

Chapter 8: The Debilitating Medical Conditions Advisory Panel



Background for adding new conditions

Among the many provisions of the Oregon Medical Marijuana Act (OMMA) is one for petitioning to add new conditions, which if approved would then allow Cannabis to be used to treat that condition. It reads:

Any person may submit a petition to the Division requesting that a particular disease or condition be included among the diseases and conditions that qualify as debilitating medical conditions under ORS 475.302. (ORS 475.334)

Petitions for new conditions

The Oregon Health Division (OHD) convened an *advisory panel* in February of 2000 to review nine petitions requesting the inclusion of eight new conditions on the list of debilitating medical conditions. (Two petitions were submitted for PTSD.) All nine petitions were submitted by either the patient or a family member of a person suffering from the disorder in question. These petitions, all for the inclusion of psychiatric conditions, were:

- schizophrenia,
- schizoaffective disorder,
- bipolar disorder,
- anxiety with depression,
- post traumatic stress disorder (2 petitions),
- insomnia with anxiety,
- agitation associated with Alzheimer’s disease, and
- attention deficit disorder.

The petition to include agitation related to Alzheimer’s disease was submitted by the wife of the man suffering from this disease. Two of the petitioners were already registered with the Health Division’s Medical Marijuana Program for *physical* ailments but maintained that Cannabis also helped their *psychiatric* disorder.

Panel members

The advisory panel included four physicians, two nurses, a medical Cannabis patient, a patient advocate, the Medical Marijuana Program manager and a panel facilitator. Four panel members were original framers and proponents of the OMMA.



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The members of this panel included: Richard Bayer MD, one of the two Chief Petitioners to Ballot Measure 67 (OMMA) and its primary spokesperson; Joshua Boverman MD, a psychiatrist practicing at OHSU; Edward Glick RN, a psychiatric nurse and medical Cannabis proponent; Teresa Keane RN, PNP, as an *ad hoc* member; Amy Klare, a consumer advocate who was also centrally involved in the OMMA campaign; Martin Lahr MD, representing Grant Higginson MD, the State Health Officer; Stormy Ray, a patient and second Chief Petitioner for Ballot Measure 67 and Kathleen Weaver MD. Neither Drs. Weaver, Lahr, Boverman nor Nurse Keane had prior experience with the OMMA.

The facilitator of the committee was Daniel Harris PhD. Kelly Paige, the Medical Marijuana Program Manager was also present and acted as a resource person and panel coordinator. Ms. Paige and Dr. Harris were not voting members.

The advisory panel meetings

The advisory committee met three times in four weeks with half, or all-day meetings. The first meeting on February 14 was taken up by a description of the panel’s responsibility and function, including the *Charge* issued by the State Health Officer, Dr. Grant Higginson:

After thoroughly and objectively reviewing and evaluating the available evidence according to an agreed upon protocol in common, each member of this Panel is to advise the State Health Officer regarding whether or not the petitioned condition(s) should be included in the definition of “debilitating medical condition” for purposes of the Oregon Medical Marijuana Act.



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During the first meeting the group discussed the parameters for evaluation, including what criteria justified the decision. This decision-making process and documentation included “Duties and Responsibilities of Expert Panel Membership,” the “*Charge*,” “Evidence Grading,” and “Evaluation Criteria.” Each of these described a different evaluation scheme—some based upon scientifically rigorous investigative protocols, others reflecting the evaluator’s assessment of the *evidentiary* value. Thick packets of information were handed out including numbered copies of the actual petitions and supporting documentation. The collected research grew from meeting to meeting until it comprised 400 pages—some of it unrelated to the issue. (Strict confidentiality was maintained for medical files and duplication of patient petitions was prohibited.)

At the first meeting, personal positions emerged. Discussion to clarify the actual meaning of “objective” evaluation criteria culminated in the direction by the facilitator, Mr. Harris, that each member should evaluate the petitions based upon what *s/he believed* to be an objective standard. This evaluation could be based upon clinical research,

medical experience, patient testimony and/or historical observation. Significantly, panel members were repeatedly advised to evaluate the petition, not the patient, since the determination would be a medical standard that required sufficient basis.

