

A note of marijuana legalization and arrest rates in the United States

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ABSTRACT

Marijuana legalization is a controversial topic in the United States. While Governor Andrew Cuomo proposed to decriminalize the possession of small amounts of marijuana in public view in May 2012, many Americans viewed the movement of marijuana legalization as “insanity.” From the criminal justice administration perspective, the motivation for Cuomo’s measure is most likely driven by the high number of arrests annually for the possession of small amounts of marijuana. In New York City alone, over 50,000 people were arrested for marijuana possession and those arrests cost the city over \$75 million annually. In the era of tight budget for the public sector, the release of budget from the marijuana arrests would help police to focus on fighting against other much severer crimes. Presently, twenty states and the District of Columbia have passed medical marijuana laws legalizing the use and production of medical marijuana for qualifying patients under state law. However, the medical use of marijuana remains illegal under federal law. Patients and providers in the medical marijuana states are still vulnerable to arrest from federal law enforcement. Do medical marijuana legalization states have less marijuana possession arrests? To answer this question, this paper compare marijuana arrest rates before and after medical marijuana legalization in Colorado by examining official data. The finding and related policy implications are noted.

Keywords: marijuana legalization, medical marijuana, arrests

INTRODUCTION

There is significant public discussion around marijuana in the United States. Social policy debates over legalization and decriminalization, while scientific debates about marijuana's risks or medical benefits (Alexander, 2003). However, the unclear conceptualization of marijuana legalization causes a lot of confusions about those discussions. From the criminal justice perspective, marijuana legalization refers to the possession and use of marijuana being lawful under laws. This concept is different from marijuana decriminalization, by which the possession and use of marijuana is still unlawful but the penalties will be reduced for the possession and use small amount of marijuana. This concept is also different from medical marijuana, in which individuals may defend themselves against criminal charges of marijuana possession if they can prove a medical need for marijuana under state laws.

While advocates believe that marijuana legalization will eliminate the illegal trade and associated crime, yielding a valuable tax-source and reducing policing costs (Miron & Waldo, 2010), the federal government insists that “marijuana is a dangerous drug that the illegal distribution and sale of marijuana is a serious crime” (Office of National Drug Control Policy, n.d.). In *Gonzalez v Raich* (2005), the US Supreme Court ruled that in accordance to the current state’s statutory, federal law enforcement authorities may criminally prosecute those patients who were under physicians care of marijuana prescriptions if law enforcement found the substance in the patient’s control. In line with this judicial decision, state medical marijuana laws do not change the fact that federal law bans using marijuana.

The reason the federal government insisting marijuana as illegal substance is mainly on the basis of marijuana’s high potential for abuse and no accepted evidence in medical treatment (Office of National Drug Control Policy, n.d.). This viewpoint seems being supported by medical associations (American Academy of Pediatrics, 2004). On the other hand, the argument of marijuana legalization proponents cannot be ignored. The act that New York Governor Andrew Cuomo proposed to decriminalize the possession of small amounts of marijuana in public view in June 2012 (Boyette, 2012) highlights the advocates’ claim about policing cost. In New York City alone, over 50,000 people were arrested for marijuana possession and those arrests cost the city over \$75 million annually (Kaplan, 2012). In the era of tight budget for the public sector, the release of budget from the marijuana arrests would help police to focus on fighting against other much severer crimes.

Now the question is obvious. Does marijuana legalization really lead to less drug-related arrests? According to classical criminology, severe punishment is one of the main principles of deterrence (Siegel, 2010). With respect to the rational choice theory, rational criminals always calculate the opportunity of being arrested and punished by the decision of their benefit and pleasure (Cornish & Clarke, 1987). It is reasonable to assume that more people may use marijuana when there is no threat of potential punishment in the ear of legalization. Chronic use of marijuana has been medically announced to increase aggressive behavior, enhance aggressive tendencies, and alter the human thought process and nervous system, in which is a vital contributor to violent crimes (Ostrowsky, 2011; Kilmer & Pacula, 2004). Therefore, it is likely that marijuana legalization will cause more aggressive behavior; and therefore more violent-related offense arrests. To shed some light on this research question, it is necessary to examine the change of arrest rates before and after marijuana legalization. Prior to the section of arrest rates change, this paper first briefly reviews marijuana regulation in the United States.

