High Achiever: How One Doctor's Dedication Soothes the Pain of Thousands

Jane Langille talks to renowned cannabis researcher Dr. Mark Ware, recipient of this year's Canadian Cannabis Award for Lifetime Achievement.

One day in the late 1990s, an elderly man with full-blown sickle cell disease walked into a medical clinic in Kingston, Jamaica. Dr. Mark Ware, a clinical research fellow at the time, was surprised the man looked so youthful and apparently healthy. Sickle cell disease is usually devastating, as misshapen red blood cells clog blood vessels and cause severe pain. When Dr. Ware asked the man's secret, he leaned over with a twinkle in his eye and said, "You must study the herb, Doc!"

That insight ignited Dr. Ware's passion for investigating cannabis's painrelieving properties. For the last 18 years he has done just that, championing groundbreaking clinical research in Canada and advancing the science of cannabis's potential, despite many obstacles.

Back in 1999, three factors cemented his decision to move from Jamaica to Canada. "There I was, a clinician with a research interest, surrounded by patients in

terrible pain, in a country with a notoriety around cannabis," says Dr. Ware. "That's when my education about the complexity of studying cannabis began." His Jamaican colleagues did not want to collaborate for fear of jeopardizing funding from the U.S. National Institutes of Health. So when Health Canada announced \$1.5 million in funding for cannabis research, he set his sights on McGill University in Montreal for its reputation in pain research. He started as a research associate at the McGill Pain Centre, now the Alan Edwards Pain Management Unit, and by July 2001 had become an assistant professor in the Departments of Family Medicine and Anesthesia.

Getting funding and approval to conduct any clinical research requires miles of red tape, but Dr. Ware faced extra hurdles to study cannabis. He had to obtain test product with different levels of tetrahydrocannabinol (THC) from suppliers, the hospital pharmacy had to be licensed to dispense it, and he had to find labs to test blood for THC. It was also challenging finding volunteers, since the university's research ethics committee at first only approved recruiting individuals with previous cannabis experience and severe neuropathic pain for at least three months.

He also had to figure out how to ventilate smoking in a non-smoking hospital. "I remember that it took Mark years just to get approval to move the air duct," says Jeffrey Mogil, PhD, director of the Alan Edwards Centre for Research on Pain at McGill University.

Nevertheless, Dr. Ware and his colleagues persisted. Twenty-one volunteers inhaled herbal cannabis for five days. They reported reduced pain intensity and improved sleep with no notable adverse effects compared to smoking a placebo. The published study made a big splash on the cover of the October 5, 2010, issue of the Canadian Medical Association Journal, Canada's leading medical journal. Dr. Ware keeps a framed cover on his office wall.

His second funded study was much larger. The Cannabis for the Management of Pain: Assessment of Safety Study was the first in the world to examine longterm safety. To recruit over 400 people who met the ethics board's criteria, he organized teams at seven pain clinics across Canada. Half of the participants used a standardized cannabis product for one year and the other half did not. The study found that medical cannabis had a reasonable safety profile as part of a one-year treatment program for chronic pain. There was no difference in the risk of severe adverse events between the medical cannabis group and the non-user group. In addition, medical cannabis significantly reduced pain intensity and improved quality of life in people with previous experience. The paper was published in the prestigious Journal of Pain in December 2015.

When asked about his success, Dr. Ware mentions his good fortune working with incredible teams of collaborators. At times, he has felt that one more barrier might be a sign to quit. Then he hears more patient stories about the remarkable effects of cannabis and says, "There's too much potential and too much suffering. We have to keep moving."

"You have to give serious credit to Mark for pushing his research towards mainstream acceptability," says Mogil. "He has a perfect personality: an amazing blend of enthusiasm and gravitas. He's enthusiastic about the promise of cannabis, but from a place of authority that makes it an effective message."

Today, Dr. Ware continues his work as director of clinical research at the Alan Edwards Pain Management Unit at the Montreal General Hospital and executive director of the Canadian Consortium for the Investigation of Cannabinoids. He recently served as vice chair of the Canadian Task Force on Marijuana Legalization and Regulation and also sits on the board of directors of the International Association for Cannabinoid Medicines.

Meanwhile, he hopes to inspire a new generation of professionals and to help position Canada as the global leader in cannabis research. As cannabis laws relax and research opportunities increase, it's a good time for specialists to follow Dr. Ware's lead in carving out a niche. Humbly, he recalls the old saying, "In the land of the blind, the one-eyed man soon becomes king," and looks forward to continuing his quest.

The Lifetime Achievement award recognizes Dr. Ware's cannabis research and his contributions towards making cannabis safe and accessible for Canadians.

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