☞ **09hr_SC-HHIPPTRR_sb0368_pt03**

(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ...
PUBLIC HEARING - COMMITTEE RECORDS

2009-10
(session year)

Senate
(Assembly, Senate or Joint)

Committee on ... Health, Health Insurance, Privacy, Property Tax Relief, and Revenue (SC-HHIPPTRR)

COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)
  (**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
  (**sb** = Senate Bill) (**sr** = Senate Resolution) (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

* Contents organized for archiving by: Stefanie Rose (LRB) (June 2012)

SB 368

Becker, Kelly

From: michael pappas [milkdust05@yahoo.com]
Sent: Saturday, December 12, 2009 7:38 AM
To: Becker, Kelly
Subject: medical marijuana

Greetings, As a concerned care giver I've seen first hand what cannabis can do beneficially for an individual with pain and neurogenic affliction. As importantly I've seen the fear and anxiety in the eyes of someone not knowing if they'll be able to continue with the therapeutic effects they receive from it for fear of criminal prosecution. Personally I know as does anyone familiar with the effects of cannabis that used properly it relieves many negative symptoms accompanying various disorders. The sad part of all this is the wrongful scheduling of this beneficial herb has crippled its medicinal research and hurt all of us in that wake. Lets all wake up and smell the roses. mdp


FORWARD
E PLURIBUS UNUM

SB 368

Becker, Kelly

From: Steve Larsen [slarsen64@wi.rr.com]
Sent: Sunday, December 13, 2009 8:06 PM
To: Becker, Kelly
Subject: written testimony JRMMA

12/12/2009

My name is Stephen Larsen,and my written and personal testimony is in favor of this act. I am 31 years old and father to a 6 year old son. I am a Milwaukee county resident who lives his life with daily chronic pain due to congenital spinal defects, Lumbar disc disease, Failed back surgery syndrome,post surgical adhesive scar tissue on my nerve roots in my lumbar spine, nerve damage and T- spine scoliosis/disc disease. I have been through surgical treatments, steroid Injections, and have tried and used Many different medications including: Soma, Flexeril, Methocarbamol, Neurontin, Lyrica, Vioxx, Celebrex, Vicodin, Codeine, Oxycodone, Morphine,and Tricyclic antidepressants, all in attempt to control my chronic pain and pain related symptoms.

I have been suffering with this for over 10 years now in this severity, with very short periods of relief. Because of this pain my family life, social life, employment (lack thereof) and attempts to return to school to further my education and become employed again have suffered. I Just want to live my life, See my 6 year old son grow up to be something, and maybe see grandchildren, but If I continue down the path I am on with my current treatments, our quality of life will continue to be poor, for myself, my fiance our 6 year old son.
Cannabis has helped me through times where I have been ready to give up life because of the pain,and side effects I experience from my doctor prescribed medications.

In my situation, I firmly believe the continued prohibition of marijuana for medical purposes is inhumane to people such as myself and others in dire need of alternative treatment. All I am asking is for this committee to try and place yourself in my situation or another like it. We all have families, and we all want the best for them, and we want to live our lives, Medical marijuana can restore dignity, relief, and some normalcy to the lives of people here in Wisconsin who live with daily pain, cancer, aids, etc. without fear of legal problems which can only compound hardship. Medical Marijuana IS health care.

Thank you for your time in reading my personal thoughts and experience on this matter. I have faith the committee will do what is right for the people of Wisconsin.

If you have any comments or questions, Feel free to contact me.

Sincerely,
Stephen D. Larsen
Slarsen64@wi.rr.com
ph: 262-320-4210


FORWARD
E PLURIBUS UNUM

Becker, Kelly

From: Pamela Therese Danby [pamela.danby@mac.com]
Sent: Saturday, December 12, 2009 1:33 PM
To: Becker, Kelly
Cc: Pamela Therese Danby
Subject: Testimony to Support Jacki Rickert Medical Marijuana Act Senate Bill 368 & Assembly Bill 554

Senate Committee Members on Health, Health Insurance, Privacy, Property Tax Relief, and Revenue
and
Assembly Committee Members on Public Health:

I've Been Given the Responsibility to Speak; So Lend Me Your Ears, Open Your Minds,
And From Any More Knowledgeable Person, I Ask Your Correction in This Matter:

Senate Bill 368: the Jacki Rickert Medical Marijuana Act and companion Assembly Bill 554
Ensuring qualified patients shall no longer be sanctioned for their medicinal use of marijuana.

The older we get, Liberal & Conservative alike,
The more likely it is that Someone We Love will Need Medical Marijuana
for Pain, Nausea, Vomiting, Weight Loss, Lack of Appetite and other symptoms
caused by Multiple Sclerosis, Cancer and AIDS or by the harsh drug treatments.
It can take Suicide off the table, particularly in cases (like mine) of Neurogenic Pain.

Former Teacher & Minister, Now Medical Marijuana User
I loved my work as a Special Ed.Teacher, a Sailor (& Sailing Instructor), & as a Minister.
Now I'm a Medical Marijuana user.
With my family & Doctors' knowledge, I smoke 3x a day, about an ounce a month, of medium grade cannabis.
I can only afford 1/3 of the recommended dose (0.9 grams taken 3x over 12 hours),
& not even the medicinal high grade.
But it's usually enough
(along with a combo of other prescription pharmaceuticals)
to take at least an edge off
the multiplicities of night time agonies from the Peripheral Sensory Neuropathy in my feet & fingers:
The Tingling, Prickling & Jabbing Pains,
The Severe Waves of Insanely Intensified "Pins & Needles";
The Persistent Aching & Pinching Sensations;
The Burning & Searing;
The Clawing, Nailing, Stabbing, Biting, Shooting & Jolting Electric Shocks.

That amount is about 3 good sized joints, or pipe bowls, which become increasingly difficult to choke down.
I alternate delivery systems with the gentler (but less effective) Vaporizer or Cannabutter Brownies.

When I smoke marijuana, I don't get high; I get productive,
& at night, I get to sleep, freed from the worst of that pain.
Actually, being able to be productive:
Washing dishes,
Changing sheets,
Making the bed,
Cooking,
Putting Laundry Away;
Those are my high!
And that's a really high functioning day for me, for which I give my gratitude for Marijuana,
& Thanksgiving to Our Creator for providing it, as well as the crucial Gabapentin/Neurontin.

That amount of (hopefully unpolluted) marijuana costs me about $200 on the black market,
which is scary as hell.
And there are always those horrible periods when the local supply has dried up,
& I suffer, (like during the sleep study) sleepless, screaming into my pillow & trying to get out of my feet.

Each night, even with multiple medications,
nerve pain from Peripheral Neuropathy becomes nearly unbearable.
Pharmaceuticals can only get you to 60% relief at the most.

(which isn't enough to take it off your mind),
before the side effects take you down.

Marijuana, for me, takes suicide off the table.
I thank God every day for the series of coincidences that brings this blessed relief.

My 1st offence for possession would be a misdemeanour with 6 months in jail &/or a $1000 fine, plus the driver's license suspension.
For those who help, 3x that.
I should feel guilty, but I am just so grateful for the relief & hope of tomorrow.


FORWARD
E PLURIBUS UNUM

SB 368

Becker, Kelly

From: Melvin Zeman [icwmail@yahoo.com]
Sent: Monday, December 14, 2009 6:00 AM
To: Becker, Kelly
Subject: Medical Marijuana Bill

I am writing in support of the AB554/SB358 Bill the Jacki Rickert medical marijuana bill. I am a 43 year old man living in Wisconsin and i have been diagnosed with muscular dystrophy. I experience chronic pain, swelling and spasms. I have lived with these symptoms to one degree or another since about the age of 8 and reached the end of my rope two years ago. there is no cure or treatment for my condition. there is no pharmaceutical medication that relieves my symptoms and i have tried dozens over the years. after months of research I tried Marijuana with astonishing results. It controls my pain, stops the spasms and allows me to have a normal life raising my children keeping my job and being an active member of my community.I feel the small amount of Cannabis needed to keep my disease in check and the responsible way in which i use it should not categorize me as a criminal. I am a respectable law abiding adult with a disease . Please Pass the Jacki Rickert medical cannabis bill, and allow patients to grow their own medicine giving them control over the specific strain of cannabis (as there are hundreds) that helps their condition thank you . Chuck Z.


FORWARD
E PLURIBUS UNUM

Is My Medicine Legal YET?

www.IMMLY.org & www.JRMMA.org
For immediate release: Tuesday, Dec. 15, 2009

SB 368

IMMLY Statement on Jacki Rickert Medical Marijuana Act Hearings

Is My Medicine Legal YET? is looking forward to hearing from the people this bill is about – patients – at the combined health committee hearing on Tuesday Dec. 15, 2009.

And while many patients will be able to attend and share how cannabis benefits them, we remind committee members to be mindful that what they see and hear Tuesday only represents the proverbial "tip of the iceberg".

For every patient that can make their particular painful journey to Room 412 East of the State Capitol at 10am, there will be thousands more who will be unable. Some are bedridden, others may be isolated or without a means of transit. Some are just too scared to even say the "M" word and would not consider breaking the law even to save their own life, even if begged by family.

And there are those patients for whom the hearing comes too late, like our dear friend Mary Powers, a disabled Army veteran and IMMLY board member who lobbied tirelessly for passage of Wisconsin medical cannabis legislation, lobbying Capitol offices up until two weeks before her death Oct. 22, at 50 from cancer, AIDS and Hepatitis C. Mary did whatever she could but died without legal access to the life-sustaining medicine she fought so hard for.

IMMLY's 2002 poll and another from 2005 established that 70-80% of Wisconsinites support legal access with a doctor's note. The people of our state understand they may need this medicine some day. Passing the Jacki Rickert Medical Marijuana Act intact correctly removes this issue from the realm of the criminal justice system and places it squarely back where it belongs, in the hands of patients and their physicians. Medical cannabis is healthcare.

Is My Medicine Legal YET? is a Mondovi and Madison Wisconsin based grass roots patient and caregiver organization dedicated to advancing public education about the medicinal benefits of cannabis. For further information contact Jacki Rickert at 715.926.4950 or Gary Storck at 608.241.8922 or visit the IMMLY websites at www.IMMLY.org and

###


FORWARD

70 West 36th Street
16th Floor
New York, NY
10018

212.613.8061 voice
212.613.8021 fax
www.drugpolicy.org
info@drugpolicy.org

Drug Policy
Alliance Network

December 15, 2009

Written Submission of Daniel N. Abrahamson, J.D., to the Wisconsin Assembly and Senate Health Committees Re: the Medical Efficacy of Smoked Medical Marijuana

Senator Erpenbach, Represenative Pocan, distinguished committee members: thank you for the opportunity to testify at today's Joint Hearing on AB 554 / SB 368, Wisconsin's proposed medical marijuana law.

I am supplementing my oral testimony to the joint committee with this written submission to more fully address an issue that I understand is of particular concern to the Wisconsin Medical Association, among others; namely the medical safety and efficacy of *smoked* medical marijuana.

Medical marijuana can be ingested in a variety of ways. For example, medical marijuana can be inhaled in mist form through an inhaler or as a pre-combustion vapor through a device known as a vaporizer, eaten as part of a cooked food product, drunk through a tincture or tea, swalled in pill form (as with Marinol), or absorbed through suppository or poultice. Medical marijuana is also commonly smoked – through a pipe (of which there are many kinds) or as a cigarette.

It is sometimes suggested that marijuana ceases to be a medicine when it's smoked rather than taken in other forms. This claim is simply wrong.

There is increasing consensus among medical professionals that marijuana, including *smoked* marijuana, provides beneficial effects in symptom management for a number of medical conditions. Highly regarded medical organizations and associations such as the American College of Physicians, American Nurses Association, American Public Health Association, British Medical Association, Canadian Medical Association, and Leukemia and Lymphoma Society have either

acknowledged the promise of marijuana as a medicine or provided an outright endorsement of it.[1]

These medical organizations recognize the promise of marijuana as a medicine because existing scientific and medical research has proven its effectiveness. In 1999, the White House commissioned Institute of Medicine of the National Academy of Sciences spent two years reviewing the scientific data then available with respect to potential benefits of medical marijuana. The study team found "substantial consensus among experts in the relevant disciplines on the scientific evidence about potential medical uses of marijuana." The study team found that, "nausea, appetite loss, pain and anxiety...all can be mitigated by marijuana." *The study team did not exclude smoked marijuana from its conclusions*, noting instead that "there are even some limited circumstances in which we recommend smoking marijuana for medical use." *See* Janet E. Joy, Stanley J. Watson, Jr., and John A. Benson, Jr. Marijuana and Medicine: Assessing the Science Base, Division of Neuroscience and Behavioral Research, Institute of Medicine (Washington, DC: National Academy Press, 1999).

