

CONTINUUM

Edited by Dick Teresi

REEFER MADNESS

fter nearly a decade of tireless work, the drug-industry giant Eli Lilly has scored a unique triumph: Its new drug, nabilone, has finally been approved for use in human patients, at least in Canada.

What is remarkable about this is that nabilone is the first tangible product of one of the most bizarre research efforts in modern medicine. In dozens of major laboratories across the United States an army of doctors, chemists, and pharmacologists is spending millions of dollars on a probably futile attempt to take the high out of marijuana.

This is not a plot by the government or by Moral Majority conspirators, though it seems likely that both groups have helped to inspire the research. Rather, it is one more tribute to the healing art's most honored principle: Before a medicine can do a patient any good, it has to taste like hell.

Why the enormous scientific interest in marijuana? Because twentieth-century physicians have rediscovered what fifth-century alchemists could have told them: Cannabis sativa is more than just a high; the stuff can be good for you. In fact, the list of diseases that may be cured or controlled with liberal doses of hemp has been growing continuously for more than a decade. It already includes nausea suffered by patients undergoing cancer chemotherapy, glaucoma, anorexia nervosa, epilepsy, bronchitis, amoebic meningitis, hypertension, and more.

Harvard University's Dr. Norman Zinberg usually gets the credit for rediscovering the drug's medicinal properties. While treating cancer patients with chemotherapeutic drugs so powerful that they caused severe nausea, the doctor noticed that some of his younger patients handled the chemotherapy surprisingly well. It didn't take him long to find out why: They were heavy pot smokers. Dr. Zinberg published the first report on the controlled use of marijuana in conjunction with chemotherapy in 1976, along with researchers at the Sidney Farber Cancer Institute, in Boston; their work has since been replicated in many other hospitals.

Another breakthrough was the discovery that marijuana could be used to treat glaucoma. While doctors were busy conducting experiments with the drug, trying to prove it really was an effective treatment that didn't produce undesirable side effects, a District of Columbia court ruled that the Food and Drug Administration must license a local ophthalmologist to prescribe

joints to control patient Bob Randall's glaucoma. Randall is now about the only person in the country who can walk into a drugstore and—legally—buy marijuana cigarettes.

Yet instead of welcoming marijuana as a versatile "new" treatment, the medical community has seemed scandalized. Typical is the reaction of a Georgia doctor who editorialized in the *Annals of Ophthalmology*: "The 'high' makes it totally unacceptable as a 'medicant [sic].' The side effects inflicted upon the recipients... certainly outweigh any conceivable benefit." Side effects? The one side effect the doctor complained of was that dreamy euphoria experienced by three quarters of the people who smoke marijuana for medical or recreational reasons.

It's become clear that doctors will probably never prescribe marijuana until the labs have found a way to take the fun out of it. So researchers are devoting as much attention to that effort as they are to exploring new medical uses for this age-old drug. Using Cannabis sativa grown on a U.S. government plantation hidden somewhere in Mississippi, chemists have already isolated 420 complex organic chemicals from the plant. Of these, one seems to have a monopoly on medicinal potency: delta-9-tetrahydrocannabinol, THC for short. And the high? That also comes from THC.

Once THC had been isolated, the next logical step was to create synthetic versions that might be more potent or less enjoyable. Nabilone was the first of these. Eli Lilly and Company has been testing it since 1974. One advantage nabilone has over natural THC is its long shelf life. Natural THC deteriorates rapidly once it's extracted from the plant. A disadvantage is that nabilone is expensive; one licit dose costs about ten times as much as an illicit joint. And it gives the same high as nature's own THC. Despite this, doctors are more likely to jot "nabilone q.i.d." on a prescription pad than "four joints a day."

Dr. Zinberg thinks the medical establishment should stop wasting millions on trying to take the high out of pot. He points out that in the past 15 years some 51 million Americans have medicated themselves with marijuana—without measurable harm, according to most scientists. In fact three out of four patients who've taken doctor-prescribed THC insist that they find nothing objectionable in its much-mistrusted side effect.

-FRANKLYNN PETERSON AND JUDI KESSELMAN-TURKEL



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