1. Medical condition proposed:

Parkinson's Disorder

2. Provide justification for why this medical condition should be included as a qualifying debilitating medical condition for the use of medical marihuana. Be specific as to why medical marihuana should be used for this condition.

> After discussion and public hearing, on April 5, 2013, the Medical Marihuana Review Panel voted 5-2 to recommend that Parkinson's disease be added to the list of debilitating conditions.

http://www.michigan.gov/documents/lara/LARA_BHCS_Medical_Marihuana_Determinations_421137_7.pdf

Parkinson's has already been approved by the panel. It was rejected on a technicality of an Administrative Rule which has since been adjusted to fix this technical problem of "a quorum". Further, HB 4210 was signed by the governor Rick Snyder in 12/2016, which cleared up oral forms of edible medical marijuana. As some panel members were apprehensive of smoked medical marijuana as a treatment option, this amendment to the MMMA for oral forms should assuage those fears.

http://legislature.mi.gov/doc.aspx?2015-HB-4210

The US Department Of Health And Human Services has determined through thorough medical research that the cannabinoids found in the marijuana plant can be used to treat Parkinson's Disease.

> Original Assignee The United States Of America As Represented By The Department Of Health And Human Services
>
> The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma**,** *or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia.*
>
> As used herein, a "cannabinoid" is a chemical compound (such as cannabinol, THC or cannabidiol) *that is found in the plant species Cannabis sativa (marijuana)*

http://www.google.com/patents/US6630507

Parkinson's Disorder symptoms are very similar to Alzheimer's disease symptoms, which primarily affect older adults. Alzheimer's is listed

in Michigan as a qualifying condition, but PD currently is not.

PD can cause symptoms such as delusions, hallucinations, dysphoria, anxiety, agitation, irritability, and aberrant motor behavior. Medical Marijuana has been known to calm these symptoms.

As seen with people who have been affected by Post Traumatic Stress Disorder, Medical Marijuana also helps patients cope with serious and debilitating delusions, hallucinations and dysphoria.

From parkinson.org:

> What Causes Hallucinations and Delusions?
>
> Side effects of PD medications
>
> In the majority of PD cases, hallucinations and delusions occur as a side effect of drug therapy. All PD medications can potentially cause these symptoms:
>
> Classic PD medications (i.e., Sinemet and dopamine agonists) are designed to increase dopamine levels, improving motor symptoms. However, by boosting the dopamine supply, these medications can inadvertently cause serious emotional and behavioral changes.
>
> Other medications used to treat PD can also cause these symptoms a little bit more often by lowering levels of acetylcholine and shifting its balance with dopamine. These medications include anticholinergics (i.e., Artane ® and Cogentin ®) and amantadine.

http://www.parkinson.org/understanding-parkinsons/non-motor-symptoms/Psychosis

Medical Marijuana should be a choice that patients and doctors can discuss and try. Just like any other medication.

Medical Marijuana is also useful to treat the side effects of many of the current PD prescription medications.

> Common side effects of Sinemet include:
>
> dizziness, drowsiness, blurred vision, nausea, vomiting, dry mouth, loss of appetite, heartburn, diarrhea, constipation, sneezing, stuffy nose, cough, other cold symptoms, muscle pain, numbness or tingly feeling,

trouble sleeping (insomnia or strange dreams), skin rash, itching, and headache.

http://www.rxlist.com/sinemet-side-effects-drug-center.htm

Medical Marijuana treats many of these side effects from PD medications, including dizziness, nausea, vomiting, loss of appetite, muscle pain, trouble sleeping, itching and headache.

Other states already approve of medical marijuana for PD.

http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx

http://resources.lawinfo.com/criminal-defense/medical-marijuana/in-which-states-is-medical-marijuana-legal.html

http://www.dhhr.wv.gov/bph/Documents/MedicalCannabis/General%20Info%2004202017%20-%20rev.pdf

http://medicalmarijuana.procon.org/view.resource.php?resourceID=000881

Including: Georgia, Vermont, Connecticut, Florida, Illinois, Massachusetts, New Hampshire, Ohio, New Mexico, New York, Pennsylvania, West Virginia and California.

3. Provide a summary of the evidence that the use of medical marihuana will provide palliative or therapeutic benefit for this medical condition or is a treatment for this condition.

1. Cannabinoids have demonstrated a number of therapeutic benefits alleviating motor and non-motor related symptoms associated with PD.

2. Medical Marijuana has been shown to be effective at alleviating symptoms associated with PD in clinical settings in the cited studies.

