

Evolution of the Science and Perception of Harm Reduction

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As the impact of the overdose crisis continues to worsen, some interventions are proving to be more impactful than others. This article provides insight on the history of harm reduction as it relates to the overdose crisis, how harm reduction strategies are saving lives in North Carolina, and the challenges that could hinder these efforts.

Introduction

A Brief History of the Overdose Crisis

Not long after pain became noted as the fifth vital sign of patient care in the mid-1990s, the United States began to see a shift in the way that the medical field treated both acute and chronic pain with prescription medications. Pharmaceutical companies began competing to promote their products, and the marketing of newly reformulated opioid medications such as OxyContin was intensified alongside patient advocacy campaigns that encouraged better pain management. These initiatives resulted in a rapid rise in both prescribing and use of opioid medications. Sales of OxyContin grew by over \$1 billion from 1996 to 2000, and with its increased availability came increased misuse, diversion, dependence, and addiction. By 2004, OxyContin had become a leading drug of misuse in the United States [1].

In recent years this supply of heroin has shifted to illicitly manufactured synthetic opioids such as fentanyl and similar chemical formulations known as analogues. These synthetic opioids are cheaper and easier to produce as well as being much more potent. Illicit fentanyl can be snorted, smoked, or injected, mixed with other substances, or pressed into counterfeit prescription pills. This increase in availability, paired with a decrease in price, has led to a “third wave” of the overdose crisis; from 2015 to 2020, the rate of opioid-involved overdose deaths once again doubled, this time driven by fentanyl [2]. Since 2020, there has been an alarming increase in the presence of additional substances, such as the sedative xylazine, in the illicit drug supply [3].

As the drug supply continues to change and more potent opioids are developed and distributed, overdoses have skyrocketed. In the year 2000, 469 people died from drug overdose in North Carolina. Since then, the state has seen an 825% increase in the number of drug overdose deaths, with 4,339 in 2022, and over 70% of those deaths involve

illicitly manufactured fentanyl [4]. Overdose rates in North Carolina, and across the United States, disproportionately impact historically marginalized and underserved groups, meaning those same populations are also the people with the most limited access to lifesaving, evidence-based resources that are vital to human growth, development, and survival.

What is Harm Reduction?

History

The term “harm reduction” has become increasingly spotlighted with the growth of the current overdose crisis; however, the practices are not new. Harm reduction’s roots in the United States can be traced back decades to the community-driven, grassroots response to the HIV/AIDS epidemic of the 1980s. HIV/AIDS was first observed among relatively small numbers of people who injected drugs until an HIV antibody test was developed in the mid-1980s. This test, paired with large-scale antibody testing, revealed that HIV had been spreading among people who inject drugs in major cities across the United States and Europe. With drug use becoming increasingly criminalized during this time and deaths due to HIV/AIDS on the rise, drug users and the people who loved them began to take action through grassroots efforts aimed at reducing the spread of HIV/AIDS.

Syringe exchange programs began as part of a public health and social justice movement to save lives by slowing the spread of disease. Decades later, they continue to do so—the Centers for Disease Control and Prevention (CDC) states that these programs alone are associated with an estimated 50% reduction in HIV and Hepatitis C (HCV) incidence, and when combined with medications that treat opioid use disorders (MOUD) the transmission of HIV and HCV is reduced by over two-thirds [5].

Over the last two decades, the biggest threat to the lives of people who inject drugs has shifted from communicable diseases, such as HIV/AIDS, to overdose. Harm reduction is, and has always been, focused on saving lives and reducing

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negative health outcomes among people who use drugs. As such, harm-reduction-centered programs have shifted to provide wraparound services in addition to HIV/AIDS and HCV testing; today, in North Carolina, syringe service programs offer an extensive array of services to protect and enhance the lives of people who use drugs, from wound care and naloxone distribution to low-barrier treatment utilizing medications for opioid use disorder.

Principles

"Harm Reduction," capital H, capital R, refers to the principles and philosophies that guide workers through the development and operation of services to establish organizational culture and values [6]. In contrast, the lowercase "harm reduction" title can be referred to as the direct strategies of harm reduction programming such as syringe service, drug checking, and provision of overdose prevention supplies [6]. These philosophies include "meeting people where they are" with "unconditional positive regard". The foundation of Harm Reduction-focused interventions recognizes the importance of human connection, relationships, and lived experiences; strong, trusting relationships are shown to be as important to the therapeutic process as the types of interventions used [7]. Many people who are living with substance use disorders often face stigma, shame, and isolation. These approaches also empower individuals to make informed decisions about their health and wellness in a way that recognizes the power of personal autonomy.