The second all-day meeting on March 20 was spent listening to the testimony from petitioners and experts. It was unclear to some in the first meeting that “experts” (other than the petitioners themselves) would be presenting testimony at the second. It was with some surprise that six speakers representing OHSU, National Alliance for the Mentally Ill (NAMI), The Oregon Office of Mental Health Services, the Oregon Office of Alcohol and Drug Abuse Programs and the Oregon Psychiatric Association, testified in complete opposition to all petitions. These opinions were countered by one lone speaker from the Office of Consumer Technical Assistance who suggested that affective disorders (like bipolar and anxiety) were valid uses of Cannabis, but that psychosis was not. This speaker was the only person to differentiate mood disorders from thought disorders in his comments or recommendations. The arguments in opposition ranged from descriptions of the deleterious effects of Cannabis on substance use disorders, to a claim that there was not a sufficient clinical research base to justify their inclusion. The most extreme example of this position, retreating into pure and unfounded opinion, was:

Typically, regular users of marijuana have an untreated mental illness... Calling marijuana medicine for mental illness is pure newspeak, convincingly calling a thing it's opposite to baffle and confound.

Jason Renaud, Executive Director of NAMI of Multnomah County (written and verbal comments, March 20, 2000.)

The appearance of “experts” nearly all opposed to psychiatric inclusions, raised questions as to how expert testimony was solicited. (In an attempt to not politicize the proceedings, the Division decided to not hold public hearings. This was predicated on the fact that confidential medical information was being discussed.) At the members’ urging, Dr. Harris allowed an additional week to accumulate additional expert testimony. Thus, the information base continued to expand until the end.

During the afternoon all of the petitioners were heard from, five in person and three by telephone. Their testimony was unpolished yet sincere as they each described significant improvement in their psychiatric symptoms from Cannabis use. The petitioner with bipolar disorder described that he had remained out of the hospital for 11 years because Cannabis controlled his mood swings. The two petitioners suffering from PTSD both described Cannabis’ antianxiety effects that diminished the intensity of traumatic life-events. The petitioner for Alzheimer’s agitation described in detail her husbands escalating confusion and anxiety and the clear sedative effect which smoking Cannabis



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created. The petitioner for attention deficit disorder described his medical condition as profoundly incapacitating to the point where he suffered from mental collapse from a racing mind. This syndrome prevented him from engaging in the computer programming work that made his living. Cannabis controlled the debilitating nature of these symptoms and allowed him to engage in complex cognitive functioning. All the petitioners described the failure of pharmaceuticals to control their symptoms. Each person had relied heavily on sedatives—particularly benzodiazapines like Ativan and Xanax—in an unsuccessful attempt to control symptoms.

Predictably, the testimony was persuasive to proponents on the panel and was not persuasive to opponents. Few minds were changed, and the committee resumed discussions about the “weight” that should be given to patient reports.

The third meeting of the Debilitating Medical Conditions advisory panel was held on March 27, 2000, seven days after the patient and expert testimony meeting. It consisted of review of the process and discussion of panel-member conclusions. Members had accumulated around ten pages of additional written testimony in support of Cannabis’ psychiatric use. This information was added to the evidence base. These papers consisted mostly of statements in support of inclusion by nationally known medical Cannabis experts, notably, Drs. Lester Grinspoon and Tod Mikuriya, and Nurse Mary Lynn Mathre.

At this meeting, concern was also expressed about the limited time that was allowed to process and write about the evidence. (The advisory committee was pushed to complete work in barely four weeks. The OHD took more than two months to make a determination.) The disparate readings of the evidence corresponded closely to the ingrained prejudices brought to the task by some members. Skeptical doctors remained skeptical, citing a lack of research evidence. Proponents emphasized humanitarian and historical evidence. The group did, however, achieve some uniformity in conclusions. Of the eight panel members, five recommended adding mood disorders like depression or anxiety to the list of covered conditions. Two physician members suggested the complete rejection of all petitions and one physician recommended that agitation related to Alzheimer’s disease should be the only addition to the list of covered conditions, for compassionate reasons.

The OMMA was written to include both *symptoms* and *diseases* in the list of debilitating medical conditions. Thus, the task-force members had the prerogative to recommend for (or against) inclusion of a *disease* condition or a *symptom* classification. Doctor Bayer was perhaps the strongest proponent of symptom-based listing versus disease-based listing. He suggested that including *affective* symptoms onto the list would give the greatest possible flexibility to physicians. (Affective symptoms are anxiety, agitation, hopelessness, and sadness among others.)

