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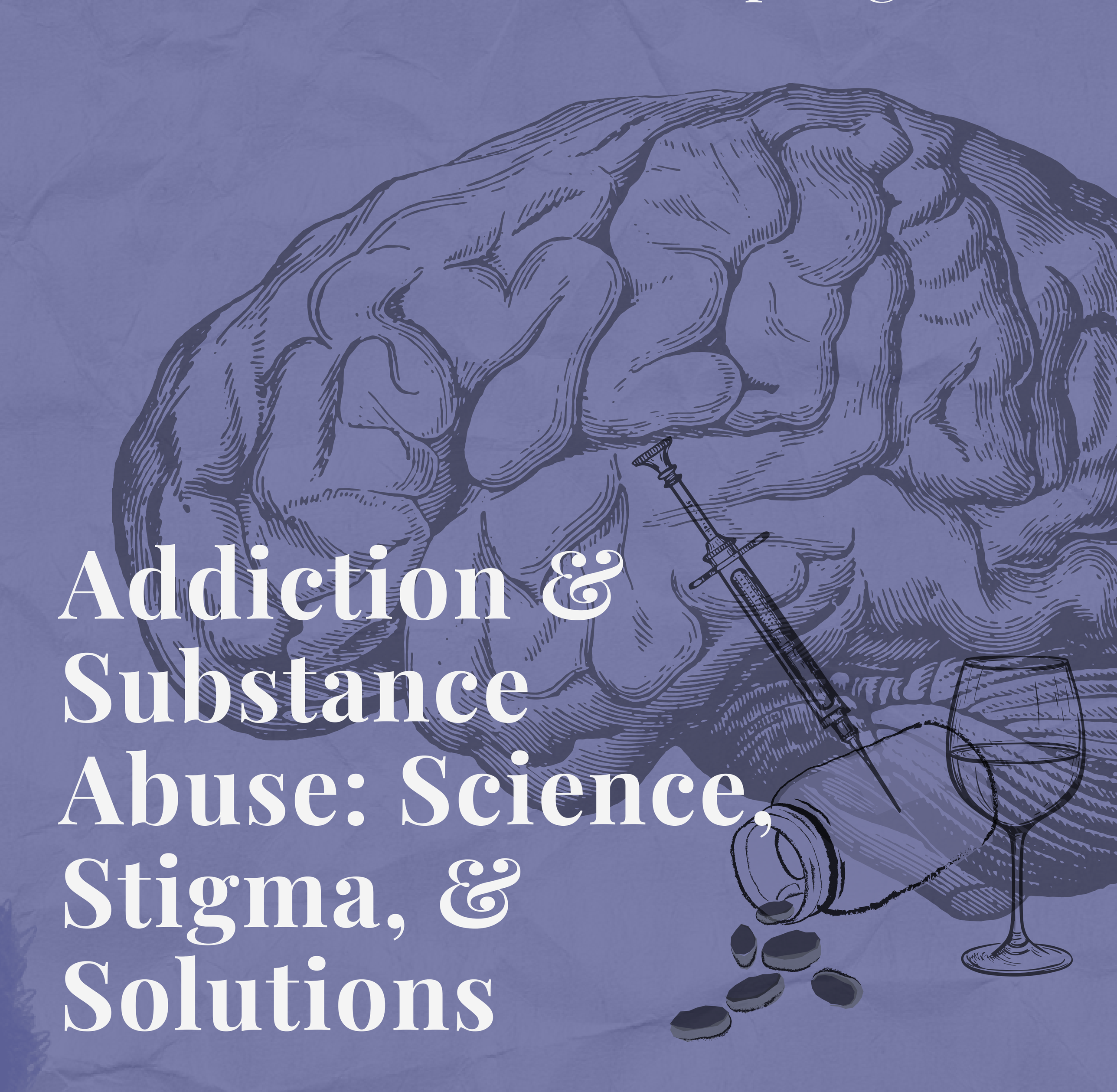

Addiction & Substance Abuse: Science, Stigma, & Solutions

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Letter from the Editors

Our 13th publication, the Spring 2026 edition of the *Duke Medical Ethics Journal*, explores topics surrounding addiction and substance abuse. As we worked on this issue, it became hard to ignore how much addiction extends beyond substance use itself. From the consequences of stigma to the role of policy, this semester's edition attempts to examine all aspects of addiction and the direct impacts on people's lives. Within both the Duke community and broader society, we see how substance use impacts everything from healthcare systems to social environments, making it a pervasive part of society.

When looking at addiction, we cannot view it simply as an individual choice or a matter of willpower. Instead, we must consider the underlying biology, along with the social systems that shape risk, treatment, and recovery. Contributors in this issue explore topics ranging from Medicaid's role in treatment access and bias within addiction care, to the normalization of stimulant use on college campuses and the ethical challenges of prescribing opioids. Other pieces examine emerging questions, including whether medications such as GLP-1 drugs may play a role in addiction treatment, how language influences patient outcomes, and how shifting drug policies shape public health. Together, these pieces highlight the complexity of addiction and the need for approaches that are both evidence-based and ethically grounded.

By critically examining all of these various factors, we can better understand the barriers that prevent effective and equitable care. This issue encourages readers to rethink how addiction is discussed and addressed, challenging common assumptions along the way.
The *Duke Medical Ethics Journal* team appreciates you for taking the time to engage with this issue and our team's work. Our writers, bloggers, review editors, and graphic designers have worked over the past few months to bring forward timely and meaningful topics, raising questions that encourage deeper reflection on addiction and its place within medicine and society. We hope this issue offers a more nuanced perspective on substance use and recovery.

Thank you for joining us in *Duke Medical Ethics Journal*'s Spring 2026 publication, *Addiction and Substance Abuse.*

Sincerely,
Co-Presidents
Devin Mulcrone & Jack Ringel

The Myth of Willpower: Substance Use Disorder and Free Will

Written by: David Axon
Editor: Laila Khan-Farooqi
Graphic Designer: Vedant Patel

As early as 200 million years ago, hominids were consuming psychotropic plants [1]. As far as we know, this choice was purely coincidental; these plants may have simply acted as a convenient food source. These substances often contained difficult-to-acquire nutrient neurotransmitter-precursors, which made them a valuable addition to the hominid diet [1]. Since then, our relationship with psychotropics has grown increasingly complex as the mammalian nervous system has evolved alongside these substances. Psychotropics involved in this process have developed properties that allow them to alter human consciousness, and as a result have gained cultural and religious significance. Despite the historical benefits, the last few hundred years have brought particularly potent drugs that exploit the dark side of this millenia-long coexistence. Our brains are hard-wired to react to these substances, and their popularization is causing an unprecedented epidemic of what is now called substance use disorder (SUD).

Though this trend has been long in the making, it has only recently been recognized and given proper attention by the general public. During the colonial period in the United States, alcohol—and alcoholism—were common. Alcohol was regarded as “healthy,” and was thought to possess many curative properties [2]. Then, as a growing domestic distillation business grew, legal regulations of taverns shrank, and the problems associated with alcohol abuse became increasingly apparent to the public conscience [2]. In response, the temperance movement was born. Its ascent in the early 19th century marked a shift in the conversation around substance abuse. What was once a “God-given gift”—abused on occasion but not inherently iniquitous—was reconceived as a poison, a vice that could be cured only by “total abstinence” [2]. It was this transition that ushered in conceptions of substance abuse as a personal moral failing.

The shift in public opinion regarding alcohol was replicated across other psychotropic substances. When the international opium trade started to establish itself in the early 19th century, no strict laws or regulations were in place to protect the populace. The negative effects of opium and its derivatives were not very well known until the 1830’s, so it was commonly prescribed to female patients for “problems related to menstruation like cramps and even morning sickness during pregnancy” [3]. By the late 19th century, opium addiction was a veritable public health crisis, but the public did not initially display a major stigma. However, this changed in the 20th century, when the demographic of opiate consumers

transitioned from women and children to young men hanging out in opium dens [3]. Opium became seen not as a medication but as a crime, characteristic of thugs snorting heroin in the streets [3]. This version of the stigma has proved remarkably difficult to extinguish, persisting even today in popular imagination..

Despite its historical popularity, the idea of substance use and abuse as a moral issue has been demonstrated as false and even harmful. Not only do alcoholism and other SUDs have a strong biological basis, but studies show that "[portraying] someone with a substance use disorder (SUD) in a shameful or negative way ... may prevent them from seeking treatment" [4]. For example, the NIH advises not to use language like "habit" to describe a substance use disorder because it "implies that a person is choosing to use substances or can choose to stop" [4]. This is undoubtedly good advice; recognizing SUD as a medical condition rather than a personal choice is imperative to reducing feelings of stigmatization. Yet, it could be argued that this language also removes the affected person's agency, and research has also indicated that a lack of belief in free will produces antisocial effects that can be detrimental for people with SUD who depend on their support systems. So, is SUD a biologically programmed fate, a failure of willpower, or something different altogether?

The outdated idea of SUD as a moral failing can be understood as a belief that the afflicted person is deliberately engaging in a sinful activity because they lack the willpower to withstand temptation. To understand why this is not the case, it is necessary to discuss free will. Common definitions of free will usually stipulate that a person's choices and actions are under their control in the sense that they are either "able to choose otherwise" or they are "the source of their [actions]" [5]. Applied to this context, this means that a person with SUD is either able to freely choose to no longer use their substance of choice or is actively and independently choosing to consume the substance. Free will is necessary for moral responsibility, so in order to disprove the morality argument we must turn to neuroscience. A neuroscientist would say that SUD is the "consolidation of maladaptive neuroplasticity" and can lead to the dysregulation of cognition and emotional regulation [6]. It also biases learning, making the brain particularly primed to drug-related cues [6]. This combination of molecular changes means that as cravings become stronger, one's ability to resist is biologically impaired. People with SUD cannot be seen as having completely free will in the traditional sense; as a result of their neurobiological environment, they are driven by a habitual state that renders them increasingly unable to choose to stop using their substance (especially as they begin to experience withdrawal symptoms).

While the picture thus far may look grim, science offers promising hope for recovery: new evidence suggests that "experiential, pharmacological, and neuromodulatory interventions can reverse or compensate" for the neurological changes induced by substance use [6].

The Myth of Willpower: Substance Use Disorder and Free Will

People with SUD may be hardwired to depend on a drug, but those same pathways can be rewired, especially with other (less harmful) drugs. For example, treatments have been developed with mechanisms involving everything from psychoplastogens (including psychedelics, ketamine, and MDMA), to meditation, to green tea nanoparticles [6].

Additionally, though many biomedical approaches have been developed to treat SUD, the disorder is perhaps best understood from a biopsychosocial perspective. Each person brings a unique combination of "relational, social, economic, cultural and political elements," which interact to influence the development of the disorder [7]. Therefore, it is essential for a holistic treatment plan to reflect these factors. In the path to recovery, a person's self-perception of their "wellbeing, belonging to a community, and a positive sense of identity" can be closely related to the success of their treatment [7]. Building community, a support system, and a sense of meaning can help address deep vulnerabilities that underlie SUD. These aspects of care often work in conjunction with inpatient treatment, which can be insufficient alone.

