Cannabis Rx: Cutting Through the Misinformation

If an American doctor of the late 19th century stepped into a time warp and emerged in 2010, he would be shocked by the multitude of pharmaceuticals that today's physicians use. But as he pondered this array (and wondered, as I do, whether most are really necessary), he would soon notice an equally surprising omission, and exclaim, "Where's my Cannabis indica?"

No wonder -- the poor fellow would feel nearly helpless without it. In his day, labor pains, asthma, nervous disorders and even colicky babies were treated with a fluid extract of Cannabis indica, also known as "Indian hemp." (Cannabis is generally seen as having three species -- sativa, indica and ruderalis -- but crossbreeding is common, especially between sativa and indica.) At least 100 scientific papers published in the 19th century backed up such uses.

Then the Marihuana Tax Act of 1937 made possession or transfer of Cannabis illegal in the U.S. except for certain medical and industrial uses, which were heavily taxed. The legislation began a long process of making Cannabis use illegal altogether. Many historians have examined this sorry chapter in American legislative history, and the dubious evidence for Cannabis addiction and violent behavior used to secure the bill's passage. "Under the Influence: The Disinformation Guide to Drugs" by Preston Peet makes a persuasive case that the Act's real purpose was to quash the hemp industry, making synthetic fibers more valuable for industrialists who owned the patents.

Meanwhile, as a medical doctor and botanist, my aim has always been to filter out the cultural noise surrounding the genus Cannabis and see it dispassionately: as a plant with bioactivity in human beings that may have therapeutic value. From this perspective, what can it offer us?

As it turns out, a great deal. Research into possible medical uses of Cannabis is enjoying a renaissance. In recent years, studies have shown potential for treating nausea, vomiting, premenstrual syndrome, insomnia, migraines, multiple sclerosis, spinal cord injuries, alcohol abuse, collagen-induced arthritis, asthma, atherosclerosis, bipolar disorder, depression, Huntington's disease, Parkinson's disease, sickle-cell disease, sleep apnea, Alzheimer's disease and anorexia nervosa.

But perhaps most exciting, cannabinoids (chemical constituents of Cannabis, the best known...
being tetrahydrocannabinol or THC) may have a primary role in cancer treatment and prevention. A number of studies have shown that these compounds can inhibit tumor growth in laboratory animal models. In part, this is achieved by inhibiting angiogenesis, the formation of new blood vessels that tumors need in order to grow. What’s more, cannabinoids seem to kill tumor cells without affecting surrounding normal cells. If these findings hold true as research progresses, cannabinoids would demonstrate a huge advantage over conventional chemotherapy agents, which too often destroy normal cells as well as cancer cells.

As long ago as 1975, researchers reported that cannabinoids inhibited the growth of a certain type of lung cancer cell in test tubes and in mice. Since then, laboratory studies have shown that cannabinoids have effects against tumor cells from glioblastoma (a deadly type of brain cancer) as well as those from thyroid cancer, leukemia/lymphoma, and skin, uterus, breast, stomach, colorectal, pancreatic and prostate cancers.

So far, the only human test of cannabinoids against cancer was performed in Spain, and was designed to determine if treatment was safe, not whether it was effective. (In studies on humans, such "phase one trials," are focused on establishing the safety of a new drug, as well as the right dosage.) In the Spanish study, reported in 2006, the dose was administered intracranially, directly into the tumors of patients with recurrent brain cancer. The investigation established the safety of the dose and showed that the compound used decreased cell proliferation in at least two of nine patients studied.

It is not clear that smoking marijuana achieves blood levels high enough to have these anticancer effects. We need more human research, including well-designed studies to find the best mode of administration.

If you want to learn more about this subject, I recommend an excellent documentary film, "What If Cannabis Cured Cancer," by Len Richmond, which summarizes the remarkable research findings of recent years. Most medical doctors are not aware of this information and its implications for cancer prevention and treatment. The film presents compelling evidence that our current policy on Cannabis is counterproductive.

Another reliable source of information is the chapter on cannabinoids and cancer in "Integrative Oncology" (Oxford University Press, 2009), a textbook I edited with integrative oncologist Donald I. Abrams, M.D. (Learn more about integrative cancer treatment from Dr. Abrams.)

After more than 70 years of misinformation about this botanical remedy, I am delighted that we are finally gaining a mature understanding of its immense therapeutic potential.

Andrew Weil, M.D., invites you to join the conversation: become a fan on Facebook, follow him on Twitter, and check out his Daily Health Tips Blog. Dr. Weil is the founder and director of the Arizona Center for Integrative Medicine and the editorial director of www.DrWeil.com.

