

TESTIMONY OF Paul Armentano  
BEFORE THE PENNSYLVANIA HOUSE OF REPRESENTATIVES  
COMMITTEE ON HEALTH AND HUMAN SERVICES  
ON HB 1393 COMPASSIONATE USE ACT OF 2009

Good morning, Chairmen Oliver and Baker, and Members of the Committee. I am Paul Armentano, Deputy Director for the National Organization for the Reform of Marijuana Laws, and I am submitting this testimony to urge passage of the Barry Busch Compassionate Use Act of 2009 (HB 1393) by this Committee and the General Assembly.

I applaud the members of the House Committee on Health and Human Services for holding this first-ever public hearing regarding House Bill 1393: The Barry Busch Compassionate Use Medical Marijuana Act -- which seeks to shield qualified patients who use cannabis therapeutically with a doctor's recommendation from criminal prosecution. The physician-supervised use of medicinal cannabis is a scientific and public health issue. It should not be held hostage by the so-called "war on drugs" or by broader public policy disputes regarding the legalization of marijuana or other controlled substances for recreational purposes.

Professionally, I have examined the science surrounding the medicinal use of cannabis and cannabinoids since 1995, publishing more than 500 articles and white papers on the subject as the deputy director for NORML (the National Organization for the Reform of Marijuana Laws) and the NORML Foundation. I have also served as a consultant for British biotechnology firm GW Pharmaceuticals - the only company legally licensed in the world to cultivate medical cannabis and perform clinical trials on various preparations of oral spray cannabis extracts. These extracts are legally available by prescription in Canada as well as on a limited basis in Spain and the United Kingdom under the trade name Sativex. In recent years I've also worked closely with various international health agencies, including the Canadian Public Health Association, on various issues pertaining to marijuana and health.

In 2007, and again in 2009, I researched, edited, and authored the nearly 100-page booklet, "Emerging Clinical Applications for Cannabis and Cannabinoids: A Review of the Recent Scientific Literature" (2009, NORML Foundation), which summarizes nearly 200 clinical and preclinical trials assessing the use of cannabinoids to moderate various neurodegenerative diseases, such as Alzheimer's disease, amyotrophic lateral sclerosis, and multiple sclerosis. Copies of this booklet have been distributed to the Committee.

Modern research suggests that cannabis is a valuable aid in the treatment of a wide range of clinical indications. A recent meta-analysis published in the April 2006 issue of the Journal of Ethnopharmacology identifies more than 70 controlled clinical trials available in the scientific literature investigating the medical safety and efficacy of cannabinoids as therapeutic agents. [1] Results of these patient trials indicate that cannabis and its constituents possess therapeutic utility as antiemetics, appetite stimulants in debilitating diseases (e.g. cancer and AIDS), and as analgesic agents to treat neuropathy and other painful conditions. Studies further indicate that cannabis provides symptomatic relief for multiple sclerosis, spinal cord injuries, Tourette's syndrome, epilepsy, and glaucoma, among other serious diseases.[2]

Published case studies as well as hundreds of preclinical studies in the scientific literature indicate that cannabis and cannabinoids also provide therapeutic utility for various other diseases, such as dystonia[3], bipolar disorder[4], fibromyalgia[5], Crohn's disease[6], and other gastro-intestinal ailments[7], as well as possess neuroprotective[8] and anti-cancer properties.[9] Animal data also demonstrate that cannabinoids may moderate the progression of certain auto-immune and neurological disorders,[10] such as multiple sclerosis,[11] Lou Gehrig's Disease,[12] Alzheimer's,[13] and diabetes,[14] and can stimulate neurogenesis.[15] Numerous animal trials, as well as one patient trial, also conclude that cannabinoids can halt the proliferation of various strains of cancer, including breast cancer[16], prostate cancer[17], and brain cancer[18]. Most recently, the first US-sponsored clinical trial assessing the efficacy of inhaled cannabis in nearly two decades reported that cannabis significantly reduced HIV-associated neuropathy, a painful nerve condition that often goes untreated by available analgesics.[19]

Many in the scientific and health community endorse legal access to the use of cannabis as medicine. More than 80 national and state health care organizations including the American Public Health Association,[20] the American Nurses Association[21] and the AIDS Action Council[22] have passed resolutions backing patients' access to medicinal cannabis under a doctor's supervision. American physicians are also supportive with nearly half of all doctors with an opinion on the subject supporting legalizing cannabis as a medicine, according to a recent national survey published in the Journal of Addictive Diseases.[23]

Most recently, in November of 2009, the American Medical Association concluded, "Results of short term controlled trials indicate that smoked cannabis reduces neuropathic pain, improves appetite and caloric intake especially in patients with reduced muscle mass, and may relieve spasticity and pain in patients with multiple sclerosis." [24] The AMA resolved, "[The] AMA urges that marijuana's status as a federal Schedule I controlled substance be reviewed with the goal of facilitating the conduct of clinical research and development of cannabinoid-based medicines." [25]

