

Marijuana, Uruguay talk

Cannabinopathic Medicine

by

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In 1966, through my anti-Vietnam War activities, I met the man who was to become my closest friend, and through him other people who smoked the dangerous drug, marijuana. Up until then, I had never seen a joint or met anyone who had ever used one. My experience with these new friends, some of whom used it daily, led me to question my firmly held belief that marijuana was quite harmful and for that reason, in 1967, I began my studies of the scientific, medical and other literature with the goal of providing a reasonably objective summary of the data which underlay its prohibition. Much to my surprise, I found no credible medical or scientific basis for the justification of the prohibition which at that time was responsible for about 300,000 arrests annually. The assertion that it is a very toxic drug was based on old and new myths. In fact, one of the many exceptional features of this drug is its remarkably limited toxicity. Compared to aspirin, which people are free to purchase and use without the advice or prescription of a physician, cannabis is much safer:

there are well over 1000 deaths annually from aspirin in the United States alone, whereas there has never been a death anywhere from marijuana. In fact, by the time cannabis regains its rightful place in the pharmacopeia around the world, it will be seen as one of the safest drugs in those compendiums. Moreover, it will eventually be hailed as a "wonder drug" just as penicillin was in the 1940s. Penicillin achieved this reputation because (1) it was remarkably non-toxic, (2) it was, once it was produced on an economy of scale, quite inexpensive, and (3) it was effective in the treatment of a variety of infectious diseases. Similarly, cannabis (1) is exceptionally safe, and (2) once freed of the prohibition tariff, will be significantly less expensive than the conventional pharmaceuticals it replaces while (3) its already impressive medical versatility continues to expand.

Given these characteristics, it should come as no surprise that its use as a medicine, legally or illegally, with or without a recommendation from a physician, is now growing exponentially around the world. Marijuana is here to stay; there can no longer be any doubt that it is not just another transient drug fad. Like alcohol, it has become a part of Western culture, a culture which is now trying to find appropriate social, legal and medical accommodations. In the United States, or 20 states and the District of Columbia have established legislation which makes it possible for patients suffering from a variety of disorders to use the drug legally with a recommendation from a physician. Unfortunately, because each state arrogates to itself

the right to define which symptoms and syndromes may be lawfully treated with cannabis, many patients with legitimate claims to the therapeutic usefulness of this plant must continue to use it illegally and therefore endure the extra layer of anxiety imposed by its illegality. California and Colorado are the two states in which the largest number of patients for whom it would be medically useful have the freedom to access it legally. New Jersey is the most restrictive, and I would guess that only a small fraction of the pool of patients who would find marijuana to be as or more useful than the invariably more toxic conventional drugs it will displace are allowed legal access to it. The framers of the New Jersey legislation may fear what they see as chaos in the distribution of medical marijuana in California and Colorado, a fear born of their concern that the more liberal parameters of medical use adopted in these states have allowed its access to many people who use it for other than strictly medicinal reasons. If this is correct, it is consistent with my view that it will be impossible to realize the full potential of this plant as a medicine, not to speak of the other ways it is useful, in the setting of this destructive prohibition. But this is rapidly changing as last year both Colorado and Washington repealed, as far as the state is concerned, the prohibition of cannabis for anyone over the age of 21.

In the United States we are gradually realizing after arresting over 24 million marijuana users since the 1960s, most of them young and 90% for mere possession, that "making war" against cannabis does

not work anymore now than it did for alcohol during the days of the Volstead Act. Many people are expressing their impatience with the federal government's intransigence as it obdurately maintains its dual archaic positions that "marijuana is harmful" and that it "is not a medicine". The 20 states that have made it possible for at least some patients to use cannabis legally as a medicine are inadvertently constructing a large social experiment in how best to deal with the reinvention of the "cannabis as medicine" phenomenon, while at the same time sending a powerful message to the federal government. Each of these state actions has taken a slice out of the extraordinary popular delusion, cannabinophobia.

Cannabinopathic medicine, because it has developed so rapidly since the late 90s has provided many patients and the people to whom they matter, the opportunity to discover for themselves that cannabis is both relatively benign and remarkably useful. This new increment of people who have personal experience with cannabis may be contributing significantly to the observation that the moral consensus about the evil of marijuana is becoming uncertain and shallow. Conservative authorities pretend that eliminating cannabis traffic is like eliminating slavery or piracy, or eradicating smallpox or malaria. The official view, at least as far as the federal government is concerned, is that everything possible has to be done to prevent everyone from ever using marihuana, even as a medicine. But there is also an informal lore of marihuana use that is far more tolerant. Many of the millions of cannabis users around

the world not only disobey the drug laws but feel a principled lack of respect for them. They do not conceal their bitter resentment of laws that render them criminals. They believe that many people have been deceived by their governments, and they have come to doubt that the "authorities" understand much about either the deleterious or the useful properties of the drug. This undercurrent of ambivalence and resistance in public attitudes towards marihuana laws leaves room for the possibility of change, especially since the costs of prohibition are all so high and rising.

It is also clear that the realities of human need are incompatible with the demand for a legally enforceable distinction between medicine and all other uses of cannabis. Marijuana simply does not conform to the conceptual boundaries established by twentieth-century institutions. It is truly a *sui generis* substance; is there another relatively non-toxic drug which is capable of heightening many pleasures, has a large and growing number of medical uses and has the potential to enhance some individual capacities? The only workable way of realizing the full potential of this remarkable substance, including its full medical potential, is to free it from the present dual set of regulations - those that control prescription drugs in general and the special criminal laws that control psychoactive substances. These mutually reinforcing laws establish a set of social categories that strangle its uniquely multifaceted potential. The only way out is to cut the knot by giving marihuana the same status as alcohol - legalizing it for adults for all uses and

removing it entirely from the medical and criminal control systems.

Before closing, I would like to reassure those who believe we do not yet know enough about marijuana to be able to make the kinds of decisions which are now necessary. Despite the US government's three-quarter century-long prohibition of marijuana and its confinement to Schedule 1 of the Drug Control and Abuse Act of 1970, it is nonetheless one of the most studied therapeutically active substances in history. To date, there are over 20,000 published studies or reviews in the scientific literature referencing the cannabis plant and its cannabinoids, nearly half of which were published within the last five years according to a keyword search on PubMed Central. Over 1,400 peer-reviewed papers were published in 2013 alone. By contrast, a keyword search of "hydrocodone" yields just over 600 total references in the entire body of the available scientific literature. These studies reveal that marijuana and its active constituents, the cannabinoids, are safe and effective therapeutic and/or recreational compounds. Unlike alcohol and most prescription or over-the-counter medications, cannabinoids are virtually non-toxic to the health of cells and organs, and they are incapable of causing the user to experience a fatal overdose and unlike opiates or ethanol, cannabinoids are not central nervous system depressants and cannot cause respiratory failure. In fact, a 2008 meta-analysis published in the Journal of the Canadian Medical Association reported that cannabis-based drugs were associated with virtually no

elevated incidences of serious adverse side-effects in over 30 years of investigative use.

It is now clear that we know as much or more about cannabis than we know about many if not most prescription pharmaceuticals. And we most certainly now know enough about its limited toxicity and remarkable medical potential to readmit it as a significant contribution to the pharmacopeia of allopathic (or modern Western) medicine.