

2017 Imagine RIT Attendees' Perceptions of Opioids and the Opioid Epidemic

Working Paper #2017-7
June 2017



Shayna Gray
Research Assistant
Center for Public Safety Initiatives

Nate Le Mahieu
Research Assistant
Center for Public Safety Initiatives

John Klofas, Ph.D.
Director of Center for Public Safety Initiatives
Rochester Institute of Technology
585-475-2432
jmkgcj@rit.edu

Irshad Altheimer, Ph.D.
Deputy Director of Center for Public Safety Initiatives
Rochester Institute of Technology
iaxgcj@rit.edu

www.rit.edu/cla/criminaljustice/cpsi

Summary

In May of this year (2017), surveys on issues relating to what has become known as the ‘Opioid Crisis’ were completed by 347 adults who attended the annual technology festival at Rochester Institute of Technology. The survey showed that a high percentage of respondents (41%) had been prescribed opioid painkillers at some point, and nearly two thirds (63%) know someone who had been prescribed that type of medication. A still higher percentage (73%) know someone who has abused some drug or suffered addiction problems. When it came to support for policies dealing with this problem, there is little support for treating drug abusers as criminals (15%) and higher levels of support for alternative approaches including over-the-counter availability of anti-overdose medications (90%), and medically supervised sites where users can inject drugs safely (47%).

The data from this survey suggest the value of reframing our thinking about the nature of drug problems and society’s response to them. Although data never supported the often-popular image of drug use as a problem concentrated in an out-of-the-mainstream and often criminal class, data on the opioid crisis clearly defy such characterizations. This problem has been fueled by legitimate drug manufacturing and legal channels for distribution. The widespread experience with opioid painkillers makes that clear. That tragic path from powerfully addictive medication to street markets for heroin and other opioids is important to recognize and to respond to with the care and compassion reflected in the responses to our survey. The drumbeat of punitive responses, however, may once again be heard despite the evidence of its failure. These data support the long line of research calling for pragmatic and humane responses to drug use and addiction.

Introduction

This paper describes the results of a survey taken by attendees of the 2017 Imagine RIT Festival. Imagine RIT is an innovation and creativity festival hosted at the Rochester Institute of Technology (RIT). Since 2008, approximately 200,000 people have attended Imagine RIT festivals.¹ The Center for Public Safety Initiatives (CPSI) at RIT developed and distributed the survey at the festival. As the sampling method used was convenience sampling and not random sampling, the results of this survey are not representative of opinions of the general public. The event is held on a college campus and is advertised as a festival of technological and scientific innovation, therefore the population taking the survey consists primarily of college students, individuals of higher education, and their families.

The focus of this year's survey was the rising opioid problem in the United States. The survey identifies peoples' experiences with opioid prescriptions and addiction. Furthermore, the survey was designed to tap into attendees' opinions on how to deal with individuals who are addicts, over-the-counter emergency treatments for overdose and supervised injection sites.

Background

The United States (U.S.) is experiencing a rising problem regarding opioid use, addiction and death as a result of drug overdose. The number of opioid deaths has now surpassed that of motor vehicle accidents (Gusovsky, 2016). In 2015, 38,022 Americans died in car crashes while 52,404 died from opioids (Lopez & Frostenson, 2017). This staggering number amounts to 143 opioid deaths each day across the U.S. This growing problem stems from a variety of factors, but one of the most prominent is the amount of prescriptions for opioids that are being written by healthcare providers. The amount of opioids prescribed in the U.S. and the number of opioid

¹ See link: <https://www.rit.edu/imagine/>

deaths have risen simultaneously. In 2013, enough prescriptions were written that every adult in the U.S. could have their own bottle of pills (“Injury prevention & control”, 2017). In some circumstances, doctors do not hesitate to prescribe opioids to patients with pain that does not warrant that level of relief (Murthy, 2016). Doctors are also willing to prescribe opioids for longer periods of time than necessary (Murthy, 2016). Consuming opioids for extended periods of time can cause physical dependence on the drug, where a person relies on the drug to prevent withdrawal symptoms (“Opiate and Opioid Withdrawal,” 2017).

