Glick Testimony Supporting SB 281

Wednesday April 3, 2013

Thank you to Oregon legislators for conducting this hearing regarding amending the *Oregon Medical Marijuana Act* to include Post Traumatic Stress (Disorder*). (SB 281) Thank you to Leland Berger, my attorney, who doggedly represented me in my strange trip through the OHA. Thank you as well to the Advisory Committee on Medical Marijuana which has persevered in representing the needs of medical marijuana patients through its decade of effort. As a panel member on the 2000 DHS Debilitating Medical Conditions Advisory panel, and as petitioner for the 2005 effort to include psychiatric and mood symptoms onto the list, I am here to describe my thoughts and feelings about both the process I endured as well as the justifications for it. While there are many unresolved sociological issues surrounding the use of cannabis, the moral justification and the evidentiary basis for adding Post Traumatic Stress "Disorder" to the OMMA are more relevant than when I submitted my ill-fated Petition.

It is increasingly apparent that activation of the endocannabinoid system stimulates homeostatic regulation by either the endogenous cannabinoid signaling (anandamide) or the exogenous activation of it by the use of marijuana. This is why marijuana is so valuable: It *causes* complicated neurological and biochemical alterations which stimulate release of neurotransmitters aimed at reestablishing more normal physiological homeostasis.

The thousand pages of research I attached to my petition described this process in great detail. The problem with the process I suffered through is that The Oregon Health Authority (then DHS) carefully crafted a process which had the trappings of a careful and considerate evaluation, but with fundamental flaws built in.

These included:

- Limiting "evidence weight" to favor human studies, avoiding the fact that there is a huge mass of evidence showing therapeutic use. Animal modeling also demonstrates the physiological basis for anti anxiety effects. The first of the three sessions was entirely devoted to process and neglected to address the issue at all.
- Patient testimony was minimally considered. One session, the last, was dedicated to patient testimony only after Mr. Berger strenuously objected to the exclusion of time for patients. In fact one Panel Member, Grant Higginson (State Health Officer representative) chose to reject PTSD based upon one patients' testimony against, when 40 patients testified for.

- It directly rejected consideration of harm to patients of arrest, while including the body of "human" drug abuse material showing adverse outcomes.
- There was no consideration of harms of pharmaceutical use. If the DHS was going to use FDA drug approval evaluation protocols, there should have been an honest evaluation of the *lack* of harms relative to Rx treatment. Thousands of deaths a year from pharmaceutical medicines was not considered germane.
- The inclusion on the Panel of "experts" who had no education or knowledge of endocannabinoid therapeutics, and in some cases (Diane Lia, Marian Fireman MD) were openly hostile to it.)

There were several members, including Theresa Keane NP, Stormy Ray, and Alan Cohn MD who diligently studied the evidence and made detailed written justifications of their votes. The medical establishment designees did not dignify the process with written comments, simply voting "against" on every condition.**

In reality, epidemiological honesty would show that cannabis should be a first-line treatment for PTSD due precisely because it is relatively safe. I am not asserting complete safety, however, in comparison to the widely accepted risks (including death) of pharmaceutical treatments, forbidding a Veteran from smoking some *indica* to help him sleep or relax is disingenuous and cruel.

That brings me to my other point. The failure of Oregon Health Authority to allow for medically supervised cannabis use for anxiety states violated their Mission Statement which says, in part:

> *Helping people and communities achieve optimum physical, mental and social well-being*

It is simply unconscionable that our government created a war based on lies, which killed and psychically maimed hundreds of thousands of people, including military service people, then denies them an option which is widely viewed as beneficial. What kind of monstrous government would do such a thing?

Vetrans by the score are putting a gun in their mouth and blowing their brains out because their government put them into a system too horrific for words. Allowing and supporting the use of ANY treatment which clinicians and patients feel is beneficial is not only sensible, but is compassionate.

Did the OHA administration follow proper procedure? They can argue that they did. But, how can a legitimate process come up with an illegitimate conclusion.

Following is an annotated bibliography of a fraction of the material I submitted in my petition. No doubt there is much more today.
Thank you for allowing me to express my thoughts and feelings about this issue.

**I am reluctant to label PTS(D) a disorder due to the intolerable conditions under which military service people endured, thereby stigmatizing them with a "disorder".*
*** Grant Higginson, to his credit, did submit written justification for the specific conclusions he reached.*

Post Traumatic Stress Disorder (PTSD)

"The research on PTSD has been late in coming, spurred on by persistent reports from military veterans who served in Vietnam and Iraq. This petition includes written comments by over a dozen people. Most of these comments have been collected since the petition was filed with the ACMM. (Some identifying information on these written comments may compromise confidentiality of the writer. It was left on the sheets in order to facilitate contact from advisory panel members. Otherwise, identifying information should be removed.) The relative lack of basic research into the mechanism of action of cannabinoids on traumatic stress means that the patient record of use is the most substantial evidence available. New Mexico added PTSD to it's list of qualifying conditions. (Re: Bryan Krumm Testimony).

