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Original Research

Knowledge, Attitude and Practices of Alcohol and Smoking among Undergraduate Students at a Private Dental College in Ghaziabad, India - A Cross-Sectional Study

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ABSTRACT:

Introduction: Alcohol consumption and smoking are two strongly related adverse habits which tends to peak between the age group of 18-25 years and college students in these age group are at high risk of having these habits. **Aim:** The present study aims to determine the knowledge, attitude and practice of alcohol intake and smoking among the undergraduate students of a private dental college in Ghaziabad, India. **Materials and methods:** A questionnaire based cross-sectional study was conducted among a sample of 350 undergraduate students. A self-administered questionnaire was used to collect the data from the participants. The data analysis was performed using Statistical Package for Social Sciences (SPSS) 18.0 (SPSS Inc., Chicago, IL, USA). Descriptive and analytical statistics were done and the level of confidence was set at 95%. The level of significance was set at $p < 0.05$. **Results:** Among the total sample of 350 students, majority were females (55.72%) and belongs to the preclinical group (50.85%). Most of the students irrespective of gender correctly identified both liver disease and cancer as a major outcome of alcohol consumption and smoking. There were no significant differences between the gender and their knowledge regarding smoking and alcohol consumption while the year of study found a significant relation. **Conclusion:** The study findings concluded that the overall knowledge of undergraduate dental students on health implications of excessive consumption of alcohol and smoking was adequate although their influence on certain diseases was lacking.

Keywords: Knowledge, attitude, practice, alcohol and smoking, students

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INTRODUCTION

College heavy episodic drinking and smoking has attained prominence as a major public health problem now-a-days.^[1] One factor that may explain the rise in tobacco use among college-aged individuals, and conversely the decline in adolescent cigarette use, is that young adults are now the "youngest legal targets of tobacco industry marketing" (Rigotti, Lee, & Wechsler, 2000). Much of the marketing targeted at college-aged populations occurs in drinking establishment typically frequented by students. Promotional efforts include free cigarette samples, in-bar advertising, promotional items (e.g., clothing, accessories, CD players, free trips), and brand-sponsored musical events. Choi, Harvey, Harris, Grobe, and Ahluwalia in 2002 found

that receptivity to tobacco marketing was significantly related to current smoking status among college students.^[2] Student's who engage in heavy episodic drinking are at increased risk of a host of adverse consequences, ranging from problems with schoolwork to unplanned sexual activity, injury and sexual assault, problems with police or campus authorities and impaired driving.^[1] Increased frequency of injury and assault inevitably leads to increased strain on care and emergency services, and links between alcohol consumption and hospital admissions are well established. Heavy alcohol intake has also been linked to depression and liver damage.^[3] Prevalence of substance use tends to decrease during the 20s and 30s (except for

tobacco), but a significant fraction of young adults continues using and abusing alcohol and illegal drugs.^[4]

Alcohol consumption and smoking are two strongly related adverse habits which tends to peak between the age group of 18-25 years in a developing country like India. Oral health graduates are role models in their communities and their social practices will be an example for many professional and lay people with whom they interact.^[5] Many habits will have been developed during their formative years as students and it is relevant therefore to determine the knowledge, attitude and practice of alcohol intake and smoking among the undergraduate dental students.

OBJECTIVE

The aim of the present study is to evaluate the knowledge, attitude and practice of alcohol intake and smoking among the undergraduate students of a private dental college in Ghaziabad, India.

MATERIALS AND METHODS

A questionnaire based cross-sectional study was conducted among the undergraduate students of a private dental college in Ghaziabad, India. The study included a total sample of 350 undergraduate students. A self-administered questionnaire was used to collect the data from the participants.

The student’s knowledge regarding alcohol and smoking was assessed by asking them to select from a list of health conditions those that they thought may possibly be associated with the consumption of these substances. Knowledge was regarded as adequate with a score of 50% or more. Attitudes towards the habits were obtained by asking questions related to how the students perceived alcohol served as a social drink and whether the intake can lead to social vices. The practices of the students regarding the habits were determined by asking students about their consumption patterns and the frequency of their intake.

Students were categorized in to either clinical or preclinical groups. The clinical group included all 3rd years and final years while preclinical group included the 1st years and 2nd years. The Institutional Review Board of the Dental college provided the ethical clearance for this study. Informed consent was obtained from all the study participants prior to

the study and the privacy of the students participated were maintained.

STATISTICAL ANALYSIS

The data analysis was performed using Statistical Package for Social Sciences (SPSS) 18.0 (SPSS Inc., Chicago, IL, USA). Descriptive and analytical statistics were done and the level of confidence was set at 95%. The level of significance was set at p<0.05.