The medicalization of alcoholism (and other related substance use disorders) has undoubtedly increased access to medical and social-oriented treatments and inspired many people to seek help. However, it has also given rise to unexpected consequences. Since the 1900's, the medical community has promoted an idea of addiction with "the connotation of loss of free will" [8]. This assertion does have some merit: addiction is a disease that is extremely difficult to treat with willpower alone. The idea is also attractive to those with SUD; the belief that one is a "helpless victim of biological forces" conforms to the fundamental attribution error, which recognizes the human tendency to overemphasize situational factors when describing negative things about themselves [8]. Nevertheless, this belief can be dangerous if it prevents people from seeking to change their situation. Especially early in the process of addiction, when the biological changes are not cemented, willpower is an important tool for seeking help or self-regulation. Even for someone with longstanding SUD, passive acceptance of the symptoms due to a rejection of free will or personal responsibility is irresponsible disregard for the various helpful interventions in existence.

The variety of direct and indirect therapies designed to treat SUD allow patients to fight back, empowering them to take control of their own lives. This sets up an interesting contrast: although those with SUD evidently do not possess the freedom to simply decide to stop using substances, they must believe that they have free will and are capable of improving their situations. Society also suffers when SUD patients stop believing in free will. Experimental results demonstrate that this belief leads to "cheating, stealing, aggression, and reduced helping"— actions that are all important for maintaining social bonds [8]. As

previously stated, belonging to a community is important to effective treatment; if an individual stops believing in free will, it causes them to lash out, alienating themselves and reducing the likelihood that they reach remission.

To remedy the apparent paradox, the best approach is to view SUD outside of the binary of all or nothing; quitting a substance is an incredibly difficult task both socially and biologically, but that does not mean we should absolve patients from all responsibility. In an article for the New York Times, Maia Szalavitz speaks about her substance abuse: she recalls that until she accepted that she needed treatment and attended rehab, she didn't think she had "any real choice" in her disorder [9]. The cycle of addiction causes the brain to prioritize short-term rewards over long-term gains, which means that those struggling with SUD "postpone the pain associated with quitting, often indefinitely" [9]. However, this does not mean that individuals lack free will entirely. Those with SUD display purposeful intention in perpetuating the disorder by delaying gratification to hide their drug use or planning ahead to obtain more drugs. This capability indicates that patients also have the potential to act in ways conducive to their rehabilitation by seeking out treatment, changing their environment, and learning to heal.

Szalavitz proposes a framework from Johns Hopkins University called "responsibility without blame:" in order to support patients with SUD, we can validate their responsibility for their actions without stigmatizing them or shaming their morals [9]. This allows them to pursue a path to recovery without internalizing negative attitudes that might halt their progress. It also bolsters their sense of free will, which helps them find and maintain a community that will reinforce their progress. In a world that tends to favor extremes, this level of nuance may be difficult to achieve; nevertheless, by spreading accurate information and refusing to indulge in stereotypes and stigmatization, we can create an environment that supports those with SUD as they grow into the best versions of themselves. To answer the question posed above, SUD is neither a biologically programmed fate nor a failure of willpower, but a treatable condition—one that deserves our compassion, empathy, and respect.

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The Role of Medicaid in Addiction Treatment Access

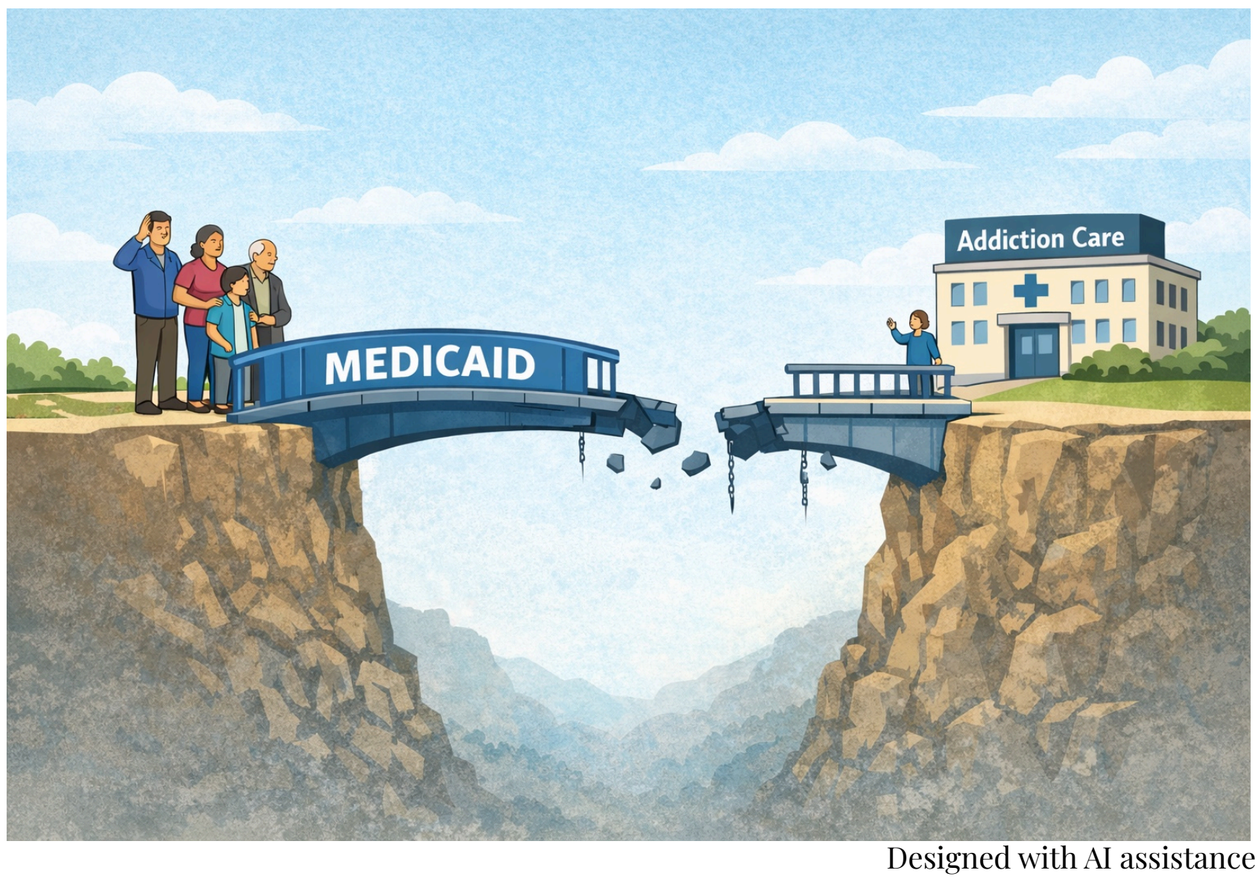
Written by: Nam Ho
Editor: Sehar Mahesh
Graphic Designer: Jack Ringel

Many discussions regarding addiction treatment in the United States often revolve around personal responsibility, clinical approaches, or the role of the criminal justice system. However, many people overlook the fact that treatment is difficult to obtain for individuals without the ability to pay for it. Medicaid, as one of the largest sources of funding for behavioral health services, addresses this issue by providing coverage and insurance to many individuals with substance use disorders, especially those with opioid use disorder. Due to its impact on treatment access for addicts, Medicaid is therefore not just insurance, but also a central factor in determining if treatments are accessible, how quickly they can be started, and whether they are sustainable for low-income patients. Accordingly, Medicaid policy has important implications for equity, as differences in coverage and implementation have been shown to shape access to treatment across populations [1]. Medicaid plays a critical role in expanding addiction treatment access, but persistent structural and social barriers continue to limit its effectiveness, raising ethical concerns about equity and care.

Medicaid's role becomes clearer when addiction is understood as a chronic medical condition rather than a moral issue. Substance use disorders often require ongoing care that includes medication, counseling, and long-term support across different settings. This kind of care is difficult to maintain without stable insurance coverage. Medicaid plays a major part in filling this gap, covering about 47% of nonelderly adults with opioid use disorder in 2023, with more than half of those receiving medication or treatment [1]. In addition, about 7.2% of Medicaid enrollees "have a diagnosed substance use disorder in 2020 Medicaid claims data" [2], which shows how central the program is to addiction care overall. These numbers suggest that changes in Medicaid coverage are likely to have direct effects on how addiction treatment is accessed and delivered. Another important contribution of Medicaid has been its expansion of basic access to treatment to populations with limited access. Under the Affordable Care Act, many low-income adults are eligible to receive coverage for outpatient visits, medications, and inpatient services that would otherwise be inaccessible. Research has supported expansion in leading to improved outcomes, with one study finding that Medicaid expansion correlated with a 6% reduction in opioid overdose deaths and larger reductions for heroin and synthetic opioids [3]. Another study found a 9.7% decrease in opioid-related hospitalizations following expansion, suggesting improved outpatient management of addiction [4]. While insurance itself does not resolve the problems of addiction, these findings demonstrate that coverage changes can provide ways for those in need to seek out the help and care required, which has subsequently led to meaningful differences in health outcomes.

The Role of Medicaid in Addiction Treatment Access

At the same time, having Medicaid does not always mean that someone can always get treatment when they need it. Coverage creates the possibility for receiving care, but often, that does not always translate into real access in practice. In many cases, access can be limited by factors like administrative barriers, a lack of available providers, or differences in how states run their programs. Data shows that about three-quarters of Medicaid enrollees with a diagnosed substance use disorder received some form of treatment or support in 2020, which still leaves roughly one in four without any documented care at all [2]. There are also noticeable differences depending on the condition. Medication treatment is much more common for opioid use disorder than for alcohol use disorder, even though effective medications exist for both. Access also varies greatly by state, and in some places, close to half of those diagnosed may not receive treatment [2]. These patterns suggest that Medicaid's impact depends less on coverage itself and more on how the coverage is carried out.



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Issues are also present in how treatment is provided within Medicaid, particularly regarding which groups are actually receiving care. Access to care can vary across race, age, and other demographic factors, and generally, Black, Hispanic, and Asian enrollees receive treatment at lower rates than White enrollees, with younger individuals being even less likely to get care [2]. Among individuals dealing with opioid use disorder, only about 40% of Black enrollees receive medication treatment, compared to roughly 70% of White enrollees [2]. The rates for adolescents and teens are even lower, which makes the disparity more pronounced. This data suggests that even though Medicaid is meant to expand access, it does not do so equally for all populations and individuals. Some efforts to address these gaps have been made, mostly at the state level. Section 1115 waivers allowed certain states to widen the range of addiction treatment services that are covered under Medicaid, which has been associated with increases in outpatient treatment and medication-assisted care [5]. Additionally, some states have introduced peer support services, adjusted reimbursement structures, and

improved support for individuals transitioning out of incarceration [6]. While these changes certainly have improved Medicaid's impact, they do not fully solve the difference in access.

One of the main reasons for the access problem is administrative complexity, especially regarding authorization for certain medications. These policies are intended to control prescriptions and manage costs, but most of the time, they end up delaying treatment. For example, prior authorization for medications like buprenorphine (used for treating opioid addiction) remains a barrier in many Medicaid programs [7], meaning that patients often have to wait before starting care, and this delay can be unpredictable because treatments for addiction depend on timing and patient readiness. Other requirements, such as routine drug testing, counseling conditions, and limits on prescription refills, add another step to the process, further delaying the process of receiving necessary treatment or care. For patients who already face challenges like unstable housing, limited transportation, or unpredictable schedules, these steps can be even more difficult to manage and often lead to missed appointments or discontinued treatment over time.

