

ORIGINAL RESEARCH

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Tobacco Usage among Dental Interns in Panchkula, Haryana, India

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BACKGROUND: Tobacco use is one of the major preventable reasons for death. Despite this, its prevalence is increasing among dental students. For the purpose of advocacy of planning tobacco control and interventions, data on prevalence of tobacco usage is needed.

AIM: To assess prevalence of tobacco usage among dental interns of district Panchkula, Haryana, India.

MATERIAL AND METHODS: A cross-sectional study was conducted from July-September 2019 among dental interns of Panchkula using a self-administered questionnaire. Data based on demographic factors, smoking habits, and associated risk factors was collected. Descriptive analysis for demographic variables and smoking habits were analyzed using the SPSS 24.0 software.

RESULT: The prevalence of current tobacco use was 29.54% (22.2% males and 6.8% females). Male interns were significantly more likely than female interns to be current cigarette smokers. On probing the cause of smoking, a majority of participants cited friends and stress as the main cause for smoking. The proportion of regular smokers whose parents smoke was more significant compared to occasional smokers.

CONCLUSION: The prevalence of tobacco usage among dental interns is more in males as compared to females so dental interns need to be trained regarding anti-tobacco counselling.

KEYWORDS: Tobacco, Prevalence, Gender

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INTRODUCTION

Tobacco consumption is one of the utmost mendable causes of disease & death in the world today. Regular habit of tobacco usage might lead to various kinds of malignancies (like oral and esophageal cancer) and can also be etiological factor for certain respiratory and cardiovascular diseases. The detrimental effects of tobacco practice on oral health have been well documented in studies focusing on changes in the oral mucosa and periodontal tissues.¹⁻⁴ There are ample documentations which reveals that tobacco cessation not only alleviate the prevalence of multifarious morbidities, but also restrict the related advancements.⁵⁻⁶

Dental interns represent the young population of the society & they are the role models for the laity in identifying smokers, as they may notice intraoral signs such as premalignant lesions and conditions, foul odor, tooth stains, and oral hygiene problems early than any other healthcare professionals; they are consequently in a more efficient place to offer preventive care. Furthermore, they have access to protocols promoting discontinuation of smoking and pharmaceutical measures if required. However, it seems that dental

interns particularly the trainees have failed to realize the hazards associated with tobacco habit and increased indulgence of themselves in tobacco usage has been seen, which ranges from 9.6% to 20%.⁷

The rates of tobacco usage among dental interns are disturbing, thus novel approaches are needed to augment existing prevention programs to reduce the prevalence of tobacco.⁸⁻¹¹ There are barely any studies to find the prevalence of tobacco usage among them. So, present study was carried out among dental interns of Panchkula to assess prevalence of tobacco usage.

MATERIALS AND METHOD

A cross-sectional study was conducted from July-September 2019 in Panchkula among 88 dental interns using a self-administered, pre-tested & validated questionnaire.

A pilot study was conducted among 20 dentists who were not the part of main study sample to test the reliability of the questionnaire. Few modifications were done to improve the understanding of the questionnaire based on the responses. Questionnaires



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were distributed to interns during routine general lectures. The completed questionnaire was seen exclusively by the investigator.

Final questionnaire consisted of 15 questions relating to demographic factors (such as age, gender, marital status, residency status, the student's year of study), smoking habits and associated risk factors. Participants who were not willing to participate in the study or who were absent during three consecutive visits were excluded from the study. The study subjects were divided based on gender and their residence into group A and B.

Data were entered into the Microsoft Word Excel Sheet 2013 version and was analyzed using the Statistical Package for the Social Sciences version 20.0 software (SPSS Inc., Chicago IL, USA). Descriptive analysis for demographic variables and smoking habits were computed.

RESULTS

A survey on tobacco usage was conducted among 88 dental interns (45 males and 43 females) with a mean age of 22.5 years. Table 1 depicts tobacco use based on gender and location. Total tobacco users were found to be 26 of which 21 were current users and 5 were past users. The remaining questions were asked from current users only so as to avoid recall bias.

More than 50% of study participants were using tobacco for more than five years. Major cause of tobacco usage turned out to be stress and the influence of friends. Cigarette was revealed as the major tobacco form consumed by 13 out of 21 tobacco users. The frequency of tobacco usage varied from individual to individual. 4 interns reported their family was aware of this habit and 5 interns admit that they had history of tobacco users in the family. All tobacco users were aware of the adverse effects of the tobacco. Out of which 2 tried to quit while 5 had consulted advice on quitting the habit.

