



The Straight Dope on Cannabis and Older People

NOTE: This Backgrounder is designed to provide helpful information for general educational purposes only. It is not a substitute for professional medical, policy or legal advice.

Background

Medical marijuana has been legal in Canada since 2001. Yet, there is still considerable stigma among older people for using cannabis to relieve a variety of symptoms that they may experience. With the legalization of recreational cannabis, and the potential legalization of cannabis edibles soon afterwards, older Canadians may be less hesitant to try cannabis as the “reefer madness” stigma fades.

This CRNCC backgrounder examines some of the literature on the “highs” and lows of pot use for older people. The federal government passed Bill C-45 to legalize recreational cannabis across the country, leaving the provinces to regulate the distribution and sale of recreational marijuana. Canadians will be able to consume marijuana recreationally without criminal penalties starting in the fall of 2018.

Although recent data on the number of Canadian seniors using cannabis are unavailable, Health Canada figures for 2013 showed that two-thirds of Canadians registered to purchase medical marijuana were taking it to treat severe arthritis, more common among older adults. According to Health Canada, by the end of 2016, almost 130,000 Canadians had signed up with the country’s 38 licensed cannabis producers (Canadian Press, 2017).

Seniors may turn to medical marijuana, because the drugs they have been taking are no longer helping their condition. They are hoping that cannabis will help ease chronic pain, insomnia, depression and anxiety, after pharmaceutical drugs have failed, and without the negative side effects that may accompany pharmaceutical drugs (Barton, 2017).

Fast Facts

Medical Marijuana

The Access to Cannabis for Medical Purposes Regulations (Government of Canada, 2018a) specifies that to qualify, a person must:

- live in Canada
- be 18 years of age or older
- not be registered more than once at any time
- not have been convicted of a marijuana-related offence

A patient may procure medical cannabis in the following ways:

- produce cannabis as a registered person;
- obtain cannabis produced by a registered caregiver;
- purchase cannabis from a licensed producer;
- obtain cannabis from a health care practitioner in the course of treatment for a medical condition, or from a hospital or hospital employee in the course of treatment for a medical condition.

It is prohibited to obtain cannabis from more than one source at a time with the same medical document.

Potential Benefits

After reviewing the limited available clinical studies, Health Canada offers the following cautiously optimistic summary, with the proviso that further research is needed to confirm the findings. Clinical studies and anecdotal reports supporting the safety and efficacy of cannabis for therapeutic purposes in a variety of disorders are limited but are slowly increasing in number (Health Canada, 2013).

There is mixed evidence thus far to suggest that cannabis may be useful in a number of disorders including the following:

- alleviating a wide variety of single or co-occurring symptoms in palliative care settings (e.g., nausea and vomiting associated with chemotherapy or radiotherapy, anorexia/cachexia, severe intractable pain, severe depressed mood, and insomnia);
- stimulating appetite and producing weight gain among AIDS and cancer patients;
- helping patients suffering from multiple sclerosis or spinal cord injury when other drugs fail or produce unacceptable side effects;
- relieving chronic pain and treating sleep difficulties associated with chronic pain;
- treating post-traumatic stress disorder;
- improving bladder dysfunction associated with multiple sclerosis or spinal cord injury

Please refer to Health Canada (2013) for a more extensive discussion and summary of the studies.

Another document developed for the World Health Organization (Amato, Davoli, Minozzi, Mitrova, Parmelli, Saulle, & Vecch., 2017) presents some very mixed evidence on the benefits and harms of cannabis (including extracts and tinctures) for treating adults with multiple sclerosis, chronic pain, HIV/AIDS, Dementia or Tourette syndrome, and adults with cancer receiving chemotherapy.

A report of the National Academies of Sciences, Engineering and Medicine (2017) draws the following conclusions.

There is conclusive or substantial evidence that cannabis or cannabinoids are effective for:

- treating chronic pain in adults --it is worth noting that rubs, creams and lotions infused with THC can help relieve pain in a localized area;
- treating chemotherapy-induced nausea and vomiting;
- improving patient-reported multiple sclerosis spasticity symptoms.

There is moderate evidence that cannabis is effective for:

- improving short-term sleep outcomes in individuals with sleep disturbance associated with obstructive sleep apnea syndrome, fibromyalgia, chronic pain, and multiple sclerosis.

There is limited evidence that cannabis or cannabinoids are effective for:

- increasing appetite and decreasing weight loss associated with HIV/AIDS;
- improving clinician-measured multiple sclerosis spasticity symptoms;
- improving symptoms of Tourette syndrome;
- improving anxiety symptoms, as assessed by a public speaking test, in individuals with social anxiety disorders;
- improving symptoms of post-traumatic stress disorder.

The report includes a series of statements that there is limited evidence to support or refute the efficacy of cannabis for a wide range of other health ailments such as cancers, irritable bowel syndrome, epilepsy, spasticity in patients with paralysis due to spinal cord injury, motor system symptoms associated with Parkinson's disease, mental health outcomes in individuals with schizophrenia.