Structural and institutional barriers also contribute to the problem of limited access to care. There are provider shortages among medical professionals who are actually trained to treat substance use disorders or willing to accept Medicaid, which greatly limits the availability of care even when patients are insured. Lower reimbursement rates and employment shortages in healthcare are also more prevalent in rural areas, which can limit or even eliminate treatment options in some areas. Pharmacy-level barriers further restrict access, as not all Medicaid-participating pharmacies provide medications for opioid use disorder, despite carrying other controlled substances [8]. These limitations are often compounded by stigma within healthcare systems, where addiction might be treated differently from other chronic conditions. Patients may encounter judgment, reduced clinical engagement, or fewer treatment options, all of which can further discourage continued care. Drastic variation across states in Medicaid policies and coverage also means that access can depend on geographic location rather than clinical need. Together, these barriers show that expanding insurance coverage alone is not sufficient to ensure meaningful access to addiction treatment.

To address these barriers, policymakers will need to focus on both policy reform and practical implementation. Expanding Medicaid in the remaining states without it could be a good first step in laying the foundation, but the solution lies beyond just enrollment in the program. There must be a drive to bring down administrative barriers, especially for evidence-based medications, which would help to ensure that treatment can begin without unnecessary delays. Advocating for increased reimbursement rates and investing in workforce development, as well as expanding support for telehealth and community-based

services, can also improve provider participation, especially in underserved areas. Finally, disparities in treatment access must be treated as a central priority rather than a secondary concern. Medicaid has already demonstrated its potential to expand addiction treatment, but its effectiveness will depend on whether these structural challenges are meaningfully addressed.

Medicaid sets the baseline for what addiction treatment actually looks like day to day. For many people, Medicaid is not just one of many options for addiction care; it is the only realistic avenue for receiving care at all. This means that any limit of Medicaid tends to show up as a limit in the overall treatment system. If certain services are harder to access or feel inconsistent depending on location, then those patterns can end up shaping the overall experience for patients. In this sense, Medicaid is not a background policy, but an active part of how care is delivered. It also points to a broader issue, which is that improving addiction treatment is not only about better medications or new therapies, but also about ensuring that the system delivers reliable and accessible care. Otherwise, treatments that are known to work may not reach people when they need them most.

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Alcohol Misuse in Older Adults

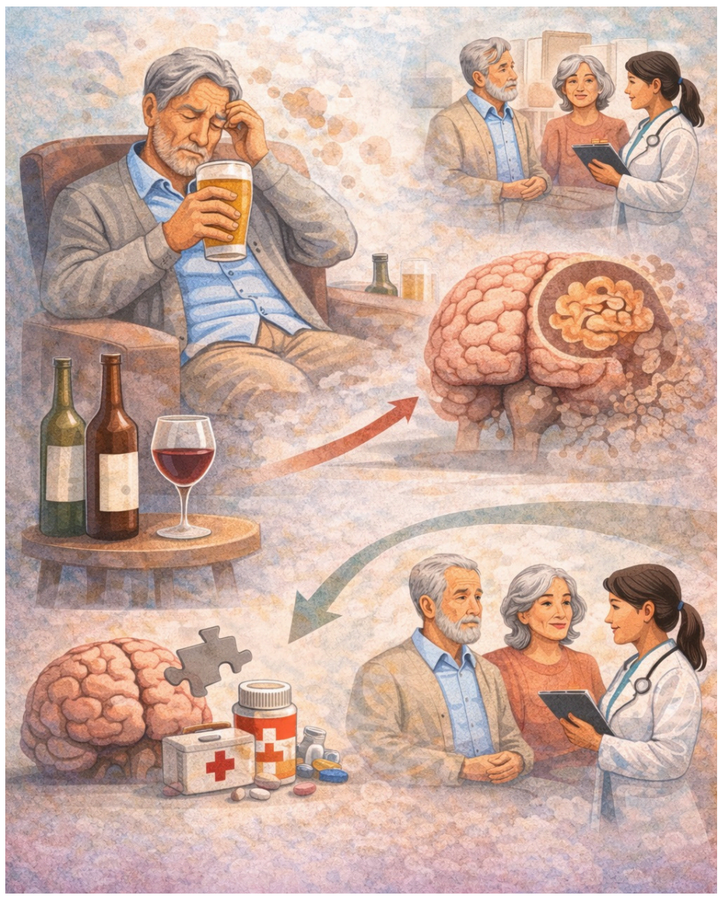
Written by: Yurika Sakai
Editor: Matthew Ahlers
Graphic Designer: Julia Williams

Discerning Alcohol Misuse from Alcohol Use Disorder

Every year when my family would return to Japan to visit relatives, we spent late evenings gathered around my grandmother's dining table. Dinners would vary–from my aunt's crisp spring rolls to my grandmother's hand-cut soba–but my grandfather, without fail, loved to enjoy his food with a large pint (or two) of Japanese beer. Usually a peaceful, gentle, and kindhearted man, he became lively after a drink and would tell his funny stories in a boisterous voice with a slight redness to his cheeks.

Towards the end of his life, my grandfather developed dementia, and grew more irritable and prone to sudden mood changes that were unfamiliar to all of us. Recognizing this shift, my family helped my grandfather gradually replace beer with non-alcoholic alternatives. The difference was striking. His mood softened and his memory even seemed to improve slightly. Watching this transformation brought my family relief and has stuck with me since.

Alcohol misuse is defined as patterns of binge drinking (5 or more drinks per occasion for males or 4 or more drinks per occasion for females) or heavy drinking, where a person binge drinks on 5 or more days within 30 days [1]. When these p atterns begin to cause significant impairment or distress, interfere with relationships, and become difficult to control, the individual can be diagnosed with Alcohol Use Disorder (AUD) [2]. Because AUD and alcohol misuse manifest as a gradual accumulation of physical and psychological symptoms, they can be difficult to recognize until they have had serious effects on the individual and those around them.



Although my grandfather was never formally diagnosed with AUD and did not meet the clinical criteria for alcohol misuse, his frequent drinking contributed to noticeable changes in mood and cognitive function that affected him and our family towards the end of his life. This experience has led me to explore the less frequently discussed risks of undiagnosed, excessive alcohol consumption in older adults.

Alcohol Misuse in Older Adults

Correlations Between Excessive Alcohol Consumption and Cognitive Decline

Across the literature, studies find strong associations between heavy alcohol consumption and an increased risk of cognitive decline. For example, a cross-sectional study of brain autopsies from individuals over the age of 50 in Brazil (mean age 74) found that both current and former heavy drinkers (those who consumed ≥112 g of alcohol/week) had higher odds of having neurofibrillary tangles, a pathological marker of Alzheimer's disease [3]. Similarly, a study examining brain MRIs of adults aged 65 years and older reported that heavy alcohol consumption (≥15 drinks/week) was associated with enlarged ventricular and sulcal size, which are markers of brain atrophy, as well as increased white matter abnormalities indicative of damage from reduced blood flow to the brain [4].

Taken together, these findings suggest that excessive alcohol consumption contributes to vascular and structural changes to the brain, including the thickening and narrowing of the small arteries [3] and abnormal accumulations of hyperphosphorylated tau protein in the neurons. These changes can impair brain plasticity [5] and contribute to a decline in cognitive function [6].

Limited Associations Between Moderate Alcohol Consumption and Cognitive Health

It is important to note that controlled alcohol consumption is not consistently linked to cognitive decline, and may even be associated with better psychological and physiological health compared to those who abstain from alcohol. Consuming alcohol in low quantities can contribute to higher quality of life by eliciting feelings of euphoria, relaxation, and reduced stress [7]. Additionally, some studies suggest that moderate drinking (1-3 drinks/day) has no harmful effects or may be linked to some protective benefits against dementia, based on studies of cellular and molecular risk factors for cardiovascular disease (CVD) and dementia, as well as epidemiological studies [6]. One meta-analysis of studies in wine consumption reported that light-moderate drinking (1 drink/day for women and 1-2 drinks/day for men) was protective against combined fatal and non fatal vascular events, cardiovascular mortality, and total mortality (Fig. 1) [9].

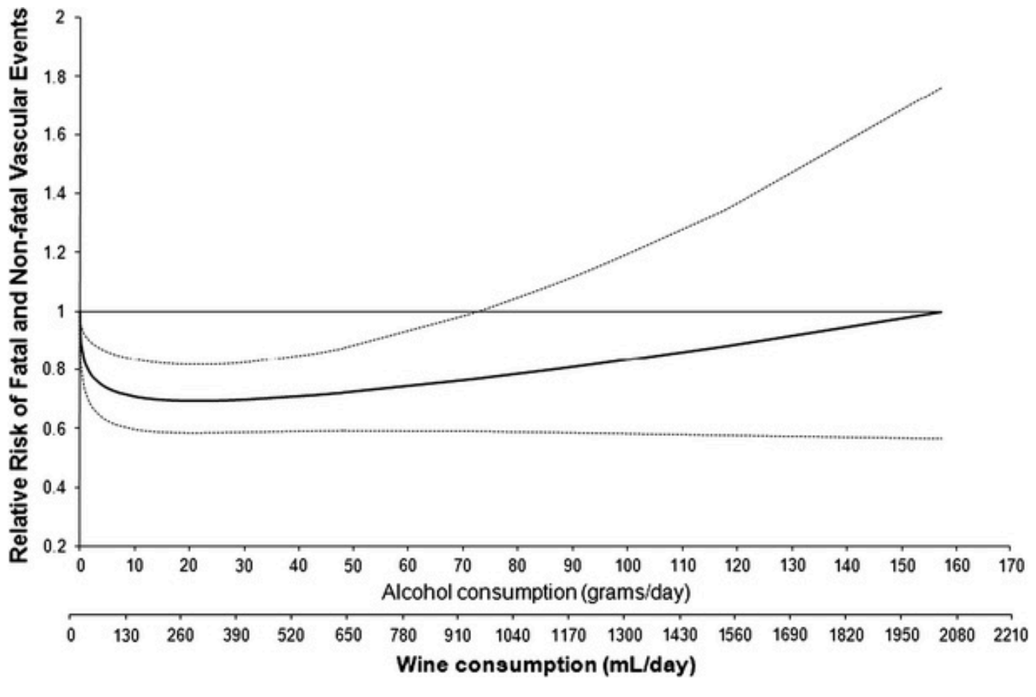


Fig. 1 - Relative risk of fatal and non-fatal vascular events related to wine intake follows a J-shaped curve, with the lowest risk at 21g alcohol/day (roughly 1.5 standard 5oz glasses/day) and the reversion point (where the protective effects of alcohol diminish) occurring around 72g alcohol/day (roughly 5 standard 5oz glasses/day). The dotted lines indicate the bounds of the 95% confidence interval. While studies of alcohol often report J-shaped curves like this one to suggest that moderate intake can be beneficial for health, they do not illustrate the damaging effects of alcohol on other organs (i.e. liver) or clarify the mechanisms by which alcohol benefits health (i.e. Does alcohol reduce risk factors associated with stress, inflammation, or other biochemical markers? What are the lifestyle factors of individuals consuming moderate vs excessive levels of alcohol?) (Figure adapted from Fig. 3 Costanzo et al, 2011).

