

Understanding Opioids: A General Overview of Monroe County, New York

March 2018

Working Paper #CLEAN-2018- 10



Luisa Swan
Student Research Assistant
Center for Public Safety Initiatives
Rochester Institute of Technology
LRS2246@rit.edu

Janelle Duda-Banwar
Research Associate
Center for Public Safety Initiatives
Rochester Institute of Technology
jmdgcj@rit.edu

John Klofas
Director
Center for Public Safety Initiatives
Rochester Institute of Technology
John.klofas@rit.edu

Introduction

This paper is a broad overview of heroin use and discusses the current opioid epidemic in the United States and, locally, in Monroe County, New York. The topics covered include heroin use, addiction, drug culture, and treatment.

The Epidemic

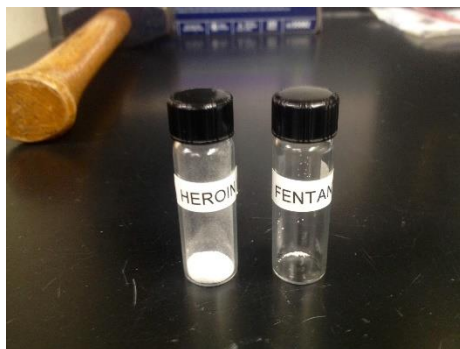
In 2016 alone, there were 42,000 Opioid-related deaths reported in the United States. In Monroe County, New York, in the same year, 118 Opioid-related deaths were reported according to the Department of Health (NYSDOH, 2017). These numbers included only victims that were Monroe County residents. Meaning, this data included people who listed their home address in Monroe County, but may have overdosed in a surrounding county. In the same year, the Monroe County Medical Examiner reported 169 opioid-related deaths in Monroe County; this is nearly four times as many homicides that occurred in Monroe County in the same year¹. According to the Department of Health, there were approximately 537 opioid-related overdoses in Monroe County in 2016 (NYSDOH, 2017). Official annual data for 2017 are not yet available.

These numbers continue to rise and are likely higher than the numbers reported. Underreporting is attributed to the time it takes for toxicology screening to be completed and differences in data collection practices across agencies. Even with the underreporting, these large numbers demonstrate the growing problem in the United States and, specifically, Monroe County. In Monroe County alone, the number of opioid-related overdoses are 20 times higher than they were five years ago (NYSDOH, 2017).

¹ There were 44 homicides in Monroe County in 2016 (New York State Division of Criminal Justice Services, 2018)

Opioids

Opioids are a class of drugs that act on the nervous system to relieve pain (Patterson, 2017). The most common types of opioids are Heroin, Fentanyl, and prescription opioids, such as, oxycodone, Vicodin, Morphine, and Codeine. Heroin is a white or brown powder that can be snorted, smoked, or injected. Fentanyl is a white powder that looks very similar to heroin, and is commonly used in the form of patches and pills. Fentanyl can be ingested orally, absorbed through the skin, and injected (Patterson, 2017; U.S. Department of Justice & Drug Enforcement Administration, 2017). The largest difference between these two opioids is that Fentanyl is a synthetic opiate, which means that it is chemically made in a lab instead of directly from the opium plant. Heroin, on the other hand, is a semi-synthetic opiate. It is made from the opium “poppy” seedpod and other chemicals. Synthetic drugs are more deadly than natural and semi-synthetic drugs because their chemical makeup is different from heroin; the chemical makeup is dependent on whomever is producing it. One lethal dose of Fentanyl is 3 milligrams, whereas one lethal dose of heroin is 30 milligrams. This demonstrates how deadly fentanyl can be. Fentanyl is becoming more and more prevalent recently and has resulted in an increase in opioid-related overdoses (“Fentanyl vs. Heroin...”, 2016; U.S. DOJ & DEA, 2017). The image below shows a deadly dose of heroin compared to a deadly dose of fentanyl².



² <http://nhpr.org/post/fentanyl-not-heroin-responsible-majority-nh-drug-overdoses-year#stream/0>

Heroin & Addiction

Drug users first use heroin for the “rush”. Right after they use heroin, the individual will report feeling a warm, calming sensation followed by a heavy ‘sluggish’ feeling in their limbs (Patterson, 2017; U.S. Department of Justice & Drug Enforcement Administration, 2017). Then they will experience an increased sense of well-being and confidence. Some of the negative side effects to heroin include nausea, vomiting, itching, and dry mouth. Delayed symptoms of opioid use include drowsiness, a foggy mental state, and slowed breathing and heart rate. Once someone experiences heroin for the first time, they will most likely try it again. Since heroin is a highly addictive drug, someone may use it only a few times before becoming addicted (Patterson, 2017; U.S. Department of Justice & Drug Enforcement Administration, 2017). When one uses heroin, the length of the high depends on the method the individual uses. For example, if one injects heroin into their system, they will begin to feel the effects after about 5 to 7 seconds. Whereas, if one takes prescription opioids orally, the individual may not begin to feel the effects for about 30 minutes. In the initial hit of heroin, one will experience a rush that will generally last only a few minutes, but the high can last a bit longer. One may experience drowsiness during this time (Zacny, 1995; “Heroin”) and the high usually lasts for around two hours but varies and changes over habitual use.

