



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Veterans Affairs

ACVA • NUMBER 111 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Monday, March 18, 2019

—
Chair

Mr. Neil Ellis

Standing Committee on Veterans Affairs

Monday, March 18, 2019

• (1550)

[English]

The Chair (Mr. Neil Ellis (Bay of Quinte, Lib.)): I would like to call the meeting to order.

Today we have a panel with Dr. Oyedeji Ayonrinde, associate professor, Department of Psychiatry, Queen's University; and Dr. Yasmin Hurd, professor of psychiatry and neuroscience at the Icahn School of Medicine at Mount Sinai.

As individuals, we have Dr. Didier Jutras-Aswad, psychiatrist, Centre hospitalier de l'Université de Montréal; and Andrew Baldwin-Brown, co-founder, Spartan Wellness.

We will begin with your testimony, Dr. Ayonrinde.

Dr. Oyedeji Ayonrinde (Associate Professor, Department of Psychiatry, Queen's University, As an Individual): Thank you.

Good afternoon, honourable members of Parliament. Thank you for the invitation to address this committee on the important topic of medical cannabis and veterans' well-being.

At Queen's University, Kingston, I'm an associate professor of psychiatry and medical director of the early psychosis intervention program for southeastern Ontario. I also hold a cross-departmental position with the department of psychology, and hold accreditations in psychiatry and addictions.

My cannabis-related research explores knowledge, attitudes and perceived benefits of cannabis across different demographic groups; cannabis use and mental disorders, primarily psychosis, anxiety and PTSD; and the objective quantification of cannabis products. Against this backdrop, we're developing a cannabis consult clinic, applying current evidence to reducing the risk of harms in youth and young adults.

I've also been involved in a number of initiatives with the Canadian Armed Forces, Health Canada and health professionals toward better understanding of cannabis products and potential impacts on mental health in some individuals.

The military veterans and their families make incredible sacrifices through the course of their careers, and in some cases for many years after active duty. As a psychiatrist who has worked with a number of veterans and their families over the years, I'd like to acknowledge this sacrifice; health consequences in some cases being physical, psychological or both.

I support evidence-based and objective decision-making by informed adults for both medical and recreational use, while advocating minimizing the risk of harms in children, adolescents and young people.

While cannabis products have been consumed for medical purposes for centuries, the scientific evidence base supporting its use at the same level of rigour as medicines and pharmaceutical preparations is still in relative infancy. There's a growing body of evidence regarding medical effects of cannabis. However, considerably more research is required. Some of the current cannabis legislative frameworks serve to position Canada as a leader in this sphere. Likewise, the anecdotal reports of individuals consuming cannabis for symptom relief cannot be ignored, as history has taught us with the development of other medications.

For my presentation, I would like to present the framework around medical cannabis using three Ps: the patient, the physician and the plant as a pill. The patient, with individual idiosyncrasies, includes comorbidities, family impact and socio-economic factors that influence health or well-being. I will speak about physicians, their experience, knowledge and attitudes, and cannabis, a plant as a pill for medical use.

With regard to the patient, in my experience in working with veterans, I would like to make a few observations, perhaps stating the most obvious. Veterans with health issues sometimes struggle with adjustment and negotiating their new identity and roles outside the military, including children, parents, partners and peer support systems.

Veterans range from individuals in late adolescence to elderly members of our communities. With these age differences are also significant differences in physical brain maturity—below the age of 25, in some—and the mental impact of exposure to different substances and situations. Furthermore, different military may influence trauma exposure or re-exposure. This exposure and individual responses are not homogeneous.

For instance, PTSD, a mental disorder, has unique subjective and experiential components for each individual that cannot be generalized. This is also the case with pain and sleep symptoms. Individual distribution of endocannabinoid systems within the body also have an interplay with cannabis that is unique to each of us.

As a pill, there's no single cannabis, and reference of cannabis indicates a very broad and heterogeneous range of plant product with shared core components in different ratios. While we refer to THC and CBD, there are many others as well.

On standardization, while some licensed cannabis products such as gels have been developed to stringent standards, the quantification and standardization of other products, such as dried flower, are less exacting. For instance, there can be considerable difference in the composition of a smoked joint with different joint sizes, THC potency, THC-to-CBD ratios and terpene profiles. Some early findings from research I'm doing at the moment have identified close to a 65-fold difference in the THC milligram potency of some joints compared to others.

- (1555)

With respect to dosaging, several factors can have an effect on the dose of active cannabis product delivered to the body: potency, quantity consumed, route of consumption—whether it's smoked, ingested or topical application—and individual tolerance. Furthermore, with smoking, significant dose differences can be achieved with different inhalation methods, such as the mouth hold and the puff frequency, to mention two. In light of this, more research needs to be done to identify optimum doses or dosing regimes for individual disorders and consumption styles.

Turning to side effects, like many products consumed for medical purposes, cannabis can present a range of adverse or side effects. Some of these may be genetically determined, such as the risk of psychosis in some individuals, while others may show direct dose response effects. In addition, adverse effects may reflect the product ratios, and this needs to be studied in greater detail.

On drug interactions, a number of veterans received treatment for different health conditions that may or may not be directly related to military duty. For instance, an individual with PTSD, heart disease and respiratory difficulties may be on multiple medications, requiring specialists' interventions. Drug interactions can have an influence on the overall effectiveness of multiple health condition interventions when different substances are used with cannabis.

In terms of risk versus benefit, with each medical cannabis product, route of consumption and application require careful thought regarding the risk versus the benefits, and it's not uncommon for individuals to tolerate harmful effects because the benefits override.

The next P is the physician or health professional. Many, if not the majority of physicians, have had only limited exposure to military medicine. The limited awareness of military experience among physicians can present a therapeutic gap. In light of this, the veteran seeking help is faced with bridging this gap with a health professional. The development of medical curricula in military medicine or a faculty of veterans involved in medical education may serve to bridge this gap, and invariably the experience of care. In addition, physician experience with cannabinoids is also quite limited, with some historical bias from the days of having to say cannabis was bad for you.

Next, I'll speak to the inadequate evidence to support clinical confidence and the absence of drug identification numbers from

cannabis products. The range of cannabinoids and their effects require considerably more medical education and training. With authorization, and the use of cannabis from a licensed producer, the patients and health professionals are better informed of the content produced, with a duty to monitor response and effects. The development of support of centrally funded centres of research excellence in veteran health could enhance this, such as the Canadian Institute for Military and Veteran Health Research, CIMVHR, and international collaborations.

I have some brief comments on the study topics. As the study topics are far-reaching, I will limit my comments to those within the scope of my knowledge and understanding.

As mentioned earlier, the number of grams, for instance, three grams of dried flower, presents a very broad and unstandardized range of THC potencies and THC-to-CBD ratios, allowing for individual differences in health conditions, metabolism and tolerance. While this may be considered heavy consumption for recreational use, there's a distinction with specific symptom reduction and medical use, and we need more research to understand this better.

Current research regarding the use for PTSD and chronic pain shows that with PTSD there's emerging evidence of benefit in some individuals; however, larger randomized controlled trials are lacking, and studies require more specific dosage and composition data. For instance, frequent use of high-potency THC cannabis in a younger veteran may trigger psychotic symptoms, or worsen mental health, particularly if there is a family history. Given these points, the evidence is inconclusive and should be considered on an individual basis for now.

With respect to access to health practitioners to obtain medical authorization, there's a dearth of health professionals with in-depth understanding of military or veterans' well-being to provide specific medical authorizations for cannabis. With regard to veterans, a specific training and accreditation program for physicians, in conjunction with relevant medical colleges, may serve to bridge this gap.