However, several limitations to epidemiological and pathophysiological studies make it difficult to draw conclusions regarding the benefits of moderate alcohol consumption. Some population studies are cross-sectional, limiting the ability to draw conclusions about causation. It is possible that individuals who drink in moderation also engage in other health-promoting behaviors like maintaining balanced diets, exercising regularly, and avoiding risky habits, contributing to better cardiovascular and cognitive health outcomes. Many pathophysiological studies reporting reductions in risk factors for CVD and dementia are either conducted in cell culture or focus on individual biochemical markers, meaning they do not consider alcohol's holistic and potentially net harmful effects on the body as a system [6]. Furthermore, many studies on alcohol and health are inclusive of broad age ranges (e.g., 20-70 years old) and may not consider how the effects differ with accumulated usage over time, making it difficult to discern age-specific impacts. As a result, while moderate alcohol consumption has been associated with improvements in some health metrics, its damaging effect on other organs systems may still make it harmful to the body over time. Furthermore, the actual mechanisms by which alcohol induces these effects and how they impact different age groups is still poorly understood.

Alcohol Misuse Is Underreported Compared to AUD

Although AUD and alcohol-related deaths among older adults may seem uncommon, alcohol misuse is surprisingly prevalent among American adults. While alcohol abuse accounted for less than 1% of all deaths (11,616 deaths) among adults aged 65 and older in the United States [10], survey data suggest that as many as one in four adults consume alcohol at levels which put them at risk for developing AUD [11]. Actual rates of alcohol misuse in older adults are likely to be underreported, because alcohol misuse is more difficult to define and detect than AUD. Many symptoms of alcohol misuse closely resemble the symptoms of aging: memory impairment, changes in mood, and troubles with balance are a few [12-14). Additionally, physicians may not recognize signs of problematic drinking until it has progressed to severe stages in the form of AUD, and older adults themselves may be reluctant to seek help for alcohol misuse due to the "shame, prejudice, and discrimination associated with substance misuse and abuse and mental health diagnoses" [15]. These factors contribute to alcohol misuse being frequently overlooked as a significant health risk in this population.

As a legally and socially accepted substance, it can also be difficult to draw the line between healthy and harmful patterns of alcohol consumption. Alcohol alters the reward neurocircuitry in the brain and chronic use leads to tolerance so that increasing doses are required to achieve the same effect [16]. This transition from rewarding to destructive can take an average of 11 to 15 years, making it difficult to recognize when consumption has become problematic [17]. Moreover, alcohol affects older adults differently due to age-related

physiological changes, including lower body water content, slower liver metabolism, and potential negative interactions with prescription medications [18]. In turn, older adults may have more difficulty processing and regulating their alcohol intake, putting them at a heightened risk for misuse even at lower levels of consumption.

Future Work to Improve Interventions for Alcohol Misuse in Older Adults

Given the well-documented associations between heavy alcohol consumption and cognitive and cardiovascular harm, it is essential to improve the recognition and treatment of alcohol misuse in older adults. Preliminary evidence suggests that psychosocial interventions typically used in the general population may be similarly effective at promoting sobriety in older individuals [19]. However, it should be noted that existing research is limited by small sample sizes that restrict the generalizability of findings. Further investigation should be done to determine whether these existing psychosocial interventions (support groups and cognitive behavioral therapy) are similarly effective in elderly populations, given the additional barriers of reduced mobility, limited access to transportation, and cognitive decline that they may face.

Studies on FDA approved pharmacological treatments suggest that the medication naltrexone is effective in older adults, with comparable adherence rates to younger populations [20]. However, other approved treatments like acamprosate and disulfiram remain under-studied, perhaps due to concerns about their side effects in older age groups [12]. Because elderly populations are more susceptible to physiological complications, it is especially important to better understand the safety and efficacy of these medications within this population.

Improving the identification of alcohol misuse presents an additional challenge, as the symptoms of misuse and progression vary between individuals and often overlap with normal aging. Innovative approaches, such as the use of electronic surveys, may help reduce response bias from the stigma associated with alcohol misuse and abuse. Additionally, integrating routine discussions about alcohol consumption into annual health check-ups for older adults could facilitate earlier detection and intervention for alcohol misuse. Incorporating these strategies into population studies and clinical practice may yield more accurate estimates of alcohol misuse and AUD prevalence among older adults, furthering our understanding of how alcohol interacts with the body over time and supporting a better aging process in our society.

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"'Addict' vs. 'Person with Substance Use Disorder': Does Language Change Outcomes?"

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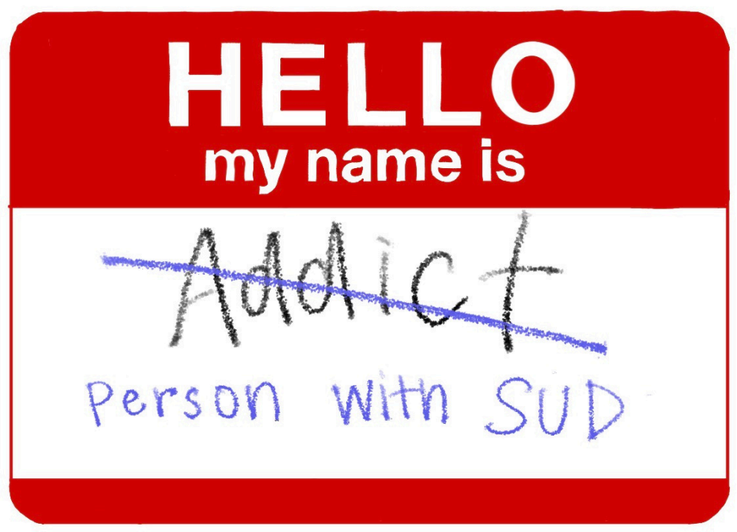
Introduction

In clinical settings, words are intended to be value-free terms merely employed for communication purposes. However, in relation to addiction problems, words can have moral and social significance. The use of words such as "addict" and "substance abuser" implies not only the description of a particular problem, but also becomes a factor determining the perception of and attitude towards the patient. This article is dedicated to exploring how language influences stigma, clinical decision-making, and patient outcomes, and whether replacing certain terms may improve health care practices in addiction cases.

The Role of Stigmas and Labeling

Addiction remains the most stigmatized disease of all those discussed within healthcare. While many other chronic conditions require proper treatment in order to help the patient get better, substance abuse is often considered a personal choice that should be addressed by punishing the individual. This perception on substance abuse is reinforced with language. According to Zwick et al., stigma around substance abuse disorder (SUD) greatly reduces chances for successful treatment [1]. Terms like "addict" imply guilt and personal accountability of the individual in question, thus influencing patient outcomes both in public and professional spheres.



It turns out that clinicians are affected by language just as much as ordinary people. It is worth noting that the same phenomenon was discovered in healthcare providers when researchers looked into clinicians' behavior upon being exposed to certain terms. It turned out that hearing about a 'substance abuser,' for example, made providers less sympathetic and more likely to use punitive measures than therapeutic ones [2]. In other words, the language used to describe a patient can subtly influence the type of care they receive. In some cases, this kind of stigma can appear even in medical files themselves. As a matter of fact, a 2023 research paper reported that more than 60% of patients diagnosed with SUD had at least one case of stigmatization recorded in their medical chart [3]. Overall, from a statistical standpoint, patients with substance abuse face more discrimination in their care.

"'Addict' vs. 'Person with Substance Use Disorder': Does Language Change Outcomes?"

Effects on Patients: Internalized Stigma and Avoidance of Care

The consequences of language usage go beyond clinicians and directly affect patients. If an individual is frequently characterized through stigmatizing labels, he or she will start accepting those labels as a part of identity. It has been found that internalization of stigmatizing attitudes leads to poor self-concept, low motivation for rehabilitation, and decreased possibility to seek help [1]. The stigmatized patient feels discriminated against or labeled and, as a result, tends to stay away from any contact with medical institutions. This can be detrimental to patients, as they may tend to avoid seeking care that can actually be vital for their health.

The importance of language usage even within a sentence becomes clear in psychological research, which finds that language can cause patients to shift their perspective of their own addiction according to how it was expressed: either as a medical disorder or a character flaw [4]. The perception of addiction as a moral issue leads to feelings of disgrace while the latter view helps people feel more self-confident in terms of treatment. In this way, language influences the process of internalizing stigma.

Person-First Language

To address these issues, many medical organizations have suggested using person-first language, which means treating patients not according to their diagnosis but highlighting their inherent value: "a person with substance use disorder." According to The National Institute on Drug Abuse, medical practitioners should refrain from calling patients "addicts" or "abusers," since such language may increase stigma and prevent treatment [5]. Similarly, the American Medical Association emphasizes that healthcare providers should bear in mind that they treat people, not diagnoses, and appropriate language is a necessary part of ethical practice [6].

There is empirical evidence of this approach's effectiveness. Participants subjected to a language change experiment, those using person-first language, had less inclination towards blaming patients than those who used stigmatizing terminology.Specifically, they had a lower mean agreement (2.82) with statements that blame the patient than participants who heard stigmatizing descriptions (2.92) [2]. From the perspective of ethics, the usage of person-first language is appropriate, as it respects patients' dignity, decreases harm caused by stigma and facilitates a more fair approach to the disease. Also, this measure implies minimal costs for medical institutions, as it requires minimal efforts from providers.

Limitations

Even though there is ample proof showing that the language affects attitudes toward addicts, there is less empirical evidence demonstrating its impact on their recovery. The majority of

research studies concentrate either on people's perceptions, prejudices, or hypothetical cases, which include describing hypothetical patients with various terms. This method of studying shows that language indeed impacts stigmatizing attitudes, but it does not help track real patients' outcomes in any way. It remains unclear whether merely changing the language can have any effect on recovery rates or relapses.

In addition to that, it should be noted that changing the way we speak about addiction does not affect the underlying problems behind the stigmatization. Access to treatment, criminalization, and socioeconomic factors are significant contributors to the outcomes of addiction, which makes language a secondary concern compared to those factors. Finally, the issue at hand brings up concerns that organizations will use the person-first language without resolving the real causes of stigma within their structure. It is entirely possible for a health organization to start using appropriate terminology while failing to provide proper financing and quality services to the individuals dealing with addictions. It is important to note, however, that disregarding language in favor of more practical approaches is not reasonable in itself.

Ways to Improve Addiction Treatment

The introduction of language reforms to benefit patients of substance use disorder should come hand-in-hand with various other strategies, such as expanding access to treatment services or strengthening insurance and policy support for treatment. Language alone does play an instrumental role in shaping attitudes, yet the impact it can have on a person's experience will only materialize when accompanied by alterations in the way they receive care. For example, training clinicians to identify their implicit biases and learn new communication skills may contribute to better quality encounters between patients and providers. However, access to evidence-based treatments like medication-assisted therapy should also not be overlooked, as they will allow the reduction in stigma to be followed up by the actual process of treatment.

Moreover, policy interventions and public health initiatives should not be ignored, as well. For instance, a shift from a criminal justice model to a health-based one may help reinforce the notion that addiction is a disease rather than a moral flaw. Using language correctly in all public communications can then reinforce this health-based model of treatment. As a result, the implementation of linguistic reforms should not be a standalone solution to stigmatization within addiction treatment, but it should still be a crucial component of the solution. Even though linguistic reforms cannot change outcomes on its own, it can help change overall public perception on addicts nonetheless.

