

Attitude Towards and Practice of Tobacco Cessation Counselling Among the Dentist and Dental Hygienist of Urban and Rural Areas of Chitradurga District, India

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ABSTRACT

Background: To assess the attitude of dental professionals, including the dentist and dental hygienist towards the TCC and identify the possible barriers towards the implementation of these practices in the rural and urban areas of Chitradurga district.

Materials and Methods: The stratified random sampling was employed to select 120 dentists and 120 dental hygienists from the urban and the rural areas of the Chitradurga districts, respectively. The study tool comprised of the closed-ended multiple-choice questionnaire in the local language which was personally administered.

Results: The regular users of the tobacco were higher among the dental hygienist (24.5%) as compared to the dentist (14.2%). However, the attitude of the dental professionals was negative towards the equal priority of the tobacco cessation counselling over the dental treatment in dental practice.

Conclusion: Dental professionals are uniquely poised to contribute to the battle against tobacco use. When tobacco users receive a consistent anti-tobacco message from a variety of health care providers, the likelihood of success in the battle to quit is increased.

Keywords: Tobacco cessation, oral cancer, primary prevention, health promotion, dental professionals.

INTRODUCTION

According to the estimates of the World Health Organization, tobacco is the second leading causes of mortality worldwide and the fourth most common risk factor for disease worldwide. More than 75% of tobacco-related deaths occur in low- and middle-income countries due to the high prevalence of smoking among men.^[1] In India, 7% of all deaths (for ages 30 and above) are attributed to tobacco use. ^[2] Further, the widespread use of tobacco in the smoking and smokeless forms have

contributed to the increasing burden of non-communicable disease, particularly lung cancer, oral and oesophageal cancer, hypertension and cardiovascular diseases. ^[1]

In addition to its association with other conditions, tobacco use plays a significant role in the aetiology of a number of oral conditions. ^[3] It's a primary risk factor for oral cancer, periodontitis and delayed wound healing. ^[4,5,6] Similarly tobacco use is

Received: Nov. 15, 2020; Accepted: Dec. 25, 2020

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associated with halitosis (foul odour), stained teeth, exposed roots, loss of taste and several other intraoral lesions. [7,8] Smokeless tobacco increases the risk for pharyngeal and oesophageal cancers. [9] There is emerging evidence relating maternal smoking with the development of cleft lip in the child. [10,11,12] Also, some studies relate maternal smoking to the development of primary caries in children. [13,14]

The harmful effects associated with the tobacco usage make it a serious public health issue which needs to be addressed with vigour and intensity. Tobacco cessation counselling is one of the most effective approaches that can be directed towards the control of this serious public health issue. Dental professionals are in a perfect place and have many opportunities to provide tobacco cessation counselling (TCC) to reduce the prevalence of tobacco use. [15,16,17] As dental treatment often requires multiple visits, hence it provides a system for initiation; reinforcement and support of tobacco cessation activities. [18,19] Dentists have the advantage to correlate cessation advice, and subsequent follow up visits with the obvious visible changes in the oral status. Hence, the dental office can be considered to be ideally suited to provide TCC. Despite the potential, not many dentists are involved in TCC activities.

The factors that might have contributed towards the lack of the counselling by the dental professionals include lack of knowledge and attitude, professional and personal barriers including the lack of professional training, anticipated negative feedback from patients, fear of patients leaving the practice, lack of confidence in their ability and skills to provide effective counselling. [7,20]

In India, there has been an increasing prevalence of tobacco use, particularly among adolescents and young adults due to lack of education, cultural impact and peer group influence. This provides with an opportunity for dental health professionals to effectively provide tobacco cessation counselling in the office and community settings. However, in rural areas, where the habit of tobacco use is more prevalent, there is no organized dental health care delivery system. Majority of the dental services in the rural areas are still provided by the unqualified quacks and the dental hygienists who hardly practice tobacco cessation counselling in their

routine dental practice. In the urban areas, there have been concerns among the qualified dental professionals regarding the TCC in their dental settings. [21]

The present study aims to assess the attitude of dental professionals including the dentist and dental hygienist towards the TCC and identify the possible barriers towards the implementation of these practices in the rural and urban areas of Chitradurga district.