Turning to the effect of legalization of cannabis for recreational purposes on the use of medical cannabis for veterans, this presents both challenges and benefits to understanding the use of medical cannabis. Research into recreational use allows a much better understanding of the physiological response, dosage effects and side effects of cannabis on healthy individuals and across the health spectrum. This new knowledge will ultimately benefit medical cannabis science. With veterans, the potential consumption of both medical and recreational cannabis concurrently can pose challenges with dosing and monitoring.

• (1600)

Additional thoughts would be on the development of a national information registry and specific advisory information for the military, and sensitively designed and tailored information campaigns for military families.

In conclusion, these are my preliminary thoughts on the study topics, and I look forward to answering questions or clarifying any points made. Thank you for the opportunity to share them with you.

The Chair: Thank you.

Dr. Hurd.

Dr. Yasmin Hurd (Professor, Psychiatry, Neuroscience, Icahn School of Medicine at Mount Sinai, As an Individual): Thank you for the invitation to speak on this very important topic, which is so critical to veterans and our society.

I'm Yasmin Hurd. I'm the director of the Addiction Institute at the Icahn School of Medicine in New York. I'm also a professor in psychiatry, neuroscience and pharmacological sciences. I'm also a neuroscientist whose cannabinoid studies have been recognized internationally in consideration of opioid reduction and related psychiatric disorders.

Veterans have always been trailblazers fighting for freedoms that we sometimes take for granted. Unfortunately, in some situations, this has placed them at tremendous risk even when the battle on the field is over. Many of them face a new battle, one even greater than the physical battlefield. A significant percentage of veterans suffer from PTSD, depression, chronic pain and substance use disorder. They are all interconnected. For example, chronic pain led many down the path of prescription opioids. Veterans, like many others, were simply unaware of the potential consequences of such potent opioids—including the tragic risk of addiction. We now know that the use of opioids over a long period of time is highly addictive, which has caused the deaths of millions of people in North America, as well as a significant economic burden and the destruction of many families and communities.

Cannabis has been proposed as a new pharmacological agent to alleviate the mental and physical suffering of veterans. Despite limited scientific research, cannabis use has been widely publicized as reducing chronic pain, PTSD, anxiety and opioid addiction. This really has unfortunate consequences since the public and veterans falsely believe that marijuana can cure all of these conditions.

As a scientist, I initiated the studies of cannabidiol, CBD, a non-intoxicating cannabinoid, as a potential treatment for opioid abuse more than 10 years ago now. Indeed, we observed efficacy to reduce anxiety and opioid craving. However, such studies are still in early

stages of development and require more support. There is still a lack of substantial research evidence about the efficacy of cannabis to treat all these disorders, yet anecdotal stories have propelled many people, including veterans, to start smoking marijuana. Smoking anything has significant health risks.

Instead of science-based medicines, it seems that the Canadian marketplace has developed without the required clinical trials and research that's really necessary to establish the safety and efficacy of these new cannabis health products. Therefore, veterans, like many in our society, falsely believe that recreational cannabis and medical cannabis are one and the same. They are not.

There really is an urgent need for proper education all around. We must be committed to doing the necessary clinical trials and partnering with non-recreational licensed producers to develop real, safe and efficacious medicines that the veterans administration can truly support for the treatment of veterans. The veterans administration needs to identify those companies truly committed to developing medicine.

We must also develop formulations that are medicinal. We must know the cannabinoids, such as CBD or full-spectrum cannabis signatures, the dose and concentrations, which was spoken about before, the dosing regimen and the delivery formats, such as capsules or inhalation, that work best to maintain stable relief of pain, PTSD and addiction while minimizing the side effects. We do not want to, once again, put veterans at risk because we are rushing to put out recreational marijuana as medicine. While it is easy to pass off recreational joints to veterans as medicine, it really is egregious and actually an insult to veterans who deserve much more.

• (1605)

By working together, I fully believe that scientists, physicians, non-recreational licensed producers and the veterans administration can develop evidence-based medicinal cannabis. I think that veterans and the general society deserve nothing less.

I have addressed a number of the points that were raised with regard to the aspect of exceeding three grams a day and the cost of the reimbursement. I can't speak to the reimbursement so much, but in terms of three grams a day, I think the aspect of standardization is critical. Three grams indicates that it's about smoking. As I indicated, for me and most people in this field, smoking is not a valid medical route of administration.

If we're creating medicines, we should create the best formulations so that we can know what doses, concentrations and dosing regimens really alleviate specific symptoms and disorders. One dose will not fit all.

There is very limited research about which particular cannabinoids, or the full cannabis plant, are needed for each of these. Again, that's why it requires more research.

Without placebo-controlled double-blind clinical studies, we will not be able to give informed information to patients and physicians.

In closing, I definitely want to emphasize overall the critical need for veterans and the public to be made aware that for cannabis to be used as a medicine, we must treat it as such. The sacrifices that veterans have made should be honoured by bringing whatever is needed to provide them with safe, evidenced-based medicines. I really think that we can be trailblazers in developing such medications together.

Thank you.

The Chair: Thank you.

We'll go to Dr. Jutras-Aswad now.

[*Translation*]

Dr. Didier Jutras-Aswad (Addiction Psychiatrist and Researcher, Centre hospitalier de l'Université de Montréal, As an Individual): I'll be speaking to you in French, and I can then answer your questions in both languages.

I want to thank the committee for inviting me to appear today to discuss an extremely important issue that affects thousands of men and women who have served this country. These citizens deserve not only our respect, but also access to care that meets their needs, both during and after their years of service.

I'll start by introducing myself. My name is Didier Jutras-Aswad. I'm an addiction psychiatrist and a researcher at the CHUM Research Centre, where I'm the head of a mental health and addiction research program. The program focuses specifically on cannabis and cannabinoids, and looks at both their harmful and sometimes therapeutic effects. I'm also the head of the Centre for expertise and collaboration in concurrent mental health and addiction disorders at the Université de Montréal, where I'm an associate professor in the department of psychiatry and addiction studies.

I'd like to start by establishing an important premise for this presentation. I believe that cannabis—as my colleagues have pointed out—is a complex substance that can have positive effects for some people, but harmful effects for others. I believe that both the dramatization of the negative effects and the excessive promotion of the therapeutic effects, which are often not scientifically proven, are counterproductive when it comes to addressing the many and sometimes complex issues concerning this substance. I hope to present to you today a balanced approach to a very important topic, namely, the proper use of therapeutic cannabis by veterans.

The appropriate choice of prescription for a treatment—as with many other medical conditions—is usually based on a careful review of the risk-benefit ratio of the proposed treatment.

In the case of medical cannabis, a number of so-called pleasant or soothing effects have been reported by users for a range of health issues. Some of these benefits have been studied and supported by scientific data, but others have not. The data that provides a more scientific perspective comes from studies that use various methodologies. These methodologies often include the administration of cannabis in the form of products with well-controlled doses and concentrations, and not cannabis smoked *ad libitum* without any control over the frequency, intensity and dose consumed by the user.

The health issues for which smoked cannabis has thoroughly demonstrated its effectiveness include chronic pain and a lack of appetite in people who have other disorders. The amount of cannabis involved is generally no more than one or two grams in most cases. Other health issues that can sometimes be adequately treated with non-smoked cannabinoids, such as tablets or inhalers, are most often nausea, spasticity and insomnia.

The risks sometimes associated with cannabis are becoming better known. While most people use cannabis without experiencing any issues, it can still have a negative impact in some situations. It can affect mental health in particular, by leading to symptoms of anxiety and depression, cognitive impairment, the development of psychotic presentations or symptoms of psychosis, or the development of a pattern of uncontrolled cannabis use. We're obviously talking about drug addiction here. All these risks are influenced by a number of factors. These factors are the person's individual profile, in particular the person's genetics, psychological profile, the context or time of use, the type of cannabis used, or the frequency and intensity of use.