In the past ten years, the findings of that report have been corroborated by numerous peer-reviewed, randomized, double-blind controlled studies of *smoked* marijuana published in highly respected and credible medical journals—this despite little federal support for and significant federal obstruction of medical marijuana research. These studies prove the safety and efficacy of smoked marijuana for chronic, neuropathic pain. The following is a brief sample of such studies -- *each of which used smoking as the method of ingestion*:

- Abrams D, et al. Cannabis in painful HIV-associated sensory neuropathy: a randomized placebo-controlled trial. *Neurology* 68 (2007): 515-521.

- Wallace M, Schulteis G, Atkinson JH, et al. Dose-dependent Effects of Smoked Cannabis on Capsaicin-induced Pain and Hyperalgesia in Healthy Volunteers. *Anesthesiology* 107 (2007):785-796.

- Ellis R. et al. Smoked medicinal cannabis for neuropathic pain in HIV: a randomized, crossover clinical trial. *Neuropsychopharmacology* 34 (2009): 672–680.

- Wilsey B. et al. A randomized, placebo-controlled, crossover trial of cannabis cigarettes in neuropathic pain. *Journal of Pain* 9 (2008): 506-521.

Myriad clinical and preclinical scientific studies further suggest the promise of medical marijuana in eventually treating, mitigating or otherwise controlling numerous medical conditions, including many forms of cancer, multiple sclerosis, Alzheimer's disease, seizure disorders, and even helping generate neuron growth.[2]

Not only has the scientific community confirmed marijuana's medicinal benefits, but it has also concluded that marijuana has a wide margin of safety as a medicine, meaning that it typically poses fewer risks to patient health and well-being than many conventionally-prescribed treatments.

Several members of this joint committee have worked on the important issue of drug overdose prevention and are aware of the rising number of deaths in this country due to the overdose of prescription medications. Unlike many pharmaceuticals, marijuana cannot cause death due to overdose. In fact, no one has ever died of a cannabis overdose. *See* Robert S. Gable, The Toxicity of Recreational Drugs, 94(3) American Scientist Online (May-June 2006), *available at* <http://www.americanscientist.org/template/AssetDetail/assetid/50773?&print=yes> (reporting "[t]he least physiologically toxic substances, those requiring 100 to 1,000 times the effective dose to cause death, include . . . marijuana" and noting "no published cases in the English language that document deaths from smoked marijuana"). In the words of the federal Institute of Medicine, "the acute side-effects of marijuana use are within the risks tolerated for many medications." Institute of Medicine Report, *supra*. Indeed, this is why many Americans choose smoked medical marijuana to safely and effectively manage their pain.

There are also specific scientific studies showing that there is little danger to health posed by smoking marijuana. A recent large-scale study conducted by Dr. Donald Tashkin at the University of California, Los Angeles Geffen School of Medicine, concluded that regular, heavy smoking of marijuana does *not* lead to an increased risk of lung cancer. *See* Donald Tashkin et al. Marijuana Use and the Risk of Lung and Upper Aerodigestive Tract Cancers: Results of a Population-Based Case-Control Study. *Cancer Epidemiology, Biomarkers & Prevention* (2006). A recent medical research study in New Zealand found no link to emphysema either. *See* Sarah Aldington, et al. Effects of Cannabis on Pulmonary Structure, Function and Symptoms. *Thorax* (2007).

There are legitimate medical reasons why many patients need to smoke marijuana over other forms of ingestion. For example, many patients use marijuana to treat nausea. The government

has offered Marinol—a synthetic tetrahydrocannabinol (THC) pill—as an alternative to smoked marijuana. However, because it is a pill, some patients seeking relief from severe nausea regurgitate the Marinol pill before it can suppress vomiting. *See* Mitch Earleywine, Understanding Marijuana, A New Look at the Scientific Evidence (Oxford University Press: 2002), p. 16.) In addition, after being swallowed, Marinol is delivered first to the stomach and then to the liver, where it is metabolized into 11-hydroxy-delta-THC. This metabolite is three times more psychoactive than THC delivered to the lungs by smoked cannabis. *See* Institute of Medicine Report, *supra*, at 36 (*citing* Raj Razdan, Structure-activity Relationships inCannabinoids, 38 Pharmacology Rev. 75-149 (1986)). Therefore, not only must patients who use Marinol wait a considerable period of time to obtain relief, but they also often experience harsh, prolonged psychoactive side-effects from the pill.

By contrast, the therapeutic benefits of smoked marijuana are almost instantaneous, resulting in prompt relief for patients. *See, e.g.,* Opening Statement of Stanley J. Watson, Jr., Institute of Medicine News Conference, "Marijuana and Medicine: Assessing the Science Base" (Mar. 17, 1999) ("Smoking ... delivers rapid drug effect, whereas the THC capsule takes effect slowly, and its results are variable. There are many symptoms for which a quick-acting drug is ideal such as pain, nausea and vomiting.") *available at* <http://www.4.nationalacademics.org> (search for "Watson and Marijuana"). The Marinol pill also does not contain the nearly five hundred active ingredients—including 70 known, chemical compounds (called cannabinoids)—in addition to THC, all of which are potentially therapeutic and which may benefit patients who smoke marijuana. *See* ElSohly & Slade, Chemical Constituents of Marijuana: The Complex Mixture of Natural Cannabinoids (2005), 78 Life Sciences, 539, 540.

Because marijuana is a safe and effective medicine, many medical doctors—particularly oncologists and those who specialize in HIV/AIDS—and their patients rely on smoked marijuana to safely relieve and ease the pain and symptoms of disease. Well before California enacted its medical marijuana law in 1996 a significant number of doctors were recommending marijuana to their patients. A 1991 survey of doctors specializing in cancer treatment, published in the *Journal of Clinical Oncology*, found that of those with an opinion, 54 percent of the doctors supported access to medical marijuana and 44 percent had suggested the use of medical marijuana to at least one patient. *See* Doblin, Richard and Kleiman, Mark A. R. Marijuana as Antiemetic Medicine: A Survey of Oncologists' Experiences and Attitudes. *Journal of Clinical Oncology*. 1991; 9(7): pp. 1314-1319. As when

considering the potential negative side effects of any medication they might prescribe, it should be left up to these doctors to weigh the pros and the cons of recommending medical marijuana and whether it should be smoked, vaporized, or otherwise ingested. There are thousands of licensed medical practitioners across the country who recommend that their patients smoke marijuana.

None of the thirteen states—Alaska, California, Colorado, Hawaii, Maine, Michigan, Montana, Nevada, New Mexico, Oregon, Rhode Island, Vermont and Washington—that have recognized a right to medical marijuana have excluded smoked marijuana from protection under their laws. The people in these states and their elected representatives did not act recklessly or without evidence in their decision to allow legal access to medical marijuana, including smoked marijuana. These states wisely chose to leave it up to doctors and patients to determine the best, most effective, method of ingestion for each individual patient.

As currently drafted, AB 554 / SB 368 respect the physician-patient relationship and honor the research evidence discussed above.

Again, thank you for the opportunity to testify.

Daniel N. Abrahamson
Director of Legal Affairs

[1] *See* American Medical Association Council on Scientific Affairs, Report 6, 2001 AMA Annual Meeting (2001) (available at http://www.ama-assn.org/ama/pub/category/13625.html); American College of Physicians, "Supporting Research into the Therapeutic Role of Marijuana," 2008, at http://www.cmcr.ucsd.edu/geninfo/ACP_2008_v2.pdf ; American Public Health Association, Resolution #9513: "Access to Therapeutic Marijuana/Cannabis." *American Journal of Public Health.* March 1996, Vol. 86: 441-442, reprinted at http://www.drugsense.org/tfy/apha.htm; American Nurses Association, June 2003 Resolution, "Providing Patients Safe Access to Therapeutic Marijuana/Cannabis" and December 2008, "In Support of Patients' Safe Access to Therapeutic Marijuana," at http://www.nursingworld.org/EthicsHumanRights; British Medical Association, *"Therapeutic Uses of Cannabis:"* November 1997 (summarized at http://web2.bma.org.uk/pressrel.nsf/wlu/CLOE-4EENN4?OpenDocument&vw=wfmms.); Canadian Medical Association, January 2006, www.cma.ca/index.cfm/ci_id/3396/la_id/1.htm; Leukemia & Lymphoma Society "Medical Marijuana Use and Research," (2008) at: http://www.maps.org/mmj/lnls-res.pdf.

[2] *See, for example:* Hanus. Pharmacological and therapeutic secrets of plant and brain (endo) cannabinoids. *Medicinal Research Reviews* 29 (2009): 213-271; Mohomed Ben Amar. 2006. Cannabinoids in medicine: a review of their therapeutic potential. *Journal of Ethnopharmacology* 105: 1-25; Manuel Guzman. 2003. Cannabinoids: potential anticancer agents. *Nature Reviews Cancer* 10: 745-755. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14570037&dopt=Abstract; Di Marzo et al. 2006. Anti-tumor activity of plant cannabinoids with emphasis on the effect of cannabidiol on human breast carcinoma. *Journal of Pharmacology and Experimental Therapeutics* Fast Forward, < http://jpet.aspetjournals.org/cgi/reprint/jpet.106.105247v1 >; Parolaro and Massi. 2008. Cannabinoids as a potential new drug therapy for the treatment of gliomas. *Expert Reviews of Neurotherapeutics* 8: 37-49; Chong et al. 2006. Cannabis use in patients with multiple sclerosis. *Multiple Sclerosis* 12: 646-651; Rog et al. 2005. Randomized, controlled trial of cannabis-based medicine in central pain in multiple sclerosis. *Neurology* 65: 812-819; Wade et al. 2004. Do cannabis-based medicinal extracts have general or specific effects on symptoms in multiple sclerosis? A double-blind, randomized, placebo-controlled study on 160 patients. *Multiple Sclerosis* 10: 434-441; Brady et al. 2004. An open-label pilot study of cannabis-based extracts for bladder dysfunction in advanced multiple sclerosis. Multiple Sclerosis 10: 425-433; Vaney et al. 2004.

Efficacy, safety and tolerability of an orally administered cannabis extract in the treatment of spasticity in patients with multiple sclerosis: a randomized, double-blind, placebo-controlled, crossover study. Multiple Sclerosis 10: 417-424; Zajicek et al. 2003. Cannabinoids for treatment of spasticity and other symptoms related to multiple sclerosis: multicentre randomized placebo controlled trial [PDF]. The Lancet 362: 1517-1526; Wade et al. 2003. A preliminary controlled study to determine whether wholeplant cannabis extracts can improve intractable neurogenic symptoms. Clinical Rehabilitation 17: 21-29; Wade et al. 2006. Longterm use of a cannabis-based medicine in the treatment of spasticity and other symptoms of multiple sclerosis. Multiple Sclerosis 12: 639-645; Rog et al. 2007. Oromucosal delta-9-tetrahydrocannabinol/cannabidiol for neuropathic pain associated with multiple sclerosis: an uncontrolled, open-label, 2-year extension trial. Clinical Therapeutics 29: 2068-2079; Ramirez et al. 2005. Prevention of Alzheimer's Disease pathology by cannabinoids. The Journal of Neuroscience 25: 1904-1913; Eubanks et al. 2006. A molecular link between the active component of marijuana and Alzheimer's disease pathology. Molecular Pharmaceutics; Campbell and Gowran. 2007. Alzheimer's disease; taking the edge off with cannabinoids? British Journal of Pharmacology 152: 655-662; Walther et al. 2006. Delta-9-tetrahydrocannabinol for nighttime agitation in severe dementia. Physcopharmacology 185: 524-528; Jiang et al. 2005. Cannabinoids promote embryonic and adult hippocampus neurogenesis and produce anxiolytic and antidepressant-like effects. Journal of Clinical Investigation 115: 3104-3116. http://www.jci.org/cgi/content/full/115/11/3104?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=cannabinoids%2Bpromote%2Bhippocamus%2Bneurogenisis&searchid=1139855602212_4399&FIRSTINDEX=0&journalcode=jci; and Abrams D et al (2003). Short-Term Effects of Cannabinoids in Patients with HIV-1 Infection: A Randomized, Placebo-Controlled Clinical Trial. Ann Intern Med. Aug 19;139(4):258-66.


