ASAM ISAM AND CANNABIS LEGALIZATION

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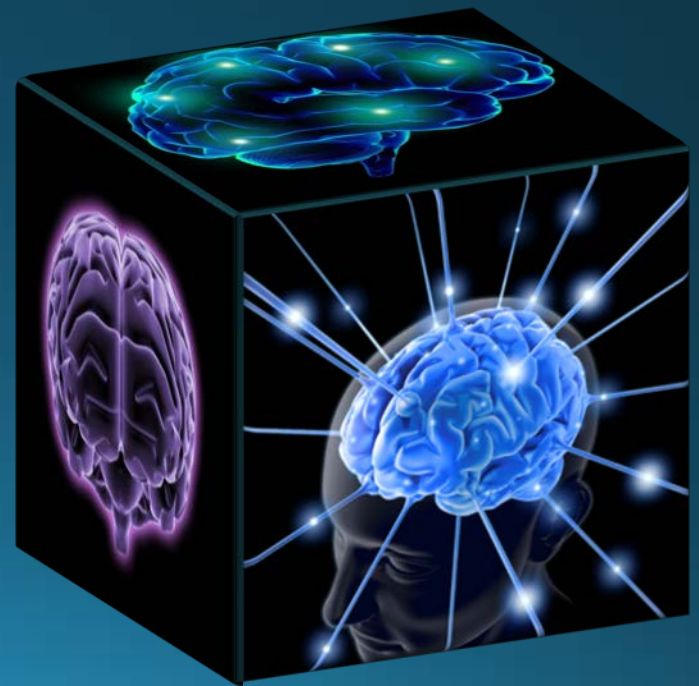


Marijuana and Cannabinoids

Science
Myth

Legalization
Decriminalization

Possession
Sale

Medical Marijuana
Recreational Marijuana

Clinical Issues
Policy and Regulatory

Models:

Dutch
Colorado

California
New York

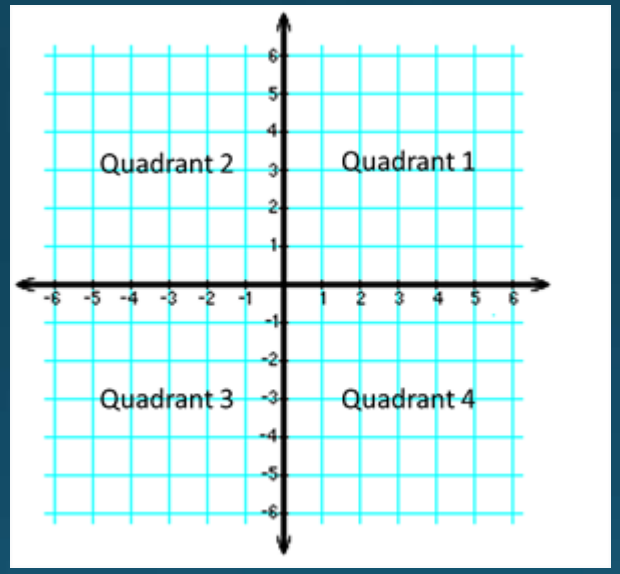
Definitions

- **Legalization** Regulated market - supply is permitted, possession is allowed
- **Decriminalization** Supply is not permitted, possession will still be punished, but with minor penalty
- **Medicinal use** - Under supervision (?!) of doctor or similar
- **Recreational use** - No supervision

Regulated Deregulated

Recreational

Medical



HARMFUL EFFECTS OF MARIJUANA

as an addictive substance

as a toxic substance

as an intoxicating substance

as a gateway drug

Addictive Potential

Initiate after age 18-9% eventually satisfy DSM criteria of dependence

Initiate before age 18-17% become addicted within 2 years of use

With daily use-estimate 35-40% rate of cannabis dependency

Adolescents

impaired neural connectivity fewer fibers

in hippocampus and prefrontal cortex

increased sensitivity to drugs (more likely to develop cannabis dependency and use other drugs)

daily pot for 3 yrs in adolescence-tested in 20's after abstinent for 2 yrs- had abnormal shape to hippocampus and memory deficits

Adverse Health Effects of Marijuana Use

Nora D. Volkow, M.D., Ruben D. Baler, Ph.D., Wilson M. Compton, M.D., and Susan R.B. Weiss, Ph.D.