MARIJUANA REGULATION IN THE UNITED STATES

Since the early 17th century, marijuana has been used in the United States when Settlers in Jamestown, Virginia used marijuana to produce hemp products. Hemp is formed from a concentration of less than 1% of tetrahydrocannabinol (THC), in which it is extracted from the cannabis plant to produce oil, clothing, wax, fuel, and other necessities that are still used today (North American Industrial Hemp Council, 2013). An 1850 medical book also referenced marijuana in the United States Pharmacopeia as a plant for its medicinal purposes (Lu, 2012). In 1910, after the Mexican Revolution, Mexican immigrants fled into the country and introduced recreational marijuana use into American culture. In 1937, the United States congress enacted the Marihuana Tax Act to prohibit the use, sale, and possession of the plant in a mischievous manner, by requiring a “high-cost transfer tax stamp” for each sale of marijuana, which the federal government hardly used (Lu, 2012).

In 1970, Nixon administration in the efforts of “war on drugs” enacted the Comprehensive Drug Abuse Prevention and Controlled Substance Act. This law classified controlled substances into five schedules by their hierarchy of potential abuse, medical use, and consequences of abuse and health risks (Lu, 2012). Marijuana and other substances such as heroin, methamphetamine, and LSD are classified as Schedule I for its potential danger without legitimate medical tendencies and supervision (Caplan, 2012).

Currently, the federal government and certain states in the United States enforce marijuana laws by strict penalties for possession, which include imprisonment sentences dependent on the altitude of the drug matter (Blumenauer & Polis, 2012). However, 21 states and Washington, D.C. have incorporated laws allowing Marijuana to be in used for a variety of medical conditions since 1996. Table 1 illustrates those states/territory with medical marijuana laws in the United States in a chronicle order.

Table 1 State/Territory with Medical Marijuana Laws

Year Passed	State/Territory
1996	California
1998	Alaska, Oregon, Washington
1999	Maine
2000	Colorado, Hawaii, Nevada
2003	Maryland
2004	Montana, Vermont
2007	New Mexico, Rhode Island
2008	Michigan
2010	Arizona, New Jersey, Washington, D.C.
2011	Delaware
2012	Connecticut, Massachusetts
2013	Illinois, New Hampshire

Source: Office of National Drug Control Policy (n.d.)

Among those medical marijuana states, Colorado and Washington are forerunners in marijuana legalization. In the 2012 election, Coloradans passed the Amendment 64, which legalizes the possession, use, display, purchase, and transportation of limited amounts of marijuana by adults 21 and older (Frosch, 2012); while Washingtonians approved their State

Initiative Measure No. 502 (I-502), by which “it will no longer be illegal for adults 21 and over to possess an ounce of marijuana” in Washington (Martin, 2012).

In sum, it seems not that the trend to decriminalize marijuana will reverse itself any time soon (Hartman, 2013). However, the legalization of marijuana, whether for recreational or medicinal use, has caused much legal confusion. Despite states’ provisions to decriminalize marijuana, which is still a Schedule I controlled substance under the federal Controlled Substances Act of 1970. Patients and providers in the medical marijuana states are still vulnerable to arrest from federal law enforcement.

ARREST RATES CHANGE IN COLORADO

Since 2012, two states, namely Colorado and Washington, have allowed recreational use of marijuana. It will be too premature to examine the change of arrest rates. Nevertheless, Colorado has allowed medical marijuana since 1996. It is more realistic to compare the change of drug-related, violent, and total arrests in Colorado.

Table 2 Arrest Rates in Colorado 1995-2005

Year	Population	Total Arrests	Total Rate	Violent Arrests	Violent Rate	Drug Arrests	Drug Rate
1995	2944000	167842	5701	5611	191	12722	432
1996	2827000	217716	7701	5211	184	12950	458
1997	2721000	181404	6667	4921	181	13024	479
1998	3800000	257663	6781	6616	174	16930	446
1999	2522000	220383	8738	5166	205	16765	665
2000	3253449	225547	6932	5171	159	16080	494
2001	3448951	229927	6667	5604	162	16598	481
2002	3653314	222108	6080	5842	160	15921	436
2003	3238375	195911	6050	5314	164	15054	465
2004	3941932	229977	5834	6143	156	17434	442
2005	4304012	249404	5795	6336	147	19743	459

Source: FBI Uniform Crime Reports

Table 2 presents descriptive statistics of population, arrest figures, and arrest rates in Colorado from 1995 to 2005. Colorado approved medical marijuana in 2000 (data row in gray). The table lists the data of total offenses arrest, violent offenses arrest, and drug use arrest as well as the rates (columns in green) with the consideration of population (column in red).