There are several policy matters that are associated with the rise in opioid addiction and overdose. The first matter explored in the survey was treating addicts as criminals. Supporters of treating addicts as criminals believe that the incarceration of drug addicts will deter drug abusers from using drugs (Spohn & Holleran, 2002). Opponents support the idea that incarceration does not decrease drug use and instead believe that addicts should be treated as patients and use or possession of drugs should be treated as a health issue. They encourage treatment over incarceration as a means to helping addicts get clean and stay out of trouble with the law. Without treatment, addicts are likely to continue using once they are released from incarceration and are subject to a higher risk of recidivism (“Drug addiction is an illness”, 2015).

Another policy matter regarding opioids involves emergency treatments such as Narcan[®] that save addicts from death once they have overdosed. Narcan is currently used by police officers and medical staff, but there is some desire for it to be made available to the general public without requiring a prescription. The availability of Narcan without a prescription is supported by the rationale that family members and friends of addicts can purchase the emergency treatment and have it handy in the event that their loved one overdoses. Administration of Narcan would allow that person the ability to save an individual without losing

time waiting for police or medical personnel to respond to the scene (White, 2016). Although this could have an impact on the amount of lives saved, the use of emergency treatments such as Narcan requires training in order to administer it properly.

The final policy matter explored in the survey is the availability of supervised injection sites. Supervised injection sites are safe locations where addicts can inject drugs with medical oversight. There, addicts are provided with clean needles to reduce the risk of spreading disease and Narcan is on hand in case of an overdose. Supporters of supervised injection sites believe that the sites will prevent addicts from injecting the drug in private (Weller, 2016). This concept is rooted in the idea that if addicts are going to inject, it might as well be in a safe environment. If an addict overdoses alone, other individuals are not present to call 911 or administer Narcan.

The goal of these sites is to save lives, as well as allow addicts the opportunity to seek further treatment (Weller, 2016). Canada has implemented supervised injection sites and has seen success from them. The number of overdose deaths within 500 meters of the Insite facility in Vancouver, Canada, decreased by 35% since its opening (Stueck, 2011). There was an additional 9% decrease that occurred in the rest of Vancouver (Stueck, 2011). Even though overdose deaths were significantly reduced, supervised sites are still a controversial matter. Although the sites may save lives by preventing overdoses, the sites still allow for the continued use of drugs. Additionally, opponents argue that supervised injection sites do not provide addicts with enough resources to seek treatment and end their addiction (Stueck, 2011).

The Survey

The survey that was used for the Imagine RIT event was developed by the researchers of the CPSI and progressed over the course of three meetings. The development of the survey questions were based around previous research that has been conducted on the opioid epidemic.

The survey questions were designed to tap into attendees perceptions of OTC (Over the Counter) emergency treatment availability, supervised injection sites, punitive treatment of drug abusers, among others. OTC drugs are drugs that can be purchased at retail stores without a prescription. Additionally, when designing the Imagine RIT survey, the CPSI researchers included various demographic questions that would be most relevant to anticipated disparities in responses to survey questions. The demographic questions on the survey included respondents' gender, age, and attained level of education.

Surveys were distributed on May 6th, 2017, at the CPSI booth at Imagine RIT. The survey was available on paper and online through RIT's Qualtrics survey software. The online survey was accessed by respondents through a link or Quick Response (QR) code provided at the booth and was printed in the Imagine RIT program pamphlet. The survey was designed to be short in length, taking no more than a minute to answer 12 questions. The survey can be found in Appendix A.