N Engl J Med 2014; 370:2219-2227June 5, 2014DOI: 10.1056/NEJMra1402309

State of the Science of Cannabis Research: Update from the NIH Marijuana Summit **Susan R.B. Weiss, PhD**

Director Division of Extramural Research May 20, 2016

Policy Research: The Details Matter *Different models of legalization*: advertising, involvement of big business, medical vs. recreational, pricing, taxes, dispensaries, edible products, potency restrictions ***Why research is not definitive on the effects of MJ policy… Source: Pacula, March 2016***

Much of the research ignores important policy heterogeneity. It also ignores how laws were implemented - how they have changed over time the lack of attention to specificity and timing

The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

Dan L. Longo, M.D., *Editor*

Adverse Health Effects of Marijuana Use

Nora D. Volkow, M.D., Ruben D. Baler, Ph.D., Wilson M. Compton, M.D., and Susan R.B. Weiss, Ph.D.

IN LIGHT OF THE RAPIDLY SHIFTING LANDSCAPE REGARDING THE LEGALIZATION of marijuana for medical and recreational purposes, patients may be more likely to ask physicians about its potential adverse and beneficial effects on health. The popular notion seems to be that marijuana is a harmless pleasure, access to which should not be regulated or considered illegal. Currently, marijuana is the most commonly used "illicit" drug in the United States, with about 12% of people 12 years of age or older reporting use in the past year and particularly high rates of use among young people.[1] The most common route of administration is inhalation. The greenish-gray shredded leaves and flowers of the *Cannabis sativa* plant are smoked (along with stems and seeds) in cigarettes, cigars, pipes, water pipes, or "blunts" (marijuana rolled in the tobacco-leaf wrapper from a cigar). Hashish is a related product created from the resin of marijuana flowers and is usually smoked (by itself or in a mixture with tobacco) but can be ingested orally. Marijuana can also be used to brew tea, and its oil-based extract can be mixed into food products.

The regular use of marijuana during adolescence is of particular concern, since use by this age group is associated with an increased likelihood of deleterious consequences[2] (Table 1). Although multiple studies have reported detrimental effects, others have not, and the question of whether marijuana is harmful remains the subject of heated debate. Here we review the current state of the science related to the adverse health effects of the recreational use of marijuana, focusing on those areas for which the evidence is strongest.

ADVERSE EFFECTS

RISK OF ADDICTION

Despite some contentious discussions regarding the addictiveness of marijuana, the evidence clearly indicates that long-term marijuana use can lead to addiction. Indeed, approximately 9% of those who experiment with marijuana will become addicted[3] (according to the criteria for dependence in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition [DSM-IV]). The number goes up to about 1 in 6 among those who start using marijuana as teenagers and to 25 to 50% among those who smoke marijuana daily.[4] According to the 2012 National Survey on Drug Use and Health, an estimated 2.7 million people 12 years of age and older met the DSM-IV criteria for dependence on marijuana, and 5.1 million people met the criteria for dependence on any illicit drug[1] (8.6 million met the criteria for dependence on alcohol[1]). There is also recognition of a bona fide cannabis withdrawal syndrome[5] (with symptoms that include irritability, sleeping difficulties, dysphoria, craving, and anxiety), which makes cessation difficult and contributes to relapse. Marijuana use by adolescents is particularly troublesome. Adolescents' increased vulnerability to adverse long-term outcomes from marijuana use is probably related

From the National Institute on Drug Abuse, National Institutes of Health, Bethesda, MD. Address reprint requests to Dr. Volkow at the National Institute on Drug Abuse, 6001 Executive Blvd., Rm. 5274, Bethesda, MD 20892, or at nvolkow@nida.nih.gov.

N Engl J Med 2014;370:2219-27.
DOI: 10.1056/NEJMra1402309

EXPOSURE

Smoking cannabis during pregnancy is linked to lower birth weight in the offspring.

