

## **Encouraging dentists as agents of change in the fight against tobacco in Malaysia: An example of a dentist-psychiatrist collaborative effort**

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### **ABSTRACT**

Dentist has long been recognized as a formal health profession. Health professionals have an important role to play in the fight against tobacco. Smoking tobacco is dangerous because it related disease and also due to it being labeled as a gateway to illicit drug abuse. As individuals, dentist can help educate the population, as community members they can support anti-smoking policies and at a societal level, they can influence national and global tobacco control efforts. The associations between tobacco use and diseases affecting the oral cavity, such as periodontal disease and cancer, are now well recognized. This has lead to proposals from some members of the profession that members of the dental team should provide smoking cessation services. Before exploring effective ways to help smokers quit, it is important to understand the nature of the addictive process and how it affects both nicotine use and cessation attempts. The potential influence of dentists as agents of change is clear from even a brief consideration of the nature and conditions of dentist-patient relationship. The dental practice setting provides a unique opportunity to assist tobacco users in achieving tobacco abstinence. The role of psychiatrists to support the effort therefore becomes all the more important.

**Key words:** Dentist, psychiatrist, tobacco, collaborative effort

### **INTRODUCTION**

Dentist has long been recognized as a formal health profession. In virtually every part of the world thus, patients come to dentists for help with some of their most pressing needs; relief from pain

and suffering and restoration of oral health as well as mental and general well-being. They allow dentists to treat their oral health problems and disclose information about themselves that they would not want others to know. They do this because they trust their dentists to act in their best interests.<sup>1</sup>

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Dental work includes biological, medical and cosmetic treatment. In 2004, there were 1.8 million dentists working around the world, or an estimated 29 dentists per 100 000 people. The three territories with the most dentists in 2004 were the United States, Brazil and China. There were, however, ten times more dentists per person working in Brazil than in China. North America has almost twice the number of dentists per person than any other region. In many African territories there were fewer than 1 dentist to every 100 000 people living there. The least dentists per person were in Angola.<sup>2</sup>

In a developing country, like Malaysia for example, statistics from the Health Human Resources, Malaysia Ministry of Health (MOH), reported a total of 2,751 dentists in both private and public sectors in 2005, projecting a dentist to population ratio of 1:9,497. In 2006, the total number of dentists in both sectors slowly increased to 2,940 improving the ratio of dentist to population to 1:9,061.<sup>3</sup> The increase is expected to become more rapid in the next decade with the increase in new dental schools from three in 2005 to eleven by 2008.

This paper provides an overview of the tobacco problem globally and in Malaysia specifically, the importance of smoking cessation program and the role of dentists as agents of change.

### **Tobacco problems**

Smoking tobacco is dangerous because it related disease and also due to it being labeled as a gateway to illicit drug abuse. There are numerous noxious chemicals in a smoked cigarette among them being tar and arsenic. The most important ingredient however is nicotine, which is believed to drive the addiction properties of tobacco smoking. The effects of smoking tobacco can be seen in both the short and long term. At its mildest, it may lead to sore throat and its worse, cancer. Tobacco smoke is not only harmful to those who take it directly, but also to those who take it in indirectly. The latter are termed passive smokers and they are actually at greater risk.<sup>4</sup>

### **Facts about tobacco smoking globally**

In this century alone, it has been reported that smoking has killed as much as one billion

people throughout the globe and despite that an astounding number of 1.5 billion people are smokers, where ironically 80% of the smokers belong to the third world country.<sup>5</sup> According to the World Health Organization (WHO), tobacco is listed as the number one killer globally. It is estimated that at least 100 million people have died due to smoking in the twentieth century. In the 21<sup>st</sup> century, it is predicted that at least one billion people will die of tobacco smoking if smoking habits continuously ensues.<sup>5</sup>

Diseases or illnesses that are related to smoking habits will eventually kill one of ten adults, or causes four million deaths. In every eight seconds, a person dies due to the attribution of tobacco smoking habits. And in every minute, 10 million cigarette packs are sold, in total 15 billion cigarette packs are sold each day. West Pacific which comprises of East Asia and Pacific has the highest ranking of smoking habits, with almost two-third of the men smoke, compared to other WHO participating countries. One out of five smokers is a teenager ranging from the age of 13 to 15 years old. In a day, it has been estimated that 60,000 to 100,000 children learns to smoke, and most of them are from Asian countries.<sup>5</sup>

About 50% of smokers will die of lung cancer, heart diseases and other chronic lung diseases due to their own smoking habits. There are at least 4,000 chemicals in tobaccos, of which 2000 are considered to be highly toxic, 63 are carcinogens and the rest causes morbidity. In an average account, smoking only one cigarette is enough to shorten a person's life span to at least five minutes. In cancer relating deaths, 30% are due to smoking habits. Ninety percent of deaths from lung cancer patients are solely attributed to their smoking habits.<sup>5</sup>