**Panel Member Recommendations (and Strength of Recommendations)
for Each Petition to Add [Yes/as Disease or Symptom] or Not Add [No] a Condition
to the List of Debilitating Medical Conditions**

Petitioned -for Condition	Panel Member (*)							
	Rick Bayer, MD	Joshua Boverman, MD	Ed Glick, RN	Teresa Keane, RN PMHNP	Amy Klare	Martin Lahr, MD	Stormy Ray	Kathy Weaver, MD
Schizophrenia	No (Strong)	No (Weak)	Yes/D	No (Weak)	No (Weak)	No (Strong)	Yes	No (Strong)
SchizoAffective Disorder	No (Strong)	No (Weak)	Yes/D	No (Weak)	No (Weak)	No (Strong)	Yes	No (Strong)
Bipolar Disorder	Yes/S (Weak)	No (Inc)	Yes/D	Yes/D&S (Strong)	Yes/S	No (Inc)	Yes	No (Strong)
Anxiety (with Depression ⁽⁺⁾)	Yes/S (Strong)	No (Inc)	Yes/D	Yes/D&S (Strong)	Yes/D (Strong)	No (Inc)	Yes	No (Strong)
Post Traumatic Stress Disorder	No (Weak)	No (Inc)	Yes/D	Yes/D (Strong)	Yes/D (Strong)	No (Inc)	Yes	No (Strong)
Insomnia (with Anxiety)	Covered under Anxiety	No (Inc)	Yes/D	Yes/D&S (Strong)	Yes (Strong)	No (Inc)	Yes	No (Strong)
Attention Deficit Disorder	No	No (Inc)	Yes/D	Yes/D (Weak)	Yes/D (Strong)	No (Inc)	Yes	No (Strong)
Agitation of Alzheimer's Disease	AD - No Agitation Yes/S	No (Inc)	Yes/D & S	Yes/S (Weak)	Yes/D (Strong)	Yes/D (Weak)	Yes	No (Strong)

(*) Teresa Keane, PMHNP, participated in the panel's process and served as an unofficial alternate member.

(+) Dr. Bayer broke anxiety with depression into 2 separate conditions and completed a separate worksheet for each one. His recommendation for depression is Yes/S (Strong).

**(from Medical Marijuana Advisory Panel Report to
the Oregon Health Division - April 14, 2000)**



...on June 15, the OHD released its conclusions. The list of Debilitating Medical Conditions would immediately be expanded to include “agitation related to Alzheimer’s disease.”

As can be seen in the table of conclusions (previous page), individual panel recommendations varied widely. Doctors Weaver and Boverman rejected all petitions. Nurse Glick and patient Ray approved all petitions. Doctor Lahr (the State Health Officer’s designee) rejected all petitions except *agitation due to Alzheimer’s disease*. Patient advocate Klare and nurse Keane made identical recommendations, suggesting the inclusion of all conditions except *schizophrenia* and *schizoaffective disorder*. Doctor Bayer rejected all of the *conditions* but supported the inclusion of *symptoms* of anxiety (with depression) bipolar disorder and agitation of Alzheimer’s disease.

Final written recommendations were collected on March 29 and forwarded to the State Health Officer a few days later with a final report. (This report, along with some panel-member individual recommendations is available on the Oregonians for Medical Rights website: [http:// www.teleport.com/~omr/.](http://www.teleport.com/~omr/))

Ten weeks later, on June 15, the OHD released its conclusions. The list of Debilitating Medical Conditions would immediately be expanded to include “agitation due to Alzheimer’s disease.” This corresponded exactly to Dr. Lahr’s (the State Health Officer designee) suggestion. All other conditions were rejected with Dr. Higginson citing a “lack of solid clinical research” showing efficacy and safety. In his comments Doctor Higginson also stated:

While there is a lack of sufficient science-based evidence to support adding [a]nxiety to the list at this time, the Health Division is going to further study this issue by conducting a physician survey and by looking into the possibility of supporting clinical trials.

(Oregon Department of Human Services press release, June 14, 2000)

(As of December 2000, neither the physician survey nor clinical trial has been implemented.)

This concluded the process of determining inclusions to the OMMA that had begun with nine psychiatric petitions.

Psychiatric conditions will one day be included on the list of covered conditions. This will require new (research) evidence showing usefulness. Nevertheless, the Debilitating Medical Conditions Advisory Panel broke new ground by, for the first time, asserting that Cannabis has psychiatric uses. This new medical and legal standard will hopefully limit the prosecution of Cannabis-using patients in Oregon who claim psychiatric benefit.

The “risk/benefit” analysis for psychiatric use

The research base used by the Debilitating Medical Conditions Advisory Panel to evaluate psychiatric conditions consisted of a large volume of material. The fact that all of the submitted petitions dealt with psychiatric use, in itself emphasizes the understanding among



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Neuropsychiatric Conditions Reported Helped by Cannabis
International Classification of Diseases 9 - CM -1996
1990 - 1999

Tod H. Mikuriya, M.D.