MATERIALS AND METHODS

The present cross-sectional survey was carried out among the dental professionals including the dentist and dental hygienist of the Chitradurga district to assess their attitude and practice of tobacco cessation counselling in the dental office and identify the possible barriers towards implementation of such practices.

The stratified random sampling was employed to select 120 dentists and 120 dental hygienists from the urban and the rural areas of the Chitradurga districts, respectively, who were registered with the state dental council. The informed consent was taken from the participants of the study, and ethical clearance was obtained from the Institutional Review Board of SJM Dental College & Hospital, Chitradurga, Karnataka state.

The study tool comprised of the closed-ended multiple-choice questionnaire in the local language which was personally administered and pretested to check for the feasibility. The questionnaire comprised of four sections: the socio-demographic profile, attitudes in tobacco cessation, practices in tobacco cessation interventions and related barriers towards implementation. The responses to the questionnaire were marked on the multiple-choice two-point scale.

The survey data were analyzed using the SPSS 16 version software package. The descriptive statistics (frequency) was generated for each question.

RESULTS

The response rate for the questionnaire among the dentist was 100% whereas among the dental

hygienist 110 out of 120 (86.4%) responded to the questionnaire (Table 1). The mean years of the dental practice were 22.4 ± 9.1 and 10.2 ± 7.6 for the dentist and dental hygienist, respectively. 72.5% of the dentist had never used the tobacco, whereas 62.7% of the dental hygienist reported being non-tobacco users. The regular users of the tobacco were higher among the dental hygienist (24.5%) as compared to the dentist (14.2%). Further, the survey results revealed that the majority of the dentist (88.3%) had received the undergraduate training on tobacco cessation counselling as compared to only 65.4% among the dental hygienist.

The responses to the items related to the attitude of the dental professionals towards tobacco cessation counselling are shown in Table - 2. The attitude of the majority of dentist towards the tobacco cessation counselling was positive as compared to the dental hygienist. 69.2% of the dentist were of the view that dental health professionals should provide tobacco cessation counselling as compared to 59.1% among the hygienist. 91.7% of the dentist had a positive attitude towards the specific training for the tobacco cessation counselling. However, the attitude of the dental professionals was negative towards the equal priority of the tobacco cessation counselling over the dental treatment in dental practice.

The practice of the tobacco cessation counselling by the dental professionals of the district are outlined in the responses of the questions in Table-3. Only 12.5% and 6.3% of the dentist and dental hygienist had ever used the nicotine replacement therapy in their dental practice. 21.8% of the dental hygienist had attended some continuing dental education programme or discussed TCC with the peer professionals. However, About 60% of the dental professionals, including dentist and dental hygienist, had ever educated about TCC to their patients and 82.5% of the dentists enquire from your patients about their tobacco habits.

The responses to the questions on barriers to tobacco cessation counselling by dentist and dental hygienist are shown in the Table-4. The lack of knowledge and information regarding TCC was the only perceived barrier among the dentists (51.7%) and dental hygienist (74.5%). Majority of the dentist and hygienist responded in negative to the

questions on monetary loss, time constraint and fear of the negative impact on clinical practice as the barriers towards Tobacco cessation counselling.

DISCUSSION

In the present study, only 14.2% of the dentist and 18.3% of the dental hygienist were found to be current smokers. With these findings, the concept of health professionals being the role models has got strong support. The data from the European studies indicate that 71% of the health professionals view themselves as the role models for the tobacco cessation. In Sweden, smoking prevalence among Swedish physicians has regularly declined from 46% in the 1960s to a current 6%, with general practitioners the least likely to smoke, at 4%.^[22] In Finland, smoking among male doctors has decreased from 60% to 7% in thirty years.^[23] Similar findings have been noted in the USA, Great Britain and Australia.^[24] The significance of these dentists' habits should not be underestimated when the profession should be involved in national anti-tobacco campaigns, especially with the youth of the country. It seems logical to state that if health professionals (dentists here) are role models and when health professionals are not smoking, then the effectiveness of counselling to patients will be increased

