

Knowledge, attitude and Practice regarding the use of tobacco and tobacco related products among the dental students in Patna city

Priyanka Kumari¹, Veeranna Ramesh², Faizul Islam³

1,3-Post Graduate, Dept. of PHD, Buddha Institute of Dental Sciences & Hospital, Patna. 2-Prof, Dept. of PHD, Buddha Institute of dental sciences & Hospital, Patna.

Correspondence to:
Dr. Faizul Islam, Post Graduate, Dept. of PHD, Buddha Institute of Dental Sciences & Hospital, Patna.
Contact Us: www.ijohmr.com

ABSTRACT

Aim: The aim of the study was to assess the Knowledge, Attitude and Practice regarding the use of tobacco and tobacco related products among the dental students in Patna city. **Method:** A cross-sectional study was conducted among 290 dental students of the 3rd year, 4th year & house surgeons from dental colleges of Patna city. A close-ended structured questionnaire was used to assess the knowledge, Attitude and Practice regarding the use of tobacco and tobacco related products. The Fisher test were used to do the statistical analysis for the given data and the statistical significance was set at $p < 0.05$. **Results:** A total of 290 dental students belonging to three dental colleges responded to this study, of which 38.6% were males and 61.4 % were females. 98.3% of subjects were aware that consumption of tobacco and tobacco related products are injurious to health. 90.7% of the subjects revealed that tobacco consumption end up having more than 2 systemic diseases. 74.8 % of the students agreed that consumption of tobacco would lead to more than two diseases/conditions affecting the oral health.

KEYWORDS: Tobacco, Oral Health, Tobacco Products

INTRODUCTION

Tobacco use causes a wide range of major diseases which impact nearly every organ of the body. According to estimates made by the WHO, currently about 5 million people die prematurely every year due to the use of tobacco.¹

By 2030, it is estimated that the number of premature deaths attributable to tobacco and tobacco related products would double to 10 million deaths every year, with about 7 million of the deaths taking place in developing countries. Among people alive today in the world, about 500 million would die prematurely due to tobacco use; most of these are children and young adults of today.²

India's tobacco problem is more complex than probably that of any other country in the world with a large consequential burden of tobacco related disease and death. The use of tobacco in India has witnessed varied pattern, which include smoking, chewing, applying, sucking, gargling and so on. Each of these patterns of consumption is governed by the geographic area, economic status, socio-cultural and religious influence. The wide range of products thus made available are either industrially manufactured on a large scale or made locally in small scale industries and sometimes by vendors or

consumers themselves (such as dhumtis).⁵

Presently, India has more than 200 million tobacco consumers; only 13 % of them consume it in the form of cigarettes, whereas 54 % consume it in the form of beedies and the rest in raw/gutkha forms. Worldwide, 85 % of the tobacco cultivated is used in the production of cigarettes. Hence, the tobacco consumption pattern in India markedly differs from the rest of the world in terms of product configuration. A recently conducted national cross-sectional household survey found the highest prevalence of tobacco use in south Bihar (94.7%), followed by Uttar Pradesh (87.3%), the high rates in the north eastern states.

The Global Youth Tobacco survey reveals that among 13-15 year old school going children, the current use of any tobacco products varies from 3.3% in Goa to 62.8% in Nagaland.⁵

Over the years, India's position has risen from third largest to the second largest unmanufactured tobacco consuming country in the world. This suggests that compared with cigarettes, more of the other forms of tobacco are consumed in India and that this trend is increasing in recent years.

An important aspect of comprehensive tobacco control

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programme is increasing the knowledge & awareness regarding tobacco use, modifying the attitude & practice towards tobacco consumption. As members of an important health profession, dentists have a duty to promote oral health and healthy lifestyles among their patients, by raising their awareness about the harmful effects of tobacco on health and guiding them in conquering tobacco addiction. Studies have shown that dentists and other clinical members of the dental team are ideally situated to counsel patients against tobacco use and even just brief and simple advice from health professionals can substantially increase smoking cessation rates. It is therefore imperative that dental students, who are tomorrow's dentists, develop their knowledge of the harmful effects of tobacco use, attitudes towards it, and skills in dealing with it adequately, and receive training in counseling patients about quitting tobacco use.⁶

Aim: The aim of the study was to assess the knowledge, attitude and practices regarding the use of tobacco and tobacco related products among the students of dental colleges in Patna city, Bihar.