Public support for the physician-supervised use of medicinal cannabis is also high with approximately 80 percent of US voters backing cannabis' availability as a prescription medicine[26]. To date, voters have enacted statewide medical marijuana protections in nine states, and only once have they rejected such a proposal.[27]

Federal scientific reviews from several Western nations strongly support the legal use of medicinal cannabis. These include a 1998 report by Britain's House of Lords Science and Technology Committee that concluded: "The government should allow doctors to prescribe cannabis for medical use... Cannabis can be effective in some patients to relieve symptoms of multiple sclerosis, and against certain forms of pain... This evidence is enough to justify a change in the law." [28]

A 1999 review by the US Institute of Medicine (conducted at the request of the White House Office of National Drug Control Policy) added, "The accumulated data indicate a potential therapeutic value of cannabinoid drugs, particularly for symptoms such as pain relief, control of nausea and vomiting, and appetite stimulation," [29] and recommended Congress immediately authorize single patient clinical trials hereupon subjects could legally use inhaled cannabis medicinally in a controlled setting.[30]

The Institute of Medicine also reviewed the medical efficacy of the FDA-approved synthetic oral THC drug Dronabinol (Marinol) and concluded it to have "poor bioavailability," slow onset, and adverse effects such as "anxiety, depersonalization, dizziness, euphoria, dysphoria, [and] somnolence" in approximately one-third of patients who use it.[31] Authors noted that many patients prefer natural cannabinoids or inhaled cannabis over this legal alternative because they are fast-acting (allowing consumers to self-titrate the dose), less dysphoric, and, in general, provide greater therapeutic relief than synthetic THC. Many experts believe that the synergism of the multiple cannabinoids found naturally in cannabis is likely more efficacious than the administration of synthetic THC alone.[32]

More recently, an overview of cannabis' medical efficacy conducted by the Canadian Senate's Special Committee on Illegal Drugs in 2002 advised Parliament to revise federal regulations so that any "person affected by one of the following [medical conditions]: wasting syndrome; chemotherapy treatment; fibromyalgia; epilepsy; multiple sclerosis; accident-induced chronic pain; and some physical conditions including migraines and chronic headaches, whose physical state has been certified by a physician or an individual duly authorized by the competent medical association of the province or territory in question, may choose to buy cannabis and its derivatives for therapeutic purposes." [33] Today, Canadians can legally choose between using natural cannabis, as authorized by Health Canada, or the natural marijuana extract spray Sativex.[34]

Thirteen US states Alaska, California, Colorado, Hawaii, Maine, Montana, Michigan, Nevada, New Mexico, Oregon, Rhode Island, Vermont and Washington - have now enacted laws protecting authorized medical cannabis patients from state prosecution. These laws are operating as voters and legislators intended and abuses by the public are minimal. According to a federal General Accounting Office (GAO) report examining the implementation of statewide medical cannabis laws in Alaska, Hawaii, Oregon, and a handful of California counties: "Officials from over half of the 37 selected federal, state, and local law enforcement organizations we interviewed in the four states said that the introduction of medical marijuana laws had not greatly affected their law enforcement activities. In addition, none of the federal officials we spoke with provided information to support a statement that abuse of medical marijuana laws was routinely occurring in any of the states, including California." [35]

Reviews by the National Academy of Sciences Institute of Medicine and others have also concluded that state medical cannabis laws have not altered adolescents' perceptions of the risk associated with the recreational use of marijuana.[36] In fact, no state that has enacted medical marijuana legalization has seen an overall increase in teen marijuana use since the law's passage.

In closing, the goal of House Bill 1393 is not to sanction the use of cannabis by the general population. Rather it is to protect patients and doctors who recognize that cannabis has medical utility, and uphold the sanctity and privacy of the doctor-patient relationship. State laws already allow the medical use of many controlled substances, such as cocaine and morphine, which can be abused in a non-medical setting. Likewise, Pennsylvania law should also properly differentiate between medicinal cannabis and other controlled substances. As opined by the New England Journal of Medicine:

"[A]uthorities should rescind their prohibition of the medical use of marijuana for seriously ill patients and allow physicians to decide which patients to treat." [37]

Sincerely,

Dated: 12/2/2009

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[20] American Public Health Association, Resolution #9513: "Access to Therapeutic Marijuana/Cannabis." The resolution states, in part, that the APHA "encourages research of the therapeutic properties of various cannabinoids and combinations of cannabinoids, and Œ urges the Administration and Congress to move expeditiously to make cannabis available as a legal medicine."  
<American Journal of Public Health. March 1996, Vol. 86: 441-442>

[21] American Nurses Association, June 2003 Resolution: "The ANA will Œ Support legislation to remove criminal penalties including arrest and imprisonment for bona fide patients and prescribers of therapeutic

marijuana/cannabis."

[22] AIDS Action Council, "Resolution in Support of Access to Medical-Use Marijuana," adopted by the Public Policy Committee of AIDS Action Council: November 15, 1996. The resolution states, in part, that the Council "supports the elimination of federal restrictions that bar doctors from prescribing marijuana for medical use by individuals with HIV/AIDS."

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