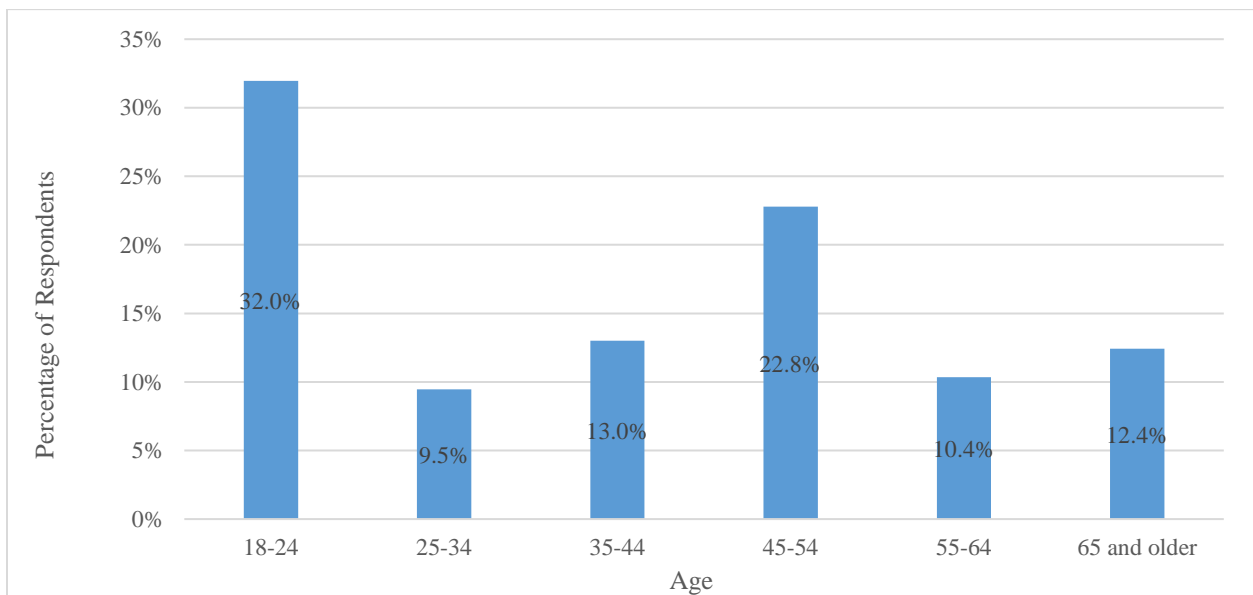
Of the 347 survey responses, 30 respondents chose to answer questions online through the Qualtrics software. Utilizing an online survey platform to distribute the survey offers a variety of advantages versus using face-to-face methods. By using an online survey program, time is saved for both researchers as well as the individuals taking the survey (Wright, 2005). Additionally, by utilizing online surveys, we can gain access to participants who may not be comfortable with taking a survey in person, especially as the survey is sensitive in subject matter.

Survey Results

Sample Descriptive Statistics

Of the 347 survey respondents, 338 self-identified their age. Overall, the largest percentage of respondents were in the “18-24 years old” category (32%, n=108 - See Figure 1), which was to be expected as RIT is primarily populated with college students. The second largest age category group of respondents identified was the “45-54 year old” category (22.8%, n=77).

Figure 1: 2017 Imagine RIT Survey Respondents’ Age (N=338)