The relationship between smoking cannabis during pregnancy and other pregnancy and childhood outcomes is unclear.

PROBLEM CANNABIS USE

Greater frequency of cannabis use increases the likelihood of developing problem cannabis use.

Initiating cannabis use at a younger age increases the likelihood of developing problem cannabis use.

CANNABIS USE AND ABUSE OF OTHER SUBSTANCES

Cannabis use is likely to increase the risk for developing substance dependence (other than cannabis use disorder).

TO READ THE FULL REPORT AND VIEW RELATED RESOURCES, PLEASE VISIT

NATIONALACADEMIES.ORG/CANNABISHEALTHEFFECTS

A limited number of studies suggest that there are impairments in cognitive domains of learning, memory, and attention in individuals who have stopped smoking cannabis.

Cannabis use during adolescence is related to impairments in subsequent academic achievement and education, employment and income, and social relationships and social roles.

MENTAL HEALTH

Cannabis use is likely to increase the risk of developing schizophrenia and other psychoses; the higher the use the greater the risk.

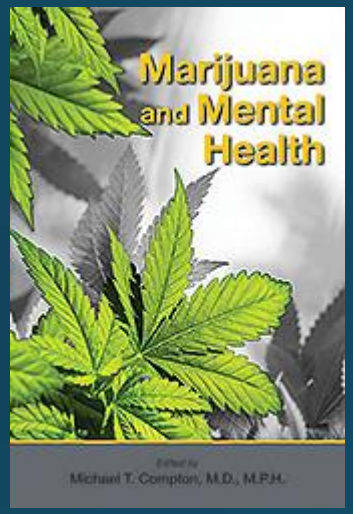
In individuals with schizophrenia and other psychoses, a history of cannabis use may be linked to better performance on learning and memory tasks.

Cannabis use does not appear to increase the likelihood of developing depression, anxiety, and posttraumatic stress disorder.

For individuals diagnosed with bipolar disorders, near daily cannabis use may be linked to greater symptoms of bipolar disorder than non-users.

Heavy cannabis users are more likely to report thoughts of suicide than non-users.

Regular cannabis use is likely to increase the risk for developing social anxiety disorder.



Edited by Michael T. Compton, M.D., M.P.H.

•2016
•272 pages
•Paperback
•Description

Even while many states have passed legislation pertaining to “medical marijuana” and others have decriminalized or even legalized recreational use, a debate continues within society as to whether marijuana is simply a harmless substance that should be fully legalized, a possibly beneficial treatment for patients with certain illnesses, or a drug with the potential to worsen addiction and cause mental health problems. It provides an academic foundation for further study while also informing clinical mental health practice as well as policy decisions by articulating the connection between marijuana and mental health, particularly in the United States.

- The effects of marijuana on the brain and mind
- Marijuana-related legislation
- Medical marijuana
- Comorbidities between marijuana misuse and mood and anxiety disorders
- The complex link between marijuana use and psychotic disorders
- Synthetic cannabinoids
- Treatment and prevention of marijuana misuse

DOHMH WARNS NEW YORKERS OF DANGERS OF "SYNTHETIC MARIJUANA" AFTER INCREASE IN EMERGENCY DEPARTMENT VISITS

Between April 8 and April 15, more than 120 emergency department visits related to "synthetic marijuana" were detected by DOHMH

April 17, 2015 – The Health Department today warned New Yorkers not to use synthetic cannabinoids – most commonly referred to as "synthetic marijuana" – after a significant increase in emergency department visits. Between April 8 and April 15, more than 120 emergency department visits related to synthetic cannabinoids were detected by the Health Department. During the first few months of 2015, an average of two to three synthetic-marijuana related emergency department visits occurred each day.

[cid:image004.png@01D07938.40891700]The majority of cases are in East Harlem. The median age of cases is 35 years old, and almost 90 percent of cases are male. In response to this troubling increase in emergency department visits, the Health Department will issue Commissioner's Orders to stores in East Harlem and surrounding areas to remind owners that it is illegal to sell synthetic cannabinoids in New York City.

