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Comprehensive Care: Harm Reduction and the Opioid Epidemic

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Comprehensive Care: Harm Reduction and the Opioid Epidemic

Overdoses are currently the leading cause of injury death in the United States. In 2016 alone, 64,000 people in the U.S. died as the result of an overdose and over 65% of these deaths were caused specifically by opioid overdoses (Hawk et al., 2015; Hall, 2021). Even more harrowing, according to the Center for Disease Control and Prevention, for each of these 42,000 fatalities, there were nine individuals admitted for treatment, thirty-five visiting emergency rooms, one hundred and sixty-one reporting dependence or abuse of these drugs, and four hundred and sixty-one cases of nonmedical opioid abuse (Hawk et al., 2015). This report will examine how different intervention strategies and access points from an individual to federal level will address this issue by delving into the root causes and different treatment strategies available to reduce these preventable deaths. The intent of this paper is to argue that these strategies are necessary steps to be taken if the United Nations' sustainable development goals are to be met, specifically focusing on SDG (Sustainable Development Goals) 3--good health and wellbeing.

The broad aim of goal three as outlined by the United Nations is to “ensure healthy lives and promote well-being for all at all ages” (2021). While it could be argued that this in itself is an argument for more comprehensive addiction treatment strategies, targets 3.3, 3.4, and 3.5 offer more direct correlations. Target 3.3 aims to prevent communicable diseases including AIDS and HIV in general. This is relevant in the framework of opioid treatment as around three million individuals who use injectable drugs are living with HIV/AIDS and over half of the people who inject drugs are living with Hepatitis C (McNeil & Small, 2014). Target 3.4 addresses the hope of

reducing the premature mortality rate as a result of non-communicable diseases through prevention, treatment, and the promotion of mental well-being. Part of the goal of these harm reduction strategies is reframing addiction as a disease rather than a choice, so in the context of this analysis, addiction will be framed as a non-communicable disease that can be treated through prevention and comprehensive care including mental health treatment. Target 3.5 aims to improve upon prevention and treatment strategies for substance abuse, specifically naming narcotic abuse.

The 2021 Orlando Voluntary Local Review put forth five criteria for the solutions aimed at addressing the challenges described in SDG 3 following the social-ecological model as outlined by the Central Florida Foundation. The intervention strategies outlined in this report will address the four of these criteria applicable to this specific challenge. These criteria are aimed at pushing solutions that “focus on projects that pilot, accelerate, or scale solutions, or fill gaps within current solutions [,] improve delivery systems and/or access to healthcare [,] focus on increasing life expectancy and lowering preventable deaths [, and] address crisis recovery, including immediate, short-term response, and long-term critical needs” (City of Orlando & Local Governments for Sustainability, 2021). As outlined later in this report, the opioid epidemic has had disproportionate effects on certain communities making SDG 10, which aims to reduce inequalities, also prevalent.

Prevention: Understanding Addiction

In order to create comprehensive treatment strategies that acknowledge the many facets of a complex issue such as substance abuse, one must first understand why it has become so

widespread in the first place. Rustard et al. define the opioid epidemic as a public health emergency and stress how “this crisis affects everyone; therefore, it is essential for clinicians to understand the myriad biological, psychological, and social factors that contribute to opioid misuse” (2021). One of the main understandings of the social factors driving substance abuse was put forward by Edward Khantzian, a professor of psychiatry at Harvard Medical School. Khantzian’s self-medication hypothesis “conceptualized opioids as a means of coping with conflicts that encompassed ordinary human pain, disappointment, anxiety, loss, anguish, and other forms of suffering” (Rustard et al., 2021). When addiction is reframed as a coping mechanism, it is easy to see how factors such as exposure to psychoactive substances and maltreatment in childhood, poor mental and physical health, and systemic racism (which can lead to other challenges such as a lack of economic opportunity, poor working conditions, eroded social capital, hopelessness, and despair) can lead to higher rates of opioid use (Rustard et al., 2021). As outlined in the previous point, systematic racism has had quite an impact on driving this epidemic, and “overdose mortality among African Americans is now rising faster than among other racial/ethnic groups” (Saloner et al., 2018).