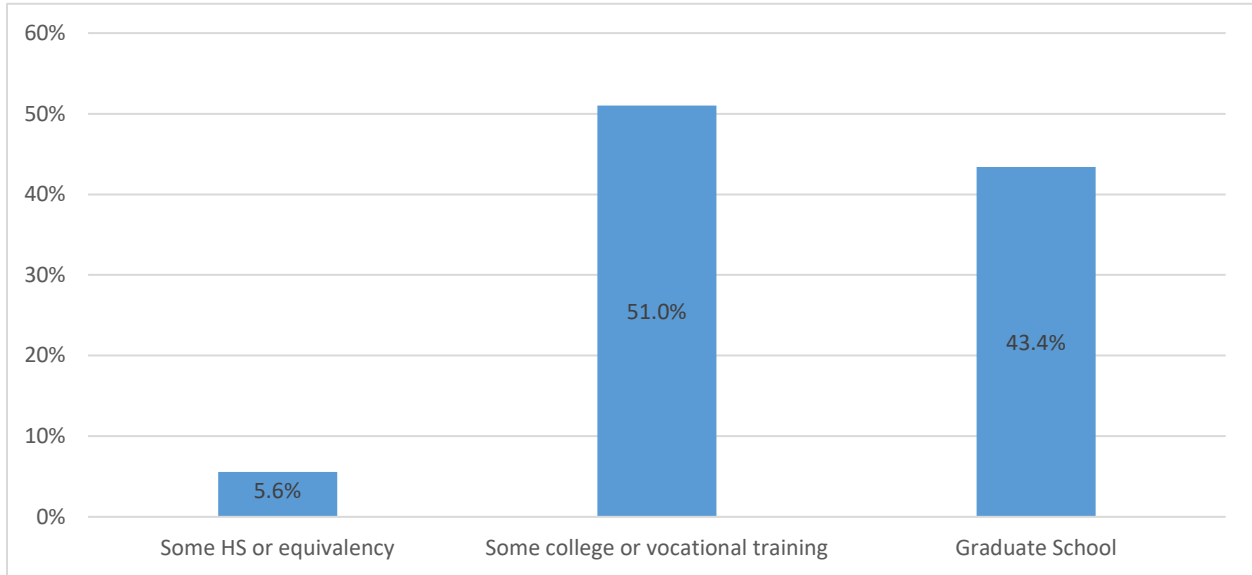


Three hundred forty-three survey respondents disclosed their gender identity in the Imagine RIT Survey. Overall, 55.1% (n=189) of the respondents identified as male, while 44% (n=151) of respondents identified as female. Those that did not identify as either male or female made up 0.9% (n=3) of respondents.

The last demographic question on the Imagine RIT survey identified survey respondents’ educational attainment. To keep the survey terse, the levels of education were categorized into “some high school or equivalency,” “some college or vocational training,” and “graduate

school.” The majority of survey respondents fell into the “some college or vocational training” group (51.0%, n=174) or the “graduate school” group (43.4%, n=148 - See Figure 2).

Figure 2: 2017 Imagine RIT Survey Respondents’ Educational Attainment (N=341)



Furthermore, the CPSI researchers wanted to identify whether respondents: (1) live in the State of New York, (2) live in Monroe County and (3) live in the City of Rochester. The motive for including questions based on where survey respondents resided was to identify disparities in perceptions associated with living in urban, suburban, and rural environments. Since Rochester is the only urban city in Monroe County, potential differences could exist between respondents living in Monroe County and those living in the city of Rochester. Moreover, differences could exist between Monroe County, Rochester, and the rest of the state of New York.

The survey results indicated that the Imagine RIT survey respondents primarily: live in the state of New York (79.6%, n=277), and within Monroe County (56.4%, n=194). Approximately one-third of survey respondents stated that they lived in the city of Rochester (29.5%, n=99).