FORWARD
E PLURIBUS UNUM

QuickTime™ and a
decompressor
are needed to see this picture.

December 15, 2009

Dear Mr. Chair and members of the committee:

Over the past 14 years, 13 states have removed state criminal penalties from the physician-recommended medical use of marijuana. SB 368 and its companion bill, AB 554, are commonsense and humane bills that reflect the experiences learned from medical marijuana laws in Alaska, California, Colorado, Hawaii, Maine, Michigan, Montana, Nevada, New Mexico, Oregon, Rhode Island, Vermont, and Washington.

There is strong support among medical and legal organizations for protecting seriously ill patients from arrest. Among other organizations, respected medical organizations such as the American College of Physicians, the American Nurses Association, the Leukemia & Lymphoma Society, and the American Academy of HIV Medicine all support allowing seriously ill patients to use medical marijuana. The American Bar Association also supports medical use of marijuana[1]. Support for medical marijuana is also found in Wisconsin-specific medical organizations. The Wisconsin Nurses Association and the Wisconsin Public Health Association have supported legal, medical use of marijuana since the beginning of the decade[2].

Mirroring the support found in the medical and legal organizations, there is strong public support for allowing the medical use of marijuana on both the national level and within individual states. A CNN/*Time* magazine national poll, published on November 4, 2002, found that 80% of those polled support legal access to medical marijuana.[3] There is also overwhelming support for medical marijuana within Wisconsin. A 2005 poll found 75.7% support for allowing "people with cancer, multiple sclerosis, and other serious illnesses to use marijuana for medical purposes, so long as their physician approves."

Because current state medical marijuana laws are working well and protecting terribly ill patients, they are all incredibly popular in practice. In 2006, polls done in each of the 11 states with medical marijuana laws at that time found public support for the medical marijuana laws ranging from 59% to 79%.[4] None of the state laws that passed by initiative had lower support than when they passed.

These medical marijuana laws have provided near total protection for terminally and seriously ill patients: 99% of all marijuana arrests are by state and local — not federal — officials.[5] Furthermore, as of October 19, 2009, the Department of Justice has advised United States district attorneys not to use "federal resources in ... States on individuals whose actions are in clear and unambiguous compliance with existing state laws providing for the medical use of

---

[1] *State-By-State Medical Marijuana Laws: How to Remove the Threat of Arrest*, Marijuana Policy Project, 2008. Appendix P.
[2] *Id.* at Appendix P - 15
[3] *Id.* at D – 1.
[4] "Proposition 215 Ten Years Later: Medical Marijuana Goes Mainstream," November 2006, <http://www.mpp.org/prop215>.
[5] See *FBI Uniform Crime Reports 2003* (U.S. Government Printing Office), p. 269, Table 4.1 and p. 270, Table 29 and *Compendium of Federal Justice Statistics* (Bureau of Justice Statistics), p. 13, Figure 1.1. Calculations derived from the two cited *Uniform Crime Reports* tables show that there were a total of 755,186 marijuana arrests nationwide during 2002. The *Compendium of Federal Justice Statistics* table states that there were 8,299 arrests for federal marijuana offenses in the 12-month period ending on September 30, 2003. Thus the arrests for federal marijuana charges are 1.09% of the total marijuana arrests.

marijuana."[6] This policy shift creates a space for states to allow well-regulated access to medical marijuana without fear of federal interference. Because of this change in federal policy, SB 368 would ensure that Wisconsin's seriously ill patients will not only be protected from arrest and prosecution for using their medicine, but that they will also have safe and legal access to the medicine their doctors recommend.

Part of the reason the laws are so popular is that the problems that some predicted did not materialize: Teens' marijuana use has not increased in any of the medical marijuana states since their laws passed.[7] In many cases, it has decreased substantially. For example, the Youth Risk Behavior Survey found that high school students' current marijuana use dropped by 30% in Hawaii.[8] In Nevada, high schoolers' current marijuana use has dropped by 33% since its law passed.[9]

Most concerns about medical marijuana laws have surrounded California's law. But even there, the problems are not widespread, as evidenced by the fact that the law has 72% public support.[10] California's medical marijuana initiative was the first law of its kind, and it consisted of only eight sentences.[11] The concerns about it have stemmed from aspects of the law that differ from Wisconsin's bill.

The biggest concern regarding California's law is the lack of regulation of dispensaries. Although several California cities and counties are enacting ordinances to regulate dispensaries, many cities have not yet done so, and the state law provides no real regulation for them. Unlike Wisconsin's bill, California's law also does not include any provisions for licensing of dispensaries.

Dispensaries fill a very significant void that many state medical marijuana laws leave. They can provide seeds and small starter plants or "cuttings" to patients and their caregivers to get them started. They also provide medicine to patients who wouldn't be able to wait several months to grow plants to a harvestable size. Perhaps most importantly, they can immediately provide medicine to patients who are suddenly stricken with an illness or who cannot grow their own medicine (and have no one who will). Patients would also benefit greatly from having the option of buying medicine if they suffer a crop failure or their plants under-produce. For the aforementioned reasons, the recent trend in state medical marijuana laws has been to include provisions for the licensing of dispensaries. Within the past year, three states (New Mexico, Rhode Island, and Maine) have licensed dispensaries or passed laws amending their existing medical marijuana laws to allow for them.

While dispensaries are a very important aspect of ensuring safe access to medical

---

[6] David W. Ogden, Deputy Attorney General of the United States. *Memorandum For Selected United States Attorneys on Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana.* October 19, 2009

[7] Karen O'Keefe and Mitch Earleywine, PhD, "Marijuana Use by Young People: The Impact of State Medical Marijuana Laws." (When the report was released, before-and-after data was only available for eight of the medical marijuana states. Since then, additional government data has been released showing that teen use has also decreased since Montana and Vermont's medical marijuana laws passed.) <http://www.mpp.org/teens>

[8] National Center for Chronic Disease Prevention and Health Promotion, "Hawaii Youth Risk Behavior Survey 1999"; "Hawaii Youth Risk Behavior Survey 2005"; breakdowns available at <http://apps.nccd.cdc.gov/yrbss/SelQuestyear.asp?cat=3&desc=Alcohol%20and%20Other%20Drug%20Use&loc=HI>.

[9] National Center for Chronic Disease Prevention and Health Promotion, "Nevada Youth Risk Behavior Survey 1999"; "Nevada Youth Risk Behavior Survey 2005"; breakdowns available at < http://apps.nccd.cdc.gov/yrbss/SelQuestyear.asp?cat=3&desc=Alcohol%20and%20Other%20Drug%20Use&loc=NV>.

[10] Mason-Dixon Polling & Research, Inc., September 2006 (a poll of 625 likely voters in California).

[11] California Health and Safety Code 11362.5.

marijuana, they are not enough without also allowing patients and their caregivers to cultivate their own medicine. Many patients will be disabled, unable to work, and facing other steep costs for medical care. Many patients would probably begin by buying a few cuttings or some seeds to start out, but will simply not be able to afford to continually buy their medicine from dispensaries. By allowing personal cultivation, Wisconsin's bill assures that patients of limited means will be able to grow their own medicine.

The amount of marijuana that patients and their caregivers are allowed to grow and possess under SB 368 and AB 554 — 12 live marijuana plants and three ounces of usable marijuana — is in line with the amount of marijuana currently allowed under most state medical marijuana laws. For instance, states such as Michigan and Rhode Island allow patients to possess 12 plants and 2.5 ounces of useable marijuana. After hearing out patients, experts, and law enforcement, the Washington State Department of Health set their state's limit at 15 plants and 24 ounces, after determining that that amount constituted a 60-day supply. Although somewhat conservative, SB 368's limit would likely be sufficient for most patients who solely cultivate their own medicine without supplementing it from dispensaries.

Wisconsin's medical marijuana bills — SB 368 and AB 554 — are good legislation that will provide relief for the seriously ill. I hope that the committee will pass SB 368, to provide relief to seriously ill patients who are currently facing arrest for relieving their suffering.

Sincerely,

Robert J. Capecchi
Legislative Analyst, State Policies
Marijuana Policy Project
(202) 462-5747, ext. 2007
rcapecchi@mpp.org

The Jacki Rickert Medical Marijuana Act

Hundreds of Wisconsin's seriously ill are counting on the legislature to enact the Jacki Rickert Medical Marijuana Act, sponsored by Sen. Jon Erpenbach (D-27th Senate District) and Rep. Mark Pocan (D – 78th Assembly District), and cosponsored by two other senators and 13 representatives. This legislation – SB 368 and AB 554 – would allow certain seriously ill patients to relieve their debilitating symptoms with marijuana, according to their doctors' advice, without facing arrest.

Marijuana Has Been Proven to Have Medical Value

- Studies show that many patients suffering from AIDS, cancer, multiple sclerosis, epilepsy, and other debilitating illnesses find that marijuana provides relief from their symptoms.

- Available prescription drugs often come with far more serious side effects than marijuana, and many patients who find relief from marijuana simply do not respond to prescription medications.

- In 1999, the prestigious Institute of Medicine reviewed the research on marijuana's medical value and found, "Nausea, appetite loss, pain, and anxiety are all afflictions of wasting and can be mitigated by marijuana," and that "there will likely always be a subpopulation of patients who do not respond well to other medications."

- In 1988, after reviewing volumes of evidence on marijuana's medical value, the DEA's chief administrative law judge, Francis Young, found that maintaining marijuana as a Schedule I drug would be "unreasonable, arbitrary, and capricious" and that "marijuana, in its natural form, is one of the safest therapeutically active substances known to man."

Thirteen States Protect Medical Marijuana Patients; Nine Others Considering Bills

- These 13 states allow the doctor-advised medical use of marijuana: Alaska, California, Colorado, Hawaii, Maine, Michigan, Montana, Nevada, New Mexico, Oregon, Rhode Island, Washington, and Vermont.

- These laws are working well, enjoy strong popular support, and are protecting patients. Data have shown that any concerns about these laws increasing youth marijuana use are unfounded: All 11 of the medical marijuana states that have produced before-and-after data have reported overall decreases in teen marijuana use — exceeding 50% in some age groups.

- Nine other state legislatures – Delaware, Illinois, Iowa, Pennsylvania, Massachusetts, New Jersey, New York, North Carolina, and Tennessee – are considering enacting medical marijuana laws, and many more are expected to in during their 2010 sessions. All of these bills but Tennessee's would allow state-licensed entities to dispense medical marijuana to qualifying patients.

Federal Law Does Not Stand In the Way

- Nothing in the Constitution or federal law prohibits states from having penalties that differ from federal law.

- Attorney General Eric Holder under President Barack Obama's direction, issued a memo directing the U.S. Attorneys in state with medical marijuana programs not to prosecute patients, caregivers and dispensaries so long as they are in strict compliance with state law.

- A federal appellate court ruled that the federal government cannot punish physicians — or even investigate them — for discussing or recommending the medical use of marijuana with patients.

• Each month, the federal government's Investigational New Drug program ships about 8 ounces of marijuana to four patients. The program was closed to new patients in 1992, depriving other seriously ill patients of this protection and safe access to the medicine their doctors recommend.

There is Strong Popular, Medical, and Religious Support For Allowing Medical Marijuana

• A 2005 poll found 75.7% support for allowing "people with cancer, multiple sclerosis, and other serious illnesses to use marijuana for medical purposes, so long as their physician approves." A 2005 national Gallup poll found that 78% of Americans support "making marijuana legally available for doctors to prescribe in order to relieve pain and suffering." A 2004 AARP poll showed that 72% of adults aged 45 and older think patients should be allowed to legally use marijuana for medical purposes if a physician recommends it.

• In November 2008, 63% of Michigan voters approved a medical marijuana initiative. A majority of voters in each of its 83 counties approved the law.

• Support includes the Wisconsin Nurses Association, the Wisconsin Public Health Association, the American Bar Association, the American Public Health Association, the American Academy of HIV Medicine, and the Leukemia & Lymphoma Society. Two former U.S. Surgeons General – Joycelyn Elders and Jesse Steinfeld – also recognize marijuana as a legitimate, beneficial medicine.