DISCUSSION

Tobacco is the most commonly abused drug in the world. The most susceptible time for initiation of tobacco use in India is during adolescence and early adulthood i.e., in the age group of 15-24 years.¹² This is a matter of great public health concern.

Tobacco control and prevention cannot be undertaken

without involvement of health care professionals. However, tobacco use among interns is becoming more prevalent and national efforts for tobacco cessation should focus on them also. So, present study was carried out among dental interns of Panchkula to assess prevalence of tobacco usage.

In the present study, out of 88 participants, 26 were tobacco users of which 20 (44.4%) were males and 6(13.9%) were females. A similar study among dental students by Thomas (2019) revealed that boys were 3.15 times more likely to use tobacco compared to girls.¹³ In the present study stress and friends (peer pressure) were the principle reasons for tobacco usage. A similar study in Saudi Arabia revealed that the effect of having close friends that smoke along with high stress might increase the rate of smoking among medical interns in Saudi Arabia.¹⁴ A survey done by Sharma R et al. (2010) suggested that adolescents whose parents or siblings smoke or whose friends do so were particularly likely to use tobacco themselves.¹⁵

In the present study 28.6% were urban users and 31.2% were rural tobacco users; the prevalence of cigarette smoking was more than smokeless tobacco forms. This can be attributed to fact that although smokeless tobacco products are relatively cheaper but more harmful^{16,17} because of their higher concentrations of tar and carbon monoxide¹⁸ which causes increased rates of oral cancers in India.¹⁹ As the subjects for the study are limited in number thus the results cannot be generalized to a larger population of dental interns.

CONCLUSION

The cross-sectional study shows that prevalence of tobacco usage among dental interns is high. Stress and peer influence were the two most important risk factors associated with tobacco usage. Dental schools should educate and train dental interns on effective strategies in managing stress during their studies. Dental interns need to be trained regarding anti-tobacco counselling.

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VARIABLE	MALE (n=45)		FEMALE (n=43)		URBAN (n=70)		RURAL (n=18)		Total (n=88)
	n	%	n	%	n	%	n	%	
Tobacco user									
Current user	16	35.5	5	11.6	16	22.8	5	27.8	21
Previous user	4	8.9	1	2.3	4	5.7	1	5.5	5
Tobacco user since									
<1 year	2	12.5	2	4.0	1	6.3	3	6.0	4
1-5 years	6	37.5	0	0	5	31.2	1	2.0	6
>5 years	8	5.0	3	6.0	10	62.5	1	2.0	11
Cause									
Stress	7	43.7	2	4.0	6	37.5	3	6.0	9
Influence of friends	7	43.7	2	4.0	8	5.0	1	2.0	9
Social media	2	12.5	1	2.0	2	12.5	1	2.0	3
Others	0	0	0	0	0	0	0	0	0
Type of tobacco used									
Cigarette	9	56.2	4	8.0	10	62.5	3	6.0	13
Cigar	2	12.5	0	0	2	12.5	0	0	2
Smokeless tobacco	2	12.5	1	2.0	1	6.3	2	4.0	3
More than one form	3	18.7	0	0	3	18.7	0	0	3
Frequency									
Once a day	2	12.5	0	0	2	12.5	0	0	2
Twice a day	2	12.5	0	0	2	12.5	0	0	2
More than twice	6	37.5	3	6.0	6	37.5	3	6.0	9
Occasionally	6	37.5	2	4.0	6	37.5	2	4.0	8
Parents awareness of habit	4	2.5	0	0	2	12.5	2	4.0	4
Family smokers	5	31.2	0	0	3	18.7	2	4.0	5
Last purchase									
Today	10	62.5	3	6.0	8	5.0	5	10.0	13
<7 days	4	2.5	2	4.0	6	37.5	0	0	6
>7 days	2	12.5	0	0	2	12.5	0	0	2
No. of packs									
0-2	6	37.5	2	4.0	7	43.7	1	2.0	8
2-5	7	43.7	3	6.0	8	5.0	2	4.0	10
>5	3	18.7	0	0	1	6.3	2	4.0	3
Adverse effects									
Drowsiness	3	18.7	1	2.0	3	18.7	1	2.0	4
Cancer	3	18.7	0	0	3	18.7	0	0	3
Others	4	2.5	2	4.0	2	12.5	4	8.0	6
Tried quitting	2	12.5	0	0	1	6.3	1	2.0	2
Consulted counsellors	5	31.2	1	2.0	6	37.5	0	0	6

Table 1. Tobacco Consumption Based on Gender and Location

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41

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