3. Cannabinoids are found to be recognized as safe and well tolerated amongst PD patients in peer reviewed clinical research studies.

4. Researchers (Lotan 2014) pointed out that “psychotropic effects of cannabis, and the perception of well-being associated with its use may be responsible in part for its favorable response”

4. Provide articles published in peer-reviewed scientific journals reporting the results of research on the effects of marihuana on the medical condition or

treatment of the medical condition and supporting why the medical condition should be added to the list of debilitating medical conditions under the Medical Marihuana Act. Attach a copy of all articles that are discussed in this section. Please do not attach articles that are not discussed in this section.

See enclosed.

Chapter 1 Contents

Cannabis in Adjunct PD Therapies

Introduction

Over 50,000 Michigan residents currently have Parkinson's disease (PD). There remains no treatment for the disease itself, treatments aimed at managing symptoms are often ineffective and known to cause severe and disabling side effects. Once a patient is diagnosed with PD their symptoms inevitably result in a progression of significant disabilities and an increasingly negative impact on their quality of life. In preclinical settings cannabinoids have demonstrated numerous therapeutic benefits in PD treatments. More importantly, smoked cannabis, and orally consumed preparations thereof, have demonstrated their safety and efficacy in clinical settings while alleviating symptoms associated with PD, as well as increasing the overall quality of life of patients. By voting in favor of, and enacting the MMMA, the will of the people of Michigan was to ensure the legal protection of qualifying patients from penalties and arrest. Overwhelming preclinical, clinical, and anecdotal evidence is presented in this petition that shows support for adding PD to the list of qualifying conditions under the Michigan Medical Marihuana Act.

1. PD and the ECS

PD is a neurodegenerative disease associated with a progressive loss of dopaminergic neurons in the midbrain which results in a cascade of changes in the basal ganglia neural circuitry, including the dysregulation of the endocannabinoid system (ECS) (Concannon 2015). The basal ganglia neural circuitry is involved in executing voluntary movement. The basal ganglia consists of a large number of cannabinoid receptors (namely CB1), as well as the highest endocannabinoid levels in the human body (More 2015). The ECS interacts bi-directionally with dopaminergic, glutamatergic, and GABAergic signaling systems in the basal ganglia to control motor functions (Kreitzer 2007, More 2015).

In part, endocannabinoids and cannabinoid receptor signaling promote neurogenesis, inhibit neuronal cell death, and function as a natural defense mechanism against inflammation (Mounsey 2105). In PD, ECS dysregulation stemming from a loss of dopamine in the basal ganglia neural circuitry manifests as motor related symptoms associated with the disease: resting tremor, rigidity, bradykinesia, postural difficulties, and gait abnormalities (More 2105). The synthesis of AEA in the basal ganglia, which is directly regulated by the dopaminergic system, is dysregulated in people with PD (Concannon 2015). The expression levels of cannabinoid receptors are also altered in PD (García-Arencibia 2009).
While the exact mechanisms involved in this neural circuitry have yet to be fully elucidated, an overwhelming number of studies demonstrate that ECS dysregulation plays a significant role in motor and non-motor symptoms associated with PD, and modulation of the ECS provides new treatment strategies for managing symptoms associated with the disease (More 2015).
Additionally, early preclinical research has demonstrated that the ECS may have the potential to modify the progression of the disease itself (Concannon 2015, Fernández-Ruiz 2011)

CB1 and AEA Dysregulated in PD

The ECS goes through two patterns of changes throughout the progression of PD. In the early stages, CB1 receptors are downregulated. In this stage cannabinoid receptor agonists (like THC) can increase CB1 signaling, prevent neuronal cell death, as well as provide other benefits. It is postulated that the increase in cannabinoid receptor signaling "normalizes striatal function following dopamine depletion as enhanced CB1 receptor signaling reduces glutamate release and activates the pool of G-proteins usually activated by the dopamine D2 receptor" (Fagan 2014). In later stages, CB1 is upregulated, possibly as part of the pathogenesis of the disease (García-Arencibia 2009). AEA is also upregulated in non-dopamine treated patients. This is believed to be in part why CB1 antagonists including CBD, found in marijuana, have demonstrated therapeutic benefit. Additionally, genetic polymorphisms in CB1 receptors have been identified in PD patients with depression, and modulating CB1 signaling may present a new pharmacological target for treatment (Barrero 2005).

