Interview with Dr. Alan Bell

UTMJ Interview Team (Nicholas Scrivens)

Dr. Alan Bell

Dr. Alan Bell is a family physician and clinical researcher in Toronto, Canada. He is Assistant Professor in the Department of Family and Community Medicine at the University of Toronto. He is a recipient of the Canadian College of Family Physicians Award of Excellence.

His activities include:

- Primary Panel and Past Chair – Canadian Cardiovascular Society Antiplatelet Guideline Committee
- Primary Panel – Canadian Cardiovascular Society Atrial Fibrillation Guideline Committee
- Thrombosis Canada – Board of Directors and Vice President
- Hypertension Canada – Board of Directors
- Canadian Stroke Network Professional Development Committee
- Heart & Stroke Foundation Structural Heart Disease Council

Dr. Bell is the only primary care physician to chair a CCS guideline committee. His involvement in continuing medical education includes the development and presentation of many national projects. He has served as faculty and chair of countless committees and advisory boards dedicated to serving the common interests of the medical profession and the public. His research, commentaries and letters have been presented and published internationally.

UTMJ: What has your medical professional journey been like and how did you become involved in the area of medical cannabis?

AB: I am a family physician that practices cradle-to-grave care in Toronto, and I've been at it since 1981. I am an academic family physician and I am involved in a number of organizations, particularly in cardiovascular medicine. I am involved in academic medicine and teaching, including the Family Medicine Longitudinal Experience (FMLE), and I do clinical research in my practice where I am the lead investigator for clinical trials at our site. However, I am mostly a family physician. I try to incorporate as much as possible into my practice to help me and my patients. I tend to use advanced therapies in all therapeutic areas and cannabis has been a natural evolution for me to use with patients with certain health issues. I first started prescribing cannabis in 2003 when it first became legal to prescribe. I found it useful in a select group of patients. I've got a broad-based practice with roughly 2000 registered patients, and I have authorized cannabis for 60-70 of those patients. I am by no means a cannabis physician or a pain physician, but I have incorporated cannabis into my toolbox to help my patients manage their conditions. I authorize cannabis mostly to help manage pain for patients who have failed other therapies. I try my best to prescribe as few opioids as possible, and cannabis has helped me reduce the quantity of opioids that I prescribe.

UTMJ: How has medical cannabis changed the lives of your patients?

AB: Many patients in primary care have chronic pain. It's a very common condition, particularly in the geriatric population. We try to manage it as best we can with the safest drugs as possible. This includes acetaminophen, then gabapentinoids for neuropathic pain, and then we may have to include opioids. So, I will use a low-dose codeine preparations and I will also use NSAIDs, but I am reluctant to use both of these in vulnerable populations. For opioids there is the risk of addictions and falls, and in the case of NSAIDS, there are complications from GI, renal, and cardiac toxicity. You do your best with these drugs, but many of your patients will continue to fail, and when they do, I will typically introduce a cannabis product. The recent explosion in licensed producers for cannabis products has introduced a wide variety of formulations that can be helpful for patients. In my experience, patients don't want to smoke anything, they don't want to vaporize anything, and they also don't want to get high. So, with a patient who has chronic pain that is not responding to standard therapies, I will introduce oral CBD and titrate upwards and then introduce low amounts THC. This is limited by the side effect of euphoria, because when most patients get high, they don't want to take it anymore. Often, I will see a patient who does not respond to other therapies who will respond nicely to cannabis, and I will be able to reduce the doses of the other medications that they are taking, particularly opioids.

So, the typical patient could be a 70-year-old with chronic osteoarthritic pain who is on non-steroidal anti-inflammatories and codeine, who continues to suffer and have poor sleep. Introducing cannabinoids will allow me to discontinue the NSAID and reduce the dose of

codeine. The patient will either respond or not respond, but in my experience the number needed to treat (NNT) is three, meaning 1 in 3 patients will respond well and the cannabis will improve their lives. Cannabis has to be viewed as a lower potency analgesic, to which not everyone will respond. But the same is true for NSAIDS, gabapentinoids, and opioids. The difference with opioids is that you will get your pain response, but there is an increased risk to the patients due to side effects and the potential for addiction. In the case of cannabis, you may not always get your pain response, but you can improve the quality of life, functionality, and sleep of patients without the side effects.