Conclusion

The difference between "addict" and "individual with a substance use disorder" goes beyond semantics. Terminology impacts stigma, decision-making processes, and patients' engagement in the treatment process. Although a change in terminology will not address the many complex issues surrounding addiction, it certainly counts as a meaningful step from an ethical perspective. In an area where stigma continues to be one of the main obstacles, even minor changes can make a great difference. Terminology is not simply a means to label patients, it is a tool to create reality, which is why careful selection of terminology becomes an ethical issue in addiction treatment.

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The War After War: Veteran Addiction in America

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Introduction

The experience of fighting to defend the United States of America is one that many citizens will never undertake. The brave men and women who choose to enlist put their lives on the line and deserve to be taken care of by their country; however, too often these American heroes are forgotten by the systems they fought to protect.

Many veterans return home with extensive physical and psychological trauma, and they require complex care to see improvements in their health. Others find themselves struggling to return to daily life outside of the military and choose to cope with this discomfort through illicit substances since they no longer fear routine drug tests. Such a multitude of lifestyle changes can lead to increased exposure to drugs amongst former service men and women, and while the causes remain variable, the end result is consistent: veterans today are suffering from unprecedented rates of substance abuse. According to a 2025 analysis, “approximately 11 percent of veterans presenting for first-time care at U.S. Department of Veterans Affairs (VA) facilities meet criteria for a Substance Use Disorder (SUD), compared to 8.6 percent of the general population” [1]. This data represents a record high in rates of veteran addiction; understanding this disparity requires a deeper look at how the American government has previously aimed to address veteran substance abuse and where these policies fall short.

The Historical Evolution of Military Wartime Drug Use

Many people view veteran substance abuse as a recent phenomenon driven by rising nationwide drug use, but veteran substance abuse has deep historical roots that long predate the modern addiction crisis. The earliest known accounts of veteran substance abuse are from the American Civil War, in which morphine and opium were frequently used to treat severe illnesses and injuries [2]. These drugs were known to effectively slow the spread of contagious disease and provide relief to chronic pain, making them common treatment options for Civil War physicians to turn to during times of need. However, the immense relief provided by these substances caused many soldiers to develop a codependence that they later carried with them after the war concluded. While formal studies on rates of addiction in veterans were not conducted during the Civil War era, soldier testimony using terms such as “opium slavery” indicate their awareness of addiction as a concept. The aftermath of the Civil War saw an unprecedented opium addiction epidemic amongst

veterans in America, but with that came a severe stigmatization of veteran addiction. It was a common theme that struggling veterans would not want to seek help for fear of losing their societal status or being seen as “unmanly” by their peers [3]. Despite having occurred over 160 years ago, the experiences of veterans after the Civil War feel eerily similar to those of veterans today.

World War One, although termed “The First Modern War”, relied on blatantly non-modern medical practices to treat injured service members. Mirroring the treatment patterns of Civil War medics, World War One physicians combatted injuries and illnesses by once again prescribing morphine to patients. Morphine was found to effectively treat victims of chemical gas poisoning, as well as Tuberculosis, but it once again left many veterans with addictions to the substance once they returned home. On the other hand, the horrors of World War One also drove many men to intentionally begin consuming illicit substances such as cocaine, morphine, heroine, etc… so they could be discharged due to addiction [4]. Regardless of what caused these servicemen to develop drug addictions, they were met with similar stigmas to those experienced by Civil War veterans suffering from addiction. For example, an early 1900s newspaper published an article urging people to “not keep company with any other person who is an addict…even if he is your own brother or a member of your family” [5]. Many struggling veterans thus again become reluctant to openly seek assistance due to fear of societal pushback, causing them to suffer in silence.

The Vietnam War saw the highest use of servicemen drug abuse during deployment in American History. A 1971 report by the United States Department of Defense found that “51 percent of the armed forces had smoked marijuana,” while “31 percent had used psychedelics,” including LSD, mescaline, and psilocybin mushrooms, and “an additional 28 percent had taken hard drugs,” such as cocaine and heroin. Drug use in Vietnam differs starkly from that of World War One because of the intention behind it: while World War One servicemen primarily utilized drugs to be discharged, soldiers in Vietnam used drugs recreationally as part of their lifestyle and in an effort to improve their military performance. Historical records indicate that military command often encouraged servicemen to consume illicit drugs such as stimulants to improve their endurance on grueling missions, but this also meant that it was not uncommon for American soldiers to engage in combat while high [6]. Even though use of hard drugs was so deeply ingrained in the soldier lifestyle in Vietnam, returning home to America or being deployed to Europe meant decreased access to drugs and higher prices for illicit substances, causing veterans to turn away from heroin and begin using LSD and opioids. While rates of veteran addiction in America were lower than expected, drug use amongst service members deployed in Europe led to numerous overdoses and deaths. Medical professionals attributed this to lack of drug education amongst service members and published educational pamphlets to combat this knowledge

gap, but the initiative was only minimally successful. American healthcare failures can also be observed in the lack of long-term support for veterans who were addicted during their deployment, since rapid detoxification before return home only catalyzed short term sobriety. The VA was also ill-equipped to handle drug addiction post-war, with few drug-centered addiction facilities existing in the early 1970s [7]. This meant that facilities that were able to assist veterans struggling with drug addictions had long wait times and were not geographically accessible to all those in need. Steps were eventually taken to remedy these issues, but preventable suffering had already been brought upon struggling servicemen and their loved ones.

Despite spanning several decades, these wartime conflicts reveal clear continuities in patterns of veteran drug use in America. All of these veterans returned home to a society that blamed them for their addictions rather than providing adequate support, and those treated with morphine by Civil War physicians, despite its known addictive properties, were often pushed into dependency through no fault of their own. Ideally, one might hope that veterans today no longer face these challenges; however, American healthcare systems and societal attitudes continue to reproduce many of the same inequities and stigmas that earlier generations of veterans endured.

Veteran Drug Abuse In America Today

Far from being resolved, the issues surrounding veteran substance abuse have evolved into a modern crisis that continues to mirror the policy failures and social attitudes of the past. As of April 10, 2026, one in ten American veterans have an SUD [8]. The causes of this statistic are a combination of those that have newly emerged in the 21st century and those that history has given explicit warnings about.

While less extreme than that of the Vietnam War, modern day military culture continues to promote substance use as a form of stress relief and normalizes recreational drug use for bonding. A 2018 study found that slightly more than “33 percent of active-duty service members” engaged in “binge drinking” within a thirty day interval, and 9% reported continuous “heavy drinking” [9]. Beyond the normalization of alcohol as a social lubricant during active duty, the return to civilian life strips soldiers of the rigid structure and routine drug testing that often keeps more severe substance use in check during active duty. For many, the end of service catalyzes a self-medication cycle to cope with both the physical and emotional traumas of war. Combat exposure is a primary contributor, as the high-stakes environment of the modern battlefield often results in Post-Traumatic Stress Disorder (PTSD). Veterans of the Iraq/Afghanistan Wars have the highest current rates of PTSD, with “an estimated 11-20 out of every 100 (11-20%) veterans” being diagnosed with PTSD every year. Furthermore, the co-occurrence of PTSD and SUDs has led to “63% of Afghanistan and.

Iraq War veterans who received an SUD diagnosis also [meeting] the criteria for PTSD" [10]. Just as Civil War physicians over-relied on morphine, modern military medicine has faced scrutiny for its reliance on prescription opioids to manage injuries obtained during service Despite reductions in opioid prescriptions over the past decade, more than 50% of Veterans prescribed opioids in 2023 remained on long-term opioid therapy (LTOT), which is defined as opioid use for pain lasting more than three months [11]. Many Veterans who begin LTOT continue high levels of opioid use for over two years, increasing their risk for opioid use disorder. This once again draws a strong parallel to veteran pain-management throughout American history.

Despite advances in medical knowledge and the creation of institutions like the VA, the underlying patterns that shaped veteran substance abuse in the Civil War, World War I, and Vietnam remain strikingly intact today. In each era, veterans were exposed to medically or culturally normalized drug use during service, returned home with untreated physical and psychological trauma, and were subsequently met with inadequate systems of care and persistent social stigma. Modern statistics on PTSD, opioid dependence, and co-occurring disorders do not represent a new crisis so much as a continuation of an unresolved one.

Gaps In Modern Veteran Healthcare

In many ways, veteran substance abuse has been perpetuated by the very system intended to protect those who served: The United States Department of Veteran Affairs. Lack of integration between VA clinics and non-VA clinics creates a loophole for addicts to obtain dangerous amounts of prescription medications from more than one provider. For many years, when a veteran received prescription pain medications from one physician, there was no shareable electronic record to show another physician and prevent them from re-prescribing the same drug. This allowed veterans struggling with addiction to receive numerous doses of prescription medications, in many cases opioids, from numerous medical centers due to lack of communication between facilities. Despite many technological advancements in healthcare, it remains shockingly simple for struggling veterans to find multiple sources to feed their addictions. For example, a 2020 study found that "in 2012, over 13 percent of Veterans dually enrolled in VA and Medicare Part D insurance received opioids from both of these sources" [12], emphasizing the lack of cross-referencing that occurs between healthcare providers when prescribing highly addictive medications. Today, all 50 states have aimed to combat this ambiguity by creating the Prescription Monitoring Program (PMP), an electronic medical record shared across healthcare providers to prevent over-prescription of addictive drugs. However, dual-system use remains an effective way for veterans to get duplicate prescriptions of drugs today despite this innovation. A 2025 study identified dual-system healthcare provider use as one of the top causes of Opioid Use Disorders (OUDs), and a questionnaire given to physicians as

a part of the study received interesting testimony: one physician notes that many of their patients come to them seeking a prescription after years of prior drug use, stating “the fact that no one really addressed this five years ago” left an addiction unresolved, “and now it’s ten years later and they can’t do without the medication” [13]. This unfortunate anecdote is representative of the threat carried by dual-system healthcare regardless of improvements to online databases. For many veterans, their addiction has spanned such a long term that they see no solution other than finding a new provider to give them a prescription.

Veteran substance abuse is also strongly linked to homelessness, which veterans are unfortunately at increased risk of compared to the average citizen. According to a 2020 study, “Veterans reported higher rates of substance use and mental health problems as a primary cause of homelessness when compared to nonveterans” [14]. This finding highlights a troubling link between addiction among veterans and an increased risk of homelessness, suggesting that when the healthcare system fails to provide effective support for SUDs, it contributes to the persistence of homelessness within the veteran community. As a result, rising rates of addiction tend to also signify rising housing insecurity, and at the start of 2019, “more than 37,000 Veterans in the U.S. [were] experiencing homelessness” [15]. Although homelessness is a major issue in and of itself, it is especially problematic when it prevents veterans from receiving appropriate medical care. The VA system provides addiction counseling to struggling veterans, but access to care can become a major problem for veterans without a stable home or source of transportation. As a result, many veterans only receive care when they find themselves in urgent situations and are rushed to the emergency room, oftentimes not of their own volition [16]. Such a lack of consistent care for homeless veterans means that their long-term needs often go on treated while their short-term issues are tended to in an emergency setting. Consequently, issues such as substance abuse and chronic mental health disease are not what homeless veterans are treated for when they seek out an emergency department, leaving the root causes of their homelessness unimproved.

Stigma also remains embedded in both policy and culture. Veterans notably avoid seeking treatment due to fears of judgment or professional consequences, while confidentiality concerns reinforce these hesitations. A study by Sharp et al. demonstrated concern amongst 44% of participating veterans that “unit leadership would treat [them] differently” following a mental health diagnosis such as a substance abuse disorder or related mental health condition; similarly 42.9% of participating veterans admitted to fear of being “seen as weak” by the rest of society [17]. Regardless of how much society has evolved, it is unfortunate that the stigmas that kept soldiers from seeking help in the post Civil War era continue to stand between veterans and addiction treatment today.