• Religious support includes the Presbyterian Church (USA), the Union for Reform Judaism, the United Methodist Church, the United Church of Christ, the Episcopal Church, the Unitarian Universalist Association, and the Progressive National Baptist Convention.

The Jacki Rickert Medical Marijuana Act

• SB 368 and AB 554 are similar to Michigan's medical marijuana law, which received 63% of the popular vote, including majorities in each of Michigan's 83 counties. It also includes non-profit dispensaries, similar to those added by over 97% of Rhode Island legislators in June and approved by 59% of Maine voters in Nov. 2009.

• This legislation would make a narrow exception to Wisconsin's criminal laws to allow seriously ill patients to possess and grow marijuana for the patients' medical use. It would make Wisconsin the 14th state to allow medical marijuana.

• The Department of Health Services would issue medical marijuana ID cards, which make it easy for police to verify that a patient is allowed to use medical marijuana. A patient or caregiver with an ID card and no more than 4 ounces and 12 plants would not be subject to arrest as long as he or she is in compliance with the law. The ID cards could be revoked for a violation of the law.

• To qualify for an ID card, a patient with a qualifying condition would have to submit to the department a physician's written certification that the potential benefits of the medical use of marijuana would likely outweigh the health risks for the patient. Qualifying conditions are: cancer, glaucoma, HIV/AIDS, post-traumatic stress disorder, hepatitis C, amyotrophic lateral sclerosis (Lou Gehrig's disease), Crohn's disease, Alzheimer's, nail-patella, or a chronic or debilitating disease or medical condition causing severe pain, severe nausea, cachexia, seizures, or severe and persistent muscle spasms.

• The bill maintains commonsense restrictions, including prohibitions on public use of marijuana and driving under the influence. Employers would not be required to allow patients to be impaired at work or possess marijuana at a workplace.

Marijuana Policy Project
P.O. Box 77492 • Capitol Hill • Washington, D.C. 20013
p: (202) 462-5747 • f: (202) 232-0442
info@mpp.org • www.mpp.org

Medical Marijuana Research

The model medical marijuana bill allows patients to obtain a medical marijuana card if they have a qualifying medical condition and a licensed physician believes they are likely to receive therapeutic or palliative benefit from the use of medical marijuana. The qualifying medical conditions listed in the bill are as follows (the state department of health can add others):

1. Cancer, glaucoma, positive status for human immunodeficiency virus, acquired immune deficiency syndrome, hepatitis C, amyotrophic lateral sclerosis, Crohn's disease, agitation of Alzheimer's disease, nail patella, or the treatment of these conditions.

2. A chronic or debilitating disease or medical condition or its treatment that produces one or more of the following: cachexia or wasting syndrome; severe and chronic pain; severe nausea; seizures, including but not limited to those characteristic of epilepsy; or severe and persistent muscle spasms, including but not limited to those characteristic of multiple sclerosis.

Key medical references addressing marijuana's ability to alleviate these conditions are below, with related items/ subjects grouped together.

Nausea, Vomiting, Appetite Loss, Cachexia

In its 1999 report "Marijuana and Medicine: Assessing the Science Base," the Institute of Medicine concluded, "Nausea, appetite loss, pain and anxiety are all afflictions of wasting, and all can be mitigated by marijuana." Marijuana's active components (cannabinoids) can both stimulate appetite and reduce the nausea, vomiting, and weight loss experienced by patients in many circumstances, including the side effects of drug therapies given for cancer, HIV infection, and hepatitis C. Observational studies suggest this may improve treatment adherence among patients experiencing gastrointestinal toxicity from drug therapy.

Cancer References

1) Vincent Vinciguerra et al., "Inhalation Marijuana as an Antiemetic for Cancer Chemotherapy," *New York State Journal of Medicine* (October 1988).

In this clinical trial sponsored by the state of New York, "Fifty-six patients who had no improvement with standard antiemetic agents were treated and 78% demonstrated a positive response to marijuana ... inhalation marijuana is an effective therapy for the treatment of nausea and vomiting due to cancer chemotherapy."

2) Richard Musty and Rita Rossi, "Effects of Smoked Cannabis and Oral Δ9-Tetrahydrocannabinol on Nausea and Emesis After Cancer Chemotherapy: A Review of State Clinical Trials," *Journal of Cannabis Therapeutics* 1, no. 1 (2001): 43-56.

Musty and Rossi reviewed data from a series of state-sponsored clinical trials of marijuana for relief of nausea and vomiting caused by cancer chemotherapy conducted in the 1970s and 1980s, concluding, "Patients who smoked marijuana experienced 70-100% relief from nausea and vomiting, while those who used the THC capsule experienced 76-88% relief."

(3) Manuel Guzman, "Cannabinoids: Potential Anticancer Agents," *Nature Reviews* 3 (2003): 745-766.

In this review article, Dr. Guzman, a leading cancer researcher, examined the data regarding use of marijuana and cannabinoids in cancer treatment. He concluded that marijuana/cannabinoids can be useful in preventing or treating "chemotherapy-induced nausea and vomiting." He also noted that cannabinoids have potential as antitumor agents: "Regarding effectiveness, cannabinoids exert a notable antitumour activity... Regarding toxicity, cannabinoids not only show a good safety profile but also have palliative effects in patients with cancer, indicating that clinical trials with cannabinoids in cancer therapy are feasible."

(4) K. Nelson et al., "A Phase II Study of Delta-9-Tetrahydrocannabinol for Appetite Stimulation in Cancer-Associated Anorexia," *Journal of Palliative Care* 10, no. 1 (1994): 14-8.

In this study of patients with anorexia due to advanced cancer, the researchers concluded, "THC is an effective appetite stimulant in patients with advanced cancer. It is well tolerated at low doses."

HIV/AIDS References

1) Donald Abrams et al., "Short-Term Effects of Cannabinoids on Patients With HIV-1 Infection: A Randomized, Placebo-Controlled Clinical Trial," *Annals of Internal Medicine* 139, no. 4 (2003): 258-266.

This preliminary, short-term clinical trial, conducted over 21 days using 62 HIV-infected patients, was designed to examine the short-term safety of smoked marijuana and oral THC on HIV-infected patients, including potential interactions with HIV protease inhibitors, viral load, and CD4 and CD8 counts. Secondary endpoints included weight, caloric intake, and appetite. No safety concerns emerged with either treatment, and the authors concluded, "Our short-duration clinical trial suggests acceptable safety in a vulnerable immune-compromised patient population." Both the marijuana and oral THC groups gained significantly more weight than the placebo group.

2) B.D. de Jong et al., "Marijuana Use and Its Association With Adherence to Antiretroviral Therapy Among HIV-Infected Persons With Moderate to Severe Nausea," *Journal of Acquired Immune Deficiency Syndromes* 38, no. 1 (2005): 43-6.

Use of illicit drugs is typically associated with poor adherence to medication regimens. This observational study sought to determine whether this common assumption applies to HIV/AIDS on antiretroviral therapy (ART). Marijuana-using patients who suffered moderate to severe nausea were far more likely to be adherent to ART than those suffering nausea who did not use marijuana (OR = 3.3). The authors concluded, "These data suggest that medicinal use of marijuana may facilitate, rather than impede, ART adherence for patients with nausea, in contrast of other illicit substances," particularly in the case of "use of smoked marijuana specifically for amelioration of nausea."

3) M. Haney, et al., "Dronabinol and Marijuana in HIV-Positive Marijuana Smokers. Caloric Intake, Mood, and Sleep," *Journal of Acquired Immune Deficiency Syndromes* 45, no. 5 (2007): 545-54.

In this controlled clinical trial, both marijuana and oral THC (dronabinol) use resulted in increased caloric intake and body weight. Strikingly, a dronabinol dose "eight times current recommendations" was required to approximate the effect of relatively low-potency (3.9% THC) marijuana, and only the marijuana improved ratings of sleep. While both drugs produced some intoxication, researchers reported "little evidence of discomfort and no impairment of cognitive performance."

(See the section on chronic pain below for studies of marijuana for HIV-associated peripheral neuropathy.)

Hepatitis C References

1) D.L. Sylvestre, B.J. Clements, and Y. Malibu, "Cannabis Use Improves Retention and Virological Outcomes in Patients Treated For Hepatitis C," *European Journal of Gastroenterology and Hepatology* 18 (2006): 1057-63.

A prospective observational study was conducted on 71 patients to define the impact of cannabis use during interferon/ribavirin treatment for the hepatitis C virus. Compared to non-users, marijuana users had three times the rate of sustained virological response, apparently due to better treatment adherence. The researchers stated, "[T] he use of cannabis during HCV treatment can improve adherence by increasing the duration of time that patients remain on therapy; this translates to reduced rates of post-treatment virological relapse."

2) B. Fischer, et al., "Treatment For Hepatitis C Virus and Cannabis use in Illicit Drug User Patients: Implications and Questions," *European Journal of Gastroenterology and Hepatology* 18 (2006):1039-42.

This commentary, published alongside the above study, placed the results in context, explaining how marijuana "may help address key challenges faced by drug users in HCV treatment (e.g. nausea, depression)."

Other References

1) Richard W. Foltin, Marian W. Fischman, and Maryanne F. Byrne, "Effects of Smoked Marijuana on Food Intake and Body Weight of Humans Living in a Residential Laboratory," *Appetite* 11 (1988):1-14.

This study, involving healthy volunteers living in a residential laboratory, documented marijuana's efficacy as an appetite stimulant. Compared to placebo, relatively weak marijuana cigarettes (2.3% THC) smoked at scheduled intervals resulted in a 40% increase in daily caloric intake.

(2) R. Layeeque, et al., "Prevention of Nausea and Vomiting Following Breast Surgery," *American Journal of Surgery* 191, no. 6 (2006): 767-72.

This retrospective review found that a prophylactic regimen combining oral THC with rectal prochlorperazine "significantly reduced the number and severity of episodes" of post-operative nausea and vomiting in breast surgical patients.

Severe or Chronic Pain

Studies have shown that marijuana is especially effective in treating neuropathic pain, commonly seen in multiple sclerosis, HIV/AIDS, and other ailments, and notoriously resistant to treatment with conventional pain drugs, including opiates. Preclinical research as well as case series and anecdotal reports suggest that marijuana use may allow reduced opioid doses when given in combination.

References

(1) **Donald Abrams, et al., "Cannabis in Painful HIV-Associated Sensory Neuropathy: a Randomized Placebo-Controlled Trial,"** ***Neurology*** **68, no. 7 (2007): 515-21.**

This clinical trial involved HIV/AIDS patients suffering from HIV-associated sensory neuropathy, a painful condition estimated to eventually afflict up to one third of HIV-infected persons. There are presently no FDA-approved treatments for this indication. Donald Abrams and his colleagues tested the efficacy of smoked marijuana on both HIV neuropathy and a type of laboratory-induced pain. Smoked marijuana produced an average 34% reduction in pain and was well tolerated.

(2) **R.J. Ellis, et al., "Smoked Medicinal Cannabis For Neuropathic Pain in HIV: a Randomized, Crossover Clinical Trial,"** ***Neuropsychopharmacology*** **34, no. 3 (2009): 672-80.**

This trial focused on patients with HIV-associated neuropathy refractory to at least two previous analgesic classes. Ellis and colleagues reported, "In the present experiment, cannabis reduced pain intensity and unpleasantness equally. Thus, as with opioids, cannabis does not rely on a relaxing or tranquilizing effect, (e.g. anxiolysis) but rather reduces both the core component of nociception and the emotional aspect of the pain experience to an equal degree. ... In general, side effects and changes in mood were inconsequential."

(3) **B. Wilsey, et al., "A Randomized, Placebo-Controlled, Crossover Trial of Cannabis Cigarettes in Neuropathic Pain,"** ***Journal of Pain*** **9, no. 6 (2008):506-21.**

This study investigated the efficacy of smoked marijuana in patients suffering from neuropathic pain related to a variety of conditions, including multiple sclerosis, spinal cord injury, diabetes, and complex regional pain syndrome. Wilsey and colleagues concluded, "This study adds to a growing body of evidence that cannabis may be effective at ameliorating neuropathic pain, and may be an alternative for patients who do not respond to, or cannot tolerate, other drugs."