The main ways systemic racism has affected communities of color regarding the opioid epidemic is through inequity in the criminal justice system and the media’s tendency to frame the opioid epidemic as a white epidemic, which prioritizes white individuals in national treatment plans. The media often portrays black people who use substances as criminals or deviants in the same breath they declare white individuals who use drugs as victims. “The ‘White drug war’ serves as a microcosm for White privilege as a whole by creating a decriminalized, medicalized conceptualization for White people who use psychoactive substances, while more punitive

systems remain for the use of substances by people of color” (Rustard et al., 2021). Not only does the idea of the white drug war further racist stereotypes, but it also creates injustices in the legal system undeniably linked to race. People of color are both disproportionately targeted and arrested, and 6-10 more likely to be incarcerated than white individuals (Rustard et al., 2021). This in turn creates “downstream effects that worsen economic, educational, and housing opportunities, which increase the incidence and consequences of substance use disorders such as opioid use disorder” (Rustard et al., 2021).

The consequences of systemic racism can also lead to environmental factors such as isolation as a result of discrimination. Miles Davis’ biography *Miles Davis: Birth of Cool* details how in the 1940s, he used heroin to cope with the discrimination he faced as a result of Jim Crow laws (Rustard et al., 2021). These environmental factors have been shown to lead directly to increased opioid use. A study discussed in Rustard et al. exhibited how lab rats reacted to isolation regarding opioid use. The study included two rat enclosures; one filled with toys, food, and other rats, the other serving as a solitary confinement chamber. “The rats in the isolated environment used up to 25 mg of morphine per day, an amount consistent with other trials, while the rats in rat park used less than 5 mg per day” (2021). There are also biological factors in play such as susceptibility genes. While environmental and social factors typically lead to initial drug use, the transition from use to dependence is likely genetic as relatives of those with opioid use disorder have been shown to be ten times as likely to also suffer from opioid use disorder (Rustard et al., 2021).

Treatment: Implementing Harm Reduction Strategies

Harm reduction strategies are treatment plans that minimize morbidity and mortality by focusing on reducing the harmful consequences of drug misuse such as death, the spread of disease, criminal activity, and incarceration (Hawk et al., 2015). There is a common misconception that some harm reduction strategies (namely safe environment interventions such as supervised injection facilities) enable or even encourage drug use, but they simply acknowledge drug use as a reality and aim to provide a safe space for those who might otherwise not have one and educate users and their community on safe practices. There are far too many harm reduction strategies to cover all of them in this report, so, this analysis will be focusing on naloxone distribution, medication-assisted treatment, and safe environment interventions.

When administered, Naloxone reverses the respiratory depression that takes place during an overdose. It also displaces opioids from their receptor, preventing receptor activation and the binding of additional opioids for 20-90 minutes (Hawk et al., 2015). The first naloxone distribution program in the United States began in Chicago in 1996. The Chicago Recovery Alliance began distributing the drug through a mobile van-based program and “in the subsequent decade delivered naloxone to 10,211 people with 1,011 reported overdoses reversals” (Hawk et al., 2015). Flash forward to 2010, “A Harm Reduction Coalition survey showed [...] 188 local naloxone programs in 15 states and the District of Columbia had distributed naloxone to 53,032 individuals and received reports of 10,171 drug overdose reversals. By June 2014, 644 local programs in 30 states and Washington, D.C. were responsible for the distribution of 152,283 naloxone kits and 26,453 overdose reversals” (Hawk et al., 2015).

Along with providing naloxone at Harm Reduction Centers and implementing mobile programs like the one in Chicago, naloxone take-home programs can also be critical in preventing overdoses. Research has shown that if there is someone there to witness an overdose, more often than not that person would be willing to intervene or provide assistance. “Naloxone administration by intranasal and intramuscular administration has been shown to be safe and effective with minimal training. Naloxone has been used for in-hospital opioid reversal for more than 40 years, and although rare side effects have been reported, it has an excellent safety profile” (Hawk et al., 2015). Naloxone should also be made available to all levels of Emergency Medical Service workers, including EMTs and First Responders. Increasing the number of people with access to naloxone by default increases the possibility that whoever may arrive first at the site of the overdose can begin the naloxone reversal. “One study estimated that using EMTs to administer naloxone could reduce time for intranasal naloxone delivery between 5.7 and 10.2 minutes, which has the potential to significantly reduce the mortality and morbidity associated with opioid overdose” (Hawk et al., 2015).

While pushing for a wider distribution of naloxone is essential, it is also important to push for more educational opportunities and the destigmatization of drug use. In 2006, a survey of 588 physicians across the United States showed that less than ¼ of the physicians surveyed were aware of naloxone as an overdose reversal. “This study also reported that more than half of these physicians would not consider prescribing naloxone and that negative attitudes toward intravenous drug users, pessimism in treating drug abuse, and fear of social or professional disapproval were associated with not considering naloxone prescription” (Hawk et al., 2015). This should be addressed by requiring additional substance abuse-specific education and training

that emphasizes evidence-based opioid prescription and the success rates of naloxone prescription for high-risk individuals.

