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Smoking among professional college students: Consumption and risk factors

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ABSTRACT

People from age groups 16–22 years old show the highest inclination towards smoking which places colleges and universities in the unique position to employ restrictive methods to create a smoke-free campusand also impart youth towards tobacco free lifestyle.
The present study was conducted through a survey-based questionnaire to assess the prevalence, knowledge, attitude, behavior and interpersonal factors related to the use of tobacco among university students.

1. Introduction

Prohibiting Tobacco consumption in young Indians appears to be the single greatest opportunity for prevention of non-communicable diseases in the world today. Tobacco consumption in the form of cigarettes, cigars, vapes, dissolvable products and hookah leads to a wide range of diseases such as heart diseases and oropharyngeal diseases. It is well known by now that tobacco kills up to half of its users. Other than that passive smoking is also a silent killer which can cause serious diseases like coronary heart disease and lung cancer.

Existing data shows that most smokers emerge from low and middle income countries. There are about 1 billion smokers across the world with around 70% of them living in low income countries.[1,2] Smoking is responsible for the deaths of 1 in every 10 adults, causing around 7 million deaths across the world each year,[3] with the life expectancy of smokers at least 10 years less than that of non-smokers.[4,5] Most college students who smoke cigarettes do not do so on a daily basis. Infrequent or Intermittent smoking (smoking on some, but not all days) is very common among college students, accounting for greater than two thirds of college smokers. Cigarette smoking on as few as 5 days month is associated with symptoms of cough and sore throat and smoking on as few as 20 month is associated with shortness of breath and fatigue among college students.[6] Thus, promoting cessation among non-daily smokers is critical. Most young adults begin smoking at such a fragile age but quitting the habit becomes troublesome with time.[7]

As the populations of age groups of 16-18 years continue to indulge in smoking as a lifestyle habit, it becomes more important to understand the reasoning behind the same. Dentistry oftentimes deals with pathology caused by tobacco consumption. Dental professional actsas the first line of defence towards finding the right solution. Therefore, a clear understanding of the prevalence of smoking among dental students is necessary in order to understand the attitudes and perspective of such a young adult studying in a dental college.This study aimed to assess the prevalence, knowledge, attitude, behaviour and interpersonal factors related to the use of tobacco among university students in

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2. Materials and Methods

The present study was conducted through a survey-based questionnaire to assess the prevalence, knowledge, attitude, behavior and interpersonal factors related to the use of tobacco among university students. A questionnaire was prepared having 20questions starting with a few personal details, including age, gender, accommodation and the year of study. Henceforth, anonymity was maintained. Students above the age of 16 years were included in the study. This questionnaire structured as a Google form, which was shared with students through watsapp and emails. Furthermore, the survey included questions from the Global Youth Tobacco Survey (Core Questionnaire),which is a comprehensive standard protocol under the collaborating organizations of the CDC Foundation, RTI International.[8]

Sample of 150 responses were collected from studying in a dental coll. The survey took about 10 minutes to complete.The survey measured demographic variables such as age, gender and educational level (first, second or third year etc.). Contextual factors included residence (on- or off-campus). Tobacco usage was measured by assessing the frequency in past 30 days. The whole process of questionnaire distribution and data collection took place in the month of April 2020.

Survey data was first collated in Microsoft Excel, and thereafter analyzed and summarized with the help of following statistical methods.

1. Population stratification using formulas for *"Subtotal formula"* of segments with specific attributes (like Gender based/ Age based) and it expressed as a % of Total population.
2. For studying the relationship between different attributes and responses, *"Pivot Table technique"* was deployed, and for each survey question, responses were filtered for different sub-segments of population to determine the bias across Genders and Living conditions. For example, by selecting the response of "Yes" to smoking habit in a Pivot table with Gender as column, it was evident that Males exhibited a much higher probability of experimenting with smoking cigarette.
3. *"Ratio analysis"* of sub-filtered population helped arrive at interesting results such as the likelihood of survey respondents living in their own residence for quitting smoking was found to be higher than those living outside.
4. Other statistical analysis techniques such as *"Averages", "Weighted percentages* "and also *"mean calculations"* were used to carry out the results.

3. Results

3.1. Prevalence of smoking habit

Nearly 28% of the surveyed population said they had experimented with smoking a cigarette at least once and more than half of them had also experimented with tobacco products other than cigarettes. Out of the balance population who had never smoked a cigarette, nearly 10% had experimented with tobacco products other than cigarettes. Males were found to be 4 times more likely to experiment with smoking a cigarette.

Besides, students living in their own residence were less likely to experiment with smoking a cigarette (one-fourth of total population living in their own residence), as against those living outside their residence (one-third of total population living outside).

Nearly 72% of the smokers' population was 18 years or older when they started smoking.

3.2. Possible grounds for smoking

Nearly 40% of relevant population (smokers) attributed the same to Peer pressure; and another 40% to Stress and anxiety. Nearly 30% of the total surveyed population thinks that smoking tobacco helps people feel more comfortable at celebrations, parties, or in other social gatherings, while another 40% believe it makes no difference.