Objectives:

- To assess the knowledge, attitude and practices regarding the use of tobacco and tobacco related products among the students of dental colleges in Patna city, Bihar.
- To assess the training needs in cessation of tobacco consumption.

MATERIALS AND METHODS

The study is a descriptive, cross-sectional survey. Data was obtained from the three Dental Colleges in Patna City. Dental students in the 3rd-year, 4th-year & house surgeons of the 3 Dental Colleges in Patna City formed the study population. The sample comprised of 290 randomly selected dental students from the three dental colleges in Patna city. Students present on the day of the survey were included in the study. Students who did not give consent to participate were excluded from the study. A pilot survey was undertaken to test the feasibility of the study including the assessment of clarity, validity, and applicability of the questionnaire.

Prior to scheduling the survey, official permission was obtained from Heads/Concerned authority of the selected dental colleges. Informed consent was obtained from the participating dental students of various dental colleges selected. The proposed study was reviewed by the Ethical committee of Buddha Institute of Dental Sciences and Hospital, Patna and clearance was obtained. Time taken for data collection was two months. The calibration of the investigator was done to limit the interviewer variability. The Kappa co-efficient value of intra-examiner reliability is 0.94.

The data was collected using a close-ended questionnaire. The questionnaire consisted of four major sections,

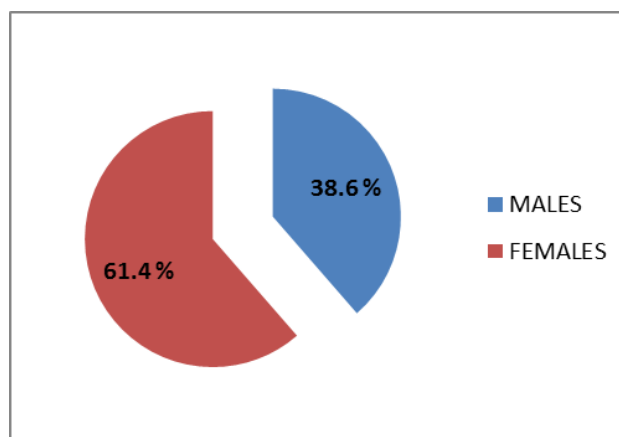
- Socio-demographic details

- Knowledge, Attitude, and Practices regarding the use of tobacco and tobacco related products

The time allocated for completion of the questionnaire was 30 min. A total of 290 students responded in the questionnaire survey. The data was analyzed by using Fisher test, and the level of significance is maintained at $p < 0.05$.

RESULTS

A total of 290 dental students belonging to three dental colleges responded to this study, of which 38.6% were males, and 61.4% were females. (Graph 1) The majority of respondents (80.7%) belonged to the age group of 21-25, while 11.7% and 7.6% belonged 18-20 years and 26-30 respectively.



Graph 1: Shows the distribution of subjects according to the Gender

The ill effects of tobacco on general health and oral health were assessed. The following general diseases/conditions like lung cancer, respiratory diseases, cardio-vascular diseases/heart problems, liver diseases, mental retardation, tuberculosis, cancers in GI tract, impotency/infertility, premature birth/low birth weight and miscarriage were included. House surgeons (93%) had better knowledge when compared to 4th-year and 3rd-year students with 91.4% and 87.6% respectively. Regarding the effect of tobacco on oral health, the following diseases or condition were under consideration, oral cancer, bad breath, and dryness of mouth, discoloration of teeth, developmental defects and gum diseases. An overall 74.8% of the students agreed that consumption of tobacco would lead to more than two diseases/conditions affecting the oral health. Interestingly 3rd-year students (91.8%) had better knowledge when compared to 4th-year and house surgeons with 72.1% and 61% respectively. 14.9% of the subjects related oral cancer to be the main effect of tobacco consumption. (Table 1)

Knowledge of harmful constituents present in the tobacco and tobacco related products affecting the health. The constituents under consideration were nicotine, carcinogens, radioactive compounds, nitrogen oxide, carbon monoxide, metals, hydrogen cyanide, and tar. An