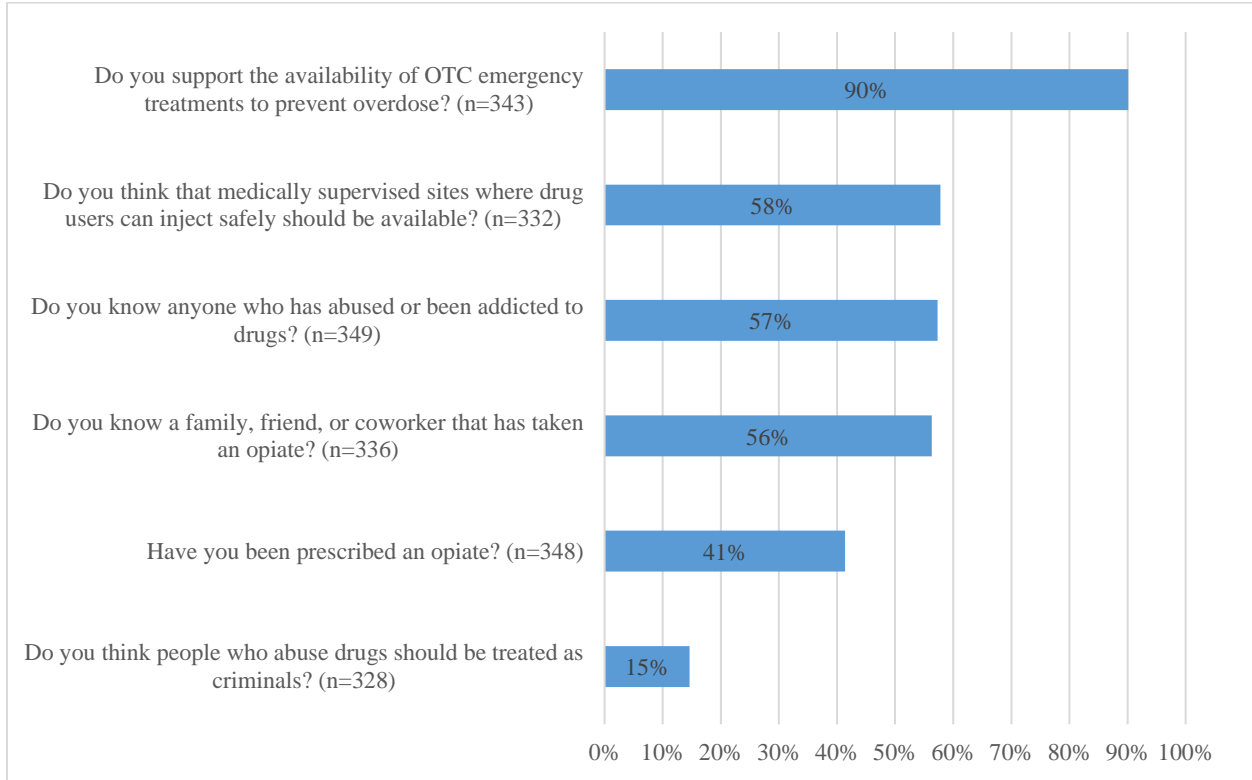
Sample Agreement to Survey Questions

In this section, we describe the results to the survey items specific to opioids. A finding within the survey is that 41% (n=143) of respondents (See Figure 3) have been prescribed an opiate at some point in their life. Since 1999, the amount of prescriptions that have been written by healthcare providers has quadrupled (“Injury prevention & control”, 2017). This increase in the number of prescriptions may contribute to the finding that two-fifths of the survey respondents had been prescribed an opioid.

The vast majority of respondents (90%, n=308) supported the availability of OTC emergency treatments (See Figure 3). More than half of respondents (58%, n=190) supported the use of medically supervised drug use or injection sites (See Figure 3). As some may consider medically supervised sites as a more serious health intervention than OTC emergency treatments, this may help explain why more people agreed with making OTC emergency treatments available. Supervised injection sites are considered controversial because they condone the use of drugs in a facility, whereas emergency treatments are a last resort to save addicts from death by overdose.

Only 15% (n=48) of respondents agree that people who abuse drugs should be treated as criminals (See Figure 3). This is contrary to current criminal justice policy, which suggests (or recommends) more punitive sanctions in order to deter the use of drugs. Extant research has shown no evidence that imprisonment would reduce the recidivism, or reoffending, of drug users (Spohn & Holleran, 2002). In recent years, alternatives to imprisonment have been advocated, taking a more rehabilitative stance in treatment of drug users.

Figure 3: 2017 Imagine RIT Respondents' Overall Agreement to Survey Questions



Cross-tabulations

One component of CPSI’s analysis of the Imagine RIT survey is to include cross-tabulations. Cross-tabulations show survey responses that can be separated by another variable, such as demographic variables we presented in Table 1.

There were a few disparities in survey responses among levels of education. We found notable differences in levels of education and how individuals responded to the question “Have you ever been prescribed an opiate?” Individuals who reported higher levels of education had been prescribed an opiate. Nearly half the individuals who had completed some college or had vocational training had been prescribed an opiate. Of the individuals who completed higher education, 41.9% (n=62) stated that they had been prescribed an opiate. However, those who completed some high school stated that they were prescribed opiates the least (17.5%, n=4).

