THE MERCY NEWS REPORT

S.B.281 to Add PTSD to OMMP Introduced

Bill to Allow Medical Cannabis for PTSD for Veterans, Police, Firefighters and Other American Citizens in Oregon

We at MERCY Newz are ecstatic to report that a bill to add Post-Traumatic Stress Disorder (PTSD) - to the list of debilitating medical conditions of the Oregon Medical Marijuana Program has been introduced. This bill is (almost!) "In The House" and Needs Your Help. To act, Contact your Legislators – both Senator and Representative – and tell them to co-sponsor, or at least support Senate Bill 281.

There is now a chance for PTSD to be included among those Diseases and Conditions Which Qualify as 'Debilitating Medical Conditions' under the Oregon Medical Marijuana Act.

But Only If People Act, like Today! S. B. 281 will mean that thousands of Oregonians who use cannabis to combat mood symptoms, diseases or

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Experts, Activists, Citizens Rally for PTSD at Oregon State Capital

On February 7th Veterans backed by medical marijuana advocates will be teaming up to appear in support of Senate Bill 281, a bill that would add post-traumatic stress disorder to the list of qualifying conditions allowed by the Oregon Medical Marijuana Act. Currently, Veterans who suffer from PTSD can not acquire medicine that could help with the post combat transition into civilian life.

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Israel Soothes Terrorist Trauma With Marijuana - by Corinne Heller

JERUSALEM (Reuters, 2004) - Israeli soldiers traumatised by battle with the Palestinians have a new, unconventional weapon to exorcise their nightmares -- marijuana. Under an experimental programme, Delta-9 tetrohydrocannabinol (THC), the active ingredient found in the cannabis plant, will be administered to 15 soldiers over the next several months in an effort to

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PTSD and Cannabis: A Clinician Ponders Mechanism of Action - by David Bearman, MD

One often intractable problem for which cannabis provides relief is post-traumatic stress disorder (PTSD). I have more than 100 patients with PTSD. Among those reporting that cannabis alleviates their PTSD symptoms are veterans of the war in Vietnam, the first Gulf War, and the current occupation of Iraq.

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Are Veterans Being Given Deadly Cocktails to Treat PTSD?

Sgt. Eric Layne's death was not pretty.

A few months after starting a drug regimen combining the antidepressant Paxil, the mood stabilizer Klonopin and a controversial anti-psychotic drug manufactured by pharmaceutical giant AstraZeneca, Seroquel, the Iraq war veteran was "suffering

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The MERCY News Report is an all-volunteer, not-for-profit project to record and broadcast news, announcements and information about medical cannabis in Oregon, across America and around the World.

For more information about the MERCY News, contact us.

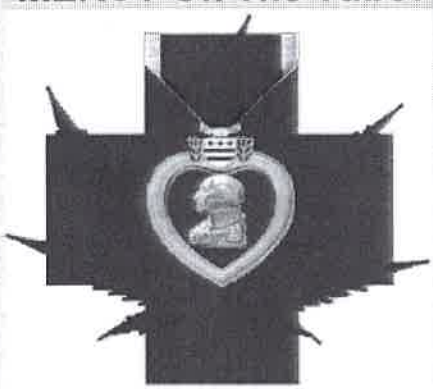
Via Snail Mail:

The MERCY News
1745 Capital St. NE,
Salem, Ore., 97301
503.363-4588

E-mail:
Mercy_Salem@hotmail.com

Or our WWW page:
www.MercyCenters.org
Check it out!

MERCY On The Tube!



in Salem, Oregon area thru Capital Community Television, Channel 23. Call In – **503.588-6444 - on Friday at 7pm,** or **See us on Wednesdays at 06:30pm, Thursdays at 07:00pm, Fridays at 10:30pm and Saturdays at 06:00pm. Visit – http://mercycenters.org/tv/**

About MERCY – The Medical Cannabis Resource Center

MERCY is a non-profit, grass roots organization founded by patients, their friends and family and other compassionate and concerned citizens in the area and is dedicated to helping and advocating for those involved with the Oregon Medical Marijuana Program (OMMP). MERCY is based in the Salem, Oregon area and staffed on a volunteer basis.

The purpose is to get medicine to patients in the short-term while working with them to establish their own independent sources. To this end we provide, among other things, ongoing education to people and groups organizing clinics and other Patient Resources, individual physicians and other healthcare providers about the OMMP, cannabis as medicine and doctor rights in general.

The mission of the organization is to help people and change the laws. We advocate reasonable, fair and effective marijuana laws and policies, and strive to educate, register and empower voters to implement such policies. Our philosophy is one of teaching people to fish, rather than being dependent upon others.

Want to get your Card? Need Medicine Now? Welcome to The Club!

MERCY – the Medical Cannabis Resource Center hosts Mercy Club Meetings **every Wednesday** at - **1745 Capital Street NE, Salem, 97301** – from **7pm to 9pm** to help folks get their card, network patients to medicine, assist in finding a grower or getting to grow themselves, or ways and means to medicate along other info and resources depending on the issue. **visit – www.MercyCenters.org - or Call 503.363-4588 for more.**

The Doctor is In ... Salem!

*** MERCY is Educating Doctors on signing for their Patients; Referring people to Medical Cannabis Consultations when their regular care physician won't sign for them; and listing all Clinics around the state in order to help folks Qualify for the OMMP and otherwise Get their Cards. For our Referral Doc in Salem, get your records to – 1745 Capital Street NE, Salem, 97301, NOTE: There is a $25 non-refundable deposit required. Transportation and Delivery Services available for those in need. For our Physician Packet to educate your Doctor, or a List of Clinics around the state, visit – www.MercyCenters.org - or Call 503.363-4588 for more.**

Other Medical Cannabis Resource NetWork Opportunities for Patients as well as CardHolders-to-be. * whether Social meeting, Open to public –or- Cardholders Only * visit: http://**mercycenters.org/events/Meets.html** ! Also Forums - a means to communicate and network on medical cannabis in Portland across Oregon and around the world. **A list of Forums, Chat Rooms, Bulletin Boards and other Online Resources for the Medical Cannabis Patient, CareGiver, Family Member, Patient-to-Be and Other Interested Parties. * Resources > Patients (plus) > Online > Forums** * Know any? Let everybody else know! Visit: http://**mercycenters.org/orgs/Forums.html** and Post It!