Questions	3rd Year	4th Year	House surgeon	Overall	
On General Health					
1	Lung Cancer	1(1%)	0(0%)	0(0%)	1(0.3%)
2	Respiratory diseases	0(0%)	0(0%)	0(0%)	0(0%)
3	Cardio Vascular or Heart Diseases	0(0%)	0(0%)	0(0%)	0(0%)
4	Liver diseases	0(0%)	0(0%)	0(0%)	0(0%)
5	Mental retardation	0(0%)	0(0%)	0(0%)	0(0%)
6	Tuberculosis	0(0%)	0(0%)	0(0%)	0(0%)
7	Cancers in GI tract	0(0%)	0(0%)	0(0%)	0(0%)
8	Impotency/In fertility	0(0%)	0(0%)	0(0%)	0(0%)
9	Premature birth/Low birth weight	0(0%)	0(0%)	0(0%)	0(0%)
10	Miscarriage	0(0%)	0(0%)	0(0%)	0(0%)
11	Others	0(0%)	0(0%)	0(0%)	0(0%)
12	More than one	11(11.3%)	8(8.6%)	7(7%)	26(9%)
13	More than two	85(87.6%)	85(91.4%)	93(93%)	263(90.7%)
P 0.57 (Not Significant)					
Questions	3rd Year	4th Year	House surgeon	Overall	
On Oral Health					
1	Oral Cancer	0(0%)	15(16.1%)	28(28%)	43(14.9%)
2	Bad breath	0(0%)	0(0%)	0(0%)	0(0%)
3	Dryness of Mouth	0(0%)	0(0%)	0(0%)	0(0%)
4	Discoloration of Teeth	0(0%)	0(0%)	0(0%)	0(0%)
5	Developmental defects	0(0%)	0(0%)	0(0%)	0(0%)
6	Gum Diseases	0(0%)	0(0%)	0(0%)	0(0%)
7	Others	0(0%)	0(0%)	0(0%)	0(0%)
8	More than one	8(8.2%)	11(11.8%)	11(11%)	30(10.4%)
9	More than two	89(91.8%)	67(72.1%)	61(61%)	217(74.8%)
P <0.005 (Significant)					

Graph 1: Shows the distribution of subjects according to the Gender

overall 45.2 % of the students agreed that more than two constituents present in the tobacco would affect the health of the individual. 22.1% revealed that more than one constituent would affect the health. 29.3% of all students' related nicotine to be main content affecting the health. (Table 2)

Questions	3rd Year	4th Year	House surgeon	Overall	
1	Nicotine	27(27.8%)	20(21.5%)	38(38%)	85(29.3%)
2	Carcinogens	1(1%)	5(5.4%)	0(0%)	6(2.1%)
3	Radioactive compounds	0(0%)	0(0%)	0(0%)	0(0%)
4	Nitrogen oxides	0(0%)	0(0%)	0(0%)	0(0%)
5	Carbon monoxide	0(0%)	0(0%)	0(0%)	0(0%)
6	Metals	0(0%)	0(0%)	0(0%)	0(0%)
7	Hydrogen cyanide and other ciliatotoxic agents	0(0%)	0(0%)	0(0%)	0(0%)
8	Tar	1(1%)	1(1%)	0(0%)	2(0.6%)
9	Others	0(0%)	2(2.2%)	0(0%)	2(0.7%)
10	More than one	25(25.8%)	24(25.8%)	15(15%)	64(22.1%)
11	More than two	43(44.3%)	41(44.1%)	47(47%)	131(45.2%)
P < 0.016 (Significant)					

Table: 2 what content in tobacco and tobacco related products are harmful to health?

Types of tobacco and tobacco related products (SMOKED) available in the market were also assessed. The different types smoked products under consideration were cigarettes, bidis, cigar, hookah, chillum, dhumti, chutta, and hookli. An overall 62.4 % of the students agreed that more than two types of tobacco products are available in the market.

The role of tobacco causing environmental pollution was also assessed; an overall 97.6 % agreed that it would contribute to environmental pollution. The knowledge was an almost similar 3rd- year (96.9%), 4th- year students (97.8%) and house surgeons (98%).

Among who were aware, the activities done at anti-tobacco cell were also assessed. The activities that were under consideration were tobacco counseling, treatment for tobacco dependence and treatment for any diseases related to tobacco usage. An overall of 49.3 % said tobacco counseling was majorly done. 7 % said that more than two activities are catered, and 7.6 % said more than one activity is done. The results were statistically significant with p value 0.005.

