

PERCEPTION ABOUT THE ROLE OF ORTHODONTIST IN TOBACCO CESSATION- A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Tobacco is the leading preventable cause of death and more than five million people die globally from the effects of tobacco every year. 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.

Materials and methods: A Self-administered structured, coded questionnaire was distributed to 100 private practitioner Orthodontists and teaching staff in all the dental colleges in Chhattisgarh city. The 100 dentists to whom the questionnaire was sent included the Orthodontists working in the dental colleges, those having private practice, postgraduates were included in the study.

Results: 52% are optimistic about the capability of dentists in tobacco cessation though 40% felt that the dentists are not presently well prepared to assist the patients. 98% strongly agree that formal training will be an effective tool to provide the guidelines to Orthodontists in tobacco cessation and counseling.

Conclusion: Dental care settings provide an exceptional opportunity to reach Tobacco users and provide brief cessation counselling and treatment to reduce oral and other tobacco-related health conditions. Orthodontists share a moral responsibility by getting involved in helping their patients to quit tobacco by learning the correct Techniques.

KEYWORDS: Awareness, Tobacco, Oral Cancer, Tobacco Cessation, Orthodontists

INTRODUCTION

Tobacco is the leading preventable cause of death and more than five million people die globally from the effects of tobacco every year.¹ 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 counselling from health professionals can substantially increase smoking cessation rates.²⁻⁵ Even a small reduction in tobacco use initiation rates during the critical adolescent period could have substantial public health benefits, including the prevention of many premature deaths. Because orthodontists see large numbers of youth repeatedly over 2 or more years, they are especially well suited for testing questions about the effectiveness of clinicians' ability to prevent tobacco use.⁶ The early phase of orthodontic tooth movement always involves an acute inflammatory response, characterized by periodontal vasodilatation and migration of leucocytes out of the capillaries. These migratory cells produce various cytokines, the local biomechanical signal molecules that interact with

the entire population of native paradental cells. Cytokines evoke the synthesis and secretion of numerous mediators by target cells, including growth factors, prostaglandins and other cytokines. Subsequent biological events occur and result in bone remodeling to accommodate movement of the tooth.^{7,8} Bone resorption and bone formation are parts of the remodeling process during orthodontic tooth movement. Bone is deposited on the alveolar wall on the tension side of the tooth with both heavy and light forces, and newly formed bone spicules follow the orientation of the periodontal fiber bundles. On the pressure side, with light forces, alveolar bone is directly resorbed by numerous osteoclasts in Howship's lacunae.⁸ Although there are more than 1.3 billion of smokers in the world⁸ and the acceptance of the fact that nicotine acts on cellular and tissue metabolism is widespread. Thus, the aim of this study was to investigate the knowledge of patients attending Department of Orthodontics and Dentofacial Orthopedics, Rungta college of Dental Sciences and Research, Bhilai on ill-effects of Tobacco Use.

AIM & OBJECTIVE OF THE STUDY

To assess the perception of Orthodontists towards Tobacco Cessation.

METHODOLOGY

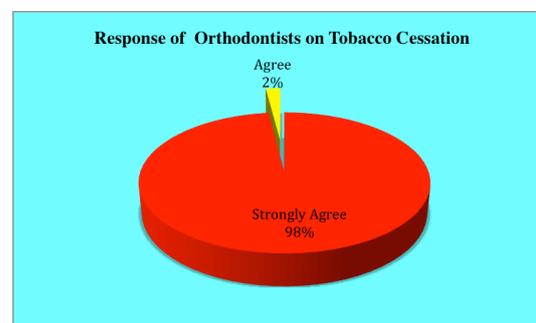
A Self-administered structured, coded questionnaire was distributed to 100 private practitioner Orthodontists and teaching staff in all the dental colleges in Chhattisgarh city. The 100 dentists to whom the questionnaire was sent included the Orthodontists working in the dental colleges, those having private practice, postgraduates were included in the study. The survey instrument of the current study included questions that addressed (a) the "5A's" protocol, i.e., Ask, Advise, Assess, Assist, and Arrange behaviors in dental practices; (b) self-efficacy including knowledge, confidence, and success regarding tobacco cessation; (c) success of various tobacco cessation strategies; (d) barriers to tobacco cessation; and (e) demographics including gender, and race/ethnicity. This is in accordance with the methodology used by Amit *et al.*^{9,10} in their study. Four-point Likert scale (strongly agree/agree/disagree/strongly

disagree) was used to assess attitudinal variables and three-point Likert scale (always/nearly always, sometimes, rarely/never) was used to measure levels of reported activity. Data analysis has been done using statistical package.