### **Facts about tobacco and smoking in Malaysia**

Smoking is a major public health concern in Malaysia. The prevalence of cigarette smoking in Malaysia is still one of the highest in South East Asia despite the on-going public health campaigns to encourage smoking cessation.<sup>6</sup> It is the only legal consumer item that is highly addictive and kills half of its regular users. It also linked to various health problems such as respiratory, cancer and heart diseases.<sup>4</sup>

In Malaysia, about 50% of Malaysian men



which their ages 18 years and above smoke.<sup>4</sup> Daily close to 45 to 50 teenagers under the age of 18 years old commit to smoking habits<sup>5</sup> for which 20% of them are teenagers smoke.<sup>4</sup> About 30% of male teenagers between the ages of twelve to eighteen are smokers.<sup>5</sup> Sadly, about 85% of them end up as cigarette addicts.<sup>4</sup> The number smokers among teenage girls has also increased. Studies conducted among teenagers between the year of 2000 to 2004 have revealed that there is an increasing number of adolescent girls smoking, with a percentage of 4% to 8%. On the whole, the study in 2004 reported one out of five teenagers are smokers.<sup>5</sup>

Lung cancer cases have been increasing with a rate of 17% per year. Smoking habits have been identified as the cause of at least half a million cases of coronary heart disease. According to the 2<sup>nd</sup> National Study of Morbidity and Wellness conducted by the Ministry of Health Malaysia in the year of 1996, smoking habits have at least been the sole cause of 10,000 deaths each year.<sup>5</sup>

Smokers tend to addicted to cigarette because it contain nicotine which is very addictive, much like heroine and cocaine.<sup>4</sup> Repetitive smoking leads to addiction or dependence. Malaysia has strengthen the law and regulations by prohibited teenagers ages under 18 to smoke, buy or even to handle any tobacco products. Smoking also prohibited in many places including schools, hospitals and clinics, government buildings, lifts and airplanes.<sup>4</sup>

### Smoking cessation programme

Before exploring effective ways to help smokers quit, it is important to understand the nature of the addictive process and how it affects both nicotine use and cessation attempts. Compulsive tobacco (nicotine) use, defined as a legitimate addiction by the U.S. Surgeon General, can be conceptualized at the central connecting link in a three-linked chain (Fig 1).<sup>7</sup> The two additional, outside links to the chain, psychological dependence and sociocultural factors, interconnect with this common core and with each other as well. As nicotine dependence develops, a corresponding set of emotions and behaviors perpetuates the act of smoking. Thus, indicating also the role of psychiatrist in smoking cessation and

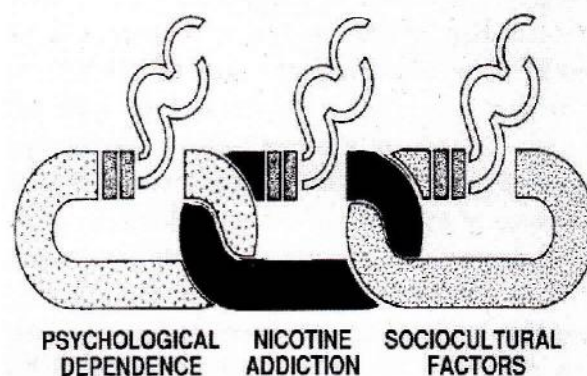


Figure 1. The addictive smoking chain: two links, psychological dependence and socio-cultural factors, interconnect with the common core, nicotine addiction.<sup>7</sup>

the input from dentists to detect oral disease related to smoking.<sup>8</sup>

Smoking cessation programmes have been available for more than two decades in Malaysia. However, these efforts have mainly focused on outpatient settings, usually at primary care practices. Much less attention has been paid to in-patient settings that deliver more acute medical care as an example is hospitals, despite the opportunities that they present for changing behavior.<sup>6</sup>

### Dentist role in tobacco cessation programme and the challenge ahead

Health professionals have an important role to play in the fight against tobacco. As individuals they can help educate the population, as community members they can support anti-smoking policies and at a societal level, they can influence national and global tobacco control efforts. Physicians occupy a key position in this regard, as they are uniquely placed to lead smoking cessation programs in the community. Patients expect information, help and guidance from their primary care physician on a number of health-related matters. Physicians also play an important role in helping patients to stop smoking.<sup>9</sup>

The associations between tobacco use and diseases affecting the oral cavity, such as periodontal disease and cancer, are now well recognized. This has led to proposals from some members of the profession that members of the dental team should provide smoking cessation services.<sup>10</sup> The potential influence of dentists



as agents of change is clear from even a brief consideration of the nature and conditions of dentist-patient relationship. Most people will go to a particular dentist regularly over a period of time subsequently establishing a relationship between them. Thus, this makes interaction and exchange of information between them easier as they have prestige, respect, authority and liking of their patients.<sup>11</sup> Their role in the smoking cessation program is very important as they are well placed to recognize smokers and identify the impact of tobacco use in the mouth. This may range from recognizing smoker's palate, through a diagnosis of periodontal disease to the management of potentially sinister white, red or speckled lesions.<sup>10</sup>

The dental practice setting provides a unique opportunity to assist tobacco users in achieving tobacco abstinence. Widespread acceptance of interventions to tackle nicotine addiction in the dental setting has been lacking and limitations in primary care resources have curtailed further efforts. Compared to other health care providers, dentists can more accurately estimate patient's tobacco use however they are less consistent with and supportive of intervention, less likely to report having strong knowledge or skill levels regarding tobacco cessation, and more likely to perceive barriers to tobacco intervention.<sup>15</sup>

According to Albert et al.<sup>15</sup> national surveys reveal only 25 percent of dental hygienists provide tobacco cessation counseling (TCC). Warnakulasuriya<sup>14</sup> reviewed two previous decades of tobacco cessation activities among dental care providers and concluded that the most significant barrier to TCC by providers remains the lack of tobacco cessation education during formative years of training.

