

Alcohol Consumption among Undergraduate MBBS Students in Rims, Imphal

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Abstract: Alcohol consumption among medical students have important implications not only for their own health but also of the general population since they are role models in terms of health related behaviours. A cross sectional study was conducted among all Undergraduate MBBS students of RIMS, Imphal using a self administered questionnaire during the period of August-September 2013 with the objectives of a. To determine the prevalence of alcohol consumption among undergraduate medical students in RIMS. b. To determine the characteristics of alcohol drinking behavior. C. To assess the effects of alcohol drinking behaviour on their academic performance. Chisquare test, t test and Kruskal Wallis test used for analysis. Out of 300 students 48% (145 students) of them have ever consumed alcohol, which was significantly higher among males and 88 students have consumed in the past one month. Beer was the most commonly consumed alcoholic beverage (31.7%). Friends influence was the most common reason for initiation of alcohol consumption (45.5%). Enjoyment was the main reason for drinking at present (67.7%). Ever consumption of alcohol was significantly associated with family history of alcohol consumption (p-value=0.00). Increasing frequency of alcohol consumption significantly affected academic performance (p-value=0.00). Alcohol consumption has a negative impact on their health, academic performance and their future professional abilities. It is recommended to conduct similar studies in the future and to create awareness about the health hazards of alcohol consumption and sensible drinking.

Keywords: Alcohol consumption, Prevalence, effects, Undergraduate MBBS students, RIMS.

1. Introduction

Alcohol consumption is worldwide health issue. Alcohol is underline cause of 3.8% of total deaths and 4.5% of total loss of DALY irrespective of societies and occupation ^[1]. Alcohol consumption will lead to many negative health effects and an array of harmful social consequences, impaired environmental relations and family relations ^[2-4]. Alcohol remains one of the widely used drugs among college students ^[5]. Chronic alcohol abuse, particularly associated with other risk factors (including genetic predisposition) promotes the development of alcoholism – a disorder associated with the loss of control on the volumes of consumed alcohol^[1].

Drinking behaviours among medical students have important implications not only for their own health but also of the general population since they are role models in terms of health related behaviours ^[6]. Alcohol consumption has a negative impact on their academic performance and their future professional abilities ^[7-10]. This problem needs to be assessed in RIMS, a prestigious medical institute in Northeastern region and hence the study was conducted with the objectives of a. To determine the prevalence of alcohol consumption among undergraduate medical students in RIMS. b. To determine the characteristics of alcohol drinking behavior. C. To assess the effects of alcohol drinking behavior on their academic performance

2. Materials and Methods

This was a Cross Sectional study conducted among all the Undergraduate MBBS students of RIMS staying in RIMS Undergraduate Hostels during the period of August to September 2013. Those students who could not be contacted after 3 visits were excluded from the study. Data were

collected using a self administered questionnaire method was used. The students were asked to grade their effect on academic performance like attendance, reading, concentration in class and exam performance on a scale of 0 to 10. Questionnaires were distributed in the hostels and filled up questionnaires were collected and checked for completeness and consistency.

Operational definitions:

Hard drinks included whisky, vodka, rum, wine, brandy and local drink, while beer and breezer were considered as soft drinks.

Ever consumers of alcohol were those who have consumed alcohol atleast once in their lifetime.

Data Analysis:

Data entry and analysis was done using SPSS version-16. Descriptive statistics like mean and percentage were used. Chi square test, t-test and Kruskal Wallis test was used for analysis and a P- value of <0.05 was taken as significant

Ethical Issues:

Approval was sought from Institutional Ethics Subcommittee, RIMS, Imphal. Verbal consent was taken from the participants and confidentiality was maintained.

Results:

Of the 467 Undergraduate RIMS MBBS students, we distributed questionnaires to 321 students and 300 questionnaires were collected back. A little more than half (55%) of the respondents were females. About half of the

respondents have consumed alcohol atleast once in their lifetime as shown in Fig 1.