I'd like to draw your attention to the fact that the use of the more potent cannabis—with high THC levels—or regular use, such as several times a week or every day, is often associated with an increased risk of developing issues related to the substance, particularly mental health issues.

I believe that all this information combined helps us identify the four conditions under which access to therapeutic cannabis has a greater chance of presenting more benefits than risks for veterans.

The first condition is the prescription of cannabis only after a thorough assessment of the underlying medical issue and the use of cannabis only for health issues for which we have enough data.

● (1610)

On that note, we have data from various studies that shows that the assessment conducted before the prescription or authorization of medical cannabis often lacks rigour. We also know that many of the people who use cannabis for therapeutic purposes will do so for health issues for which we don't have enough scientific data.

The second condition is the use of the most evidence-based treatments that follow the good clinical practice guidelines for the different health issues in question. In most cases, cannabis shouldn't be a first-line treatment for veterans.

The third condition is the administration of cannabis in the form for which sufficient data is available. In most cases, the smoked form shouldn't be the preferred cannabinoid form.

The fourth condition is the administration of cannabis in controlled doses, at the lowest possible dose to minimize the risk of side effects. Clinical attention must be paid to the concentrations and the frequency of administration, as is the case for any medical treatment. I'd like to mention here that the scientific data is weak and often non-existent for doses above one or two grams a day.

Lastly, I'd like to remind you how often veterans experience physical or mental health issues and addiction. Most of these issues can be treated through various forms of psychotherapy or through certain drug therapies. However, these treatments aren't always available to veterans. In many cases, cannabis is most likely not the preferred first-line treatment to properly help veterans. That said, and particularly when we're talking about tightening up the procedures for regulating access to therapeutic cannabis, it seems more important than ever to ensure that veterans have better access to care or services that are known to be effective.

I'll be pleased to answer your questions during the question and answer period.

• (1615)

[*English*]

The Chair: Thank you.

From Spartan Wellness, we have Andrew Baldwin-Brown, a co-founder.

Mr. Andrew Baldwin-Brown (Co-Founder, Spartan Wellness): Hello. I'd like to thank you for inviting me to speak with you today.

I am Master Corporal (Retired) Andrew Baldwin-Brown. I enrolled in the forces in September 2001. I was a signaller. I did three tours in Afghanistan in the first six years of my service. I was diagnosed with post-traumatic stress disorder in 2012 and was subsequently medically released in October 2015.

I tried many SSRIs for depression and post-traumatic stress disorder, chronic pain in my lower back and in my knees. I didn't seem to find what I would call effective relief. I was more or less in a haze for about three or four years. I found that traditional medications didn't offer me the ability to feel either positive or negative emotions and it really negatively impacted my ability to get quality care.

Since then, as I said, I medically retired in October 2015. I've been a prescribed medical cannabis patient since January of that year. I had totally given up on the pill route.

Since then, I and eight other veterans co-founded a company called Spartan Wellness after seeing marked turnarounds in other patients, other veterans, in their quality of life, their ability to interact with their families, and keep up with commitments, both at home and outside. We decided it was time to actually take medical cannabis, as veterans, and take it back in-house, if you will, to take care of our own,

Currently, we have nine co-founders, all veterans, 26 veteran educators across the country, as well as the wife of a still-serving

member who is taking care of our administration. A retired medic from the joint task force who did 16 years there is our medical director. We're hiring nurse practitioners who served in the forces as well.

When veterans come to us, they are processed administratively by a veteran, prescribed by a veteran, overseen by a veteran, and educated by a veteran on the way out. We feel there is nobody else in a better situation than us to help guide those patients. We have found that the difference in the quality of life is night and day. The veterans are, number one, staying alive. As I said, they are able to keep their family commitments and actually absorb proper treatment from psychiatric and psychological care as well as deal with their physical needs. They are able to get to physiotherapy. They are able to get to their doctors' appointments and they are actually improving.

That's pretty much all I have to say. I'm here to answer your questions more than to speak on what I do.

Thank you very much for having me here.

The Chair: Before we start the questions, we have to welcome a new member.

I didn't realize, Ms. Blaney, that you're filling in permanently now, so you can't leave.

Is there anything we have to do for that?

The Clerk of the Committee (Mr. Michael MacPherson): We have to elect her as second vice-chair.

The Chair: Could somebody move that motion?

Ms. Rachel Blaney (North Island—Powell River, NDP): This is a hard job for you all.

Mr. Phil McColeman (Brantford—Brant, CPC): So moved.

The Chair: Okay.

(Motion agreed to)

The Chair: Thank you.

Mr. McColeman, we'll start with you.

Mr. Phil McColeman: Chair, I'd like you to give me a notice when I have one minute left in my questioning.

The Chair: Yes, okay.

Mr. Phil McColeman: There's something procedurally that I need to introduce to the committee and I'm going to use my question period, which allows me to ask specific questions of you and then at the end, I will move on to committee business. It should not take a long time, but I just wanted to keep you informed.

In full disclosure, I've been studying the use of cannabis in the Dravet community for probably over 10 years and have seen the anecdotal information. Some people describe it as Dravet syndrome, but it's largely, the doctors will know, a seizure issue often with children who experience uncontrollable seizures. That community across the country—I have been to one of their national conferences—is convinced that the CBD product hasn't prevented or cured the seizure situation, but in some cases, according to individuals I've visited, it has reduced their children's seizures from 45 a day down to three. They're organized both in the United States and Canada.

Also, I have a special needs, disabled son who has experimented with cannabis oil for anxiety issues and episodic aggression.

I definitely agree with all of you that there's so little scientific research on the subject matter. I thank all the doctors because I see the common thread in your comments. You've also heard each other today comment that this is, at best, a trial that's going on in all of society as to what the benefits are. Some people are trying to grasp it.

The other distinction that was made by your testimony today is that there's medical cannabis and there's recreational cannabis. Of course, the current government decided to move forward with recreational marijuana, without the evidence in front of them of what the effects would be. Many people, including the medical community, were not in agreement because it was a premature step to take in terms of legalizing it. Also, my riding has the largest first nation in Canada, Six Nations of the Grand River, and they are rampantly going into production. This past weekend I met an individual who thought he was buying a CBD product in a liquid form to reduce his pain. I asked him if he knew what he was taking. He said he had no idea what he was taking. There are no labels on the bottle. They're completely out of the jurisdiction of the Government of Canada because they consider themselves to be an independent nation.

We have all this going on and I'm describing it in the context here. There's one issue that industry seems to be pushing right now and I want your thoughts and honest views on it. There's medical, which is not really prescribed, but it's recommended and that's been talked about as medical cannabis. The taxation regime for that is the same as for recreational. The government taxes it three times and they pile on a final tax called an excise tax, which no other medication in this country experiences, if it's called medical. I've gone to a lot of the production facilities and a lot of them are legitimately producing medical product, but the recreational side is so attractive financially that most of them are going both routes. It's based on shareholder value in the company, so it's profit that they're after.

That said, there are some companies that are doing their due diligence on the medical side. Should medical marijuana be taxed the same as recreational marijuana, with the additional excise tax or what a lot of people call the sin tax? Should veterans be paying an additional excise tax on what is quoted as being medical cannabis?

• (1620)

The Chair: You have a minute and 30 seconds.

Mr. Phil McColeman: I'll leave it there.

I'll tell you what. Because you can't adequately answer this in 30 seconds and I do need to take care of this business, if I've planted a

seed in your brain, maybe you could come back to the answer or one of my colleagues can follow up with you as you think about how you might answer that.

Chair, thank you for giving me notice. I'm sorry that I had to give that much of a soapbox perspective on things.

Chair, I need to put on the table something that's on notice of motion, something that I think has been botched by our committee, if I might take that perspective. That is the fact that with all that's going on, with the chaos in the government today on all that's going on with SNC-Lavalin, we had a minister who resigned from this ministry.