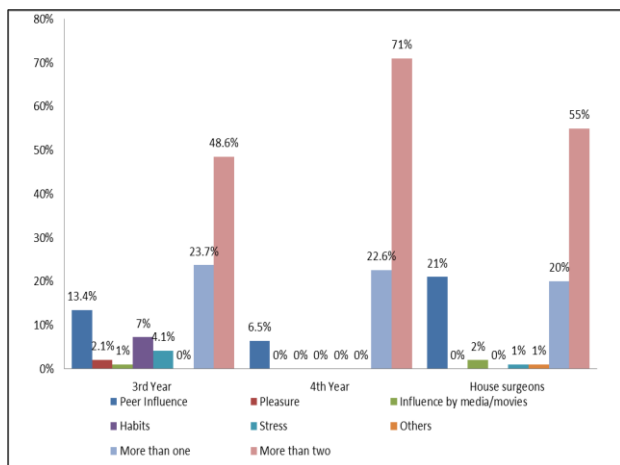
Those who were aware, commonly available nicotine replacement in the market were also assessed. The products that were considered are nicotine gums, nicotine patches, nicotine tablets, nicotine sprays, nicotine inhalers and nicotine lozenges. An overall 20.7 % were aware of more than 2 products availability, while only 5.9 % were aware of more than one product availability. But the majority of 45.9 % were just aware of nicotine gums. Among different year of education, house surgeon had the better awareness for nicotine gums with 59%, followed by 40.2% for 3rd-year and 37.6% for 4th- year. The results were statistically significant with p value 0.001. (Table 3)

Questions	3rd Year	4th Year	House surgeon	Overall	
1	Nicotine Gums	39(40.2%)	35(37.6%)	59(59%)	133(45.9%)
2	Nicotine Patches	1(1%)	0(0%)	0(0%)	1(0.3%)
3	Nicotine tablets	5(5.2%)	0(0%)	0(0%)	5(1.7%)
4	Nicotine spray	0(0%)	0(0%)	0(0%)	0(0%)
5	Nicotine inhaler	0(0%)	0(0%)	0(0%)	0(0%)
6	Nicotine lozenges	0(0%)	0(0%)	0(0%)	0(0%)
7	More than one	4(4.1%)	9(9.7%)	4(4%)	17(5.9%)
8	More than two	7(7.2%)	35(37.6%)	18(18%)	60(20.7%)
P 0.001 (Significant)					

Table: 3 Common nicotine replacements available

The reasons for consumption of tobacco and tobacco related products were also assessed. The following reasons were considered peer influence, pleasure, and influence by media/movies, habits and stress. An overall 58% of the students revealed that more than two reasons were responsible for consumption of the tobacco and tobacco related products. While 22.1% gave more than one reason and 13.8% of the students said peer influence to be the sole reason. The awareness was better with 4th-year students when compared to 3rd-year and house surgeon. The results were statistically significant with p <005. (Graph 2)

Regarding the opinion on banning the tobacco products for the better health of the individual, 97.6% favored banning the products. 4th-year students (98.9%) favored more towards banning the product. And 97.3 % agreed that other family members would be affected by passive smoking.



Graph 2: Shows the reason for consumption for tobacco and tobacco related products

House surgeons (99%) and 4th-year students (98.9%) almost had an identical response on passive smoking when compared with 3rd-year students (93.8%).

Among those who consumed, 93% consumed tobacco in all forms, while 7.1% consumed only in the smoked form of tobacco.

All those who consumed 100% of them consumed on a daily basis. Regarding since when they started using tobacco products, a majority of 64.3% started 1-2 years back, while 7.1% and 28.6% started 2-5 years back and < 1 year back respectively.

None of the subjects (100%) who used tobacco have made any attempt to quit tobacco. They have reasoned that addiction (100%) to be the main cause for the failure to quit tobacco. (Table 4)

Questions	3rd Year	4th Year	House surgeons	Overall
1 Yes	0(0%)	0(0%)	0(0%)	0(0%)
2 No	8(100%)	2(100%)	4(100%)	14(100%)
3 Not really	0(0%)	0(0%)	0(0%)	0(0%)

Table: 4 did you ever make an attempt to quit the habit?