Why are synthetic cannabinoids so dangerous?

Different brands of smoking mixtures can have very different effects, but the strength of a specific brand appears to owe more to the ratio of cannabinoids to chemically inactive plant material in the mixture, rather than the variation in the chemical structure of compounds themselves

Due to the high potency of some synthetic cannabinoids, the amount needed for each "hit" can be as little as a few tens of milligrams (about the size of a match head). The intoxicating effects of more potent brands – such as Clockwork Orange, Pandora's Box and Annihilation – can be quite overpowering

Because of the substantial risks of synthetic cannabinoids, many countries have already outlawed their production, possession and distribution.

But it is unlikely that the “war on drugs” will show any sign of relenting, given the rapidly evolving nature of the recreational drugs market and the lack of globalized drug-control legislation.

Only by working collectively can scientists, medical professionals and law makers help to stem the flow of these dangerous compounds before they pose a serious threat to health of vulnerable groups in society

Drug and Alcohol Dependence
Volume 144, 1 November 2014, Pages 12-41

Review

Synthetic cannabinoids: Epidemiology, pharmacodynamics, and clinical implications☆

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CANNABIS RELATED MEDICATIONS

Marinol / Dronabinol Synthetic Delta-9 THC

Sativex THC (delta-9-tetrahydrocannabinol)
CBD (cannabidiol)

Nabilone / Cesamet Synthetic cannabinoid similar to THC

Dexanabinol Synthetic non-psychotropic cannabinoid that blocks NMDA receptors

Epidiolex® Pure plant-derived Cannabidiol (CBD)

Rimonabant / Acomplia Synthetic chemical that blocks endocannabinoids

•Epilepsy from Physician-Led Expanded Access Treatment Program

GW Pharmaceuticals Announces Physician Reports of Epidiolex® Treatment Effect in Children and Young Adults with Treatment-Resistant Epilepsy from Physician-Led Expanded Access Treatment Program

Data show promising signals of efficacy and safety

Conference Call Today at 8:30 a.m. ET, 1:30 p.m. (UK)

GW Pharmaceuticals Announces Physician Reports of Epidiolex® Treatment Effect in Children and Young Adults with Treatment-Resistant Epilepsy from Physician-Led Expanded Access Treatment Program

17 June 2014

London, UK; 17 June 2014: GW Pharmaceuticals

Sativex® is an oromucosal spray of a formulated extract of the cannabis sativa plant that contains the principal cannabinoids THC and CBD in a 50/50 ratio as well as specific minor cannabinoids and other non-cannabinoid components.

Sativex is developed to be administered as an oral spray, whereby the active ingredients are absorbed in the lining of the mouth, either under the tongue or inside the cheek.

GW's licensing partners are commercializing Sativex for MS spasticity in 16 countries outside the United States. Two additional countries have recommended approval for Sativex and regulatory filings are ongoing in 12 other countries, principally in the Middle East and Latin America where we expect approvals over the next 12 months.

MEDICAL MARIJUANA

Nov 5, 1996: California becomes the first state to legalize medical marijuana.
1998, Nov 3: Alaska, Oregon, Washington legalize medMj

Approved Conditions: AIDS, anorexia, arthritis, cachexia, cancer, chronic pain, glaucoma, migraine, persistent muscle spasms, seizures, severe nausea, *or other chronic or persistent medical symptoms*.
Allowed Possession: 8 ounces (1oz += 28 grams)
Fee: $66, unless on Medicaid, then $33.
Note that a typical 1/8th ounce bag of marijuana costs about $50 on the street.
Also note that one ounce of marijuana can be used to make approximately 50 joints

Is there a currently accepted medical use?