This may be related to age, where typically, individuals having attended or completed higher education tend to be older. Approximately one-third of individuals in the age group 18-54 stated that they had been prescribed an opiate, in comparison to individuals who were 55 and older, with roughly one-half of individuals stating they had been prescribed an opiate. This may be due to the fact that when people are older, they have more pain related illnesses that require the prescription of opioids (Buntin-Mushock., Philip, Moriyama, & Palmer, 2005).

Additionally, we found a notable difference in levels of education and responses to the question “Do you think people who abuse or are addicted to drugs should be treated as criminals?” Individuals who attained some high school education agreed the most (35.9%, n=10 - See Table 1), followed by individuals who attained some college or vocational training (14.4%, n=24). Those that attained graduate school education agreed the least (9.5%, n=13). This finding is supported by research of educational attainment and perception of punitive views, where individuals of lower educational attainment support harsher punishments (Hough & Moxon, 1985).

Table 1: 2017 Imagine RIT Survey Responses Cross-tabulated by Demographic Variables

		Q1 (n=334)	Q2 (n=346)	Q3 (n=347)	Q4 (n=326)	Q5 (n=341)	Q6 (n=332)
Gender	Male (n=195)	53.7%	42.6%	52.8%	17.9%	92.1%	60.8%
	Female (n=168)	59.6%	37.1%	65.5%	10.8%	88.0%	54.4%
	I do not identify as male or female (n=3)	33.3%	33.3%	33.3%	66.7%	100.0%	33.3%
Age	18-24 (n=108)	51.9%	36.1%	55.6%	17.8%	92.5%	65.1%
	25-34 (n=32)	53.1%	31.3%	71.9%	18.8%	87.5%	58.1%
	44-54 (n=44)	62.8%	40.9%	65.9%	11.6%	93.2%	53.7%
	44-54 (n=77)	64.9%	49.4%	62.3%	10.3%	86.8%	50.7%
	55-64 (n=35)	57.6%	47.1%	48.6%	14.3%	100.0%	45.5%
	65 and older (n=42)	46.2%	45.2%	42.9%	10.0%	87.2%	62.2%
Level of Education	Some High School (n=40)	51.3%	17.5%	67.5%	35.9%	90.0%	62.2%
	Some College or Vocational Training (n=176)	56.8%	43.4%	58.0%	14.4%	91.3%	55.7%
	Graduate School (n=148)	55.6%	41.9%	54.7%	9.5%	89.0%	58.2%
Q1 = Do you know a family member, friend, or coworker that has taken an opiate?							
Q2 = Have you ever been prescribed an opiate?							
Do you know anyone who has abused or been addicted to drugs?							
Q4 = Do you think people who abuse or are addicted to drugs should be treated as criminals?							
Q5 = Do you support the availability of over-the-counter emergency treatments to prevent overdose?							
Q6 = Do you think that medically supervised sites where drug users can inject safely should be available?							

A cross-tabulation was also performed on survey respondents’ place of residence and their responses to all survey questions. Generally, the analysis showed that respondents from within different locations responded to the survey questions similarly. However, a few differences were identified. Respondents who lived in New York State reported being prescribed an opiate less than those who lived outside of New York State (38.8%, n=110). Those who lived in New York agreed more to Q6 “Do you think that medically supervised sites where drug users can inject safely should be available?” (60.3%, n=167) versus those who did not live in New York (47.8%, n=33). The results of the analysis also showed notable differences between how respondents who lived in Rochester versus those who did not live in Rochester answered survey questions. For Q1 “Do you know a family, friend, or coworker that has taken an opiate?” 47.4% (n=47) of respondents who lived in Rochester did know someone, while 58.8% (n=142) of those who did not live in Rochester know someone. According to Keyes, Cerdá, Brady, Havens, and Galea (2014), those who live in suburban or rural areas often work in physically demanding jobs that are prone to injury, and have higher rates of being prescribed opioids.

