

Empowering dental hygienists: tobacco cessation resources

As dental hygienists, our aim is to prevent disease and contribute to the health of our patients. Tobacco cessation is just one of the responsibilities we embrace in our clinical practices. There are many resources available to assist us in this endeavour. At the top of the list is *mpower*. This article will review new information regarding the war on tobacco, and will review a pharmaceutical agent used in tobacco cessation efforts, and explain the new warnings regarding this product.

In the area of pharmaceuticals, it is possible that as drugs are approved and used by a large number of individuals, side effects not known previously may emerge. One such drug is Chantix (varenicline), a prescription medication used to help patients stop smoking. Chantix™ (Pfizer®, Mission, KS, USA) is a prescription medication indicated as an aid to smoking cessation in adults. Chantix was approved by the U.S. Food and Drug Administration (FDA) in May 2006 as a smoking cessation drug. Chantix acts at sites in the brain affected by nicotine and may help those who wish to stop smoking by providing some nicotine effects to ease the withdrawal symptoms and by blocking the effects of nicotine from cigarettes if users resume smoking (1). On 1 February, 2008, the FDA issued a *Public Health Advisory* to alert health care providers, patients, and caregivers to new safety warnings concerning Chantix™ (varenicline) (2). On November 20, 2007, the FDA issued an *Early Communication* to the public and health care providers that the agency was evaluating postmarketing adverse event reports on Chantix™ related to changes in behaviour, agitation, depressed mood, suicidal ideation, and actual suicidal behaviour (3).

As the FDA reviewed the adverse event reports, it appeared possible that there may be an association between Chantix™ and serious neuropsychiatric symptoms. As a result, FDA has requested that Pfizer, the manufacturer of the drug, elevate the prominence of this safety information to the warnings and precautions section of the Chantix™ prescribing information and labelling. As well, the FDA is working with Pfizer to finalize a *Medication Guide* for patients. The director of the FDA's Division of Anaesthesia, Analgesia and Rheumatology Products stated that while Chantix™ has demonstrated clear evidence of efficacy, it is important to consider the safety concerns and alert the public about this risks (2). The advisory recommends

that patients talk with their physicians to establish whether Chantix™ is the appropriate drug for them. As well, healthcare professionals should closely monitor patients for behaviour and mood changes if they are taking this drug.

In the *Public Health Advisory* and a *Health Care Professional Sheet* that was issued, FDA emphasized the following safety information for patients, caregivers, and healthcare professionals (4):

Patients should tell their health care provider about any history of psychiatric illness prior to starting Chantix™. The drug may cause aggravation of current psychiatric illness even if it is currently under control. It may also cause an old psychiatric illness to reoccur. Patients with these illnesses were not included in the studies conducted for the drug's approval.

Health care professionals, patients, patients' families, and caregivers should be alert to and monitor for changes in mood and behaviour in patients treated with Chantix™. Symptoms may include anxiety, nervousness, tension, depressed mood, unusual behaviours and thinking about or attempting suicide. In most cases, neuropsychiatric symptoms developed during Chantix™ treatment, but in others, symptoms developed following withdrawal of varenicline therapy.

Patients should immediately report changes in mood and behaviour to their physician.

Vivid, unusual, or strange dreams may occur while taking Chantix™.

Patients taking Chantix™ may experience impairment of the ability to drive or operate heavy machinery.

Worldwide over 80 000 children will begin smoking each day, and as many as one quarter will die from smoking (4). While the side effects of Chantix™ are troubling, the good news is that we have many other resources at our fingertips (5–9). On 7 February, the World Health Organization (WHO) released new data showing that while progress has been made, not a single country fully implements all key tobacco control measures, and outlined an approach that governments can adopt to prevent tens of millions of premature deaths by the middle of this century (10). The report presents the first comprehensive analysis of global tobacco use and control efforts, based on data from 179 countries. It also outlines the MPOWER package, a 342 page document, a set of six key tobacco

control measures that reflect and build on the WHO Framework Convention on Tobacco Control (11). The *WHO Report on the Global Tobacco Epidemic, 2008* is the first in a series of WHO reports that will track the status of the tobacco epidemic and the impact of interventions implemented to stop it.

Remember, the tobacco epidemic death toll is 100 million dead in the 20th century, and currently 5.4 million deaths every year (11). Unless urgent action is taken, by 2030, there will be more than 8 million deaths every year, and by 2030, more than 80% of tobacco deaths will be in developing countries, and there will be one billion estimated deaths during the 21st century. The rise of tobacco use in girls and young women is among the most ominous of recent trends. As dental hygienists, we can help to lower these numbers, and reverse these trends. Tobacco use is a risk factor for six of the eight leading causes of death in the world, and part of our job as health care professionals is to change these staggering statistics. Remember, tobacco is the global agent of death, and is the only legally available consumer product which kills people when it is used entirely as intended (12). So use the roadmap, called mPOWER, a package of five cost-effective policy measures selected because of their proven power to reduce tobacco use (11). These are straightforward common-sense measures within the reach of every country, regardless of income level. Will you do your part to fight this battle? We must act now to reverse the global tobacco epidemic and save millions of lives.

Quote:

'We hold in our hands the solution to the global tobacco epidemic that threatens the lives of one billion men, women and children during this century' (13).

References

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