(4) **David Baker, et al., "The Therapeutic Potential of Cannabis,"** ***The Lancet Neurology*** **2, no. 5 (2003): 291-8.**

This review, written prior to publication of the clinical trials described above, discussed in detail the biochemical basis for marijuana's analgesic effects. It also discussed the drawbacks of oral dosing, explaining that "oral administration is probably the least satisfactory route for cannabis owing to sequestration of cannabinoids into fat from which there is slow and variable release into plasma. In addition, significant first-pass metabolism in the liver, which degrades THC, contributes to the variability of circulating concentrations of orally administered cannabinoids, which makes dose titration more difficult and therefore increases the potential for adverse psychoactive effects. Smoking has been the route of choice for many cannabis users because it delivers a more rapid 'hit' and allows more accurate dose-titration."

(5) **M.E. Lynch, J. Young, A.J. Clark, "A Case Series of Patients Using Medicinal Marihuana for Management of Chronic Pain Under the Canadian Marihuana Medical Access Regulations,"** ***Journal of Pain and Symptom Management*** **32, no. 5 (2006): 497-501.**

This case series is based on 30 patients qualified to use medical marijuana under Canadian regulations, seen at a pain management center in Nova Scotia. All suffered from chronic, severe pain that had not responded to conventional approaches. On an 11-point scale, 93% reported pain relief equal to 6 or greater, and many reported relief of other symptoms such as spasticity, poor sleep, nausea, and vomiting. 70% reported being "able to decrease use of other medications that had been causing side effects (e.g., NSAIDs, opioids, and antidepressants)."

Glaucoma

Glaucoma is a leading cause of blindness, damaging the optic nerve, which is responsible for carrying images from the eye to the brain. High pressure within the eye is one of the main risk factors for this optic nerve damage. There currently is no cure for glaucoma. Marijuana helps relieve the pressure within the eye, thus preventing damage.

Although other drugs are considered first-line glaucoma treatments, some patients and physicians have found marijuana useful when conventional drugs fail. One of the three patients who still receive medical marijuana from the federal government – Elvy Musikka – is a glaucoma patient, who also successfully argued in a Florida court case that marijuana was medically necessary to maintaining her vision.

(1) J.E. Joy, S.J. Watson, J.A. and Benson, *Marijuana and Medicine: Assessing the Science Base* (National Academy Press, 1999).

"In a number of studies of healthy adults and glaucoma pressure, IOP (intra-ocular pressure) was reduced by an average of 25% after smoking a marijuana cigarette that contained approximately 2% THC -- a reduction as good as that observed with most other medications available today."

Amyotrophic lateral sclerosis

Amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's Disease, is a progressive neurodegenerative disease that affects nerve cells in the brain and the spinal cord, progressively reducing the ability of the brain to initiate and control muscle movement. Some research has shown that cannabinoids can delay the progression of ALS. Some ALS patients have indicated that medical marijuana has helped alleviate their symptoms, such as pain, appetite loss, depression, and drooling.

References

(1) Gregory T. Carter and Bill S. Rosen, "Marijuana in the Management of Amyotrophic Lateral Sclerosis," *American Journal of Hospice and Palliative Care* 18, no. 4 (2001): 264-69.

This review article, co-authored by a leading ALS and palliative medicine researcher from the University of Washington, concluded that marijuana may help with many symptoms of ALS, including pain, spasticity, drooling, dysautonomia, and wasting. The authors also discussed how marijuana's antioxidative and neuroprotective effects may prolong neuronal cell survival, and concluded, "In areas where it is legal to do so, marijuana should be considered in the pharmacological management of ALS."

(2) E. de Lago, J. Fernández-Ruiz, "Cannabinoids and Neuroprotection in Motor-Related Disorders," *CNS and Neurological Disorders — Drug Targets* 6, no. 6 (2007): 377-87.

This review explored in detail the mechanisms of cannabinoid neuroprotection related to a variety of disorders, including ALS.

(3) Dagmar Amtmann et al., "Survey of Cannabis Use in Patients With Amyotrophic Lateral Sclerosis," *American Journal of Hospice and Palliative Medicine*, March-April 2004.

This anonymous survey of 131 people with ALS found that 10 percent had reported using marijuana in the past year, reporting relief of multiple symptoms. The authors concluded, "...results indicate that cannabis may be moderately effective at reducing symptoms of appetite loss, depression, pain, spasticity, and drooling."

Crohn's disease

Crohn's disease is marked by inflammation of the digestive tract, most commonly the lower part of the small intestine. It can cause severe abdominal pain, nausea, and weight loss – all symptoms that marijuana can help mitigate, as noted in other sections of this document. Preclinical research has demonstrated the role of the endocannabinoid system, the body's natural, marijuana-like chemicals, in protecting the GI tract, providing support for anecdotal reports of relief.

References

(1) J.E. Joy, S.J. Watson, and J.A. Benson, *Marijuana and Medicine: Assessing the Science Base* (National Academy Press, 1999).

"For patients ... who suffer simultaneously from severe pain, nausea, and appetite loss, cannabinoid drugs might offer broad-spectrum relief not found in any other single medication."

(2) F. Massa, M. Storr, and B. Lutz, "The Endocannabinoid System in the Physiology and Pathophysiology of the Gastrointestinal Tract," *Journal of Molecular Medicine* 83, no. 12 (2005): 944-54.

This review article noted, "Under pathophysiological conditions induced experimentally in rodents, the endocannabinoid system conveys protection to the GI tract (e.g. from inflammation and abnormally high gastric and enteric secretions). Such protective activities are largely in agreement with anecdotal reports from folk medicine on the use of Cannabis sativa extracts by subjects suffering from various GI disorders."

Agitation of Alzheimer's disease

In preliminary research, THC has been shown to reduce agitation in severely demented Alzheimer's patients. Preclinical research also suggests that marijuana components may help retard the progression of Alzheimer's disease.

References

(1) S. Walther et al., "Delta-9-Tetrahydrocannabinol for Nighttime Agitation in Severe Dementia," *Psychopharmacology* (Berl) 185, no. 4 (2006): 524-8.

This open-label pilot study reported, "Compared to baseline, dronabinol led to a reduction in nocturnal motor activity (P=0.028). These findings were corroborated by improvements in Neuropsychiatric Inventory total score (P=0.027) as well as in subscores for agitation, aberrant motor, and nighttime behaviors (P<0.05). No side effects were observed."

(2) G. Esposito et al., "The Marijuana Component Cannabidiol Inhibits Beta-Amyloid-Induced Tau Protein Hyperphosphorylation Through Wnt/beta-catenin Pathway Rescue in PC12 Cells," *Journal of Molecular Medicine* 84, no. 3 (2006): 253-8.

"Here, we report that cannabidiol inhibits hyperphosphorylation of tau protein in Abeta-stimulated PC12 neuronal cells, which is one of the most representative hallmarks in AD. ... These results provide new molecular insight regarding the neuroprotective effect of cannabidiol and suggest its possible role in the pharmacological management of AD, especially in view of its low toxicity in humans."

Multiple sclerosis, seizures, muscle spasms

There is a shortage of formal research on whole marijuana for treatment of MS, but a number of studies have been conducted with various marijuana extracts, which have reported relief of both pain and spasticity.

Considerable data from animal models as well as some human clinical evidence suggest a role for marijuana in the treatment of seizure disorders such as epilepsy.

Multiple Sclerosis References

(1) J. Zajicek et al., "Cannabinoids for Treatment of Spasticity and Other Symptoms Related to Multiple Sclerosis (CAMS Study): Multicentre Randomised Placebo-Controlled Trial," *The Lancet* 362 (2003): 1517-26.

This trial, using an oral cannabis extract, reported "evidence of a treatment effect on patient-reported spasticity and pain (p=0·003), with improvement in spasticity reported in 61% (n=121, 95% CI 54·6–68·2), 60% (n=108, 52·5–66·8), and 46% (n=91, 39·0–52·9) of participants on cannabis extract, 9-THC, and placebo, respectively."

(2) D.T. Wade et al., "Long-Term Use of a Cannabis-Based Medicine in the Treatment of Spasticity and Other Symptoms in Multiple Sclerosis" *Multiple Sclerosis* 12 (2006): 639-45.

In this long-term follow-up of a clinical trial of a marijuana-based oral spray, patients were followed for as much as 82 weeks. The marijuana spray demonstrated long-term relief of spasticity, pain, and bladder issues related to MS, "without unacceptable adverse effects."

Epilepsy and Other References

(1) Alsasua del Valle, "Implication of Cannabinoids in Neurological Diseases," *Cellular and Molecular Neurobiology* 26, no. 4-6 (2006): 579-91

This wide-ranging review of the neurobiology of marijuana and its constituents in relation to neuroprotection and neurological disease noted, "It has been known for centuries that exogenous cannabinoids have anti-convulsant activity."

(2) K. Mortati, B. Dworetzky, and O. Devinsky, "Marijuana: an Effective Antiepileptic Treatment in Partial Epilepsy? A Case Report and Review of the Literature," *Reviews in Neurological Diseases* 4, no. 2 (2007): 103-6.

Mortati and colleagues reported the case of a 45-year-old male with cerebral palsy and epilepsy "who showed marked improvement with the use of marijuana." The authors reviewed the current literature and concluded, "Although more data are needed, animal studies and clinical experience suggest that marijuana or its active constituents may have a place in the treatment of partial epilepsy."

(3) D.W. Gross et al., "Marijuana Use and Epilepsy: Prevalence in Patients of a Tertiary Care Epilepsy Center," *Neurology* 62, no. 11 (2004): 2095-7.

In this patient survey, of 28 epileptic patients who actively used marijuana, 68% reported that it improved severity of seizures and 54% reported improvement of seizure frequency. None reported that it worsened these symptoms.

Nail-Patella Syndrome

Nail-patella syndrome is a rare genetic disorder involving the bones, joints, and connective tissue. Patients may have problems due to limitation of joint mobility, dislocation or both, especially at the elbow and knee where osteoarthritis may eventually occur. Nail-patella patients are also at increased risk for glaucoma and kidney problems. While there is a lack of controlled research on marijuana and nail-patella, one of the three patients who still receive medical marijuana from the federal government – George McMahon – suffers from the condition, and his case is described in the one study of these patients that has been published. This article notes: "On May 10, 2000, a letter to FDA noted the patient continued to do well on the therapy, smoking 8-10 cigarettes per day without other medication. He continued to function well using a cane and occasionally a wheelchair when bothered by spasms and nausea. At present, he utilizes about 7 grams a day or 1/4 ounce of NIDA material that is 3.75% THC ... He indicates that he has been short on his supply 3 times in 10 years, generally for 1-2 weeks, secondary to lack of supply or paperwork problems. When this occurs he suffers more nausea and muscle spasms and is less active as a consequence."

References

(1) E. Russo et al., "Chronic Cannabis Use in the Compassionate Investigational New Drug Program: An Examination of Benefits and Adverse Effects of Legal Clinical Cannabis," *Journal of Cannabis Therapeutics* 2, no. 1 (2002): 3-57.

Vaporization as an Alternative to Smoking

One often-mentioned objection to medical use of marijuana is the respiratory risk associated with smoking. For this reason, the Institute of Medicine urged development of a "nonsmoked, rapid-onset cannabinoid delivery system." Published research suggests that vaporization — in which marijuana is heated to the point where cannabinoid vapors are released, but not to the point of combustion — represents a viable solution to this problem.

References

(1) A. Hazekamp et al., "Evaluation of a Vaporizing Device (Volcano) for the Pulmonary Administration of Tetrahydrocannabinol," *Journal of Pharmaceutical Sciences* 95, no. 6 (2006): 1308-17.

This laboratory test of a commercially available vaporizer known as the Volcano used language striking similar to that of the Institute of Medicine, concluding, "Our results show that with the Volcano a safe and effective cannabinoid delivery system seems to be available to patients."

(2) D.I. Abrams et al., "Vaporization as a Smokeless Cannabis Delivery System: A Pilot Study," *Clinical Pharmacology and Therapeutics* 282, no. 5 (2007): 572-8.

In this clinical trial, again using the Volcano vaporizer, volunteers were randomly assigned to either smoke or vaporize marijuana of three different strengths. Vaporization was comparable to smoking in terms of THC delivery, but dramatically reduced the amount of carbon monoxide, indicating "little or no exposure to gaseous combustion toxins." The researchers concluded that vaporization "therefore is expected to be much safer than smoking marijuana cigarettes."

