiterate	5	6.67	71	93.33	75	0.737
Literate	6	5.33	133	94.67	139	
Occupation						
Labor/farmer	9	13	68	87	77	0.001
Student	0	0.00	73	100.00	73	
Service/profession	0	0.00	7	100.00	7	
Housewife	0	0.00	33	100.00	33	
Unemployed	2	8.3	23	91.8	24	
SES						
<836	8	4.55	168	95.45	176	0.447
836–1,670	2	11.11	16	88.89	18	
1,671–2,785	0	0.00	17	100.00	17	
2,786–5,570	0	0.00	3	100.00	3	
Type of family						
Nuclear	8	8.4	86	91.6	94	0.089
Joint	3	2.50	117	97.50	120	
Diet						
Vegetarian	0	0.00	39	100.00	39	0.126
Nonvegetarian	11	6.3	164	93.7	175	
Family size						
Four or less	3	6.52	43	93.48	46	0.451
More than four	8	4.17	16	95.83	168	
Total	11	5.1	204	94.9	214	

population of village rather than selecting a particular age group population, and the most common addiction for the population was tobbaco.

In our study, it was found that consumption of alcohol was common on male subjects when compared with female subjects. Similar pattern was observed in a multinational study done by Wilsnack et al.,[10] which suggests that drinking per se and high-volume drinking were consistently more prevalent among male than among female subjects. In our study, gender was found to be significantly associated with alcohol consumption. In Indian society, alcohol consumption is most prevalent among male subjects as observed in our study. Similar observations were made by Bellentani et al.[11] The gender differences in alcohol consumption remain universal.[10] The magnitude of gender differences vary across cultures. The reasoning may be that, in some of the cultures, male superiority symbolized by giving them the license and tolerance to get drunk in public. On the other hand, self-restraint of drinking by women demonstrate their roles as social guardians and restraining influences on male recklessness.[10]

Maximum consuming population was found in the age groups of 60 years and older (16.7%), followed by 30–39 years (15.3%). Similar results were observed by Sethi and Trivedi,[12] who found alcohol misuse to be 11.3% among the age group

Table 3: Distribution of alcohol consuming habits of population of village

	N (%)
Frequency of consumption (*n* = 11)	
Occasional	1 (9.1)
Once a week	6 (54.5)
Twice a week	3 (27.3)
Once a month	1 (9.1)
Age when started drinking (years)	
0–9	0
10–19	2 (18.2)
20–29	9 (81.8)
Amount of alcohol consumed (mL) per session	
≤30	1 (9.09)
31–60	3 (27.27)
61–90	1 (9.09)
91–120	2 (18.18)
121–150	2 (18.18)
151–180	1 (9.09)
181–210	1 (9.09)
Type of liquor consumed	
Country liquor	10 (90.91)
Branded	0 (0)
Combination (both)	1 (9.09)

of 55–64 years and 16.8% among the age group pf 65–74 years in a rural population in north India. Varma *et al*.[13] found 18.3% of those older than 50 years of age to be current users of alcohol and 23.3% to be "ever" users of alcohol. Higher prevalence of high-frequency drinking in older age groups of drinkers is also reported in a study done by Wilsnack et al.[10]

Alcohol consumption pattern according to occupational status was found to be most prevalent among farmers and laborers, followed by unemployed population. Occupation was found to be significantly associated with alcohol consumption. Droomers et al.[14] found in their study that alcohol consumption among adolescents was found to be significantly associated with father's occupation. Alcohol consumption was more common in nuclear families. All people (100%) who consume alcohol were nonvegetarian by dietary habit, but no significant association was found for alcohol consumption and type of families and dietary habit. In our study, alcohol consumption was more prevalent among illiterate (6.7%) when compared with literate (5.3%). Maximum consumption of alcohol was found in lower and lower-middle class. In southern India, the prevalence of current alcohol use varies between 33% and 50%, with a higher prevalence among the lesser educated and the poor.[15]

Conclusion

Socioeconomic class and education show their direct impact on alcohol consumption in rural tribes. Efforts must directed toward educational intervention for quitting alcohol among lower class and illiterates. Public health officials attempting to develop effective prevention and treatment approaches must consider the population's attitudes and expectations regarding alcohol consumption and its effects.

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