- The drug's chemistry is known and reproducible
- There must be adequate safety studies
- There must be adequate and well-controlled studies proving efficacy
- The drug must be accepted by qualified experts
- Scientific evidence must be widely available

NEWS

The National Academies of SCIENCES • ENGINEERING • MEDICINE

Nearly 100 Conclusions on the Health Effects of Marijuana and Cannabis-Derived Products Presented in New Report; One of the Most Comprehensive Studies of Recent Research on Health Effects of Recreational and Therapeutic Use of Cannabis and Cannabis-Derived Products

Therapeutic Effects

One of the therapeutic uses of cannabis and cannabinoids is to treat chronic pain in adults. The committee found evidence to support that patients who were treated with cannabis or cannabinoids were more likely to experience a significant reduction in pain symptoms. For adults with multiple sclerosis-related muscle spasms, there was substantial evidence that short-term use of certain "oral cannabinoids" – man-made, cannabinoid-based medications that are orally ingested – improved their reported symptoms. Furthermore, in adults with chemotherapy-induced nausea and vomiting, there was conclusive evidence that certain oral cannabinoids were effective in preventing and treating those ailments.

THE NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE
Health and Medicine Division
Board on Population Health and Public Health Practice

Committee of the Health Effects of Marijuana: An Evidence Review and Research Agenda

Copies of ***The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*** are available from the National Academies Press at http://www.nap.edu or by calling 1-800-624-6242

THE NATIONAL ACADEMIES OF SCIENCES, ENGINEERING, AND MEDICINE Health and Medicine Division Board on Population Health and Public Health Practice Committee of the Health Effects of Marijuana: An Evidence Review and Research AgendaCopies of The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research are available from the National Academies Press at http://www.nap.edu or by calling 1-800-624-6242 **Nearly 100 Conclusions on the Health Effects of Marijuana and Cannabis-Derived Products Presented in New Report; One of the Most Comprehensive Studies of Recent Research on Health Effects of Recreational and Therapeutic Use of Cannabis and Cannabis-Derived Products** *One of the therapeutic uses of cannabis and cannabinoids is to treat chronic pain in adults. The committee found evidence to support that patients who were treated with cannabis or cannabinoids were more likely to experience a significant reduction in pain symptoms. For adults with multiple sclerosis-related muscle spasms, there was substantial evidence that short-term use of certain "oral cannabinoids" – man-made, cannabinoid-based medications that are orally ingested – improved their reported symptoms. Furthermore, in adults with chemotherapy-induced nausea and vomiting, there was conclusive evidence that certain oral cannabinoids were effective in preventing and treating those ailments*

Controversial Study

Medical cannabis laws are associated with significantly lower state-level opioid overdose mortality
Further investigation is required to determine how medical cannabis laws may interact with policies aimed preventing opioid analgesic overdose.

Bachhuber MA, Saloner B, Cunningham CO, Barry CL.
Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999-2010.
JAMA Intern Med. 2014;174(10):1668-1673.

CANNABIS and the DEA

Schedule I of the Controlled Substances Act

In August 2016 the DEA reaffirmed its position and refused to remove Schedule I classification.

However, the DEA announced that it will end restrictions on the supply of marijuana to researchers and drug companies that had previously only been available from the government's own facility at the University of Mississippi.

Cannabis for the Management of Pain: Assessment of Safety Study (COMPASS)

Ware MA, et al 2015

Prospective cohort study to describe safety issues among individuals with chronic, non cancer pain

Medscape
Friday, March 31, 2017

Role for Cannabis in Treatment for Opioid Addiction?

It is important to move with a deep sense of urgency to leverage the opportunity presented by increased legalization of medical marijuana to expedite the development of cannabidiol for therapeutic interventions for opioid use disorder, thus curbing the opioid epidemic," writes Yasmin L. Hurd, PhD, of the Friedman Brain Institute, Departments of Psychiatry and Neuroscience, Icahn School of Medicine at Mount Sinai, Center for Addictive Disorders, Mount Sinai Behavioral Health System, New York City.

"[The study] serves as an important foundation, along with accumulating evidence in animal models, to warrant expedited efforts for additional clinical studies to evaluate the potential therapeutic benefits of cannabidiol as a treatment for opioid use disorders," Dr Hurd writes.