Psychotherapeutic: Antidepressant/Anxiolytic

Senile Dementia	290.0
Delerium Tremens	291.0
Organic Affective Syn.	293.83
Organic Brain Syn., chronic	294.8
Schizophrenia(s)	295.x
Schizophrenic Episode, acute	295.4
Schizoaffective Disorder	295.7
Mania	296.0
Manic Disorder, recurrent	296.1
Menopausal Depression	296.2
Major Depression, Recurrent	296.3
Bipolar Disorder, manic	296.4
Bipolar Disorder, depressive	296.5
Bipolar Disorder	296.6
Bipolar Disorder, unspec.	296.7
Paranoid State, simple	297.0
Anxiety Disorder	300.0
Panic Disorder	300.01
Hysteria	300.1
Obsessive Compulsive Dis.	300.3
Dysthemic Disorder	300.4
Neurasthenia	300.5
Paranoid Personality Dis.	301.0
Transient Sleep Dis.	307.41
Persistent Insomnia	307.42
Psychogenic Pain, unspec.	307.80
Tension Headache	307.81
Psychogenic Pain	307.89
Acute Stress Reaction	308.3
Depressive Reaction, prolonged	309.1
Post Traumatic Stress Dis.	309.81
Adjustment Reaction, other	309.89
Adjustment Reaction, unspec	309.9
Pschogenic PAT	316.0
Narcolepsy	347.0
Insomnia	780.52
Chronic Fatigue Syndrome	780.7

Harm reduction substitute

Alcoholism	303.0
Opiate Dependence	304.0
Sedative Dependence	304.1
Cocaine Dependence	304.2
Amphetamine Dependence	304.4
Drug Dependence, unspec.	304.9
Alcohol Abuse	305.0
Tobacco Dependence	305.1

Antispasmodic Anticonvulsant

Post Polio Syndrome	138.0
Psychogenic Pylorospasm	306.4
Bruxism	306.8
Stuttering	307.0
Tourette's Syndrome	307.23
Frontal Lobe Syn.	310.0
Org. Mental Dis: Head Injury	310.1
Nonpsychotic Organic Brain Dis.	310.8
Brain Trauma	310.9
Intermittent Explosive Disorder	312.34
ADD	314.0
ADD w/o Hyperactivity	314.00
ADD w/ Hyperactivity	314.01
ADD, other	314.8
Parkinsons Disease	332.0
Huntingtons Disease	333.4
Cerebellar Ataxia	334.4
Motor Neuron Disease	335.2
Amytrophic Lateral Sclerosis	335.20
Multiple Sclerosis	340.0
Cerebral Palsy	343.9
Flaccid Hemiplegia, Dominant Side	342.01
Quadriplegia(s)	344.0x
Paraplegia(s)	344.1x
Monoplegia, Lower Dominant Limb	344.31
Paralysis, unspecified	344.9
Epilepsy(ies)	345.x
Grand Mal Seizures	345.1
Limbic Rage Syndrome	345.4

Courtesy of Dr. Tod Mikuriya



Legitimate concerns about substance dependence (among the mentally ill) appears to be the greatest single limitation to Cannabis' use in psychiatry.



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patients that Cannabis has clear psychiatric applications. Doctor Tod Mikuriya's Neuropsychiatric Conditions table reinforces this widely held belief (see previous page).

There is general agreement that Cannabis can exacerbate underlying psychiatric symptoms in some vulnerable patients. Research indicates that paranoid or psychotic people who use Cannabis may experience an increase in disease symptoms. This is often combined with "self-medication" with alcohol, tobacco and other drugs.