CB2 and Neurodegeneration

CB2 receptors are also dysregulated in PD. The upregulation of CB2 receptors in the brain functions as part of an endogenous neuroprotective system in response to damaging stimuli (Gómez-Gálvez 2016). CB2 signaling in the brain helps reduce oxidative injury, neuroinflammation, and has been demonstrated to slow the progression of neurodegenerative disorders effecting the basal ganglia (including PD) in preclinical models (Fernández-Ruiz 2011). In PD, CB2 has been shown to be downregulated in the substantia nigra increasingly as the disease progresses, possibly as part of the pathogenesis of the disease (García 2015). CB2 agonists (like THC) increase CB2 signaling which slows neurodegeneration, reduces neuroinflammation and oxidative stress, as well as provides other benefits (Gómez-Gálvez 2016, Fernández-Ruiz 2007, Fernández-Ruiz 2011).

Beyond CB1/CB2

In addition to the dysregulation and potential therapeutic benefit of targeting the ECS to manage PD cited above, PPAR's, TRPV's, GABAergic, and other receptor signaling associated with the ECS also likely play significant roles in PD. Cannabinoids offer many opportunities for therapeutic benefit. For the sake of brevity, these will be left out but for further review, please see Concannon 2015 and More 2015.

Section 1 Summary

Due to the extensive body of data demonstrating the role of the ECS with the dopaminergic system, basal ganglia disorders, neurodegenerative disorders in general, and PD specifically; cannabinoids have been investigated extensively in preclinical settings to identify therapeutic benefits of targeting the ECS in PD and similar disorders. In a variety of PD models cannabinoids have demonstrated a number of therapeutic benefits alleviating motor and

non-motor related symptoms associated with PD, as well as symptoms commonly associated with levodopa (L-DOPA). In addition, cannabinoids provide an array of neuroprotection benefiting management of the disease itself. This will all be outlined in the following section.

2. Cannabinoids for PD in Preclinical Models

In preclinical PD models, cannabinoids have been demonstrated to be neuroprotective molecules. These molecules are effective at reducing neuroinflammation, oxidative stress, excitotoxicity, calcium influx, and motor complications. Inflammation is decreased by "modulating glial processes that are associated with neuronal survival". Both cannabinoid receptor agonists, as well as antagonists have potential therapeutic value in PD treatments. (More 2015)
There are extensive numbers of published preclinical studies demonstrating that cannabinoids have multiple therapeutic benefits in the treatment of PD (More 2015, Concannon 2015). Some of the therapeutic benefits include potentially modifying the progression of the disease itself, combating motor dysfunction as well as non-motor related symptoms and alleviating dyskinesia associated with current pharmaceutical (L-DOPA) treatments. Some of the most recent studies regarding cannabis derived cannabinoids, as well as synthetic analogs of cannabis cannabinoids , are cited below.

Cannabinoids Provide Neuroprotection in PD

- THC and CBD 3mg/kg protect against neurodegeneration (Lastres-Becker 2005)
- THC .25-2mg/kg inhibited subthalamic hyperactivity associated with PD (Morera-Herreras 2011)
- THC provides neuroprotection in PD model independent of cannabinoid receptors (Carroll 2012)
- THCV and CBD 2mg/kg amounts reduced motor inhibition and provided neuroprotection, protected against dopaminergic loss, and preserved dopaminergic survival (Garcia 2011)
- Rimonabant (CBR agonist) enhanced striatal glutamate levels at doses previously shown to alleviate motor symptoms (García-Arencibia 2009)
- Other cannabinoids agonists have been shown to attenuate nigrostriatal damage and/or increase dopamine in the midbrain (Price 2009, Chung 2011, Chung 2012, Esposito 2012, Gonzalez-Aparicio 2014)

Cannabinoids Alleviate Motor Related PD Symptoms

- 5-20mg/kg cannabis concentrate ameliorates motor deficits in PD model (ElShebiney 2014)
- CBR antagonist potentiates dopamine-agonist induced locomotion (Di Marzo 2000)

- CBR antagonist reduces motor asymmetry in PD model (El Banoua 2004)
- CBR antagonist increases range of movement in PD model (van der Stelt 2005)
- CBR antagonist improves akinesia and sensorimotor orientation (Fernandez-Espejo 2005)
- CBR antagonist alleviates hypokinesia in PD model (González 2006)

Cannabinoids Reduce Levadopa (L-DOPA) Induced Dyskinesia

- Primarily cannabinoid receptor agonists, but in some cases also antagonists, have been shown to be anti-dyskinetic in preclinical PD models (Fox 2002, Ferrer 2003, Segovia 2003, van der Stelt 2005, Morgese 2007, Morgese 2009, Walsh 2010 Martinez 2012)