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Cannabis is illegal because of cellulose. It produces four times the cellulose per acre compared to trees. It takes fewer chemicals to turn hemp into paper than what it takes to turn trees into paper. Half the forests of the world have been ground into paper as a direct result of cannabis prohibition. The DuPont corporation, inventor, in the 1930’s, of a new process for making tree paper, owes it’s current size to tree paper chemistry. Follow the money. Read the book: http://www.jackherer.com/chapters.html
my theory is that most of america is in the middle, the press does its best to keep us into 1 boxes left vs right....i guess i am mostly libertarian like the next post alleges

Timothy Hale 09:52 PM on 9/19/2010
3 Fans

Or possibly a libertarian.

HUFFPOST SUPER USER
Natalie Willoughby 04:38 PM on 9/30/2010
15 Fans

That's wonderful! As the first reply says, it makes you a rational human being - more of us (cons and libs) should put politics aside and do what's good for the whole.

LizM 09:11 PM on 9/19/2010
105 Fans

What if it just makes you feel good? I'm just saying ...

HUFFPOST SUPER USER
Donna McGregor 07:35 PM on 9/21/2010
78 Fans

That's just an added bonus.

APRandom 09:50 AM on 10/01/2010
8 Fans

Feeling good is a sin. We must suffer in this life, because God has a plan (and I have a bridge I'll sell you).

BrunswickGaDem 08:25 PM on 9/19/2010
131 Fans

I'm not qualified to speak about the effectiveness of medical marijuana. However, it seems that all of the arguments against the therapeutic use of marijuana could just as easily be used against drugs such as effexor, paxil, valium, and all of the other psychoactive drugs now in legal medical use. It seems that the biggest difference between marijuana and the legal drugs is that marijuana is not produced by and does not contribute to the profits of major pharmaceutical corporations.

topkatnc 08:49 PM on 9/19/2010
370 Fans

bingo ....

HUFFPOST SUPER USER
Janis Moorhouse 09:04 PM on 9/19/2010
12 Fans

Thank you!!

Seattle Mike 09:43 PM on 9/19/2010
Not to mention the fact that cannabis is about as physically addictive as a chocolate bar, which means only mildly addictive at worst. Compare this to many of the drugs big pharma makes which are incredibly addictive. Being physically addictive is actually a trait that big pharma not only encourages, they go out of their way to produce highly addictive drugs. This is yet one more thing they hate about cannabis - it is basically non-toxic, impossible to OD on, plus it is only mildly addictive, most of this mental addiction. Compare this to nicotine which is the most deadly addictive drug known to mankind and the hypocrisy is breathtaking. The pharmaceutical companies don't care about people at all. They just want to make as much money as possible. Turning everyone into maintenance addicted to their drugs makes them a ton of money. They hate the fact that cannabis has almost zero side-effects and doesn't give you a hangover.
We are lucky to have him, thank you Dr. Weil for being so smart and not falling into the drill...

noneIn2008 07:05 PM on 9/19/2010
48 Fans

Reason TV has a good recent article on this. They note that if Cannabis were recently discovered in the Amazon, NIH would be spending billions to research the benefits.
http://reason.com/blog/2010/09/15/reasontv-no-accepted-medical-u

Vajara 07:03 PM on 9/19/2010
36 Fans

Yes, I think you are right as this herb produces stress relief and relaxation without the dangers and nasty side affects of the psychotropics, Additionally, the mental health/behavioral health system is overwhelmed on most posts with the returning vets and don't or can't provide the necessary treatment and integrative health practices with them.. The VA is equally unable to respond effectively with their conventional mental health methods so our Injured Warriors continue to suffer without these natural aids.

HUFFPOST COMMUNITY MODERATOR
ncmom54 09:36 PM on 9/19/2010
783 Fans

indeed... medical marijuana should be made available & free to ALL veterans. Regardless what state they live in.

fumes 06:50 PM on 9/19/2010
312 Fans

make it hempen!

fumes 06:07 PM on 9/19/2010
312 Fans

just say know:

POT SHRINKS TUMORS; GOVERNMENT KNEW IN ’74

Wednesday, March 28, The United States Supreme Court rules on whether marijuana use for medicinal purposes can be a valid defense on charges of marijuana possession. The following article was listed as one of the top 25 censored stories of the year 2000.

The term medical marijuana took on dramatic new meaning in February 2000, when researchers in Madrid announced they had destroyed incurable brain tumors in rats by injecting them with THC, the active ingredient in cannabis.

The Madrid study marks only the second time that THC has been administered to tumor-bearing animals. In 1974, researchers at the Medical College of Virginia, who had been funded by the National Institutes of Health to find evidence that marijuana damages the immune system, found instead that THC slowed the growth of three kinds of cancer in mice -- lung and breast cancer, and a virus-induced leukemia.