Prior to that, we had a minister. Then Madam Jody Wilson-Raybould came into the position and resigned from her position. Then we had a temporary minister, Mr. Sajjan, who is also the Minister of National Defence. Now we finally have a permanent minister, but there was this whole transition and the ongoing chaos on the government side with SNC-Lavalin and the scandal that involves her testimony to the justice committee. The Prime Minister finally has seen fit to put in a permanent minister.

The reason I'm describing that to you is that this motion deals with that minister coming to this committee to answer the questions around what are called the supplementary estimates (B), the allocation of money for the use of veterans and the payment of money. As a committee, we have a solemn responsibility to make sure that funding goes to the front lines, to where it's most important to veterans. It's intertwined a bit with this, but not a whole lot.

That said, Chair, I'd like to move this motion:

That the committee invite the Minister of Veterans Affairs, the Hon. Lawrence MacAulay, to appear on the Supplementary Estimates (B) on March 20, 2019.

• (1625)

The Chair: Does anyone wish to speak to the motion?

(Motion agreed to)

The Chair: Who do we have up next?

Mr. Phil McColeman: Do I get my minute and a half?

The Chair: You were down to a minute. You can have a minute.

Mr. Phil McColeman: Thank you, Chair.

Maybe it's time to ask you to answer the taxation question I had on medical versus recreational cannabis and both being taxed the same with no differentiation. Should medical cannabis be taxed with excise tax?

Mr. Baldwin-Brown.

Mr. Andrew Baldwin-Brown: As a patient and a veteran, I would have to say no. When you're dealing with veterans who have post-traumatic stress disorder—who make up a large chunk of the medical cannabis patients in Canada—any time you throw a wrench at any type of system, you're going to have issues. Veterans will see any form of unforeseen circumstance or any form of unknown change in a bad light until it's fully explained.

For us as veterans, luckily most of the licensed producers have absorbed that excise tax. However, on the back end, that may not be the best thing for the department. If they're forced to eat one dollar per gram on an \$8.50 gram, they may skimp some other procedures or policies in creating the actual cannabis, and we may see a substandard product at the end because of it.

If they are allowed to put that money towards production, paying their people and ensuring it's done properly, with full quality, it wouldn't negatively impact at all. Most producers have been absorbing it.

The Chair: Thank you.

Mr. Samson.

Mr. Darrell Samson (Sackville—Preston—Chezzetcook, Lib.): Thank you, Chair, and thanks to all of you for your testimony and the information you've provided.

Thank you, Mr. Baldwin-Brown, for your service. It's very much appreciated.

I'm hearing that more and more people are indicating that the use of marijuana reduces the use of other medications such as opioids and others. Could you please comment on that?

Mr. Andrew Baldwin-Brown: Yes, for sure.

I do have one particular case. A friend of mine has been on cannabis for a while. He said that it's okay to talk to you guys about his case. He was a member of the Royal Canadian Navy. They hit some heavy seas. He ended up falling down a ladder and massively injuring his back, resulting in a medical release. Since then, he's been diagnosed with depression as well as degenerative disc disease, and he's going to be going down for a little while.

That individual was on every type of opiate I could possibly think of. He was unable to walk and unable to function. There were massive implications for his digestive system and cognitive abilities. He also went over to fentanyl patches and the like. He was prescribed, I believe, three grams a day to start. He ended up going to approximately six, almost exclusively on CBD, cannabidiol, a completely non-psychoactive variant of cannabis.

In 2016, we did see a reduction in initial coverage from 10 grams a day to three, and he had some issues getting specialist appointments lined up in time in order to facilitate that changeover. That patient did go back down to three grams per day and also as a result had to increase his pharmaceutical intake, so it was back to opiates and fentanyl as well.

Mr. Darrell Samson: Thank you.

Maybe some of the doctors could share some information on that question, as well, quickly.

• (1630)

Dr. Oyedeji Ayonrinde: The use of cannabis and cannabis products as an alternative to the use of opioids and opiates carries its own risk. A lot of people do use the cannabis products for symptom relief, and with some symptoms, they may get relief from similar symptoms as they do with the use of opioids.

The research to actually make this sufficiently robust for medical science is limited. Again, I emphasize that there's no single cannabis.

We can't ignore individual anecdotes and symptom relief, but as a clear substitute, as we would substitute other things in medical practice, the evidence isn't sufficiently robust.

Mr. Darrell Samson: I open the floor to the other two, please. Do you have comments?

Dr. Hurd.

Dr. Yasmin Hurd: In fact Didier Jutras-Aswad was a fellow at Mount Sinai who helped with the initial studies, and we have gone on.

We've definitely seen that CBD decreases craving and anxiety. But these studies are still small, and we are now conducting larger studies. Other groups have also seen CBD decreasing use of other drugs. Perhaps nicotine and alcohol are the two that most people have seen where CBD can have a positive effect. Most of the studies we do are on CBD.

As the doctor said, there is still a lot of research that's needed. But our studies show a potential benefit.

[*Translation*]

Mr. Darrell Samson: Dr. Jutras-Aswad, do you have anything to add?

[*English*]

Dr. Didier Jutras-Aswad: If I may comment on this, I think we need to take a step back. I think that looking at this question with the two possible answers being cannabis and opioid may be misleading.

In medicine in general, when we talk about treating a condition, we have guidelines. We have practice guidelines. We have different levels—first level treatment, second level treatment, third level treatment—based on scientific evidence. I think the question should not necessarily be whether it is opioid versus cannabis, or SSRIs versus cannabis, but rather, what the best interventions are that are available for different conditions, and where cannabis use may or may not be based on scientific evidence to treat that condition. I think it's very important. We've heard a lot of discussion around whether it is cannabis, opioids or whatnot. I think we should go back to how we usually consider treatment for different conditions, including pain.

Mr. Darrell Samson: Again, I open this question to any one of you.

We hear testimony from individuals that it is helping them tremendously, and we hear of some research that supports that and of other research that doesn't. Where are we exactly? What is the most important piece of research we could do right now to help us better understand this question?

Dr. Didier Jutras-Aswad: The most important piece of research we could do is a well-designed research trial to get the effect of very specific compounds for very specific conditions, and that's what's lacking. I think an anecdotal report, a patient or user reporting positive effects, is very valuable to start that process. But at some point I would strongly support the idea that we need a well-designed randomized control trial to test whether cannabis or cannabinoids may be helpful for specific conditions with specific dosage, which is not the case at this point.

Dr. Yasmin Hurd: I would just add that a lot of placebo effects are here, because many people do want to feel something that they've never felt before. That is why I concur with Didier, Dr. Jutras-Aswad, that we need placebo-controlled, randomized studies.

Dr. Oyedeji Ayonrinde: I would concur with Dr. [Inaudible—Editor].

The Chair: Thank you.

Ms. Blaney, you have six minutes.

Ms. Rachel Blaney: Thank you.

Thank you, all, for being here today.

As a member who represents a lot of veterans who deal with multiple issues, I think this is a really important topic that we're discussing.

I want to come back to a couple of things.

I want to talk a little bit more about the data. I think you guys did a fairly precise job of telling us where the gaps are, but I would still like to hear what the gaps are. Is any research happening internationally that would be beneficial for us to look at?

There's another thing I would love to have you touch on. I heard again and again that the focus is on smoking. Right now we know that the licensed cannabis producers are responsible for determining the quantity that they might be getting from fresh or from oil, and comparing that to dried grams. You also talked about concentration. This is a challenge. I feel there's a lot of uncertainty here about what that looks like.

What kind of recommendations need to go to the government around making sure that we're protecting veterans?

I'll start with you, Mr. Ayonrinde.