Addiction is marked by an increased effort in getting and using a drug even though the person is aware and has experienced some of the problems that may arise (Patterson, 2017). Addiction can be divided into physical dependence and psychological dependence. Physical dependence is related to your body’s physical response to the drug, while psychological dependence is rooted in thinking patterns and environment. However, once users become addicted to heroin, they build up a tolerance to the drug, so they fulfill their need to use more of

the substance by using a higher dosage (Patterson, 2017). However, most heroin addicts are not using to obtain the ‘high’ they once felt while using the drug. Heroin addicts are often using to relieve their withdrawal symptoms. These withdrawal symptoms can include: fever, chills, sweating, and nausea. Heroin addicts can have needle marks or bruising on their arms where they choose to inject. They may also have skin abscesses and infections. Some internal consequences an addict may face are heart problems, liver and kidney disease, and collapsed veins from repeated injections. There is also the risk of users becoming infected with HIV/AIDS and Hepatitis B and C, if they are not safe with their needle disposal (Patterson, 2017).

Due to its addictive properties, more and more Americans are becoming dependent on the drug, which led to an increase in overdoses over the past year (Patterson, 2017). In the 1990s, doctors began to prescribe opiates as a cure all for chronic pain that individuals were experiencing (Lyapustina & Alexander, 2015). At this time, the effects of opioids were not fully realized, and patients began getting addicted to pain killers. In response to the over-prescription of painkillers, states, including NY, in recent years began registries to reduce doctor and pill shopping. This resulted in people turning to heroin to relieve their withdrawal symptoms. Specifically, in Rochester, NY, there have been many issues with the open-air heroin market leading to health and safety concerns. An open-air market means that sales and drug use are visible to the public; for example, on a street corner or in a vacant lot (C.J.B, 2018).

Drug Culture

On the streets, Heroin is referred to by many names such as, stamp, smack, tar, brown sugar, China White, and Mexican Brown. In Rochester, some of the more common street names are Boy, Shit, H, Dope, and China (C.J.B., 2018). Back in the 70s, Heroin dealers used to market their product by creating a brand logo. Usually, the dealers would stamp their brand on the

product generating the nickname, 'stamp'. However, more recently, in Rochester, there is limited branding going on. According to recent interviews, branding is now in the form of different colored baggies. For example, one dealer may use green baggies, while another dealer may use purple baggies. Drug dealers sell their product by word of mouth and trust in their users. When looking for a dealer, one will usually go off of the recommendation of a friend or someone they trust (C.J.B., 2018). This occurs when the primary user and their dealer trust each other and the user has a good standing with the dealer's product. Meaning they have "the good stuff." However, there is also "bad stuff" out there as well.

When it comes to heroin, it can often be hard to tell if the drug is going to be good or bad. Good, meaning the product blocks one's withdrawal symptoms and they feel the same "rush" and warming sensation as they did the first time they used (C.J.B., 2018). There is also the bad stuff out there. Meaning the drug gives them adverse side effects or they do not feel the rush. These good and bad batches of heroin can be a result of the dealers cutting their heroin with other chemicals or substances to try and save money and product (C.J.B., 2018; U.S. DOJ & DEA, 2017). Dealers may mix heroin with fentanyl, which results in a "very good high", but is the most leading opioid that is driving the surge in overdose deaths (CDC, 2017). Logically, a non-user would refer to heroin cut with a toxic dose of fentanyl as the "bad stuff," but heroin users often refer to it as "good stuff" because the high is so close to the euphoric feeling of first use.

Related Issues

With higher drug usage, comes issues with an increase in drug-related crimes. These crimes include theft, burglary, prostitution and robbery (Harocopos & Hough, 2005). Heroin addiction can lead addicts to steal to support their habit. When thinking of who commits theft,

one may think of a certain type of a person; however, with heroin addiction, there are no limitations to who can be an addict and who will steal to support their habit (Ryan, 2016); addiction does not discriminate (C.J.B., 2018). People from all backgrounds, races, religions, and geographies may steal to support their addiction.

The rise in heroin addiction brings issues with diseases and public health. One consequence of heroin use includes used needles left on the ground in neighborhoods (Ryan, 2016; “Heroin”). The needles may be left in parks, by schools, and other publicly accessible areas. This puts community residents at risk for Hepatitis C or even HIV (Ryan, 2016; “Syringe Exchange Program”, 2018). Transmission can happen if one steps or gets poked by the needle and the used tip enters the skin. Not only are residents put at risk for these diseases, residents and children are susceptible to witnessing drug culture in their communities (Ryan, 2016). Their property values could decline due to an increase in vacant properties in the neighborhood and lack of interest in community revitalization, along with an increase in property and other crimes.