(3) M. Earleywine and S.S. Barnwell, "Decreased Respiratory Symptoms in Cannabis Users Who Vaporize," *Harm Reduction Journal* 4, no. 11 (2007).

This Internet sample of nearly 7,000 participants compared self-reported respiratory symptoms among marijuana users whose primary method was smoking with those whose primary method was vaporization, reporting, "use of a vaporizer predicted fewer respiratory symptoms even when age, sex, cigarette smoking, and amount of cannabis used were taken into account."


FORWARD
E PLURIBUS UNUM

Medical Marijuana
December 15, 2009

My name is Robert Block. I am a member of the Controlled Substances Board and will be speaking as the Board's legislative liaison. The Controlled Substances Board is opposed to Senate Bill 368 and Assembly Bill 554 as proposed. However, before going into specific details as to why the Controlled Substances Board opposes these bills, the board does intend to have further future discussion about the use of medical marijuana. I would like to quote the official American Medical Associations statement on medical marijuana as released on November 9, 2009. "Our American Medical Association 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. This should not be viewed as an endorsement of state-based medical cannabis programs, legalization of marijuana, or that scientific evidence on the therapeutic use of cannabis meets the current standards for a prescription drug product." The Controlled Substances Board may be willing to approve medical marijuana in the future if it is done properly. The Controlled Substances Board generally feels that should medical marijuana be approved that it should follow the same guidelines as the approval of any other prescription controlled substance product. That is, there needs to be continued research and study on its medical use, physicians need to receive specialized training in the appropriate use and prescription of medical marijuana, that the prescription and distribution of medical marijuana fall under a state prescription monitoring program and that medical marijuana be dispensed like any other current prescription controlled substance product.

The Controlled Substances Board and I have reviewed the proposed medical marijuana bill as proposed and have a number of concerns, unanswered questions and objections to the proposed language in this bill. I have written a list by page and statute number of the specific points of concern or questions with this proposed bill which I have provided to you for your later review. I will at this time only highlight a few of the specific points in the bill for which the Controlled Substances Board had questions or concerns.

1. Currently Tetrahydrocannabinols (THC) is a schedule I controlled substance. By definition schedule I controlled substances have no medical use and can not be prescribed. Is it the intent of the legislature to re-schedule THC to a schedule II controlled substance so that it can be prescribed? That is not included in this bill.

2. Who may use medical marijuana? It is obvious that the patient who has a prescription and is registered may use medical marijuana. However, as the bill is written it is not clear to me if the caregiver or any member of the treatment team may also smoke the medical marijuana. Is that the intent of the law or will the law specifically state that only the patient may use medical marijuana even if the marijuana is provided by a caretaker or a member of a medical team?

3. This bill provides for the establishment of compassion centers. There does not appear to be any limitation as to the location or number of these compassion centers. This bill does not allow or permit municipalities to either limit or opt out of allowing medical care providers or compassion centers in their community. The state of California which does permit medical marijuana does allow for communities to either limit or opt out entirely for the establishment of compassion centers. Currently while the city of Los Angeles had set a limit of 169 compassion centers it is estimated that they now have as many as 1000 such

centers. They are now in the process of addressing this problem and reducing the number of centers to the original allowed number. How are the numbers of compassion centers in a municipality or the state to be controlled or limited?

4. Currently the first cut-off for the manufacturing of marijuana is four plants. This bill allows the growth of up to 12 plants for medical marijuana and 3 ounces (about 85 grams) of usable marijuana. A full grown marijuana plant will provide a pound or more of usable marijuana. That is 454 grams or approximately 5 times the allowed limit for a single marijuana plant. So why do they need twelve plants? Shouldn't the limit be only four plants to be consistent with current penalties for manufacturing? Since a caregiver can provide for up to five individuals are they allowed to have only 12 plants or a total of 60 plants? How many plants could a compassion center have? If a compassion center provides for 50 individuals could they have as many as 600 marijuana plants? If so, you are talking about over 600 pounds of usable marijuana. Who will monitor that an individual, care provider or a compassion center is compliant with the law as to the allowable number and weight of usable medical marijuana? What are the penalties if someone (individual, care provider or compassion center) exceeds these limits? What would be the penalty if a registered medical marijuana user, care giver or compassion center sells, gives away or provides this medical marijuana to someone other than the registered user? Is there any limit as to what a care provider or compassion center can charge for medical marijuana?

5. Penalty for false statement. If an individual is stopped and charged with possession of marijuana and they claim it is medical marijuana and do not have a registered permit, have they given a false statement? If this is their defense, would they be charged with a false statement and a fine not to exceed $500 or would they be liable for criminal charges for possession, delivery or manufacturing of THC based on the amount present? If in violation would this limit of $500 be contrary to the current penalties for possession, delivery or manufacturing based on weights or number of plants? This could create a nightmare for law enforcement and prosecutors.

6. Currently the hygiene lab is backlogged with cases of driving under the influence of alcohol or other controlled substance. Will the use of medical marijuana greatly enhance this backlog? What is the cut-off for violation of driving under the influence of THC, any detectable amount? As proposed, one is not allowed to drive if using medical marijuana. However, if someone does use medical marijuana and then drives what are the penalties for doing so? Would these penalties apply to a care giver if driving under the influence of THC?

7. It has been stated in many places that medical marijuana would provide tax revenue through taxation. This will not generate any tax revenue for the state. Generally medicines or prescriptions are not taxed. While it is not clear in this bill what tax liabilities care providers would have, the compassion centers would have none since they would be considered non-profit entities. As a non-profit entity, I would assume that the compassion centers (and maybe the care giver as well) would have to file the appropriate paperwork to the appropriate state office for the establishment of a tax exempt non-profit organization. Who will monitor that the care providers and compassion centers are doing so and what are the penalties if they do not do so? If an individual were to grow their own medical

marijuana are they exempt from taxation and do they have to register with the state for non-profit status?

8. Under 968.072(2)(b) it states – "The person possesses a valid registry identification card, a valid out-of-state registry identification card, or a copy of the qualifying patient's written certification". How does law enforcement verify an out-of-state registry identification card? Is a copy of the written certification a loophole around registration? Could it be easily abused?

9. While the bill lists specific illnesses or diseases for which medical marijuana can be used, there is also a generic clause under 961.01(5m)(c) which states "Any other medical condition or any other treatment for a medical condition ..." Is this a possible loophole to allow almost any reasonable or unreasonable medical condition to be granted a medical marijuana permit? Could this lead to possible doctor shopping to find a doctor who would be willing to write a certification for medical marijuana regardless of the cause or need? How are doctors to determine what these medical conditions are that can be treated with medical marijuana?

10. How does this bill deal with the diversion of medical marijuana, who is responsible for checking for illegal diversion of medical marijuana and what are the penalties for illegal diversion of medical marijuana? The Controlled Substances Board shares this concern with law enforcement agencies that either have or will express their concerns with this issue. Some recent numbers in the news express this concern. Michigan just recently passed medical marijuana. A news story said 1000 people had registered for medical marijuana which seemed reasonable for the state. However, that was 1000 per month. A recent story on CNN last night reported that the state of Colorado had 2000 medical marijuana users registered from 2000 to 2008 which again seems like a reasonable number. However, since then the list has grown to 60,000 registered users. That would seem to imply diversion, abuse or inappropriate medical evaluation and prescribing of medical marijuana. The AP reports this morning that marijuana use among teenagers is on the rise again, along with the abuse of prescription drugs. With respect to marijuana it states: "The increase of teens smoking pot is partly because the national debate over medical use of marijuana can make the drugs seem safer to teenagers the researchers (the University of Michigan) said. That would be a very unsafe and inappropriate message to be sending to teenagers.

While there are other issues with this proposed bill for medical marijuana I will not go into those at this time. I have provided those concerns and questions in the handout that I have provided for you. I hope that this partial list of concerns and questions regarding this bill addresses the issues that the Controlled Substances Board had with this proposed bill and why they are opposed to this bill as written.

In summary, it is the Controlled Substances Boards feeling that medical marijuana should not be treated any differently than any other controlled or non-controlled prescription product. These proposed bills would supersede the role of the federal Food and Drug Administrations role for the establishment of rules and regulations for prescription products. The Controlled Substance Board would like to see medical marijuana follow the same rules and regulations as

established by the FDA to show that medical marijuana is a legitimate medicine in exactly the same way all drugs are approved through science and research.

I will address any questions you may have at this time pertaining to this statement by the Controlled Substances Board in opposition to this bill. Should you have further questions about this statement after your further review, feel free to contact me at the phone number or email address that I have provided to you in the handout material.


FORWARD

PHARMACY SOCIETY OF WISCONSIN

"Leading Our Profession in a Changing Health Care Environment"

To: Members of the Senate Committee on Health, Health Insurance, Privacy, Property Tax Relief, and Revenue and Assembly Committee on Public Health

Re: Statement on Senate Bill 368 and Assembly Bill 554 relating to medical marijuana

From: Tom Engels, Pharmacy Society of Wisconsin vice president of Public Affairs

Date: Tuesday, December 15, 2009

State and federal laws strictly regulate the distribution and dispensing of prescription medications. Pharmacies in Wisconsin must be licensed and must follow regulations established and enforced by the state Pharmacy Examining Board, the federal Drug Enforcement Agency (DEA) and the Food and Drug Administration (FDA). These agencies serve to ensure the integrity of the medications being dispensed to citizens in Wisconsin and across the United States. PSW advocates that the guidance provided by these state and federal agencies be closely examined and understood prior to sidestepping their regulations and creating a quasi-approved system for making marijuana available for medical purposes.

In accordance with current state and federal laws, pharmacy providers cannot dispense marijuana under any circumstances. The intent of both Senate Bill 368 and Assembly Bill 554 is to allow legal access to marijuana for medical purposes.

The Pharmacy Society of Wisconsin may support access to marijuana for defined and limited medical purposes, as long as it is delivered through a regulated distribution system, in compliance with both state and federal laws, like all other prescription medications, especially controlled substances. Through this approach a patient that is receiving prescription marijuana for a medical purpose can be assured of the integrity of the product and, equally important, persons who do not have a medical reason to receive the product would not have access to it.

Efforts that made marijuana available in California for medical reasons have resulted in a run away train, billowing smoke in every community. There are more marijuana dispensaries in Los Angeles than there are legitimate pharmacies. These businesses are barely regulated and patients are being provided multiple marijuana plants to grow in their homes or elsewhere. This situation is worse than a slippery slope and it will only further the drug abuse problem that is plaguing our nation.

Only through a highly regulated distribution system will legitimate patients be separated from drug abusers and pot smokers.

701 Heartland Trail
Madison, WI 53717
tele 608.827.9200
fax 608.827.9292
info@pswi.org
www.pswi.org


FORWARD
E PLURIBUS UNUM

Senate and Assembly Health Committees

Proponent Testimony of the Jacki Rickert Medical Marijuana Act
by
Mary Lynn Mathre, RN, MSN, CARN
December 15, 2009

Thank you members of the Senate and Assembly Health Committees for allowing me this opportunity to speak to you on behalf of SB #368 and AB #554, the Jacki Rickert Medical Marijuana Act.

I'm speaking to you today from the perspective of a registered nurse with almost 35 years of clinical practice and an expert on the therapeutic use of cannabis/marijuana. The early years of my career were in the field of medical-surgical nursing and since 1987 I have specialized in addictions nursing and am a certified addictions registered nurse. My interest in cannabis as medicine began in 1985 while earning my masters in nursing from Case Western Reserve University. My thesis was on marijuana disclosure to health care professionals. In 1995, I along with my husband, other health care professionals, and 3 of the federally supplied medical marijuana patients started a 501c3 non-profit organization, Patients Out of Time (www.medicalcannabis.com). The mission of Patients Out of Time is to educate the public and health care professionals about the therapeutic use of cannabis. I am also the editor of the book, *Cannabis in Medical Practice: A Legal, Historical and Pharmacological Overview of the Therapeutic Use of Marijuana*, published in 1997 by McFarland & Company and I am a co-editor of *Women and Cannabis: Medicine, Science and Sociology*, published in 2002 by Haworth Press. I have no financial motivation in this work since it is all volunteer.

