

AT DUKE UNIVERSITY

Young Scholars Summer Research Institute 3rd Year Cohort

Research Papers

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Samuel DuBois Cook

The Samuel DuBois Cook Center on Social Equity (Cook Center) was named after Dr. Samuel DuBois Cook, a distinguished political scientist, scholar, educator, author, administrator, civil and human rights activist and public servant. Dr. Cook, a professor in the Duke University political science department became the first African-American to hold a regular and/or tenured faculty appointment at a predominantly white southern college or university. He went on to serve 22-and-a-half years as president of Dillard University in New Orleans.

Samuel DuBois Cook Center on Social Equity

The Duke University Samuel DuBois Cook Center on Social Equity is an interdisciplinary research center within Trinity School of Arts and Sciences that is comprised of faculty and scholars from across Duke and a diverse international group of affiliated universities, research centers and non-governmental organizations. Its mission is to promote equity, across all domains of human interactions, through interdisciplinary research, teaching, partnerships, policy, and practice. The Cook Center seeks to employ the innovative use of new and existing data, develop human capital, incorporate stakeholder voices though civic engagement, create viable collaborations, and engender equity-driven policy and social transformation at the local, national and international levels.

Young Scholars Summer Research Institute

The Young Scholars Summer Research Institute is sponsored by the Samuel DuBois Cook Center on Social Equity at Duke University in partnership with Durham Public Schools (DPS) in Durham, North Carolina. It is a three-week program that provides middle and high-school students enrolled in DPS with training to enhance their writing, research and presentation skills. In keeping with the Samuel DuBois Cook Center's central mission as a community of scholars engaged in the study of the causes and consequences of inequality, program participants will be exposed to curriculum related to the economic, political, social, and cultural dimensions of inequality.

During the Young Scholars Summer Research Institute, students receive instruction from distinguished middle and high-school teachers, university professors, and leaders from community organizations. The program's main focus is on the development of the students' research, writing, presentation and critical-inquiry skills, culminating in a capstone presentation of the student's research topic and findings before institute peers, university scholars, and Durham community members.

Abstract:

This research paper will assess the effects of Medicare/Medicaid cuts on the current opioid crisis. In order to do this I aim at describing the correlation between Medicare funding and the abuse of opioids. To formulate the argument the majority of information was gathered from monthly and yearly mortality/abuse reports in addition to the costs of prescriptions, direct Medicaid effects on populations, Medicare/Medicaid funding, and drug abuse statistics. From this information, correlations became apparent as the time and costs necessary to receive effective pain relief were high and, as a result, citizens become more likely to abuse the drugs available to them. Medicare boosts have been shown to help patients to purchase the proper medicines for their specific needs. In sum, the people who struggle to afford their prescriptions with the assistance of current Medicare services are at high risks of drug abuse, and another drop in Medicaid and Medicare would throw many more patients into the trend of drug abuse.

Introduction

Beginning in the early 2000s the number of recorded users for opium-based prescription painkillers soared. The most basic definition of opioids is that they are high-ranking pain relieving agents used to treat long-lasting pains with a relatively short list of side-effects. As a negative side effect, however, to the broad-spectrum uses of opioid medications for pain treatment is that they can become easily addictive. Alongside the significant increase in

¹ H. J McQuay. "Opioids in chronic pain." BJA: British Journal of Anaesthesia, accessed July 26, 2017.

prescription drug use is an added increase in opioid-related deaths.² Additionally, paired with the increasing use of prescription opioids there are some lower income populations that turn to heroin, another highly addictive opium based drug, which only adds to the total abuse of these painkillers. Experts have deemed this situation as a crisis. *New York Times* writer Josh Katz declared that drug overdoses are now the leading cause of death among people under the age of 50.³

Thesis and Research Questions

In this paper I will argue that future cuts to the very services needed to purchase prescription opioids, such as Medicaid and Medicare, may aggravate the crisis by potentially pushing people who are dependent on the drug into using easier to obtain yet more addictive substitutes such as heroin, some codeines, and fentanyl.

- 1. What types of drugs stimulate the opioid crisis?
- 2. Are boosts to Medicare/Medicaid viable options?
- 3. How will the federal cutbacks to Medicare and Medicaid potentially worsen the current opioid crisis?

Methodology/Review of Literature:

The majority of the mortality and overall opioid usage data was gathered from publications from the Center for Disease Control, the United Nations Offices on Drugs and Crime, the United States Senate budgets, and the National Institute on Drug Abuse. Some other data was gathered from the Goodra pharmaceuticals site including prices for medications and

² From 8,442 in 2000 to nearly 16,412 in 2006. Rose A. Rudd, Noah Aleshire, Jon E. Zibbell, and R. Matthew Gladden, "Increases in drug and opioid overdose deaths—United States, 2000–2014," American Journal of Transplantation 16, no. 4 (2016): 1323-1327.

³ Josh Katz, "Drug Deaths in America Are Rising Faster Than Ever," New York Times, June 5, 2017.

prescriptions in addition to forums on drug use/effectiveness from sites such as Narconon and the drugs.com.