Legitimate concerns about substance dependence (among the mentally ill) appears to be the greatest single limitation to Cannabis' use in psychiatry. Unfortunately, these beliefs have prevented an assessment of Cannabis *within the context of conventional drug-therapy and disease morbidity*. They have also prevented definitive clinical research, which would establish whether or not Cannabis falls within the accepted medical parameters for safety and efficacy. This medical standard—"risk/benefit analysis"—determines if any therapy is effective enough to warrant its use. In western medicine the "risk" portion is considered secondary to "benefit" since virtually all pharmaceuticals and medical treatments carry potential for harm, including serious injury and death. The accepted standard, therefore is whether or not any treatment benefits the patient. The *perception of relative benefit* is usually best made by the patient as a self-report. (This may not be true in psychotic patients who suffer from delusional thoughts.) Research investigation is usually initiated by these reports. Thus, the extensive reporting of psychiatric efficacy cannot be dismissed as mere "self-reports." (The State Health Officer used the "risk" standard to justify not including most of the petitioned conditions, without factoring in the baseline standard of risk for all other pharmaceuticals or benefit to the patient.) Research into Cannabis, therefore, must compare *its risks relative to accepted psychiatric treatments* along with its reputed benefits. An analysis of this sort will show that many patients suffering from *physical* and *psychiatric* diseases derive a *net* benefit through antianxiety, appetite stimulant, sedative and a decrease in pharmaceutical use. Any research, which does not make this distinction, should be seriously suspect.

Cannabis' expanding uses

In time, the acceptance of Cannabis as a treatment for anxiety, bipolar disorder and depression will increase, as health care providers interact with Cannabis-using patients. Physicians and nurses know that Cannabis is widely used by mentally ill patients. In the context of alcohol, methamphetamine and heroin use, Cannabis is of less concern. Nevertheless, there is little support within the mental health system for using Cannabis as a medicine.¹ (During the DMC Advisory Panel testimony there was no professional medical organization in Oregon expressing support for its use. In fact, none of the medical organizations differentiated between *primary thought [Axis 1] disorders* like schizophrenia and *Affective [Axis 2] disorders* like anxiety or depression.)


Mental health uses of Cannabis are expanding as physical uses expand. Patients do not draw the distinction between physical and emotional suffering that the American medical establishment does. Cannabis easily fits within the medical context of safety and efficacy. Patients know it. They also know that Cannabis pharmacologically acts as an antianxiety agent and sedative. This effect may be common to both psychiatric and physical afflictions, and may account for the vast list of physical and emotional diseases which Cannabis is used to control.

The controversy surrounding the use of Cannabis to treat mental illness reflects the deep divisions between patients and health care providers in Oregon and around the United States. Additionally, this differentiation alienates many mentally ill patients who perceive the mental health system as capricious and authoritarian. Thus, NAMI (ostensibly an organization professing itself as an association *for* the mentally ill) advocates a position which continues to stigmatize mentally ill people from physically ill people, all the while asserting a position of support for them.


The prosecution of ill patients for using *any* drug to relieve truly debilitating symptoms is not consistent with medical ethics of compassion or medical science. In the future when these arbitrary social and medical barriers disappear, mentally ill patients will integrate more successfully into medical systems. Around that time, medical Cannabis will be considered a valuable psychiatric addition to the pharmacopoeia, as it once was.

Footnotes

¹During the Debilitating Medical Conditions expert testimony session, the National Association for the Mentally Ill (better known as NAMI) offered not one, but two strongly-worded testimonials against the use of Cannabis for any psychiatric condition.



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Selected psychiatric research citations

NOTE: The following is a listing of selected research citations having particular relevance to Cannabis' psychiatric uses. This list is not complete, but it does indicate that Cannabis has psychiatric as well as physical effects. Citations are only listed once, though many of the citations fit more than one symptom or disease category. These studies also encompassed much more information than is reported here. Interested parties are encouraged to obtain the study for more complete information.

Psychosis

1. *A retrospective study of symptom patterns of cannabis-induced psychosis* [Imade et. al. (1991). Acta Psychiatr Scand 83: 134-136.]

Medical records and case notes of 272 psychotic patients attempted to discover “*whether there are any similarities between cannabis psychosis on the one hand and schizophrenia and mania on the other...*” The researchers concluded: “*it was not possible to demonstrate a consistent pattern of symptoms typical of cannabis psychosis.*”

2. *Anti-psychotic Effect of Cannabidiol* [Letter to the editor, Journal of Clinical Psychiatry, 56:10, October 1995.]

Single-case experimental study of cannabidiol administration for 26 consecutive days to an acutely psychotic woman documented improvement as measured by a decrease in psychotic symptoms on the Brief Psychiatric Rating Scale (BPRS) as well as a decrease in Haldol administration.

3. *Towards a Cannabinoid Hypothesis of Schizophrenia: Cognitive Impairments Due to Dysregulation of the Endogenous Cannabinoid System* [Emrich et. al. (1997). Pharmacology Biochemistry and Behavior; Vol. 56: No. 4, pp. 803-807.]

