

# Can Past Psychedelic Use Mitigate the Severity of Opioid Use Disorder?

## Case Report of a Musician

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### Abstract

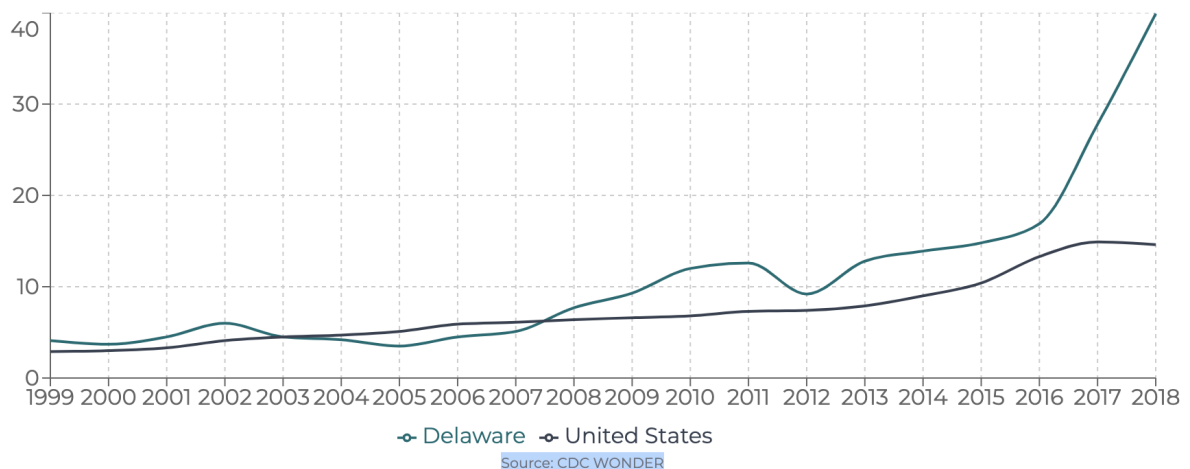
Little is known about the association between psychedelic use and substance abuse in the general population. We present a case of an award winning musician with an extensive history of hallucinogen use during his early life and how this impacted his overall wellbeing and opioid experience.

### Introduction

Opioids were involved in 68,630 overdose deaths (74.8% of all drug overdose deaths). More than 932,000 people have died since 1999 from a drug overdose (see Figure 1).<sup>1</sup> The majority of substance-use-disorder deaths are attributed to opioid abuse, especially with the highly fatal rise of fentanyl contamination in previous years.<sup>1</sup> Current therapies are somewhat helpful, but insufficient because morbidity and mortality of opiate use disorder are increasing. However, psychedelics are beginning to be investigated for the treatment of psychiatric disorders such as substance use disorders or PTSD.

Figure 1. Opioid Death Rate in Delaware Compared to the United States<sup>1</sup>

**Opioid-related overdose death rate per 100,000 people, 1999–2018 (age adjusted)**



In light of these challenges, our case report explores an unconventional potential therapy: psychedelic drugs. There are studies on the effects of drugs like psilocybin and 3,4-methylenedioxymethamphetamine (MDMA) on individual brain cells<sup>2</sup> and their role in rewiring the brain, however, there is little known about the association between psychedelic use and

substance abuse in the general population. We present a case of an award winning musician with an extensive history of hallucinogen use during his early life and how this impacted his overall wellbeing and opioid experience.

## **Background**

Illicit opioid use contributes significantly to disease, disability, and death. It strains the healthcare system and burdens the economy. In 2019, opiate use led to 12.9 million global disability-adjusted life years.<sup>1</sup> Effective therapies exist, including methadone, buprenorphine, naltrexone, and various support programs, but these therapies are insufficient because the opioid problem continues to grow as opioid-involved overdose deaths rose from 21,089 in 2010 to 80,411 in 2021.<sup>1</sup> The risks increase when individuals are unable to break the habit, when they are no longer able to maintain healthy relationships, and when they begin using intravenously.

Hallucinogens are being considered for investigation as potential therapies for opiate use disorder because psychedelic use in naturalistic settings has been found to be associated with reductions in opioid use. A single treatment with the alkaloid ibogaine, from an African root known for its hallucinogenic qualities, was found to reduce withdrawal symptoms and facilitate opioid cessation over a twelve-month period.<sup>3</sup> However, despite the promise of psychedelic drugs as therapies, there have not been investigations into the potential prophylactic effect of early-life use of psychedelics to reduce the severity of opiate use if it develops later in life.

