

### Introduction

In the late 1990s, doctors were told by pharmaceutical companies that opioid pain relievers were not addictive and that they could prescribe them freely to patients in severe pain. As a result, doctors began prescribing opioid pain medications at a much higher rate. People began abusing these medications and the misuse of prescription and non-prescription opioids grew at an alarming rate. In 2017, the United States Department of Health and Human Services (HHS) declared the opioid crisis a public health emergency. Since then, opioid use and opioid related deaths have continued to increase prompting concern from government officials, healthcare providers, and public health advocates (HHS, 2023). Here we explore the current impact of the opioid epidemic and the current intervention strategies as well as explore using exercise as a complementary treatment for recovery.

## Impact of Opioids

The need for an immediate response to the opioid crisis is magnified by the increasing number of lives being lost to overdose. According to the National Institute on Drug Abuse, over 80,000 lives were lost due to opioids in 2021 and the number continues to increase every year. Males are more often impacted, especially once they reach the age of 25. The graphs below outline the impact of opiates on our population, providing insights into the variation among racial demographics and age groups.

### **Overdose Deaths from Synthetic and Prescription Opioids**



**Opioid Overdose Deaths by Age** 





American Indian Black Native Hawaiian or Other Pacific



# From Crisis to Recovery: Exploring Holistic Solutions for **Opioid Addiction**

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## The Problem with Recovery

Due to the intensely addictive nature of opioids, cessation has become a new battle facing individuals fighting against substance use disorders. According to NIDA, 40-60% of individuals with substance use disorders experience relapse, often occurring within the first two weeks due to the symptoms of withdrawal. Due to the similarity between opioids and endorphins, studies have shown exogenous drugs reduce the number of endorphins naturally produced in the body. After drug use ceases, low production of endorphins continue for weeks causing and intensifying the painful effects of withdrawal. These withdrawal symptoms have become one of the primary areas targeted by those advocating for opioid use cessation.

### **Current Solutions**

### **1. Medication-Assisted Treatment (MAT)**

**Focus**: Medications are prescribed and used to reduce withdrawal symptoms and cravings. (methadone, buprenorphine, naltrexone)

**Benefits**: Using medications mitigates the effects of withdrawal, reducing pain and cravings. Users are able to gradually reduce their opioid dependence while getting their lives back in order.

**Drawbacks**: The medications used in MAT can also be addictive, simply replacing the drug without mitigating the dependency. Medication use requires a prescription which is not available to all in recovery.

### 2. Abstinence-Based Approach

**Focus**: This approach advocates for the complete cessation of drug use and promotes total sobriety. It encourages the use of a support group or community and typically follows the 12-step program.

**Benefits**: Abstinence offers a much faster independence from drugs since it does not require a weening period. Individuals gain personal responsibility and autonomy while taking control over their lives. The individual emerges with a healthy community of support to continue through their recovery journey. Many religious groups provide support and transition homes for individuals in the abstinence-based approach.

**Drawbacks**: Withdrawal symptoms must be delt with by the individual. Relapse is more likely especially if they are unable to establish a strong support group. The heavy emphasis on willpower can overlook deeper causes for substance use disorder like trauma or mental health issues. Relapse can cause feelings of shame, guilt or inadequacy in the individual.

#### 3. My Choice

Every individual is different, but in most cases, building a support group and choosing abstinence is the better choice. By choosing complete sobriety the individual is empowered and motivated to cease drug use because they want to, not because they have a court order. Furthermore, individuals can grow mentally and spiritually and typically find a deeper meaning to their life.

In the search for improved treatments and recovery services for recovering addicts, the use of exercise has gained some interest. Exercise has been shown to have an array of benefits which include reducing the chance of heart attack, blood cholesterol levels, anxiety, depression, and stress as well as increasing energy, selfesteem, cognitive processing, and resilience (Lynch, 2013). All these benefits would be helpful for drug addicts, as they are for everyone, but further research indicates a greater benefit due to the increased production of endorphins during exercise. To offset the reduced production of endorphins in opioid users, exercise is presented as complementary treatment for the management of symptoms of withdrawal (Ahmadi, 2018; Lynch, 2013). Other research indicates that exercise can also help repair neural connections that are destroyed by opioids (Crist, 2019). Further, the anterior mid-cingulate cortex (aMCC) has been identified as the area in the brain that controls tenacity in an individual (Touroutoglou et al., 2021). Research indicates that the aMCC can be trained to increase an individuals willpower by doing difficult tasks(Colcombe et al., 2006). This indicates that by completing a difficult workout or task, an individual gains the ability to complete other undesirable tasks more easily. Applying these findings to the recovery community, it should be far more common for rehabilitation centers and treatment centers to encourage exercise and strength training. The implementation of a grant for building an exercise center at recovery facilities is one way this could be encouraged. Other methods include employing trainers to work with those in recovery to teach proper technique and build workout programs. Recovery centers could also require a form of exercise as part of their program.

Exercise should not be positioned as a singular strategy to replace other established methods in addiction treatment; instead, it should be integrated as a complementary approach, working conjunctively with existing interventions. By incorporating exercise as a cotreatment, individuals undergoing addiction recovery can potentially experience enhanced physical, mental, and emotional well-being. Exercise has the potential to contribute positively to various aspects of recovery and support individuals seeking rehabilitation.

## Sweat it Out!

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