Discusses neurochemistry of schizophrenia and historical overview of research into cannabinoid receptor system in humans. Presents results of experimental study of 40 subjects (13 schizophrenia patients) comparing visual projections before and after administration of Cannabis resin. (Cannabis resin was not administered to psychotic patients.) This research concluded that: “*a subgroup of schizophrenic syndromes may pathogenetically be related to a functional disturbance of the endogenous cannabinoid/andamide system.*”

4. *Elevated endogenous cannabinoids in schizophrenia* [Leweke et. al. (1999). Clinical Neuroscience; Vol. 10: No. 8, pp. 1665-1669.]

Excellent discussion of brain neurochemistry. Research study where cerebrospinal fluid (CSF) is examined in ten schizophrenic patients and eleven non-schizophrenic patients. Analysis showed that endogenous cannabinoid concentrations were significantly higher in schizophrenic patients than in controls. This lends support to a hypothesis that

schizophrenia may in part be due to chemical signaling malfunctions involving the endogenous cannabinoid signaling (receptor) system.

5. *Mesolimbic dopaminergic decline after cannabinoid withdrawal* [Diana et. al. (1998). Proceedings of the National Academy of Science, Vol: 95, pp. 10269-10273.]

Research study where rats were chronically treated with THC followed by administration of cannabinoid antagonist SR 141716A. Administration of cannabinoid antagonist precipitated intense withdrawal symptoms. Abrupt termination of THC failed to produce a withdrawal syndrome. Results indicate that withdrawal from chronic cannabinoid administration is associated with reduced dopaminergic transmission in the limbic system.

6. *Toward a rational pharmacotherapy of comorbid substance abuse in schizophrenic patients* [Krystal et. al. (1999). Schizophrenia Research 35, s35-s39.]

Review of factors contributing to comorbid substance use in schizophrenic patients. ETOH (alcohol) most common drug used followed by Cannabis. The article compares “*self-medication hypothesis*” with “*comorbid addiction vulnerability hypothesis*.” Use of non-prescribed substances may increase Extrapyridamal Symptoms (EPS) or decrease them. Article indicates an association between Cannabis use and psychotic symptoms in vulnerable populations.

7. *Cannabis and Schizophrenia: A Longitudinal Study of Swedish Conscripts* [Andreasson et. al. (1987). The Lancet, pp. 1483-1486.]

Fifteen year study of 45,000 Swedish conscripts concluded that heavy Cannabis use (>50 times) could be an independent risk factor for development of schizophrenia but admitted that Cannabis use still accounts for a minority of cases of schizophrenia.

8. *American Psychiatric Association Policy on the Medical use of Marijuana* [1997.]

Recommends further research, and compassion for the ill; recommends FDA drug-approval process be followed.

9. *Marijuana and Medicine: Assessing the Science Base*; [1999. Institute of Medicine, pp. s105-109.]

Research review concludes: “*The association between marijuana and schizophrenia is not well understood.*” Also describes that schizophrenics prefer marijuana to cocaine for unknown reasons but “*this raises the possibility that schizophrenics might obtain some symptomatic relief from moderate marijuana use*”, “*but compared with the general population, people with schizophrenia....are likely to be at greater risk for adverse psychiatric effects.*”

10. *Psychiatric symptoms in cannabis users.* [Thomas (1993). British Journal of Psychiatry, 163: pp. 141-149.]

Unknown research format concludes: “*The evidence that cannabis has a causative role in chronic psychotic or affective disorders is not convincing, although the drug may modify the course of an already established illness.*”

11. *The use of cannabis as a mood stabilizer in bipolar disorder; anecdotal evidence and the need for clinical research.* [Grinspoon, et. al. (1998). Journal of Psychoactive Drugs, 30(2), pp. 171-177.]

Case histories indicating a number of patients find Cannabis useful in treatment of their bipolar disorder. “*The potential for cannabis as a treatment for bipolar disorder unfortunately can not be fully explored in the present circumstances.*”

12. *Substance use among the mentally ill: Prevalence, Reasons for Use, and Effects on Illness* [Warner, et. al. (1994). American Journal of Orthopsychiatry, 64(1): pp. 30-39.]

Literature review and interview of 55 subjects conducted by an independent researcher. Researchers state: “*The two-year admission rate was significantly lower among those whose drug of preference was marijuana ...compared to the remainder of the sample, including nonusers.*” “*most subjects who preferred marijuana and reported anxiety, depression, insomnia, or physical discomfort...perceived the substance as relieving those symptoms.*”

Bipolar disorder

1. *Substance Abuse and Bipolar Comorbidity* [Sonne, et. al. (1999). The Psychiatric Clinics of North America Newsletter, Vol.22: Number 3.]