Hohmann et al., (2005) theorizes that the endogenous cannabinoid system modulates stress-induced analgesia. Stressed-induced analgesia is analgesia that results from activation of opioid or non-opioid mechanisms. "Here we show that an opioid-independent form….termed stress-induced analgesia is mediated by the release of endogenous marijuana-like compounds in the brain." This lends weight to the subjective experience of cannabis users, especially those suffering from severe pain, that cannabis modulates the pain perception and decreases associated anxiety.

Marsicano et al., (2002) describes the acquisition and storage of "aversive memories" as one of the basic functions of the nervous system, and that these aversive memories will gradually diminish over time if they are not reinforced. This research supposed that "the endogenous cannabinoid system has a central function in the extinction of aversive memories." The researchers concluded that "…endocannabinoids facilitate extinction of aversive memories through their selective inhibitory effects on local inhibitory networks in the amygdala."

The petition included 15 patient comments, five of which are from veterans. Comments by users significantly underscore the perception of relief through herbal cannabis:

- C. M. relates personal experiences as an active duty nurse *"treating victims of major trauma, watching young people die." "The use of medical marijuana continues to alleviate the PTSD and it's effects on my life. Marijuana definitely influences my quality of life."*

- OMMP Patient # 161570 relays memories of abuse, molestation, depression, anxiety and disability. She has taken a number of pharmaceuticals including Prozac, Wellbutrin, Seroquel. *"…using cannabis will stop the memories and divert my mind to allow me to take care of my responsibilities…" "Cannabis makes it possible for me to relax…., to go places outside my home, relieves depression symptoms, alleviates anxiety, and helps me go to sleep."*

- D. P. writes: *"I have been using cannabis to alleviate symptoms of PTSD for years. I was in Vietnam in 1966 and the experience left indelible scars that would not heal, and weren't even acknowledged or identified for years. It has been common knowledge for a long time among PTSD veterans (and many mental health professionals who treat them) that cannabis is an effective treatment for these symptoms."*

Di Marzo et al., (2003) provides an excellent discussion of cannabinoid neurochemistry. The authors state: "Endocannabinoid signaling might be seen as an adaptive response to stimuli or conditions that pose a threat to the organism and to the brain in particular." "Via… inhibitory actions, endocannabinoid are able to compensate both at the neurochemical and behavioral level, for the abnormal neurotransmission caused by these conditions."

Patal, et al., (2006) describes a model of anti anxiety effects modulated through the effect of anandamide on the endogenous cannabinoid signaling system. "These data indicate that activation of CB-1 cannabinoid receptors reduces anxiety-like behaviors in mice and further support an anxiolytic role for endogenous cannabinoid signaling." As with PTSD, this research lends weight to the use of herbal cannabis by people to treat unwanted symptoms of anxiety. Cannabis appears to reduce anxiety from any cause, be it Alzheimer's Disease, traumatic experiences or other sources.

Musty et al., (2005) is included as an abstract in this petition. The review describes the activation of various locations in the brain, particularly the hypothalamus, and hippocampus- as increased due to activation of CB-1 receptors in those areas. Interestingly, they relate that CB-1 antagonists are anxiolytic, but that agonists (like cannabis) "seem to have biphasic effects. Low doses seem to be anxiolytic, while high doses are antigenic." It would be interesting to compare

the dosage with the disease condition and see if people with anxiety states report using low-dose therapy.

Marx et al., (2006) contains a good discussion of the neurobiology of cannabinoids on a number of physiological processes including, weight loss, anxiety, pain, tissue and brain inflammation, cancer cell growth, PTSD. The article discusses Rimonabant, a selective CB-1 receptor inhibitor and it's potential as a weight loss medication. According to the authors, "Even phobias and posttraumatic stress disorder (PTSD) may be amenable to treatment with cannabinoid boosters." Patients have long ago discovered this treatment; researchers are more interested in formulating pharmaceuticals.

There is strong evidence that cannabis assists some victims of trauma to compartmentalize the horror of the experience. This symptom relief needs to be evaluated in the context of substance use disorders which are prevalent in people with PTSD. It appears that the inclusion of PTSD into the list of qualifying conditions seems justified if considered in the context of living hell experienced by many people with PTSD."

Ed Glick

Ed Glick practiced nursing from 1985-2005 as a Registered Nurse. He helped draft and campaigned for the OMMA (BM 67), sat on the Debilitating Medical Conditions Advisory Panel, (2000) , and was petitioner for the 2005-2009 "Expert Panel".