Cannabinoids and Non-Motor Related Symptoms

- Antagonists like CBD demonstrate benefits in treatment of psychosis (Zuardi 2006)
- Cannabinoids demonstrate therapeutic benefit in treatment of depression in PD (Barrero 2005)
- THC and CBD both promote sleep (Murillo-Rodríguez 2008, Murillo-Rodriguez 2006)
- Cannabinoids alleviating pain via CBR and non-CBR mechanisms (Russo 2015)

Section 2 Summary

Cannabinoids have demonstrated multiple therapeutic benefits in preclinical PD models.

Based on the overwhelming data in preclinical models demonstrating the safety and efficacy of cannabinoids providing not only therapeutic benefit alleviating symptoms associated with PD, but also symptoms commonly associated with levodopa (L-DOPA), as well as the disease itself, a number of clinical trials that have included both oral as well as smoked cannabis in PD therapies have been conducted that further verify some of these findings. These will be discussed in the following section.

CBD has demonstrated a number of benefits treating neurodegenerative disorders (Fernández-Ruiz 2013).

3. Clinical Trials Managing PD with Cannabinoids

Overall, the therapeutic benefits of cannabinoids in PD treatments have been extensively demonstrated in preclinical settings. More importantly for the purposes of adding PD to the list of qualifying conditions for medical marijuana in MI, smoked cannabis, as well as preparations of orally consumed cannabis, have been demonstrated to be safe, well tolerated, and effective at alleviating symptoms associated with PD in clinical settings in peer reviewed studies.

Oral Cannabinoid Agonist Reduces Dyskinesia in Double Blind

About fifteen years ago in 2001 one of the first randomized, double blind, placebo controlled studies was conducted with a cannabinoid receptor agonist (Nabilone) for use in PD treatments. This trial demonstrated the ability of the cannabinoid agonist to identified significantly reduced L-DOPA induced dyskinesia. *No serious adverse side effects were documented.* (Sieradzan 2001)

Low Dose Oral THC/CBD in PD Trial

Another randomized, double blind, crossover study was then conducted in 2004. This trial utilized THC 2.5mg/CBD 1.25mg per capsule up to twice daily. That's 7.5mg/daily and was only .25mg/kg daily by patient body weight. The study demonstrated that the cannabis extract was well tolerated among PD patients and improved MMSE scores significantly. However, possibly due to the extremely low dosages no changes in dyskinesia was documented. This was interpreted as, and is cited in other works as, a failure of cannabinoids to prove efficacy in a clinical trial. Other preclinical and clinical studies seem to suggest that the dosage may have been too low in this trial. It is important to note that a typical cannabis product intended for oral consumption will range from 50-150mg THC and 100-250mg CBD per dose. In subsequent years, additional trials have been conducted with greater success at treating symptoms as the later studies used higher dosages of cannabinoids. (Carroll 2004)

CBD Safe and Effective Treating PD Patients with Psychosis

Psychosis is very common in PD. Nearly one in every three PD patients suffers from psychosis, particularly in the later stages of the disease. This psychosis is often medication induced, resulting from long term L-DOPA and other Parkinson's treatments. This makes managing

psychosis in PD particularly challenging from a clinical perspective. Current anti-psychotic medications either cause involuntary motor tremors or others are known to cause cardiovascular and neurological side-effects. CBD has demonstrated anxiolytic, neuroprotective, and anti-psychotic characteristics in preclinical studies. CBD has also been demonstrated to be an effective anti-psychotic in an open case study, as well as a controlled clinical trial.

Based on the known side effects of current PD treatment options, a four week open label, flexible dose pilot study treating PD patients suffering from psychosis was conducted to establish the safety and efficacy of 150mg tablets of CBD in addition to their regular therapy. The study demonstrated that CBD significantly reduced psychotic symptoms and decreased total scores on the Unified Parkinson's Rating Scale. No adverse effects were documented and overall CBD is believed to be safe and well tolerated in treating PD associated with psychosis. (Zaurdi 2008)

