Original Research Article

Perception and practice towards alcohol consumption among a government boy's pre-university college students-a cross sectional study

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ABSTRACT

Background: Harmful use of alcohol consumption can lead to various health hazards and pre-university students are vulnerable for abuse of substances like alcohol. Hence this study was aimed to find out the prevalence and perception towards alcohol consumption among students of government boy's college and to find out some factors affecting alcohol consumption among students.
Methods: A cross sectional study conducted among purposively selected students of government pre-university (PU) college for boys. Data was collected through pre-structured questionnaire. Alcohol consumption was assessed by self-reporting through questionnaire.
Results: In the present study 7% students have consumed alcohol at least once in their life time. Mean age of initiation of alcohol consumption was 14.89 years. 23.7% of students said that alcohol consumption can lead to cancer and 13.3% students knew it leads to liver damage, 18.1% felt it leads to heart problems. Among the current alcohol consumers 41.7% said they have driven the vehicle under influence of alcohol. Among the current alcohol consumers 75% have thought to quit the alcohol consumption at least once. Having family history of alcohol consumption was significantly associated with alcohol consumption among students.
Conclusions: Alcohol consumption is prevalent in the pre-university college students and family history is a major risk factor for the alcohol consumption. Many alcohol consumers have driven the vehicle under the alcohol consumption in spite of the legal prohibition. Parental and peer involvement is crucial in reducing the prevalence of alcohol consumption among PU students.

Keywords: Adolescent, Alcohol, Pre-university, Students

INTRODUCTION

Alcohol is a psychoactive substance with dependence-producing properties that has been widely used in many cultures for centuries. The harmful use of alcohol causes a large disease, social and economic burden in societies. Worldwide every year 3.3 million deaths occur as a result of harmful use of alcohol, which is equal to 5.9 % of all deaths. 25% of total deaths among the age group 20-39 years are because of alcohol consumption.[1]

Excessive alcohol use can lead to the development of chronic diseases and other serious health problems like, Hypertension, heart disease, stroke, liver disease, and digestive problems, Cancer of the breast, mouth, throat, oesophagus, liver and colon, Learning and memory problems like dementia and poor school performance, Mental health problems like depression and anxiety, Social problems like lost productivity, family problems and unemployment.[2] Pre-university college students consist of adolescents aged around 15-20 years.

Adolescence is the formative period of life where there is more risk of acquiring the various habits, alcohol consumption being one among them. Those who use alcohol in their adolescence period have got more risk of misusing the alcohol in the adult period. Delaying the first exposure itself has got significant influence in reducing the adult usage of alcohol.[3] Hence this study is intended to detect the alcohol consumption among the pre-university students. The objectives of this study were

- To find out the prevalence of alcohol consumption among the students of a government boy's college,
- To find out the perception of students towards alcohol consumption
- To find out some factors affecting alcohol consumption among students.

METHODS

A community based cross sectional study was conducted in one selected government pre-university (PU) college for boys, situated in Raichur city. The college was selected through purposive sampling as it is the only government PU College for boys in the city. Ethical clearance for the study obtained from the institution ethical committee of Raichur Institute of Medical Sciences, Raichur. Permission to conduct the study was obtained from the principal of the government PU College for boys. Study was conducted during December 2015. All the students studying in the college available during the study period and willing to participate were included in the study.

 Data was collected through pre-structured questionnaire. Around 40 students were assembled each time in a selected classroom and questionnaire was distributed to each of them and each question was read and explained to the students by the investigators. Students were made to sit at adequate distance from other students while filling of the questionnaire, to avoid copying from or discussing with others. Students were motivated to give the prompt answer and assured of confidentiality of the information obtained. Questionnaire consisted of data regarding general information like age, gender, year of study, religion, any family member with the alcoholic habit etc, knowledge regarding harmful effects of alcohol, social problems due to alcohol if any witnessed by the students, self-reporting regarding consumption of alcohol, its frequency of usage, desire to quit alcohol, reason for start, driven the vehicle anytime under the influence of alcohol, etc.

Any student who has consumed any alcoholic product at least once in his life time is considered as ever consumer of alcohol. Anybody who has consumed alcohol at least once in the last one month is considered as current alcohol consumer. Data was analyzed using SPSS version 16 software and presented as proportions in tabular form and chi-square test was used to test the association between the variables.

RESULTS

A total of 270 students were included in the study whose age ranged from 15 years to 19 years. Mean age of the study group was 17 years (SD=0.84 yrs). Majority of the study participants i.e. 231 (85.6%) were Hindus, 24 (8.9%) were Muslims and 15 (5.6%) were Christians. 186 (68.9%) students were studying in PUC first year and 84 (31.1%) in PUC second year.