• (1635)

Dr. Oyedeji Ayonrinde: The exciting bit is that research into cannabinoids and cannabinoid medicine is rapidly growing and the momentum is building. There is also significantly more collaboration between researchers and centres around the world. Canada has a bit of a legislative advantage compared to some parts of the world. There's a lot of medical interest across the range of medical specialties regarding this. The evidence with therapeutic benefits of CBD and the cannabinoid CBD preparations is more robust and gaining more consistency than for THC with regard to ratios, the numbers and so on, but there's still a lot more we don't know.

In Canada, for instance, there's a Canadian consortium for investigations of cannabinoids. Different centres are beginning to harness their skills and work together. The partnerships are getting stronger. Veteran numbers are large globally and I think it does

present a lot of opportunity, provided there's solid research funding to back this up.

Ms. Rachel Blaney: Thank you.

Dr. Hurd, do you have anything to add?

Dr. Yasmin Hurd: I concur.

In the U.S., Europe and also in Canada, a lot of research has focused on CBD with psychosis, where some of the data is looking positive with opioid addiction. Obviously, with epilepsy and anxiety.... In the U.S. there are a number of studies being done on PTSD with CBD, but all of them are either just about to start or are in the mid-stages. I think that within two years we will have significant information.

This is the problem that I have. Canada has already stepped into the legalization on both recreation and medicinal, but I think we could address this very quickly. With the funding, we can identify collaborative centres to carry out this research, so it can be done quickly. We don't have to wait how many years. I think that if the veterans administration really wants answers, they have the resources. There are a lot of us scientists and physicians all over Canada, the U.S. and other places who can do collaborative studies very quickly to get the answers.

Ms. Rachel Blaney: Thank you.

Finally, Dr. Jutras-Aswad, do you have anything to add?

Dr. Didier Jutras-Aswad: Yes. I will not repeat what my colleagues already mentioned.

One thing is for sure. I will concur with Dr. Hurd that there are a number of networks in Canada and the U.S. Just in the field of addiction, for example, there are two very strong networks in the U.S. and in Canada that should be supported to conduct clinical trials.

The other piece of information and advice I would like to add is also the need for non-industry funded research. We've seen, of course, industry having a lot of money to put into that for [Technical difficulty—Editor] reasons. Collaboration with industry is important, but there is clearly a need for independently conducted research to provide the country and other countries with non-biased data surrounding the use of cannabis for a number of conditions.

Ms. Rachel Blaney: Thank you so much.

One of the other challenges is that we have a huge country with a lot of rural and remote communities that have really big barriers to addressing services for veterans as it is. This just adds another layer.

I'm wondering if I could come back to you, Mr. Baldwin-Brown, and ask you if you know anything about that. Could you talk about that in the context of the work that you do?

• (1640)

Mr. Andrew Baldwin-Brown: Specifically regarding veterans in rural areas?

Ms. Rachel Blaney: Yes.

Mr. Andrew Baldwin-Brown: As we found, a lot of veterans, specifically those who are struggling with post-traumatic stress disorder and depression retire into very rural areas. They want to live at peace; they don't want to deal with the hustle and bustle of city life. We found abilities to still be able to see those veterans, and if need be we can put another veteran across the table from them to get that one-on-one experience and explanation. I found, as a veteran with PTSD myself, over the phone is not always the best way.

There are a lot of veterans out there, and where they're recruited from has a huge play. As we know, Nova Scotia has a very high number of veterans per capita. Newfoundland, rural areas of Ontario and Quebec have as well.

Ms. Rachel Blaney: Thank you so much. I'm done.

The Chair: Ms. Ludwig.

Ms. Karen Ludwig (New Brunswick Southwest, Lib.): Thank you.

Thank you, all, for your testimony today.

Mr. Baldwin-Brown, thank you so much for your service and to your seven colleagues who are working with you.

We've heard from a number of people regarding the collection of data. In the work you do, are you sharing with Veterans Affairs Canada the information you're collecting and what you're learning?

Mr. Andrew Baldwin-Brown: We are not at this time. We would love to. We would relish the opportunity to work closely with Veterans Affairs Canada. When we're taking patients in on an initial prescription, we obviously ask them what medications they're currently on and check with the medical staff to make sure there are no contraindications and that the prescription is appropriate for that individual. That's not always the case.

Obviously, on renewal as well, we ask them which medications they've been taking. Have we had any luck in reducing those medications? In almost every instance we have, as I said, with the quality of life improvements and things like that.

Our data gathering is second to none in Canada as it stands right now. We have a vested interest in making sure that we gather everything we can.

Ms. Karen Ludwig: Where do you maintain your data?

Mr. Andrew Baldwin-Brown: It's online in our own program. It's in a medical program known as EMR, electronic records management.

Ms. Karen Ludwig: Have many of the veterans who are attending Spartan Wellness taken...? You mentioned finances, because however much it costs.... Did many of them receive a one lump sum payment or a pension for life?

Mr. Andrew Baldwin-Brown: With Spartan it's a mix of both. We found that the average age of our patients is somewhere around the late forties to mid fifties. A lot of those patients will be covered by the Pension Act, as well as received subsequent payments for different ailments. If somebody broke their hip in Cyprus, they got a pension under the Pension Act. For PTSD in Afghanistan they have a lump sum payment that is now going over the pension for life.

Ms. Karen Ludwig: Do you hear from any of the veterans that you're working with about the veterans centres themselves? Are they using the veterans centres?

Mr. Andrew Baldwin-Brown: Usually not, but some do. I tend not to. Most of the patients that we deal with deal with Veterans Affairs remotely through My VAC Account. The younger generation, usually those under 40 are high users of My VAC Account.

Then again, it's individualized. Someone with severe PTSD and depression may not have the capability to click 82 times to get what they need. Most of them are call-ins or proactive outreaches from the case managers themselves.

Ms. Karen Ludwig: Do you know if any of the veterans are using any of the wraparound services, such as education and training services, family services?

Mr. Andrew Baldwin-Brown: Some are, yes. I look at a whole bunch of veterans as three big packs. You have the veterans who got out who don't require any assistance from the VA. They're just off work and they're doing their thing and they happen to serve and didn't get injured and got out. A lot of those veterans I dealt with, the people I served with, are using the education and training benefit. I can think of at least two off the top of my head. You have a second group of people who are out and receiving some form of help from Veterans Affairs, whether they're working and receiving a top-up to their income or a permanent impairment allowance. Then we have the third group who usually have diminished earning capacity and rely on the VA as well.

Ms. Karen Ludwig: Thank you very much.

I'm going to jump over to our psychiatrist here in the room.

On the Canadian side, where are you receiving your funding for your current research?

Dr. Oyedeji Ayonrinde: Some is being funded within the university and for other research that's been funded, one is through a bequest from a family who lost someone. There are opportunities through CIHR and so on, which are competitive bids.

• (1645)

Ms. Karen Ludwig: Is there a national body that you think could be the overarching centre for the data you're working on in Canada? You mentioned in your testimony, for example—

Dr. Oyedeji Ayonrinde: —CIMVHR.

Ms. Karen Ludwig: Yes.

Dr. Oyedeji Ayonrinde: Yes, one of the bodies is the CIMVHR, which is the Canadian Institute for Military and Veteran Health Research, based at Queen's University. That has network links with other veteran research organizations around the world in Australia, the U.K. and the U.S.

Ms. Karen Ludwig: Am I looking at this too narrowly if... I'm just going to make my suggestion.

I think a lot of the work that I hear about at this committee, particularly from the medical profession and psychiatrists, is critical information. Networking and collaboration, as you said, are absolutely important.

Isn't there a crossover from the medical prescriptions to the general population for similar psychiatric challenges? If we keep it just inside Veterans Affairs is that too limited?

Dr. Oyediji Ayonrinde: It's not too limited; however, as I said earlier in evidence, there are some unique skills in working with veterans. Not all clinicians are comfortable with veterans' experiences. Not all have a sufficiently good appreciation of what happens in the theatre of combat and the consequences on the individuals and their families. A veteran said to me just last week that PTSD is that thing he had enough courage to share with me.