Table 2: 2017 Imagine RIT Survey Responses Cross-Tabulated with Place of Residence

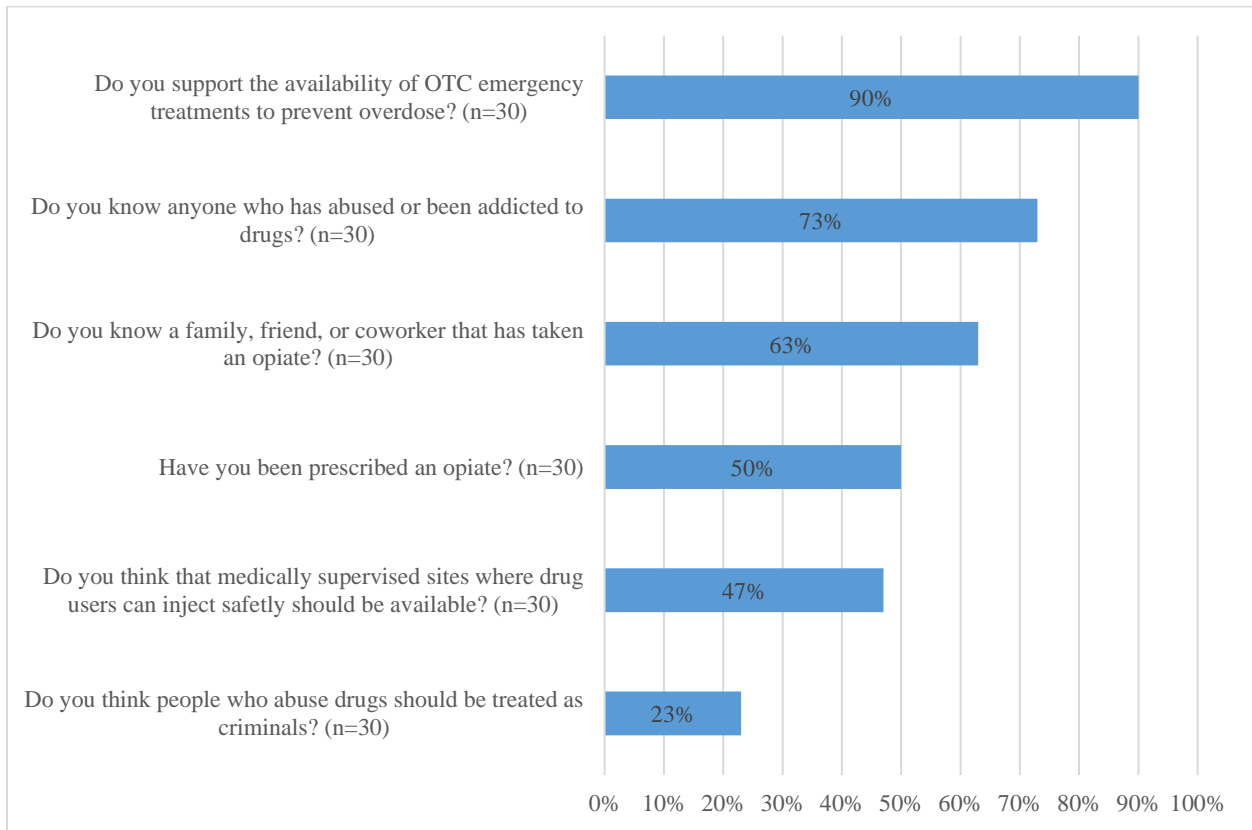
		Q1 (n=334)	Q2 (n=346)	Q3 (n=347)	Q4 (n=326)	Q5 (n=341)	Q6 (n=332)
Live in NY	Yes	54.6%	37.3%	57.4%	16.0%	89.4%	59.9%
	No	60.3%	49.3%	58.9%	9.2%	93.0%	46.5%
Live in Monroe County	Yes	54.4%	37.6%	54.7%	13.8%	89.1%	59.2%
	No	56.3%	42.0%	60.5%	14.9%	91.1%	56.1%
Live in Rochester	Yes	47.0%	35.9%	51.0%	13.3%	82.4%	64.6%
	No	58.4%	41.1%	59.3%	14.8%	93.2%	55.4%
<i>Q1 = Do you know a family member, friend, or coworker that has taken an opiate?</i>							
<i>Q2 = Have you ever been prescribed an opiate?</i>							
<i>Q3: Do you know anyone who has abused or been addicted to drugs?</i>							
<i>Q4 = Do you think people who abuse or are addicted to drugs should be treated as criminals?</i>							
<i>Q5 = Do you support the availability of over-the-counter emergency treatments to prevent overdose?</i>							
<i>Q6 = Do you think that medically supervised sites where drug users can inject safely should be available?</i>							

