Many chronic conditions can be prevented or effectively managed when the patient is aware, informed and engaged in making healthy life choices. Despite this knowledge, a significant gap remains between preventive health ideals and reality. As per 2016 Canadian Institute for Health Information data, over half of BC smokers have not been offered smoking cessation information by their physician, 37% of seniors were not vaccinated against influenza, and almost one in three people with diabetes did not have an eye exam in the last two years. Barely half of Canadians achieve moderate or better activity levels, and one in two adults are overweight or obese. All health care professionals, including pharmacists, have a responsibility to provide preventive health interventions for the general population.

At the UBC Pharmacists Clinic, we develop and regularly participate in two types of outreach: group education and health awareness events for people who work and live at – and around – UBC’s Vancouver Campus. We do this to give our students learning opportunities, improve the health of our community, and demonstrate the role pharmacists play in preventive health initiatives.

**Group Education**

Several times a month, a Clinic team member (often with a student) participates in a presentation, workshop or discussion for a patient audience. Our goal is to bring people together for group learning from us and from each other. The key to success is knowing your audience and effectively engaging them in the discussion.

At a minimum, we ask for the following information when planning a group education event:

- Background details about who is attending, such as their age, language issues, and communication issues (hearing and vision).
- The desired topic and what attendees want to know.

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• A description of the venue including number of seats, space layout, support for audio visual aids, and other factors that can help or hinder discussion.
• The preferred format. For example, a lecture with Q&A, a semi-structured discussion or an open forum where the audience sets the agenda.
• Who from the group can help organize the event including getting the word out to attendees and setting up the room.

We then prepare the clinical topic based on current evidence and our knowledge of the questions patients typically ask. We usually start with a trivia or quiz to help get people thinking and talking. We also use slides when appropriate to highlight key points we want people to remember. An excellent resource for preparing presentation materials is available here from the BC Patient Quality and Safety Council.

Popular topics we have used with recent audiences are:
• managing stress/anxiety
• prostate health
• keeping your brain sharp
• treatment updates for specific health conditions such as arthritis or chronic pain

Health Awareness Events

Several times each year, we also organize health awareness events at and around UBC. At these events, participants get one-on-one time with a pharmacist or student. We use validated health measurement tools, key messages and activities to help participants understand the practical aspects of a health condition, their own level of wellness and options for better health. We run these events in partnership with the UBC Health, Benefits and Wellness team on campus, and also with coordinators at community organizations such as senior’s centres.

When planning a health awareness event, we ask the same questions as when we plan a group education event (see above). Health awareness events usually require a larger room with a more involved set up, and more time to schedule participants individually.

We have four topics pre-prepared for health awareness events:
• heart health
• lung health
• bone health
• diabetes awareness

Modified versions of the materials we use for outreach are available for any pharmacist to download from the resources section of our website. Presentation materials can be made available upon request by emailing us at pharmacists.clinic@ubc.ca. Please note that UBC identifiers have been removed and the pharmacist user may need to update some of the content as new information becomes available.

Through our outreach efforts, we have found that participants are pleasantly surprised at the preventive health knowledge pharmacists have. Participants also tend to discover that they are less healthy than they thought, and this knowledge provides great motivation for them to make positive changes to reduce their risk of disease. Through our outreach efforts, we have noticed that the most common barriers to optimal health for people in our community are sedentary lifestyle and being overweight.

We have had great success connecting with our community, using our preventive health knowledge and proactively improving patient health through outreach events – we know that you can too.

References
A 60-year-old female was referred for fibromyalgia pharmacotherapy assessment. In addition to her 20-year history of fibromyalgia, past medical history is significant for chronic fatigue syndrome, Sjogren’s syndrome, actinic keratosis, and post-menopausal hot flashes. Up until 18 months ago, her fibromyalgia had been well controlled however, she is now experiencing worsening generalized back and joint pain with progressive physical weakness with decreased stamina. She has not identified any precipitant for this change. For management, she has been taking ibuprofen 100mg PRN and amitriptyline 10mg at bedtime every 2-3 days. More frequent use of amitriptyline caused excessive dry mouth and sedation. Upon further discussion, she revealed she also uses inhaled medicinal cannabis and has found it to be very effective and well tolerated in managing her symptoms.