Data Analysis

Abused Opioids

In relation to today's opioid epidemic the blame primarily falls onto a selected group of drugs. Although most fault for the crisis comes from the abuse of prescribed drugs that have already been given to the patient, there is a considerable contribution to the crisis on the part of heroin and other street opioids that are exchangeable without the need for an actual prescription. Among the prescribed opioids given to a majority of patients is the drug Vicodin. Placed in the context of effectivity data collected through the drugs.com network, Vicodin received ratings of around 8 out of 10.4 These reviews for the most part show that the prescribed medicines are fully able to alleviate patients of their mid- to long-term pains. As Vicodin has decently high ratings in the way of treating regular everyday pains, a plausible reason as to why people would divert from using these fairly powerful opioids that work in favor of their more addictive counterparts could be because of the relatively high cost per individual prescription. When the prices for prescription drugs grow in addition to the decrease in federal aid for lower-income prescriptions, a number of citizens who are at the mercy of drug companies to perform daily functions are very likely to abuse these drugs or potentially turn to the use of illegal opioids.⁵

⁴ Drugs.com has a network used to provide information of drug statistics and effectiveness. "User Reviews for Vicodin," *Drugs.com*, accessed July 23, 2017, https://www.drugs.com/comments/acetaminophen-hydrocodone/vicodin-for-pain.html.

⁵ People who have intense chronic pains are more likely to abuse Opioids and contribute to the crisis. Patrick Skerrett, "For some chronic pain patients, 'without opioids, life would be torture', StatNews, Published July 15, 2016; Sara Bellum, "The Connection between Pain Medications and Heroin," *Nida Teens*, Published April 2, 2014, updated March 24, 2016.

In relation to the jumping first from prescriptions to abuse, and then on to otherwise illegal substitutes, newer more dangerously addictive drugs have spawned to inflame the current crisis. As these opioids do not require the escalating dosages of prescribed medicines or the mandatory breaks in prescriptions for evaluations, they become far easier to obtain than regular painkillers. Fentanyl, an increasingly popular street opioid, was described by the organization Narconon as potentially 50 to 100 times stronger than the highly potent painkiller morphine, additionally a single pill could sell for up to \$5.7 To compare with the minute cost of Fentanyl, which is considerably more potent, a prescription of Vicodin, a highly prescribed opioid, can cost up to \$105 out of pocket. In data collected by the site Heroin. Net, findings show that a single dose of heroin in the state of Ohio may cost around \$15 to \$20. Notably, although Heroin costs significantly more per dosage, its strength compared to Vicodin is exceptionally higher. When paired with the fact that both Heroin and Fentanyl can be obtained without the need of a prescription at the cost of being incredibly addictive, a number of opioid-dependent people have fallen into non-prescribed drug use. This trend is largely due to patients' developed tolerances and the costs of prescriptions.⁸

Medicare Effects on Opioid Abuse

To lower income citizens who are unable to easily get medical care, face long wait times for prescriptions, and have to deal with higher costs for medicine, there are higher chances to

⁶ Opioids are closely guarded and must essentially be ranked-up from weaker over the counter drugs and over time to substantially stronger versions. Additionally most Opioid prescriptions are provisional and patients require monthly planned evaluations before each prescription. Ross Johnson, "CDC opioid prescribing guidelines unlikely to affect physicians' practices," *Modern Healthcare*, last revised March 15, 2016.

⁷ Fentanyl costs were recorded no higher than 5 dollars per pill. Soumya Karlamangla and Joseph Serna, "Painkiller fentanyl linked to six deaths and numerous overdoses in Sacramento area," *L.A. Times*, March 2016.

⁸ Fentanyl, a popular illegally sold Opioid that is primarily used on/for people who have developed tolerances to other opioids. Brief Description of Fentanyl, National Institute on Drug Abuse, www.Drugabuse.gov, last updated June 2016, https://www.drugabuse.gov/drugs-abuse/fentanyl.

turn to non-prescribed, stronger, and ultimately easier to obtain opioids. An effective system to counteract this migration from prescribed and easier controlled drugs to powerful yet immensely addictive opioids is the federal Medicaid program.

Established in July 1965, the federal law introducing Medicare and Medicaid were put into effect in order to help deal with the individual costs of medication. Under Medicaid a person would be provided a discount on medical costs. This legislation would contribute positively to the lives of some working class citizens, those of whom otherwise would have had to pay out of their own pockets for work-related injury treatment. As a result of these costs people would potentially be tempted towards drugs such as heroin and fentanyl.

One of the best recent combatants to this crisis of opium has been the introduction of the Affordable Care Act. A highly probable cause for the usage of illegal street alternatives boils down to the costs per prescription or necessity for pain relief on the behalf of the user. In the context of high prescription costs, the primary remedy to the issue is to raise federal Medicare spending.