Electronic Survey

The researchers of the CPSI were interested in seeing if disparities existed between electronic survey responses versus paper survey responses. In reference to the sample's overall agreement to the survey questions, the electronic users had responded similarly to the questions on the survey. The largest difference was that electronic survey users reported higher levels of opiate prescriptions. Additionally, electronic survey respondents also reported knowing more family members and friends who have taken opiates, or abused drugs. Moreover, electronic survey respondents reported less agreement with implementing supervised injection sites (47%, n=14), and agreed more to supporting criminal treatment for those who abuse or are addicted to drugs (23% n=7). However, the electronic survey sample was small and likely not representative, and should be acknowledged as a limitation.

Figure 4: 2017 Imagine RIT Electronic Survey Respondents Overall Agreement to Survey

Questions



Conclusion

Surveying attendees at the 2017 Imagine RIT Festival gave access to a robust sample to perform research in the form of survey analysis on opioids and the opioid epidemic. As a whole, the researchers at the CPSI were able to utilize 347 surveys from Qualtrics and the paper format combined.

More than half of the survey respondents knew a friend, family member, or coworker that has taken an opiate, and over half also knew someone who has abused or been addicted to drugs.

Furthermore, the results of our analysis show that the survey respondents are in support of alternative strategies to combat the drug and opioid epidemic, with only a small percentage (15%, n=48 - See Figure 3) agreeing that those who are addicted to drugs should be treated as criminals. Almost the entire sample (90%, n=308) agreed that OTC emergency treatments for overdose should be available, and over half of the sample supported the availability of supervised injection sites. Additionally, we found a connection with respondents' level of education and support for these alternatives.

In addition, we did not identify many disparities in how much respondents agreed to these policy matters regarding their location. Thus, it can be argued that support for progressive policies in addressing the opioid epidemic are not limited to Rochester, and may potentially garner further interest in the future. What's more, the results indicate inconsistencies with current punitive policies on opioid usage, with only 15% (n=48) of respondents believing that people who use drugs should be treated as criminals (See Figure 3). However, due to the nature of the sampling method chosen, these results are not generalizable and should be acknowledged as a limitation of this study.

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Appendix A:

Center for Public Safety Initiatives Imagine RIT 2017 Survey

1. What is your age in years?
 Under 18 18-24 25-34 35-44 45-54 55-64 65 or older
2. Do you know a family, friend, or coworker that has taken an opiate? **(By opiate, we mean powerful painkillers such as OxyContin, morphine, Percocet, heroin and Oxycodone.)**
 Yes No

	Yes	No
Have you ever been prescribed an opiate?		
Do you know anyone who has abused or been addicted to drugs?		
Do you think people who abuse or are addicted to drugs should be treated as criminals?		
Do you support the availability of over-the-counter emergency treatments to prevent overdose?		
Do you think that medically supervised sites where drug users can inject safely should be available?		

3. What is your gender identity?
 Male Female I do not identify as male or female
4. What is your highest level of education?
 Some high school or equivalency Some college or vocational training Graduate school

	Yes	No
Do you live in the State of New York?		
Do you live in Monroe County?		
Do you live in the city of Rochester?		