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“We change laws.”

Post-Traumatic Stress and Medical Cannabis

Post-traumatic stress disorder is a serious condition that involves a person developing characteristic symptoms — such as flashbacks, numbing, and avoidance — after experiencing an extremely traumatic stressor. Available treatments are often dangerous or ineffective.

Thousands of patients have turned to medical cannabis for help, and states are increasingly adding PTSD to their lists of qualifying conditions for medical cannabis. Upon the recommendation of an eight-member advisory board of physicians, New Mexico became the first state to specifically list PTSD as a qualifying condition in 2009. Eight states have followed suit, and two more states and Washington, D.C. allow cannabis for any serious condition upon a doctors’ recommendation.¹

Unfortunately, there has been limited research on whole plant marijuana and PTSD, largely due to federal obstacles to clinical research. However, there are clinical trials ongoing in Israel, where an open pilot study found marijuana effective at alleviating symptoms of combat veterans. In addition, other human and animal evidence supports the therapeutic potential of cannabis in treating PTSD.

The limitations of other medications

Pharmaceutical drugs such as antipsychotics and antidepressants are often used to treat PTSD;² however, according to researchers, such medications can be ineffective³ or even harmful.^{4,5} *The New York Times* summarized the results of the largest study on antipsychotics’ use in treating PTSD, saying, “Drugs widely prescribed to treat severe post-traumatic stress symptoms for veterans are no more effective than placebos and come with serious side effects ... ”⁶

Research thwarted and delayed by federal government

Medical marijuana’s therapeutic effects in treating the symptoms of PTSD have gotten the interest of members of the medical community, and the FDA has approved clinical trials to study it further. Unfortunately, there has been limited research on whole plant marijuana and PTSD due to federal obstruction of research. In April 2011, the FDA approved a study to test whether marijuana can ease the symptoms of PTSD in combat veterans, but a Health and Human Services Department committee refused to provide the researchers with the government-grown marijuana necessary to conduct the study.⁷ The researchers modified and resubmitted the study to address the committee’s concerns, and finally got approval in 2014. At that time, researchers were told the type of medical cannabis they needed for the trial was not actually available. The study has still not begun.⁸

¹ The states that allow medical cannabis for PTSD are Arizona, California, Connecticut, Delaware, Maine, Maryland, Massachusetts, Michigan, Nevada, New Mexico, Oregon, and Washington.

² Mayo Clinic Staff, “Post Traumatic Stress Disorder, Treatment and Drugs,” Mayo Clinic.

³ B. Carey, “Drugs Found Ineffective for Veteran’s Stress,” *New York Times*, August 2, 2011.

⁴ Press Release, *Opioids drive continued increase in drug overdose deaths*, Centers for Disease Control and Prevention, Feb. 20, 2013. http://www.cdc.gov/media/releases/2013/p0220_drug_overdose_deaths.html

⁵ J. Lloyd, “CDC: Antidepressant Use Skyrockets 400% in Past 20 Years,” *USA Today*, Oct. 20, 2011.

⁶ Carey, Benedict, “Drugs Found Ineffective for Veterans’ Stress,” *The New York Times*, August 2, 2011.

⁷ Vastag, Brian, “Marijuana study of traumatized veterans stuck in regulatory limbo,” *Washington Post*, October 1, 2011.

⁸ This is not the first time the federal government has prevented approved studies from going forward due to its refusal to provide the marijuana necessary to conduct the research. As DEA’s Administrative Law Judge Mary Ellen Bittner found, “NIDA’s system for evaluating requests for marijuana research has resulted in some researchers who hold DEA registrations and the requisite approval from the Department of Health and

Science, studies, and research

Research has been conducted outside the U.S., including clinical trials ongoing in Israel, where a 2012 open pilot study in the Abarbanel Mental Hospital found that “medical cannabis was associated with a reduction in PTSD symptoms.”⁹

In addition, a study conducted by Canadian researcher Dr. George Fraser involved administering naboline — a prescription drug made of a synthetic cannabinoid (component of marijuana) — to patients who had PTSD with treatment-resistant nightmares. Fraser reported, “The majority of patients (72%) receiving naboline experienced either cessation of nightmares or a significant reduction in nightmare intensity. Subjective improvement in sleep time, the quality of sleep, and the reduction of day-time flashbacks and nightsweats were also noted by some patients.”¹⁰

In another investigation, Dr. Alexander Neumeister, director of the molecular imaging program at NYU School of Medicine, helped conduct a study using brain-imaging technology to highlight a connection between the number of cannabinoid receptors in the brain and PTSD. Neumeister noted, “[W]e know very well that people with PTSD who use marijuana — a potent cannabinoid — often experience more relief from their symptoms than they do from antidepressants and other psychiatric medications.”¹¹

In New Mexico, a study of 80 patients who administered medical for PTSD, pursuant to state law, found “greater than 75% reduction in [Clinician Administered Post-traumatic Scale] symptom scores were reported when patients were using cannabis than when they were not... There is extensive evidence that cannabinoids may facilitate extinction of aversive memories.”¹² The report concludes, “There are currently 3350 patients enrolled in the PTSD program. To date, there have been no incidents or adverse events.”

Considering that medications used to treat PTSD are often ineffective and damaging, it would be a grave disservice to survivors of trauma to continue to criminalize them for using a treatment option that has helped so many others. Those who suffer from PTSD should be able to speak freely with their physicians, so that together they can decide if cannabis is an appropriate treatment option for the individual patient.

Human Services being unable to conduct their research because NIDA has refused to provide them with marijuana.” (In the Matter Lyle E. Craker, Ph.D., Docket No. 05-16, Mary Ellen Bittner, ALJ, (DEA 2007) at 84.)

⁹ Mashiah, Mordechai, “Medical Cannabis as Treatment for Chronic Combat PTSD: Promising Results in an Open Pilot Study,” Abarbanel Mental Hospital, Israel, presented at Patients out of Time Conference (2012).

¹⁰ Fraser, George, “The Use of a Synthetic Cannabinoid in the Management of Treatment-Resistant Nightmares in Posttraumatic Stress Disorder (PTSD),” *CNS Neuroscience & Therapeutics* 15, no 1. (2009): 84-88.

¹¹ A Neumeister, M D Normandin, R H Pietrzak, D Piomelli, M Q Zheng, A Gujarrro-Anton, M N Potenza, C R Bailey, S F Lin, S Najafzadeh, J Ropchan, S Henry, S Corsi-Travali, R E Carson, Y Huang, “Elevated brain cannabinoid CB1 receptor availability in post-traumatic stress disorder: a positron emission tomography study,” *Molecular Psychiatry*, 2013; DOI: [10.1038/mp.2013.61](https://doi.org/10.1038/mp.2013.61)

¹² George Greer, et al, “PTSD Symptom Reports of Patients Evaluated for the New Mexico Medical Cannabis Program,” *Journal of Psychoactive Drugs*, March 2014.