

The Health and Social Consequences of National Marijuana Legalization

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Immense historical shifts are taking place in marijuana policy. Colorado, Washington, Alaska, and Oregon have legalized commercial production and possession of recreational marijuana, and other states are considering similar policies. There is substantial debate about the social and health consequences associated with these policy changes. Even though the evaluation of these states over time is a necessary step, such an evaluation will only tell us about the impact that fully commercial models of marijuana legalization have on marijuana use and associated social problems. We are missing information on the impact that regulated, non-commercial models that control aspects of the marijuana market that could be critical drivers of use, including advertising, individual purchasing limits, and points of sale, have on marijuana use and associated social problems. The national legalization of marijuana in Uruguay offers us an opportunity to evaluate such a model.

In December 2013, Uruguay became the first country in the world to remove the prohibition and regulate the sale, cultivation, and distribution of marijuana. The Uruguayan model differs from U.S. state models in unique ways that can inform future U.S. policies in this topic. It is a non-commercial model of legalization, whereby the state, rather than the market, controls production and sales of marijuana. Advertising of the product is prohibited. Users are registered in a national registry and are only allowed to obtain marijuana through one of 3 mechanisms with a maximum annual dispensation of 480 grs. (i.e. pharmacies; home cultivation; cannabis clubs). In contrast, U.S. states allow for advertising, there is no registry of users, and purchase limits are only placed on the point of sale. We propose a pre/post law, intervention/control group comparison, with municipalities in Montevideo, the capital of Uruguay, as the intervention sites. We will compare the prevalence of marijuana use, other types of substance use and traffic injuries, pre- (2001-2014) and post- (2015-2019) legalization, in 8 municipalities in Montevideo, and in a synthetic control group calibrated by similar data from 167 municipalities in 16 comparable cities in Chile and Argentina.

This study aims: (1) To evaluate whether marijuana legalization is associated with changes in marijuana use in Montevideo, Uruguay, vs. control cities; and whether changes in perceived riskiness and availability of marijuana, and in marijuana price, explain changes in marijuana use; (2) To evaluate whether marijuana legalization is associated with changes in the use of other drugs (i.e. alcohol, tobacco, nonmedical prescription drug use, cocaine and derivatives ("pasta base")) in Montevideo vs. control cities; and (3) to evaluate whether marijuana legalization is associated with changes in the prevalence of traffic fatalities in Montevideo vs. control cities. As more states in the U.S. legalize marijuana, they will be able to use evidence from our study, jointly with evidence from U.S. studies, to make an empirical decision about the types of legalization approaches that will be least likely to lead to increases in substance use and associated social problems.