CBD Improves Quality of Life Scores in PD Trial

One of the first placebo controlled, double blind clinical trials with CBD and Parkinson's patients was conducted in 2014. The patients were broken into three groups: placebo, 75mg/day, and 300mg/day for six weeks. Compared to the placebo group the 300mg of daily CBD group showed significant improvements in their quality of life scores (measured by the PDQ-39 questionnaire). "Quality of life is an important measure in clinical trials improvements in quality of life. The PDQ-39 is a self-report instrument that assesses several dimensions of PD providing a detailed picture of the disease with little influence of symptom oscillations throughout the day, especially in what refers to treatment with levodopa." In this study, as in all studies previous to it, no serious adverse events were documented. (Chagas 2014)

CBD Clinically Improves Sleep

REM sleep behavior disorder (RBD) is associated with nightmares and active behavior (yelling, talking, swearing, kicking, punching, laughing, crying) when sleeping. RBD has a high rate of occurrence with PD patients. Currently clonazepam is used for treatment, but due to its long half-life and damage to the liver, it is not well suited for long term use. A case study was conducted in which PD patients with psychosis that suffered from RBD were given CBD (75-300mg)/day orally. Immediate reductions or elimination of psychotic events and RBD, significant improvements on the global scale to assess PD (UPDRS), and clinical improvements in sleep were recorded in this study, with no adverse effects. (Chagas 2014)

Smoked Cannabis for PD in the 90's

The first clinical trial involving smoked cannabis and PD dates back as far as 1990, and it sought to observe the impact of smoked cannabis on serious tremors of five treatment resistant patients. According to the researchers the trial came about from reports from a PD patient that described a reduction in tremors for up to three hours after smoking cannabis. While the researchers didn't observe a significant reduction in tremors during the trial, it should be pointed out that the

cannabis described in the study "approximately 1g shredded leaf" only contained 2-9% THC by weight. This is a huge variance which results in an unknown amount of cannabinoids being consumed by the patients. At any given rate provided (2-9%) the cannabis used was extremely low quality by today's standards and this results in less cannabinoids being delivered systemically via inhalation. While this, as well as the very parameters of the trial itself (which was highly flawed and included the use of other drugs like diazepam) cast doubt on any conclusions drawn from the trial, one fact remains: PD patients smoked marijuana cigarettes in a clinical setting and no serious adverse effects were documented, though mild drowsiness and euphoria was reported. The researchers almost reluctantly point out the possibility of smoked cannabis alleviating anxiety induced tremors, otherwise they (and others) cite this trial as a marked failure of cannabis to prove efficacy in the clinical setting for PD. Any conclusions drawn in regards to efficacy from this study should be taken with a grain of salt. (Frankel 1990)

Smoked Cannabis Demonstrates Safety and Efficacy for PD in Clinical Setting

More recently (2014), a more robust 22 participant study was published which was conducted over the course of a year and evaluated the efficacy of smoked cannabis on motor and non-motor symptoms of PD patients in a clinical setting. In terms of motor symptoms the study found that smoked cannabis significantly reduced tremor and rigidity, moderately improved bradykinesia scores, and showed a trend for improvement in posture. Smoked cannabis was also shown to greatly reduce pain scores in this study, and patients reported an increase in quality of sleep. The researchers in this study point out that the perception of well-being from smoked cannabis may be responsible for its favorable response in patients. They also note that smoked cannabis was well tolerated with adverse effects including mild dizziness, drowsiness, and bad taste. (Lotan 2014)

Section 3 Summary

As cited above, cannabis, and preparations thereof, have been demonstrated not only in preclinical, but also in a number of clinical trials to be effective at alleviating symptoms associated with PD, as well as improving patients overall quality of life. The few clinical studies cited as failures of cannabinoid efficacy in clinical settings are due to the extremely low dosages in the trials. In the case of Frankel, the study itself was highly flawed in regards to establishing efficacy. Most preclinical, as well as multiple other clinical trials have demonstrated greater success with higher mg/kg dosages. While the majority of clinical trials have demonstrated some therapeutic benefit, they all have demonstrated cannabinoids to safe and well tolerated amongst PD patients. Researchers in one of the trials point out that "psychotropic effects of cannabis, and the perception of well-being associated with its use may be responsible in part for its favorable response" (Lotan 2014); considering the level of safety cannabinoids have demonstrated in PD clinical trials, and that PD is such a progressively debilitating condition with so few effective treatments currently available, is euphoria such a bad side-effect to preclude it from being a qualifying condition?

To be clear, no line of cannabinoid research to date enables curative claims for PD on a clinical level, and none are implied by this petition. Simply having the potential to deliver palliative relief and increase the quality of life is enough, particularly since it's proven to be safe and well

tolerated in over half a dozen clinical studies. PD patients deserve legal protection under the MMMP. Cannabis has a relatively large self-reported history of use as a beneficial adjunct therapy in PD treatments.

