

A Briefing on the Opiate Epidemic in the United States

The Problem

While opium and its derivatives have been used in American medicine for centuries, the number of people who are misusing or are addicted to opium-based substances is on the rise. According to 2015 statistics from the American Society for Addiction Medicine, **2 million** Americans abuse opiate based prescription painkillers like oxycodone and Vicodin while over half a million use heroin ¹. As of 2014, *prescription painkiller deaths account for more injury deaths than car accidents* ².

Why are opiates so addictive?

Chemically, opiates are capable of targeting cells in the brain that are usually targeted by endorphins that are naturally produced by the body ³.

- These endorphins are meant to create positive feelings in the body, including pain relief, so users take opiates to synthetically reproduce these feelings.
- However, with increased opiate abuse the body stops producing endorphins on its own, making opiate withdrawal particularly terrible to undergo.
- For many people, being prescribed an opiate based painkiller is meant to help them deal with symptoms of whatever is causing pain, but overtime the experience of being off their opiate is so difficult to deal with they begin taking it more frequently, leading to addiction.

Opiate drugs include morphine, fentanyl, oxycodone, and codeine. Recognizable prescription opiates include Percocet, Oxycontin and Vicodin ⁴. Heroin is a notoriously addictive illicit drug that is also derived from opium. The study of heroin addiction cannot be studied separately from prescription opiate addiction because the two are often linked. Often, prescription painkiller users turn to heroin because it is cheaper; one study found that half of intravenous heroin users first became addicted to prescription painkillers before turning to heroin ⁵. Prescription opiates can sometimes cost as much as \$60-\$100 per pill, so when an addict has become financially crippled by their addiction they may turn to heroin to keep it going and avoid withdrawal symptoms ⁶.

What programs have been successful in combating the opiate epidemic?

Manufacturing changes ⁷

- Manufacturers have begun producing opiate-based painkillers differently to make it more difficult for them to be abused. In order to achieve a high from painkiller pills, they have to be crushed up to be inhaled or injected. So now, manufacturers are producing pills that are either very difficult to crush or are impossible to crush effectively enough to be dissolved and injected.

Drug treatment

- Drugs can be used to treat opiate addiction; methadone is sometimes used in rehab clinics to aid with withdrawal symptoms. However, methadone is itself an opiate ⁸. Because of this, methadone can also be habit forming. In 2009, methadone was a part of a third of prescription

drug overdose deaths; 6 times as many people died that year from methadone overdoses than had in the decade prior⁹.

Needle Exchange Programs

- A system that has existed for several decades is the needle exchange program (NEP), alternatively known as the syringe service program (SSP). Needle exchange programs were initially pioneered to halt the spread of diseases like HIV and hepatitis among intravenous drug users by giving out clean needles¹⁰.
- Now, these programs have begun offering other services to users like information on treatment centers and handing out doses of naloxone¹¹.
 - Naloxone can treat an opiate overdose by reversing its effects long enough for an individual to get to a hospital, it is non-habit forming which is why it's ideal to use. It is administered through inhalation or injection and may return respiratory function to a victim in 2-8 minutes¹².
- Critics of needle exchange programs tend to be social conservatives who dislike the idea of government money funding these programs, as in their eyes it means the federal government is assisting in someone's drug habit¹³. For decades the federal government was not allowed to spend federal money on needle exchange programs, this ban has recently been lifted with bipartisan support¹⁴.
- Research has been done on the cost-benefit analysis for needle exchange programs to quell concerns regarding federal funding going towards furthering addiction. The King County Needle Exchange Program in Seattle, Washington did one such study. They found that the program cost the county \$1.2million a year, whereas treatment for an individual with HIV cost the county \$400,000 per person a year, meaning they program paid for itself if three people

didn't contract HIV after using the program ¹⁵. A similar study done by the Human Rights Watch found that an individual clean syringe costs a community less than a dollar to distribute compared to the hundreds of thousands that are spent on HIV treatment for one person ¹⁶.

Naloxone Administration

- The Pennsylvania government heavily advocates for the widespread distribution of naloxone. Within the state, naloxone can be accessed at a pharmacy with a prescription, although some counties have what is known as a “standing order” that acts as a prescription for anyone in the county, making it much easier to access; however some but not all insurances will cover naloxone ¹⁷.
- Currently, 40 states have standing orders in place that are similar to Pennsylvania in allowing easier access to naloxone ¹⁸.

Drug Take Back Boxes

- The Drug Enforcement Administration has take back programs in place nationwide in order to collect unused prescription painkillers. The DEA's National Drug Take Back Day is April 29th
- In 2016, the Pennsylvania drug take back programs collected 124,336 pounds of relinquished drugs ¹⁹.

A Proposal on Combating the Opiate Epidemic

The course of action chosen for the purposes of this briefing is to increase the number of needle exchange programs in the United States and the services they offer. While keeping contaminated needles out of circulation is important in improving the health of addicts, these

programs, with increased funding and supplies, could do even more. Needle exchange programs should provide ready access to naloxone. Naloxone can be a lifesaving drug in the case of an overdose, but it can't work unless it's administered as soon as possible. If a person overdoses nowhere near a pharmacy and first responders can't reach them fast enough, they may not get treated in time and a life is lost. By administering naloxone at these needle exchange programs and by increasing the number of them in heavy-hit areas, not only addicts but the people who care about them will be able to access this life-saving medication.