The War After War: Veteran Addiction in America

They Fought For Us, How Can We Fight For Them?

The staggering statistics on veteran substance abuse send a clear message: the American healthcare system requires immediate reform for veterans. The most glaring policy gap is the continued lack of cross-referencing between healthcare facilities serving dually enrolled veteran patients. As long as physicians continue unknowingly over-prescribing addictive drugs to veterans who are already suffering from addiction, veteran rates of addiction and homelessness will continue to climb in America. Currently, not all VA and civilian providers are effectively linked, creating a fatal disconnect in veteran care. While the Prescription Monitoring Program (PMP) exists to prevent over-prescription, its effectiveness is often inhibited by the "hassle costs" of the current medical workflow. To bridge this gap, American healthcare must prioritize administrative efficiency; a 2022 cluster randomized clinical trial published in JAMA Health Forum shows that integrating drug-monitoring tools directly into the Electronic Health Record (EHR) increased clinician queries by 60%, significantly improving adherence to "guideline-concordant care." This suggests that by removing the technical barriers that discourage physicians from checking a veteran's full prescription history, the system could drastically reduce the dual-system loophole that currently allows addiction to go unaddressed and untreated for years [18].

Beyond administrative data fixes, the United States government must also modernize its approach by expanding the "Housing-First" model; a potential way to do this would be by investing more funds in VA sponsored Mobile Medical Units. While the VA prioritizes permanent housing solutions for homeless veterans, care for SUDs remains tethered to stationary clinics that many veterans struggle to reach. In 2024, the VA made efforts to deploy 25 mobile units in an attempt to provide care to unhoused veterans. While this is a huge step towards accessible care, 25 vans nationwide is not sufficient to support America's extensive veteran homelessness epidemic. By deploying more mobile clinics throughout cities with high populations of homeless veterans, the VA can provide immediate outreach and connect veterans with pathways to long-term SUD treatment, a need commonly ignored during an emergency department visit.

Lastly, Americans as a collective need to put an end to the stigma surrounding veteran addiction. The people who put their lives on the line to fight for American freedom should not have to face an even longer battle when they return home. There is no reason why veterans today should face the same judgement they encountered after the Civil War, World War One, the Vietnam War, and every other conflict in American history. As the United States of America turns 250 years old, now is finally the time to create a system that encourages care for struggling veterans rather than belittling it.

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Between Relief and Risk: Ethical Challenges of Opioid Prescribing in Chronic Pain Management

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Introduction

Chronic pain is one of the most prevalent and common medical disabilities, affecting over 100 million Americans and representing an enormous burden on individuals, families, and medical systems alike. For many, opioid analgesics have historically been among the most reliable forms of relief available. Yet the same medications that offer meaningful respite from debilitating pain carry a well-documented likelihood of misuse, dependence, and overdose; complications that have driven one of the worst public health crises in modern American history. In 2024, opioid-involved overdoses claimed 54,045 lives in the United States, a staggering figure that prompted sweeping legislative and regulatory responses at the federal and state levels. This crisis places physicians at the center of a grave ethical conflict: the obligation to relieve suffering on one hand, and the duty to prevent harm on the other. Understanding this tension calls for examining four foundational bioethical principles: beneficence, nonmaleficence, autonomy, and justice. Dealing with these competing forces responsibly is not only fundamental for individual clinical outcomes but also for restoring trust between the medical profession and the communities it serves.[1][2][3].

The Ethical Framework: Four Principles in Conflict

The ethical facets of opioid prescription are best perceived through the four aforementioned classical principles of biomedical ethics. These principles frequently apply to opioid prescribing and asking how rigid policy responses sometimes compromise the very patients they are designed to protect. Beneficence demands that physicians act in the patient's best interest: relieving suffering is a fundamental medical obligation, and for patients whose pain is unresponsive to non-opioid interventions, withholding opioids may itself represent a failure of care. Nonmaleficence, by contrast, cautions physicians to reduce harm, involving careful attention to a patient's addiction risk, history of substance use, and the risk of drug diversion into the community. These two principles sit in constant tension: the same drug that provides relief can cause serious harm, and the balance is rarely obvious [4].

Respect for autonomy adds a further layer of complexity. Patients with chronic pain have the right to be informed partners in their care, making decisions about treatment options based on a thorough understanding of risks and benefits. True autonomy is not simply about granting every patient whatever medication they request; rather, it requires transparent, shared decision-making in which the physician neither dismisses the patient's suffering nor

capitulates to demands that contradict sound medical judgment. The principle of justice adds further complexity to the picture by demanding equitable treatment for all patients. When physicians apply blanket policies such as refusing opioids to anyone with a history of substance use, they risk overlooking medical need, contributing to stigma, and denying appropriate care based on characteristics often irrelevant to a patient's clinical case. As physician bioethicist Kotalik notes, “Physicians need to be careful in accepting, without reflection, labels of their patients as 'junkies' or 'drug seekers' as a reason to deny pain control medication or care.” The label 'drug-seeking,' however, is not a neutral clinical observation; it is a socially loaded judgment applied disproportionately to patients who are addicted, who are women, or who belong to other marginalized groups, even when the observable behavior is indistinguishable from that of any patient in uncontrolled pain. Kotalik's caution is not merely that physicians might misidentify a 'deserving' patient as an addict, but that addiction itself should never disqualify a person from receiving adequate pain care. These four principles do not invariably align, and it is precisely their collision that makes opioid prescribing one of the most ethically challenging tasks in contemporary medicine. This is especially imperative in clinical settings where time is limited, uncertainty is high, and the stakes are enormous for both the short- and long-term future [4].

Physician Responsibility in an Age of Scrutiny

Physicians bear ultimate responsibility for opioid prescribing decisions, and the scope of that responsibility is both clinical and legal. Prescribing a controlled substance requires that the physician document the clinical rationale, monitor the patient for signs of misuse or adverse effects, and continuously reassess whether the benefits of the therapy outweigh its risks. As health law attorneys Barnes, Giampa, and Caron observe in a legal analysis of opioid prescribing standards, “nothing can relieve the responsibility of the physician as the party ultimately responsible for the decision to prescribe a controlled substance,” with violations of professional standards carrying risks of disciplinary action, peer review, and in extreme cases, criminal prosecution. This accountability structure is not inherently problematic; it assures that physicians exercise careful judgment when deploying powerful medications. The difficulty arises when the threat of legal or professional consequences becomes so pervasive that physicians make treatment decisions based not on clinical evidence, but on fear of legal repercussions [3][5].

The cultural climate surrounding opioid prescription has changed dramatically in the space of just two decades, oscillating between condemnation of under-prescribing and condemnation of over-prescribing with little room for nuance in either direction. In 2000, articles in mainstream medical journals declared that patients were “suffering needlessly, primarily because of improper management and inadequate pain medication”. By the mid-2010s, that narrative had reversed entirely: headlines asking “Who Is Responsible for the

Pain-Pill Epidemic?" and reporting that "Doctors Increasingly Face Charges for Patient Overdoses" had made many physicians extremely reluctant to prescribe opioids even when they were clearly clinically warranted.

Research reflects this chilling effect: a 2018 Pennsylvania survey of primary care physicians found significant knowledge gaps in pain assessment and pharmacologic options, suggesting that the profession had become more cautious but not necessarily better equipped to form nuanced decisions. This environment of fear does not serve patients well. Physicians need robust clinical training and a regulatory culture that enables individualized decision-making, not one that pushes practitioners toward reflexive avoidance of a drug class that, for many patients, remains the most effective available option [5][2].

When Policy Backfires: The Unintended Consequences of Restriction

The release of the Centers for Disease Control and Prevention's (CDC) 2016 Guideline for Prescribing Opioids for Chronic Pain was a landmark document bringing clarity to the chaotic prescribing landscape. The guidelines advised primary care physicians to prefer non-opioid therapies, start patients on the lowest effective dose, and avoid exceeding 90 morphine milligram equivalents (MME) per day without exceptional clinical justification. Although voluntary, the guideline quickly acquired the force of law in many contexts: insurance companies began treating its recommendations as hard limits, pharmacists declined to fill prescriptions exceeding the suggested thresholds, and state medical boards issued professional standards that paralleled its language. A study of over 450,000 patients published in Health Affairs found that the guideline was associated with "a reduction in patients' rate of receiving at least one opioid prescription by approximately 20 percentage points by December 2018, compared with the counterfactual, no-guideline scenario". However, the reductions did not vary according to the strength of expert consensus against opioids for a given diagnosis, suggesting cuts were often indiscriminate [6][7][3].

The human cost of these indiscriminate reductions became apparent in patient-reported outcomes data gathered in the years immediately following the guideline's release. A 2018 survey of 362 chronic pain patients on long-term opioid therapy found that those whose extended-release opioid dose had been decreased were significantly more likely to report worsening pain, declining physical function, deteriorating mental health, and impaired ability to work compared with patients whose doses remained unchanged. Critically, over a third of respondents reported an opioid dose reduction in the preceding six months, and many of these reductions appear to have been driven not by individual clinical assessment but by an institutional imperative to comply with the CDC thresholds. Pergolizzi et al. describe the resulting situation as a "second and more silent public health crisis" running alongside the opioid epidemic itself: one in which physicians had become "increasingly

unwilling to prescribe opioid analgesics, even in patients in whom they would be clearly indicated," leaving many chronic pain patients undertreated and, in some cases, desperate. These unintended consequences were serious enough that the CDC substantially revised its guidelines in 2022, explicitly acknowledging that the 2016 document had contributed to "patient harms, including untreated and undertreated pain, rapid opioid tapers and abrupt discontinuations." This is a tacit admission that the policy had overshot its mark. The ethical lesson here is clear: policy solutions designed at a population level must still protect the individual patient, and a 'one size fits all' approach to opioid dosing is fundamentally incompatible with the individualized nature of pain and the wide variation in patient pharmacology [8][3][2][5].

Patient Autonomy and the Stigma of Chronic Pain

Alongside the institutional pressures on physicians, chronic pain patients themselves face a stigma that meaningfully compromises their autonomy and access to care. People living with chronic pain are frequently regarded with suspicion in healthcare settings; their subjective reports of pain are questioned, their requests for medication are interpreted as drug-seeking behavior, and their moral character is implicitly impugned when they stand for their own relief. A qualitative study of patients who use drugs and experience chronic non-cancer pain found that the majority of participants felt "labelled as 'addicts' and stigmatized within the healthcare system," with many having been denied opioid prescriptions even when their pain was severe, and their opioid dependence was not established. When legitimate channels close, some patients report turning to illicit sources to manage their pain. This is an outcome that is not only clinically dangerous but also signifies a profound failure of the healthcare system's duty of care [7].

The erosion of patient autonomy in this context is compounded by the power differential inherent in the physician-patient relationship. Patients who experience chronic pain often have few viable non-opioid alternatives: non-pharmacologic therapies such as physiotherapy, psychological counseling, and rehabilitative care are frequently expensive, inaccessible, or insufficiently effective for severe pain, while insurers routinely deny coverage for these services even as they limit opioid prescriptions. This creates a situation where patients are caught between the double under-provision of analgesic medication and non-pharmacologic alternatives, with little recourse in either direction. Respect for autonomy as an ethical principle is not satisfied by giving a patient a list of options that exist only in theory– it requires that the healthcare system ensure those options are genuinely accessible. A patient who is refused opioids, denied physiotherapy coverage, and offered no meaningful alternative is not the act of exercising autonomy; rather simple abandonment [3].