<continued from BILL TO ADD PTSD TO OMMP, page 1> the intolerable effects of pharmaceuticals, will be free of danger of arrest, prosecution, civil asset forfeiture, child protective service investigations, employment discrimination, medical discrimination, jail and forced drug treatment. PLEASE make contact and Join the Campaign today! It is urgent that patients speak up, take part and tell Oregon and the World – whether you use cannabis or know someone who does – cannabis is safe and effective in treating this condition, and that all patients deserve to use any medication that benefits them free of fear – especially in America. **For more, visit – mercycenters.org/action/camp_PTS.html**

What To Do? JOIN the CAMPAIGN!

At this point we are getting Everyone to lobby their Oregon State Senator, then Rep, in Support of S.B. 281. If they won't sign on to co-sponsoring, at least get a commitment to vote 'yes' each and every opportunity they have on the bill.

Phoning Your Legislator >> During a legislative session, you may call your legislators by contacting the WATS operator. **Within Salem, call – 503-986-1187. Outside of Salem, please call 1-800-332-2313.**

- Get your testimony / talking-points ready for Hearings and beyond. You can practice them on your Legislators! Also, in Letters-to-the-Editor (LTEs), **Visit the web page below for more Contact info,** sample letters, plus.

- Tell everybody you know. Make copies of this document and pass around all over the place.

- If you're not able to contact your Reps yourself, PLEASE feel free to contact us and we'll help get your testimony or talking points down and to them. Call **503.363-4588** (in the Salem area) or visit -

- mercycenters.org/action/camp_PTS.html -

more Contact Info -- To Find Your Legislator online, visit the link above. From there you can also **Write your legislator online**. By entering your location information, you will be automatically matched to your State Senator and Representative.

What is PTS(d)? How does Cannabis help?

Post-traumatic stress disorder (PTS(d)) is a psychiatric illness that can occur following a traumatic event in which there was threat of injury or death to you or someone else. Post-traumatic stress disorder can develop after someone experiences or witnesses an event that causes intense fear, helplessness or horror.

(PTS(d)) may occur soon after a major trauma, or can be delayed for more than six months after the event. When it occurs soon after the trauma it usually resolves after three months, but some people experience a longer-term form of the condition, which can last for many years. PTS(d) can occur at any age and can follow a natural disaster such as flood or fire, or events such as war or imprisonment, assault, domestic abuse, or rape. The terrorist attacks of Sept. 11, 2001, in the U.S. may have caused PTS(d) in some people who were involved, in people who witnessed the disaster, and in people who lost relatives and friends. These kinds of events produce stress in anyone, but not everyone develops PTS(d).

Many of us have heard about Post Traumatic Stress Disorder (PTSD) in one form or another. Either through direct contact with friends and family members, or through national media reports of veterans gone out of control. Regardless of the source, the fact is that PTSD is a chronic medical condition that is about to become an even larger national health issue as more and more of our veterans return from war with this debilitating disease.

Many people who are involved in traumatic events have a brief period of difficulty adjusting and coping, after which they improve and get better. In some cases, though, the symptoms can get worse or last for months or years. Symptoms can sometimes interfere with normal functioning, sleeping, and interpersonal relationships. This is often when the diagnosis of PTSD is made. Three groups of symptoms are required in order to make the diagnosis of PTSD:

(1) recurring re-experiencing of the traumatic event (troublesome memories, flashbacks, nightmares)

(2) avoidance to the point of having phobias of places, people, and experiences that are reminders of the traumatic event, and

(3) chronic physical signs of hyperarousal, such as insomnia, trouble concentrating, irritability, anger, blackouts, and difficulty remembering things.

PTSD sufferers often have emotional numbing that manifests as difficulty enjoying activities that they previously enjoyed, inability to look forward to future plans, and emotional distancing from loved ones. Conventional treatment for PTSD includes psychotherapy, learning coping skills, and family

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<continued from previous page> counseling. Medications such as anti-depressants, mood stabilizers, sleep aids, and anti-anxiety medicines are often prescribed. Some patients find relief with these treatments but it is well known in the medical community that PTSD is difficult to treat. The difficulty in treating PTSD is reflected in the variety of treatment modalities and prescription medications that have been used in attempts to reduce the severity of this condition.

Individual psychotherapy, Cognitive Behavioral Therapy, Eye Movement Desensitization and Reprocessing, and Group Therapy are among the non-medical treatments that have been tried with limited success. Anti-depressants, sedatives, and anti-psychotic medications have also been employed with limited benefit and serious side effects. Currently the U.S. FDA has approved two anti-depressants for the treatment of PTSD.

These are Zoloft and Paxil, both of which have limited efficacy and produce remission in only about one-quarter of patients. Such medications have also been found to double the risk of suicidal thinking and suicidal attempts in patients 24 years or less, which pertains to a large percentage of our returning young veterans.

Clearly, safer and more effective treatments are needed. PTSD not only results in an array of debilitating symptoms, but it also causes specific changes to certain areas of the brain that are responsible for the processing malfunctions that underlie this disease.

Activation of the primitive mammalian brain, or limbic system, during times of severe stress may play a role in optimizing survival. However, when this center of the brain becomes hyper-active and over-stimulated as a result of misguided neuro-plasticity, direct intervention at the cellular level is required.