It's quite a different approach to civilian health issues. If I liken it medically to a fracture—a person could fracture his femur slipping on ice, in a car crash or being blown up. It's the same broken bone, but the experience and the qualitative nature is considerably different and the impacts are different.

Ms. Karen Ludwig: Thank you.

Do I have more time?

The Chair: No.

Mr. Chen, you have six minutes.

Mr. Shaun Chen (Scarborough North, Lib.): Thank you, Mr. Chair.

I have a question for the physicians, the doctors here with us today and the researchers.

In 2016, Veterans Affairs Canada reduced the maximum allowable reimbursement limit for medical marijuana from 10 grams to three grams per day. They also established an exceptional approval process for those who require a higher dosage. Some have argued that there is a lack of medical professionals who specialize in treating PTSD and are simultaneously well versed on medical marijuana usage. Many of you have pointed out the lack of research and the need for more data on the effects of using medicinal cannabis.

Can you comment on some of those concerns that have been previously raised?

Dr. Oyediji Ayonrinde: I think one of the challenges for the medical profession also is when we refer to grams, as my colleague Dr. Hurd mentioned earlier, it's predominantly referring to smoked plant product.

Within that weight can be a whole range of differences, mentioned earlier. One of our studies has identified a 65-fold difference in potency within what would be described as a joint. Within that potency, being THC, there's still the ameliorating effects of CBD. A unique experience is needed, just understanding and having the clinical confidence with cannabinoids.

PTSD is a disorder not only in the military population, but a disorder that requires considerably more professional input. I think

so many people suffering from PTSD find themselves in addiction services, misusing alcohol, opioids. Marriages and relationships break down, and so on. That requires a whole skill and resource on its own.

Every area of this could certainly do with a lot more resources. I think if we can make this important curricular training for medical students and therapists much earlier, that will go a long way.

It may well be, as mentioned, that veterans have a considerable role in medical education. If you can make a strong impression and raise awareness in a young medical student, nurse, social worker, occupational therapist, that goes a long way for the rest of their careers.

• (1650)

Mr. Shaun Chen: Doctor, thank you for sharing that.

This goes to your earlier comments. You spoke about the development of a national information registry and an information campaign, combined with what you have just raised with respect to medical schools arming the next generation of doctors with the proper knowledge.

Can you talk a bit more about that national information registry that you mentioned at the end of your testimony earlier?

Dr. Oyediji Ayonrinde: Yes, by that I'm referring to actually pooling the experience and the resources within centres, from Montreal to Toronto to all over the country. There's a lot of strength in numbers, and if there's a way of actually bringing together evidence, data, in a secure way and having this used to develop the larger knowledge pool.... There are countries with much larger numbers, but for the population here, if we can pool all of that together in such a way that we have confidential material available, where veterans can seek evidence-based information relevant to them, where veterans' families or kids, who wonder why dad's always angry and so different, or when people say, "Your dad uses pot", will be able to actually access information that's not going to stigmatize them or cause further difficulty.

Having spoken with veterans, I think it can be a very lonely world. Some of these experiences involve mislabelling. Some people who have given their lives in service to the nation could do with bringing together the information we have.

Mr. Shaun Chen: The data is showing, in fact, that the department spent in the 2016-17 fiscal year, \$63.7 million on medicinal cannabis. That amount was triple the amount that it had spent the year before. Simultaneously it reduced the limit from 10 grams per day to three grams per day.

Based on your experiences, and I'm happy to hear from Mr. Baldwin-Brown as well, what are some of the reasons and factors you can share with us as to why there has been such an increase in just one year?

Mr. Andrew Baldwin-Brown: Because it works, sir.

Veterans are very community organized. If we're sitting in a hole together in Afghanistan, and I find a really good way to clean my rifle, I'll tell you. If I find a really good way to move from point A to point B and not get blown up, I'll tell you. We also have a very limited capacity to witness human suffering. If we see other brothers and sisters of ours who are in their basement drinking, going down a bad path, we're going to do everything we can to pull them out of it. If medical cannabis happens to work—and I'm not saying it does every time, because it doesn't, but if it does work—we're going to make sure that happens.

I think you're going to see a marked increase in the next 10 years with recreational cannabis being legalized and most of the armed forces being able to actually partake in that as well. I think if some of the soldiers who are in there now tried cannabis recreationally, they would find out that it would work to help them sleep. It would help with their back pain. It would help with their knee pain. They'll become medical patients when they release from the military as well.

The Chair: Thank you.

Mr. Kitchen, you have six minutes.

Mr. Robert Kitchen (Souris—Moose Mountain, CPC): Thank you, Mr. Chair.

I'm going to defer to my colleague for just a second.

Mr. Phil McColeman: Mr. Chair, I just want clarification, because it was pointed out to me that I should put on notice, or I'd like to put on notice, a motion as to whether the minister is able to attend our next meeting, which I know is very short notice for him. I'd also like to put on notice now this exact same motion, that the minister appear before committee on April 1. I'd like to make that notice of motion, exactly the same, and just change the date to April 1, which I will be bringing up at our next meeting if he turns us down for the next meeting.

I'm just letting the committee know that.

•(1655)

The Chair: Okay, thank you.

Mr. Kitchen, you have two minutes left.

Mr. Robert Kitchen: Thank you, Mr. Chair.

Mr. Baldwin-Brown, thank you for your service.

Doctors, thank you for being here. One of the reasons we started this study was that in the past three and half years, we've heard a lot of anecdotal evidence from our veterans who have come here and talked about the challenges they've had. We've listened to them and to their families about their coming back and using cannabis versus the opioids they were on. We've heard from the parents and from the families about how they got back their spouse, for instance, or whatever it may be.

That's one of the ideas here. There's a lot of stuff. Obviously, it's very new. It's new for us just like it's new for you. That's a big challenge. Here we're dealing with and asking for guidelines and standards, which are two different things. They're based on research, but you don't have the research to provide those guidelines and standards, so it makes it very difficult for you to make that decision.

Dr. Ayonrinde, you mentioned the three Ps, the patient, the physician and the plant. I think that's a very good way to look at it.

I want to focus on the physician part of it. As you mentioned, we're dealing with a situation where we have medical schools that are teaching our doctors based on these guidelines and standards that are out there, and we don't have guidelines and standards for our physicians to make these decisions. What's the appropriate dose? What's the appropriate strength? Should it be smoked or should it be ingested, and so on?

We're asking to make this happen because our veterans are suffering today. How do we bridge that gap to make certain that we provide the service for our veterans that we might need to provide them but at the same time collect the information that will take years to get?

Dr. Ayonrinde, perhaps you could comment on that.

Dr. Oyedeji Ayonrinde: I think my colleague Dr. Hurd raised the point about the urgency. We need to see this as a very urgent issue and mobilize as much research as we can, making it a priority area, which Health Canada has done to some degree and CIHR has done to some degree. I think it's an issue of immense urgency. We can't continue to practice with anecdotes for such a serious issue. It is an area of urgency for medical education. My colleague Didier... I didn't get his surname, or I don't recall it; my apologies.

I think the urgency with which this should be treated should have all the same regard as medicine, i.e., can we dose it and all the rest? It's urgent. We can't wait and wait. There's human suffering here. The research needs to drive it really quickly. People are keen. There are lots of clinicians, researchers, biomedical scientists, geneticists and neuroscientists. In fact, I sometimes say, loosely, that the “green rush” had it on us: We woke up and they had gone. The research that has gone into plant development and so on, it's gone way faster than the medical profession. We're playing catch-up.

Mr. Robert Kitchen: Dr. Hurd.

