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Senate Legal and Constitutional Affairs Committee PO BOX 6100
Parliament House
Canberra ACT 2600

RE: The Moderator of Medicinal Cannabis Bill 2014

Cannabis has many cannabanoids and CBD has proven to be a safe affective medicine for many illnesses. The other cannabanoids are also essential medicines and should also be legalised but for a start you can help many people with CBD medicine.

As studies have concluded you will see clearly the full benefits of full Cannabanoid medicine, as they have in the US. Many studies have proven the full benefits of CBD and I hole heartedly support medicinal cannabis in ANY form.

Cannabis plants, whilst growing are a totally safe, none psychoactive natural medicine. CBD and THCA are both strong tumour reducers and should both be fully legalised. THC is the only psychoactive cannabanoid and is for a reason. Appetite, sleep and stress relief really on its affects. CBD and THCA are safe affective medicine and un decarboxylated products can be made once cannabis plants are legal to cultivate.

Decarboxylation

As a Cannabis plant grows, light hitting the leaves is collected by chlorophyll. Part of this energy is stored for later use, and part is used to split water (H₂O) molecules into free oxygen gas (O₂), and hydrogen (H); this is how plants give off oxygen (O₂). Plants absorb carbon dioxide (CO₂), and as part of a process in photosynthesis known as 'carboxylation', or the addition of CO₂, carboxylic acids are formed in part using the freed hydrogen (H).

These acids are groups of carbon, oxygen, and hydrogen atoms, and one of the most important to vipers is delta-9-tetrahydrocannabinol carboxylic acid (also known as tetrahydrocannabinolic acid or THCA). Other cannabinoids also first take shape as acid forms, such as CBD-carboxylic acid (CBDA) for cannabidiol (CBD), and CBN-carboxylic acid (CBNA) for cannabinol (CBN) and follow the same process.

While THCA does appear to have some beneficial impact, it does not induce the 'high' effects generally desired by smokers. While the plant is living, the THC in the plant is in THCA form. This is why consuming live, green plant material has a greatly reduced effect. As long as the extra CO₂ is attached to the THC, the potency is hindered.

Delta-9-tetrahydrocannabinol (also known as Δ-9 tetrahydrocannabinol, or Δ-9 THC) is formed from THCA through a process called decarboxylation (the removal of CO₂).

MY CURRENT MEDICAL CONDITION

In 1990 I was admitted to hospital in Sydney for an unusual growth on my right foot. This blue Nevis was removed and sent for analysis. The biopsy results were positive for cancer cells and I was admitted for surgery to remove the cancerous cells. The cut was very deep and between the

ligaments and a large amount of material was removed. All cancerous. I was on crutches for several weeks.

At that time I was 23 years old and on occasion used cannabis recreationally and was aware of the possible use of cannabis oil as a skin medication to help in the healing process and remove cancer cells still left. I was shocked by the fact I had cancer at 23 and decided to use whatever was recommended by my doctor to help. It was at this time I started using cannabis as medicine. The oil was rubbed directly onto the scare area several times a day for one month. The cancer did not return for what ever reason.

In 1997 I had a grade 1 dislocation of the AC joint in my right shoulder and was put on a list for surgery to fix the snapped tendon and relocate the bones. I was prescribed codine based medicine which I found very hard to deal with due to its side affects, nausea, constipation and drowsy ness and above all else, addiction. This affected my whole life and I soon found myself relying on both pandadine and various sleeping pills as I suffered insomnia from not being able to sleep longer than 2 hours without waking up in pain. This led to many other ill affects on my life.

I started using cannabis again instead of the opiate based medicine that I was now dependent on as I felt it had worked well in the past. It helped me to stop using sleeping pills as it put me to sleep very well. It stopped inflammation of the shoulder and provided a certain amount of pain relief. Especially at night.

In 2004 I had a massive accident where I suffered three fractured vertebrae in my spine, a triple compound fracture of my right leg. A grade 3 separation of the AC joint in my left shoulder, five broken bones in my right foot, torn muscle in my left shoulder and was rendered unconscious for several minutes. It took rescue helicopter two hours to pull me out of the bush and evacuate me to hospital.

I still suffer greatly from these injuries on a daily basis and it seems to be getting worse with age and time.

Cannabis helps me no end with all the symptoms of my injuries and is the only answer to long term pain as legal pharmaceutical medicines cause severe side affects and addiction. I have suffered these in the past and refuse to suffer them again.

I'm on a partial disability pension and have a part time business as a caterer. I am not a rich man.

MEDICAL CANNABIS

Since the legalisation of cannabis as a medicine in 1998 in California USA there have been several hundred studies into cannabanoids found in cannabis and no where else's in nature.

