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# Smoking Cessation

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**New Year's resolutions and the case for smoking cessation intervention**

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## BRIEF INTERVENTIONS FOR SMOKING CESSATION: THE 5 A'S AND AAR

Simply asking patients about tobacco use and identifying current smokers opens the door and can increase the likelihood clinical intervention.<sup>19</sup> The recommended brief intervention consists of **5 actions**:

**Ask about tobacco use:** Identify and document tobacco use status for every patient at every visit.

**Advise to quit:** In a clear, strong, and personalized manner, urge every tobacco user to quit.

**Assess willingness to make a quit attempt:** Is the tobacco user willing to make a quit attempt at this time?

**Assist in quit attempt:** For the patient willing to make a quit attempt, offer medication and provide or refer for counseling or additional treatment to help the patient quit.

**Arrange follow-up:** For the patient willing to make a quit attempt, arrange for follow-up contact, beginning within the first week after the quit date.

**A shorter intervention** – 30 seconds that can save a life – can also be employed: the **Ask-Advise-Refer (AAR)** intervention. **Ask** all patients whether they use tobacco, **advise** identified tobacco users to quit, and **refer** them to cessation programs.<sup>20</sup> The BC Lung Association's QuitNow program facilitates the AAR intervention – visit [www.quitnow.ca](http://www.quitnow.ca) for more information.

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**Want to learn more about smoking cessation?** UBC's Continuing Pharmacy Professional Development ([www.pharmacy.ubc.ca/cppd/](http://www.pharmacy.ubc.ca/cppd/)) offers a distance education course on pharmacist-delivered tobacco cessation. The Canadian Pharmacists Association ([www.pharmacists.ca](http://www.pharmacists.ca)) also offers their QUIT training program online. Also have a look at what the BC Lung Association's ([www.bc.lung.ca](http://www.bc.lung.ca)) Education Services have to offer.

The DPIC column is usually about medication safety issues, therapeutic controversies or other interesting questions received by the drug information program. A little while ago, DPIC received a query about the safety of nicotine replacement therapy (NRT) in surgical patients: the patient was advised to quit smoking before surgery to reduce the chances of poor wound healing, but wondered if NRT was any safer than cigarettes - nicotine is nicotine after all, right? It seemed like a good idea to incorporate this into a piece on smoking cessation given the post-New Year's timing. However, the theme of this issue of The Tablet (which includes promoting the pharmacy profession) prompted a look at NRT and smoking cessation from a different angle.

By the time this issue of The Tablet is delivered, National Non-Smoking Week (January 17-23, 2010) will have come and gone, and some patients who made the ever-popular New Year's resolution to quit smoking may have already abandoned this goal. For those patients, this would be a good time to revisit those New Year's resolutions. However, it might also be a good time for pharmacists themselves to make a resolution to become more involved in smoking cessation interventions.

## **PHARMACISTS AND BRIEF SMOKING CESSATION INTERVENTIONS**

Pharmacists are well-positioned to be on the front lines of smoking cessation initiatives and to perform brief interventions (see side bar), and they are being increasingly encouraged to do so.<sup>1,2</sup> Compared to other health professionals, pharmacists are more accessible, readily able to provide effective treatment options in the form of NRT, and likely receive more training in the pharmacotherapy of smoking cessation.<sup>3</sup> However, how often are pharmacists proactive in smoking intervention? Data on what BC pharmacists is not available. There are definitely BC pharmacists active in smoking cessation by performing interventions and holding clinics, for example, but conversations with colleagues and the observations from other provinces indicate there is probably room for improvement.

In a survey of pharmacists from four provinces (Ontario, Quebec, Saskatchewan and Prince Edward Island), only 29% of respondents knew the smoking status of half or more of their patients, ~30% regularly discussed smoking with known smokers, and 14% asked new patients if they smoked.<sup>4</sup>

In another survey, when asked about the provision of smoking cessation counseling to more than half of their patients, pharmacists scored the lowest in asking, advising, and assessing readiness to quit out of six health professions (including physicians, dentists, dental hygienists, nurses, and respiratory therapists) surveyed in Quebec. Pharmacists were in the middle when it came to referring patients ready to quit, and at the bottom again in assisting and arranging follow-up for patients who were not ready to quit. However, pharmacists were second only to physicians when it came to assisting patients who were ready to quit.<sup>3</sup>

Public perception of pharmacists as professionals they can turn to for help with smoking could

also be better. Only 20% of smokers in Ontario would ask their pharmacist first for advice on how to quit -- about the same proportion as would ask their friends first, and less than half the proportion who would ask their physician.<sup>5</sup> This is consistent with reports that only 17% of British Columbians have discussed smoking cessation with a health professional other than a physician.<sup>6</sup>

## **PHARMACIST INTERVENTION - WHAT ARE SOME OF THE BARRIERS?**

Despite the fact that asking about and identifying smoking status can lead to further interventions, this is not routinely done. One major barrier identified in both Canada and the US is the negative perception by pharmacists that "most patients don't want unsolicited advice from their pharmacist",<sup>7</sup> or that patients would feel badgered or nagged.<sup>8</sup> However, 30% of smokers at any given time are thinking about quitting,<sup>9</sup> and roughly 50% of smokers in a recent Canadian survey were thinking about quitting in the next 6 months.<sup>10</sup> Further, 25% of those smokers felt it was the role of healthcare professionals to initiate the conversation.<sup>10</sup> One suggestion, as a starting point to overcome this barrier, is to encourage patients to initiate the conversation by placing visual cues in the pharmacy area,<sup>8</sup> however, asking about tobacco use in every patient should remain the goal.