Treatment and Solutions

With the rise in the opioid epidemic, there have been an increase in new ways to help tackle this issue. These include new drugs used to overturn overdoses, new treatment methods, or facilities for safe injection use and needle disposal. Narcan is the brand name for the drug Naloxone (“Narcan”, 2017). Naloxone is a drug that blocks the opioid receptors in the brain and reverse the effects of the opioid. This drug is specifically used to reverse an opioid overdose; it does not affect other types of drug overdoses. Narcan comes in various forms, including intramuscular and in a nasal spray. Anyone can be trained on how to use Narcan (“Narcan”, 2017). The drug is also sold over the counter for people to get without a prescription. Many emergency responders are trained to administer Narcan. Currently, there are no known side

effects to Narcan. Meaning, if someone is suspected to be overdosing, but they really are not, yet they receive Narcan, then they will not suffer any side effects (“Narcan”, 2017).

Another solution to the epidemic is the use of safe injection sites. This type of program is not offered in the United States; however, legislation has been passed to implement these in San Francisco and Philadelphia. These sites offer addicts a place to go and safely use heroin (The Editorial Board, 2018). The program staff monitor individuals to make sure they do not overdose and are able to have clean water and needles when they use. This program is controversial and has mixed reviews among government officials and residents. Another solution is a needle exchange program. Needle exchange programs are used to help addicts dispose of their needles safely and to allow opioid users access to clean needles, water, and other drug supplies (“Syringe Exchange Program”, 2018). Trillium, in Rochester, has a syringe exchange program in which they offer clean water and needles in exchange for used needles. They give their client safe disposal containers for needles, and connect them to health insurance and treatment options if they are interested (“Syringe Exchange Program”, 2018). These programs are helpful to users and the public to ensure safe using and safe disposal of needles.

Conclusion

The use of opioids in the United States has hit an all-time high in the past two years and it is still on the rise (NYSDOH, 2017; MCME, 2017). Heroin is a highly addictive opioid that is being used worldwide, but, more specifically, it is a big problem in Monroe County. Opioid-related deaths and nonfatal overdoses are on the rise. Heroin users’ health is at risk and the problem seems to still be on the rise locally (Singer, 2018). Treatment and needle exchange programs continue to develop to reduce opioid use and overdose. Drugs such as Narcan are becoming more popular to help tackle the overdoses; however it may not be enough.

References

- B, C. J. (2018, January). Personal Interview.
- Centers for Disease Control and Prevention. (2017, July). Prescription Behavior Surveillance System (PBSS) Issue Brief. Retrieved from, <https://www.cdc.gov/drugoverdose/pdf/pbss/PBSS-Report-072017.pdf>
- “Crime, Arrests, and Law Enforcement”. (2018). *Drug War Facts*. Retrieved from http://www.drugwarfacts.org/chapter/crime_arrests
- New York State Division of Criminal Justice Services (2018) Index Crimes Reported: 2012 – 2016 by county and agency. Retrieved from, http://www.criminaljustice.ny.gov/crimnet/ojsa/indexcrimes/county_totals.htm
- “Fentanyl vs. heroin: The similarities and difference between two powerful opioids”. (2016). *American Addiction Centers*.
- Harocopos, A. & Hough, M. (2005). Drug-dealing in open markets. Center for Problem Oriented Policing. Retrieved from, http://www.popcenter.org/problems/drugdealing_openair/
- Lyapustina, T., Alexander, G. C. (2015). The prescription opioid addiction and abuse epidemic: how it happened and what we can do about it. *The Pharmaceutical Journal*.
- Medical Examiner: Monroe County, NY. (2017). Medical examiner releases annual heroin, opioid and fentanyl overdose data. Retrieved from http://www.whec.com/whecimages/repository/cs/files/Overdose_data-Monroe_County.pdf.
- Miroff, N. (2017). From Teddy Roosevelt to Trump: How drug companies triggered an opioid crisis a century ago. *The Washington Post*.
- “Narcan” (2018). *ADAPT Pharma*. Retrieved from <https://www.narcan.com/>.
- NIDA. (). Heroin. Retrieved from <https://www.drugabuse.gov/drugs-abuse/heroin>
- New York State Department of Health. (2017). New York State- opioid annual report. Retrieved from https://www.health.ny.gov/statistics/opioid/data/pdf/nys_opioid_annual_report_2017.pdf
- Patterson, E. (2017). Heroin abuse. Retrieved from drugabuse.com/library/heroin-abuse/
- Ryan, J. T. (2016). Drug and property crime link explored. *Perry County Times*.
- Singer, P. (2018). February’s opioid total: 28 days, 84 ODs, 16 dead. *Democrat and Chronicle*, Retrieved from, <https://www.democratandchronicle.com/story/aerial-journalism/2018/03/09/monroe-county-opioid-overdoses-fatalities-february/411211002/>
- The Editorial Review Board. (2018). Let cities open safe injection sites. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/02/24/opinion/sunday/drugs-safe-injection-sites.html>.

Trillium Health. (2018). Syringe exchange program. Retrieved from <https://www.trilliumhealth.org/en/20/syringe-exchange-program>.

U.S. Department of Justice and Drug Enforcement Administration (2017). Drugs of abuse: A DEA resource guide. 40-42.

Zacny JP. (1995). A review of the effects of opioids on psychomotor and cognitive functioning in humans. *Ex Clin Psychopharmacol*, 3(4), 432-466.