The results of these studies in every case have shown conclusively over and over again that cannabis and the cannabanoids have a direct relation to the endocannabinoid system found in all mammals.

Medical Cannabis now has the full backing of the NSW Government Premier, Mick Baird, the ex NSW Police Superintendent Meg McGowan, the NSW Nurses Union, Cancer Council Australia and many members of the NSW legislative council.

The government enquiry held in NSW fully recommended the legalisation of medical cannabis and NSW Human trials into medical cannabis will commence shortly.

The following is an extract from the Medical Journal of Australia 1914-2014 and is the most current information available to the NSW government.

Quote

The medicinal use of cannabis was prohibited in Australia some 50 years ago, at a time when scientific knowledge about it was meagre. It is now clear that cannabis has genuine medicinal utility, but this has been largely overlooked, with research and society's attention, in most parts of the world, being directed towards the hazards of its recreational use rather than the benefits of its medicinal use.^{1,2} We maintain that consideration of policy for medicinal cannabis should be kept separate from consideration of recreational cannabis.

In May 2013, a New South Wales parliamentary committee comprising members of five political parties unanimously recommended making medicinal cannabis available for selected conditions.

The conclusion was as follows:

The benefits of cannabinoid pharmacotherapy can be substantial. The risks are generally modest and must be weighed against those of not treating the symptoms or of alternative treatments.²²

In Australia, medicinal cannabis currently has strong community support (69%), with research into its use being even more strongly supported (74%).²³ The number of Medline-indexed publications has doubled each decade, from about 400 in 1990 to about 1600 in 2010. A stronger medical consensus is emerging. In a hypothetical case of a 68-year-old woman in pain with advanced cancer, 76% of respondents indicated that they would recommend medicinal cannabis to alleviate her symptoms.²⁴ We do not envisage terminal illness to be a sole entry criterion to cannabis pharmacotherapy.

With medicinal cannabis now available legally in 20 US states and fully legal in 4 US states, there is an undeniable shift towards recognising its pharmacotherapeutic potential. It is time to implement the use of medicinal cannabis in Australia. The NSW Report has produced an excellent starting point. Changing the laws to allow such pharmacotherapy presents more of a challenge but is not an insurmountable obstacle.

A civilised and compassionate country that supports evidence-based medicine and policy should acknowledge that medicinal cannabis is acceptably effective and safe, and probably also cost-effective, especially when the costs of resource use and improvement to the lives and functionality of patients and carers are considered.

There is certainly more to learn about medicinal cannabis, but we know more than enough to act now. As Bradford Hill has observed: "All scientific knowledge is incomplete ... That does not confer upon us a freedom to ignore the knowledge we already have, or to postpone the action that it appears to demand".

PUBLIC OPINION

There was a public vote on the Sunday night TV program with approximately two million votes in one week with a 96% positive vote for legalisation for medicinal use. The debate on medical cannabis is highly emotive and current in today's media and is being discussed in every level of society. It's on every TV channel, news paper, public debate program's, government departments, United Nations council and just about every government in opposition in the world. This clearly represents a massive proportion of today's society and the way they feel about medical cannabis. The public clearly do not approve of the current laws and feel strongly enough to openly challenge the current laws by treating both them self and there children in a very open and public way. Growers are now starting to sell there products openly on the internet and only more will follow. Public decent is all we have left.

There are thousands of people in this horrible situation of having to source illegal cannabis to save the lives of their children and risk a criminal charge for doing so.

Police around the country are now refusing to arrest these people and have publicly stated so. Such as former federal police chief Mr Mick Palmer has urged law enforcement agencies to exercise discretion when dealing with family's who are treating seriously ill children with cannabis oil. Also the police chief of Tamworth where Dan Haslem and his family live have publicly stated that they will not arrest any member of the Haslem family. The Haslems are giving evidence at both the NSW and Tasmanian Government inquiry into medical cannabis.

Dan Haslem is a terminal cancer patient that uses cannabis for exactly the same reasons that I do. Pain relief, sleeping aid, anti-inflammatory and also for appetite. All symptoms of chemo therapy. Also symptoms of many other sicknesses and physical injuries that thousands of people suffer from every day. Dan has now passed on from his illness, another wasted life that Cannabis

could have helped and possibly cured his condition if allowed a full treatment and medical grade researched products.

Cannabis in its natural form, still growing, un dried and un heated has now been proven to have no Psychoactive qualities what so ever. THCA is only converted to THC after decarboxylation caused by extended heat or the curing proses. Whole plant cannabis have proven to helpful with many conditions from skin cancer to MS.