Case Studies in the Ethical Conflict

Between Relief and Risk: Ethical Challenges of Opioid Prescribing in Chronic Pain Management

Two clinical scenarios illustrate the ethical tensions described above with particular clarity. The first involves a patient with a long-standing chronic pain condition, such as severe fibromyalgia or spinal stenosis, who has been stable on a moderate opioid dose for several years, functioning at work and sustaining personal relationships. Following the 2016 CDC guidelines and pressure from their insurer, the patient's primary care physician reduced the dose to fall within the recommended 90 MME threshold. Within weeks, the patient reports dramatically worsening pain, inability to work, and deteriorating mental health, which are outcomes consistent with the survey data discussed earlier. In this case, the prescribing restriction has not served the patient's interests; it has sacrificed their well-being on the altar of population-level policy compliance. The principles of beneficence and respect for autonomy have both been violated in the name of nonmaleficence, but the harm to this individual patient is no less real for having been inflicted by regulation rather than by negligence [3].

The second scenario involves a patient with a history of substance use disorder who presents with legitimate, verifiable chronic pain following a work injury. The treating physician, aware of the addiction risk, declines to prescribe opioids without ever conducting the formal risk assessment tools recommended by clinical guidelines. These are instruments that, if used, would reveal that the patient's pain is real, their risk is managed, and their clinical need is clear. Instead, the physician relies on the stereotype of the ‘drug seeker’ and offers only non-opioid alternatives that are inadequate for the patient's level of pain. This represents a failure of the justice principle as well as of beneficence: the patient is denied appropriate care not because of individualized clinical evidence but because of a social category incorrectly applied. As Barnes et al. argue, the professional disciplinary systems that adjudicate cases of inappropriate prescribing are also capable of identifying and handling inappropriate denial of care, yet these systems are rarely invoked for undertreating pain in the way they are for overprescribing. The asymmetry reveals a cultural bias that treats excess caution as ethically neutral, when in reality, leaving a patient in preventable pain is itself an ethical failure [4][5].

Conclusion and Interventions

The ethical questions surrounding opioid prescribing in chronic pain management will not resolve themselves through regulation alone. As has been demonstrated, rigid prescribing limits imposed at a policy level can produce genuine harm to individual patients whose clinical needs fall outside the statistical average. A more ethically defensible approach starts with the recognition that pain management is an individualized discipline: the appropriate opioid regimen for one patient may be clinically inappropriate for another, and that distinction can only be made by a physician who knows the patient, has assessed their risk, and has discussed treatment goals through a process of genuine shared decision-making.

Between Relief and Risk: Ethical Challenges of Opioid Prescribing in Chronic Pain Management

Clinical practice guidelines should serve as exactly that, not as substitutes for clinical judgment. The 2022 revision to the CDC guidelines moved toward this position by explicitly restoring the centrality of the patient-clinician relationship in prescribing decisions. Building on this shift, policymakers should ensure that insurers and pharmacy benefit managers cannot unilaterally impose the guideline thresholds as absolute limits, particularly for patients already stable on long-term opioid therapy [7].

Beyond prescribing reform, several structural interventions would reduce the conditions under which the ethical conflicts described in this paper arise most acutely. Expanded training in pain management is urgently needed at the medical school and residency level, where current curricula often devote minimal time to the pharmacology, ethics, and clinical complexity of chronic pain treatment. This knowledge gap leaves many physicians inadequately equipped to make the detailed risk-benefit assessments that responsible opioid prescribing demands. Additionally, healthcare institutions must invest in genuine access to non-pharmacologic alternatives such as physiotherapy, pain psychology, and interdisciplinary pain clinics. This is so that opioid dose reductions are paired with effective substitute therapies rather than simply leaving patients without adequate pain control. Finally, the culture of stigma surrounding chronic pain patients must be actively challenged within medical education and institutional culture. Patients with chronic pain deserve the same presumption of good faith that is extended to patients with any other debilitating medical condition. Guaranteeing that these principles are not simply stated but structurally supported will allow the medical profession to honor its deepest obligations to relieve suffering, prevent harm, respect persons, and treat all patients with fairness and dignity [8] [2].

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Psychedelics for Profit: Ethical Risks in Addiction Treatment

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Scientific research into psychedelic medicine has expanded rapidly in recent years, particularly in the study of compounds such as psilocybin and MDMA for treating substance use disorders (SUD), depression, and PTSD [3,4]. Among these applications, addiction treatment presents both one of the most promising and most ethically complex areas of psychedelic medicine. As this research progresses, venture capital (VC) has emerged as a major force shaping how these therapies are developed and delivered. Venture capital is a form of private investment that provides funding to emerging companies in exchange for equity, often targeting high-risk, high-reward industries [1]. While private investment can accelerate innovation, expand treatment availability, and support clinical infrastructure, it also introduces ethical concerns that are especially significant in the context of addiction. Because individuals with SUD often experience impaired decision-making, heightened vulnerability, and limited access to care, the commercialization of psychedelic therapy raises serious risks related to scientific integrity, treatment quality, patient autonomy, and misuse.

Substance use disorder is a chronic, relapsing condition characterized by long-term changes in brain function that affect reward, motivation, and self-control [11]. These neurobiological changes make individuals more susceptible to compulsive behavior and relapse, even after periods of abstinence. As a result, addiction treatment requires sustained, multifaceted care rather than short-term intervention. Psychedelic-assisted therapy has shown potential to disrupt maladaptive thought patterns, increase psychological openness, and promote insight that may support recovery [3,4]. However, its integration into addiction treatment must be approached cautiously. When profit-driven incentives shape how these therapies are studied, marketed, and delivered, there is a risk that the complexity of addiction will be oversimplified in ways that ultimately harm patients.

Scientific Integrity and the Ethics of Evidence

The first major ethical concern involves the influence of financial incentives on the production and interpretation of scientific evidence. Psychedelic-assisted therapy presents unique methodological challenges, including difficulties with blinding, strong expectancy effects, and the integration of psychotherapy with pharmacological intervention. These issues were highlighted during the FDA's 2024 Psychopharmacologic Drugs Advisory Committee meeting, where concerns were raised about inconsistent protocols and limitations in evaluating safety in MDMA-assisted therapy trials [2]. In addiction research, these uncertainties are particularly significant because outcomes are often variable and

long-term success is difficult to measure. Patients with SUD frequently seek treatment after exhausting other options, placing a high level of trust in emerging therapies. If preliminary or ambiguous findings are presented as definitive in order to attract investment, patients may be misled about the effectiveness of treatment. Scholars describe this dynamic as part of the "commercial determinants of health," in which financial incentives shape research priorities, data interpretation, and regulatory pathways [5]. In the context of addiction, overstating efficacy is especially harmful, as it may lead individuals to rely on interventions that do not adequately support long-term recovery. Because addiction is a chronic condition, short-term improvements are not sufficient indicators of success, making rigorous and transparent research especially critical.

Additionally, selective reporting of positive outcomes may distort the scientific literature and influence clinical adoption prematurely. If negative or inconclusive results are underreported, the perceived effectiveness of psychedelic therapies may be artificially inflated. This not only threatens patient safety but also undermines public trust in addiction medicine.

Restructuring Care: Efficiency vs. Therapeutic Integrity

A second ethical issue concerns how commercialization reshapes the structure of addiction treatment. Psychedelic-assisted therapy is resource-intensive, typically involving multiple preparatory sessions, a prolonged dosing experience, and extensive integration work [6]. These components are particularly important for individuals with SUD, whose recovery often depends on building coping strategies, addressing underlying trauma, and developing long-term behavioral change. However, because clinician time represents a major cost, venture-backed models may prioritize efficiency through shortened sessions, standardized protocols, or group-based treatment formats [6,7]. While these approaches may increase scalability, they risk undermining the individualized care that addiction treatment requires. Effective treatment often depends on strong therapeutic relationships and ongoing support. Streamlining care may weaken these elements, reducing treatment effectiveness and increasing the likelihood of relapse.

These concerns are further compounded by issues of access and equity. Addiction disproportionately affects marginalized populations, yet these groups often face the greatest barriers to treatment. Early evidence from Oregon's Measure 109 program highlights high out-of-pocket costs, inconsistent training standards, and limited insurance coverage [8]. If psychedelic therapies remain expensive and inaccessible, they may primarily benefit those with financial resources while excluding individuals most in need of care.

Misuse, Abuse, and the Risk of Harm

The third major ethical concern involves the potential for misuse and abuse as psychedelics become more widely available. Although classic psychedelics are generally considered to have low addictive potential, their psychological effects can still lead to harmful patterns of use, particularly outside of controlled clinical settings [3]. This issue is especially relevant in the context of substance use disorder. Individuals with SUD may be more likely to engage in risky patterns of substance use or to seek out alternative substances as forms of self-medication. As psychedelics become more commercially available, there is a risk that they will be used outside of clinical supervision, without appropriate screening or support.

Medical ethics emphasizes the importance of informed consent, which requires that patients fully understand the risks and benefits of a treatment. However, commercialization may distort public messaging, emphasizing positive outcomes while minimizing risks. This imbalance may distort patient perception, leading to inflated expectations about both safety and effectiveness of psychedelic therapies, increasing the likelihood of misuse [10].

Additionally, unsupervised use can pose serious medical risks. Psychedelics can exacerbate conditions such as psychosis, bipolar disorder, and cardiovascular disease. Without proper screening and monitoring, these risks may go unrecognized until harm occurs. Thus, the commercialization of psychedelics must be accompanied by robust regulatory frameworks to ensure patient safety.

Addiction as a Chronic and Relapsing Condition: Implications for Psychedelic Therapy

To fully evaluate the ethical implications of psychedelic commercialization, it is essential to understand the nature of addiction itself. Substance use disorder is not simply a pattern of repeated drug use, but a chronic, relapsing condition characterized by long-term changes in brain function, behavior, and decision-making. Neurobiological research shows that repeated substance use alters reward pathways, particularly those involving dopamine signaling, reinforcing compulsive drug-seeking behaviors even in the face of negative consequences [11]. These changes impair executive function, emotional regulation, and impulse control, making sustained recovery a complex and ongoing process rather than a one-time intervention.

This understanding has important implications for the integration of psychedelic therapies into addiction treatment. Many commercial models implicitly frame psychedelic-assisted therapy as a relatively brief intervention capable of producing rapid and lasting results. While early studies suggest that psychedelics may help disrupt maladaptive thought patterns and promote psychological insight, addiction typically requires long-term management, including behavioral therapy, social support, and environmental change [12]. Presenting

psychedelic therapy as a standalone or definitive solution risks oversimplifying the condition and may lead to unrealistic expectations among patients.

This tension highlights a direct conflict between beneficence and economic efficiency. If patients believe that a single psychedelic experience can “cure” their addiction, they may neglect other essential components of recovery. This dynamic increases the likelihood of relapse, particularly if underlying social or psychological factors remain unaddressed. Moreover, relapse itself is often accompanied by feelings of shame or failure, which can be intensified if patients were led to expect permanent improvement.