The key to using Cannabis to treat PTSD lies in the distribution of naturally occurring Cannabinoid receptors in those areas of the brain that cause the symptoms associated with PTSD.

The presence of CB1 receptors in the hippocampus, amygdala, prefrontal cortex and anterior cingulate cortex supports the conclusion that Cannabinoids are involved in regulating anxiety, response to stressful situations, and the extinction of conditioned fear.

This conclusion is also supported by pre-clinical research showing that mice without CB1 receptors, or mice whose CB1 receptors have been rendered non-functional by chemical blockade, exhibit increased levels of anxious behavior and loss of the ability to extinguish previously learned fearful behaviors.

Conversely, the stimulation of CB1 receptors in the amygdala of rats has been shown to protect against the effects of stress on fear conditioning and avoidance behavior.

Early human studies using synthetic Cannabinoids have also shown that stimulation of the endogenous Cannabinoid system is significantly effective in reducing the occurrence of treatment-resistant nightmares in PTSD patients, along with subjective improvements in sleep time and sleep quality, and a reduction in daytime flashbacks.

These results stand in stark contrast to a recent study sponsored by the Veterans Administration National Center for PTSD, which showed that treatment with a second-generation anti-psychotic medication was ineffective at controlling symptoms in combat related PTSD patients.

"One often intractable problem for which cannabis provides relief is post-traumatic stress disorder (PTS(d)). I have more than 100 patients with PTS(d). Among those reporting that cannabis alleviates their PTS(d) symptoms are veterans of the war in Vietnam, the first Gulf War, and the current occupation of Iraq. Similar benefit is reported by victims of family violence, rape and other traumatic events, and children raised in dysfunctional families." -- David Bearman, MD; from PTS(d) and Cannabis: A Clinician Ponders Mechanism of Action.

PTSD And Medical Cannabis

Many PTSD sufferers have found good results with medical cannabis use, especially for relief of insomnia and anxiety. Cannabis can give PTSD patients a sense of well being and serenity, and it allows them to continue to function with little to no adverse side effects. PTSD patients often prefer medical cannabis over conventional medications, as it is a single medication that helps with a number of symptoms (as opposed to taking multiple medications for each separate symptom) , and the risk of medication interactions is removed. There are a number of researchers currently exploring the science behind the use of cannabis for treatment of PTSD and the results are promising.

A study from Israel in 2009 found that the cannabinoids (the medicinal compounds in the

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Another report from Israel in 2011 that PTSD patients using medical cannabis had "significant improvement in quality of life and pain, with some positive changes in severity of PTSD". These researchers, as part of their routine consulting work at MaReNA Diagnostic and Consulting Center in Bat-Yam, Israel, assessed the mental condition of 79 adult PTSD patients who had applied to the Ministry of Health in order to obtain a medical cannabis license. About half of the patients got their licenses and were studied for about two years.

The majority of these patients also used conventional medications. The daily dosage of cannabis was about 2-3 grams per day. The patients reported a discontinuation of or lowering of dosages of pain killers and sedatives. The group of patients that showed improvement were those that also suffered from pain and/or depression.

Researchers concluded that "results show good tolerability and other benefits, particularly in the patients with either pain and/or depression comorbidity". (Comorbity is the term used when a patient suffers from more than one condition). These results were presented at the 2011 Cannabinoid Conference in Bonn, Germany.

Many of our patients who suffer from PTSD report that medical marijuana has helped them by lessening anxiety, improving mood, improving sleep, eliminating nightmares and producing an overall improved sense of well-being. Many of these patients had tried and failed other medication treatments.

Taking Action

Fortunately, there is something that the People of the State of Oregon can do to improve the treatment options that are available to our stricken veterans and others who suffer this condition. A new bill, SB 281, was recently introduced into the Senate, which would add PTSD as a qualifying medical condition under Oregon's Medical Marijuana Program, the OMMP. Such an addition would make it possible for physicians to Qualify PTSD patients for the Program and allow them to use Cannabis free of fear from State and Local institutions.

For now, PTSD patients that live in states where medical use of cannabis is approved are using it to help decrease the debilitating symptoms of their illness and improve their quality of life. If you or a loved one is suffering from PTSD, you may find relief from the use of medical marijuana. New Mexico, California and Delaware already allow PTSD patients to utilize Medical Cannabis, and it is likely that others will also follow suit as more states recognize the benefit that this herbal botanical substance can bring. But nothing is going to happen unless we make it. Those of us who recognize the benefit of using Cannabis to treat PTSD need to make our voices heard in the Oregon Legislature.

It is time to put the "We" back in "We the People", by contacting your legislators and letting them know that we want this medical treatment made available to our deserving veterans.

For more information, Visit our page of info on PTS(d) and Cannabis, and tell everybody you know about it. And get them to write and spread the word, etc. >> **mercycenters.org/action/camp_PTS.html**

<continued from EXPERTS, ACTIVISTS, CITIZENS RALLY FOR PTSD, page 1 > Michael Krawitz, director of a Virginia-based group called Veterans for Medical Cannabis Access, said marijuana can help people suffering from PTSD find balance in their lives. Military suicides reached a record 349 last year.

"Although many disabled by post traumatic stress are able to access medical marijuana under the heading of pain, it is disrespectful to those veterans to not allow them to honestly claim their primary medical condition."

Krawitz goes on to add that "nationally it would very helpful to know who the pain patients are, and who are the post traumatic stress patients are. This is something that would help a lot towards removing the stigma of seeking treatment for post traumatic stress and certainly can help save lives."

