

Brief review of literature on medical marijuana laws & crime
Jack Reed
Colorado Department of Public Safety, Division of Criminal Justice

- Two studies (1,3) conclude that states with medical marijuana laws show significant **decreases** in violent crime compared to states without MMLs.
- A study of the ecological associations between medical marijuana dispensaries and crime (4) found no relationship between density of dispensaries and either violent or property crime.
- Three studies (2,5,6) conclude that current drug enforcement patterns actually lead to an **increase** in violent crimes and suggest that different models of drug policies would improve public safety. This gives additional credence to the Governor's assertion that the previous method of dealing with marijuana was a failure.

(1) Shepard, E. & Blackley, P. (2016). Medical marijuana and crime: further evidence from the western states. *Journal of Drug Issues*, 46, 122-134.

Abstract

State medical marijuana programs have proliferated in the United States in recent years. Marijuana sales are now estimated in billions of dollars per year with over two million patients, yet it remains unlawful under Federal law, and there is limited and conflicting evidence about potential effects on society. We present new evidence about potential effects on crime by estimating an economic crime model following the general approach developed by Becker. Data from 11 states in the Western United States are used to estimate the model and test hypotheses about potential effects on rates of violent and property crime. Fixed effects methods are applied to control for state-specific factors, with adjustments for first-order autocorrelation and cross-section heteroskedasticity. **There is no evidence of negative spillover effects from medical marijuana laws (MMLs) on violent or property crime. Instead, we find significant drops in rates of violent crime associated with state MMLs.**

(2) Shepard, E. & Blackley, P. (2007). The impact of marijuana law enforcement in an economic model of crime. *Journal of Drug Issues*, 37, 403-424.

Abstract

U.S. law enforcement against the sale and possession of marijuana has been estimated to cost close to \$8 billion a year in criminal justice resources. **Current enforcement is justified if it provides net benefits greater than alternatives such as a legal, regulated market for marijuana.** Prior research suggests that current levels of drug enforcement may increase nondrug crime and hard drug use. Here, local rates of property crime, homicide, and nonmarijuana drug possession are estimated as a function of economic conditions, enforcement effectiveness, and arrests for possession or sale of marijuana. The data consists of a pooled sample of over 1300 U.S. counties (1994-2001). **The results suggest that marijuana arrests are associated with increases in homicides, burglaries, motor vehicle thefts, and larcenies along with subsequent increases in hard drug arrests. These results raise significant questions about the merits of policies that focus on criminal justice approaches to marijuana control.**

(3) Morris, R., TenEyck, M., Barnes, J., & Kovandzic, T. (2014). The effect of medical marijuana laws on crime: evidence from state panel data, 1990-2006. *PLOS One*, 9, e92816, 1-7. Available: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0092816> .

Abstract

Background

Debate has surrounded the legalization of marijuana for medical purposes for decades. Some have argued medical marijuana legalization (MML) poses a threat to public health and safety, perhaps also affecting crime rates. In recent years, some U.S. states have legalized marijuana for medical purposes, reigniting political and public interest in the impact of marijuana legalization on a range of outcomes.

Methods

Relying on U.S. state panel data, we analyzed the association between state MML and state crime rates for all Part I offenses collected by the FBI.

Findings

Results did not indicate a crime exacerbating effect of MML on any of the Part I offenses. Alternatively, state MML may be correlated with a reduction in homicide and assault rates, net of other covariates.

Conclusions

These findings run counter to arguments suggesting the legalization of marijuana for medical purposes poses a danger to public health in terms of exposure to violent crime and property crimes.

(4) Kepple, N. & Freisthler, B. (2012). Exploring the ecological associations between crime and medical marijuana dispensaries. *Journal of Studies on Alcohol and Drugs*, 73, 523-530. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3364319/pdf/jsad523.pdf>

Abstract

Objective:

Routine activities theory purports that crime occurs in places with a suitable target, motivated offender, and lack of guardianship. Medical marijuana dispensaries may be places that satisfy these conditions, but this has not yet been studied. The current study examined whether the density of medical marijuana dispensaries is associated with crime.

Method:

An ecological, cross-sectional design was used to explore the spatial relationship between density of medical marijuana dispensaries and two types of crime rates (violent crime and property crime) in 95 census tracts in Sacramento, CA, during 2009. Spatial error regression methods were used to determine associations between crime rates and density of medical marijuana dispensaries, controlling for neighborhood characteristics associated with routine activities.

Results:

Violent and property crime rates were positively associated with percentage of commercially zoned areas, percentage of one-person households, and unemployment rate. Higher violent crime rates were

associated with concentrated disadvantage. Property crime rates were positively associated with the percentage of population 15–24 years of age. Density of medical marijuana dispensaries was not associated with violent or property crime rates.

Conclusions:

Consistent with previous work, variables measuring routine activities at the ecological level were related to crime. There were no observed cross-sectional associations between the density of medical marijuana dispensaries and either violent or property crime rates in this study. These results suggest that the density of medical marijuana dispensaries may not be associated with crime rates or that other factors, such as measures dispensaries take to reduce crime (i.e., doormen, video cameras), may increase guardianship such that it deters possible motivated offenders.

(5) Miron, J. (1999). Violence and the U.S. prohibitions of alcohol and drugs. *American Law and Economics Review*, 1, 78-114.

Abstract

This paper examines the relation between prohibitions and violence, using the historical behavior of the homicide rate in the United States. **The results document that increases in enforcement of drug and alcohol prohibition have been associated with increases in the homicide rate, and auxiliary evidence suggests this positive correlation reflects a causal effect of prohibition enforcement on homicide.** Controlling for other potential determinants of the homicide rate does not alter the conclusion that drug and alcohol prohibition have substantially raised the homicide rate in the U.S. over much of the past 100 years.

(6) Resignato, A. (2000). Violence crime: a function of drug use or drug enforcement? *Applied Economics*, 32, 681-688.

Abstract

An assumption of many national drug control policies is the existence of a causal relationship between illegal drug use and violent crime. However, robust empirical findings supporting this relationship are scarce. Alternatively, there is extensive research, much of it in economics, which suggests that there may actually be a stronger causal relationship between drug enforcement/control/prohibition and violent crime than drug use and criminal violence. The paper presents some of the research pertaining to the relationship between illegal drugs and violent crime. In addition, a violent crime model is empirically tested using data from 24 Metropolitan Statistical Areas (MSAs) in the United States to determine the nature and strength of this relationship.

Conclusions

“The belief that illegal drug use causes violent crime is widely held by the public in the United States and other countries. The results presented here, however, indicate that the relationship between the psychopharmacological /economic compulsion effects of illegal drug use and violent crime, may be weaker than assumed. Although many drug users may commit violent acts, it may not necessarily be the results of drug use itself. From these findings it appears that drug-related violent crime is

more likely the result of systemic factors caused by drug prohibition and increased drug enforcement.

Results from this paper and other recent research indicate that US drug policies may have more costly negative externalities than benefits. This result may be consistent across other countries with similar drug policies as the US. Alternatives to current drug policies, especially with respect to specific drugs, could reduce the overall external costs of illegal drug control. New drug policy strategies do not necessarily mean complete across the board legalization. Instead rational fact-based policies ranging from legalization and decriminalization, to strict regulation and prohibition should be considered for all drugs. Violent crime may be only one of many negative results of increased enforcement and misguided policies. The need for continued objective research and policy analysis in this area is essential.”