Literature survey describing the high association between bipolar disorder and substance use issues. It repeatedly emphasizes cocaine and ETOH as associated features with bipolar disorder. No mention of Cannabis as comorbid feature with severe effects (unlike cocaine, ETOH).

2. *DSM-4 Diagnoses associated with class of substances,* [Diagnostic and Statistical Manual of Mental Disorders, 4th ed. pp177.]

A one-page table compares major mental illnesses with associated substances including Cannabis. It indicates that Cannabis use is not associated with mood disorders, is associated with psychotic disorders.

3. *Cannabis- THC and Bipolar Disorder* [Marijuana and Medicine: Assessing the Science Base (1999 Institute of Medicine, pp. 108, 126.)

A. Describes “the psychological effects of cannabinoids, such as anxiety reduction, sedation, and euphoria can influence their potential therapeutic value.” (pp. 109.)

B. Describes the side-effect profile as “within the risks tolerated for many medications.” (pp. 126.)]

Anxiety with depression

1. *Cannabis Indica in 19th-Century Psychiatry* [Carlson (1974). American Journal of Psychiatry, 131: 9, pp. 1004-1007.]

A study of the history and usage of Cannabis indica. The article makes frequent reports that indicate Cannabis was widely prescribed by physicians in Europe and America for depressive and anxious symptoms. The... *“review of the drug’s physiological and psychological effects reveals that most of the effects reported in the 1960’s were known to writers of the 19th century, when the drug was alternately considered a cure for and a cause of insanity.”* *“Frequently cited as a sedative, a hypnotic, or a soporific, [C]annabis was widely prescribed for insomnia.”* *“With the widespread reports of the pleasant and cheerful stimulating effects of the drug and its reduction of horrible feelings and fears, it was inevitable that cannabis was to be subjected to extensive trial in the treatment of melancholia.”*

2. *[Delta-9] Tetrahydrocannabinol in Depressed Patients* [Kotin, et. al. (1973). Archives of General Psychiatry, Vol. 28: pp. 345-348.]

Double blind clinical trial of THC in eight patients suffering from depression, over a period of seven days failed to produce significant euphoria or antidepressant effect. Two patients experienced severe anxiety reactions.

3. *Haschish in Melancholia* [Polli (1972). Medical Times, Vol: 100, No. 7, pp. 236-238.]

A single case study in the 1860’s of a physician using a Cannabis preparation to successfully treat a woman with severe, incapacitating depression with what appeared to be psychotic features. According to the author the treatment lasted 10 days with steadily increasing doses. The cure was permanent.

4. *The Management of Treatment Resistance in Depressed Patients with Substance Use Disorders* [Nunes, et. al. (1996). The Psychiatric Clinics of North America, Vol. 19: No. 2, pp. 311-327.]

Discusses depression and comorbid substance use with evaluation of depression and comorbid substance use and treatment recommendations. Case studies are described. It recommends a *“harm reduction”* approach and emphasizes the debilitating effects of ETOH and cocaine. There is one reference to Cannabis as being perceived by patients as being harmless.

5. *Advertisement for Cannabis U.S.P. (American Cannabis) fluid extract* [Parke, Davis & Company 1929-1930 physicians’ catalog of the pharmaceutical and biological products, p. 82.]

An advertisement for a Cannabis-based fluid extract of 80% alcohol, which was distributed to physicians. *“Extensive pharmacological and clinical tests have shown that its medicinal action cannot be distinguished*

from that of the fluid made from imported East Indian cannabis.” “Narcotic, analgesic, sedative.”

6. *Do patients use marijuana as an antidepressant?* [Gruber et.al. (1996). Depression 4(2): pp. 77-80.]

The authors “*present 5 cases in which the evidence seems particularly clear that marijuana produced a direct antidepressant effect. If true, these observations argue that many patients may use marijuana to “self-treat” depressive symptoms.*”

Anxiety disorders (insomnia with anxiety, agitation/anxiety associated with Alzheimer’s disease)

1. *Ranking of risks of 6 commonly used drugs* by Dr. Jack Henningfield (NIDA) and Dr. Neal Benowitz (UCSF) [New York Times, August 1994, C3.]

In rankings of nicotine, heroin, cocaine, caffeine, and Cannabis, Cannabis is rated least serious in withdrawal symptoms, least serious in reinforcement, least serious in tolerance, least serious in dependence, and moderately intoxicating (alcohol rated most serious.)