Dr. Yasmin Hurd: I completely agree, but I want to add one thing. I think it's really great that many people have found relief in smoking cannabis, but we are not talking about that. Really, one thing from today would be that smoking is not a medicinal route of administration.

As well, as a lot of my colleagues have indicated, the committee needs to know that the cannabis plant is very complex. You have over 500 chemicals in the cannabis plant, and more than 140 of them are cannabinoids with biologically active properties. We used to take the bark of a tree and that alleviated pain. We then isolated the active ingredient in that bark and realized it was aspirin. It's 2019. We should be developing medication by extracting or knowing which components of the cannabis plant are helping which particular symptoms for veterans and the general public. We owe it to our society to not use 10 grams or three grams.... It's crazy that someone could be ingesting 10 grams a day and saying that this is alleviating anything, because at that amount, the intoxication, the toxicity....

If we continue with smoking, we'll cause health risks in our veterans. We need to develop medications to help people, not to continue to contribute to just masking something in the short term and producing huge problems in the future. We can all develop together, very fast, which cannabinoids and which routes of administration are for which symptoms. It's not impossible.

● (1700)

Mr. Robert Kitchen: Dr. Jutras-Aswad.

Dr. Didier Jutras-Aswad: I don't know if I'm allowed to do this, but I would actually ask a question. We have a number of processes already in place to test, to evaluate, to study and to finally approve new medicine and new treatments. The question is actually, why would we do it differently for cannabis, if we're talking about therapeutic cannabis. We're supposed to do it with all other treatments. Again, all these rules and processes are in place to actually protect the public and make sure that we're not giving a product or a treatment to the population that would actually not be useful or in some cases may even be detrimental.

The question I have is, why should we not follow the usual rules that were put in place in our country and others to actually make sure that what we're doing for the population is the best thing possible and the safest.

The Chair: Thank you very much.

Mr. Bratina.

Mr. Bob Bratina (Hamilton East—Stoney Creek, Lib.): Sorry, I missed the early part, but it's a tremendous conversation, although I have to say that the conversations that we've had with other experts up to and including now leaves a bit of confusion in terms of where we're going with this. As an example, I looked at some data from the University of Texas at Dallas about brain mapping and how the reward system of the brain is changed with continuous use of marijuana, or cannabis. We hear all the good things that are happening for veterans, and that's why we're here, to make sure that something efficacious is happening for them. On this whole notion of marijuana, I see that it has a 6,000-year history that got interrupted in the early 20th century. What can we say at the moment about our understanding of the impacts on the brain through the scanning and the imaging and the other things that are occurring? Can we say much for sure about what the outcome would be of a continuous use of cannabis?

Who would like to answer that?

Dr. Hurd.

Dr. Yasmin Hurd: Yes. It depends on the age at which the cannabis is consumed. We have studies, for example, on THC and on many people around the world, and imaging studies in humans. Without a doubt the chronic use of cannabis does change the brain. It can change the brain in some aspects that are positive, obviously, and in others that are negative. In the developing brain, we see that it has a long-term impact. In prenatal exposure, adolescent exposure, and when you look at the brain of adults, you see sensitivity of reward, sensitivity of stress reactivity in the brain. We see changes that in some individuals are even reflective of a psychosis risk, which is consistent to what was mentioned before, that in some individuals that can occur.

Cannabis is not benign. It is definitely having an impact not only, as I said, on reward, but also cognition and emotional circuits. For example, PTSD activates the part of our brain, the amygdala, which is very important for emotional regulation. There have been studies to show that cannabis reduces that hyperactivity. However, the chronic use is definitely long term, impacting all brain circuits that we can see, and in other people as well, both in imaging....

You mentioned marijuana, cannabis, has been around for 6,000 years. Opioids are also natural and they've also been around for thousands of years. What we as humans have done is to leverage things in our environment to help us medicinally. To Dr. Jutras-Aswad's question, I think it's very important that we need to make sure we are standardizing in the same way that we develop all other medications.

● (1705)

Mr. Bob Bratina: I'm concerned, I guess, that we're going to come to a simple conclusion that so many grams of marijuana should be provided for a veteran based on such and such, when what I'm hearing about is all of the research that is going on at the moment that isn't conclusive yet.

I'm going to share my time with my colleague Ms. Ludwig.

Ms. Karen Ludwig: Thank you.

I did have a question about some topics of discussion today on the type, in terms of smoking marijuana. What's the impact on the lungs? Are there any side effects physiologically from smoking versus ingestion, say, in a pill format?

Dr. Oyedeji Ayonrinde: I have a quick comment on that.

Smoking, as mentioned earlier, carries considerably more harm. We have all the lessons we've learned from tobacco to bring us up to where we are now. Some people actually mix tobacco with their cannabis when they smoke it. There are many, many years of lessons and experience to learn from and apply. Certainly the impacts on lung disease, respiratory disorders and so on are considerable.

Ingestibles—also looking at the legislation which may be around the corner regarding edible cannabis products—are a completely different process. The way it's metabolized and so on takes longer, and the effects peak within a half an hour to two hours.

Ms. Karen Ludwig: If I may jump in on the edible format, what I've heard from older constituents in my riding is that they would be open to using or accepting an approved medical marijuana, but not in smoking format.

Doctor, you gave the example of one child to the next saying, "Your father smokes pot." I find that even with older people there is a stigma about smoking marijuana.

Dr. Oyedeji Ayonrinde: Yes.

With licensed products, there are a range of preparations, including gels, and there has been a concerted push to come up with other non-smoked preparations. It's not only smoked products; there are infusibles, oils, gels and so on. That allows for better circumscribed doses. Some of those come in considerably lower doses, 2.5 milligrams of THC and so on. It does exist.

If I could be very naughty and quickly comment on the historical point, it was around 1836 to 1843 that William O'Shaughnessy, who was a military physician, took samples of Indian hemp to London, England, to be tested for trials on this sort of issue. It was in the mid-1800s that the British Parliament was having a very similar discussion to this one.

I'm in the process of publishing a study which has very similar findings to what we're talking about now: low dose, higher dose, high potency, what was then referred to as Indian hemp insanity, the impact on taxation and so on, and suggesting that young people below the age of 16 shouldn't use it. There's also a considerable amount of military evidence that was considered.

I think there is urgency. We need to show that we've moved on from 1836.

The Chair: Ms. Wagantall.

Mrs. Cathay Wagantall (Yorkton—Melville, CPC): Thank you, Chair.

I appreciate your ending with the term "urgency", because right now in Australia, in a concerted effort, in a minimal amount of time, that government took major testimony from veterans on the issue of meprobamate. It came up with significant results, indicating that this is something we need to deal with right now.

On the urgency issue for government—if it were an urgent issue to them—we could deal with this in a reasonable time frame. Is that correct? Yes or no.

Dr. Oyedeji Ayonrinde: Correct.

Mrs. Cathay Wagantall: Absolutely.

I'm hearing that there's been a disconnect, obviously, between medical research here in Canada, Veterans Affairs and veterans groups like Spartan Wellness. There are many, many veterans who have felt that they needed to do what they need to do to take care of each other.

I'm aware of Spartan Wellness. I believe, from what you've shared again today, Andrew, that you're working very responsibly and as effectively as possible to take care of your own.

You have a database that you mentioned, and you have medical people involved.

• (1710)

Mr. Andrew Baldwin-Brown: Yes, ma'am.

Mrs. Cathay Wagantall: What would you like to see done with that medical base, that research you have?

Also, for those of you who are doctors, with all of this going on and having gone on already—and there's a lot of this kind of evidence—are you prepared to take it, or are we starting at square one?

Andrew.

Mr. Andrew Baldwin-Brown: With our evidence specifically, we would be more than happy to share it with Veterans Affairs. It is a sampling of veterans—mostly veterans. We have some civilian patients as well.