## **Methods**

This case report centered around a structured patient interview conducted in an outpatient clinic setting. The interview was designed to gather comprehensive information regarding the patient's drug addiction history, including the onset of drug use, types of substances used, frequency and duration of use, previous attempts at cessation, and any related medical or psychological comorbidities. Prior to the interview, the patient provided informed consent after being assured of confidentiality and the non-judgmental nature of the inquiry. The questions were formulated based on established diagnostic criteria and tailored to elicit detailed responses that could contribute to both the understanding and the treatment of the patient's addiction.

## **Case presentation: Therapeutic effects of psychedelics on opioid use.**

Mr. TF is a 65-year-old married Caucasian male who has been attending an outpatient psychiatric clinic for ongoing management of depression and posttraumatic stress disorder. He has been an exceptional musician all his life who has achieved notable success.

### **Initial Drug Use**

Mr. TF started using psychedelics between the ages of 14 and 20, claiming that it profoundly helped his creativity as a musician. Although he could not perform while under the influence of these psychedelics, they played a key role in his creative process especially when he was brainstorming musical ideas in the course of composition. After this period of psychedelic use, he began using opioids, however, his experience was critically different than most opioid users.

## Transition to Opioids

Mr. TF began using opioids after he received a prescription from his physician for pain management, which led him down a spiral of addiction and drug-abuse. He never used drugs intravenously or shared needles and had a shorter duration of use than other opioid users. Although opioids were readily available around him when he was using psychedelics, he never used them. It was after he stopped using psychedelics that he developed severe opioid dependence.

## Outcomes

This transition underscores a critical period where the absence of psychedelics in his life perhaps left a void, making him more susceptible to the allure of opioids as an alternative means of coping or pain relief. What stands out in Mr. TF's story is the manner in which he engaged with opioids; despite the severity of his addiction, he maintained certain boundaries—never resorting to intravenous drug use or sharing needles, behaviors often associated with heightened risks of disease transmission and overdose. Additionally, compared to typical trajectories of opioid addiction, Mr. TF's period of opioid use was relatively brief. This experience suggests that past hallucinogen use may translate into a less severe opioid experience in the future and could have had a protective effect while he was using opiates.

## Discussion

Few and possibly none of the studies on psychedelics have been funded with public money. In light of the dire nature of opioid addiction and promising signals in data on psychedelics with regards to opioid addiction, we hope that more research is undertaken in this area. Because of the growing body of evidence that psychedelics can help with many psychiatric conditions, the question arises why this kind of research does not receive more attention from funding agencies. It has been argued that funding is scarce due to stigma against psychedelics because it is associated with the United States counterculture. It is also possible that there is reluctance to investigate the potential of psychedelics because they are associated with other stigmatized groups, namely indigenous people. These compounds have been used for therapeutic and ceremonial purposes for centuries or perhaps millennia in non-western contexts.<sup>4</sup>

Linking the therapeutic potential of hallucinogens to the case of a patient with opioid use disorder, such as the mentioned musician, involves understanding the individual's unique journey through addiction and recovery, and how these substances might facilitate a transformative healing process. In this context, the use of hallucinogens could be seen not just as a method of reducing dependency on opioids, but as a crucial part of a broader therapeutic intervention aimed at addressing the underlying causes of addiction, including emotional pain, trauma, and a lack of connection or meaning in life.

The case suggests that the musician's previous use of psychedelics may have had a lasting impact on his relationship with substances, possibly contributing to a form of resilience against the more destructive patterns of opioid use. The return to psychedelics, in a therapeutic context, could reinforce this resilience, helping to reduce opioid dependency while addressing psychological distress. Linking the potential benefits of hallucinogenic therapy to a patient's experience requires a holistic view of addiction treatment, recognizing the complexity of substance use disorders and the multifaceted nature of recovery. For the musician, and indeed for many

struggling with opioid use disorder, psychedelics could offer a unique and powerful tool for healing, provided they are used within a carefully structured and supportive therapeutic framework.

## Public Health Implications

Opioid use disorder is a very serious public health problem and it is worthwhile exploring the relationship of opioid use disorder in the context of other substance use disorders, specifically hallucinogens. Drugs with hallucinogenic properties have been found to be useful in many psychiatric disorders.<sup>5</sup> In light of our patient TF's use of psychedelics, which may have protected him from a more serious opioid addiction, we hope that further research may validate whether or not psychedelics indeed have a prophylactic effect if users are subsequently exposed to opioids, and elucidate any mechanisms by which this prophylactic effect occurs.

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