As can be seen, the evidence to date is mixed. Though recent studies show some promise, more and larger studies need to be done on the effects of cannabis on treating the common ailments of older people.

We again caution that this information is not a substitute for professional medical advice.

Recreational Marijuana

In June 2018, Bill C-45, the Federal Cannabis Act for recreational marijuana was passed and will become law on in Canada on October 17, 2018. The Cannabis Act will allow adults who are 18 years or older to engage in the following activities:

- “Purchase fresh or dried cannabis, cannabis oil, plants and seeds for cultivation from either a provincially or territorially regulated retailer, or where this option is not available, directly from a federally licensed producer;
- Possess up to 30 grams of dried legal cannabis or equivalent in public;
- Share up to 30 grams or equivalent of legal cannabis and legal cannabis products with other adults;
- Cultivate up to 4 plants in their own residence (4 plants total per household); and
- Alter cannabis at home in order to prepare varying types of cannabis products (e.g., edibles) for personal use provided that no dangerous organic solvents are used in the process.”
(Government of Canada, 2018b & 2018c).

The federal, provincial and territorial governments will share responsibility for overseeing the new system.

Government of Canada

The federal government’s responsibilities will be to:

- set strict requirements for producers who grow and manufacture cannabis;
- set industry-wide rules and standards, including:

- the types of cannabis products that will be allowed for sale;
- packaging and labelling requirements for products;
- standardized serving sizes and potency;
- prohibiting the use of certain ingredients;
- good production practices;
- tracking cannabis from seed to sale to prevent diversion to the illicit market;
- imposing restrictions on promotional activities.
(Government of Canada, 2018b & 2018c).

Provinces, Territories and Municipalities

The Bill provides that provinces and territories may take responsibility for developing, implementing, maintaining and enforcing systems to oversee the distribution and retail sale of cannabis, in close collaboration with municipalities. They can also:

- **increase the minimum age** in their province or territory (but not lower it);
- **lower the personal possession limit** in their jurisdiction;
- set further restrictions on personal cultivation, **such as lowering the number of plants per residence**;
- restrict where adults can consume cannabis, such as in public places, workplaces or motor vehicles
(Government of Canada, 2018b & 2018c).

Points to Consider Before Trying Cannabis

The literature offers a number of cautionary notes, particularly to those who have never tried cannabis. For example, drowsiness and dizziness, two known side effects of cannabis, can contribute to instability and falling in older people.

Dr. Hance Clarke, director of the pain-research unit at the Toronto General Hospital, advises that not all marijuana is the same. Not only do marijuana plants have different

chemical compounds which can affect a wide range of processes in the human body, the amount of cannabidiol (CBD) and tetrahydrocannabinol (THC - the ingredient that makes people feel high), varies across marijuana strains.

Currently, there is insufficient reliable scientific evidence regarding standardized doses and treatment protocols, leaving physicians with no guidelines as to what dose to recommend. Since there is no protocol on dosage, people need to play an active role in determining their own most effective dose (Taylor, 2017).

Dr. Arsenio Avila, an anesthesiologist and pain specialist at Sunnybrook Health Sciences Centre in Toronto noted that with marijuana some patients could reduce their doses of other pain medications, including opioids. Since patients tend to develop a tolerance to opioids, requiring a higher dosage, patients can gradually reduce the dosage of opioids with marijuana and get the same pain relief (Taylor, 2017).

Health Canada (2000) includes the following short-term effects for Cannabis.

Effects of smoking are felt within a few minutes and last two to four hours. Effects from ingestion (e.g., eaten in baked or cooked foods) appear more gradually and last longer, and the person may feel dull and sluggish for some time afterwards. The person feels calm, relaxed, talkative and sometimes drowsy. Concentration and short-term memory are markedly impaired, and sensory perception seems enhanced, colours are brighter, sounds are more distinct, and the sense of time and space is distorted. Appetite increases, especially for sweets. Some people withdraw, or experience fearfulness, anxiety, depression; a few experience panic, terror or paranoia, particularly with larger doses. Some experience hallucinations with larger doses and symptoms worsen in persons with psychiatric disorders, particularly schizophrenia. Physical effects include impaired coordination and balance, rapid heartbeat, red eyes, dry mouth and throat. Usual doses impair motor skills; especially

when used in combination with alcohol; cannabis use before driving is particularly dangerous...

...chronic, heavy use may include decreased motivation and interest, as well as difficulties with memory and concentration. These problems tend to clear when regular use stops. However, there is increasing research evidence of lasting harmful effects on mental function in some people. The respiratory system is damaged by smoking; a single joint of marijuana yields much more tar than a strong cigarette. Tar in cannabis smoke contains higher amounts of cancer-producing agents than tar in tobacco smoke...