In addition, needle exchange centers could also function as drug take back locations. By putting take back boxes in the same place where addicts are going for other resources, workers at the center who advocate seeking treatment can give the addicts an easy means of disposing of their pills before going into treatment. Members of the community who are responsibly taking care of their prescription painkillers can also pick up naloxone to have on hand in case they witness an overdose.

Addicts have discussed the positive emotional benefits they've gained from utilizing the services at needle exchange centers. In an *Atlantic* article on the debate over needle exchange programs, a former drug user from New York City, Cindy G., discussed how her needle exchange center made her feel as if someone actually cared about the problems she and other drug addicts face

²⁰.

“This is where we stop seeing ourselves as a bunch of drug users. What’s insane is that there are so many people that can’t or won’t be able to use them.”-Cindy, who runs a support group at the exchange program she uses ²¹.

While the belief that funding needle exchange programs encourages drug use is an understandable conclusion to draw, government research actually proves this wrong. A 2000 study

posted in the Journal for Substance Abuse Treatment found that drug users who took advantage of needle exchange programs were **5 times more likely to seek treatment** than users who didn't, leading the Surgeon General to conclude that these programs could effectively combat addiction ²².

Testing for HIV and other diseases is an important service to continue offering at these centers, but it's already the most offered type of service. Less than half of centers, regardless of geographic location, offer treatment options for addicts and **only 37%** of rural centers offer naloxone ²³. If the United States were to increase federal funding that went towards these programs, more money could be diverted towards treatment education and naloxone administration which could ease the minds of social conservatives who fear their tax money going towards funding drug habits.

What caused the opiate epidemic?

The opioid epidemic truly began in the 90s, when the rates of doctors prescribing opiate based painkillers increased in response to the number of people with debilitating pain issues ²⁴. Over the last two centuries, the number of Americans addicted to opium and opium-based products has increased and decreased in waves. In the early 1900s Bayer sold heroin for pain relief which eventually led to people using opiates for pleasure, and soldiers who were treated with morphine during the civil war led to an increase in opiate addictions in the late 1800s ²⁵. A letter stating that opiate addictions were not an issues in hospitals written in 1980 led to the development of the misconception that opioids weren't as addictive as had been believed in earlier decades ²⁶. However, this letter was not an official peer-reviewed study and only involved patients who were receiving inpatient care under a doctor's supervision ²⁷. Doctors treating terminal and severely sick patients, especially in the case of cancer patients, advocated for the use of opiates to subdue the pain associated with these illnesses ²⁸. Opiate

prescription in cancer patients led to people believing it could be used in other treatments, and the prevalence of opiate use in pain treatment began to increase ²⁹.

With the growth of the opiate epidemic, healthcare systems have fought to end the practice of “doctor-shopping.” This is a colloquial term for when a patient goes from doctor to doctor to try to obtain prescriptions for painkillers ³⁰. Because systems have been put in place to try to stop doctor-shopping, more people have begun turning to heroin because it’s becoming easier to access ³¹.

Who is affected by the opiate epidemic?

Because of the chemical processes that lead to opiate addiction, anyone can realistically become addicted to an opiate. However, different opiates tend to affect different groups at varying levels. The type of opiate that an individual is at risk of becoming addicted to depends widely on the person’s social group and the availability of different types of opiates. Something as seemingly unrelated as gender norms can also influence what a person is at risk of developing a dependence on.