20% of returning U.S. Veterans are being diagnosed with post-traumatic stress disorder and the high rate of suicide among service members punctuates the need for this valuable tool in the treatment of this disorder to be added. Jim Greig, a long time medical marijuana patient and advocate, is proud to help mobilize the Oregon Medical Marijuana community toward helping veterans achieve peace when they return from service. "They fought for us, now it's our duty to fight for them. It's the least we can do"

Todd Dalotto, Chair of the Advisory Committee on Medical Marijuana and the constituent requesting this bill responded, "we have attempted to make this change through the administrative rules

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<continued from previous page> process twice to no avail. Now we are bringing this to the steps of the capital in hopes of giving PTSD the hearing it deserves."

While also frustrated at the lack of progress, Jim and others believe this bill could be a litmus test on which legislators are more concerned with their personal stake than community good. "We are looking forward to seeing who votes against this obviously common sense legislation. It will shine a light on who is here for progress and who is here for personal gain."

We would like anyone who supports helping veterans to call their local representatives and come down to the hearing to show your support for our service members in need.

Who: Veterans for Medical Cannabis Access, Oregon Medical Marijuana Advocates
What: Hearing on Senate Bill 281, a bill to help reduce suffering
Where: Capitol building, Hearing Room A
When: Feb 7th, 3pm
Primary Press contact:
Michael Krawitz, 540 964 9809,
Email: miguet@november.org
Secondary Contact:
Sam Chapman, 503 396 9062,
Email: samuelclchapman@gmail.com

Medical Marijuana Helps Treat Veterans With PTSD

Regarding the editorial "Rx for Oregon pot laws" (Aug. 29): I am glad that The Oregonian editorial board thinks enough of this subject matter to dedicate an entire editorial just to respond to the excellent article by The Oregonian's Noelle Crombie ("Medical marijuana for PTSD?" Aug. 27). However, some of the claims are misleading, and the tone is offensive to the men and women who I serve as a veterans advocate. First, many or most of the veterans who are seen at VA hospitals for treatment of post-traumatic stress disorder are given a host of medications, including strong painkillers. So yes, many of those veterans are currently served by the provision in Oregon law that allows for chronic pain. But the inflated numbers of chronic pain patients on the Oregon Medical Marijuana Program have become a red flag to law enforcement officials who are actively seeking to dismantle the program and strip Oregonians of their protection to use cannabis under a doctor's supervision. ?

Cannabis is a well-proven pain medication that has stood the scrutiny of double-blind placebo-based studies, so it sounds reasonable when the editorial board calls for similar studies for PTSD. The lack of such studies was cited as a factor in Arizona's decision, but that isn't a reasonable demand, given that the federal government has blocked our every effort to conduct these studies. The editorial board, being well-read, must know how hard we have tried to study this indication. Instead of asking why Arizona shot down our efforts to add PTSD as a qualifying condition, I think the better question would have been, "Why did New Mexico approve cannabis for PTSD?" It did so after considering the available medical evidence. We have a preponderance of research on how cannabis works in the brain and body, the so called endocannabinoid receptor system, and studies that show how the various chemicals in cannabis work for the various symptoms that we call PTSD. However, this information is complicated, and it takes a medically trained individual to understand this evidence, which New Mexico had in place, but unfortunately, neither Arizona nor Oregon did.

Finally, I want to address the tone of this editorial and why it is so offensive to the men and women who have served our country honorably in the U.S. Armed Forces. The editorial board portrays the veterans as pawns who are nothing more than a flag draped around the shoulders of potheads trying to change the law. Veterans come down and testify in support of a change in the law because they know cannabis works first-hand. That's simple enough, but then why does my organization, made up of and for veterans, support the changing the law? Veterans For Medical Cannabis Access supports changing the law because we are losing 18 veterans per day to suicide, because the drugs the VA is throwing at these vets are ineffective and because we have taken the time to consider the evidence.

We believe that allowing for PTSD under the Oregon state medical marijuana law will help us better understand how many people in the program are really suffering from post-traumatic stress and are not primarily pain patients. We believe that, when this happens, it will go a long way to removing the stigma associated with seeking treatment for PTSD and will save lives. SOURCE = http://www.oregonlive.com/opinion/index.ssf/2012/08/medical_marijuana_helps_treat.html By Michael Krawitz. Michael Krawitz is the executive director of Veterans For Medical Cannabis Access, based in Elliston, Va.

<continued from PTSD AND CANNABIS, page 1 > Similar benefit is reported by victims of family violence, rape and other traumatic events, and children raised in dysfunctional families.

Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder —once referred to as "shell shock" or "battle fatigue" — is a debilitating condition that follows exposure to ongoing emotional trauma or in some instances a single terrifying event. Many of those exposed to such experiences suffer from PTSD. The symptoms of PTSD include persistent frightening thoughts with memories of the ordeal. PTSD patients have frightening nightmares and often feel anger and an emotional isolation.

Sadly, PTSD is a common problem. Each year millions of people around the world are affected by serious emotional trauma. In more than 100 countries there is recurring violence based on ethnicity, culture, religion or political orientation.

Men, women and children suffer from hidden sexual and physical abuse. The trauma of molestation can cause PTSD. So can rape, kidnapping, serious accidents such as car or train wrecks, natural disasters such as floods or earthquakes, violent attacks such as mugging, torture, or being held captive.

The event that triggers PTSD may be something that threatened the person's life or jeopardized someone close to him or her. Or it could simply be witnessing acts of violence, such as a mass destruction or massacre. PTSD can affect survivors, witnesses and relief workers.

Symptoms

Whatever the source of the problem, PTSD patients continually relive the traumatic experience in the form of nightmares and disturbing recollections. They are hyper-alert. They may experience sleep problems, depression, feelings of emotional detachment or numbness, and may be be easily aroused or startled. They may lose interest in things they used to enjoy and have trouble feeling affectionate. They may feel irritable, be violent, or be more aggressive than before the traumatic exposure.