The study results have shown that the dentist and the dental hygienist reflected the positive attitude towards the tobacco cessation counselling in the dental practice. 69.3% of the dentist agreed to view that the dental health professionals should effectively advise their patients to quit smoking and 91% of the dentist supported the specific training programmes on tobacco cessation techniques. Similarly, 59.7% of the dental hygienist supported the view of TCC, and 86.3% were interested in specific training programmes. The findings are in agreement with the study on the attitude of the Irish dentist, dental hygienist and dental nurse towards tobacco cessation.^[25]

In the present study, 82.1% of the dentist and 67.2% of the dental hygienist reported that they enquire about the tobacco habits from the patients during their routine clinical dental practice. In the results from the similar study reported that only 52% of the dental health professionals enquire about tobacco use.^[26] The findings of the present

study are quite encouraging in light of the fact that oral health care providers represent a key health resource in reducing tobacco use. The approach of dental professionals towards the use of Nicotine replacement therapy has been found to be discouraging. Only 12.5% of the dentist and 6.3% of the dental hygienist had ever used NRT for tobacco counselling. This might be attributed to a lack of information about the availability of the product, inconsistent academic detailing of the dental professionals' regarding these products by pharmaceutical companies and the high cost of these products.

Lack of knowledge, information and training, not the financial loss and time constraints have been found to be a barrier in the implementation of Tobacco cessation strategies in the present survey by the dental professionals. The findings are in agreement with the study of Hastreiter R et al. & Albert D et al. [7, 27] Tobacco-use cessation education provided in dental schools is neither comprehensive nor systematic; much of the effort is directed at the consequences of smoking, and little attention is paid to cessation activities. [28] Nearly 25 per cent of dental schools and 36 per cent of dental hygiene schools do not include questions about tobacco on their health history forms. There are few continuing education courses that specifically address tobacco-use cessation, and only 19 per cent of dentists or dental hygienists have completed formal training in tobacco-use cessation. [29] The inclusion of TCC in Undergraduate curriculum is the need of the hour. There was a unanimous voice of the responding professionals in this study towards the inclusion of TCC training in the curriculum. There should be continuing dental education programs for clinicians to better and sharpen their skills in TCC and harvest their confidence in a positive direction to carry out the interventions.

Now the question that arises here is: - Can the dental professionals raise to this mounting challenge of tobacco cessation interventions? Dr William Foege, who directed the smallpox global eradication program, once said, "One individual who is given a challenge will say, 'I can't do that.' Another will respond, 'I can.' Both are right". [19] Now it is up to the dental professionals; to what individual they want to be characterized with. But it is important for dental professionals to rise to the occasion. Smoking cessation programmes delivered

in medical and dental offices have proven successful with one-year quit rates at between 5 and 15% and have become increasingly attractive as an avenue for promoting a smoke-free environment. The American Dental Association and the American Dental Hygienists Association strongly support tobacco intervention training for their members. Frequent contact over time with an oral health worker trained to provide tobacco use cessation counselling improves the success of quit attempts. [30,31,32,33,34,35,36]

Some of the acknowledged limitations of the study are that there was no age and gender characterization in the study. There was also no characterization on the basis of postgraduate/undergraduate qualification and hence results could not be stratified and compared on the basis of demographic details.

CONCLUSION

Dental professionals must expand their horizon and armamentarium to include TCC strategies inclusive of their regular preventive and therapeutic treatment modalities. Also, the dental institutions should include TCC into the curriculum, but it should not be just theoretical knowledge rather it must have a practical component so that the upcoming bunch of professionals have the requisite and desired competency to fight one of the preventable causes of death. Students and Interns should also be inspired and motivated to carry out tobacco awareness and cessation programs, especially at the rural level. It is also recommended to train the dental professionals at the primary and community health care levels in the treatment of tobacco dependence as most people in India cannot afford to go to specialist TCC centre's nor can the government afford to run them on a large scale.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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