

International Journal of Medical Science and Current Research (IJMSCR)

Available online at: www.ijmscr.com Volume 7, Issue 1 , Page No: 429-436

January-February 2024

Attitude and Behaviour of Dentist Towards Use Of Tobacco

¹Dr. Sonal Chhajed * , ²Dr. Priyanka Khatri , ³Dr. Vibhuti Madhad , ⁴Naitik Vora, ⁵Mansi Piplaya, ⁶Maitri Patel

¹Professor, ²Lecturer, ³Senior Lecturer, ^{4,5,6}Intern, ^{1,2,4,5,6}Department of Public Health Dentistry, ³Department of Periodontics Goenka Research Institute of Dental Science, Ahmedabad, Gujarat [India]

*Corresponding Author: Dr. Sonal Chhajed

B-102, Ratnaakar 2, Prerna Tirth Derasar road Satellite, Ahmedabad, (Gujarat), 380015, India

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Background: The dentist have their major duty to help tobacco abuser to quit and to prevent people indulging in these activity. So, this study was designed to assess the knowledge, attitude and practice of dentist of western India towards tobacco habit.

Method: It was a descriptive cross-sectional questionnaire based study, conducted among dentist in Gujarat city, western India. A total of 890 questionnaires were, out of which 872 (97.97%) responded.

Results : Total 872 students participated in the study, out of which 682 (78.09%) were male and 191 (21.9%) were female; 677(77.63%) were BDS and 195(22.4%) were MDS . The The result of study showed that out of 872 dentist, 329(37.7%) used smoked form of tobacco, 77(9.8%) used smokeless form of tobacco and 466 (53.4%) had never used tobacco. Among them 355 (87.4%) wanted to quit and 359 (88.4%) had already tried to quit the smoking.

Conclusion: The dentist themselves indulged in habit, this reflect alarming situation and demands tobacco cessation measures to be adopted by health promoters & health role models for society.

Keywords: Dentist, tobacco, knowledge, attitude, Behaviour

Introduction

According to the World Health Organization (WHO), tobacco kills more than 8 million people each year; 7 million of those deaths are due to direct tobacco use and 1.2 million are the result of exposure to second-hand smoke [1]. Tobacco smoking is responsible for 90% of lung cancer deaths and 80% of deaths from chronic obstructive pulmonary disease (COPD) [1,2]. Moreover, it increases the risk of several diseases such as coronary heart disease, stroke, oral cancers (throat, tongue, soft palate, the tonsils) and the periodontal disease [2,3,4].

Based on the common risk factor (CRF) approach, oral problems have been included in the group of

non-communication diseases. As smoking, which is one of the crucial CRFs, contributes to the main oral problems (caries, halitosis, periodontal disease, caries, oral cancer), dentists are among other health professionals who should be at the front line of antismoking strategies. They should provide patients with the necessary information about tobacco use and the consequences on oral health outcomes [5,6,7,8].

Being the oral health providers, dentist knowledge, attitude and behavior towards smoking could be of major importance in tobacco control performance. It may impact the success or failure of any form of tobacco control activities in patients. Therefore, it is

important to obtain information about their behavior and attitudes toward tobacco[9]

Health care professional plays a major role in tobacco control and cessation, both for the community as a whole or towards the individual patient. The dental health care professional have their major duty to help smokers to quit and to prevent people indulging in smoking activity. The theme of World Health Organization's World No Tobacco Day 2005 was the role of health professionals in tobacco control. The code of practice proposed by World Health Organization 2004. in encourages health professionals to provide information about the harmful effects of smoking, help smokers to quit and act as a role model to promote tobacco free life style [10] . There is evidence to show that a very brief advice for not more than 3 minutes given effectively by a health professionals will help 2% of smokers to stop smoking successfully. [11]

Health professionals who continue to smoke cigarettes direct an inconsistent message to patients whom they counsel to quit smoking. Moreover, dental health professionals, who are considered as health promoter and educator, if involve in tobacco consumption practice can leave the negative impact on society. Also, self use of tobacco has also been identified as a significant barrier to anti tobacco counseling by health professionals. Study conducted by WHO in 2005 has already showed that most of the dentist are using smoking form of tobacco [12]. So, this study was designed to assess the knowledge, attitude and practice of dentist of western India towards smoking habit.

