

# Attitudes, practices, and perceived barriers in tobacco cessation counseling among dentists of Chennai

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## ABSTRACT

**Aim:** The aim of this study is to investigate the attitudes and practices of dentists from Chennai with respect to their roles in tobacco cessation counseling and to identify the barriers. **Method of Investigation:** Survey design was used to conduct the study. Multistage sampling method was adapted to select the participants. In Stage 1, cluster sampling was used to select the practicing dentist in Chennai city. In Stage 2, simple random sampling was used to select a subset of dentist covering Chennai city. A total of 250 dentists of Chennai city were selected for the study. A semi-structured questionnaire was given to them and the responses were recorded. The questionnaire comprised demographic details and 13-item questionnaire related to attitudes, practices, and barriers among dentists for tobacco cessation counseling. **Results:** A total of 200 questionnaires were returned with the response rate of 80%. Of 200 respondents, 160 (80%) were male dentists and 40 (20%) were female dentists. Age of dentists varied from 25 to 48 years, with the mean age of  $34.2 \pm 7.3$  years. Most of the dentists strongly believed that it is their responsibility to educate the patients regarding tobacco cessation counseling. The lack of proper training was found to be the major barrier for tobacco cessation counseling among dentist. **Conclusion:** Dentist has a positive attitude for tobacco cessation counseling, but lack of proper training is a significant barrier for their failure. Hence, dentists should be given proper orientation and training toward tobacco cessation counseling during their curriculum.

**KEY WORDS:** Attitude, Dentist, Practice, Questionnaire study, Tobacco cessation

## INTRODUCTION

Tobacco use is one of the leading causes of premature mortality and morbidity globally.<sup>[1]</sup> There were 5.4 million tobacco-attributable deaths in 2005. It is expected that by the year 2030, tobacco will be the single biggest cause of death globally and will be accounted for about 10 million deaths annually.<sup>[2]</sup> In low-income countries, aggressive marketing strategies of tobacco industry have led to considerable rise in tobacco use.<sup>[3]</sup>

The harmful effects of tobacco are proven ever since the 1950s.<sup>[4]</sup> It has been reported that dependence on tobacco is a chronic condition that requires repeated interventions by health-care providers and multiple attempts by the patients to stop this habit.<sup>[5]</sup>

The harmful effects of tobacco use are exerted on all the human biological systems including oral cavity.<sup>[6]</sup> Various countries are showing increasing interest in utilizing dental settings for tobacco cessation. Due to regular recall of patients and the consequent opportunity of assisting people to lifestyle change, dentistry has a potential setting for several aspects of clinical public health interventions.<sup>[7-9]</sup>

The rate tobacco quitting can be increased significantly by interventions in dental settings.<sup>[10,11]</sup> Research indicates that mentioning the link of oral lesions with patients' tobacco use is a very strong motivating factor to induce a cessation attempt.

Although dental care settings provide an exceptional opportunity to reach smokers and provide brief cessation advice and treatment to reduce oral and other tobacco-related health conditions, past studies have shown that dental practitioners need clear pathways for their involvement in managing tobacco use and dependence.<sup>[12]</sup>

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It is a professional and ethical responsibility of the dentists to be trained in and provide tobacco cessation interventions. Several researches have proved that dentists' counseling might be more effective than physicians and other health-care providers in helping patients quit tobacco use.<sup>[13]</sup> Gordon and Severson stated that the dental professional should play an important role in tobacco cessation activities within their clinical setup.<sup>[14]</sup>

Hence, the aim of this study is to investigate the attitudes and practices of dentists from Chennai with respect to their roles in tobacco cessation counseling and to identify the barriers.

## METHOD OF INVESTIGATION

A cross-sectional survey was carried out among the 250 dentists of Chennai city. Before conducting the study, the research protocol was submitted to the Ethics Committee of Saveetha Dental College and Hospital and the approval to conduct the study was obtained. Multistage sampling method was adapted to select the participants. In Stage 1, cluster sampling was used to select the practicing dentist in Chennai. In Stage 2, simple random sampling was used to select a subset of dentist covering Chennai by table of random numbers.

The survey was scheduled to spread over a period of 3 months. The purpose and procedure of the study were informed to each participant dentist and those dentists who are willing to participate in the study had given their informed consent.

A semi-structured questionnaire developed in English was given to them and the responses were recorded. The questionnaire comprised demographic details and 13-item questionnaire related to attitudes, practices, and barriers among dentists for tobacco cessation counseling. Prior appointment was taken through telephone, and later, the dentists were contacted as per their convenient time. Questionnaire was administered by the investigator (PE) to each participant dentist, and the dentists were interviewed face to face.

### Statistical Analysis

Questionnaires which were completely filled were considered for the analysis. The data were analyzed by applying descriptive statistical analysis. Analysis was carried out using the Statistical Package for the Social Sciences Version 17 (SPSS Inc., Chicago, IL, USA).