What Can Community Service Organizations Do?

Community organizations may consider the following activities.

- Collaborate with a geriatrician, physician and/or licensed producer to host an information session or workshop to inform older people and their carers about cannabis as medicine and how to access cannabis from licensed producers as opposed to cannabis dispensaries that operate illegal businesses;
- Make information pamphlets available;
- Display a poster showing how to access more information about medicinal cannabis as an alternative to pharmaceuticals;
- Create an online forum and video informing older people about cannabis;
- Educate seniors that there are many strains and types of medical cannabis and many ways to consume cannabis, from smoking, to vaping, to cannabis-rich tinctures, oils and capsules. For example, pure cannabidiol (CBD) oil has medicinal properties to relieve symptoms without the tetrahydrocannabinol (THC), the psychoactive ingredient that makes people feel "high".
- Cannabis capsules also do not have to give the "high" feeling, but can possibly help to relieve pain, or provide a full night's

sleep. Again, there is no protocol on dosage.

- When edibles become legal in 2019, older people can choose an edible form of cannabis.

The general agreement is that we need more research and evidence. With the legalization of recreational cannabis, presumably more studies will be conducted to assess the effectiveness of cannabis in promoting the well-being of older adults.

Cite as:

Lum, J.M. (July, 2018). Toronto: ON, Canadian Research Network for Care in the Community

References

Amato, L., Davoli, M., Minozzi, S., Mitrova, Z., Parmelli, E., Saulle, R., & Vecch, S. (2017). *Systematic reviews on therapeutic efficacy and safety of cannabis (including extracts and tinctures) for patients with multiple sclerosis, chronic neuropathic pain, dementia and Tourette syndrome, HIV/AIDS, and cancer receiving chemotherapy*. Geneva, Switzerland: World Health Organization. Retrieved from http://www.who.int/medicines/access/controlled-substances/Systematic_reviews_on_therapeutic_efficacy_and_safety.pdf

American for Safe Access. (2018). *Aging and medical cannabis*. Washington, DC: Author. Retrieved from <https://www.safeaccessnow.org/aging>

Barton, A. (2017, November 12). Seniors turning to cannabis for relief – and businesses are all in. *The Globe and Mail*. Retrieved from <https://www.theglobeandmail.com/life/health-and-fitness/health/seniors-turning-to-cannabis-for-relief-and-businesses-are-all-in/article34760076/>

Canadian Institute for Health Information. (2014). *Drug use among seniors on public drug programs in Canada, 2012*. Toronto, ON: Author. Retrieved from https://secure.cihi.ca/free_products/Drug_Use_in_Seniors_on_Public_Drug_Programs_2012_EN_web.pdf

Canadian Press. (2017, February 23). Number of medical marijuana users soars across Canada, now almost 130K. *Global News*. <https://globalnews.ca/news/3268705/number-of-medical-marijuana-users-soars-across-canada-now-almost-130k/>

Government of Canada. (2018a). *Access to Cannabis for Medical Purposes Regulations*. SOR/2016-230. Retrieved from <http://laws.justice.gc.ca/PDF/SOR-2016-230.pdf>

Government of Canada. (2018b). *Legalizing and strictly regulating cannabis: The facts*. Ottawa, ON: Author. Retrieved from <https://www.canada.ca/en/services/health/campaigns/legalizing-strictly-regulating-cannabis-facts.html>.

Government of Canada. (2018c). *Introduction of the Cannabis Act: Questions and answers*. Ottawa, ON: Author. Retrieved from <https://www.canada.ca/en/services/health/campaigns/introduction-cannabis-act-questions-answers.html>

Government of Ontario. (2017, December 12). *Ontario passes legislation to ensure safe transition to Federal cannabis legalization*. Toronto: ON: Author. Retrieved from <https://news.ontario.ca/mag/en/2017/12/ontario-passes-legislation-to-ensure-safe-transition-to-federal-cannabis-legalization.html>



Health Canada. (2013) *Information for Health Care Professionals: Cannabis (marihuana, marijuana and the cannabinoids*. Ottawa, ON: Author. Retrieved from <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/information-medical-practitioners/information-health-care-professionals-cannabis-cannabinoids.html#chp41>

Health Canada. (2000). *Straight facts about drugs & drug abuse*. Ottawa: ON: Author. Retrieved from <http://publications.gc.ca/collections/Collection/H39-65-2000E.pdf>

National Academies of Sciences. (2017). *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research*. Washington, DC: National Academies Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK423845/pdf/Bookshelf_NBK423845.pdf

Taylor, P. (2017, April 20). Dosage, THC levels and other points to consider before trying medical marijuana. *The Globe and Mail*. Retrieved from <https://www.theglobeandmail.com/life/health-and-fitness/health-advisor/dosage-thc-levels-and-other-points-to-consider-before-trying-medical-marijuana/article34760645/>