Opioid Addiction Being Treated With Medical Marijuana in Massachusetts

Hundreds of people in Massachusetts who are addicted to opioids are being treated with medical marijuana according to the Boston Herald

"We have a statewide epidemic of opioid deaths," said Dr. Gary Witman of Canna Care Docs, a network of facilities that qualifies patients into medical marijuana programs in Rhode Island, Massachusetts, Maine, Connecticut, Delaware and the District of Columbia. "As soon as we can get people off opioids to a nonaddicting substance — and medicinal marijuana is nonaddicting — I think it would dramatically impact the amount of opioid deaths."

Witman, who works in a Massachusetts Canna Care clinic, has treated about 80 patients who were addicted to opioids, anti-anxiety medication or muscle relaxers with cannabis through a one-month tapering program. More than three-quarters of patients stopped taking the harder drugs, he told the newspaper.

Witman said cannabis can be a safer alternative for managing the symptoms patients had been using opioids to treat, such as chronic pain or anxiety.

Another Massachusetts physician, Dr. Harold Altvater, said he has also successfully used medical marijuana as a substitute for other medications. "You are basically taking something that can be very harmful for an individual, and substituting it with another chemical, just like you would any other drug, that has a wider safety margin," he said. "So if the goal is to decrease the body count … the goal would be to get them on to a chemical that was safer."

Some doctors say cannabis substitution therapy needs extensive followup. "It might be an exit drug for some, or an entry drug for others," said Dr. Anil Kumar. "If you don't have a way of monitoring this patient who is saying 'give me marijuana and I will stop taking narcotics,' they may do both."

Cannabis does not kill patients (no case of death from marijuana overdose has ever been reported)
o
Medical cannabis is has been shown to be effective for the treatment of chronic pain
o
Neuropathy has the highest quality evidence
o
Medical cannabis has a very well-tolerated side effect profile
o
Medical cannabis works synergistically with opioids
o
The medical community should be a pillar of education and support surrounding medical cannabis

New York Governor Cuomo bill

He said he would sign a bill, but it had to include the following, or he would veto the bill:

1. Can not be smoked
2. Very limited conditions
3. Limited number of dispensaries
4. Careful controls: the marijuana is labeled and tested in a laboratory
5. No advisory committee: Department of health would make decisions
6. Doctors need a special permit to prescribe it and have to take a course.
7. It is a crime for a patient to lie to obtain it, and a crime for a doctor to misprescribe it

Is Cannabidiol Legal?

On December 14, 2016, the Drug Enforcement Administration (DEA) delivered a new ruling that classifies CBD oil as a Schedule 1 drug, making it illegal under federal law. With that said, the Rohrabacher-Farr amendment, limits the Justice Department (and DEA) from overriding state medical marijuana laws. This means that while the DEA considers cannabidiol illegal, if your state allows patient access to medical marijuana you are still able to possess cannabidiol oil (if it doesn't contain psychoactive THC). Therefore, if you wish to benefit from CBD, it's critical that you know your state's laws, partner with trusted marijuana doctors, possess a medical marijuana card and have a valid medical marijuana prescription.

Even though CBD is non-psychoactive, it's still illegal if it comes from a medical marijuana plant and you don't have a prescription. Generally, most high CBD strains are illegal and if a product contains more than around one percent THC, it's currently classed as a psychoactive Schedule 1 drug and therefore illegal.

FDA Targets Country's Largest Cannabidiol Producer In Warning Over Cancer Claims

The U.S. Food and Drug Administration sent letters on Tuesday to four cannabis companies, warning them against making medical claims about cannabidiol (CBD). The agency also took issue with the businesses marketing CBD products as dietary supplements.

The FDA's warning letters targeted companies in California, Florida and Colorado: Natural Alchemist, Greenroads Health, That's Natural! and the Stanley Brothers, who produce CBD products under CW Botanicals and CW Hemp.

It's certainly not the first time the agency has gone after CBD producers. The FDA sent similar letters to more than a dozen companies in 2015 and 2016. But the latest warnings are notable in that they target one of the biggest players in the CBD market.