One element that makes harm reduction programs effective among people who use drugs is that they are often led and staffed by people who also have lived experience with substance use. Through compassionate understanding and shared experiences, these services not only provide practical education and empowerment to prevent harm but also instill hope and resilience for some of the most marginalized members of our communities [8].

Harm reduction programs play a vital role in supporting personal autonomy and connecting people who use drugs, their families, and others in the community with resources needed to live healthy and happy lives. While the definition of harm reduction may differ across settings, the National Harm Reduction Coalition defines harm reduction as "a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use and as a movement for social justice built on a belief in, and respect for the rights of people who use drugs" [8].

Perceptions and Challenges

Evolving Perceptions

In the last 5 to 10 years, the prevalence and availability of harm reduction services and programming has increased. The efficacy of such programs in reducing the number of preventable overdose deaths and increasing linkage to care among underserved groups has driven state and federal dollars to support the development and expansion of such pro-

grams and services. As a result, harm reduction has shifted from a largely underground peer-led movement to a public health approach backed by state and federal agencies, such as the CDC and the Substance Abuse and Mental Health Services Administration (SAMHSA).

For decades, traditional treatment and public mental health modalities, which are not always effective in adequately engaging people who use drugs, have been viewed as separate from harm reduction. In more recent years, these strategies are slowly no longer being viewed as oppositional to one another, but rather as integrated services across a spectrum of care to support individuals and increase positive health outcomes.

As of June 1, 2024, there are 56 registered syringe service programs registered in North Carolina, providing services in 66 counties, illustrating the increased acceptance of these practices statewide. This increase in the number of syringe services programs and interest in harm reduction training and education both point to more acceptability across the state.

Ongoing Challenges

Despite growing acceptance, barriers continue to prevail. Harm reduction programs have faced decades of challenges as they compete against criminalization, systemic violence, stigma, and an ever-changing drug supply. While the NC Syringe Access Law legalized the distribution of sterile syringes and injection supplies in 2016 [9], programs that distribute safer use supplies to reduce the likelihood of overdose and slow the spread of communicable disease through other routes of administration continue to operate without any legislative protections. This lack of protection perpetuates clandestine underground services, risking the safety and efficacy of harm reduction efforts.

Peer-led grassroots agencies are also navigating the challenge of ensuring fidelity to the harm reduction model within their communities as the movement gains traction across the state. Amidst intense competition for resources, larger conventional systems of care often dilute or misinterpret harm reduction approaches, deviating from their initial purpose. This not only undermines the core principles of Harm Reduction but also diminishes its effectiveness in addressing the needs of marginalized communities.

Law enforcement response to the climbing overdose epidemic has largely come in the form of so-called "Death by Distribution" laws. These drug-induced homicide (DIH) laws allow governments to prosecute anyone who provides certain drugs to a person who later dies for second-degree murder or manslaughter. North Carolina's Death by Distribution law was expanded in 2023 to extend culpability beyond people who received payment for drugs that later proved fatal to include people who shared drugs freely that later ended in death. Research suggests that such legislation, aimed at deterring and removing people who distribute lethal substances, may be counterproductive to their goal.

Research published by Jennifer Carroll of North Carolina State University and colleagues in the *International Journal of Drug Policy* in 2021 found that any positive benefits of DIH laws in reducing overdose deaths were significantly outweighed by the negative, long-term impacts, including a more volatile drug supply and reduced willingness to call emergency services in the event of an overdose. These findings are echoed in North Carolina: among the 143 Death by Distribution cases filed from 2019 to 2023, counties that utilized the law the most saw the most dramatic increases in overdose rates [10]. Death by Distribution and other legislation aimed at intensified penalties for drug use are largely criticized by harm reduction and public health experts as an extension of the failed War on Drugs.

What's Next?

As the United States continues to face over 100,000 overdose deaths each year [11], communities and programs practicing harm reduction are making an impact and saving lives. This is not easy. Various state and federal funding restrictions, coupled with ongoing stigma and a lack of understanding of harm reduction, often result in programs needing to navigate funding, program management, and ever-changing participant needs with inadequate resources.

With the unprecedented settlements against pharmaceutical manufacturers and distributors, states, counties, and local municipalities across the United States are planning and implementing various projects to provide life-saving resources to their communities. Settlement funds present a unique opportunity for communities to financially support evidence-based harm reduction strategies, such as the implementation of syringe services programs and other harm reduction services without the same restrictions as state and federal governments.

Community-based programs are the foundation of change across the country and here in North Carolina. These programs are crucial for fostering resilience and promoting public health at the grassroots level. As the State of North Carolina navigates the challenges posed by the opioid crisis, it's essential that it harnesses settlement funds to empower local organizations and advocate for programs that directly address the opioid crisis. By investing in harm reduction services and supporting community-led efforts, the state can build a stronger, healthier future for all. **NCMJ**

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