Medication-assisted treatment (also referred to as opioid agonist treatment) is another treatment option that has been highly supported by clinical evidence (Saloner et al., 2018). This form of treatment uses medications such as methadone and buprenorphine to reduce cravings and other symptoms of withdrawal. A randomized controlled trial reported that medication-assisted treatment both decreased use and increased engagement in treatment after thirty days of buprenorphine preceding ten weeks of primary care-based treatment and medical management this represents a paradigm shift in which emergency physicians initiate treatment and refer patients much as they would patients with other chronic diseases such as asthma, diabetes, and hypertension” (Hawk et al., 2015). It has also been shown to decrease HIV transmissions, criminal activity, and fatalities as a result of opioid misuse. Unfortunately, some barriers for widespread access to these treatments are in place including excessive costs making it not locally available to providers and stigma associated with harm reduction strategies. This stigma leads to communities having concerns about diversion and “a general aversion to substance abuse treatment clinics being located in one’s community” (Hawk et al., 2015).

Safe environment interventions (SEIs) are the paramount of harm reduction strategies. There are many different forms of SEIs, but most often they include supervised drug consumption sites (also referred to as safe injection facilities) and syringe exchange and distribution programs. McNeil & Small conceive SEIs as “a continuum of programmatic responses that directly intervene to mitigate social, structural, and environmental determinants of

risk among [people who inject drugs]. Of primary importance is how SEIs produce social, structural or physical settings that enable risk reduction or otherwise produce positive health outcomes among injection drug-using populations” (2014). People who inject drugs (PWID) are often left without any spaces to occupy without the fear of arrest because of an intersection of meso and macro-environmental forces such as policing and poverty. These forces cause these individuals to be dislocated through social regulation which leads to health risks such as physical and sexual violence along with complications due to unsafe practices such as re-using or sharing syringes. SEIs provide a safe space for dislocated individuals that allows them to escape the structural and everyday violence often characterized in street-based drug scenes while giving them access to sterile equipment. Access to sterile equipment through syringe programs has been shown to be “a cost-effective, low-threshold strategy to reduce blood-borne infections” (Saloner et al., 2015). Another important feature of SEIs is drug screening services, which allow individuals to identify adulterants that may be in their drugs such as fentanyl. This is extremely important in the current climate as fentanyl-laced opioids are becoming more common. Deputy Attorney Lisa Monaco states that fentanyl-laced drugs could potentially kill more than 700,000 Americans in a single year (U.S Department of Justice: Drug Enforcement Administration, 2021).

SEIs do not only serve as injection sites, but studies have also shown that those who frequented safe injection facilities were disproportionately affected by poverty and homelessness and often struggled to meet their daily needs. SEI’s provided them not only a refuge but mediated access to other support services such as providing food and shelter and mediated access to broader health and social support services (McNeil & Small, 2014). PWID are often wary of