Source: Forbes

CBD Oil Reduced Toddler's Seizures. Still, Indiana CPS threatened to take away her child a Mother says

The parents of a 20-month-old girl say Indiana child welfare authorities threatened to take the child away from them because they chose to treat her epilepsy with legal CBD oil. Lelah Jerger, the child's mother, said personnel at Riley Hospital for Children at IU Health reported her to Indiana's Child Protective Services after she and her husband decided to use cannabidiol oil, or CBD, to treat their daughter Jaelah, rather than use the medication prescribed by a Riley doctor. Jerger said CPS dropped the case after a state legislator intervened and emphasized the legality of the treatment. "Our daughter was never taken away from us, but the fear was horrible to live with," Lelah Jerger said. "I would look outside my window just scared to death I would see a police officer and CPS here to take my kid."

The case raises more questions about what state officials consider to be the legal status of CBD oil — and whether medical professionals consider the substance to be a viable alternative to pharmaceuticals.

Source: IndyStar.com

National Institute on Drug Abuse
Advancing Addiction Science

The Biology and Potential Therapeutic Effects of Cannabidiol

June 24, 2015
presented by Nora D. Volkow, Director, National Institute on Drug Abuse
Senate Caucus on International Narcotics Control

Drug Caucus Hearing on Barriers to Cannabidiol Research (United States Senate Caucus on International Narcotics Control)

"Cannabidiol: Barriers to Research and Potential Medical Benefits"

Mr. Chairman, Ms. Chairwoman, and Members of the Senate Drug Caucus, thank you for inviting the National Institute on Drug Abuse (NIDA), a component of the National Institutes of Health (NIH), to participate in this hearing to share what we know about the biology and the potential therapeutic effects of cannabidiol (CBD), one of the main active chemical compounds found in marijuana. In light of the rapidly evolving interest in the potential use of marijuana and its derivative compounds for medical purposes, it is important to take stock of what we know and do not know about the therapeutic potential of CBD.

Background

To date, 23 states and the District of Columbia have passed laws allowing marijuana to be used for a variety of medical conditions. Fifteen additional states have enacted laws intended to allow access to CBD oil and/or high-CBD strains of marijuana. Interest in the potential therapeutic effects of CBD has been growing rapidly, partially in response to media attention surrounding the use of CBD oil in young children with intractable seizure disorders including Dravet syndrome and Lennox-Gastaut syndrome. While there are promising preliminary data, the scientific literature is currently insufficient to either prove or disprove the efficacy and safety of CBD in patients with epilepsy.[i] and further clinical evaluation is warranted. In addition to epilepsy, the therapeutic potential of CBD is currently being explored for a number of indications including anxiety disorders, substance use disorders, schizophrenia, cancer, pain, inflammatory diseases and others. My testimony will provide an overview of what the science tells us about the therapeutic potential of CBD and of the ongoing research supported by NIH in this area.

CBD Biology and Therapeutic Rationale

CBD is one of more than 80 active cannabinoid chemicals in the marijuana plant.[ii] Unlike the main psychoactive cannabinoid in marijuana, tetrahydrocannabinol (THC), CBD does not produce euphoria or intoxication.[iii,iv,v] Cannabinoids have their effect mainly by interacting with specific receptors on cells in the brain and body: the CB1 receptor, found on neurons and glial cells in various parts of the brain, and the CB2 receptor, found mainly in the body's immune system. The euphoric effects of THC are caused by its activation of CB1 receptors. CBD has a very low affinity for these receptors (100 fold less than THC) and when it binds it produces little to no effect. There is also growing evidence that CBD acts on other brain signaling systems, and that these actions may be important contributors to its therapeutic effects.[ii]

Preclinical and Clinical Evidence

Rigorous clinical studies are still needed to evaluate the clinical potential of CBD for specific conditions.[i] However, pre-clinical research (including both cell culture and animal models) has shown CBD to have a range of effects that may be therapeutically useful, including anti-seizure, antioxidant, neuroprotective, anti-inflammatory, analgesic, anti-tumor, anti-psychotic, and anti-anxiety properties.

According to WHO, CBD is not addictive or toxic.

Important Findings from the WHO's CBD Report

WHO Cannabidiol (CBD) Pre-Review Report from November 2017 says:

"To date, there is no evidence of recreational use of CBD or any public health related problems associated with the use of pure CBD."