I want to share 4 major projects conducted by Patients Out of Time that will provide support for the Jacki Rickert Medical Marijuana Act. **First** of all, we created an ever-growing list of organizations that have passed resolutions or issued a public statement in support of patient access to therapeutic cannabis (see attached list). Among others, this list includes the American Public Health Association, the American College of Physicians, and the American Nurses Association. I was consulted for the drafting of the ANA's resolution, which passed overwhelmingly by the delegate assembly, including the delegates from the Wisconsin Nurses Association. The marijuana prohibition is quite intimidating for licensed health care professionals, but once educated about the science that supports the efficacy of cannabis, the members or leadership of these organizations formally recognized the potential value of this medicine through these public statements (ANA resolution attached). In November of 2008 the voters of Michigan passed an initiative for medical marijuana by 63%, joining 12 other states with medical marijuana laws. Just yesterday, the U.S. Senate

passed a bill to allow funding for the medical marijuana referendum that passed by 69% of the voters in Washington DC back in 1998. Hopefully President Obama will sign the bill and the people of Washington DC will finally have legal access to therapeutic cannabis.

Secondly, in 2001 Patients Out of Time conducted *The Missoula Study* (found in PDF format at www.medicalcannabis.com), which was a thorough examination of 4 of the federally supplied medical marijuana patients who had been receiving their marijuana cigarettes for 11 – 19 years. The federal government has never conducted any studies on these patients to determine whether or not there were any negative long-term effects from their use of cannabis. Our study found the patients to be in remarkably good health considering their health problems, with mild bronchitis as the only negative finding. I would like to add that these patients consume approximately 10 cigarettes per day of low-grade, freeze-dried cannabis cigarettes, some of which are more than 10 years old. In fact, on November 20th of this year, Irvin Rosenfeld received his 115,000th cannabis cigarette from the federal government, marking his 27th anniversary in the Compassionate IND program under the FDA. The 4 patients included in The Missoula Study are the only patients still living since the federal government closed the program in 1992. These four patients are on our Board of Directors.

Our **third** project began in 2000 with *The First National Clinical Conference on Cannabis Therapeutics*, held in Iowa and co-sponsored by the University of Iowa's Colleges of Medicine and Nursing. We have continued this biennial series with the Fifth conference held in CA in April of 2008 and co-sponsored by the University of California San Francisco's School of Medicine. All have been accredited to provide continuing education for physicians, nurses and other health care professionals. Our conferences present state-of-the-art cannabis research from leading scientists and clinicians from the US as well as Canada, Great Britain, the Netherlands, Israel, and Spain. The Sixth National Clinical Conference on Cannabis Therapeutics will take place in Warwick, RI on April 15-17, 2010 and will feature U.S. experts as well as researchers from Israel, Brazil and Canada. Professor Raphael Mechoulam of the Hebrew University in Jerusalem, Israel, will be the keynote speaker and he will review the current research on the efficacy of cannabis beginning with his isolation of THC in 1964 to the recent discoveries of the endogenous cannabinoid system. This endocannabinoid system helps us maintain homeostasis and is essential to life. The ECS is involved in how we eat, sleep, relax, protect (neuroprotection, immune system) and forget. Cannabis is the ONLY plant that contains cannabinoids similar to those found in the human body. Professor Mechoulam's assessment of the research to date is that cannabis will be one of the most important medicines of the 21st century.

And our **fourth** ongoing project is our educational website. We have just launched our new and updated website to provide healthcare professionals,

patients, caregivers, and the public evidence-based science on the safety and efficacy of cannabis. The site combines links to scientific papers, historical and current events, along with video presentations of researchers, clinicians, patients and caregivers to give the viewer a broad understanding of issues relating to cannabis as medicine. Healthcare professionals will find a link to the University of California, San Francisco, School of Medicine's online continuing education programs that will enable them to view our 2008 (with 2006 coming soon) conference proceedings and earn continuing medical education (CME) units or contact hours for other healthcare professionals. We have much more to add to the site and will be updating it on a continual basis.

Finally I would like to speak to you from a nurse's perspective regarding cannabis as medicine. Nurses administer countless medications to patients, monitor their effects and educate patients about the safe use of their medications. We understand the potential risks involved with medications and learn about the 5 rights when administering any medication: the right patient, the right drug, the right dose, the right time, and the right route. As a nurse with expertise in the efficacy of cannabis, I can attest that this is a remarkably safe medication.

In 1988, Francis Young, the DEA's Administrative Law Judge, ruled that cannabis should be removed from Schedule I of the controlled substances in the landmark case of NORML and ACT vs. the DEA. After reviewing more than 5000 pages of evidence, he stated in his ruling that cannabis is "one of the safest therapeutic substances known to man." There are no recorded deaths attributable to cannabis. A lethal dose has been described as 20,000-40,000 times a normal dose or consuming 1500 pounds in 15 minutes – a virtual impossibility. The 1999 Institute of Medicine's report, *Marijuana and Medicine: Assessing the Science Base,* concluded that, "The side effects of cannabinoid drugs are within the acceptable risks associated with approved medications." (p. 127).

You may be concerned with the "stronger" strains of cannabis now available. It is true that many growers have improved their horticultural skills and are able to get high THC content plants, but you must understand that almost pure synthetic THC is already legally available in pill form, such as in Marinol (which also contains sesame seed oil). Delta-9-tetrahydrocannabinol (THC) is the primary psychoactive cannabinoid in cannabis – it is the cannabinoid that produces the high, but it does not produce all of the therapeutic effects. With whole cannabis the user ingests a combination of cannabinoids, some of which work against the "high" produced by the THC and some that produce additional therapeutic effects.

There is no claim that cannabis is without potential risk. No medication is risk free to all patients. However, the greatest risks are related to the use of cannabis under marijuana prohibition, such as no quality control, little to no

guidance by a healthcare provider, and the potential legal consequences as a result of growing, possessing or distributing this plant. As you read about the potential side effects or adverse reactions, you should note that per numerous patient testimonials, patients have found cannabis to have fewer or milder side effects than their previously prescribed or over-the-counter medications. You will hear of patients decreasing or eliminating the use of other medications as they experience the therapeutic effects of cannabis. Given the many side-effects and overdose risks related to opioids for pain management and the opioid–sparing effects of cannabis as an effective adjunct, it would behoove the patients in Wisconsin to have this combination of medicines controlled and guided by healthcare professionals, rather than prohibited.

Perhaps the leading health concern is the potential of lung damage from smoking this herbal medication. Let me address the smoking risk as well as alternatives. Patients often smoke cannabis because of the ability to self-titrate a therapeutic dose. The effects are experienced shortly after inhalation so a patient is able to determine when enough is enough. So, regarding the issue of a stronger or higher THC content in a cannabis supply, a patient will consume less to get a therapeutic effect, thus decreasing the amount of exposure to smoke. In addition, the leading researcher on the long-term pulmonary effects from smoking cannabis, Dr. Donald Tashkin, found little risk compared to tobacco smokers. In the early years of his research on the potential harm from smoking cannabis the DEA and the ONDCP often cited Dr. Tashkin's early work in their claims of its harmful effects on the lungs. However, as Dr. Tashkin continued his longitudinal studies on large populations, he discovered to his surprise that smoking cannabis did not lead to pulmonary problems such as emphysema, COPD or even lung cancer.

Furthermore, to eliminate any potential harm from inhaling smoke, many patients are now using vaporizers. A vaporizer, heats the cannabis plant material to a temperature that releases the oils in a vapor to be inhaled. Since it does not heat the plant material to the point of combustion no smoke is created. This method of delivery still allows patients a quick onset of its effects and therefore the ability to self-titrate.

Inhalation is not the only route of administration of whole cannabis. Patients can easily make an oral tincture or extract of cannabis, or a cannabis butter to be used in foods or suppositories, or a topical preparation. GW Pharmaceuticals in England has developed an oral-mucosal spray of cannabis. In Jamaica, they have developed cannabis eye drops for glaucoma patients. The cannabis prohibition is the primary reason patients smoke cannabis. Allowing the medical use of cannabis will open the dialogue between patients and health care providers and as healthcare providers, we can educate patients about the most effective method of delivery for their particular needs.

As you review the articles I am providing please take note of two in particular. Pacher, Bátkai and Kunos (2006) published a lengthy review: *The Endocannabinoid System as an Emerging Target of Pharmacotherapy*. Despite the federal government's denial of the therapeutic value of cannabis, it seems curious that this review was done by the National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism. The authors note the significance of this system:

> The length of this review, necessitated by the steady growth in the number of indications for the potential therapeutic use of cannabinoid-related medications, is a clear sign of the emerging importance of this field. This is further underlined by the quality of articles in the public database dealing with the biology of cannabinoids, which numbered ~200 to 300/year throughout the 1970s to reach an astonishing 5900 in 2004. (p. 441)

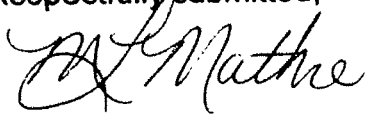
The second article (currently in press) by Izzo et al. provides a review of the non-psychoactive phyto-cannabinoids and their potential therapeutic applications. As you can see by the extensive reference lists in these reviews, much is being learned about cannabis and the endocannabinoid system. What you should also see is that there are no startling findings that indicate hidden dangers of cannabis. You should not assume that a future study is suddenly going to find any justification for the continued prohibition of this medicine. The National Institute on Drug Abuse has funded study after study to identify risks that can justify its placement in Schedule I. This is not like a newly developed medication, where it is discovered to have dangerous adverse effects once it reaches FDA approval and is used by a large population on the open market. Cannabis is more like aspirin - it is an old medicine, widely used prior to the Marihuana Tax Act of 1937 and it would have been accepted as medicine without the need for placebo-controlled double-blind studies based on its record of use. Cannabis was eventually removed from the Pharmacopoeia NOT because of any related health risks, but because of the politically-driven reefer madness campaign against "Negroes" and Mexicans who smoked this drug. Bonnie and Whitebread (1974) provide a history of the "marijuana conviction" and cited the AMA's plea to allow it to remain a medicine. After thousands of years of use and countless studies, its low toxicity is recognized – safer than aspirin.

I am not here to tell you that cannabis is a cure all. No drug is. However, there is no doubt about the efficacy of cannabis as medicine. The safety of cannabis is threatened when a patient has to purchase it from the black market. There is no quality control. It could have been adulterated with other substances or contaminated with toxic fertilizers. Patients are forced to buy from unknown sources and a supply is not always available. The patients must hide their use out of fear of arrest and criminal sanctions. The Jacki Rickert Medical Marijuana Act will be a first step in helping patients gain much needed relief from suffering by allowing them legal access to a remarkably safe medicine and opening up the dialogue and ongoing medical evaluation with their primary care provider. And

by the way, the concern about the message this bill will send to children is misguided. Young people should not be lied to and they are smart enough to understand that this can be a helpful medication for many patients.

Thank you for this opportunity to speak before you. I will be happy to answer any questions from the Committees.