RESULTS

The response rate was 100% with a maximum participants belonging to the age group of 22 – 25 years (55.43%). Among the total sample of 350 students, majority were females (55.72%) and belongs to the preclinical group (50.85%) (Table 1).

There were 24.57% participants who reported their consumption of alcohol as ‘regular’ and almost half of the males (47.75%) consumed alcohol. Of those who responded to the question related to the habit of smoking, 69.43% reported that they didn’t smoke regularly. Of the 30.57% who were current smokers, more were males (50.33%) compared to females (Table 2).

Assessment of knowledge of undergraduate dental students regarding the ill effects of alcohol consumption was described in Table 3. Most of the students irrespective of gender correctly identified both liver disease and cancer as a major outcome of alcohol consumption and smoking. Table 4 included the details of the participant’s knowledge regarding the ill effects of smoking. There were no significant differences between the gender and their knowledge regarding smoking and alcohol consumption while the year of study found a significant relation.

TABLE 1: Demographic data of study subjects

DEMOGRAPHIC DATA		FREQUENCY
AGE	18-21 YEARS	156 (44.57%)
	22-25 YEARS	194 (55.43%)
GENDER	MALE	155 (44.28%)
	FEMALE	195 (55.72%)
STUDENT CATEGORY	PRECLINICAL	178 (50.85%)
	CLINICAL	172 (49.15%)

TABLE 2: Alcohol and Smoking Consumption Practices of the participants

PRACTICE	MALE	FEMALE	TOTAL	P VALUE
PREVALANCE OF ALCOHOL CONSUMPTION				
Never consumed alcohol	53 (34.19%)	158 (81.03%)	211 (60.29%)	0.056
Rarely consumed alcohol	28 (18.06%)	25 (12.82%)	53 (15.14%)	
Regularly consumed alcohol	74 (47.75%)	12 (6.15%)	86 (24.57%)	
PREVALANCE OF SMOKING				
Current Smokers	78 (50.33%)	29 (14.87%)	107 (30.57%)	0.01**
Non-Smokers	77 (49.67%)	166 (85.13%)	243 (69.43%)	

TABLE 3: Ability of the study participants to positively link health conditions with Alcohol Consumption

	LIVER DISEASE	P	HYPERTENSION	P	DIABETES	P	CANCER	P
Male	147 (94.83%)	0.62	52 (33.54%)	0.54	99 (63.87%)	0.38	151 (97.41%)	0.84
Female	188 (96.41%)		74 (37.94%)		88 (45.12%)		176 (90.25%)	
Preclinical	167 (93.82%)	0.03**	34 (19.10%)	0.02**	47 (26.40%)	0.01**	158 (88.76%)	0.01**
Clinical	170 (98.83%)		77 (44.7%)		89 (51.74%)		169 (98.25%)	

Test used – Chi square analysis
P value ≤0.05 means significant

TABLE 4: Ability of the study participants to positively link health conditions with Smoking

	LIVER DISEASE	P	HYPERTENSION	P	DIABETES	P	CANCER	P
Male	150 (96.77%)	0.56	72 (46.45%)	0.84	111 (71.61%)	0.78	154 (99.35%)	0.66
Female	189 (96.92%)		79 (40.51%)		91 (46.66%)		181 (92.82%)	
Preclinical	170 (95.50%)	0.01**	44 (24.71%)	0.01**	46 (25.84%)	0.01**	163 (91.57%)	0.01**
Clinical	166 (96.51%)		83 (48.25%)		91 (52.90%)		170 (98.83%)	

Test used – Chi square analysis
P value ≤0.05 means significant

DISCUSSION

Alcohol intake is known to be the world's third largest risk factor for the burden of disease. Excessive alcohol intake and smoking is known to be common among adolescents and young adults which is associated with intoxication and many negative social and health consequences including violence, child neglect and abuse, absenteeism from workplace and chronic diseases.^[5] Hence this study estimates the knowledge, attitude and practice among the undergraduate students of a private dental college in Ghaziabad, India.

The study results suggest that the overall prevalence of smoking in the sample was 30% and this was a proportion similar to that reported in other studies by in which the frequency varied between 3% and 13%.^[6-9] However, the figure was much lower compared with the Western Cape study by Eriksen MPet al which reported a prevalence of 23%.^[10] That survey was conducted more than five years ago and since then South Africa has implemented and extended its anti-tobacco legislation and policies throughout the country, probably resulting in the reduced prevalence. The relatively superior knowledge level associated with smoking seen in the study could be due to the inception of that legislation and the campaigns which have been implemented being robust and effective. In

addition, health professionals are used as advocates in the prevention of smoking. The dental team is involved in efforts to reduce smoking, and the profession plays a critical role in tobacco control, ongoing treatment, counselling and prevention. This study is the only paper which has reported that students linked smoking with periodontal diseases. The majority of previous studies recorded student opinion as linking smoking with lung cancer and heart diseases. This may be due to the fact that the current study was conducted amongst oral health students, whilst most other reviewed studies have been conducted amongst medical students.^[11-13] There were no significant differences between the genders, nor between the courses of study in relation to knowledge regarding smoking.