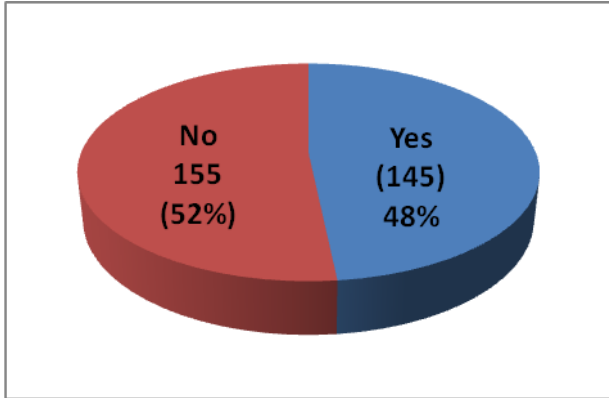


Figure 1: Ever consumption of alcohol

Table 1 shows that Beer was the most commonly (31.7%) consumed alcoholic beverage. More than half (53.3%) of the ever users have consumed with in the past one month. The mean age of initiation of alcohol consumption was 18.21 years. About 3.4% of the ever users consume daily while most (68.3%) of them consume only occasionally.. Friends influence was the most common (45.5%) reason for initiation of alcohol consumption and majority(67.7%) of them said enjoyment was the reason for drinking alcohol at present. Mean amount of alcohol consumed in a single occasion was 203.71± 188.15 ml 229.38± 319.87 ml for hard drinks and soft drinks respectively.

Table 1: Characteristics of alcohol consumption (N=145)

Characteristic	Number	Percentage
Alcohol consumed usually		
Beer	46	31.7
Whisky	43	29.7
Vodka	16	11.0
Rum	15	10.3
Wine	12	8.3
Local	10	6.9
Breezer	2	1.4
Brandy	1	0.6

Time of last consumption

Time of last consumption	Number	Percentage
Within past one month	82	56.6
1 month to 6 months	27	18.6
6 months to 1 year	21	14.5
Did not consume in past one year	15	10.3

Table 1 continued...

Characteristic	Number	Percentage
Age of initiation		
Mean age: 18.21 ± 2.80 yrs		
< 10 years	2	1.4
10-15 years	23	15.9
16-20 years	93	64.1
21-25 years	27	18.6

Frequency of consumption

Frequency of consumption	Number	Percentage
Daily	5	3.4
Few times a week	17	11.7
Few times a month	24	16.6
Ocasionally	99	68.3

Reasons for initiation of alcohol consumption

Reasons for initiation of alcohol consumption	Number	Percentage
Friends influence	66	45.5
Party	33	22.8
Curiosity	21	14.5
For fun	9	6.2
Social gathering	6	4.1
Others	10	6.9

Others include depression (2), cant remember (2), joining MBBS course (2), break up with girl friend, relief from cough, personal reason, to relieve tension.

Reasons for drinking alcohol at present (multiple answers)

Reasons for drinking alcohol at present	Number	Percentage
Enjoyment	98	67.6
Socialisation	37	25.5
pressure	14	9.7
I quit	7	4.8
Others	7	4.8

Table 2: Association of characteristics of alcohol consumption with gender

Characteristic	Males	Females	P-value
Ever consumption of alcohol			
Yes	104(63.0)	41(30.4)	0.00
No	61(37.0)	91(69.6)	

Age at initiation 18.18 ± 2.14 18.27 ± 2.96 0.87*
(in years)

Amount consumed usually per occasion (in ml)
Hard drinks 219.93 ± 168.81 157.00 ± 232.88 0.00*

Soft drinks 250.62 ± 293.20 186.88 ± 374.21 0.00*

*** Analysis done using t-test**

Table 2 shows that more number of males have ever consumed alcohol as compared to females (P value=0.00). Amount consumed in a single occasion was also significantly higher among males . Ever consumption of alcohol was significantly associated with history of fathers', mothers', brothers', sisters and other relatives' consumption of alcohol.(Table 3)

Table 3: Association of alcohol consumption with family history of alcohol consumption

	Ever consumption		P-value
	Yes (%)	No (%)	
Fathers consume	70 (66.0)	36 (34.0)	0.00
Fathers don't consume	75(38.7)	119(61.3)	
Mothers consume	15(8.2)	2(11.8)	0.00
Mothers don't consume	130(45.9)	153(54.1)	
Brothers consume	65(80.2)	16(19.8)	0.00
Brothers don't consume	80(36.5)	139(63.5)	
Sisters consume	12(100.0)	0(0.0)	0.00
Sisters don't consume	133(46.2)	155(53.8)	
Other relatives consume	95(56.5)	73(43.5)	0.00
Other relative don't consume	50(37.9)	82(62.1)	