Triggers

Seeing things that remind them of the incident(s) may be very distressing, which could lead them to avoid certain places or situations that bring back those memories. Anniversaries of a traumatic event are often difficult.

Ordinary events can serve as reminders of the trauma and trigger flashbacks or intrusive images. Movies about war or TV footage of the Iraqi war can be triggers. People with PTSD may respond disproportionately to more or less normal stimuli — a car backfiring, a person walking behind them. A flashback may make the person lose touch with reality and re-enact the event for a period of seconds, hours or, very rarely, days. A person having a flashback in the form of images, sounds, smells, or feelings experiences the emotions of the traumatic event. They relive it, in a sense. Symptoms may be mild or severe — people may become easily irritated or have violent outbursts. In severe cases victims may have trouble working or socializing. Symptoms can include:

- Problems in affect regulation —for instance persistent depressive symptoms, explosion of suppressed anger and aggression alternating with blockade and loss of sexual potency;
- Disturbance of conscious experience, such as amnesia, dissociation of experience, emotions, and feelings;
- Depersonalization (feeling strange about oneself), rumination;
- Distorted self-perception —for instance, feeling of helplessness, shame, guilt, blaming oneself, self-punishment, stigmatization, and loneliness;
- Alterations in perception of the perpetrator —for instance, adopting distorted beliefs, paradoxical thankfulness, idealization of perpetrator and adoption of his system of values and beliefs;
- Distorted relationship to others, for instance, isolation, retreat, inability to trust, destruction of relations with family members, inability to protect oneself against becoming a victim again;
- Alterations in systems of meaning, for instance, loss of hope, trust and previously sustaining beliefs, feelings of hopelessness;
- Despair, suicidal thoughts and preoccupation;
- Somatization —for instance persistent problems in the digestive system, chronic pain, cardiopulmonary symptoms (shortness of breath, chest pain, dizziness, palpitations).

Cannabis | Ample anecdotal evidence suggests that cannabis enhances ability to cope with PTSD. Many combat veterans suffering from PTSD rely on cannabis to control their anger, nightmares and even violent rage. Recent research sheds light on

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<continued from previous page> how cannabis may work in this regard.Neuronal and molecular mechanisms underlying fearful memories are often studied in animals by using "fear conditioning." A neutral or conditioned stimulus, which is typically a tone or a light, is paired with an aversive (unconditioned) stimulus, typically a small electric shock to the foot. After the two stimuli are paired a few times, the conditioned stimulus alone evokes the stereotypical features of the fearful response to the unconditioned stimulus, including changes in heart rate and blood pressure and freezing of ongoing movements. Repeated presentation of the conditioned stimulus alone leads to extinction of the fearful response as the animal learns that it need no longer fear a shock from the tone or light.

Fear Extinction | Emotions and memory formation are regulated by the limbic system, which includes the hypothalamus, the hippocampus, the amygdala, and several other structures in the brain that are particularly rich in CB1 receptors.

The amygdala, a small, almond-shaped region lying below the cerebrum, is crucial in acquiring and, possibly, storing the memory of conditioned fear. It is thought that at the cellular and molecular level, learned behavior —including fear— involves neurons in the baso-lateral part of the amygdala, and changes in the strength of their connection with other neurons ("synaptic plasticity"). CB1 receptors are among the most abundant neuroreceptors in the central nervous system. They are found in high levels in the cerebellum and basal ganglia, as well as the limbic system. The classical behavioral effects of exogenous cannabinoids such as sedation and memory changes have been correlated with the presence of CB1 receptors in the limbic system and striatum.

In 2003 Giovanni Marsicano of the Max Planck Institute of Psychiatry in Munich and his co-workers showed that mice lacking normal CB1 readily learn to fear the shock-related sound, but in contrast to animals with intact CB1, they fail to lose their fear of the sound when it stops being coupled with the shock.

The results indicate that endocan-nabinoids are important in extinguishing the bad feelings and pain triggered by reminders of past experiences. The discoveries raise the possibility that abnormally low levels of cannabinoid receptors or the faulty release of endogenous cannabinoids are involved in post-traumatic stress syndrome, phobias, and certain forms of chronic pain. This suggestion is supported by our observation that many people smoke marijuana to decrease their anxiety and many veterans use marijuana to decrease their PTSD symptoms. It is also conceivable, though far from proved, that chemical mimics of these natural substances could allow us to put the past behind us when signals that we have learned to associate with certain dangers no longer have meaning in the real world.

What is the Mechanism of Action?

Many medical marijuana users are aware of a signaling system within the body that their doctors learned nothing about in medical school: the endocan-nabinoid system. As Nicoll and Alger wrote in "The Brain's Own Marijuana" (Scientific American, December 2004):

"Researchers have exposed an entirely new signaling system in the brain: a way that nerve cells communicate that no one anticipated even 15 years ago. Fully understanding this signaling system could have far-reaching implications. The details appear to hold a key to devising treatments for anxiety, pain, nausea, obesity, brain injury and many other medical problems."

As a clinician, I find the concept of retrograde signaling extremely useful. It helps me explain to myself and my patients why so many people with PTSD get relief from cannabis.

We are taught in medical school that 70% of the brain is there to turn off the other 30%. Basically our brain is designed to modulate and limit both internal and external sensory input.

The neurotransmitter dopamine is one of the brain's off switches. The endocannabinoid system is known to play a role in increasing the availability of dopamine. I hypothesize that it does this by freeing up dopamine that has been bound to a transporter, thus leaving dopamine free to act by retrograde inhibition.

By release of dopamine from dopamine transporter, cannabis can decrease the sensory input stimulation to the limbic system and it can decrease the impact of over-stimulation of the amygdala.