The study was planned to achieve following objectives:

- 1. To determine the prevalence of smoking among dentist.
- 2. To know the approach of dentist towards tobacco consumption by their patients and their colleagues.
- 3. To assess the perceptions and attitudes of dentist towards participating in tobacco control and cessation activities.

Methodology:

It was a descriptive cross-sectional questionnaire study, conducted amongst dentist in Gujarat western India. The study protocol was discussed and the ethical approval was taken from the ethical committee of the Goenka Research Institute of Dental Science. The questionnaire method was preferred for data collection because it can done on convenient time, also permits group of dentist to be surveyed at a time and more suitable for recording potentially sensitive or personal information related to their tobacco abuse than personal interviews.

The questionnaire was given in google form through social media. The purpose of the study was described before to the dentist and were asked to fill the form with trustworthiness. The dentist were also assure about the confidentiality of the information given by them. Total of 890 questionnaires were distributed, out of which 872(97.97%) responded. so total 872 dentists participated in the study.

The google survey form was having total 18 questions with 5 questions each on knowledge, attitude and practice. Rest 3 question was based on age, gender and native place. The google survey form was designed to be completed in less than 3 minutes. The language, phrasing and sentence formation was checked and later questions were modified wherever required.

The following variables were included in the study:

- 1. Habit of tobacco
- 2. Reasons for tobacco use
- 3. Attitude of health professional towards tobacco
- 4. Attitude towards their patient tobacco abuse
- 5. Knowledge regarding harmful effects of tobacco
- 6. Behaviour about quitting of smoking
- 7. Barrier to quitting
- 8. Willingness to do cessation counselling

Statistical analysis:

Data was coded and entered into excel sheet which was later analyzed by using Statistical Package for Social Science (SPSS) version 17 software package. Descriptive statistics were generated for relevant items. Chi-square test was used to analyze the association between scores and other factors. The level of significance was set up at p<0.05.

Results:

Population characteristic:

Total 872 dentists participated in the study, out of which 681 (78.09%) were males and 191

(21.9%) were females; 677(77.63%) were BDS and 195(22.4%) were MDS.

Prevalence of Tobacco Consumption:

The result of study showed that out of 872 dentist, 329(37.7%) used smoked form of tobacco, 77(9.8%) used smokeless form of tobacco and 466 (53.4%) had never used tobacco. Out of 681 male, 317 (46.5%) used smoked form of tobacco and 70 (10.2%) used smokeless form of tobacco . Out of 191 females, only 12(6.28%) used smoked form of tobacco and 7(3.66%) used smokeless form of tobacco (Table 1). 37.8% of BDS and 8.17% of MDS were consuming tobacco. The reason for their smoking is shown in the bar graph (Fig II). Among them 355 (87.4%) wanted to quit and 359 (88.4%) had already tried to quit the smoking.

Attitude towards their patients smoking:

94 Dentist (17.5%) would like to advice their patient to quit, 114 (21.2%) will explain about the harmful effects of tobacco, 235 (43.8%) will advice the patient, only if he is willing to quit and 63 (11.7%) will not bother.

Willing to counsel on tobacco cessation:

Out of 872 dentist, 723 (82.9%) would like to counsel their patient for cessation of tobacco. Among them, 53.4% of non consuming tobacco, 37.4% used smoked form of tobacco and 8.8% used smokeless form of tobacco would like to do tobacco cessation counseling for their patients.

Barrier to quitting:

85(9.74%) of dentist believe that tobacco is addictive so it is one of the barrier in quitting of tobacco. 139 (15.94%) believe that quitting is difficult due to poor self determination to quit. The Dentist who smoke, among them 9.74% (85) find that addictive nature of tobacco is most important reason for not quitting.

Gender	Smokeless Form	Smoked Form	<u>None</u>	<u>Chi-Square</u> <u>Value</u>	P Value
Male	70	317	294	132.837	0.00
Female	7	12	172		
Profession					
BDS	58	272	249	76.924	0.00
MDS	19	57	217		

Table 1 - Descriptive Frequencies of Tobacco Consumption

Table 2: Comparison of participants in terms of Frequency, Duration and Place of tobacco consumption

Frequency	<u>BDS</u>	MDS	<u>Chi – Square</u> <u>Value</u>	<u>P - Value</u>
<5 times	198	23	90.828	0.00
5 – 10 times	40	42		
>10 times	22	11		
<u>Duration</u>				
<5 years	214	32	84.77	0.00
5 – 10 years	116	44		
<u>Place</u>				