4. Self-reported Beneficial Use of Cannabis amongst PD Patients

At least two patient questionnaires have been published in peer-reviewed sources that identify the prevalence and self-reported benefits of cannabis use amongst PD patients. Both studies discussed here demonstrate that cannabis is commonly used as an adjunct therapy by PD patients and that it appears to be effective, safe, and well tolerated. This is why PD needs to be added to the list of qualifying conditions.

25% of PD Patients in Survey Admit to Smoking Cannabis to Alleviate Symptoms

In a study published in 2004 by the Journal of Parkinson's and Movement Disorder Society, an anonymous questionnaire was mailed out to 630 PD patients aimed at evaluating whether their patients had any experiences with cannabis. Of the respondents 339 respondents, 25%, admitted to having used cannabis at some point. 45.9% described alleviation of their symptoms in general, 44.7% described alleviation of bradykinesia, 37.7% described alleviation in muscle rigidity, 30.6% described improvement in tremors, and and 14.1% described L-DOPA induced dyskinesia. No serious adverse side effects were reported. (Venderová 2004)

Survey Finds Cannabis Effective CAM Therapy for PD

In a study conducted by the University of Colorado examining the use of CAM therapies by PD patients in the Denver-Metro area, cannabis use had the highest self-reported therapeutic benefits reported by PD patients within the study. The majority of benefits were described as non-motor related symptoms, but some described relief from motor symptoms as well. This survey identified a high rate of use of CAM therapies amongst PD patients, likely due to the large numbers of PD patients without effective treatment options. No serious adverse effects were reported from cannabis use in this survey. (Finseth 2015)

Section 4 Summary

These patient surveys correlate well with the preclinical and clinical research. Cannabis seems to be effective at alleviating symptoms associated with PD, safe, and well tolerate by patients. One thing that these surveys highlight is the need for legal protection of PD patients to legally pursue cannabis as an optional adjunct therapy under the guidance of their physician.

5. PD Must Be Added to List of Qualifying Conditions

Due to the lack of clinically available curative therapies and symptoms associated with current drug treatments, a portion of PD patients remain unresponsive to clinically available therapies or often see their symptoms worsened by them. This has resulted in a large number of PD patients having to pursue alternative adjunct CAM therapies, including cannabis. PD patients deserve legal protection and access to medical marijuana. Based on this and the overwhelming preclinical and clinical data, states (Georgia, Vermont, Connecticut, Illinois, Massachusetts, New Hampshire, New Mexico, New York, Pennsylvania, and California) with medical marijuana programs already recognize PD as a qualifying condition. It's time for Michigan to join them.
A large number of the 50,000 PD patients in Michigan already utilize cannabis for therapeutic benefit. PD is a serious, chronic and debilitating medical condition. Cannabis has been clearly and repeatedly demonstrated to be effective, safe, and well tolerated by PD patients in clinical trials. Under the proper guidance of a physician (which is required under the guidelines of the MMMP) cannabis has been demonstrated to provide therapeutic and palliative relief for some of these patients who qualify under different qualifying conditions. The rest of PD patients deserve access. PD patients, as well as their families and caregivers have enough stress and complications in their lives. Worrying about arrest and prosecution should not be one of those complications. We owe them more than that.
No curative cannabinoid therapies have been demonstrated clinically, or are implied by this petition. Nevertheless the MMMA does not require cannabinoid therapies be curative. Only that they demonstrate safety and have the possibility to deliver therapeutic or palliative relief to patients with severe or debilitating conditions. This has clearly been demonstrated. For the sake of the integrity of the MMMP program, and to ensure the will of the voters is upheld by current administrators, PD must be added to the list of qualifying conditions for medical cannabis in MI.
A small portion of symptoms associated with PD would otherwise qualify for medical marijuana under the current program, but quite frankly that's not enough. Cannabinoids clearly have demonstrated therapeutic benefits for symptoms that fall outside of the realm of those that currently qualify medical cannabis, and that's why PD must be added to the qualifying list of conditions.
PD patients deserve to gain legal access to adjunct cannabis therapies in accordance with the MMMP, and under the guidance of their physician, so that they may find therapeutic and palliative relief and possibly a greater quality of life. We owe them that much. These are precisely they types of patients that MI voters set out to protect.

Over 50,000 people in MI with Parkinson's:
http://www.parkinsonswm.org/parkinsons-info/

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