Cannabis has many healing qualities and is a whole plant medicine. None of the single components tell the whole story. Unfortunately.

THC has many medical uses and in its purest form has shown the greatest potential of tumour reduction and is the only answer for chronic pain, as it can be vaporised for instant affect, very strong pain relief for cancer surgery patients and chronic pain sufferers such as myself.

Studies are now also showing clearly that our fears of mental illness from THC is unfounded and has actually been proven to help many mental conditions such as MS, epilepsy and even Parkinson's. It's relation to mental illness is purely as a trigger for genetic conditions. It is not the cause. This is now proven.

I use cannabis in four forms, cannabis juice is my main method of consumption, cannabis oil mixed with seed oil for anti-inflammatory and raw decarboxylated cannabis for insomnia, appetite and pure THC for pain at night and good sleeping patterns. None of these products has any side affect or addiction. They are all organic in nature and can be grown by anyone to self medicate, safely.

The NSW Terminal Illness Cannabis Scheme has approved me as a career and in the past few months I have been involved with an application to join the NSW TICS trials as a business and R&D centre into Cannabis Cultivation and Medical Cannabis Medicine Production and design.

With the vast knowledge and experience in Medical Cannabis we have our aim is to support both the NSW trials and the Federal Medical Cannabis Bill with our knowledge, expertise and commitment to this Medicine.

Medicine Man Concentrates aim under the NSW trials to research modern and productive methods of cultivation and related cannabinoid production by the Genus Cannabis under Relative environmental conditions and to trace the true landrace plants of the world and document the medical cannabinoids found in these original strains.

MMC is a in the planning stage for a Cannabis Medicine Supply and Production Company. Our business plan includes two large Organic Cannabis cultivation operations of less than 1% THC that we already have in place under NSW Hemp Licensee and a high THC organic grow facility for production of THC and all other cannabinoids and Terpenes.

We have great experience in organic cultivation methods and many years experience in the horticultural nutrient and equipment supply industry here in Australia. We are leaders in horticultural methodology and plan to advance cannabis cultivation methods using this knowledge and experience from the horticultural industry. We will also open a Herbal Extraction facility to produce the various medical cannabis products recommended by the American studies into Medical Cannabis and it's uses.

We are partners with Cannabis Soul Healing in Australia who aim to open several cannabis dispensary here in Australia inline with there submission to this NSW trial. We will also associate with the Hemp Association of Australia and work closely together with these company's to study and research the benefits of medical cannabis and to produce organic medical grade products for the NSW Trials.

Medicine Man Concentrates hopes to help the 300+ people on our patient Support page on social media plus many more NSW residents and help improve their general quality of life through diet, lifestyle and medical cannabis products.

We hope that this will eliminate the need for such over demand on the NSW health department and give the healing power of cannabis back to the people of Australia after many years of prohibition.

We will happily conform to any requests made by the NSW Government as far as medical records and facilitation of the Cannabis Trials. We will be happy to assist the NSW and Federal Government in any way we can to help the people of Australia through this change in policy and assure quality medical products for all doctors and any supply chains Licensed through these trials.

We have studied many of the world's clinical trials and university studies on Medical Cannabis and will continue to do so to achieve current and appropriate products for the trials. We will work closely with doctors and medical staff in the areas of our dispensaries to make sure that supply is constant and of the highest medical grade. We will also employ nurses and clinic staff to operate our mobile clinic and Dispensary and make personal contact with all registered patients through Cannabis Soul Healing and the allocated doctors in each region.

Safety and high grade medical Cannabis and the extraction and production of medical cannabis products is a specialised field and needs many years to understand the intricacy of the Genus Cannabis cultivar. Our company has employees of the highest experience and vast horticultural specialist knowledge to bring to the NSW trials and hope very much to be accepted and funded for these trials.

Should we not be accepted for the NSW trials we would hope to be Licensed under the Federal Bill.

CLOSING ARGUMENT

In conclusion of this statement I would like to say that at some stage in a man's life he must stand up and fight for what he believes is morally correct. He has an obligation to his children to heal himself and conduct, in private, his beliefs.

This is also true of a government, to have indisputable evidence and deep knowledge and not to act on it is a crime against your own people.

Please act now to change this injustice.

It was Thomas Jefferson that said

"if a law is unjust, a man is not only right to disobey it, he is obligated to do so"

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CBD is all the rage in the public sphere these days, but how much does the average person actually know about it? In this issue of Cannabinoid Profiles, the properties of CBD are broken down and the therapeutic benefits are explored. Get to know this cannabinoid and discover what studies are currently being done to determine its wide variety of medicinal benefits.