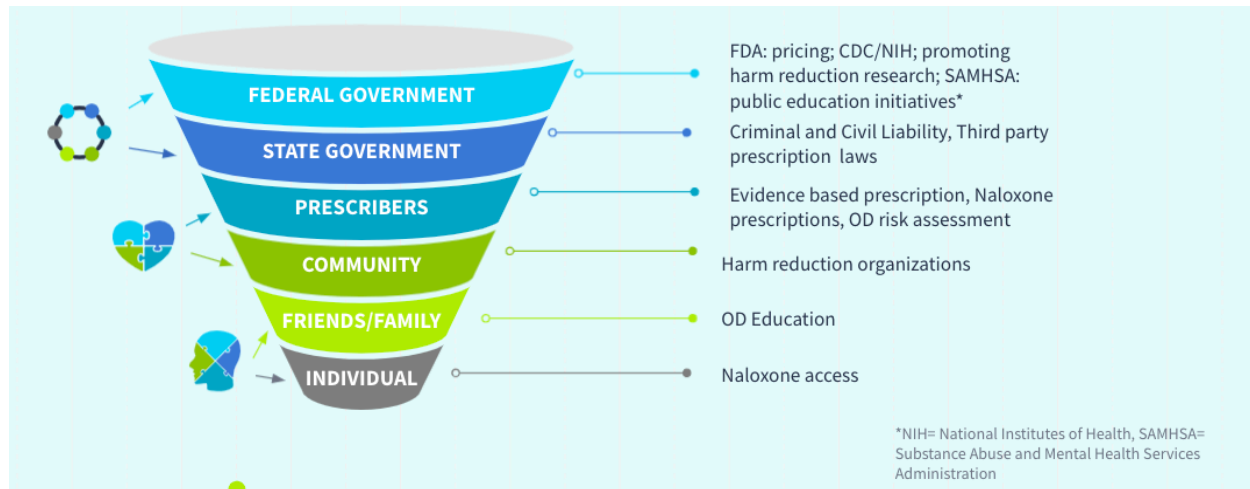
soliciting help from formal medical practices because of associated stigmas or previous “exploitative relations with ‘hit doctors’” (McNeil & Small, 2014). These spaces allow health care workers to interact and connect with PWID in a space free of judgment and provide care and treatment in a space that is both safe and comfortable for these individuals outside of the typical punitive hospital setting. “Across the majority of studies, trust was identified as a critical factor in mediating access to medical care and support. In the broadest sense, trust between participants and programme staff was seen as important to fostering access to SEIs and ancillary services. Trust was perceived to be an outcome of the non-judgmental, supportive approaches taken by these interventions” (McNeil & Small, 2014). Safe injection facilities have been consistently linked with safer practices, a reduction in the transmission of communicable diseases, and-- contrary to popular belief-- improves public order in communities by reducing discarded syringes. SEIs have been found to be both cost-effective and add significant years to the lifespan of those with opioid use disorder (Rustard et al., 2021).

Intervention: Primary Access Points

In order for a comprehensive treatment plan to be implemented in the fight against rising opioid abuse, one must consider the different intervention access points available and how they intersect. In their 2015 analysis, Hawk et al introduced a way in which to understand these access points from an individual to federal level. They presented this strategy in the form of a pyramid, which is important when considering how these access points both interact with and build upon each other. As shown in Figure 1, Hawk and their colleagues have identified six different access points across various levels. The baseline of their intervention strategy lies at the federal level,

with each following level building off its predecessor. A reconfiguration of their illustration is included below:

Figure 1:



Note. FDA refers to the Federal Drug Administration, CDC refers to the Center for Disease Control and Prevention, NIH refers to the National Institutes of Health, and SAMHSA refers to the Substance Abuse and Mental Health Services Administration. Reformatted from Figure 1 of Hawk et al., 2015b.

At the federal level, five strategies have been identified as successful intervention techniques; take-back programs, increased funding, public policy reform, deregulation, and a reframing of attitudes towards the issue itself. Starting with take-back initiatives, these programs allow pharmacies and hospitals to collect unused medications. Since 2010, nine country-wide take-back days have taken place and resulted in the collection of 2,411 tons of unused medications (Hawk et al., 2015). Safe collection of these unused medications prevents them from being sold or used out of their intended context. This ties into the next strategy, an increase in

funding. An increase in funding for prevention and harm reduction strategies would not only increase the frequency of take-back drives, but also allow for more relevant research, and the spread of other intervention strategies such as SAMHSA's opioid overdose toolkit and increased access to medication assisted treatment and widespread naloxone distribution. Lack of funding has become increasingly relevant with the spread of Big Pharma and an increase in the price of essential treatments, the cost of naloxone doubled over the course of several months during 2014 (Hawk et al., 2015). Public policy changes can be one of the drivers of this necessary increase in funding. It is also a key player in furthering criminal justice reform, which is essential in combating structural racism within opioid reduction strategies. Current policy preserves punitive approaches that disproportionately affect people of color, hampering “the efforts of public health approaches [...] future programs for opioid use disorder should take steps to avoid reproducing racial stigma and criminalization. Policy efforts should specifically address racial/ethnic and economic differences in treatment access and engagement” (Rustard et al., 2021). Public policy changes are also necessary to implement the use of supervised injection facilities as they are currently in violation of federal criminal laws. Saloner et al argue that Congress must provide more funding to Medicaid and other federally funded programs, as Medicaid's expansion has been shown to increase resources for substance abuse treatment. Unfortunately, Medicaid has not been adopted in certain states and is continually subject to repeal threats. “Beyond expanding insurance coverage, Medicaid and private insurers need to support long-term recovery options, eliminate barriers to effective medications, and cover a wider array of treatments” (Saloner et al., 2018).