64.3% have tried quitting the habit but ended up starting once again. When asked on their opinion to quit the habit now, 50% said they are not ready to quit and the remaining 50% were not sure of making an attempt. (Table 5)

The duration of chewing tobacco was also evaluated. A majority of 78.6% chewed for a duration of 3-6 minutes, while 21.5% chewed for < 3 minutes. Labial mucosa (100%) was the preferred part in the mouth to retain tobacco products. When asked how long they retain the tobacco products, 50% said < 5 minutes and remaining subjects said between 5-10 minutes.

If given an opportunity to participate in quit tobacco program, only 7.5% were willing to participate, though they are aware that quitting tobacco and tobacco related products would improve the health of the individual (96%).

Questions	3rd Year	4th Year	House surgeons	Overall
1 Yes	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2 No	8 (100%)	2 (100%)	4 (100%)	14 (100%)
P 0.4 (Not Significant)				
Do you want to quit now?				
1 Yes	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2 No	4 (50%)	2 (100%)	1 (25%)	7 (50%)
3 Don't Know	4 (50%)	0 (0%)	3 (75%)	7 (50%)
P 0.3 (Not Significant)				

Table: 5 did you quit and restart the habit anytime

DISCUSSION

An overall 98.3% of subjects were aware that consumption of tobacco and tobacco related products are injurious to health. 4th-year students (100%) and house surgeons (100%) had better knowledge regarding harmful effects when compared with 3rd-year students (95%).

On general health related issues, house surgeons had marginally better knowledge when compared with 3rd-year and 4th-year dental students. An interestingly on oral health related issues; 3rd-year students had better knowledge when compared to 4th-year dental students and house surgeons. The results of Ali I et al. study in Saudi Arabia (2010) justifies the results of this present study.²⁴

Environmental pollution by tobacco smoke is a worldwide established entity. When surveyed its role in causing environmental pollution, it was the almost similar response with higher awareness among all grades of dental students.²⁵

More than (98.3%) of the respondents knew that tobacco use is harmful and can lead to various health-related issues. The effect of the influence of peers (13.8%) was a major determinant of tobacco smoking when comparable to that reported in regional and local studies. This is clearly reflected in our findings of 4th-year students. This finding should be taken very seriously as students use tobacco smoking as a stress coping strategy.²⁴

On October 2, 2008, section 4 of India's Cigarette and Other Tobacco Products Act came into action, prohibiting smoking in all public places and work places. This legislation also specified that there should be a visible board at every entrance and every floor of a public place that reads, "No Smoking Area. Smoking Is an Offence". As per this legislation, most of the dental colleges in India adopted official policies banning smoking in buildings, clinics, indoor public and common areas. This

may be the reason (97.6%) along with harmful effects of tobacco on health, favors for banning the tobacco and tobacco related products.¹ The percentage who preferred banning of tobacco was more in comparison with studies of V N Shah et al., (2005) 82.2 % in Gujarat²⁶ and 73 % in study of Harini Priya et al. (2008) in Mangalore city Karnataka.³

Majority in the present study (97.3%) agreed that passive smoking could affect family members²⁴

The majority of the student (95.2%) said that they didn't consume tobacco in any form. In the remaining 4.8% who consumed tobacco, 93% said that they consume tobacco in both smoked and smokeless form. Among those who consumed tobacco, 78.6% were those who started the habit within the last 30 days. In our study, the prevalence of tobacco consumption was low when compared to studies of V N Shah et al., 17.6% (2005) Gujarat²⁶ and more than when compared to study of Tessier J F et al., 2.7% (1992) done in more than nine Asian countries. The present study showed that 14% of the participants consumed tobacco in more than one form.²⁷

Majority of the students (42.8%) in the current study consumed less than 5 cigarettes per day which are less when compared to studies of Harini Priya et al. (2008), (70.8%) in Mangalore city Karnataka.³ House surgeons consumed more (<5 Cigarettes/day) when compared to 3rd-year and 4th-year students. Also, a good percentage of students (55%) consumed more than 6-15 cigarettes per day. 3rd-year had more prevalence when compared to 4th-year and house surgeons. Regarding smokeless tobacco consumption, the overall prevalence for < 5 /day and between 6-10/day was the same with 42.8% respectively. When compared with the year of education, 3rd-year students consumed more when compared with 4th-year and house surgeons. The above justifications may significantly contribute to the reasons for increased consumption among 3rd-year dental students. There were no similar studies to compare with the results of the present study.

