



Which is More Injurious: Cannabis or Alcohol?

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ABSTRACT

Twitter is a useful medium for the exchange of ideas, but it is not well suited to a thorough exposition of complex topics. In one recent exchange, I engaged author and journalist Peter Hitchens (@clarkemicah) on the relative harms of alcohol and cannabis, a discussion he later dissected in his blog (<http://dailym.ai/13Dc1Rv>). Having repeatedly attempted without success to post a reply on his blog, I have elected to do so here.

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As the “Mr. X” described in his blog post of December 26th (<http://dailym.ai/13Dc1Rv>), I wish to respond to the main points made by Peter Hitchens. By way of background, I am a physician with specialization in Internal Medicine, along with additional subspecialization in both Clinical Pharmacology and Medical Toxicology. I also hold a PhD in Clinical Epidemiology and, as Mr. Hitchens notes, am a scientist devoted to the study of drug safety. In my clinical work and research, I deal daily with the adverse effects of drugs, and am by any fair metric qualified to opine on such issues. (If it helps my case in this regard, I practiced as a pharmacist from 1990 to 1995.)

My skepticism about prescription drugs is deeper than Mr. Hitchens suggests in his post. I devote much of my time to studying the effects of these drugs and to caring for patients harmed by them. In my efforts to curtail dangerous prescribing, I have been rather vocal about prescription opioids, the toll of which is immense yet unquantifiable. I have also been critical of the safety record and overuse of antidepressants (I’ve even buttressed Mr. Hitchens’ views on them <http://bit.ly/13L1EeQ>), stimulants and antipsychotics, but also antibiotics, diabetes therapies, anticoagulants, and drugs for heart disease and hypertension. Most of my 220-odd publications address drug-related harm in one way or another.

To address the gravamen of his complaint, Mr. Hitchens did not, in fact, state that cannabis was more injurious than alcohol. I have neither the wish nor the motive to twist his words, as I made clear in our exchange (see <http://bit.ly/16TMTly>), and I apologize for suggesting this is what he said. And while I don’t wish to detract from my apology, I would like to clarify how I drew this inference.

The explanation begins with our exchange of December 20th (see <http://bit.ly/1t8RPha>), in which I stated that the harmful effects of alcohol exceeded those of cannabis, and that this was independent of the legal status of either drug. Mr. Hitchens replied: “Ah, so lifelong mental illness is not as bad as the various effects of alcohol? Daft.”

The word “daft” struck me as unnecessarily hostile, but the reply also left me with the impression that Mr. Hitchens viewed cannabis as the more dangerous drug. How did I draw this

inference? Consider a debate in which I assert that it is daft to suggest that margarine tastes better than butter. (Reasonable people may disagree on this, although I hope not too strenuously.) From this assertion, one could reasonably infer that I hold one of two alternate positions: either butter tastes better than margarine, or the two do not differ in taste. (I appreciate that this is a matter of preference rather than of science, and that one might conceivably assert that truth in the matter of *Butter v. Margarine* is unknowable.)

Comfortable in the knowledge that the dangers of cannabis hold no comparison to those of alcohol, I inferred from Hitchens' reply – his use of “daft” in particular - that he perceived cannabis to be the more injurious drug. I think other readers might reasonably draw the same conclusion. Having read his blog post, I now appreciate that my inference was wrong, and that Mr. Hitchens believes it is not possible to know which drug is more dangerous.

This claim is unequivocally wrong, and in making it Hitchens demonstrates a striking lack of understanding about the harms caused by different drugs. Alcohol is without question the more dangerous compound, and there is nothing “bizarre” (to use his word) about saying so. The harms of alcohol are myriad and involve not only the brain and behavior, but also the heart, liver, pancreas, metabolic and hematopoietic systems. Alcohol can damage each of these systems in several ways, and acutely or after chronic heavy use. Alcohol also threatens the developing fetus, is a risk factor for various malignancies, and increases the risk of obesity and its many consequences. Finally, the phenomena of alcohol dependence and withdrawal (which can itself be life-threatening) are far more consequential than what is seen among habitual cannabis users.

Estimates of the toll of alcohol vary, but the World Health Organization estimates 3.3 million deaths occur each year from the effects of alcohol (see <http://bit.ly/1hglD6d>), almost 6% of all deaths globally. The global burden of disease attributable to cannabis holds no comparison (see <http://1.usa.gov/1yf2DBr>). In every meaningful sense – the variety of harms, the likelihood of their development in an individual, and the total number harmed or killed – alcohol is unquestionably the more injurious drug. Assertions to the contrary are not to be taken seriously.

If I may correct Mr. Hitchens further, cannabis is also far less dangerous than cocaine, heroin, amphetamines and many other illegal drugs. I know of no reputable clinical pharmacologist or toxicologist – and I know quite a number rather well - who would suggest otherwise. This should not be taken to imply that cannabis carries no risk. It does. Acute psychosis is one such risk (for a particularly vivid example, see <http://1.usa.gov/1x9olF7>), as are impaired driving (<http://1.usa.gov/13KD79w>) and the under-recognized cannabinoid hyperemesis syndrome (<http://1.usa.gov/14hzusN>). The link between cannabis and chronic mental illness is considerably more tenuous. Mr. Hitchens seems convinced of a cause-and-effect relationship here, and it is his right to draw this conclusion. When one imputes causality, a judgment is made, and the threshold for doing so varies according to one's pre-existing inclinations. As an epidemiologist and clinician whose daily work involves causality assessment of various sorts, I anticipate that future research will illuminate whether cannabis is truly a component cause of mental illness in a small minority of patients, or whether the association between cannabis use and chronic mental illness reflects bias or confounding. Readers with the time and inclination are directed here <http://bit.ly/1BqzmBg> and here <http://1.usa.gov/1yeXE3J>.

In closing, I appreciate that Mr. Hitchens does not share my views on the relative harms of alcohol and cannabis. This is his prerogative, even if it involves setting aside a very large body of evidence. I welcome the opportunity to clarify my views on the matter here, and to apologize to Mr. Hitchens for suggesting he said something he did not.

Sincerely,

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