In terms of regulatory change, a reevaluation of federally controlled substances can be encouraged by a regulation of medication-assisted treatment and targeted decriminalization. Historically the DEA has been driven by criminal justice metrics that disregard patient care and public health initiatives. “Better public health outcomes could result if the regulatory system were reevaluated based on the likely balance of risks and benefits to public health. This process should be holistic in its focus on overall health and consider opioid regulations alongside other controlled substances” (Saloner et al., 2018). It is also necessary to reframe the way society views the opioid epidemic and addiction in general. National dialogue and media coverage surrounding opioid use are often dominated by the War on Drugs approach which aims to deter drug use by increasing incarceration. These approaches are often harmful to communities of color and do no real work in decreasing access to street drugs. “The moral failing approach also fails to recognize the role of trauma and adverse childhood experiences in addiction. Most importantly, the willpower approach lacks evidence for efficacy [...] Moving beyond moralized and punitive approaches to addiction could help reduce stigma and increase acceptance of treatment, not only for people who use opioids but also for the safety and wellbeing of society at large” (Saloner et al., 2018). Saloner and their colleagues identified a public health approach that analyzes the many complex issues involved in opioid abuse. It centers around improving data collection, reducing related stigmas, and prioritizing harm reduction and treatment expansion.

At the state level, successful intervention strategies include prioritizing prescription monitoring programs and evidence-based prescription plans, closing pill mills, and putting Good Samaritan and naloxone laws in place. It has been shown that bystanders often are scared to interfere during an overdose and refrain from soliciting help from the police or medical

assistance for fear of incriminating themselves. These are valid fears as there have been many cases in which bystanders are arrested for possession on site of the overdose. Good Samaritan laws are made to offer “protection from low level-controlled substance possession charges and not for more significant charges such as manufacturing, trafficking, and distribution” (Hawk et al., 2015). 88% of high-risk opioid users said if these laws were in place, they would be much more likely to call 911 if witnessing an overdose (Hawk et al., 2015).

For prescribers, there are three main combative strategies; prescription monitoring programs and evidence-based prescriptions, specialized training opportunities, and an increase in naloxone access for healthcare providers. Evidence-based opioid prescriptions were shown to correspond to a 70% decrease in active opioid prescriptions among victims of fatal overdoses from 2008 to 2010 (Hawk et al., 2015). Specialized training programs could be put in place to reduce stigma among health care workers, one of these potential programs is the implementation of the American Board of Addiction Medicine’s Graduate Medical Education accredited subspecialty. The goal of this program is to increase addiction-specific training opportunities within general medical training. And finally, as made clear in the earlier sections of this paper, increasing the number of individuals with access to naloxone will typically lead to a decrease in fatal overdoses.

At the community level, making harm reduction centers and treatment services more locally available is the prime strategy for the prevention of opioid abuse. It is also important to destigmatize the attitude surrounding addiction to understand it as a disease rather than a moral failure. This can be done by increasing general knowledge of the biological and environmental

factors that can impact the risk of developing addictive behaviors. Feeling supported by one's community and feeling like there are other options available is important in addiction prevention and treatment. This is also the prime intervention at the friends and family level. Support from "close contacts such as friends and family also may play a role in encouraging patients with opioid use disorders to seek and continue to engage in treatment" (Hawk et al., 2015). At the individual level, education, and access to naloxone outside of a clinical setting are the two main intervention strategies. If high-risk individuals had access to naloxone, they would have the opportunity to intervene if they were witness to an overdose. As naloxone has very few side effects and is extremely safe to administer, it would be a game-changer if witnesses could administer it to the victim, starting the reversal process without delay rather than having to wait for help to arrive. Targeted educational initiatives have been shown to increase treatment engagement among individuals with opioid use disorder (Hawk et al., 2015)

Overall, when considering solutions to an issue as multifaceted as addiction and drug misuse, it is important to consider why the issue is prevalent and what different entrance points and treatment strategies are both available and effective. This issue is widespread, and it is only getting worse. In approaching solutions, it is essential to consider intervention points ranging from local to federal levels in order to create a care plan that addresses each complexity of the issue. The way these solutions are approached going forward will directly affect the completion of the United Nations Sustainable Development Goals. A standard of Good Health and Wellbeing cannot be achieved when 91 Americans still die every day from an opioid overdose (*Opioid addiction: Olalla Recovery Centers 2020*). Equity cannot be attained when the consequences of this epidemic disproportionately affect certain communities. In creating comprehensive solutions

for the problems outlined in Sustainable Development Goals 3 and 10, the consequences of opioid addiction cannot be ignored. The reality is that addiction exists, and it is not simply going to go away. Spaces must be created for this disease to be treated rather than leaving its victims alone with no support or access to comprehensive care.

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