Fibromyalgia is a common chronic pain syndrome, with an estimated prevalence rate of 2-3% in Canada. Fibromyalgia occurs more commonly in women, and the diagnosis typically occurs between the ages of 20 and 55 years. Symptoms can vary, but commonly include multifocal musculoskeletal pain with paresthesias, tenderness, fatigue, temperature intolerances, mood changes, and cognitive disturbances. Clinical diagnosis is often entirely dependent on a thorough history of symptoms and functional impairment, without defining physical or laboratory abnormalities. Based on the 2012 Canadian Guidelines for the management of fibromyalgia syndrome, a multi-modal approach with a combination of nonpharmacological strategies (e.g. physical activity) and symptom-directed pharmacological interventions is recommended. Pharmacologic agents that have been studied for use in fibromyalgia include tricyclic antidepressants, selective serotonin reuptake inhibitors, serotonin norepinephrine reuptake inhibitors, gabapentinoids, low dose naltrexone, cannabinoids, NSAIDs, and opioids. Benefits with pharmacological interventions tend to be modest and often a combination of treatments from different pharmacologic categories is required. Despite the availability of other therapies, our patient had a strong preference to continue using cannabis or cannabinoids and is wondering if there is any evidence to support this practice and what the safety risks may be.

Conclusions of recently published reviews and consensus documents on use of medical cannabis for chronic non-cancer pain are conflicting. Trials are often limited by short duration (weeks), limited clinically relevant functional outcomes, large variations in THC component/overall dosing, and low methodological rigor. In general, evidence suggest that cannabis may alleviate chronic neuropathic pain, defined as improvement of ≥30% in pain score, but its use has been insufficiently evaluated in fibromyalgia to be considered an evidence based alternative. A survey of 28 patients with fibromyalgia suggested cannabis may provide significant relief of pain and stiffness, evaluated by VAS before and 2 hours after cannabis self-administration while promoting relaxation and perception of well-being. Currently, the Canadian Rheumatology Association does not support the use of medical cannabis for fibromyalgia syndromes; while the Canadian preliminary guidelines for the use of cannabis for chronic pain or anxiety, suggest use of pharmaceutical cannabinoids like nabilone as an alternative prior to pursuing cannabis. Available evidence indicates nabilone may improve pain, anxiety, and sleep compared to placebo or amitriptyline for fibromyalgia. As cannabis dosing is complicated by lack of standardization in clinical trials, gradual dose titration is needed to establish the optimal dose effective in improving pain relief and function, while minimizing euphoric or cognitive impairment. General guidance is to take 1 inhalation (=1 dose) slowly over 5 seconds, hold breath for 10 seconds and gently exhale. The effect of a single dose should be assessed in 4 hours in naïve patients or with each trial of new cannabis strain. Frequency can be increased over the course of days to weeks, to a total 4 inhalations (=4 doses) per day or max of 3g/day.

Canadians can legally access medical use of cannabis through the Access to Cannabis for Medical Purposes regulations (ACMPR) program via a licensed producer, for more information access and ACMPR: https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-use-marijuana/compliance-enforcement.html.

Potential medical harms of cannabis include impairment in memory or cognition, psychosis or new onset mania and cardiovascular
and respiratory disease. Generally, cannabis use is not appropriate for patients who are under the age of 25, have a personal history or strong family history of psychosis, have a current or past cannabis use disorder, have an active substance use disorder, have cardiovascular (angina, peripheral vascular disease, cerebrovascular disease, arrhythmia) or respiratory disease, are pregnant, planning to become pregnant or are breastfeeding.\(^{7,8,13}\)

The role of cannabis in fibromyalgia symptom management is unclear at this time. Considering the best available evidence and patient’s current positive response to cannabis therapy, a trial of nabilone at 0.5mg PO HS x 1-2 weeks, with titration as tolerated to 1mg PO BID was recommended as an alternative option. She was aware of risk of dry mouth (estimated to be 22%-36%) and drowsiness (estimated to be 52-66%) with nabilone and was comfortable proceeding with this option given tolerability of inhaled cannabis. Amitriptyline was discontinued due to poor tolerability and unclear benefit.

References

Note: each case study has been peer reviewed and qualifies as a non-accredited learning activity (CE-Plus) within the annual professional development requirement for licensure by the College of Pharmacists of BC.

Your Responsibility

Health care professionals are required to assess each case based on the patient’s unique circumstances in consultation with the patient and their care team. The recommendations in this case are based on the views of our clinicians after careful consideration of the best available evidence and needs of the patient. If you would like to discuss one of your patients with us please contact the Clinic team.