I postulate that exposure to the PTSD-inducing trauma causes an increase in production of dopamine transporter. The dopamine transporter ties up much of the free dopamine. With the brain having lower-than-normal free dopamine levels, there are too many neural channels open, the mid-brain is overwhelmed with stimuli and so too is the

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<continued from previous page> cerebral cortex. Hard-pressed to react to this stimuli overload in a rational manner, a person responds with anger, rage, sadness and/or fear.

With the use of cannabis or an increase in the natural cannabinoids (anandamide and 2-AG), there is competition with dopamine for binding with the dopamine transporter and the cannabinoids win, making a more normal level of free dopamine available to act as a retrograde inhibitor.

This leads to increased inhibition of neural input and decreased negative stimuli to the midbrain and the cerebral cortex. Since the cerebral cortex is no longer overrun with stimuli from the midbrain, the cerebral cortex can assign a more rational meaning and context to the fearful memories.

I have numerous patients with PTSD who say "marijuana saved my life," or "marijuana allows me to interact with people," or "it controls my anger," or "when I smoke cannabis I almost never have nightmares." Some say that without marijuana they would kill or maim themselves or others. I have no doubt that cannabis is a uniquely useful treatment. What remains is for the chemists to determine the precise mechanism of action. SOURCE: http://davidbearmanmd.com/docs/ptsdccrmg.htm

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<continued from ISRAEL SOOTHES TERRORIST TRAUMA WITH MARIJUANA, page 1 > fight post-traumatic stress disorder. Raphael Mechoulam of Jerusalem's Hebrew University, the chief researcher behind a project he described as a world-first, said the chemical could trick the brain into suppressing unwanted memories.

For soldiers haunted by flashbacks of traumatic battle experiences, he said, the drug, administered in liquid form, could be the answer to hundreds of sleepless nights.

"It helps them sleep better, for one thing. These people often wake up from nightmares, and experience sweating or hallucinations," Mechoulam told Reuters.

The army said civilian and military committees had approved the experiment.

Millions of people, mainly war veterans, suffer from post-traumatic stress disorder, a psychiatric condition that can develop after experiencing life-threatening events.

MEDICAL USES

Doctors already use so-called medical marijuana to treat nausea among cancer patients, appetite loss among AIDS sufferers and neurological disorders such as Tourette's Syndrome, epilepsy and multiple sclerosis. However, Mechoulam said this is the first time THC would be used to treat post-traumatic stress.

Some of the soldiers slated to take part in the experiment came down with the disorder after experiences confronting a Palestinian uprising which began in 2000. Others are veterans of past Israeli-Arab wars.

Symptoms can be eased by painkillers and psychological treatment but THC could speed up the process, or at least reduce the number of traumatic episodes, said Mechoulam. He was among a group of researchers that first isolated THC in 1964.

"If given two or three times a day, it lasts about six hours at a time," Mechoulam said at his office in the university's School of Pharmacy.

The effects of THC on stress were first discovered by Germany's Max Planck Institute of Psychiatry in 2002. Scientists tested it on mice and found THC lessened their fear of electric shocks, because it suppressed their memory of them.

PERMITS REQUIRED

Israel's army usually frowns on cannabis and soldiers caught smoking it can expect to be stripped of their ranks or thrown into military jail. Special government authorisation was needed for the experiment.

"A medical permit is needed for what is called 'compassionate use' of marijuana, which means it's used to treat illnesses ... when nothing else seems to work," Mechoulam said.

Smoking marijuana, as an estimated eight percent of Israelis aged 18-40 do, does not act as a medicine on its own, he said.

"The drug is only approved for medical use, and its active curing ingredient, THC, must be isolated and used in medical treatment," he said.

Instead of smoking the drug, soldiers will drink THC dissolved in olive oil.

"We prefer to give it under the tongue rather than through a pill because it's more effective. I hope (the drug) will help at least part of the time, so they can sleep better more often," Mechoulam said.

If successful, the treatment could be tried elsewhere. The U.S. National Centre for Mental Health says that 30 percent of Americans who

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<continued from previous page> spent time in war zones have experienced the disorder, dubbed "shell shock" by veterans of World War One.

Surveys conducted by the Walter Reed Army Institute of Research in Washington in 2003 found that nearly a fifth of U.S. soldiers returning from the war in Iraq may suffer from the disorder.

A million Vietnam War veterans are believed to have developed it as well.

A New York Academy of Medicine poll found that levels of post-traumatic stress disorder doubled among New York City residents a few weeks after the September 11 attacks. http://newsmine.org/content.php?ol=war-on-terror/israel/israel-to-soothe-soldiers-with-marijuana.txt

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<continued from ARE VETERANS BEING GIVEN DEADLY COCKTAILS TO TREAT PTSD?, page 1 > from incontinence, severe depression [and] continuous headaches," according to his widow, Janette Layne. Soon he had tremors. " ... [H]is breathing was labored [and] he had developed sleep apnea," Layne said.

A potentially deadly drug manufactured by pharmaceutical giant AstraZeneca has been linked to the deaths of soldiers returning from war. Yet the FDA continues to approve it . . . while denying Medical Cannabis (Marijuana)

Janette Layne, who served in the National Guard during Operation Iraqi Freedom along with her husband, told the story of his decline last year, at official FDA hearings on new approvals for Seroquel. On the last day of his life, she testified, Eric stayed in the bathroom nearly all night battling acute urinary retention (an inability to urinate). He died while his family slept. Sgt. Layne had just returned from a seven-week inpatient program at the VA Medical Center in Cincinnati where he was being treated for post-traumatic stress disorder (PTSD). A video shot during that time, played by his wife at the FDA hearings, shows a dangerously sedated figure barely able to talk.

