

Attitude of Dental Students Towards Tobacco Cessation Counseling in Various Dental Colleges in Tamil Nadu, India

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Abstract

Background: Attitude of dental students towards tobacco cessation counseling is gaining attention all around to provide dental practitioners who feel prepared and comfortable in helping tobacco using people to abstain.

Purpose: To assess the attitude of dental students towards the tobacco cessation counseling.

Materials & Methods: The study was conducted among clinical dental students of 3 different colleges in Tamil Nadu, India. A 16 item survey was administered to all the participants. Questions focused on the dental students' attitude towards the tobacco cessation counseling.

Results: Response rate was 100% (425/425). Respondents were 173 (40.7%) males and 252 (59.3%) females. There were 107 (25%) 3rd year, 157 (37%) 4th year and 160 (38%) Interns of Dental students. Eighty percent agreed that it is within the scope of dental practice to advise patient to quit tobacco and 91 percent agreed that tobacco cessation counseling in the dental office could impact patient's quitting. Nearly 15% were slightly or not interested in receiving tobacco cessation training.

Conclusion: Attitude of the participants appears to be positive regarding the Dental professionals' responsibility to encourage the patients to quit using tobacco.

Keywords: Attitudes, Counseling, Dental Professionals, Intervention, Tobacco cessation

INTRODUCTION

Of all the rights cherished by human beings and enshrined in international law, none is more fundamental than the right to health. Asked to rank their aspirations, men and women around the world name good health as their number one desire. One of the greatest threats that desire today is the epidemic of tobacco use.¹

Tobacco use is generally described as the most preventable cause of morbidity and mortality all around the world, with the World Bank fortelling over 450 million tobacco deaths in the next fifty years.² Tobacco-related mortality in India is among the highest in the world, with about 900,000 annual deaths because of smoking in the last decade.³ Annual oral cancer incidences in the Indian subcontinent has been

estimated to be as high as 10 per 100,000 among males, and these rates are steadily increasing in a great manner among young tobacco users.⁴

Smoking remains a significant public health problem worldwide. The adverse health effects from cigarette smoking are undisputable. Besides reducing the health of smokers in general, smoking harms nearly every organ of the body, causing many serious illnesses such as cancer, cardiovascular diseases, and pulmonary diseases. In addition, tobacco use is also a primary cause of many oral diseases and conditions, ranging from mild to life-threatening, such as stained teeth and restorations, taste derangement, halitosis, periodontal diseases, poor wound healing, oral precancerous lesions, and oral cancers.⁵

The prevention and control of tobacco use is an emerging issue of global significance and the important links between smoking and oral health provide a unique opportunity for Dentists to become involved in smoking cessation activities.⁶ Smoking cessation advice provided by Dentists has been shown to be effective.⁷ Dental treatment that often necessitates multiple visits provides the mechanisms for initiation, reinforcement, and support of tobacco cessation activities. Cessation advice can also be associated with readily visible changes in oral status. Cessation rate of 8.6% after one year of counseling alone has been reported, and when combined with prescription of Nicotine Replacement Therapies, the quit rate increased.⁸

The purpose of this study was to determine the attitudes of Dental students in Tamil Nadu towards Tobacco use cessation, as well as barriers that prevent them from doing so.

MATERIALS AND METHODS

The study area was the Dental colleges in Tamil Nadu, India. The study population for the study was comprised of third year, final year, and interns of three different Dental colleges chosen randomly to collect the data. The study was approved by the Institutional Review Board. The permission to conduct the survey was obtained from Institutional Ethical Committee of Priyadarshini Dental college & Hospital.

The sample size was estimated as 425 based on staff supportiveness and breadth of interest from previous studies. The power of the sample size was 80 percentage with 0.05 percent of alpha error according to statistician. A well structured, pretested, self administered questionnaire was adapted from Victoroff *et al.*'s survey. Additional items were developed to determine the practices, barriers, training, needs and willingness to provide smoking cessation services.

The questionnaire includes socio demographic information (gender and study level), and questions on attitudes, awareness of smoking cessation, willingness to provide cessation services, and barriers to smoking cessation advice in the Dental setting. Additionally, questions were asked about attitude and opinions regarding current level of interest in receiving training and introduction of Tobacco cessation course in Dental curriculum.