2. *Expert Testimony:* correspondence from Dr. Tod Mikuriya.

Dr. Mikuriya states: “*The persons who suffer from PTSD in my practice who medicate with Cannabis have discovered that the drug is by far the most effective in controlling the symptoms of anxiety attacks and insomnia*”.

3. *Cannabis Use and Cognitive Decline in Persons under 65 Years of Age* [Lyketsos, et. al. (1999). American Journal of Epidemiology, Vol 149: No. 9, pp. 794-800.]

This study analyzed 1,318 persons over twelve (12) years through the Mini-Mental State Exam. It concluded: “*There were no significant differences in cognitive decline between heavy users, light users, and nonusers of cannabis.*”

4. *Marijuana and Medicine: Assessing the Science Base* [1999. Institute of Medicine, pp. 5.]

Executive summary conclusion: “*The psychological effects of cannabinoids, such as anxiety reduction, sedation and euphoria can influence their potential therapeutic value. Those effects are potentially undesirable for certain patients and situations and beneficial for others.*”

5. *Cannabisprodukten im deutschen Sprachraum {The use of Cannabis products in Germany}* [1999. Forsch Komplementarmed Suppl. S3: pp. 28-36.]

170 subjects participated in an anonymous standardized survey. Questionnaires of 128 respondents were included. Among most frequent mentioned indications for using Cannabis were the following: Depression (12%), Sleeping disorders (4.8%).

6. *A Survey of 100 Medical Marijuana Club Members* [Harris, et. al. (no date). Drug Dependence Research Center, UCSF]

One hundred Cannabis Club members were surveyed as to their reasons for using Cannabis. Users: “*perceived marijuana to be more effective with less severe side-effects than other treatments.*” A history of substance abuse or dependence was present in 87% and of other psychiatric disorders in 83%.

Post-traumatic stress disorder PTSD

1. *Factors relating to current marijuana use by Vietnam War veterans in recovery from addiction to other drugs or chemicals of abuse* [Newton, et. al. Department of Veterans Affairs Research and Development Information System (RCS 10-0159).]

An anonymous questionnaire was given to veterans treated in the Stratton VA Medical Center. It was based upon staff observations that Vietnam combat veterans discontinued their use of alcohol and illicit drugs except Cannabis. Results indicated that the PTSD group more often used Cannabis to:

- a. Help with sleep;
- b. decrease nightmares;
- c. prevent bad thoughts of the past; improve self-esteem

The authors conclude: “*data support the contention that marijuana can be used for ‘self medication’ of psychiatric problems.*”

2. *Acute administration of the CB-1 cannabinoid receptor antagonist SR 141716A induces anxiety-like responses in the rat.* [Navarro, et. al. (1997). NeuroReport 8: pp. 491-496.]

Rats were administered SR 141716A, a cannabinoid antagonist. The results indicate that the CB-1 receptor antagonist SR 141716A elicited defensive responses in rats in two behavioral models of anxiety, suggesting the existence of an endogenous cannabinoid tone involved in regulation of the emotional responses

Insomnia with agitation

1. *Action of Cannabidiol on the Anxiety and other Effects Produced by [delta-9] THC in Normal Subjects* [Zuardi, et. al. (1982). Psychopharmacology 76: pp. 245-250.]

The objective of this research was to determine whether CBD exerts an antianxiety effect in persons treated with THC, in eight volunteers. The author’s state: “*It was verified that CBD blocks the anxiety provoked by THC, however this effect was also extended to other marijuana-like effects and to other subjective alterations.*”

2. *Summary of 2,480 medical marijuana patients interviewed by Dr. Tod Mikuriya* [Submission to the Association for Cannabis Medicine.]

This paper summarizes ICD classifications for diseases and categorizes the data according to mentions of Cannabis use. The results indicate

that: “2.9% of Dr. Mikuriya’s medical Cannabis patients have a primary diagnosis of insomnia.” According to the table, 26% of his patients comprising 660 patients use Cannabis for mood disorders including depression, anxiety disorder, attention deficit disorder, and panic disorder.

3. *[Delta-9] THC an an Hypnotic: An Experimental Study at Three Dose Levels* [Cousens, et. al. (1973). *Psychopharmacologia (Berl.)* 33: pp. 355-364.]

THC was found to significantly decrease the time it took healthy insomniacs to fall asleep. Three dosage levels were tried with nine subjects tested once a week for six weeks. The most effective dose was the 20-mg. level.