If we can take a look at that—it's able to be extrapolated; it's a very comprehensive system—and if we can use that to help out in any way, we're willing to do it 100%. From what I've seen in taking probably 200 to 300 veterans through the process and monitoring them throughout, like I said, the differences have been night and day.

I think it would be very much worthwhile. Our process right now is an initial prescription, as well as clinical follow-ups from medical professionals at three, six, nine and 12 months, as well as being checked up on by your veteran educator, who has experience and qualifications in cannabis.

Mrs. Cathay Wagantall: Okay, thank you.

Doctors, I have more questions.

Would one of you like to respond to that? Is that information that could speed up this process? Would it be valuable to you, or is it just—and we keep hearing these words—anecdotal evidence?

Dr. Didier Jutras-Aswad: I think this information is very important, but again, just to start a process of formal, well-designed evaluation and studies. I think there are no shortcuts, and shortcuts may be dangerous.

When you want to treat, and when you want to evaluate a new treatment, there are different steps for that, which include a randomized trial where you have well-designed studies according to international standards where you will compare a new treatment to another condition. This has to be very specifically designed, of course, which allows us to get the results we need to see if we use that intervention or not.

Mrs. Cathay Wagantall: I appreciate that clarification very much.

The challenge, from my experience at this committee and with many veterans when I hear “should only use when there is sufficient data” or “shouldn't be the first source of treatment”, is that there are so many veterans who see this as the means of being taken care of and of getting off of significantly huge doses of pharmaceuticals.

Andrew, can you speak to that?

Mr. Andrew Baldwin-Brown: I can speak to that from my own experience when I was getting out of the military. Granted, it was a few years ago. We used to call it “the death rattle” when troops would be walking down the hallway and they had three or four bottles of pills, of God knows what, in their pockets.

I don't know if it was an individual-based thing or what was going on. However, in having discussions with civilian caretakers and civilian doctors on the other end, when they would hear what we were prescribed, a lot of the times you had to pick their jaws up off the table.

Being in the military is a rough job. Obviously, we contract things like post-traumatic stress disorder, depression, arthritis and degenerative disc disease at a much higher rate and much earlier in our lives than most Canadians do, so that's definitely part of it. However, in having discussions with civilian doctors, they were sometimes taken aback.

Mrs. Cathay Wagantall: Can I ask, too, about the whole question of how many grams? I have a friend who was on a thousand pharmaceuticals a month. His wife got him to use a suppository—this is not for fun, as I've said before—10 grams. It made a huge difference in his life. Over time, his wife, on her own, because a doctor would not assist her, brought him down to where he is basically no longer dependent on any pharmaceuticals.

Mr. Andrew Baldwin-Brown: That's fantastic.

Mrs. Cathay Wagantall: When we talk about how much is needed, is it based on the type of treatment—

Mr. Andrew Baldwin-Brown: Very much so.

Mrs. Cathay Wagantall: —and do you use different treatments?

Mr. Andrew Baldwin-Brown: Very much so. There is no one-size-fits-all treatment with regard to cannabis.

My post-traumatic stress disorder may be very different from that of another vet sitting beside me who witnessed even the same incidents.

I found that the amount prescribed is generally in correlation with the percentage of the disability of the patient: the number of different ailments the patient is suffering from, whether it be osteoarthritis, degenerative disc disease, as well as PTSD, as well as depression, as well as, as well as, as well as. That patient is going to need a lot more than a patient who just has PTSD or is managing with three grams per day, or two, or one.

The objective, from our end, of medical cannabis is to bring the patient in and, as you said, remove the opioid addiction portion, or at least help where we can with that, re-establish a quality of life and then titrate the cannabis down to the point where the patient doesn't need it anymore.

• (1715)

Mrs. Cathay Wagantall: Where would veterans be when you hear the conversation around creating what they would see as a pill to treat?

Mr. Andrew Baldwin-Brown: We had to do that for a lot of years before we had oil coverage as well. Obviously, Veterans Affairs did not cover the oil originally, so a lot of the older, original patients had to take the dried cannabis that one would consider as smokable and then convert that into some form of coconut oil or MCT oil.

Mrs. Cathay Wagantall: What about it coming in a form like most pharmaceuticals, such as a tablet or a pill? How would they respond to that?

Mr. Andrew Baldwin-Brown: Some would respond very well. I know that for me, dealing with the stigma of actually having to smoke or vaporize cannabis has not always been the best for me or my social life.

I will actually slightly disagree with Dr. Hurd on the smoking or vaporizing portion, as I've seen that it does help a lot of veterans with sudden onset PTSD symptoms. With oils or edible forms, it can take anywhere between 45 minutes and two hours to actually calm the patient down. If somebody is in a mall and has a flashback and he or she is freaking out and needs to step outside, I find that actually vaporizing cannabis is a much better immediate symptom reliever than an edible. It's going to vary from patient to patient.

The Chair: Ms. Blaney, you have three minutes.

Ms. Rachel Blaney: Today we've heard just how complex this issue is. I'm new to the study, so I want to get back to the data and the research. I want to get clarity.

In Canada, are we doing any specific research that touches on military veterans, PTSD and the interaction with cannabis? Are we actually looking at that specifically, so that there's more information that really helps support veterans?

What's being heard today is the complexity of this issue—the challenge for veterans who are just trying to get their lives back and right now are looking for any solution that will allow them to stay in their marriages, to be with their children, and keep their families as they once were. Are we really seeing research that is looking at this specifically?

Dr. Didier Jutras-Aswad: There was a specific call by the CIHR, the Canadian Institutes of Health Research, for research projects around the issue of cannabis and PTSD for veterans specifically. There is research being conducted, yes.

Ms. Rachel Blaney: Are you saying this research is in progress right now?

Dr. Didier Jutras-Aswad: The approval and all that is confidential, so I don't have the information, but I'm pretty sure if you addressed that question to CIHR to see what was funded and—

Ms. Rachel Blaney: —when that is going to happen.

When we do this research, which is so important, we need to look at rural and remote communities. When you look at the reality of being diagnosed in those communities, getting the medication that you need, all of these things have multiple barriers that need to be addressed in a meaningful way.

Does anybody have any information on research that really talks about the challenges those rural and remote communities face? It is true. I have a riding where many veterans come simply because they want that pace of lifestyle. They want to be somewhere quiet where they're not in circumstances where they're going to feel overwhelmed. I just don't know whether we're looking at this in the way we should be in this country.

Dr. Didier Jutras-Aswad: For a number of conditions in medicine, we have a number of technology-assisted methods to support rural communities and health care providers in these communities. They would be able to provide the best evidence-

based treatment in these communities. That could certainly apply for all issues related to cannabis.

We should be careful about the idea of really centralizing knowledge on medical cannabis with specific clinics that are usually in big cities. That's certainly not a good way to make sure that everyone across the country, including rural communities, will have access to treatment.

To go back to my colleague, one key thing is to improve the training in medical schools, so that all physicians, including those who will go and work in these rural communities, will be well trained regarding cannabis, and not only these very specific clinics that usually just provide that kind of treatment in larger cities in Canada

Ms. Rachel Blaney: Yes, it is a big issue. Many health professionals don't even know how to diagnose or prescribe, and so they don't, which leaves people in these communities really struggling.

Thank you so much.

• (1720)

The Chair: That ends our committee meeting today.

On behalf of our committee, I'd like to thank all of the witnesses for their excellent testimony today. Witnesses, thank you for all that you've done to help the men and women who have served.

The meeting is adjourned.

Published under the authority of the Speaker of
the House of Commons

SPEAKER'S PERMISSION

The proceedings of the House of Commons and its Committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its Committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the House of Commons website at the following address: <http://www.ourcommons.ca>

Publié en conformité de l'autorité
du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la *Loi sur le droit d'auteur*.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante : <http://www.noscommunes.ca>