## RESULTS

### Demographic Characteristics

A total of 200 questionnaires were returned with the response rate of 80%. Of 200 respondents, 160 (80%) were male dentists and 40 (20%) were female dentists.

Age of dentists varied from 25 to 48 years, with the mean age of  $34.2 \pm 7.3$  years.

### Attitudes of Dental Surgeons Regarding Tobacco Use

About 82.5% of the clinicians asked their patients regarding tobacco use, but only half of the respondents discussed the health hazards and benefits of quit smoking. With regard to referral to cessation clinics, only 22.5% of the dentists refer while 17.5% of the respondents followed up their patients for tobacco cessation.

## DISCUSSION

The present study has provided interesting information about the attitude and the current practice among dentists of Chennai regarding tobacco cessation as well as various barriers met during their practice. The result of this study has also offered encouraging views of dentists' current activities and their responsibility for future involvement in smoking control.

The direct comparison and contrast between the findings of this study with previous studies are difficult as various studies have done the assessment using varieties of questionnaires at different setups.

### Attitude toward Tobacco Cessation Counseling

Majority (96%) of the dentists in this study believed that it is their responsibility to educate the patients regarding the risk associated with the tobacco use and to encourage the patients to quit the tobacco use. These findings are in consistent with other surveys having the nearly same purpose conducted in Canada,<sup>[15]</sup> Malaysia,<sup>[16]</sup> the USA,<sup>[17]</sup> Saudi Arabia,<sup>[18]</sup> and Australia.<sup>[19]</sup> However, the dentists were not much confident in tobacco cessation counseling. In this study, all the dentists reported that they asked their patients routinely about their tobacco consumption.

Good numbers of dentists support strict legislation on tobacco use. Data from around the world suggest that up to half of all dentists advise their patients and suggest methods to quit tobacco.<sup>[20,21]</sup> While interviewing with the dentists, it was revealed (data not presented) that the few dentist smoke during their clinical practice. Majority of dentist (89%) supported the increase in price and size of warning labels on tobacco products. More than half (93%) of the health professionals also felt that the media and celebrities promoted tobacco, either directly or indirectly, calling for measures to control such promotion of tobacco use.<sup>[22]</sup>

### Practice of Tobacco Cessation Counseling

It was agreed by few dentists that too much time was spent on providing routine dental treatments such that it was almost impossible to give tobacco cessation counseling to their patients. Similar responses were found in studies conducted by Stacey *et al.*<sup>[23]</sup> In

spite of that, only 22.5% of dentists in this study refer smokers to a smoking cessation expert or quit smoking clinics, and this was in contrast to the study by Trotter and Worcester.<sup>[24]</sup>

Only 17.5% of dentist scheduled a follow-up visit for their patients. Follow-up visits during the abstinence period often provide the dentist with an opportunity to review the progress of smoking cessation, encourage the patients, identify problems, and initiate a new intervention or modify the current one if necessary.

### Barriers to Tobacco Cessation Counseling

Inadequate time, lack of training, and fear of losing the patient due to counseling were the important barriers faced by dentists. The results of the present study showed that the less than half of the dentists believe that the major constraint for providing tobacco cessation counseling was lack of training, which was also noted in Australia<sup>[25]</sup> and Hongkong.<sup>[26]</sup>

In the present study, it is evident that lack of interest on tobacco cessation was the major obstacle in implementing smoking cessation interventions. This might be due to inadequate training in smoking cessation interventions after graduation and a lack of emphasis on smoking education in the dental curriculum. These urge the need to give priority to smoking cessation education in the dental colleges and continuing education programs after graduation.

However, there are certain limitations of the study such as information obtained through self-administered questionnaire have to be interpreted with caution due to bias created through favorable responses. It is possible that dentists who agreed to participate or completed and returned the questionnaire were more interested in the issue as compared to those who did not participate, resulting in possible overestimation of positive responses.

### RECOMMENDATIONS

Tobacco cessation guidelines should also incorporate the “5As” or “5Rs” (i.e., relevance, risks, rewards, roadblocks, and repetition), which constitute the gold standard adopted in the UK, USA, New Zealand, and elsewhere.<sup>[27]</sup> Training may boost the confidence dentists to become involved in tobacco cessation counseling and, in turn, may help them take a more effective role in such counseling. Continuing education and training for tobacco cessation should be organized by the government and health department. Studies have shown that dentists trained in tobacco cessation counseling were able to contribute to tobacco cessation programs in the community with good success rates, comparable to the rates reported in general practice settings.<sup>[28,29]</sup>

### CONCLUSION

The present study provided an interesting insight into the attitudes and practices related to tobacco cessation counseling as well as various barriers encountered by the dentists of Chennai during their clinical practice. Within the limitation of the study, it can be concluded that the dentists have a positive attitude for tobacco cessation counseling, but lack of proper training is a significant barrier for their failure. Hence, more practical training in helping patients on tobacco cessation should be included in the dental curriculum. In an attempt to encourage dentist to become more involved in tobacco cessation, a simple yet effective protocol should be introduced.

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