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Alcohol or Marijuana? A Pediatrician Faces the Question

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As my children, and my friends' children, are getting older, a question that comes up again and again from friends is this: Which would I rather my children use — alcohol or marijuana?

The immediate answer, of course, is “neither.” But no parent accepts that. It's assumed, and not incorrectly, that the vast majority of adolescents will try one or the other, especially when they go to college. So they press me further.

The easy answer is to demonize marijuana. It's illegal, after all. Moreover, its potential downsides are well known. Scans show that marijuana use is associated with potential changes in the brain. It's associated with increases in the risk of psychosis. It may be associated with changes in lung function or

long-term cancer risk, even though a growing body of evidence says that seems unlikely. It can harm memory, it's associated with lower academic achievement, and its use is linked to less success later in life.

But these are all associations, not known causal pathways. It may be, for instance, that people predisposed to psychosis are more likely to use pot. We don't know. Moreover, all of these potential dangers seem scary only when viewed in isolation. Put them next to alcohol, and everything looks different.

Because marijuana is illegal, the first thing I think about before answering is crime. In many states, being caught with marijuana is much worse than being caught with alcohol while underage. But ignoring the relationship between alcohol and crime is a big mistake. The National Council on Alcoholism and Drug Dependence reports that alcohol use is a factor in 40 percent of all violent crimes in the United States, including 37 percent of rapes and 27 percent of aggravated assaults.

No such association has been found among marijuana users. Although there are studies that can link marijuana to crime, it's almost all centered on its illegal distribution. People who are high are not committing violence.

People will argue that casual use isn't the issue; it's abuse that's worrisome for crime. They're right — but for alcohol. A recent study in Pediatrics investigated the factors associated with death in delinquent youth. Researchers found that about 19 percent of delinquent males and 11 percent of delinquent females had an alcohol use disorder. Further, they found that even five years after detention, those with an alcohol use disorder had a 4.7 times greater risk of death from external causes, like homicide, than those without an alcohol disorder.

When I'm debating my answer, I think about health as well. Once again, there's no comparison. Binge drinking accounted for about half of the more than 80,000 alcohol-related deaths in the United States in 2010, according to a 2012 report by the Centers for Disease Control and Prevention. The economic costs associated with excessive alcohol consumption in the United States were estimated to be about \$225 billion. Binge drinking, defined as four or more drinks for women and five or more drinks for men on a single occasion, isn't

rare either. More than 17 percent of all people in the United States are binge drinkers, and more than 28 percent of people age 18 to 24.

Binge drinking is more common among people with a household income of at least \$75,000. This is a solid middle-class problem.

Marijuana, on the other hand, kills almost no one. The number of deaths attributed to marijuana use is pretty much zero. A study that tracked more than 45,000 Swedes for 15 years found no increase in mortality in those who used marijuana, after controlling for other factors. Another study published in the American Journal of Public Health followed more than 65,000 people in the United States and found that marijuana use had no effect at all on mortality in healthy men and women.

I think about which is more dangerous when driving. A 2013 case-control study found that marijuana use increased the odds of being in a fatal crash by 83 percent. But adding alcohol to drug use increased the odds of a fatal crash by more than 2,200 percent. A more recent study found that, after controlling for various factors, a detectable amount of THC, the active ingredient in pot, in the blood did not increase the risk of accidents at all. Having a blood alcohol level of at least 0.05 percent, though, increased the odds of being in a crash by 575 percent.

I think about which substance might put young people at risk for being hurt by others. That's where things become even more stark. In 1995 alone, college students reported more than 460,000 alcohol-related incidents of violence in the United States. A 2011 prospective study found that mental and physical dating abuse were more common on drinking days among college students. On the other hand, a 2014 study looking at marijuana use and intimate partner violence in the first nine years of marriage found that those who used marijuana had lower rates of such violence. Indeed, the men who used marijuana the most were the least likely to commit violence against a partner.

Most people come out of college not dependent on the substances they experimented with there. But some do. So I also consider which of the two might lead to abuse. Even there, alcohol fares poorly compared with

marijuana. While 9 percent of pot users eventually become dependent, more than 20 percent of alcohol users do.

An often-quoted, although hotly debated, study in the *Lancet* ranked many drugs according to their harm score, both to users and to others. Alcohol was clearly in the lead. One could make a case, though, that heroin, crack cocaine and methamphetamine would be worse if they were legal and more commonly used. But it's hard to see how pot could overtake alcohol even if it were universally legal. Use of marijuana is not rare, even now when it's widely illegal to buy and use. It's estimated that almost half of Americans age 18 to 20 have tried it at some point in their lives; more than a third of them have used it in the last year.

I also can't ignore what I've seen as a pediatrician. I've seen young people brought to the emergency room because they've consumed too much alcohol and become poisoned. That happens thousands of times a year. Some even die.

And when my oldest child heads off to college in the not-too-distant future, this is what I will think of: Every year more than 1,800 college students die from alcohol-related accidents. About 600,000 are injured while under alcohol's influence, almost 700,000 are assaulted, and almost 100,000 are sexually assaulted. About 400,000 have unprotected sex, and 100,000 are too drunk to know if they consented. The numbers for pot aren't even in the same league.

I'm a pediatrician, as well as a parent. I can, I suppose, demand that my children, and those I care for in a clinic, never engage in risky behavior. But that doesn't work. Many will still engage in sexual activity, for instance, no matter how much I preach about the risk of a sexually transmitted infection or pregnancy. Because of that, I have conversations about how to minimize risk by making informed choices. While no sex is preferable to unprotected sex, so is sex with a condom. Talking about the harm reduction from condom use doesn't mean I'm telling them to have sex.

Similarly, none of these arguments I've presented are "pro pot" in the sense that I'm saying that adolescents should go use marijuana without worrying about consequences. There's little question that marijuana carries

with it risks to people who use it, as well as to the nation. The number of people who will be hurt from it, will hurt others because of it, begin to abuse it, and suffer negative consequences from it are certainly greater than zero. But looking only at those dangers, and refusing to grapple with them in the context of our society's implicit consent for alcohol use in young adults, is irrational.

When someone asks me whether I'd rather my children use pot or alcohol, after sifting through all the studies and all the data, I still say "neither." Usually, I say it more than once. But if I'm forced to make a choice, the answer is "marijuana."

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