Tobacco smoking: the role of dental health professionals

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Submitted: June 2021
Accepted: August 2021
Published: November 2021

Abstract

Tobacco use is a serious public health problem with smoking as the most common method of consuming tobacco. It is a major preventable cause of premature morbidity and mortality. The prevalence of tobacco smoking varies from country to country. It creates a huge economic burden on the individuals who consume it and on the healthcare system. The current approach toward the management of tobacco smoking addiction revolves around a combination of education, counselling, and pharmacotherapy.

Dental professionals, such as dentists and dental therapists/hygienists have a special role in identifying smokers: odour and teeth stains are obvious revealing signs. Dentists are well placed in tobacco smoking cessation as they provide preventive and curative services on a regular basis. The regularity of visits by patients to dental clinics offer valuable contacts for dental health professionals to initiate and strengthen tobacco cessation measures. Dentists are in a unique position to motivate and assist their patients to quit tobacco use and smoking.

Keywords: Smoking, tobacco smoking, dental professionals

Introduction

Tobacco use is a serious public health problem with smoking as the most common method of consumption. Tobacco smoking is a major preventable cause of premature morbidity and mortality globally. It is a health threat to both the smokers themselves and the public arising from secondary exposure. It also poses a huge economic burden and financial implications on the individuals who consume tobacco and on the healthcare system. Tobacco forms of usage include cigarette, cigar, pipe, chewed tobacco, dipped tobacco, and snuff (moist and dry), but smoking is the most popular form of usage ahead of chewing tobacco, dipped tobacco, and snuff. Tobacco smoking is a learned behaviour resulting in a physical addiction to nicotine for many smokers.

Tobacco smoking in its various forms (cigars, cigarettes, pipes) is an important risk factor for many non-communicable diseases (NCDs) which include, but are not limited to, cardiovascular disease, lung disease, low birth weight and premature birth. It is a cause of many oral diseases and conditions, ranging from mild to life threatening, such as stained teeth, taste disturbance, halitosis, periodontal diseases, poor wound healing, oral mucosal lesions such as hairy tongue, smoker’s melanosis (which is a discoulouration of the oral mucosa), oral precancerous lesions, and oral cancers.

Prevalence of tobacco smoking

Tobacco smoking often becomes addictive and the prevalence of smoking varies from country to country according to the following studies published in 2015 and 2018 from Africa:

- The prevalence of tobacco smoking was 17.6% in South Africa.
- From a systematic review in Nigeria, the prevalence of tobacco smoking was between 0.2% - 32.5%.
A rural population-based study in Tanzania reported a prevalence of current and ex-smokers of 5.4% and 19.8% respectively.\[6\]

- In Madagascar, the prevalence of cigarette smoking among adolescents was 19%.\[6\]
- In Uganda the prevalence of smoking was 34.4% and 7.4% in men and women respectively.\[6\]
- The prevalence of tobacco use in Kenya was 19.1% and 4.5% among adult males and females respectively.\[8\]
- In Angola, the prevalence of current tobacco smoking was reported to be 6.1%.\[6\]

There might be a change in prevalence of tobacco smoking within the last three years in the countries reported.

**Smoking cessation programmes and the role of dental health professionals**

The habitual and addictive nature of tobacco smoking makes cessation difficult for chronic smokers. Guidelines suggest that smoking cessation interventions should include both behavioural support and pharmacotherapy\[2\] (e.g., nicotine replacement therapy). The current approach to the management of tobacco smoking addiction revolves around a combination of education, counselling, and pharmacotherapy.\[2\]

The prevention and control of tobacco use are increasing issues of global importance. The links between tobacco use and some oral conditions create an opportunity for dental specialists to become involved in smoking cessation activities. Some dental treatment requires several visits, which provides further opportunities for initiation, fortification, and follow up of tobacco cessation measures.\[9\] These measures are aimed at reducing the effect of tobacco related morbidity and mortality\[7\] by preventing the initiation of tobacco smoking by the non-users and cessation of tobacco smoking\[9\] among current users and chronic smokers.

Dentists are well placed to contribute to tobacco smoking cessation as they provide preventive and curative services on a regular basis.\[3\] Dental professionals can identify the people who use tobacco regularly, document their usage history and offer advice and written materials, as a part of their routine clinical practice.\[10\] They can also adapt their clinical practice so that every patient who uses tobacco is identified and offered at least a session of brief counselling.

By expanding the dental examination, diagnosis, and treatment to include tobacco cessation, a potentially life-saving measure is added to an established service.\[4\]

Dentists have a special role in identifying smokers: odour and teeth stains are obvious revealing signs.

The dental clinic is an ideal setting for tobacco cessation services since preventive or treatment services, oral screening, and patient education have always been a large part of the dental practice. Counselling from a health professional such as a dentist is an effective method of helping patients quit the tobacco habit. The visits of patients to dental clinics or health centres where dental services are offered can create a valuable contact,\[4\] for dental health professionals or allied dental health professional with adequate knowledge and training to initiate anti-smoking activity.

Sometimes, these dentist-patient contacts are under-utilized and there is little interaction between dentist and his patient with regard to prevention of smoking and its consequences.\[11\] It could be attributed to the lack of practice time and resistance on the part of the patients, so some dental professionals avoid this topic.

Enhancing motivation\[12\] is an important part of the overall treatment for tobacco addiction as it increases smokers’ enthusiasm, sense of purpose, and will to quit. Dental health professionals should try to advocate for the implementation of the World Health Organization (WHO)\[13\] framework convention in tobacco control in their locality of practice.

**Financial support and sponsorship:** None

**Conflict of interest:** None

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