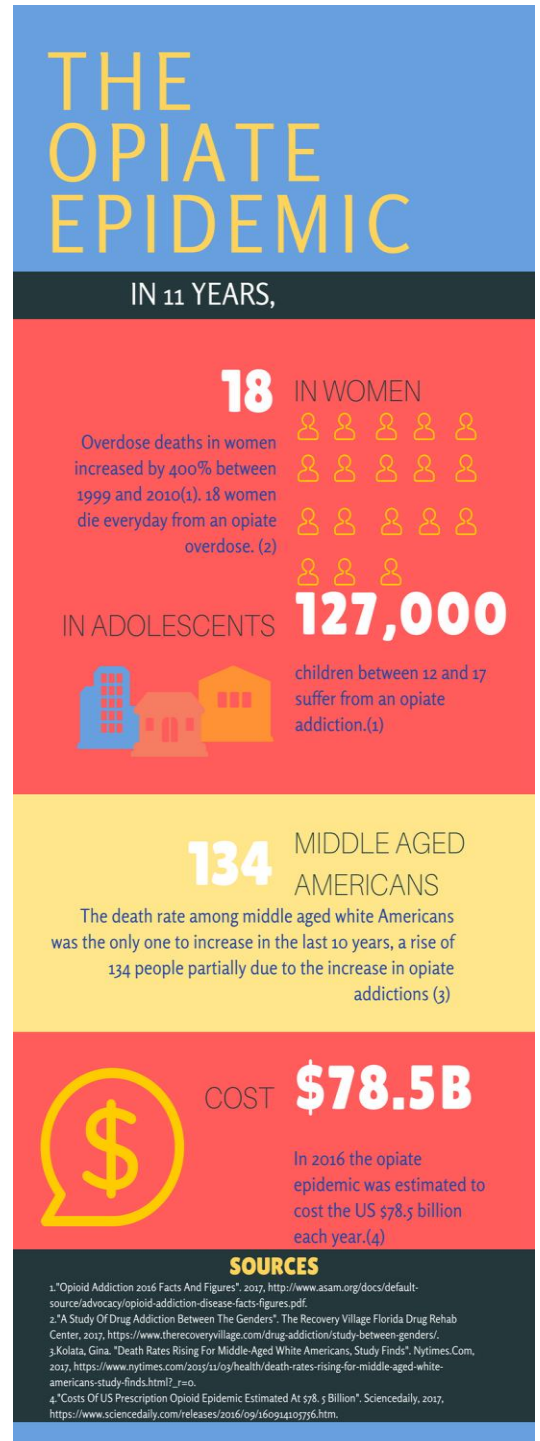
Addiction across genders

- American women are more likely to become addicted to prescription painkillers than men.
 - Researchers believe this is because women tend to be more affected by chronic pain disorders, with some being gender specific like endometriosis ³².
- Tracking painkiller deaths in the United States over the last 20 years has also demonstrated that painkiller addictions disproportionately affect women.
 - Between 1999 and 2010, opiate painkiller overdoses in American women increased by 400% while in men they increased 237%³³.

- In women, heroin overdoses are also increasing at an alarming rate. Between 2010 and 2013 the heroin overdose rates for American women tripled ³⁴. 18 American women die every day from an opiate overdose ³⁵.

Addiction across age groups

- Of American adolescents, who are defined as children between 12 and 17, 127,000 were painkiller addicts in 2015 while 5,000 were addicted to heroin ³⁶.
- Americans between the ages of 18-25 abuse prescription drugs more than any other group, although this includes non-opiates like “study drugs” such as Adderall³⁷.
 - Heroin use in this age group has doubled in the last 10 years ³⁸.
- Between 1999 and 2014, middle-aged white Americans are the only group that have seen an increase in their death rate (an increase by 134 people to be exact), a rise that researchers partially attribute to opiate overdoses ³⁹.
- The elderly are also increasingly becoming susceptible to opiate addiction. Americans 65 and older account for a third of all prescriptions written in the nation each year, which increases their risk of abuse ⁴⁰.
 - 17% of this age group have reported prescription drug abuse ⁴¹.



The infographic on the opposite page is from the same CDC study and displays every state that had an increase in their rate of overdose deaths. The worst city in the nation for opiate addictions, Wilmington, is located in North Carolina, one of the states that saw an overall increase in opiate deaths in

2015. Greater than 11.6% of the population of Wilmington suffers from an opiate addiction; in a city of 112,000 people this works out to **13,000 people** ⁴⁴. The 25



worst cities in the nation for opiate addictions are seen in the infographic produced by Castlight Health at right ⁴⁵.

National Resources for Opiate Epidemic Information

The opiate epidemic is widespread across the United States. Federal agencies that have been studying the opiate epidemic in detail include ⁴⁵

- The Centers for Disease Control and Prevention (CDC)

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- American Society of Addiction Medicine (ASAM)
 - Drug Enforcement Administration (DEA)
 - National Institute on Drug Abuse (NIDA)
 - Center for Substance Abuse Prevention, which is part of the Department of Health and Human Services
 - Some federal agencies are specific to drug addiction in certain populations, such as
 - The Higher Education Center for Alcohol and Other Drug Prevention which targets drug abuse on college campuses.

Conclusion

Far too many Americans are dying every day from opiate related deaths. While prescription opiates are necessary in treating debilitating pain disorders and cancer, they carry serious risks when over-prescribed. By increasing the services offered by community needle exchange programs, the federal government can combat the drug epidemic in several ways. Firstly, by funding a standing supply of naloxone and making it easy for it to be administered to those who go to these programs, the federal government increases the prevalence of the drug in society. This could save the lives of people who live far away from medical centers who need an intervention to keep them alive before attention can reach them. In addition, by having government backed take back boxes at these centers people who have been prescribed opiates can take them out of circulation and have them handled by the proper authorities. Statistics supporting the success of needle exchange programs have been around since the Clinton administration, but this growing problem is forcing the hand of the United States to do something about opiate addiction in this country. Congress, with the support of agencies like the DEA, should work together to develop legislation that would require and provide funding for

the expansion of needle exchange programs in towns and cities nationwide. With an expansion of access to needle exchange programs, many American lives can be saved.

“There is ample evidence to suggest that syringe service programs also promote entry and retention into treatment. According to research that tracks individuals in treatment over extended periods of time, most people who get into and remain in treatment can reduce or stop using illegal or dangerous drugs...The Surgeon General of the United States Public Health Service has therefore determined that a demonstration syringe services program would be effective in reducing drug abuse.”

-Regina Benjamin, 18th Surgeon General of the United States, February 23rd, 2011⁴⁶

Endnotes

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