RESULTS

Out of 100 dentists to whom the questionnaire was administered. The response rate was 100%. The demographic details of the respondents according to Age-wise numbers distribution of Orthodontists is 20-25 years: 12, 25-30 years: 24, 30-35 years: 37 Above 35 years: 27. The Gender-wise numbers are Males: 61 and Females: 39. The Type of practice-wise numbers are Private practitioners: 37, Academicians: 23 and Both: 28. There was no difference in the results in terms of age, gender, or type of practice. The findings of the study are as follows 98% of the dentists agreed that it is the duty of every dentist to advise patients about tobacco cessation Figure 1.

Figure 1: Response of Orthodontist on advising patients on Tobacco Cessation.

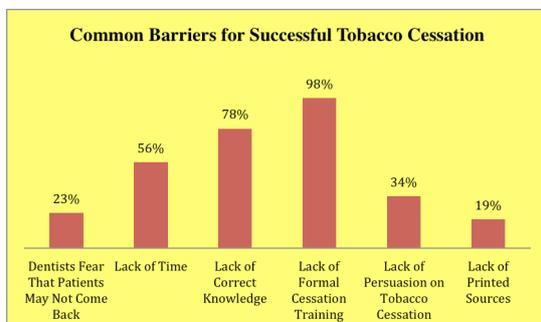


52% are optimistic about the capability of dentists in tobacco cessation though 40% felt that the dentists are not presently well prepared to assist the patients. 23% dentists raise the topic of the importance of tobacco cessation. 67% display patient education materials in their practice/reception areas and 71% engage even their staff in the process of tobacco cessation and counseling. 42% refer their patients to a general practitioner and rarely or even never recommend over-the-counter nicotine replacement therapy. As regards the most common barriers for successful tobacco cessation as seen in Figure 2. 98% strongly agree that formal training will be an effective tool to provide the guidelines to

Perception of Orthodontists In Tobacco Cessation

Orthodontists in tobacco cessation and counseling.

Figure 2: Common barriers for successful tobacco cessation.



DISCUSSION

In the current study, 98% of the respondents feel that it is the duty of every dentist to encourage patients to stop smoking. This is in close agreement with the study of and Amit *et al.*⁹ with 97 % and Raja *et al.*¹¹ in which 94% have agreed that it is the duty of every dentist to advise patients about tobacco cessation. The study also reveals that the Orthodontist are capable of tobacco cessation if certain barriers on this noble path are removed. The most common barriers for successful tobacco cessation as perceived by the dentists in the current study were, e.g., lack of time, lack of printed resources, lack of persuasion on tobacco cessation, lack of correct knowledge and training, dentists' fear that the patients may not come back to them. Johnson *et al.*¹² also in their study had mentioned the same common barriers as perceived in the current study, i.e., lack of time, lack of training, and lack of patient education materials but added another barrier as lack of reimbursement. The important role of formal training to the Orthodontists and their staff in achieving tobacco cessation has emphatically come out in both these studies though the percentage of the respondents on this aspect differs slightly. It is heartening to note from the current study that not withstanding various barriers on the path to achieve successful tobacco cessation, the Orthodontists in Chhattisgarh motivate educate their patients to quit Tobacco. The hazardous effects of smoking on general and oral health are well known. There has been rising trend of smoking and use of tobacco in the adults,

youngsters as well as school children. Orthodontist are one of the role models for children and adolescents since once the orthodontic treatment starts, they usually continue for a year or more. So, children and adolescents are more likely to receive tobacco cessation positively just as adults. This is the first study to assess and perception among Orthodontists according to which strategies can be formulated in this region.

CONCLUSION

Dental care settings provide an exceptional opportunity to reach Tobacco users and provide brief cessation counselling and treatment to reduce oral and other tobacco-related health conditions. Orthodontists share a moral responsibility by getting involved in helping their patients to quit tobacco by learning the correct Techniques.

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