What we ought to talk about when we're talking about decriminalizing *Cannabis*

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A green revolution is sweeping through the social and political landscape of the United States—a shifting tide in the way American law and society conceptualize *Cannabis* as a recreational and a medical substance. In light of the unprecedented legalization of *Cannabis* in several states, and decriminalization campaigns in other jurisdictions—such as the nation's capital, where we work—the topic of marijuana has grabbed the nation's attention and reinvigorated debate about its use.

No dearth of opinion on marijuana use

Legal and economic positions seem to be the pivot points of argument on recreational use of *Cannabis*—but not, surprisingly, health considerations. Even to the *Cannabis* nonuser, the pending changes in state laws are relevant; after all, every illicit substance can lead to a pathological process and thus a public economic burden.

Articulations of marijuana's "safety" are nothing new: Consider President Barack Obama's recent comment that pot is no more dangerous than alcohol (the danger of alcohol is a different argument altogether). There is another layer of *Cannabis* use—the drug's psychiatric effects—that is seldom visible to the public eye but quite palpable in the field of mental health—a troubling disconnect because those psychiatric effects have been softened to inconsequence, or are not spoken of at all.

When *Cannabis* is juxtaposed with other illicit substances, it seems almost innocuous; dependence and withdrawal have not been detailed empirically and are continuously debated. True, consumption of marijuana is not *immediately* life-threatening, compared with the risk of stroke and myocardial infarction with cocaine use or respiratory depression with narcotic agents. Despite this facade, however, the psychiatric morbidities of marijuana are real and incapacitating, ranging from extreme anxiety and dysregulated mood to chronic psychotic debilitation.

Even after only a few years in psychiatric residency, it has become a common experience for us to observe acute and chronic psychosis in patients after they have used *Cannabis*. Many require hospitalization or a leave of absence from academics or employment; one of our patients re-matriculated to college after 7 years of intensive care.

Every mental health professional can tell similar tales.

Beyond anecdote

Numerous publications have shown that *Cannabis* expedites onset of psychotic and prodromal symptoms of schizophrenia. The age range of onset of psychotic symptoms—typically, late adolescence into early 20s—is critical, prognostically.[1,2] This epidemiological fact is dangerously in tandem

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Clinical Point

The scary truth? Medical science can't yet tell us who is predisposed to the ill effects of *Cannabis*, and to what degree

with *Cannabis* use patterns in America and its college culture. It is known that modifiable risk factors are decisive in the development of psychopathology. Additionally, environmental exposures in the developing brain elicit a more ominous concern because the brain does not complete neural development until early or mid-20s.[3]

Another concern is the effect of *Cannabis* on cognition, during periods of acute intoxication and after chronic use. Research on this topic is limited, but evidence suggests that heavy *Cannabis* use at an early age affects cognition, as measured by a diminished IQ.[4] Regrettably, unknowns in this area of study are far more abundant than what we know. This gray area might serve to placate legislators and frequent users and cool discussion.

R_x *Cannabis*?

Another aspect of the controversy concerns medicinal use of marijuana. Perhaps legalization of medical marijuana has served simply as an antecedent to recreational legalization, as was the case for Colorado and Oregon. But under the heading of "medical marijuana" lies a poorly defined, amorphous designation—one that borders on arbitrariness regarding standards of use.

Cancer treatment, pain, glaucoma, HIV, multiple sclerosis are examples of conditions in the bucket list for discretionary use of *Cannabis*, yet none has a formal FDA indication.[5] This absence of approval underscores the lack of empirical validation, quality control, and standardization that are required of every other sanctioned pharmaceutical agent.

Lack of validation also might explain why the collective opinion of major medical associations, including the American Medical Association and the National Council on Alcoholism and Drug Dependence, are opposed to wide availability of smoked marijuana. The American Society of Addiction Medicine, an interdisciplinary organization of physicians, has posted a policy statement affirming that medical marijuana should 1) be held to FDA standards and 2) not be kept under the jurisdiction of state law and regulation.[6]

Why are psychiatric morbidities of marijuana reported so timidly?

Perhaps the rarity and randomness of long-term illness associated with *Cannabis* use pacifies individual concerns. Psychiatry understands this reality: All people respond to stresses differently and have specific, individual vulnerabilities. The diathesis-stress model plainly explains this hypothesis—and, sometimes, *Cannabis* is that stressor. Perhaps a more academic hypothesis is the concept of "ecophenotypes," which posits that our heritability is not fixed but is in constant calibration with our environment and our adaptability to it. Environment often is a choice that people make.

The fact remains: This drug is risky

Cannabis can precipitate mood and anxiety disorders, alter development of the brain, and serve as a trigger for schizophrenia. The scary truth is that medical science cannot yet tell us who is predisposed to these ill effects and to what degree. In the meantime, society is missing the voice of psychiatry on individual and public health risks that might be the consequences of sweeping legal changes.

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