Sgt. Layne was not the first veteran to die after being prescribed medical cocktails including Seroquel for PTSD. In the last two years, Pfc. Derek Johnson, 22, of Hurricane, West Virginia; Cpl. Andrew White, 23, of Cross Lanes, West Virginia; Cpl. Chad Oligschlaeger, 21, of Roundrock, Texas; Cpl. Nicholas Endicott, 24, of Pecks Mill, West Virginia; and Spc. Ken Jacobs, 21, of Walworth, New York have all died suddenly while taking Seroquel cocktails. Death certificates and other records collected by veteran family members show that more than 100 similar deaths have occurred among Iraq and Afghanistan combat vets and other military personnel, many of whom took PTSD cocktails that included Seroquel and other antipsychotics, antidepressants, mood stabilizers, sleep inducers and pain and seizure medications. Since the 2008 publication of "The Battle Within," the Denver Post's expose of a "pharmaco-battlefield" in Iraq, in which troops were found to be routinely propped up on antidepressants, the Department of Defense has sought to curb the deployment of troops with mental health problems to combat zones. The DOD has also stepped up monitoring of soldiers who have been medicated, according to the Hartford Courant, and with good reason: 34 percent of the 935 active-duty soldiers who made suicide attempts in 2007 were on psychoactive drugs.

But the U.S. Army's Warrior Care and Transition Office reports that soldiers are dying after coming home, many in Warrior Transition Units that were established in 2007 to prepare wounded soldiers for a return to duty or civilian life. According to the Army Times, between June 2007 and October 2008, 68 such veteran deaths were recorded -- nine were ruled suicides, six are pending investigation and six were from "combined lethal drug toxicity." Thirty-five were termed "natural causes." The mysterious deaths -- and an alarming track record -- have cast renewed scrutiny on Seroquel. Although it has not been approved for treatment of PTSD, Pentagon purchases of Seroquel nearly doubled between 2003 and 2007. Elspeth Ritchie, medical director of the Army's Strategic Communications Office told the Denver Post the drug is "increasingly utilized as an adjunct for PTSD."

The Seroquel Scandals

It would be hard to find a drug with a wider fraud footprint than Seroquel -- at least one that's still on the market. One of its first backers, Richard Borison, former chief of psychiatry at the Charlie Norwood VA Medical Center, lost his medical license, was fined $4.26 million and went to prison for a swindle involving Seroquel's original clinical studies.

AstraZeneca's U.S medical director for Seroquel, Dr. Wayne MacFadden, had sexual affairs with two different women doing research on Seroquel, a study investigator at London's Institute of Psychiatry and a Seroquel ghostwriter at the

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<continued from previous page> marketing firm, Parexel. According to court documents, MacFadden even joked about the conflicts of interest with one paramour. Last year, the Chicago Tribune and ProPublica reported that Chicago psychiatrist Michael Reinstein, who wrote 41,000 prescriptions for Seroquel, received $500,000 from AstraZenenca. Meanwhile, a report in the Minneapolis Star Tribune discredited influential studies by AstraZeneca-funded Charles Schulz, MD, chief of psychiatry at the University of Minnesota.

Seroquel was even promoted by the disgraced former chief of psychiatry at Emory University School of Medicine, Charles Nemeroff, who was accused by congressional investigators of failing to report $1 million in pharmacological income -- in AstraZeneca-funded continuing medical education courses. And until a Philadelphia Inquirer expose last year, Florida child psychiatrist Jorge Armenteros, a paid AstraZeneca speaker, was chairman of the FDA Psychopharmacologic Drugs Advisory Committee responsible for recommending Seroquel approvals.

In a trial that began in New Jersey last month, AstraZeneca is defending itself in one of 26,000 lawsuits, denying that Seroquel caused diabetes in Vietnam veteran Ted Baker, who was prescribed Seroquel for PTSD. Last year, London-based AstraZeneca agreed to pay $520 million last year to settle suits pertaining to clinical trials and illegal Seroquel marketing. Yet, instead of reconsidering a drug linked to an alarming number of deaths and marred by at least eight corruption scandals in 13 years -- Seroquel was even prescribed to a 4-year-old Massachusetts girl, Rebecca Riley, before her death -- the FDA continues to issue approvals for new uses for Seroquel.

Seroquel was first approved to treat schizophrenia in 1997. The FDA subsequently expanded its use, approving it for "acute manic episodes associated with Bipolar I Disorder" in 2004, "major depressive episodes associated with Bipolar Disorder" in 2006 and "maintenance treatment for Bipolar I Disorder" in 2009. Last April, the FDA opened the door to prescribing Seroquel to people who have not even been diagnosed with schizophrenia or bipolar disorder, approving Seroquel as "an additional therapy in patients suffering from depression who do not respond adequately to their current medications."

Not that Seroquel needed a boost; its $4.9 billion in sales in 2009 signals usage far beyond the 1 percent of the population with schizophrenia and the 2.5 percent with bipolar disorder.

North Carolina's Medicaid spends $29.4 million per year on Seroquel -- more than any other drug, according to the Charlotte News and Observer. Most recently, in December, Seroquel was quietly approved for children between the ages of 10 and 17 who are diagnosed with bipolar mania and children between 13 and 17 with schizophrenia. It was a stealth end-of-the-year decision, announced not by the FDA itself but by AstraZeneca. (The change was reflected in an entry on Seroquel's FDA approval page that notes "Patient Population Altered.")

'When six people die from peanut butter we shut the factories down'

With veteran deaths in the news, family members hope the unsolved mysteries surrounding Seroquel-linked deaths of soldiers could finally force AstraZeneca to take responsibility for its product. Stan and Shirley White lost two sons to war. Robert White, a staff sergeant, was killed in Afghanistan in 2005, when his Humvee was hit by a rocket-propelled grenade. But the death of Robert's younger brother Andrew, who survived Iraq only to succumb to a different battle, is in some ways "harder to accept" says his father.