UTMJ: The research on medical cannabis is not robust. How does this affect physicians and their ability or willingness to prescribe it?

AB: The literature is certainly not robust. If we look at some of the meta analyses with regard to cannabis and pain, some show positive and some negative associations, and none will show a clear effect. There a number of reasons for this. First, the funding for research is limited. We don't have the Merks or Pfizers or the world pouring hundreds of millions of dollars into studies to get the necessary patient populations and duration of therapy to show a direct effect. Second, patients are highly variable in their response. The variation in response can be due to the patients and the cannabis itself. Unlike pure molecules, which we typically use in medicine, cannabis is a wide variety of molecules that we are providing to the patients. There is CBD, THC, dozens of other cannabinoids, and other chemicals such as terpenes and flavonoids, for which we don't know the effect yet. The patients are given a wide variety of substances, so I think that the variation in response is to be expected. So, what we are left with is what I like to refer to as n of 1. Which means that if we give the cannabis to patients and they respond, great, and if they don't, that's okay. This means that we may need to try different titrations.

UTMJ: What are some of the barriers for physicians to become comfortable prescribing cannabis for their patients?

AB: I spend a significant amount of time teaching cannabis medicine. I give a presentation to the College of Family Physicians every year on cannabis authorization. Despite the fact that cannabis is legal now in Canada, there remains a huge stigma among physicians and patients. There is a large number of physicians that are unwilling to prescribe cannabis because of this stigma. There is also a large number of physicians who are not making the effort that is needed to be comfortable incorporating cannabis into their practice. So just like it takes some knowledge and training to provide insulin to diabetic patients, the same effort is required to provide cannabis to your patients. There is a lot of reluctance, but it is not all that complicated. The current formulations make it fairly easy for physicians to prescribe cannabis. For example, the licensed producers will provide highly accurate information on the content of CBD and THC in their formulations. Physicians get confused about methods of administration, smoked, vaporized, or oral. As a result, physicians remain confused and the regulatory bodies continue to frighten physicians about prescribing cannabis. Physicians are worried about the implications of prescribing cannabis and the safety of patients; for example, in motor vehicle accidents. They don't realize that the same problems exist when we prescribe opioids. However, physicians have embraced opioids to the point where we have an opioid crisis.

UTMJ: Is cannabis overlooked as a potential way to mitigate the opioid crisis?

AB: Yes, overlooked and I would say ignored. Can cannabis cure the opioid crisis? Probably not. There is some evidence showing that cannabis can be opioid sparing. There is also data from the United States showing a reduction in opioid overdoses in states where cannabis has been legalized. There is certainly some scientific evidence showing that medical cannabis can have an impact of the opioid crisis. However, we haven't done the hard research necessary to prove this, and we probably won't.

If you look at the Canadian Pain Society Guidelines for neuropathic pain, cannabis is the third-line therapy after opioids and tramadol. I'm not clear on why we have a high toxicity and potency agent (opioids) ahead of a low potency and virtually zero toxicity agent (cannabis). So increasingly, I am using cannabis ahead of opioids for the management of neuropathic pain.

UTMJ: How has the legalization of recreational cannabis affected the prescription of medical cannabis?

AB: Certainly, I think that the legalization of cannabis has been a positive move. Open-minded physicians are starting to view cannabis as an option, but the majority of physicians still do not. One of the big barriers has been the position of the Canadian Medical Association (CMA), which has been that with the legalization of cannabis there is no need for two tracks for recreational and medical cannabis. I believe that this is an incredibly backwards position. It is clear that there is a difference between getting high and treating medical conditions. I can't believe that an organization like the CMA does not recognize that. It takes a skilled clinician in order to appropriately prescribe and titrate cannabis to get a therapeutic value without the euphoric effects. Trained medical professionals are required to guide patients with regard to their use. I wouldn't want my patients to be

guided in their use by a "bud-tender" in a cannabis store. We can't expect patients to be able to manage their own medical conditions with cannabis. I think the CMA's position has been a large step backwards in the adoption of cannabis into practice.