In the report, WHO says that CBD offers medical benefits without the potential risk of addiction. The report notes: "In an animal drug discrimination model, CBD failed to substitute for THC. In humans, CBD exhibits no effects indicative of any abuse or dependence potential."

The WHO report says CBD has "been demonstrated as an effective treatment for epilepsy" in adults, children, and animals. In addition, the report indicates that there is preliminary evidence showing that CBD could be beneficial in treating many diseases including alzheimer's disease, cancer, psychosis, parkinson's disease, and other conditions.

ASAM White Paper on State-Level Proposals to Legalize Marijuana July 25, 2012

Committee to Develop a Response to State-Level Proposals to Legalize Marijuana: Robert L. DuPont, M.D., Co-Chair Andrea G. Barthwell, M.D., Co-Chair
Mark Kraus, M.D. Kevin Sabet, Ph.D. Richard Soper, M.D. Scott Teitelbaum, M.D.

Marijuana is not a safe and harmless substance and its use is not health-promoting (though as acknowledged by ASAM, the use of some cannabinoids prepared in a standardized manner in well-tested pharmaceutical products can alleviate specific diseases and distress in specific patients and is supportable[113]).

ASAM policy on marijuana is based on the scientific fact that marijuana is a drug with distinct effects on the brain and behavior and the fact that addiction to cannabinoids and to marijuana is a significant health problem.

In reviewing the significant role the criminal justice system plays in reducing marijuana use, ASAM recognizes that an improved link is needed between the systems of criminal justice and health care with the additional goals of reducing criminal recidivism and reducing incarceration.

ASAM opposes proposals to legalize marijuana anywhere in the United States

In summary, ASAM recommends against the approval of state initiatives to legalize marijuana. . Further, specifically focusing on state proposals to legalize marijuana, ASAM recommends:

That physicians lead efforts to oppose legislative or ballot initiatives that would result in the legalization of marijuana production, distribution, marketing, possession and use by the general public. That public education campaigns

ASAM Public Policy Statement
Marijuana, Cannabinoids and Legalization
Adoption Date: September 21, 2015

ASAM supports the decriminalization of marijuana, which would reduce penalties for marijuana possession for personal use to civil offenses linked to contingencies, such as mandated referral to clinical assessment, educational activities, and, when indicated, formal treatment for addiction or other substance-related disorders

ASAM does not support the legalization of marijuana and recommends that jurisdictions that have not acted to legalize marijuana be most cautious and not adopt a policy of legalization until more can be learned from the natural experiments now underway in jurisdictions that have legalized marijuana.

VULNERABLE POPULATIONS
Adolescents
Psychiatric Disorders
Predisposition to Addictions

ASAM Clinical Recommendations

1. **ASAM recommends that addiction medicine physicians and other clinicians educate their patients about the known medical risks of marijuana use,**
2. **ASAM recommends a significant expansion of opportunities for youth with cannabis use disorder to receive medically necessary treatment as well as for youth to receive appropriate clinical preventive services related to cannabis use, and that private and public insurance coverage be available for youth to be able to access such services.**
3. **ASAM supports the consensus of most addiction professionals that clinicians should counsel persons suffering from addiction about the need for abstinence from marijuana and synthetic cannabinoids and the role of cannabis and cannabinoid use in precipitating relapse,** even if the original drug involved in their addiction is a substance other than marijuana
4. **ASAM supports the expanded establishment of clinical entities such as Student Assistance Programs in middle schools, high schools, and post-secondary schools, including professional schools,**

SURVEY AREAS AND DATA

1. Potential Adverse Effects

2. Cannabis and Cannabinoids – Medicinal Effects

3. Vulnerable Populations

4. Legal Sanctions

5. Public Policy – Models of Legalized “Medical” and Recreational Cannabis

6. Marijuana, Addiction Physicians and Public Policy

Vulnerable Populations

Do you believe smoking marijuana is harmful to adolescents?

Do you believe smoking marijuana is harmful for those with chronic mental illness?

Do you believe smoking marijuana is harmful those with a predisposition to addictions?

Do you believe smoking marijuana is harmful for opiate addicts in recovery?