(C	•	1
(C	1	2
٠	-	1	H
		1	į
		i	T

College Campus	34	12	7.682	0.1
Public place	84	30		
Home	31	25		

Figure 1: Showing data related to attitude of BDS and MDS participants on tobacco consumption habit

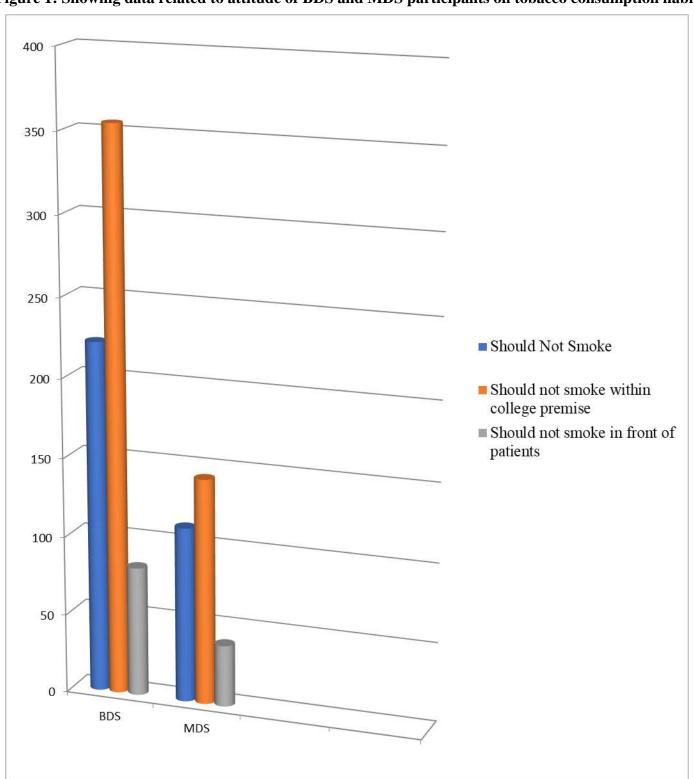
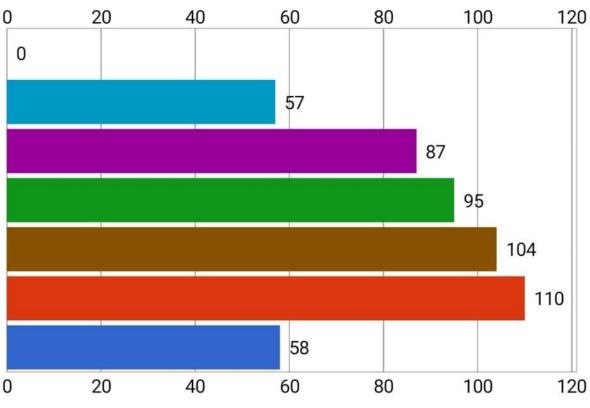


Figure 2: Showing data related to reason for tobacco abuse

Reason for your Tobacco use



- Influenced By Family members [58]
- Influenced by Friends [110]
- Study / mental tension [104]
- Influenced by teaching staff or college [95]
- Loneliness [87]
- Enjoy as leisure [57]
- other [0]

Discussion:

This study was conducted among the dentist of Gujarat city in western India. Many of the studies has already been reported in the previous literature describing health professional's attitude towards tobacco but this was the pioneer step taken to know

the knowledge, attitude and practice of dentist regarding tobacco, studying in western India.

The prevalence of smoking habit among dental students in the present study recorded was 16.3% which was similar with the study conducted by Murad Alrsheedi (2011) [13] in Saudi Arabia, who

reported 17.8% of dental students smoke cigarette. The study conducted by world health organization in 2005 among the dental students in the Indian population showed that 10% of third year students were current smokers and 3.7% currently use other tobacco products. [14] Tobacco use among the health professionals was found out to be 18.65% and 25.11% in Mangalore [15] and Jaipur [16] cities of India respectively. They reported tobacco use was highest in the form of smoking. A study conducted by Singh et al., where they reported on the usage of smoking and smokeless forms of tobacco among dental students in India and found a prevalence of 23.8%, with 44.5% and 32.8% prevalence for smoking and smokeless forms of tobacco, respectively [17]. Rodakowska et al. reported an even higher amount of prevalence of tobacco smoking among dental students from Poland and Italy, which was found to be 42% and 28%, respectively [18] In the present study, among the smokers 355 (87.4%) wanted to quit and 359 (88.4%) had already tried to quit the smoking. whereas in the study conducted in Saudi Arabia 74.6% of the smokers wanted to stop smoking and 70.8% of them had an attempt to stop smoking. [13] Also, the study conducted in Karnataka (India) showed that more than half of the tobacco users (56.92%) made an attempt to quit the habit but, more than half (60%) of them restarted the habit. [15] In the study conducted by Sanjeev et al. Out of 120 (27.90%) smokers, the majority of them (71, 59.20%) initiated smoking after enrolling in the dental program This signifies that most of the tobacco users will quit the habit if they get effective tobacco cessation counselling and proper follow up at regular interval [19]