Respectfully submitted,



Mary Lynn Mathre, RN, MSN, CARN
President and Co-founder
Patients Out of Time
1472 Fish Pond Rd.
Howardsville, VA 24562
434-263-4484
434-263-5763 (fax)
www.medicalcannabis.com
mlmathre@hughes.net

Submission Contents

1. Testimony from Mary Lynn Mathre on behalf of Patients Out of Time

2. List of Support Organizations

3. ANA Resolution

4. CD with pdf files of articles on cannabis efficacy

5. DVD set of Highlights from past conferences held by Patients Out of Time
   !st DVD includes:
   Legal Patients - Elvy Musikka, George McMahon & Irvin Rosenfeld (2002)
   Missoula Study - Dr. Ethan Russo (2002)
   First federal medical marijuana patient - Robert Randall (2000)
   Welcome address – Al Byrne (2004)
   Cannabis & Pain – Dr. Donald Abrams (2004)
   Cannabis & Hospice Care – Valerie Corral (2004)
   Cannabis Moms – Mae Nutt (2004)
   Patient Out of Time - Mary Lynn Mathre – (2004)
   Neuroprotection - Raphael Mechoulam – (2004)
   Cannabis Spouse – Jim Miller (2004)
   Drug Policy - Arnold Trebach – (2004)
   Hemp Oil and Nutrition – Mary Beth Augustine (2004)

   2nd DVD includes:
   Staying Safe - Mark Miller (2006)
   Pulmonary Study Conclusions -Tashkin, MD (2008)
   Pain Study Conclusions - Abrams, MD (2006)
   Mental Health Conditions - Glick, RN (2006)
   ADD-ADHD - Bearman, MD (2006)
   Patient's Son, Jay Cavanaugh, Jr. (2006)
   Compassion Clubs - Amanda Reiman – (2008)
   Physician's Perspective - Hosea, MD (2008)

6. DVD with patient testimonials produced by Patients Out of Time and the Cannabis Patient Network (www.CannabisPatientNetwork.com)

Organizations Supporting Access to Therapeutic Cannabis

Addiction Science Forum - 2009
AIDS Action Council - 1996
*Alaska Nurses Association - 1998
Alaska Voters - 1998
Alliance for Cannabis Therapeutics – 1981
+American Academy of Family Physicians – 1989, 1995
American Academy of HIV Medicine - 2003
American Anthropological Association - 2003
American Civil Liberties Union (ACLU)
American College of Physicians – 2008
American Federation of State, County and Municipal Employees - 2006
American Medical Association's Council on Scientific Affairs – 2001
American Medical Association's Medical Student Section – 2008
American Medical Association's Pacific Rim Caucus – 2008
Alaska Medical Association
Hawaii Medical Association
Guam Medical Association
American Medical Students Association – 1993
+*American Nurses Association - 2003
*American Preventive Medical Association – 1997
+*American Public Health Association (APHA) – 1995
Ann Arbor, MI - 2004
Arizona Voters - 1996 & 1998
+Association of Nurses in AIDS Care - 1999
Berkeley, CA - 1979
Breckenridge, CO - 1994
Burlington, VT – 1994 & 2004
California Academy of Family Physicians - 1996
California Democratic Party - 1993
California Legislative Council for Older Americans - 1993
+California Medical Association - 1994
California Nurses Association - 1995
California-Pacific Annual Conference of the United Methodist Church - 1996
California Pharmacists Association - 1997
California Voters - 1996
Cannabis Freedom Fund – 1996
Coalition for Rescheduling Cannabis - 2002
Colorado Voters - 2000
*Colorado Nurses Association – 1995
Columbia, MO - 2004
*+Connecticut Nurses Association - 2004
Contigo-Conmigo - 1997
Consumer Reports Magazine - 1997
Crescent Alliance Self Help for Sickle Cell - 1999
Cure AIDS now – 1991
Detroit, MI - 2004
District of Columbia Voters - 1999
+Episcopal Church of the U.S. - 1982
Farmacy - 1999
Federation of American Scientists – 1994
Ferndale, MI - 2004
Florida Governor's Red Ribbon Panel on AIDS - 1993
Florida Medical Association - 1997
Frisco, CO – 1994
Green Party – 1998
Hailey, ID - 2007
Hawaii Kokua Council of Senior Citizens - 2000
*Hawaii Legislature - 2000
*Hawaii Nurses Association – 1999
+HIV Medicine Association - 2006
Idaho Disabled American Veterans - 2004
*Illinois Nurses Association - 2004
Institute of Medicine - 1982 & 1999
International Cannabis Alliance of Researchers and Educators (I-CARE) - 1992
Iowa Civil Liberties Union
Iowa Democratic Party - 1994 & 2000 & 2004
Kaiser Permanente – 1997
Lancet - 1997
Life Extension Foundation - 1997
Libertarian Party – 1999
Los Angeles County AIDS Commission - 1996
Lymphoma Foundation of America - 1997
Madison, WI – 1993, 2004
Maine AIDS Alliance - 1997
Maine Voters - 1999
Marin County, CA – 1993
+Medical Society of the State of New York – 2004
Michigan Democratic Party – 2008
Michigan Voters - 2008
Minnesota Democratic Farm-Labor Party - 1992
*Mississippi Nurses Association – 1995
Molaki Advertiser-News Editorial Staff – 1999
Montana Voters - 2006
Mothers Against Misuse and Abuse (MAMA) -1992
Multiple Sclerosis California Action Network (MS-CAN) - 1996
National Association for Public Health Policy - 1998
National Association of Attorneys General - 1983
National Association of Criminal Defense Lawyers (NACDL)
National Association of People with AIDS - 1992
*National Nurses Society on Addictions (NNSA) - 1995
Nevada Voters - 1998
New England Journal of Medicine – 1997
New Hampshire Medical Association - 2003
New Jersey Nurses Association – 2002
New Mexico Legislature - 2007
New Mexico Medical Society - 2001
*New Mexico Nurses Association – 1997
*New York State Nurses Association – 1995
New York State Association of County Health Officials - 2003
*North Carolina Nurses Association – 1996
Oak Creek, CO - 2005
Oakland, California – 1998
Ohio Patient Network - 2001
Oregon Voters – 1998
Oregon Green Party - 2001
Oregon Democratic Party - 1998
Patients Out of Time - 1995
Physicians Association for AIDS Care
Physicians for Social Responsibility (Oregon) – 1998
Presbyterian Church (USA), General Assembly - 2006
Progressive National Baptist Convention - 2004
Republican Liberty Caucus National Committee – 1999
Rhode Island Legislature – 2006
Rhode Island Medical Society – 2004
Rhode Island Nurses Association – 2004
Rhode Island Patient Advocacy coalition - 2003
San Diego, CA - 1994
San Francisco, CA - 1992
San Francisco Medical Society - 1996
Santa Cruz County, CA – 1993
+Texas Democratic Convention – 2004
Texas Nurses Association -2005

The American Federation of State, County and Municipal Employees (AFSCME) - 2006
Traverse City, MI - 2004
Unitarian Universalist Association - 2004
United Methodist Church – 2004
+Union for Reform Judaism – 2003
Vermont Legislature – 2007
Veterans for Medical Marijuana Access - 2007
*Virginia Nurses Association – 1994, 2004
*Virginia Nurses Society on Addictions - 1993
*Washington Hemp Education Network - 1999
Washington Democratic Party - 1998 & 2000
Washington Medical Association - 2008
Washington Voters - 1998
Wisconsin Democratic Party – 1997& 2002
Wisconsin Public Health Association - 1999
Wisconsin Nurses Association - 1999

Supporting Research

American Academy of Addiction Psychiatry - 2000
+American Academy of Family Physicians - 1977
American Cancer Society – 1997
+*American Nurses Association - 2003
*American Nurses Association, Congress of Nursing Practice - 1996
American Society of Addiction Medicine – 2000
+Association of Nurses in AIDS Care - 1999
+California Medical Association – 1997 & 2006
California Society of Addiction Medicine – 1997
+*Connecticut Nurses Association - 2004
+Council of Health Organizations - 1971
Federation of American Scientists – 1995
+HIV Medicine Association - 2006
+Medical Society of the State of New York - 2004
National Institute of Health Workshop on the Medical Utility of Marijuana -1997
+Northern New England Psychiatric Society
+Texas Democratic Convention – 2004
Texas Medical Association - 2003
+Union for Reform Judaism - 2003
Wisconsin State Medical Society – 1998
Women of Reform Judaism - 2000

No Criminal Penalty

Amherst, MA - 2000
Alaska Medical Association - 1972
+American Academy of Family Physicians - 1977
American Bar Association - 1977
American Medical Association – 1977
+*American Nurses Association - 2003
+American Public Health Association - 1971
American Social Health Association – 1974
+Association of Nurses in AIDS Care - 1999
+Berkeley, CA – 1972
Billy Graham Ministries - 1998
B'nai B'rith Women – 1974
+California Medical Association - 2006
Central Conference of American Rabbis – 1973
+*Connecticut Nurses Association - 2004
+Council of Health Organizations - 1971
District of Columbia Medical Society - 1973
+Episcopal Church of the US - 1973
Episcopal Diocese of New York - 1975
Gray Panthers - 1975
Illinois Bar Association - 1974
Lutheran Student Movement - 1975
Massachusetts Bar Association - 1974
National Association for Mental Health - 1972
National Association of Social Workers – 1975
National Council of Churches - 1973
National Education Association - 1978
New York Bar Association - 1974
+Northern New England Psychiatric Society
Progressive National Baptist Convention - 2004
Southern California Psychiatric Society – 1979
+Texas Democratic Convention – 2004
United Church of Christ - 2002
United Methodists - 1976
+Unitarian Universalist Association – 1970, 2002, 2004
Vermont Bar Association - 1974
+Washington Democratic Party - 2000

Non-U.S. Organizations

Arachnoiditis Trust, UK - 2000
Australian National Task Force on Cannabis – 1994
Australian Medical Association (New South Wales) Limited – 1999
British Columbia, Canada, Green party - 2004
British Medical Association - 1997
Bundesverband Poliomyelitis (Federal Union for Polio), Germany – 1998
Canadian AIDS Society - 2004
Canadian Association of Chiefs of Police - 2001
Canadian Medical Association – 2001
Canadian Medical Association Journal - 2001
Canadian Medical Journal - 2001
Deutsche AIDS-Hilfe (German AIDS Support Organization) - 1998
Deutsche Epilepsievereinigung (German Association for Epilepsy) -1998
Deutsche Gesellschaft für Algesiologie (German Society for Algesiology) -1998
Deutsche Gesellschaft für Drogen-und Suchtmedizin (German Society for Drug and Addiction Medicine) - 1998
Deutsche Gesellschaft niedergelassener Ärzte zur Versorgung HIV – 1998
French Ministry of Health - 1997
Health Canada - 1997
House of Lords (UK) Select Committee on Science and Technology – 1999
International Association for Cannabis as Medicine - 2000
Infizierter (German Working Group for Therapists of the HIV infected) –1999
International Association for Cannabis as Medicine - 2000
Legalise Cannabis Alliance - 2000
New South Wales (Australia) Parliamentary Working Party on the Use of Cannabis for Medical Purposes – 2000
New Zealand Health Select Committee - 2003
Lancet (UK) – 1995, 1998
Medical Association of Jamaica - 2001
Medical Cannabis Research Foundation (UK) – 2000
National Commission on Ganja, Jamaica - 2001
National Council on Drug Abuse, Jamaica - 2001
Preventive Medical Center, Netherlands - 1993
Schmerztherapeutisches Kolloquium (Society for Pain Therapists) Germany - 1998
Stichting Institute of Medical Marijuana, Netherlands - 1993
United Church of Jamaica and Cayman Islands – 2000

+ Denotes listing in multiple categories 11/2009

* Therapeutic cannabis consultation and information provided by:

Patients Out of Time
Fish Pond Plantation, 1472 Fish Pond Road
Howardsville, Virginia 24562
(434) 263-4484, FAX (434) 263-6753
E-mail: Patients@MedicalCannabis.com

American Nurses Association, Representing 2.6 Million Registered Nurses Nationwide, Passes Resolution Endorsing Medical Marijuana, June 2003

At the 2003 American Nurses Association House of Delegates Meeting, in Washington, D.C. June 24-27, the delegates passed a resolution in support of medical marijuana. The text of the resolution is as follows:

WHEREAS, the Controlled Substances Act of 1970 categorized marijuana as a Schedule I substance making it unavailable for medical use; and,

WHEREAS, nine states and the District of Columbia have laws that permit use of medicinal marijuana/cannabis; and,

WHEREAS, marijuana/cannabis has a wide margin of safety for use under prescribed supervision, and it is effective for numerous conditions; and,

WHEREAS, ten of ANA's Constituent Member Associations (CMAs) has taken positions in support of access to marijuana/cannabis for therapeutic use; and,

WHEREAS, ANA's Congress on Nursing Practice in 1996 supported the education of registered professional nurses regarding current, evidence-based therapeutic uses of cannabis and the investigation of the therapeutic efficacy of cannabis in controlled trials; and,

WHEREAS, nurses have an ethical obligation to be advocates for access to health care for all,

THEREFORE BE IT RESOLVED THAT the American Nurses Association will:

1. Support research in controlled investigational trials on the therapeutic efficacy of marijuana/cannabis, including alternative methods of administration.

2. Support the right of patients to have safe access to therapeutic marijuana/cannabis under appropriate prescriber supervision.

3. Support the ability of health care providers to discuss and/or recommend the medicinal use of marijuana without the threat of intimidation or penalization.

4. Support legislation to remove criminal penalties including arrest and imprisonment for bona fide patients and prescriber's of therapeutic marijuana/cannabis.

5. Support federal and state legislation to exclude marijuana/cannabis from classification as a Schedule I drug.

6. Support and encourage the education of registered nurse regarding current, evidence-based therapeutic use of marijuana/cannabis.