More than 40% of dentists do not routinely ask about tobacco use and 60% do not routinely advise tobacco users to quit.<sup>12,13</sup> While 61.5% of dentists believe their patients do not expect tobacco cessation services, 58.5% of their patients felt such services should be provided.<sup>12</sup> Barriers to providing tobacco cessation service include concern for patient resistance<sup>12</sup>, lack of knowledge<sup>13</sup>, lack of time<sup>12</sup>, lack of financial reimbursement<sup>12</sup> and a concern for poor co-ordination of care between dentistry and tobacco cessation services.<sup>12</sup> However, 85% perceived that discussing smoking

habits is part of their job.<sup>13</sup>

#### **Nicotine Addiction Research & Collaborating Centre (NARCC)**

The uniqueness of dentists playing a more interventive role therefore cannot be argued. The role of psychiatrists to support the effort therefore becomes all the more important. In realizing the above, two leading universities in Malaysia, University Malaya and Universiti Kebangsaan Malaysia, have teamed up to set-up the Nicotine Addiction Research & Collaborating Centre (NARCC) under the University Malaya Centre of Addiction Sciences (UMCAS) in December 2008. This group will attempt to address the problems faced by dentists in setting up a TCC in their respective sites. The team conducts workshops throughout the country and provide expert consultation to attract dentists of all walks of life to fight against this growing menace to society. The positive outcome of such collaborative efforts hoped to be realized in the years ahead.

#### **CONCLUSION**

The potential influence of dentists as agents of change is clear from even a brief consideration of the nature and conditions of dentist-patient relationship. The dental practice setting provides a unique opportunity to assist tobacco users in achieving tobacco abstinence. The role of psychiatrists to support the effort therefore becomes all the more important.

#### **REFERENCE**

1. Fédération Dentaire Internationale (FDI)- World Dental Federation. FDI World Dental Federation Website. [cited 2009 Jun]. Available from: [http://www.fdiworldental.org/resources/4\\_6ethics-manual.html](http://www.fdiworldental.org/resources/4_6ethics-manual.html)
2. World Mapper. World Mapper Website. [cited on 2009 June]. Available from: <http://www.worldmapper.org/display.php?selected=218>
3. Malaysia Ministry of Health (MOH). Ministry of Health Website. [cited 2009 Jun]. Available from: [http://www.moh.gov.my/MohPortal/health\\_fact.jsp](http://www.moh.gov.my/MohPortal/health_fact.jsp)
4. Malaysia Ministry of Health (MOH). My Health for Life Portal Website. [cited 2009 Jun].

- Available from: <http://www.myhealth.gov.my/myhealth/eng/index.jsp>.
5. Malaysia Ministry of Health (MOH). Health Education Department Website. [cited 2009 Jun]. Available from: <http://www.infosihat.gov.my/taknak/KempenTakNak.php>.
  6. Noor Zurani MHR and Mohammad Hussain H. Is there a need for a hospital based smoking cessation programme in Malaysia? *Malay J Psychiat* 2008;17(2).
  7. Christen AG, Beiswanger BB, Mallatt ME, ET AL. Effects of nicotine containing chewing gum on oral soft and hard tissues: a clinical study. *Oral Surg Med Oral Path* 1985;59:37-42.
  8. Arden G. Christen DDS, MSD MA *J Dent Educ* 2001;65:368-74.
  9. Smith DR, Leggat PA. An international review of tobacco smoking among medical students. *J Postgraduate Med* 2007;53(1):55-62.
  10. Monaghan N. *British Dent J* 2002;193(11):611-2.
  11. O'Shea RM, Corah NL. *Public Health Rep.* 1984;99(5):510-4.
  12. Carr A, Ebbert J. Interventions for tobacco cessation in the dental setting. *Cochrane Database of Systematic Reviews* 2006, Issue 1. Art. No: CD005084. DOI: 10.1002/14651858.CD005084.pub2.
  13. Yahya NA, Croucher RE. Smoking Cessation for Adolescents: Opinions and Experience of Malaysian Government Dental Practitioners. *Malay Dent J* 2005;26(2):108-15.
  14. Warnakulasuriya S. Effectiveness of tobacco counseling in the dental office. *J Dent Educat* 2002;66(9):1079-87.
  15. Angela L. Monson and Lynnette M. Engeswick. Promotion of tobacco cessation through dental hygiene education: A pilot study. *J Dent Educat* 2005;69(issue 8).