The DEA quickly shut down the Virginia study and all further cannabis/tumor research, according to Jack Herer, who reports on the events in his book, The Emperor Wears No Clothes. In 1976, President Gerald Ford put an end to all public cannabis research and granted exclusive research rights to major pharmaceutical companies, who set out -- unsuccessfully -- to develop synthetic forms of THC that would deliver all the medical benefits without the "high."
http://www.mapinc.org/drugnews/v01/n572/a11.html?1979

HUFFPOST SUPER USER
samanthemofthesun 09:38 PM on 9/19/2010
9 Fans

So many studies, so little done with the information. It is all about politics and money. Thanks for this. I went to Amsterdam recently, to the hash and marijuana museum, and they
have VOLUMES of studies on it, most of which were commissioned by the US. Amazing.

HUFFPOST SUPER USER
Jordan Baldi 05:26 PM on 9/19/2010
36 Fans

The cops that arrest people for smoking weed know themselves that marijuana is no more worse than Marlboro or Budweiser.

Yes We Cannabis.

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Seattle Mike 09:46 PM on 9/19/2010
11 Fans

Cannabis is way less toxic and dangerous than either tobacco or alcohol. It isn't even close. Millions of people die every year directly because of tobacco and alcohol. Dying from cannabis? Not one.

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HUFFPOST SUPER USER
texgal7 04:40 PM on 9/19/2010
37 Fans

Whether MJ is safe or not, it's obviously safer than many things the FDA allows to be prescribed or purchased over the counter. I do appreciate the FDA when it acts with common sense, but not when it tries to make moral decisions for me. And, by the way, I don't drink or smoke, anyway. I just don't like to see my tax dollars being thrown into a "war" against Marijuana, a "war" which makes no sense at all to me.

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avg american 04:10 PM on 9/19/2010
95 Fans

"The FDA, which studies and approves all medicines in the United Stated, has made very clear that the raw marijuana plant is not medicine, and any state considering medical marijuana should look very carefully at what has happened in California." -R. Gil Kerlikowske , Marijuana Legalization; A Non-Starter Oct 23, 2009

Hhmmm... the FDA (in addition to our other regulators) hasn't been doing such a stellar job lately..

Accutane, Tysabri, our spinach, our beef, our eggs...all slipped through the cracks... And it looks like the FDA is in bed with Big Pharmaceuticals. The Pharmaceutical companies are multibillion dollar industries. They do not want to classify raw marijuana as medicinal, because they want to chemical-ize it, charge a lot of money for it and be the only dealers in town.

I am thinking that our regulatory agencies need a complete audit and overhaul.

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schatsie 06:14 PM on 9/19/2010
261 Fans

Yes, I heard on NPR that they (pig pharma) have developed pills at a cost of $30 per pill and you might require 3 pills a day...and this replaces 3 plants...,3 plants...

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Seattle Mike 09:50 PM on 9/19/2010
11 Fans

Big pharma wants you on highly addictive maintenance drugs for the rest of your life. They don't care one whit for humanity just as long as they make obscene profits. They hate the fact that cannabis is a naturally growing herb that is both non-toxic and non-addictive. How can they make money on that?

The pharmaceutical companies are pure evil. They aren't working in the best interest of humanity. They are working in the best interest of a handful of obscenely wealthy people. They are sucking all the money from lower and middle class people and not providing one single thing of intrinsic value.

Permalink | Share it
During the 2008 debates Ron Paul said that a lot of the government "agencies" are so bogged down by bureaucracy they can't do anything...he gave the example of FEMA like it was common knowledge it was useless...

FDA doesn't care about public health, they care about power, profit, and job security.

This is evident from so many examples. For example, FDA won't do anything significant about the top cause of acute liver failure in the US, the dangerous drug Tylenol. It destroys the liver by causing massive depletion of glutathione. The fix is simple and dirt cheap, add NAC (N-acetylcysteine) to prevent the liver damage. But big medicine will make more money on people destroying their livers with a painkiller they think is safe. Since FDA is funded by big medicine, FDA won't protect the public. None of this information is new, NAC is an inexpensive amino acid supplement that is sold over the counter as an antioxidant and immune system booster. It has been used as the antidote for Tylenol for decades.


The FDA and the government are not actually interested in protecting public health and the poison drug Tylenol proves this quite well. They may have their reasons for trying to control pot, but protecting public health is not one of them.

What they are interested in doing is lining the pockets of the drug companies with massive profits and monopolies on patented chemicals so that the public will be dependent upon them and big pharma will continue to plow huge quantities of funds into FDA fees and filings, keeping everybody in the agency busy.

What have I missed with Accutane? I took it as prescribed and I went from having severe acne to not having more than a few small pimples in the last 2 years. It also filled in most of my facial scarring. The only side-effect I had was extremely dry lips but I knew that going in, and that ended once I was done taking it. I was also informed of the birth-defects that could result from having sex while on it, so I didn't. Were certain side-effects not revealed at first, but had been by the time I took it?