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REVIEW ARTICLE

DENTAL HEALTH PROFESSIONALS AS TOBACCO CESSATION COUNSELORS

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ABSTRACT

The purpose of the paper was to review the ever growing threat of tobacco and its ill effects and the role of DHPs (Dental Health Professionals) in curbing this menace. Materials and Methods: Several publications and books were electronically searched in google using the keywords "Role of DHPs in tobacco cessation", "Strategies to reduce tobacco-related morbidity and mortality", and "Dental office an ideal setting for tobacco cessation services". The search was limited to articles and books in the English literature. To prepare a thorough review the contents were screened between the year 1992 to 2015 by going through the title and abstracts, and further short listing articles for full text reading. Conclusion: The present review revealed that DHPs are largely the untapped resource for providing effective tobacco intervention services. DHPs can play a vital role in helping patients quit using tobacco which can be very beneficial and cost effective as well.

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INTRODUCTION

Tobacco use is a global epidemic that kills 5.4 million people annually, with more than 80% of those deaths occurring in the developing world (Jiloha, 2008). Tobacco related mortality in India is among the highest in the world with about 700,000 annual deaths attributable to tobacco use in the last decade and is expected to increase to 1million in the current decade (Shah, 2008; Murthy, 2010; Gajalakshmi, 2003). The high prevalence of head and neck cancers in India is attributed to extensive tobacco use, especially chewing tobacco (Warnakulasuriya, 2009; Saraswathi, 2006 and Yen, 2007). Because of the diverse patterns of tobacco consumption in India: smoking, chewing, applying, sucking, gargling, cleansing etc, tobacco problem is more complex than probably most countries in the world, and hence a large consequential burden of tobacco related morbidity and mortality (Sinha, 2002). So to curb this ever growing menace of tobacco and its ill effects, DHPs contributions can be invaluable in this venture. They are largely the untapped resource for providing effective tobacco intervention services that can be very useful and cost effective as well.

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Various studies worldwide have shown that DHPs can bridge this gap by actively participating in tobacco cessation activities (Rikard-Bell, 2003; Polychonopoulou, 2004; Rajasundaram, 2011).

Tobacco control measures in India

Tobacco cessation measures across the world have shown many benefits, further strengthening the requirement of aggressive measures to stop tobacco usage (Murthy, 2010; Wu, 2011; Jang, 2010). Tobacco control is not receiving adequate attention in India due to limited resources. There is an urgent need for coordinated efforts in the area of tobacco control so as to reduce the morbidity and mortality from tobacco induced diseases. Much of the efforts towards tobacco cessation occur in the context of primary, community-based interventions for cancer control. In 2001, the Indian Government introduced the Cigarettes and other Tobacco Products Bill (COTPA) according to which smoking in public places was outlawed, sale of tobacco to individuals below 18 years of age was prohibited, ban on sale of tobacco products within 100 meters of educational institutions, maximum limits on levels of tar and nicotine, tobacco packages required to have warnings and it also prohibited tobacco companies from advertising and sponsoring sports and cultural events (Sukhvinder Singh

Oberoi, 2014). The effect of any legislation depends on its implementation. In India, according to various studies compliance to COTPA is a mere 23% (Tripathy, 2013). In a Karnataka based study, high level of compliance regarding no smoking in public places, and a high level of non-compliance to the provisions of signage under COTPA was observed which calls for a sensitization workshop and advocacy for all the stakeholders (Sushil kumar, 2014). In India, enforcing the ban on smoking in public places or selling tobacco items within the vicinity of educational institutions would have gone a long way to prevent young individuals from this deadly addiction, but again, we have stringent tobacco laws but not the will to put them into practice. The aim of a nicotine reduction policy is to make tobacco products non-addictive, which results in lower intake of nicotine and hence lower level of nicotine dependence, so that novice users will not undergo transition from experimental or occasional smoking to addiction. Such a policy is consistent with WHO's Framework Convention on Tobacco Control (the 'Tobacco Treaty') that has been ratified by most countries. Though the government have taken a stand on banning these Chewing Tobacco(CT) products sale, substitutes such as supari mix' packets which contain a mixture of areca nut, lime, spices and condiments are sold along with a free packet of CT, in the form of zarda or khaini. Since these products are not banned individually, the user mixes these two products and makes his own gutka. Most of the companies that manufacture gutka or pan masala with tobacco, also manufacture plain pan masala without tobacco under the same brand name, the advertisements of which commonly appear in mass media, including electronic mass media which are surrogate advertisements for the chewing tobacco products bearing the same trade name. Regarding ban on sale of tobacco products within 100 meters of educational institutions, many heads of institutions are not aware of the provisions of the COPTA Act or the fact they are empowered under the law to levy fine on such vendors selling tobacco within 100 yards. Vendors must support institutions by refusing to sell tobacco products to those below 18 and should refrain from displaying them visibly (Tripathy, 2013).

Compared to many developing nations there is very minimal inclusion of tobacco control curricula in school based formal education system in India (Jha, 2008 and Khan, 2012). There is also lack of professional education in tobacco control measures in various disciplines including dentistry. Even in medical education, more emphasis is given to the study of risk factors and determinants of tobacco related diseases rather than tobacco cessation and prevention aspects. WHO recommends inclusion of curriculum on tobacco intervention services to all health professionals. Dental institutions must provide training in tobacco control to ensure that all DHPs are well versed in providing tobacco intervention services to their patients. World Health Organization (WHO) highlighted the role of trained health professionals in tobacco control during "World No Tobacco Day" on May 31, 2005 (WHO, 2005). Personal tobacco use has been cited to be one of the major barrier to tobacco control interventions among health care professionals worldwide (Negandhi, 2010). In 2002, formal tobacco cessation clinics (TCC) supported by the World Health Organization Country Office and the Ministry of Health and Family Welfare, Government of India were set up for the first time in India. The focus of these TCCs was capacity building in tobacco cessation in various states by conducting training of health professionals and also to focus on setting up cessation facilities in medical and dental institutions (Mackay, 2002).