3.3. Detrimental effects of smoking

Nearly 95% of the surveyed population agreed that smoke from other people's tobacco smoking maybe harmful. As high as 90% of the surveyed population also believed that smoking should be banned inside enclosed public places as well as outdoor. However, only 16% of the people who smoke replied that they wanted to stop smoking. When asked whether they would be able to stop smoking if they wanted to, nearly 49% said Yes. Interestingly, 58% of the Males smokers thought so, while 35% of the Female smokers believed so.

3.4. Contextual factors

People living at their own residences were found to be more likely to believe they can stop smoking. When asked whether they had ever received help or advice to help stop smoking, only 30% said Yes. And out of that, only half got professional help.

4. Discussion

Smoking and tobacco consumption is a slow and addicting poison that engulfs the youth as we speak. One of the most widespread issues around the world –Prolonged smoking and tobacco consumption lead to a wide range of diseases, varying from cardiologic distress to or pharyngeal

complications.[9] Along with the adolescents it also poses as a major threat for the adult population as it can cause premature morbidity and mortality. Smoking alone is responsible for the deaths of one out of every 10 adults, amounting to a fatality rate of about 1million people in India annually. Through continuous research, it is observed that 90% of smokers begin this hazardous habit in their teens either under peer pressure, stress or naive thought that smoking is a demonstration of modernity and adulthood. Some seek a thrill as they believe is achieved through these unsafe practices while others get carried away with their friends and peers. The reasons may seem small to an outsider but they are big enough to push a juvenile into a perilous future. More than often such practices lead to an unhealthy adulthood for which remedy is almost impossible to procure.

As dentistry often deals with diseases related to tobacco consumption and smoking, therefore a clear understanding of the prevalence of such habits amongst dental students is a lot more needed in order to understand the mentality of the dental student. The above survey conducted with 150 students is a step taken towards better understanding of the aforementioned issue. A cross sectional study was conducted over a period of 4 weeks in the month of April 2020.A structured, pretested questionnaire in the form of goggle forms comprising of 19 questions starting with basic personal details such as age, gender, accommodation, year of study. Hence, anonymity was maintained. The survey based questionnaire was shared among students of Manav Rachna Dental College, Faridabad (Haryana) by means of whatsapp and emails. However, the survey included questions from the Global Youth Tobacco Survey which encourages using globally standardized methodology and a core questionnaire that is designed for systematic monitoring of youth tobacco use and tracking tobacco indicators.

The questionnaire was distributed mostly to the students between age group of 18-22 years from 1^{st} year up to students of Internship as Google forms and a sample of 150 responses has been received. Finally the responses were analysed in the form of Google Sheets and were converted to Excel Spreadsheets for detailed analyses. The survey gives us an overall view that males are nearly 4 times more addicted to smoking rather than female. The study demonstrated that at least 28% of the surveyed population had experimented with smoking a cigarette at least once or more than half of they had experimented with tobacco products as well. However it has been revealed that students residing in their own place are less prone to do testing with smoking a cigarette (one fourth of total population living in their own residence) as compared to to those living outside their residence (one third of total population living outside). Nearly 72% of the smokers population was 18 years or older when they started smoking.

Result of this study is comparable with study conducted by Mandil et al as they also analysed the effect of the influence of peers as a major determinant of tobacco smoking among University of Sharjah students. Similarly, survey conducted by Abolfotouh et al. about Smoking Habits of King Saudi University students in Abha, Saudi Arabia found that students use tobacco is consumed to overcome the stress experienced during their studies.[10]

In research carried out in Bihar by Sinha et al amongst the students of 51 school, it has been reported that tobacco prevalence among boys was higher than that of girls (61.4% boys, 51.2% girls). However the gap isn't big enough when compared with our study which underlies that males are 4 times more likely to experiment smoking a cigarette. High prevalence of smoking amongst girls in Bihar may be attributed to globalisation and tobacco industry's advertisement impact in glamourising tobacco as a tool of women emancipation.

Moreover, in a study by Sinha et al revealed that 72.2% agreed with banning smoking from public places but when taking in account our study, it was nearly 90% of the studies who consented the ban.[11] Nearly 95% of surveyed population stated that smoke from other people's tobacco smoking may be hazardous.90% of the surveyed population also believed that smoking should be restricted outdoors. Public places should also ban indoor smoking as it has already been proved that non smoker residing with a smoker have a 20% to 30% increased risk of developing lung cancer and risk of sinus and respiratory infections also.