Peer influence and stress can play a major role as discussed in many kinds of literatures. The majority of the users chewed for 3-6 minutes and this time enabled them to have maximum use of the product. Most of them preferred the labial mucosa, and this is commonly preferred site in most part of north-eastern India as discussed in literature. Many retained the product between 1-10 minutes and this duration with continued use over the year is a well established mechanism of changes in the mucosa which may facilitate the cancers in the oral cavity.

Surprisingly none of the participants have made an attempt to quit the habit. And 93 % revealed that if given an opportunity, they do not want to participate. There were no similar studies to compare with the results of the present study.

These findings have to be taken seriously, and a sincere effort has to be made to change the perceptions of

participating subjects. If we fail to reach them, we can have an adverse effect on them and also being a responsible dentist, they will fail to deliver the health advice to the potentially risk patients.

CONCLUSION

Majority of the subjects were aware of the ill effects of tobacco products on both oral and general health. Even the role of the individual constituent of tobacco on health was aware among the dental students. Nearly more than half the dental students (64.5%) under study were aware of the anti tobacco-cell and their activities did like tobacco counseling (49.3%) and treatment of tobacco dependence or disease related to tobacco use.

74.5% of the dental students were aware of nicotine replacement therapy. Nicotine gums (45.9%) were the most easily available product compared to patches, tablets, spray, inhalers, and lozenges. Peer influence (43.8%) was the most common reason for students developing the habit. A majority of (96.6%) of the students are in favor of stopping the habit. They consume both smoked and smokeless form (93%) of tobacco. 78.6% of the subject's chewed tobacco between 3-6 minutes, and labial mucosa (100%) was the preferred area for retention. None of the subjects have made an attempt to quit the habit and admitted that addiction was the reason for doing so and now they did not want to quit the habit. They have never come across any tobacco cessation program, and surprisingly 93% of the subjects were reluctant to participate in such programme if opportunity gives. All these findings clearly signify the need for such program to stop the habit. The concerned authority or the dental curriculum in their academics has not done any good in shaping the future dental profession. This situation should be taken very seriously, and sincere effort should be made both by the government agencies and the institutions to improve the system at large.

Many dental students consider Tobacco Cessation Counseling as an important part of their professional training & their responsibility in future as professionals. However, it also found that lack of adequate tobacco cessation training program and inadequate knowledge and awareness of tobacco cessation counseling are barriers to counseling practices. The results of this study indicate that tobacco cessation counseling may be practiced more widely and an appropriate manner if dental students will be given additional training during their undergraduate education. So, a unified effort should be made among health professionals to reduce the morbidity and mortality associated with tobacco use. With a clear vision and administrative support, we can strive to develop practitioners who feel prepared and comfortable helping tobacco-using patients to abstain.