Benefits of Tobacco Control Measures

If aggressive tobacco cessation measures are undertaken several benefits can be appreciated. It has been estimated that if adult tobacco consumption were to decrease by 50% by the year 2020, approximately 180 million tobacco-related deaths could be avoided (Mackay, 2002). In order to control and prevent tobacco hazards effectively, it is essential to understand effects of tobacco on general and oral health, effects of passive smoking and nicotine addiction and withdrawal symptoms**.** Both smokers and smokeless tobacco users have substantial short and long term health benefits from cessation (Kulik, 2012). Tobacco cessation is associated with reduced risks of oral cancer and oral potentially malignant disorders, cardiovascular diseases, and dental problems. A significant reduction of risk for oral cancer was observed among quitters and follow up studies reveal that the level of risk approaches that of never smokers approximately 10 years after cessation. In a meta analysis, pooled risk estimates for ex-smokers (OR: 1.40, 95% CI 0.99, 2.00) were significantly lower compared with current smokers (OR: 3.43, 95% CI 2.37,-4.94) (Gandini, 2008). Risks for lung cancer, coronary heart disease, stroke and chronic obstructive pulmonary disease was also found to be significantly reduced by tobacco cessation. If potential mothers quit smoking before becoming pregnant, or within the first trimester of pregnancy, infant birth weight is likely to be the same as nonsmokers. Pregnant women who quit smoking late trimesters, the infant birth weights are higher than among women who continue to use tobacco. Risk of passive smoking-induced diseases, especially in children: pneumonia, bronchitis, middle ear infections, and exacerbations of bronchial asthma are also reduced with cessation (Sukhvinder Singh Oberoi, 2014 and Samet, 1992).

Role of DHPs in tobacco cessation

Given the high global morbidity and mortality from tobacco use in India, there is a need to develop evidence-based, cost-effective interventions for both smoking and smokeless tobacco use. While many community-based interventions have been effective to some extent in increasing cessation rates, health care professionals can play an integral role in tobacco cessation. DHPs can identify the tobacco users by observing the intraoral signs such as tooth stains and oral hygiene problems earlier than other healthcare professionals, offer pharmacotherapy and provide cessation counseling, have follow-ups and also refer these patients to either quit lines or social support groups. The dental clinic is an ideal setting for tobacco cessation services since preventive treatment services, oral screening, and patient education have always been a major part of the dental practice. Considering the vast resource of DHPs in India in the form of the private practitioners, teaching faculty in institutions involving them might be an important step towards effective eradication of tobacco use. Compared to physicians and other health professionals, DHPs are less likely to provide tobacco intervention services to their patients. Moreover, 59% of patients expect their dentists to routinely offer tobacco cessation services. Patients are receptive to DHPs inquiring about tobacco use and offering advice on quitting, particularly in the context of health problems related to tobacco use being identified (Rikard-Bel, 2003). In various KAP studies on tobacco cessation among DHPs, higher knowledge and attitude scores and very low practice scores where reported (Rikard-Bell, 2003; Polychonopoulou, 2004; Rajasundaram Binnal, 2011). Key factors that hinder provision

of cessation services include provider's lack of confidence/preparedness due to lack of tobacco cessation knowledge/training. Many health professionals have emphasized the need for tobacco cessation training in dental schools as one of the major facilitators for successful tobacco cessation services in future clinical settings (Binnal, 2012) Education in areas like 5 A's, pharmacological agents, history of tobacco control and tobacco legislation, should also be mandatorily included in the undergraduate dental curriculum so that they are in a position to offer tobacco cessation services and preventive care. So training the dental graduates in tobacco intervention services can bridge this gap by actively participating in tobacco cessation activities in their practices (Rikard-Bell, 2003; Polychonopoulou, 2004; Rajasundaram, 2011). All DHPs should effectively recognize oral signs of tobacco use and in addition to providing treatment of the particular disease and should offer tobacco cessation services to all tobacco users. Given the consequences of tobacco use on dental and oral tissues, greater perceived dental needs of tobacco users as compared to non-users, increased duration of dental treatment compared to other health care professionals, tobacco intervention can be introduced to patients in the dental office when patients seek care for problem-oriented visits e.g. Periodontal treatment, extractions or for cosmetic purposes. Therefore, it is essential to train DHPs to acquire knowledge and clinical skills for the prevention and cessation of tobacco use. At least one to two faculty of every dental institution should be extensively trained in tobacco intervention services, so that he/she may act as a leader in the area of tobacco control. They will be required to provide counseling support and to have the ability to prescribe appropriate pharmacological preparations as part of an individual care plan to increase the quit rate. Evidence shows that clinical interventions during dental care are as effective as in other healthcare settings.

Conclusion

A standardized tobacco intervention UG curriculum that covers key topics didactically and clinically should be included as DHPs could expand their role as tobacco counselors. Training of DHPs and development of definitive guidelines for tobacco cessation activities in all dental institutions will have considerable contributions to make towards combating the tobacco menace.

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