Majority of the students i.e. 223 (82.6%) were living with their parents at present, 37 (13.7%) were living with friends and 10 (3.7%) were living with their relatives. 139 (51.5%) students said they have at least one family member who consumed alcohol (Table 1).

Table 1: Distribution of students based on their socio-demographic characteristics.

Socio-demographic variables		F	%
Age in years	15	4	1.5
	16	73	27.0
	17	122	45.2
	18	61	22.6
	19	10	3.7
Religion	Hindu	231	85.6
	Muslim	24	8.9
	Christian	15	5.6
Year of study	1st year PU	186	68.9
	2nd year PU	84	31.1
Present place of stay	Parents	223	82.6
	Friends	37	13.7
	Relative	10	3.7
Having a alcoholic family member	Yes	139	51.5
	No	131	48.5

F = frequency; % = percentage.

In our study 64 (23.7%) students were knowing that alcohol consumption leads to cancer, 49 (18.1%) were knowing it leads to heart problems, 36 (13.3%) were knowing it causes liver damage, 24 (8.9%) said it causes intestinal damage, 17 (6.3%) said it causes kidney problems, 14 (5.2%) said it causes death, 13 (4.8%) said it causes weakness, 8 (3%) said it causes brain damage.

Majority of the students i.e. 150 (55.6%) felt that alcohol consumption is high risk health hazard, 29 (10.7%) felt it is having moderate risk, 14 (5.2%) felt it carries little risk, 3(1.1%) felt it has no health risk and 74 (27.4%) said don't know or not responded (Table 2). When asked about why do people consume alcohol, 46 (17%) said as it gives pleasure, 74 (27.4%) said to reduce tension, 44 (16.3%) said for fashion, 88 (32.6%) said to reduce boredom and 46 (17%) said don't know.

Table 2: Health problems and severity of health hazards of alcohol consumption as listed by students.

Health problems and severity of hazards		F	%
Health problems*	Cancer	64	23.7
	Heart problems	49	18.1
	Liver damage	36	13.3
	Intestinal damage	24	8.9
	Kidney problems	17	6.3
	Death	14	5.2
	Weakness	13	4.8
	Some health problem	10	3.7
	Brain damage	8	3.0
	Decreased appetite	02	0.7
	Decrease the body immunity	02	0.7
Severity of health hazard of alcohol consumption**	Can't say	74	27.4
	No risk	3	1.1
	Little risk	14	5.2
	Moderate risk	29	10.7
	High risk	150	55.6

*Multiple responses; ** as per the student; F = frequency; % = percentage.

Table 3: Perception and practice of alcohol consumption among students.

Perception and practice		F	%
Alcohol should be banned	Yes	211	78.1
	No	44	16.3
	Don't know	15	5.6
Having friends who consume alcohol	Yes	98	36.3
	No	172	63.7
Relation with classmates who consume alcohol	Same as others	113	41.9
	Avoid them	152	56.3
	More close to them	5	1.9
Ever consumed alcohol	Yes	19	7.0
	No	251	93.0
Consumed alcohol in the last one month	Yes	12	4.4
	No	258	95.6

F = frequency; % = percentage.

Majority of the students i.e. 211 (78.1%) felt that alcohol should be banned. 98 (36.3%) students said they have friends who consume alcohol, 152 (56.3%) students said that they avoid friendship with classmates who consume alcohol. 19 (7%) students said that they have consumed alcohol at least once in their lifetime.

Mean age of initiation of alcohol consumption was 14.89 years (SD=2.16 years). Minimum age at starting alcohol consumption was 10 years. 12 (4.4%) students said they have consumed alcohol in the last one month (Table 3).

Table 4: Various practices among the current alcohol consumers.

Practices among current alcohol consumers		F	%
Frequency of alcohol consumption	Once weekly	01	8.3
	More than once a week	03	25.0
	Less than once a week	08	66.7
Ever driven a vehicle under the influence of alcohol	Yes	05	41.7
	No	07	58.3
Ever thought of quitting the alcohol	Yes	9	75
	No	3	25

F = frequency; % = percentage.

Among 12 students who said they consumed alcohol in the last one month, one (8.3%) said he consumes once weekly, 3 (25%) said consumes more than once a week, 8 (66.7%) said consumes less than once a week. Among the current alcohol consumers 5 (41.7%) said they have driven the vehicle under the influence of alcohol at least once.