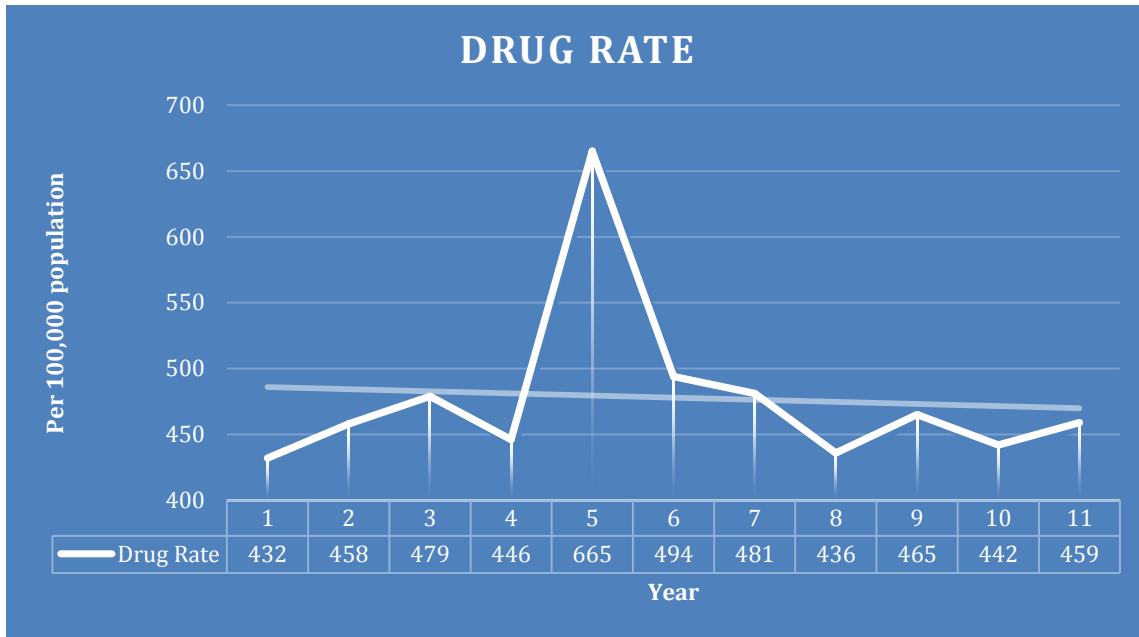


Figure 1 Drug-offense arrest rates per 100,000 population in Colorado from 1995 to 2005

Figure 1 presents the fluctuation of drug-offense arrest rates per 100,000 population in Colorado from 1995 to 2005. By a plain view, a spike occurs in 1999 (Year 5 = 665) and the trend tilts but not significantly. By using two-sample t-test to compare the average of arrest rates before and after 2000, it is found no statically significant difference ($t = 0.8928$) at level 0.05.



Figure 2 Violent-offense arrest rates per 100,000 population in Colorado from 1995 to 2005

Figure 2 presents the flux of violent-offense arrest rates per 100,000 population in Colorado from 1995 to 2005. By a plain view, a spike happens in 1999 (Year 5 = 205) and a downward trend presents. By using two-sample t-test to compare the average of arrest rates before and after 2000, the difference is statically significant ($t = 4.6677$) at level 0.01.

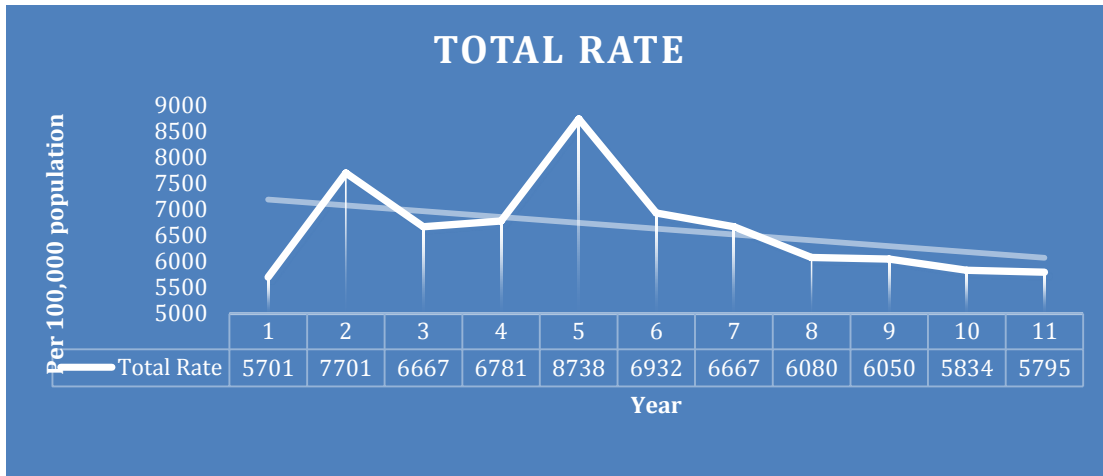


Figure 3 Total arrest rates per 100,000 population in Colorado from 1995 to 2005

Figure 3 presents the fluctuation of total arrest rates per 100,000 population in Colorado from 1995 to 2005. By a plain view, two spikes take place in 1996 (Year 2 = 7701) and 1999 (Year 5 = 8738), respectively; and the trend inclines but not significantly. By using two-sample t-test to compare the average of arrest rates before and after 2000, it is found no statically significant difference ($t = 1.922$) at level 0.05.