In a study conducted by Christopher Chantrill there was a slight, yet recognizable, increase in United States Medicare spending from 2006 up until 2016. The most notable trend in the increases to Medicare and Medicaid found in this data selection revolve around Part D funding, which is the primary coverage for low income citizens. As Medicare boosts have been quite effective for combating the increasing rate of opioid abuses, an upcoming boost may be within reason.

⁹ There wasn't an explicit Medicaid Act at the time however the bills would be put into business via an amendment to the social security act. "The 1965 Medicare Amendment to the Social Security Act," *lbjlibrary.org*, accessed July 20, 2017, http://www.lbjlibrary.org/press/the-1965-medicare-amendment-to-the-social-security-act.

¹⁰ Christopher Chantrill, "What is the spending on Medicare", http://www.usgovernmentspending.com, accessed July 24, 2017, http://www.usgovernmentspending.com/medicare_spending_by_year.

Costs of Lowering Spending

In stark contrast to the helpful nature and general feasibility of boosts to federal Medicaid and Medicare, there have recently been talk of cuts to the very services that help keep people away from the growing street opioid craze. In the newly written and subsequently repealed Federal Care Act there are direct mentions to cut or "repeal" Medicare benefits. These benefits, previously established by the Obamacare health plan, had been significantly helpful to many of the aforementioned lower class citizens in need of affordable prescription medicine. In one section there is a notion to repeal a low-income subsidy known as Part D, allocated towards prescription drug coverage. The cut to the Part D subsidy will undoubtedly have significant effects on lower income patients who rely on this portion of Medicare. This case is a clear example of the soon to decrease Medicare and Medicaid coverage in the upcoming years.

Although the new GOP health care bill has yet to be signed on by the Senate from these drafts it is easy to see the direction that the current senate majority is taking.

Medicare, as it is, is one of the few current systems in place that helps to keep U.S. citizens away from highly dangerous and addictive opioids and on to the regular care provided by medicines such as Vicodin and Oxycodeine. Ultimately, lower income citizens who would suffer most from high prescription costs are far more likely than the average person to buy into non-prescription alternatives. As a result, the most feasible options would be to closely manage the costs and coverage for opioid medications. With the help of federal Medicare and Medicaid, medical coverage can be provided to many U.S. citizens and most crucially the working class

¹¹ Senate of The United States, "Amendments to the Affordable Care Act", *U.S. Senate*, accessed July 22, 2017, https://www.budget.senate.gov/imo/media/doc/SENATEHEALTHCARE.pdf.

¹² Most of the publication was a lot of jargon but is the reconsideration for getting rid of deductions for the Medicare Part D subsidy. Subsection 115 "Repeal of Elimination of Deduction for Expenses Allocable to Medicare Part D Subsidy," U.S. Senate, accessed July 22, 2017, https://www.budget.senate.gov/imo/media/doc/SENATEHEALTHCARE.pdf.

men and women who at the absolute bare minimum would make \$15,000 yearly or \$1,250 per month without taxes.¹³ With the median cost of housing being around \$1,000 for monthly rent this barely leaves 250 for utilities, food, and medications, prescribed or otherwise.¹⁴

If the cost per prescription for lower income areas alone were to be reduced, the results could be exponentially beneficial. For instance, not only would civilians lack the need to seek out possibly fatal alternatives, thus decreasing the chances of accidental overdoses, but similarly people in need of these prescribed drugs would potentially be able to receive treatment and return to work regularly, as opposed to developing long-lasting addictions to medicines far stronger than initially needed. To surmise, any raises to prescription drug costs and decreases in Medicare coverage would pose primarily negative side effects, thus, as the patterns in mortality rates rise and the total spending for affordable healthcare fall, the currently increasing tidal wave of opioid related-deaths will likely increase in the future without positive oversight. The planned cuts to Medicaid and Medicare may arbitrarily save the Senate a portion of money. However, the costs to lives and future addictions of American citizens are far too large to ignore.

Conclusion

From examined trends in both the increases in deaths over the past years and the exponential growth in opioid usage, the United States faces a true problem in drug abuse. ¹⁵ The concluding ideas from the data observed point towards the argument that Medicare assistance is the key to balancing opioid abuses. With the increasing drug costs as a result of Medicare drops,

¹³ "What are the annual earnings for fulltime minimum wage workers," University of California, Davis, accessed July 25, 2017, https://poverty.ucdavis.edu/faq/what-are-annual-earnings-full-time-minimum-wage-worker.

¹⁴ Amelia Josephson, "The Average Rent: What You Should Know", Smart Asset, Published March 2, 2016.

¹⁵ This can be seen in the annual prevalence rate of such medicines from 2.9% in 2000 to 5.1% in 2006. "'Drugs and Statistics Trends' World Drug Report 2010", UNODC, accessed July 20, 2017.

people who had misused prescribed drugs by any means, such as taking more than the proper amount or taking stronger than prescribed drugs, develop immensely high risks of falling into drug addiction. The current opposition to medical subsidies as it stands will only serve to inflame the opioid epidemic and prolong this modern crisis.

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