Like Eric Layne, Andrew was taking Seroquel, Klonopin, Paxil and prescription painkillers for PTSD after returning home from his Iraq tour. Like Layne, he deteriorated physically and mentally on the prescribed cocktail until experiencing a sudden, inexplicable death. "When six people die from peanut butter we shut the factories down, but at least 87 military men have died in the past six years on Seroquel and similar drugs and no alarm sounds," Stan White told AlterNet.

When White informed his representatives, Sen. Jay Rockefeller and Rep. Shelley Moore Capito of West Virginia, of Andrew's unexplained death, they were helpful, as was Tammy Duckworth, the VA's Assistant Secretary of Public and Intergovernmental Affairs. But packets White distributed to news organizations, Congress and the White House were acknowledged only by First Lady Michelle Obama, who forwarded hers to the VA, and Sen. Daniel Akaka of Hawaii, who chairs the Senate Committee on Veterans Affairs. In letters to White, both remarked that therapy, not just drugs, should be part of PSTD treatment. A 2008 investigation by the VA's Office of Inspector General into the deaths of Andrew White and Eric Layne was inconclusive, finding "no apparent signal to indicate increased

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THE MERCY NEWS REPORT
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<continued from ARE VETERANS BEING GIVEN DEADLY COCKTAILS TO TREAT PTSD?, previous page> mortality for patients taking the combination of Quetiapine, Paroxetine, and Clonazepam when compared with patients taking other similar combinations of psychotropic medications."

"The direct impact of non-prescribed medications in these patient deaths cannot be determined," investigators concluded. SSGT (Ret) Tom Vande Burgt's Army National Guard company was stationed outside Baghdad at the same time that Eric and Janette Layne were serving, in 2004 and 2005, but his story has a happier ending.

Like White and Layne, he was prescribed a PTSD cocktail that included Seroquel, along with Klonopin and the antidepressant Celexa, but as tremors, sleep apnea and enuresis (bedwetting) developed, his wife, Diane, questioned the high dosage, off-label use of a bipolar drug like Seroquel. After her husband was taken off his meds abruptly and it was discovered there were no records of the drugs being sent to him (or the doses) by a VA primary care doctor -- mistakes that "could have cost him his life," according to Diane -- the Vande Burgts filed a complaint with the VA Office of the Inspector General. It, however, found no wrongdoing, concluding the treatment was within the VA's "standard of care." Under the care of a private psychiatrist, Vande Burgt's cocktail only grew, but eventually he went off the drugs with the help of his doctor, and his sleep apnea, urinary problems, tremors, weight gain, depression, mood swings, lethargy and paranoia subsided.

The way Vande Burgt describes it, Seroquel "drugs vets up" to such a degree that they "don't dream at all." "It wipes out the hypervigilance factor," he told AlterNet via e-mail. "But as soon as the meds are decreased, the hypervigilance and anger and trust issues come raging back, worse than before."

Now the Vande Burgts, who live in Charleston, West Virginia, coordinate a PTSD support group and a Web site (http://www.lestweforgetptsdsupport.org/) that emphasize nondrug solutions and the need for soldiers and veterans to have an advocate present during care for PTSD and traumatic brain injury to ensure clear communication between doctors and patient. Tom also uses the services of Give an Hour, a program in which local therapists donate one hour of therapy a week to veterans, soldiers and families dealing with PTSD. "There is no cure for PTSD, especially in a magic pill," the Vande Burgts told AlterNet. "Good old-fashioned talk therapy and support groups are tried and true ... all the others are just quick fixes that add to the problem, not addressing the root of the problem."

AstraZeneca: Too Big to Regulate?

Seroquel's ability to cause cardiac arrest and sudden death is well-known. A search of the U.S. National Library of Medicine database yields 20 articles linking "Seroquel" and "sudden death," 24 linking "Seroquel" and "QT prolongation" (a heart disturbance that can led to death), 55 linking "Seroquel" and "toxicity," as well as such terms as "cardiac arrest" and "death."

A 2005 article in the Journal of Forensic Sciences says Seroquel was detected in 13 postmortem cases and the cause of death in three, observing that "little information exists regarding therapeutic, toxic, and lethal concentrations." A 2003 article in CNS Drugs reports, "some patients have died while taking therapeutic doses," of atypical antipsychotics like Seroquel and that "toxicity may be increased by coingestion of other agents."

"The second-generation antipsychotics were termed 'atypical' based on misconceptions of enhanced safety and efficacy," Dr. Grace Jackson, a former Navy and Veterans Administration psychiatrist and author of Drug-Induced Dementia and Rethinking Psychiatric Drugs, told AlterNet in an interview. ("Atypical" antipsychotics supposedly function differently from "typical" antipsychotics and are thought to cause fewer side effects.) "In 2002 and 2003, according to a VA study published in 2007, 20 to 30 percent of demented veterans [veterans with brain conditions including organic and psychiatric psychosis] died within the first 12 months of beginning treatment with an antipsychotic," said Jackson. "When you combine antipsychotics with antidepressants, benzodiazepines and antiepileptics -- especially in Iraq/Afghanistan veterans who have likely sustained traumatic brain injuries -- you have potential lethality from sleep apnea, endocrine anomalies and opioid intoxication."

Seroquel's record of causing sudden cardiac death was on the docket at last year's FDA hearings, which Stan and Shirley White and Janette Layne attended. According to Dr. Wayne Ray, who testified before the FDA's Psychopharmacologic Drugs Advisory Committee, one study involving 93,300 users of antipsychotic drugs -- half of whom were on atypical antipsychotics -- showed that such users were at no less than double the risk of a "sudden, fatal, pulseless condition, or collapse ... consistent with a ventricular tachyarrhythmia occurring in the absence of a known, non-cardiac cause." --- Click here > http://www.alternet.org/story/145892/are_veterans_being_given_deadly_cocktails_to_treat_ptsd < for the full story, links and comments.