Another barrier identified by Canadian pharmacists is the lack of financial incentive to intervene - roughly 5 to 20% of pharmacists surveyed felt that advising on smoking cessation took time away from more profitable activities, and 30 to 44% of surveyed pharmacists agreed that there is little financial incentive to do so. This may be less important with the very brief AAR intervention, but it has been suggested that the lack of financial incentive should be addressed through national and provincial programs aimed at increasing pharmacists' interventions.<sup>7</sup>

## **AN OPPORTUNITY FOR PHARMACISTS AND THE PROFESSION?**

In 2006 it was estimated that 16.4% or one in six British Columbians smoke - that's over half a million people.<sup>6</sup> In 2007, smoking was estimated to contribute to 24-44% of deaths from cancer, cardiovascular disease and respiratory disease in British Columbia, and tobacco-related illness is the leading cause of preventable death in BC, killing more people than all other drugs, motor vehicle collisions, murder, suicide and HIV/AIDS combined.<sup>11, 12</sup> Clearly there is a lot of work to be done to help British Columbians reduce their use of tobacco. In doing so, strain on the healthcare system will also be reduced. Could this be an opportunity for pharmacists?

BCPhA President Derek Desrosiers makes the point that pharmacists need to embrace new opportunities (lest they be given to other providers), become comfortable providing expanded services, prove our worth and get paid for doing so.<sup>13</sup> "Pharmacists must take advantage of every opportunity to implement new services that will generate new streams of revenue...By showing government that we are interested in taking advantage of expanded scope opportunities, more opportunities will be presented to us as pressures mount within the health care system."<sup>14</sup> He also cautions against embarking on "resource-draining activity with no

associated fee structure to ensure revenue generation".<sup>13</sup>

Whether smoking cessation interventions could be a financial opportunity is unknown, but it is clear that from the perspective of promoting our patient's health, and thereby our profession, pharmacists need to be more proactive in smoking cessation interventions. To those who are already making a difference, keep it up. For those who have contemplated making an intervention but have not done so, or haven't thought about it, hopefully you are encouraged to consider your willingness to do so, and to make a resolution to become involved.

Finally, it wouldn't be a Drug information column without some drug information substance, so back to the original query about the safety about nicotine replacement and surgery. It is established that smoking is a risk factor for surgical wound complications, with complication rates (e.g. infection, poor healing, tissue necrosis, etc.) being more than 2 to 3 times higher in smoking patients than in non-smoking patients undergoing various procedures.<sup>15, 16</sup> Tobacco smoke contains thousands of chemicals but nicotine and carbon monoxide have received the most scrutiny - and of the two, the main culprit appears to be carbon monoxide. Hypoxia is the main proposed mechanism for wound healing complications, but other mechanisms (e.g. thrombogenesis, impaired wound epithelialization, microvascular injury; leukocyte, macrophage, fibroblast and platelet dysfunction) may also contribute.<sup>15</sup> While nicotine can cause vasoconstriction and thus contribute to tissue hypoxia, the hypoxic effects of nicotine are much shorter lasting than those of carbon monoxide. Nicotine has been shown to decrease surgical flap survival in animal experiments, but the doses used produce serum nicotine levels higher than those seen in active smokers and much higher than those achieved with nicotine replacement.<sup>17</sup> Additionally, there is some evidence that nicotine might stimulate dermal cells and promote angiogenesis which could be beneficial for wound healing, but clinical applications are still remote.<sup>18</sup> As far as nicotine replacement in surgical patients is concerned, "nicotine delivered by transdermal and oral routes causes fewer cardiovascular and endocrine effects, but its influence on surgical procedures and wound healing has yet to be fully investigated."<sup>15</sup> That said, while complete nicotine abstinence would be ideal, supervised use of nicotine replacement products is not likely to impair wound healing and is still preferable to active smoking near surgery time.

Opinions expressed are my own and do not necessarily reflect the position of the BC Drug and Poison Information Centre, the University of British Columbia, or the BC Ministry of Health.

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DPIC answers a wide variety of drug information questions from pharmacists and other health professionals throughout BC. The Centre would rather assist health providers with questions, than have them be doubtful about drug safety or therapeutic options in their patients.

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We are grateful to all the First Nations who have cared for and nurtured the lands and waters around us for all time, including the xʔmʔʔkʔʔyʔʔm (Musqueam), Skʔwxʔwuʔ7mesh Uʔxwumixw (Squamish Nation), and sʔlʔilwʔtaʔ (Tsleil-Waututh Nation) on whose unceded and ancestral territory our centre is located.

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