DISCUSSIONS AND CONCLUSION

This study found that the average of arrest rates in total, violent, and drug-related after 2000 are all less than that of before. However, this decrease is only statistically significant in violent but not drug-related and total offense arrests. It is beyond the scope of this article to provide explanations to this finding. First, this note is exploratory-oriented. It intends to explore the correlation between marijuana legalization and drug-related arrests. Secondly, there are certain methodological limitations of this note. It only examines the official data of one state. It lacks the generalizability. A longitudinal research in all medical marijuana states and/or a cross-sectional research between medical marijuana states and non-medical marijuana states may be necessary in the future. Given the budget of domestic law enforcement in the amount of \$9.4 billion in FY2013 (Office of National Drug Control Policy, n.d.), nevertheless, this note would like to point out the importance of policing costs in the context of marijuana enforcement.

REFERENCES

- Alexander, D. (2003). A Review of Marijuana Assessment Dilemmas: Time for Marijuana Specific Screening Methods? *Journal of Social Work Practice in the Addictions*, 3(4), 5-28.
- American Academy of Pediatrics (2004). Legalization of marijuana: Potential impact on youth. *Pediatrics*, 113(6), 1825-1826.
- Blumenauer, E. & Polis, J. (2012). The path forward: Rethinking federal marijuana policy (PDF document). Retrieved from http://polis.house.gov/uploadedfiles/the_path_forward.pdf
- Caplan, G. (2012). Medical marijuana: A study of unintended consequences, *McGeorge Law Review*, 43(1), 127-146.

- Cornish, D. & Clarke, R. (1987). Understanding crime displacement: An application of rational choice theory. *Criminology*, 25, 933-947.
- Frosch, D. (2012). In Colorado, getting down to business of marijuana. *New York Times*, December 18, p. 18.
- Gostin, JD., & Lawrence, O. (2005). A framework convention on global health, health for all, justice for all AIJAMA: *The Journal of the American Medical Association*, 294(7), 842 – 844.
- Kaplan, F. (2002). NY continues to see plunge in number of felonies. *The Boston Globe*, April 15, p. A3.
- Pacula, R. & Kilmer, B. (2004). Marijuana and crime: Is there a connection beyond prohibition? (NBER Working Paper No. 10046) Retrieved from http://www.rand.org/content/dam/rand/pubs/working_papers/2004/RAND_WR125.pdf
- Lu, Y. (2012). *Medical marijuana policy in the United States*. Unpublished manuscript, Stanford University, Stanford, CA. Retrieved from <https://www.stanford.edu/group/hopes/cgi-bin/wordpress/2012/05/medical-marijuana-policy-in-the-united-states/>
- Martin, J (2012, November 6). Voters approve I-502 legalizing marijuana. *The Seattle Times*. Retrieved from http://seattletimes.com/html/localnews/2019621894_elexmarijuana07m.html
- Miron, J. A. & Waldock, K. (2010). *The Budgetary Implications of Drug Prohibition*. Washington, D.C.: CATO Institute.
- North American Industrial Hemp Council (n.d.). Hemp information. Retrieved from <http://www.naihc.org/hemp-information>
- Office of National Drug Control Policy (n.d.). Marijuana Resource Center: State laws related to marijuana. Retrieved from <http://www.whitehouse.gov/ondcp/state-laws-related-to-marijuana>
- Office of National Drug Control Policy (n.d.). The National Drug Control Budget: FY 2013 Funding Highlights. Retrieved from <http://www.whitehouse.gov/ondcp/the-national-drug-control-budget-fy-2013-funding-highlights>
- Ostrowsky, M. (2011). Does marijuana use lead to aggression and violent behavior? *Journal of Drug Education*, 41(4), 369-389.
- Siegel, L. (2010). *Criminology: Theories, patterns, and typologies (10th Edition)*. Belmont, CA: Wadsworth.

Statutes Cited

- Controlled Substance Act, 21 U.S.C. § 801 (1970).
Gonzalez v. Raich, 125 S.Ct. 2195 (2005).