REFERENCES

1. Salman K, Azharuddin M, R Ganesh. Attitude of dental students towards tobacco cessation counseling in various

- dental colleges in tamil nadu, India. *Int J of Scientific Study* July 2014; 2(4):20-24.
2. Reddy K S and Gupta PC. Report on Tobacco Control in India, Ministry of Health and Family Welfare, Government of India and Centers for diseases control and prevention, USA, World Health Organization. 2004; Page no 1-4
 3. Priya M H, Bhat SS, Hegde KS. Prevalence, knowledge and attitude of tobacco use among health professionals In Mangalore City, Karnataka. *J Oral Health Com Dent* 2008;2(2):19-24.
 4. Richard P. Smoking and death: the past 40 years and the next 40. *BMJ* 1994;309:937-9
 5. Rao V, Chaturvedi P. Tobacco and health in India. *Ind Journ of Cancer*. 2010;47(supp 1):S3-S8.
 6. Shailee F, Girish SM, Vikas F, Bharat B, Singh B, Praveen D et al. Knowledge of, attitude towards, and prevalence of tobacco use among dental students in Himachal Pradesh state, India. *OHDM*. 2013;12(2):73-79.
 7. Dumitrescu AL. Tobacco and alcohol Use among Romanian dental and medical Students: a Cross-sectional Questionnaire Survey *Oral Health Prev Dent* 2007; 5(4): 279-284. Vol 5, No 4, 2007 279.
 8. Jawaid A, Zafar AM, Rehman TU, Nazir MR, Ghafoor ZA, Afzal O, Khan JA. Knowledge, attitudes and practice of university students regarding waterpipe smoking in Pakistan. *Int J Tuberc Lung Dis*. 2008 Sep;12(9):1077-84.
 9. Mohanty U, Parkash H, Kohli A. Tobacco Habits Among Dental Students in Northern India. *Dentistry India*. 2009;3(1):1-10.
 10. Singh I, Anup N, Manjunath BC. Prevalence of Tobacco Habits Among Health Care Students in Jaipur. 2010;12(3):116-119.
 11. Bhatti M U D, Choksi H M, Bashir N H. Tobacco Knowledge, Attitudes and Trends amongst staff and students of university college of dentistry Lahore, Pakistan. *Pakistan Oral & Dental Journal*.2010; 30(2):468-472.
 12. Uti OG, Sofola, OO. Smoking cessation counseling in dentistry: attitudes of Nigerian dentists and dental students. *Journal of dental education* 2011; 75(3), 406-412.
 13. Clareboets S, Sivarajasingam V, Chestnutt IG. Smoking cessation advice: knowledge, attitude and practice among clinical dental students. *Br Dent J*. 2010 Feb 27;208(4):173-7.
 14. Rajasundaram P, Sequeira P S, Jain J. Perceptions of Dental Students in India About Smoking Cessation Counseling. *Journal of Dental Education*. 2011;75(12):1603-1610.
 15. Tangade PS, Ravishankar TL, Tirth A, Mathur A, Gupta V. Attitude of dental students, interns and practicing dentists towards tobacco use cessation. *J Oral Health Comm Dent* 2011;5(1)15-18.
 16. Hala H. Abou-Faddan and Sabra M. Ahmed. Knowledge, Attitude and Practice Study on Smoking among Male Students in Al-Jabal Al-Gharbi University, Gharian - Libya. *Journal of American Science*, 2012;8(11):485-491.
 17. H. Keshavarz, M.R. Khami, A. Jafari and J.I. Virtanen. Tobacco use among Iranian dental students: a national survey. *Eastern Mediterranean Health Journal*. 2013;19(8):704-710.
 18. Laura M. Romito, Farideh Kouchak, Amir Soofi, Shanila Fakhari and Mehrdad Askarian. Cigarette Smoking Knowledge, Attitudes, and Practices of Iranian Health Professions Students of Shiraz University of Medical Sciences, Shiraz, Iran-2011. *J Dent Oral Health* 2013;1: 1-8 .
 19. Ghimire A, Sharma B, Niraula SR, Devkota S, Pradhan PM. Smoking habit among male medical and dental students of B.P.Koirala Institute of Health Sciences, Nepal. *Kathmandu Univ Med J (KUMJ)*. 2013 Jan-Mar;11(41):32-6.
 20. Abdullah S. AlSwuailem, Majed K. AlShehri, Salwa Al-Sadhan. Smoking among dental students at King Saud University: Consumption patterns and risk factors. *The Saudi Dent J*. 2014 Jul; 26(3): 88-95.
 21. Anjum M, Reddy P, Monica M, Yadav K, Abbas I, Kanakamedala S. Dental Students attitude towards tobacco cessation in and around the dental colleges of Hyderabad - A cross sectional survey. Nov 2014. Page no 1-11.
 22. Didilescu A, Inagaki K, Sfeatcu R, Hanganu SC, Virtanen JI. Smoking habits and social nicotine dependence among dental students in Romania. *Oral Health Dent Manag*. 2014 Mar;13(1):35-40.
 23. Monsoon AL, Engeswick LM. Promotion of tobacco cessation through dental hygiene education: a pilot study. *J Dent Educ* 2005;69:901-911.
 24. Ali I. Al- Haqwi, Hani Tamim, and Ali Asery. Knowledge, attitude and practice of tobacco smoking by medical students in Riyadh, Saudi Arabia. *Ann Thorac Med*. 2010 Jul-Sep; 5(3): 145-148.
 25. S S Hiremath. Textbook of Prevention and Community Dentistry. 2nd Edition Page no -544-550.
 26. Shah. V. N, Verma P.B, Tripathi C.B. Knowledge, Attitude and Practice Regarding Tobacco Consumption Among the College Students of Bhavnagar City (Gujarat). *Indian Journal of Community Medicine*. 2005 Jan-Mar;30(1):1-2.
 27. Tessier J F et al. Smoking habits and attitude of medical students towards smoking and anti-smoking campaign in nine Asian countries. *J. Epidemiol*, 1992; 21:139-147.

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