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Editorial

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Smoking Cessation: What do Pharmacists Need to Know?

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As per Health Canada, ~ 17% of Canadians (i.e. 4.9 million) are active smokers of 15 years and older [1]. According to the Canadian Cancer Society (Smokers Help Line) [2], 47,000 Canadians die from smoking each year, and lung cancer (although preventable) is the leading cause of cancer death for both men and women in Canada. Moreover, second-hand smoking kills more than 1000 non-smoking Canadians each year.

Given the above statistics, it is not surprising to encounter frequent questions on risks of long term tobacco use and ways to quit smoking. When counseling patients on the importance of smoking cessation, it is important to realize that achieving success in smoking cessation is not measured only by quit rates, but also by the patient's progress through the process of quitting [3]. Our focus in patient counseling on smoking cessation should not be solely dependent on nicotine replacement therapies and/or medication use. An approach that combines behavioral strategies and pharmacotherapeutic strategies in the context of multiple counseling sessions, format is recommended. Behavioral strategies include assessing the patient's willingness to quit smoking, discussing the patient's past experience with quitting, possible barriers to cessation and how to overcome them, and assisting the patient to decide on a quit date [4]. Continuously building motivation in your patients via affirming, encouraging, boosting their self-esteem and avoiding arguments throughout the smoking cessation process is equally important. When the patient is a heavy smoker and tried to quit before and failed, then nicotine replacement therapies (NRTs) and/or pharmacotherapeutic options might be an option.

In Canada, four over-the-counter NRTs are currently available and can be easily bought without a prescription. These include oral and transdermal NRTs. Oral NRTs such as nicotine gums (Nicorette®), lozenges, inhalers can be used for several weeks to several months. Transdermal nicotine replacement patches (Nocoderm®, Habitrol®, Nicotrol®) are once-a-day application for 8 to 12 weeks or longer if necessary. NRTs replace the nicotine in cigarettes without the hazardous additional ingredients in tobacco smoke and thus it reduces withdrawal symptoms and makes it easier to quit gradually. NRTs are contraindicated in cases of pregnancy and breastfeeding, in arrhythmias, anginas, and 2-weeks post myocardial infarction.

Two prescription drug aids for quitting are currently available in Canada namely Bupropion and Varenicline. Bupropion (Zyban®) is administered as 150 mg in the morning for 3 days, then twice daily for the duration of treatment, which is usually 7 to 12 weeks or longer if necessary. It should be started 7 to 14 days before the quit date. Bupropion was originally developed as an antidepressant. However, in smoking cessation, bupropion is hypothesized to exert a dopaminergic effect, acting on the reward pathway, and its noradrenergic effect during the withdrawal process reduces craving. Patients with past history of seizures, serious head injuries, eating disorders or pregnancy, or who are breastfeeding should not use bupropion. Varenicline (Champix®) is administered as a 0.5 mg dose once daily in the morning for 3 days then a 0.5 mg dose twice daily for 4 days followed by 1 mg twice daily thereafter for the duration of treatment which is usually 12 weeks. Varenicline is a nicotine receptor partial agonist and it stimulates nicotine receptors more weakly than nicotine itself. It reduces craving and decreases the pleasurable effects of tobacco smoking. Patients with past history of depression or mental illness should avoid using the medication.

In conclusion, smoking cessation is best achieved by a combination of counselling and smoking cessation medications in the context of multiple counseling sessions for successful results.

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