Current study showed that almost 87.4% of dentist would like to counsel their patients for cessation of tobacco. This rate was quite high in present study when compared it to the study conducted in hungary where only 45% of the dentists and 54% of the dental students showed willingness to assist their patients in giving up smoking.[20] While, the other study conducted showed that more than 95% of students believed in taking a more active role in providing smoking cessation for patients and believed that doctors ought to set a good example to their patients. [21] Similar study were reported by Khalaf et al., where the majority of dental students from Kuwait were willing to brief their patients on smoking

cessation, but 62% perceived their role that smoking cessation was difficult [22].

The majority of the dentists in this study (51.7 %) reported that they should not smoke in front of their patients which is similar to other studies carried out in India and Jordan. [23]

The doubt in accuracy of answers reported by the dentist can be one of the limitations of the study. Also the study has included only dentist which might have affected the prevalence of smoking among the doctors.

This study concludes that the habit of tobacco was prevailing among the dentist respectively among the males. Study or mental tension was the main reason behind their habit. The prevalence of tobacco was more in BDS than in MDS. But majority of them were interested in giving tobacco cessation counselling to their patients and also had a good knowledge regarding harmful effects of tobacco.

Considering the morbidity and mortality attributable to tobacco use, dental colleges should develop and promote effective cessation program to reduce tobacco use among dentist. They should also strengthen and enforce the legislation aimed at tobacco free healthcare campus premises and buildings. Because tobacco cessation measures to be first adopted by health professionals, who happens to be health promoters & health role models for the society. Also, it has been seen that the health professionals who are consumers of tobacco are less likely to raise the issue of tobacco consumption with their patients and lack the credibility on tobacco cessation. [24] Dental council of India should emphasize more on tobacco education and dental curriculum should include the assignment for each dentist to refrain atleast one tobacco user abusing tobacco.

Tobacco cessation activities should be stressed more during CDE programmes, conferences and training modules. Both aspects, the community-based programmes and the individual communication skills, need to be emphasized. The educational system's movement towards prevention and holism is a trend that deals with the relevant themes in our changing society and that can contribute to the development of dentist attitude.

Reference :-

- 1. World Health Organization. [(accessed on 30 June 2020)]; Available online: https://www.who.int/news-room/fact-sheets/detail/tobacco
- 2. Centers for Disease Control and Prevention Smoking and Tobacco Use. [(accessed on 16 July 2020)]; Available online: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/
- 3. Winn D.M. Tobacco use and oral disease. J. Dent. Educ. 2001;65:306–312. Doi: 10.1002/j.0022-0337.2001.65.4.tb03400.x. [PubMed] [CrossRef] [Google Scholar]
- 4. Johnson G.K., Slach N.A. Impact of tobacco use on periodontal status. J. Dent. Educ. 2001;65:313–321. Doi: 10.1002/j.0022-0337.2001.65.4.tb03401.x. [PubMed] [CrossRef] [Google Scholar]
- 5. World Health Organization Regional Office for Europe WHO European Strategy for Smoking Cessation Policy. [(accessed on 9 October 2020)]; Available online: http://www.euro.who.int/__data/assets/pdf_file/0 017/68111/E80056.pdf
- 6. Carson K.V., Verbiest M.E.A., Crone M.R., Brinn M.P., Esterman A.J., Assendelft W.J.J., Smith B.J. Training health professionals in smoking cessation. *Cochrane Detabase Syst. Rev.* 2012;**16**:CD000214. doi: 10.1002/14651858.CD000214.pub2. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- La Torre G., Kirch W., Bes-Rastrollo M., Ramos R.M., Czaplicki M., Gualano M.R., Thümmler K., Ricciardi W., Boccia A. Tobacco use among medical students in Europe: Results of a multicenter study using the Global Health Professions Student Survey. Public Health. 2012;126:159–164. doi: 10.1016/j.puhe.2011.10.009. [PubMed] [CrossRef] [Google Scholar]
- 8. Ficarra M.G., Gualano M.R., Capizzi S., Siliquini R., Liguori G., Manzoli L., Briziarelli L., Parlato A., Cuccurullo P., Bucci R., et al. Tobacco use prevalence, knowledge and attitudes among Italian hospital healthcare professionals. *Eur. J.*