Among the current alcohol consumers 9 (75%) have thought to quit the alcohol consumption at least once (Table 4) When asked about the social problems witnessed by the students due to alcohol consumption, 47 (17.4%) students said they have witnessed poverty, 36 (13.3%) said accident, 27 (10%) said child abuse, 18 (6.7%) said domestic violence, 11 (4.1%) said broken family and 7 (2.6%) said divorce.

In the present study, ever consumption of alcohol was less prevalent among those staying with parents (5.4%) compared to those staying with their friends (16.2%) or relatives (10%) but the difference was statistically not significant (p=0.054). Ever consumption of alcohol was more prevalent among second year PU college students (9.5%) compared to first year PU students (5.9%) this difference was not statistically significant (p=0.283). There was no statistically significant difference in prevalence of alcohol consumption with respect to the religion. Occurrence of ever consumption of alcohol was 11.5% among those with family history of alcohol consumption whereas it was 2.3% among those without the family history and this difference was statistically significant (p= 0.003) (Table 5).

DISCUSSION

Prevalence of alcohol consumption in the past was different in various studies and various areas, in the present study 7% students have consumed alcohol at least once in their life time and 4.4% are current consumers of alcohol. In a study done by Syed Qadri et al in northern India prevalence of ever use of alcohol among the school children was 44.5% and current users of alcohol was 29.72%, this study was done in both the genders.[4] A study done by Sarangi L et al among adolescents in urban slums in Sambalpur revealed usage of alcohol to be 14.7%.[5] Our study showed lower prevalence compared to other studies hence it can be said that prevalence varies with the area studied and our study reiterates the need for the survey's in other uncovered areas also.

Table 5: Association between some socio-demographic factors and ever consumption of alcohol among students.

Socio-demographic factors		Ever consumed alcohol	Never consumed alcohol	p value
Religion	Hindu	17 (7.4%)	214 (91.6%)	0.540
	Muslim	02 (8.3%)	22 (91.7%)	
	Christian	00 (0.0%)	15 (100%)	
Place of residence	With friends	6 (16.2%)	31 (83.8%)	0.054
	With parents	12 (5.4%)	211 (94.6%)	
	With relatives	1 (10.0%)	09 (90.0%)	
Year of study	1st year PU	11 (5.9%)	175 (94.1%)	0.283
	2nd year PU	08 (9.5%)	76 (90.5%)	
Alcoholic in the family	No	3 (2.3%)	128 (97.7%)	0.003
	Yes	16 (11.5%)	123 (88.5%)	

Mean age of initiation of alcohol consumption in the present study was 14.89 years. The trend of early initiation of alcohol consumption was also demonstrated in the study done by Gururaj G et al.[6] Early onset of regular use of alcohol in late childhood and early adolescence is associated with the highest rates of alcohol consumption in adult life as compared to later onset of drinking.[3] In the present study, 24% students were knowing alcohol consumption leads to cancer, 18% were knowing it leads to heart problems, only 13% were knowing it causes liver damage where as in a study done by Khosla V et al 90 per cent were aware of the health effects of alcohol related to liver disease, 18 per cent heart disease, 25 per cent mental illness, 20 per cent cancer and 23 per cent impotence.[7] Higher mean age of study group in the study by Khosla V et al maybe the reason for more awareness in their study.

In the present study, 41.7% of current alcohol consumers have driven the vehicle under the influence of alcohol. In a study done in Mangalore by Kulkarni V et al, 25% of the medical students have met with road traffic accidents under the influence of alcohol.[8] In United States 51 per cent of the traffic deaths in the aged 18-24 yr were alcohol related.[9] These findings highlight the risk taking behaviour of the adolescents and need for more care during the adolescence period.

In the present study, family history of alcohol consumption was shown to be significantly increases the chance of alcohol consumption among students, this finding was similar to the study done by Khosla V et al in Punjab and Hembram et al in West Bengal.[7,10] Hence the family plays a crucial role in programs planned to reduce the alcohol consumption among students. In the Hembram et al study religion was also significant contributor for alcohol consumption but our study findings differ with it and no association was found with religion.[10]

Limitations

As the study involved only students of a government college, hence the findings cannot be generalised to all the pre-university students, as the private colleges student's socioeconomic status varies from Government College students.

CONCLUSION

Alcohol consumption is prevalent in the pre-university college students (boys) and family history is a major risk factor for the alcohol consumption. Majority of the students even though felt alcohol consumption is a high risk health hazard but majority did not know what harmful effects it may cause hence there is a need to conduct health education sessions mentioning about the harmful effects of alcohol consumption. Many current alcohol consumers have driven the vehicle under the alcohol consumption at least once in spite of the legal prohibition. Parental and peer involvement is crucial in reducing the prevalence of alcohol consumption among PU students.

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