The questionnaires were distributed to students during lecture periods and retrieved immediately. All the

Dental students who were present in college over a period of first week of December 2013 completed the questionnaire.

The collected data was entered on a MS excel sheet and descriptive analysis was done using SPSS V16.0 software. Descriptive statistics were conducted for all questions and frequency tables generated. Differences were considered statistically significant at the level of $p < 0.05$.

RESULTS

Totally 425 Dental students has participated in the study. Out of 425 respondents 173 (40.7%) were males and 252 (59.3%) females. The age group participated in the study were 18-30 years. Figure 1 shows distribution of academic years of the Dental students.

Almost 213 (50.1%) respondents felt they were responsible as a Dentist to provide smoking cessation counseling significantly, 203 (47.8%) respondents thought smoking cessation counseling provided by Dentist effective to a considerable extent and 130 (30.6%) respondents to some extent. 184 (43.3%) respondents were confident in their ability to effectively offer the smoking cessation counseling to a considerable extent.

Only 159 (37.4%) respondents thought that patient expects smoking cessation advice from Dentist, 142 (33.4%) to a considerable extent are optimistic in patient ability to change their smoking habit, while 137 (32.2%) believed it to some extent.

387 (91.1%) respondent thought they have sufficient knowledge to assist the patient with tobacco cessation,

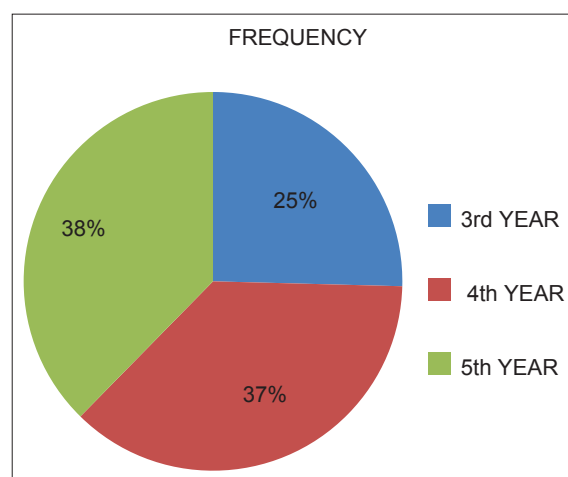


Figure 1: Pie diagram for age group participated in the study

170 (40%) feels prepared and 171 (40.2%) are comfortable to assist and advice patient in tobacco cessation.

169 (39.8 %) respondents thought 5 minutes was enough for TCC, while only 115 (27.1%) thought they need 10 minutes or greater time to spend in tobacco cessation counseling. More than 190 (44.7%) respondents feel that tobacco cessation training should be a part of the Dental curriculum. 353 (83.1%) of the respondent takes a tobacco usage histories from all the patients. More than 384 (90.4%) respondents thought the role of tobacco in the etiology of oral cancer.

Almost 378 (88.9%) respondents agreed to the information such as posters or pamphlets displayed in their institution. Responses to questions on attitudes by Dental students are shown in Table 1.

DISCUSSION

The Dental office provides an excellent setting for providing tobacco cessation intervention services. Dental patients are particularly more aware, little quick to understand health messages during every dental visits, & oral effects of tobacco use which ultimately provide strong motivation for tobacco users to quit. Hence every dentist should always be ready and prepared to intervene patients who visit their dental office.

There are 5 major steps (the “5 As”) to intervention in the primary care setting. It is important for the Dental care provider to “Ask” the patient if he or she uses tobacco, “Advice” him or her to quit, “Assess” willingness to make a quit attempt, “Assist” the patient in making a quit attempt, and “Arrange” for follow-up contacts to prevent relapse.⁹⁻¹¹

Our study investigated the attitudes and views of clinical Dental students from 3 Dental colleges chosen randomly

in Tamil Nadu, India. The study sample consisted of 425 respondents, comprised of III year, IV year and interns Dental students.