- Public Health. 2011;**21**:29–34. doi: 10.1093/eurpub/ckq017. [PubMed] [CrossRef] [Google Scholar]
- 9. 9.Smoking Prevalence, Attitudes and Behavior among Dental Students in Poland and Italy Ewa Rodakowska, Marta Mazur, Joanna Baginska, Teresa Sierpinska, Giuseppe La Torre, Livia Ottolenghi, Valeria D'Egidio, and Fabrizio Guerra [PubMed] [CrossRef] [Google Scholar]
- 10. 10. The GTTS Collaborative Group. Tobacco use and cessation counseling: Global Health Professionals Survey Pilot Study, 10 countries, 2005. Tobacco Control 2006; 15(2);31-4.
- 11. 11.Raw M, McNeill A, West R. Smoking cessation guidelines for health professionals. A guide to effective smoking cessation interventions for the health care system. Thorax 1998;5:1-38.
- 12. 12. Shah M N. Health professionals in tobacco control: evidence from Global Health Professional Survey (GHPS) of dental students in India. GHPS Fact Sheet. World Health Organization, 2005;1-13.
- 13 Alrsheedi M, Haleem A. Knowledge, Attitude and Behavior of Medical and Dental Students toward Smoking Habit in Saudi Arabian Universities: A comparative study. IDJSR, 2012;1(1):5
- 14 Shah M N. Health professionals in tobacco control: evidence from Global Health Professional Survey (GHPS) of dental students in India. GHPS Fact Sheet. World Health Organization, 2005;1-13.
- 15 Harini PM, Bhat SS, Hegde SK. Prevalence, Knowledge and Attitude of tobacco use among health professionals in Mangalore city, Karnataka. J Oral Health Comm Dent 2008;2(2):19-24.
- 16 Singh I, Anup N, Manjunath BC. Prevalence of Tobacco Habits Among Health Care Students in Jaipur. JK science 2010;12(3):116-9.
- 17 Singh I, Khurana J, Patil L, Jadhav MS, Chawla R, Patil PS: Assessment of habits of tobacco use among dental and nondental students of Indian population: a cross-sectional study. J Pharm Bioallied Sci. 2021, 13:S417-20

- 18 Rodakowska E, Mazur M, Baginska J, et al.: Smoking prevalence, attitudes and behavior among dental students in Poland and Italy. Int J Environ Res Public Health. 2020, 17:7451. 10.3390
- 19 Cigarette Smoking and Nicotine Dependence Among Dental Students in Riyadh, Saudi Arabia:A Cross-Sectional Study 2023 Khanagar et al. Cureus 15(11): e48676. DOI 10.7759/cureus.48676
- 20 Antal M, Forster A, Zalai Z, Barabás K, Ramseier C, Nagy K. Attitudes of hungarian dental Professionals to tobacco use and cessation. Cent Eur J Public Health 2012; 20 (1): 45–9.
- 21 Sinha DN, Gupta PC, Warren CW, Asma S. School Policy and Tobacco Used By Students in Bihar, India. Indian J Public Health 2004; 48(3):118-22.

- 22 Khalaf ME, Curtin S, O'Reilly Trace A: Perception and attitudes of dental students towards their role in the delivery of a brief smoking cessation intervention. Med Princ Pract. 2020, 29:69-74. 10.1159/000501420
- 23 Merrill JR, Madanat HN, Cox E, Merrill JM. Perceived effectiveness of counselling patients about smoking among medical students in Amman, Jordan. East Mediterr Health J. 2009;15(5):1180-91.
- 24 Raw M, McNeill A. Tobacco dependence treatment in England (WHO/NMH/TFI/FTC/03.3). In: "Tools for Advancing Tobacco Control in the XXIst century: Success stories and lessons learned." Geneva, World Health Organization, 2003.