Formula: C₂₁H₃₀O₂

Molecular Mass: 314.2246 g/mol

Decarboxylation Point: 115-145°C (239°F to 293°F)

Boiling Point: 180°C (356°F)

LD50 (Lethal Dose): 50mg/kg for mice (Compare to Nicotine: 3.34mg/kg), ~748mg/kg for humans

Cannabidiol (CBD) is the principal non-psychoactive cannabinoid present in the cannabis plant, occurring in the largest concentrations after THC. Beyond being not psychoactive, CBD is a powerful anti-psychotic drug and valuable for anyone with psychosis or schizophrenia. CBD has been shown to be a better anti-inflammatory than THC and Ibuprofen, it is also at least as effective as THC for treating pain and managing tumors. CBD has a wide range of therapeutic uses ranging from physical ones like pain relief to mental ones like relief of anxiety and depression. Due to the fact that it is non-psychoactive and strongly medicinal even in small doses, CBD is highly recommended for treatment of children, the elderly, and anyone who wants to remain clear headed yet medicated. CBD appears to change how THC affects the body, making it less psychoactive and more therapeutic.

Therapeutic Uses

Analgesic – Relieves pain.

Antibacterial – Slows bacterial growth.

Anti-Diabetic – CBD is the only cannabinoid identified that helps lower blood sugar levels.

Antidepressant – Relieves symptoms of depression.

Anti-Emetic – Reduces vomiting and nausea.

Anti-Epileptic – Reduces seizures and convulsions.

Anti-inflammatory – Reduces inflammation systemically.

Anti-Insomnia – Aids with sleep.

Anti-Ischemic – CBD is the only cannabinoid identified that reduces the risk of artery blockage.

Antipsoriatic – CBD is the only cannabinoid identified to treat psoriasis.

Anti-Proliferative – Inhibits cancer cell growth.

Antipsychotic – Tranquilizing effects to relieve symptoms of psychosis, two terpenoids also help (linalool and myrcene).

Antioxidant – Prevents the damage of oxidation to other molecules in the body.

Antispasmodic – Suppresses muscle spasms.

Anxiolytic – CBD is the only cannabinoid identified that relieves anxiety, but two terpenoids also help (linalool and limonene).

Bone Stimulant – Promotes bone growth.

Immunosuppressive – CBD is the only cannabinoid identified that reduces function in the immune system.

Intestinal Anti-Prokinetic – CBD is the only cannabinoid identified that reduces small intestine contractions.

Neuroprotective – Slows damage to the nervous system and brain.

Vasorelaxant- CBD is the only cannabinoid identified that reduces vascular tension.

CBD is also currently being studied for a variety of conditions.

Currently Being Studied For

Cancer: A study was published in 2007, regarding ongoing research being done at San Francisco's California Pacific Medical Center, showing that CBD inhibits a particular gene (Id-1) which is responsible for the growth of cancer cells in the body. By inhibiting this gene CBD shuts down the growth of cancer cells, potentially stopping or even reversing tumor growth. While it is premature to say that CBD cures cancer, it is worth further research.

Dravet Syndrome/Epilepsy: In October of 2013, the Food and Drug Administration (FDA) approved two clinical trials assessing the therapeutic uses of CBD in treating intractable epilepsy in children. The CBD preparations are being made by British pharmaceutical company GW Pharmaceuticals, makers of Sativex. Dravet is a rare seizure disorder where usually children will have their first intractable seizure before they are even one year old, and in exceptional cases seizures can last over 24 hours. Harborside, where I work, has a famous patient named Jayden, a young boy who uses a CBD-rich tincture to treat his Dravet Syndrome.

Depression/Anxiety: CBD stimulates the 5-HT_{1a} receptor in the brain, a region involved in the re-uptake of serotonin and other processes that aid with depression and anxiety. The antidepressant properties of CBD are very similar to the tricyclic antidepressant Imipramine (also being evaluated for panic disorder).

Schizophrenia/Psychosis: CBD is a powerful antipsychotic currently being considered for use in treating schizophrenia and other psychoses. Cannabidiol appears to have a very similar chemical profile to certain atypical antipsychotic drugs.

Inflammatory Bowel Disease/Crohn's Disease: CBD shows a lot of promise for controlling the inflammatory responses and discomfort caused by Crohn's disease and IBD. CBD has so much potential to regulate these diseases that it is being considered for a new class of IBD drugs.

Alzheimer's Disease/Dementia/Memory Loss: CBD's strong neuroprotective and antioxidative effects work together to counteract the effects of aging on our brains, fighting off memory loss and dementia.

Figure 1. Halent Laboratories, Cannabinoid Chart; 2011

Videos: SC Labs has numerous videos profiling the medical benefits of various cannabinoids.
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