The widespread use of alcohol and the emphasis of education regarding the harms of excessive alcohol consumption may have led to the very high level of knowledge regarding the damaging effects on the liver. However, knowledge is inadequate with regards to hypertension, diabetes and especially cancer, which is a concern, although the results are similar to those found in other studies.^[5,6,14]

Regarding the attitude towards alcohol consumption, most of the students felt that alcohol was acceptable as a social

drink and for entertaining with friends. This was considerably higher than the Nigerian study which reported that only 20% serve alcohol to friends as a social drink.^[6] This difference could be due to cultural and religious beliefs.

One of the major limitation of the present study is the smaller sample size due to which study results can't be generalized. It is a fact that studies involving the use of questionnaires are susceptible to acquiescence bias and social desirability bias and this may be another limitation.

CONCLUSION

The study findings concluded that the overall knowledge of undergraduate dental students on health implications of excessive consumption of alcohol and smoking was adequate although their influence on certain diseases was lacking. More emphasis on the ill effects of alcohol and smoking should be included in the dental curriculum to help improve student's knowledge. Students should be allowed to visit Oncology wards during their outreach visits to make them aware of the drastic situation caused by these adverse habits.

REFERENCES

1. Dawson DA, Grant BF, Stinson FS, Chou PS. Another look at heavy episodic drinking and alcohol use disorders among college and non-college youth. *J Stud Alcohol Drugs*. 2004;65(4):477.
2. McKee SA, Hinson R, Rounsaville D, Petrelli P. Survey of subjective effects of smoking while drinking among college students. *Nicotine Tob Res*. 2004;6(1):111-117.
3. Bewick BM, Mulhern B, Barkham M, Trusler K, Hill AJ, Stiles WB. Changes in undergraduate student alcohol consumption as they progress through university. *Bio Med Cent Public Health*. 2008;8(1):163-170.
4. Melchior M, Chastang J-F, Goldberg P, Fombonne E. High prevalence rates of tobacco, alcohol and drug use in adolescents and young adults in France: results from the GAZEL Youth study. *Addict Behav*. 2008;33(1):122-133
5. Nkambule NR, Bhayat A, Madiba TK. Knowledge, attitude and practices of alcohol and smoking among undergraduate oral health students at a South African University. *S Afr Dent J*. 2018;73(1):27-30.
6. Fadupin G, Ogunkunle M, Gabriel O. Knowledge, Attitude and consumption pattern of alcoholic and sugar-sweetened beverages among undergraduates in a Nigerian institution. *Afr J Bio Med Res*. 2014;17(2):75-82.
7. Khan N, Hussain M, Khalid MM, Siddiqui SH, Merchant AA. Effect of institute and educational level on knowledge, attitude and practice regarding Hepatitis B and C and vaccination of Hepatitis B among medical students of Karachi, Pakistan. *Journal of Dow University of Health Sciences*. 2013;7(1):3-9.
8. Rikard-Bell G, Groenlund C, Ward J. Australian dental students' views about smoking cessation counseling and their skills as counselors. *J Public Health Dent*. 2003;63(3):200-206.
9. Andrade APAd, Bernardo ACC, ViegasCAAd, Ferreira DBL, Gomes TC, Sales MR. Prevalence and characteristics

- of smoking among youth attending the University of Brasília in Brazil. *J Bras Pneumol*. 2006;32(1):23-28.
10. Eriksen MP, Cerak RL. The diffusion and impact of clean indoor air laws. *Annu Rev Public Health*. 2008; 29:171-185.
11. Awotedu A, Jordaan E, Ndukwana O, Fipaza N, Awotedu K, Martinez J, et al. The smoking habits, attitudes towards smoking and knowledge regarding anti-smoking legislation of students in institutions of higher learning in the Eastern Cape Province of South Africa. *S Afr Fam Pract*. 2006;48(9):14-20.
12. Al-Haqwi AI, Tamim H, Asery A. Knowledge, attitude and practice of tobacco smoking by medical students in Riyadh, Saudi Arabia. *Ann Thorac Med*. 2010;5(3):145-148.
13. Peltzer K. Tobacco use among black South African university students: attitudes, risk awareness and health locus of control. *Curatationis*. 2001;24(2):4-8.
14. Raychowdhury S, Lohrmann DK. Oral cancer risk behaviors among Indiana college students: a formative research study. *J Am Coll Health*. 2008;57(3):373-378.