UTMJ: Since legalization, have patients been more willing to self-medicate with cannabis?

AB: I think very much so. With all of the hype of legalization, patients are coming to their physicians and asking for guidance. Physicians may refuse to help and may send them in a different direction. Some may go to cannabis clinics, some of which are excellent. The patients may also go to "bud-tenders" at cannabis stores, some of which are illegal. These patients are getting advice from untrained individuals and getting advice that may not be the best for their conditions or their health. So yes, legalization has had a huge impact on the population of patients looking towards cannabis to treat their conditions, but they may be frustrated when seeking advice from physicians.

UTMJ: What are some of the risks or adverse effects associated with the use of medical cannabis?

AB: Cannabis does not come without harms. Most of the data on harms comes from the recreational use of cannabis, which is often of high THC content. Addiction is certainly a harm associated with cannabis. There is a 9-10% rate of addiction for individuals who use cannabis, which is roughly the same for benzodiazepines, but much lower than for alcohol and other drugs of abuse such as opioids. There is also the risk of psychosis. There are certainly risks with breastfeeding and pregnancy, however, we really don't have much data on this. With the use of high THC products, there is the risk of cyclical vomiting syndrome. There are certainly toxicities and risks, like there are with all medications. But we know that there has never been a recorded death as a result of cannabis use.

UTMJ: Other than pain, what areas of medicine can cannabis be helpful in the management of conditions?

AB: Patients will come in having read that cannabis can be useful for a large number of conditions, such as glaucoma or asthma. However, I don't think that there is much use for cannabis in this area.

I have found medical cannabis useful in pain, palliative care, chemotherapy induced nausea and vomiting, anxiety conditions, refractory seizures, and multiple sclerosis (MS). In terms of palliative care, patients with chronic cancer pain have been very happy to accept cannabis into their treatment regimen. It improves their pain, sleep, and quality of life. Patients receiving palliative care often like a little bit more THC, as they find it helpful. Cannabis is effective in anxiety, and anxiety disorders such as PTSD. There are a number of high-quality studies in the literature to support this. The problem that we face though, is that most of the data has been for very high doses of CBD, and high doses of CBD are expensive. If I titrate a patient's dose of CBD to 40 mg per day, this is about $5 per day. So, with high doses of CBD, cost becomes a limiting factor. This is a similar issue for treating epilepsy. Cannabis, and in particular CBD, is the best thing that we have for Lennox-Gastaut syndrome and refractory epilepsy in children and adults. Unfortunately, the doses are sky high, up to 300-400 mg per day for patients. It is difficult for patients to afford this. This points again to the importance of separate streams for recreational and medical marijuana. With recreationally sourced cannabis, there would be sales tax and a sin tax in addition to the already high cost for the CBD. We need a separate stream to also encourage reimbursement for the costs of medical cannabis in refractory epilepsy and other medical conditions. Lastly, I have found medical cannabis to be helpful for patients with MS. Virtually all of my patients with MS use cannabis, and most used cannabis before they became my patients. It provides a clear benefit for their pain and muscle spasm. This is an area where there is no doubt for the benefit of cannabis.

UTMJ: It is a challenging and evolving area of medicine, but how can medical students and physicians become more knowledgeable and comfortable in this area?

AB: Well, I can tell you that I have had discussions with Dr. Young, Dean of Medicine, and Dr. Kidd, Chair of the Department of Community and Family Medicine, and cannabis will be incorporated into the undergraduate curriculum next year. Another way to become more informed is to read the literature. There is an organization called the Canadian Consortium for the Investigation of Cannabinoids (CCIC). They have excellent publications, presentations, and resources available. It would also be helpful to attend the CCIC annual meeting. I would recommend attending seminars and webinars on the topic. I encourage medical students and residents to seek out information from reliable sources, which will allow them to stay on the cutting edge and to see the exciting advances in cannabis. This will help your confidence in cannabis as a medication and to better understand how to incorporate this into your practice. Lastly, it's important to be open-minded. We are physicians and scientists, let's keep our minds open to alternative treatments that can help our patients.