Table 4: Association of frequency alcohol consumption with academic performance

	Daily# N=5	Few times a week# N=17	Few times a month# N=24	Ocasionally # N=99	P-value*
Effect On attendance	3	1	1	0	0.00
Effect on reading	3	1	1	0	0.00
Effect on class concentration	5	3	0	0	0.00
Effect on exam performance	3	2	0	0	0.00

Increasing frequency of alcohol consumption affected academic performance in terms of attendance, reading, class concentration and exam performance (Table 4). Nearly half (48%) of the ever users have thought of quitting as seen in Fig 2

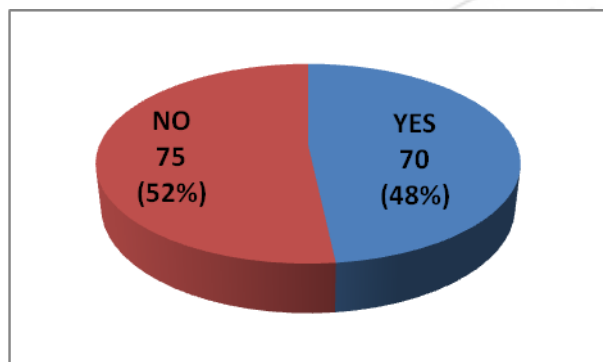


Figure 2: Response to the question “Have you ever thought of quitting?” (N=145)

3. Discussion

This study showed that the prevalence of ever consumption of alcohol was 48% which was consistent with the findings seen in other studies (32-63%)^[11,12,13], but was far less than that observed in a study conducted in Poland(85%)^[14]. In the past one month 27% of the respondents consumed alcohol, but was higher in studies conducted in Poland (70%) and US (78%)^[14,15]. Similarly past one year consumption was also lesser (43%) as compared to other studies^[14,16].

Beer was the most preferred alcoholic beverage as seen in studies all over the world^[12,13,14,17]. Similar to studies conducted in India^[13,17], friends influence was the most common reason for initiation of alcohol consumption. However in the Vietnamese study^[12] curiosity was the most common reason. Enjoyment was the most common cause for drinking at present in contrast to the study conducted among Physicians in Nepal where socialisation was the main cause^[12]. Similar to the studies in Gwalior and Poland^[12,17], only 1% of the respondents consumed few times a week or more. But in the study conducted among Physicians in Nepal, it was 6%^[12].

Ever consumption of alcohol was higher among males (63%), compared to females (30%) as seen in other studies^[12,13,17,18]. As seen in other studies^[13,15,19] amount of alcohol

consumed in a single occasion was higher among males as compared to females. Mean age of initiation of alcohol consumption was 18.2 yrs for males and 18.3 yrs for females. However in the study conducted in Punjab^[13] it was 18.7yrs and 19.2 yrs for males and females respectively. Earlier initiation of alcohol has been reported to be associated with increased risk for alcohol related problems^[20]. This is a problem to be considered because about 16 % of them initiated drinking even before 15 years.

In this study alcohol consumption was significantly associated with positive family history and it was 100 percent among those whose mothers consume alcohol. Others studies also showed a significant association with family history of alcohol consumption^[11,13,16]. About 40 % of the respondents reported that alcohol affected their academic performance, a little less than observed from a study conducted in London^[19] and far more than that observed from a study in US^[21]. With increase in frequency of alcohol consumption, academic performance was affected more similar to that observed from a study in Nigeria and Brazil^[22,23]. In this study only 48% of the respondents were willing to quit in contrast to the Gwalior study (86%)^[17].

The strength of the study was Questionnaire method used - so participants could express their answers freely. The limitations were (i)Response rate was only 64% since most of the 2nd semester students went home after exams (ii)All alcoholic beverages contain different percentage of alcohol content so it's difficult to predict the exact amount of alcohol consumption.

It is recommended to conduct similar studies in the future and to create awareness about the health hazards of alcohol consumption and sensible drinking.

4. Acknowledgement

We acknowledge all the participants for their kind co-operation in this study

5. Conflict of Interest

None

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