However students showed positive attitude towards minimizing passive smoking .Only 16% of the students who smoke replied that they wanted to quit smoking. When asked whether they will be able to give up this bad practice of smoking if they wanted to nearly 49% said "yes". Interestingly 58% of the male smokers thought so, while 35% of female smokers believed so. People living in their own residence found to be more likely to believe that they could stop smoking. Only 30% of the population gave positive answers when they were asked whether they had ever received help or advice to help stop smoking. Efforts should be taken to educate students on effective strategies in managing stress during their course as they thought that tobacco smoking could be a stress coping strategies. Sessions could be organized for medical students to help them cope with life stressors and to minimize the possibility of smoking and probably more serious behaviours such as use of alcohol or other drugs. Even though a high percentage of students believed that they could quit smoking, the reality of quitting is a hard hit subject wherein people victimised by such habit generally found it very difficult to let go off cigarettes and tobacco which could also be due to the increased probability of relapsing while under rehabilitation.[12]

5. Conclusion

As a culmination to the study, male students were found to be 4 times more likely to experiment with smoking, indicating a need for gender specific health promotion and intervention. Only 30% of the surveyed smokers had received help to quit the habit, therefore better measures towards providing professional help can be given. The most common root causes which led to an initial urge to experiment with the same were attributed to be peer pressure and stress/anxiety stipulating the requirement of psychological aid in form of therapy to the students. Being in a field of dental health, the students of this field must take up the responsibility of creating awareness regarding the detrimental impacts of active and passive smoking through tobacco cessation camps, workshops, counselling and various smoking prevention programs. A tobacco free campus must be achieved by implementing the Tobacco Control Act of 2005 according to which all educational institutions must be free of tobacco smoke.[9] A large amount of information is known about the addictive qualities of tobacco, yet little is known about smoking among young adults or how to help them quit. A competent course of action would be to employ counsellors to help the students through situations like peer pressure and stress and also, to help them quit the habit of cigarette smoking when required. Moreover, creative measures such as poster designing, slogan writing, street plays etc. can help create a general sense of awareness in the society. Longitudinal studies assessing tobacco use patterns and intention to quit among college students are warranted.[13] People from age groups 18–22 years old show the highest inclination towards smoking which places colleges and universities in the unique position to employ restrictive methods to create a smoke-free campus.[14]

6. Source of Funding

None.

7. Conflict of Interest

None.

References

1. Al-Kubaisy W, Abdullah NN, Al-Nuaimy. Factors associated with smoking behaviour among university students in Syria. *Procedia Soc Behav Sci*. 2012;38:59–65. doi:10.1016/j.sbspro.2012.03.324.
2. Jalilian F, Matin BK, Ahmadpanah M, Ataee M, Jouybari TA, Eslami AA. Socio-demographic characteristics associated with cigarettes smoking, drug abuse and alcohol drinking among male medical university students in Iran. *J Res Health Sci*. 2015;15(1):42–8.
3. WHO. WHO report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies; 2017. p. 135. Available from: https://apps.who.int/iris/handle/10665/255874.
4. Berg CJ, Lessard L, Parelkar PP. College student reactions to smoking bans in public ,on campus and at home. *Health Educ Res*. 2011;26(1):116–8. doi:10.1093/her/cyq076.
5. Husten CG. How should we define light or intermittent smoking? Does it matter? *Nicotine Tob Res*. 2009;11(2):111–21. doi:10.1093/ntr/ntp010.
6. An LC, Berg C, Klatt CM. Symptoms of cough and shortness of breath among occasional young adult smokers. *Nicotine Tob Res*. 2009;11(2):126–59. doi:10.1093/ntr/ntp015.
7. Jha P, Ramasundarahettige C, Landsman V. 21st-Century hazards of smoking and benefits of cessation in the United States. *N Engl J Med*. 2013;368(4):341–50. doi:10.1056/NEJMsa1211128.
8. Global Youth Tobacco Survey (GYTS): Core Questionnaire with Optional Questions, Version 1.2; 2014. Available from: https://www.paho.org/hq/dmdocuments/2017/1-GYTS-CoreQuestionnairewithOptionalQuestions-v1.2-Nov2014.pdf.
9. Hasan MDMS, Hossain K, Hafiz TA. Prevalence and predictors of tobacco smoking among university students in Sylhet division. Bangladesh; 2012. p. 1–38.
10. Backinger CL, Fagan P, Matthews E, Grana R. Adolescent and young adult tobacco prevention and cessation: current status and future directions. *Tobacco Control*. 2003;12(4):46–53. doi:10.1136/tc.12.suppl_4.iv46.
11. Dhirender N, Gupta M, Prakash C. Tobacco use among students in Bihar (India). *Indian J Public Health*. 2004;48(3):111–7.
12. Butler KM, Ickes MJ, Rayens M, Wiggins T, Ashford K, Hahn EJ. Intention to quit smoking and polytobacco use among college student smokers. *Prev Med Rep*. 2018;10:72–5. doi:10.1016/j.pmedr.2018.02.006.
13. Raina R, Krishna M, Murali R, Shamala A, Yalamalli M. Knowledge, attitude and behavioral determinants of tobacco use among 13-15 year old school children. *J Int Soc Prev Commun Dent*. 2015;5(4):321–6. doi:10.4103/2231-0762.161764.
14. Al-Haqwi A, Tamim H, Asery A. Knowledge, attitude and practice of tobacco smoking by medical students in Riyadh, Saudi Arabia. *Ann Thorac Med*. 2010;5(3):145–8. doi:10.4103/1817-1737.65044.

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