On October 2, 2008, Section 4 of India’s Cigarette and Other Tobacco Products Act came into action, prohibiting smoking in all public 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.¹² This may be the reason that 88.9 % of the students in our study reported that tobacco cessation information was displayed within their institution.

Very few of the the respondent had a positive attitude about tobacco and its users which is consistent with the literature.^{13,14} And which is in concurrence with our finding that more than 90 % of the respondent knew that tobacco use is harmful even in small quantity and has a role in etiology of oral cancer.

Almost 346 (81.5%) Dental students in Tamil Nadu agreed about their role in smoking cessation counselling although opinions on the degree of responsibility varied. A similar study done in Nigeria by Omolara. G. Uti (2011)¹⁵ among Dental students in Lagos University Teaching Hospital, Lagos, Nigeria, found that only 3 percent of Dental students considered their role in smoking cessation as important. It was noted that the attitudes insmoking cessation counselling among Dental students in Tamil Nadu was more favourable than Dental students in Nigeria. However this was not an issue as ones attitude depends on many background factors such as knowledge, training, past experiences as well as interests and rewards in practices, which were not explored in this study.

Table 1: Dental students responses to questions on attitudes by percentage of total respondents

	Agree	Neutral	Disagree
It is the dental professional’s responsibility to:			
Educate patients about the risk of tobacco use related to overall health or well-being	346 (81.4%)	78 (18.4%)	1 (0.2%)
Educate patients about the risk of tobacco use related to oral health			
Encourage patients to quit using tobacco			
It is within the scope of dental practice to:	338 (79.5%)	87 (20.5%)	-
Ask patients if they use tobacco			
Advise patients to stop using tobacco			
Discuss health hazards of tobacco use			
Discuss benefit of stopping			
Responses related to effectiveness of smoking cessation programs:	267 (62.8%)	121 (28.5%)	37 (8.7%)
Tobacco cessation counseling offered in the dental clinic can have an impact on patients’ stopping			
The dentist’s time can be better spent doing things other than stopping tobacco use in patients			
It is not worth discussing tobacco use with patients since most people already know they should stop			

Nevertheless, there is an agreement with results of other studies done in the United States (Logan *et al.*, 1992),¹⁶ the United Kingdom (John *et al.*, 1997; Stacey *et al.*, 2006),¹⁷ Australia (Clover *et al.*, 1999),¹⁸ and Saudi Arabia (Wyne *et al.*, 2006)¹⁹ that Dentists generally believed that it was part of their responsibility to help patients in smoking cessation.

Some respondents may be skeptical about the extent to which tobacco cessation counselling promotion is effective in helping patients to quit. When asked about the impact of tobacco cessation counseling on patient's quitting, almost 91% respondents agreed that counseling can have an impact. About 62.8 percent of respondents agreed with the statement "It is not worth discussing tobacco use with patients, since most people already know they should quit", but more than 37 percent were neutral or disagreed to it. About 20 percent agreed that the Dental Professionals' time can be better spent doing other things. These responses are at a variance with the results of the study by Victoroff *et al.*⁹ and they suggest that the majority of respondents are positive about the extent to which tobacco cessation counseling promotion is effective in helping patients to quit, but some may have reservations about effectiveness.

The inclusion of smoking cessation training in the dental curriculum also becomes paramount if smoking cessation behaviour in dental practice is to be improved,^{20,21} and almost 258 (84.2%) respondents also felt that tobacco cessation training is an important part of Dental curriculum.

If the goal of tobacco cessation curricula is to influence students' future clinical practice behaviors – to produce practitioners who incorporate tobacco cessation promotion as a routine component of Dental practice – then instructors must understand where students are starting from. Attitudes, concerns, and reservations must be acknowledged and addressed. Students need to understand the principles of tobacco cessation. Further, Dental Faculty need to reinforce the tobacco interventionists' message more consistently and clearly.

CONCLUSION

Present study found that a majority of the students and interns in three different Dental colleges in Tamil Nadu, India planned to provide Tobacco Cessation Counseling in their professional career and saw it as part of their professional role as Dentists. However, it also found that lack of adequate tobacco cessation training 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 in 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.

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