The chronic nature of addiction underscores the necessity of continuity of care. Psychedelic therapy, when used responsibly, may serve as a catalyst for change, but its benefits are often dependent on sustained integration and follow-up support. However, commercially driven models that prioritize efficiency and scalability may not adequately provide these long-term resources. This creates a gap between the short-term delivery of treatment and the long-term needs of patients with SUD.

Finally, addiction’s relapsing nature complicates the evaluation of treatment success. In clinical trials and commercial settings alike, short-term improvements may be emphasized to demonstrate effectiveness, while long-term outcomes receive less attention. This selective framing can distort both scientific understanding and public perception of psychedelic therapy. Ethical practice requires a more comprehensive approach that acknowledges relapse as a common part of recovery and prioritizes sustained patient wellbeing over immediate results.

Autonomy, Free Will, and Vulnerability in Addiction

A particularly important ethical dimension in addiction medicine involves the concept of autonomy. Patients with substance use disorders often experience impaired decision-making due to neurobiological changes associated with addiction. This raises a critical question: to what extent can individuals with SUD provide truly autonomous consent to novel and highly publicized treatments like psychedelic therapy?

On one hand, promoting psychedelic therapy as a breakthrough treatment may empower patients by offering hope and new avenues for recovery. On the other hand, it may exploit their vulnerability, particularly if marketing strategies emphasize rapid or dramatic

improvements. Patients may feel pressured to pursue these treatments without fully understanding their limitations. This issue intersects with broader debates about free will and addiction. As discussed in previous analyses, SUD involves both biological constraints and elements of personal agency. Ethical care must navigate this balance carefully, supporting patient autonomy while recognizing the ways in which addiction can compromise decision-making. Overly deterministic narratives ("you have no control") may discourage recovery, while overly individualistic narratives ("just choose to stop") can perpetuate stigma. Psychedelic therapy exists at this intersection. Its success often depends on the patient's psychological engagement and willingness to change, yet its commercialization may frame it as a passive or purely pharmacological solution. Ethical treatment depends on preserving patient agency while avoiding misleading representations of what these therapies can achieve.

Cultural Accountability and the Ethics of Appropriation

An often-overlooked ethical dimension concerns the cultural origins of many psychedelic substances. Compounds such as psilocybin have long been used in Indigenous spiritual and healing practices. The commercialization of these substances raises concerns about cultural appropriation and the exclusion of Indigenous communities from the benefits of their traditional knowledge [5].

From an ethical perspective, this issue relates to justice and respect for persons. If pharmaceutical companies profit from substances rooted in Indigenous traditions without acknowledging or compensating these communities, it represents a form of exploitation. Furthermore, removing psychedelics from their cultural context may alter their meaning and use, reducing them to commodified medical products. Addressing these concerns requires not only acknowledgment but also meaningful inclusion of Indigenous perspectives in research, policy, and profit-sharing. Without such efforts, the commercialization of psychedelics risks perpetuating historical patterns of exploitation in medicine.

Conclusion

As psychedelic therapy continues to evolve, the ethical challenges surrounding its commercialization must be carefully addressed. Venture capital plays an important role in advancing research and expanding treatment options, particularly for conditions like substance use disorder that urgently require new approaches. However, the influence of profit-driven motives must be balanced with safeguards that prioritize patient welfare, scientific rigor, and equitable access.

In the context of addiction, these ethical considerations are especially urgent. Patients with SUD are often vulnerable, stigmatized, and underserved, making them particularly

susceptible to both the promises and risks of emerging therapies. Ensuring that psychedelic medicine develops responsibly will require strong regulatory frameworks, transparent research practices, and a commitment to the core principles of medical ethics: beneficence, nonmaleficence, autonomy, and justice. Ultimately, the success of psychedelic therapy will not be determined solely by its clinical outcomes, but by the ethical framework within which it is developed and delivered. Only by prioritizing patient-centered care over profit can the field realize its potential as a transformative tool in the treatment of addiction.

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Functional Addiction: Why High-Achieving Addicts Go Undetected

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You're doing everything right. Strong grades, internships, leadership roles—on paper, your life looks put together. You're reliable, productive, and driven. People trust you to follow through. But behind the scenes, there may be something else at play. Some high-achieving individuals rely on substances to keep up with demands—stimulants to stay focused, alcohol to unwind, or other coping mechanisms to manage stress. Because they continue to meet expectations, this reliance often goes unnoticed.

There are often no obvious warning signs—no missed deadlines or visible decline in performance. Instead, the very qualities that contribute to success, such as discipline, consistency, and control, can also make it easier to conceal underlying struggles. This reflects the central paradox of functional addiction: the more composed and capable someone appears, the less likely others are to question what may be happening beneath the surface.

So how can someone who appears "high-functioning" still be struggling with addiction? And why is it that addiction is often only recognized once everything begins to fall apart?
The concept of functional addiction, where an individual maintains outward success while experiencing substance dependence, reveals a gap in how addiction is commonly understood. When someone continues to perform well and appears stable, they are often assumed to be "fine". However, that assumption can be misleading—and, at times, dangerous.

A significant part of the issue lies in how addiction is commonly perceived. When people hear the term "addiction," they often imagine someone who has lost control of their life—unemployed, unhoused, or visibly unstable. However, this stereotype does not reflect the full reality. The National Institute on Drug Abuse defines addiction as a chronic brain disorder that can affect anyone, regardless of how "successful" they appear [1]. Meeting deadlines or excelling in school does not preclude someone from struggling; it may simply mean those struggles are less visible.

In many high-pressure environments, substance use is not only common but often normalized. On college campuses in particular, drugs like Adderall and Ritalin are frequently treated as study aids rather than substances with meaningful risks. Jokes about needing them to get through exams or stay productive can make it easier to overlook how quickly usage can develop into dependence. Research shows that nonmedical use of

prescription stimulants is relatively widespread among students, especially in competitive academic settings [2]. When a substance is framed as something that enhances performance, it is far less likely to be recognized as a problem. Instead, it may even be viewed as a “smart” or strategic choice, reinforcing the behavior rather than questioning it.

Alcohol is another example of this double standard. In many settings, such as parties, networking events, and celebrations, its use is not only accepted but expected. According to the Centers for Disease Control and Prevention, excessive alcohol use is relatively common, yet individuals who continue to function in their daily lives are less likely to be recognized as having a problem [3]. As long as someone is still showing up, performing, and meeting expectations, their behavior often goes unquestioned. Over time, they may even begin to overlook it themselves.

There is also a psychological dimension to consider. Many high-achieving individuals operate under constant pressure—whether from academic demands, family expectations, or personal ambition. Substances may initially serve as a way to manage that pressure, helping with focus or providing a sense of relief.

Over time, however, what begins as a coping mechanism can develop into dependence. Research published in the American Journal of Psychiatry highlights a strong link between chronic stress and substance use, particularly in high-demand environments [4]. At the same time, individuals who are accustomed to pushing through challenges may be less likely to recognize when they need help.

This issue is further compounded by stigma. Although conversations around mental health have become more open in recent years, addiction continues to carry significant judgment. For high-achieving individuals, admitting a struggle can feel like admitting failure—especially when they are used to being seen as capable and in control. The Substance Abuse and Mental Health Services Administration identifies stigma as a major barrier to seeking treatment [5]. Without external recognition, stigma can further discourage individuals from acknowledging the issue or seeking support.

In addition, the healthcare system does not always identify these cases. Many screenings rely on visible warning signs or self-reported substance use. If an individual appears stable and does not disclose their behavior, the issue can easily go undetected as functional addiction often does not align with conventional expectations.

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The problem is that functional addiction doesn't remain "functional" indefinitely. Over time, tolerance develops, and what once felt manageable begins to escalate. The pressure to maintain the appearance of control can make things worse, as individuals are not only managing stress but also concealing how they cope with it. Eventually, that balance becomes difficult to sustain, and the consequences are often more complex to address all at once.

To effectively address addiction, it cannot be defined solely by how someone's life appears from the outside; success does not negate struggle and academic or professional achievement does not necessarily reflect well-being.

Recognizing functional addiction requires paying attention to patterns of behavior, not just outward outcomes. It also means fostering environments where individuals feel able to seek help without fearing that doing so will undermine everything they have worked to achieve. Ultimately, addiction is not always obvious, which is precisely what makes it so easy to overlook—and so important to recognize.

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Drug Decriminalization and The Ethical Limits of Oregon's Measure 110

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Amid growing recognition of addiction as a public health issue, Oregon became the first U.S. state to decriminalize possession of all drugs through Ballot Measure 110 in 2020 [1]. The policy decriminalized possession of small amounts of controlled substances while allocating cannabis tax revenue to fund treatment and harm reduction services. Possession of substances such as crack cocaine and heroin, once classified as a criminal misdemeanor, was reclassified as a Class E violation punishable by a small fine [1]. Measure 110 was influenced by Portugal's successful decriminalization model and marked a significant shift away from punitive approaches to drug use toward a public health–oriented model of addiction in the United States [2]. This shift reflects a broader change in how substance use disorders are viewed and addressed.

The measure reflects a broader transition within medicine and public policy toward understanding addiction as a chronic medical condition rather than a moral failing. In turn, many lawmakers are increasingly interested in prioritizing harm reduction over criminalization. Decriminalization has been proposed as a means of reducing the harms associated with incarceration while encouraging individuals with substance use disorders to seek treatment. However, whether such policies can effectively achieve these goals remains contested. The experience of Measure 110, which has since undergone significant policy reversal, suggests that while decriminalization may be ethically appealing in principle, it risks failing in practice when not supported by adequate treatment infrastructure [3]. In this paper, I argue that although drug decriminalization is ethically justified as a response to substance use disorders, it is only morally defensible when accompanied by sufficient treatment infrastructure, as demonstrated by Measure 110's shortcomings and Portugal's more successful approach.

Drug decriminalization is justified on the basis that rehabilitation is more beneficial than imprisonment for individuals with addiction. Prison can directly inflict harm, may expose individuals to violence, inadequate healthcare, worsen future job prospects, and exacerbate racial disparities after release [4].In addition, incarceration can disrupt access to ongoing healthcare and treatment, increasing the risk of relapse. In contrast, substance use treatment has been shown to improve outcomes, with individuals in treatment demonstrating higher rates of abstinence compared to those who do not receive care [5].. Approaches that prioritize treatment over punishment have the potential to support recovery and improve well-being, thus reducing harm and prioritizing recovery.

On the basis of this knowledge, Oregon replaced criminal penalties for drug possession with a $100 fine that could be waived if the individual completed a health screening. Furthermore, the policy outlined that the tax revenues from cannabis sales would be the primary source of funding for new harm-reduction services, affordable substance abuse disorder treatment facilities, housing, and peer support services [6]. However, the policy did not require individuals to engage with treatment services, leaving participation largely dependent on voluntary, self-initiated action. In practice, this gap means that individuals cited for drug possession often receive only a fine, without meaningful access to treatment, leaving underlying addiction unaddressed.

Measure 110 is now widely considered a failure. Despite the state of Oregon spending $800 million on funding service providers, current studies note that there is insufficient data to prove the effectiveness of this policy [7]. In 2025, the Oregon Health Authority evaluated the efficacy of the public health approach, noting that it was limited by fragmented governmental coordination, government instability, poor integration, and unequal access to treatment across counties. As a result, the program has not effectively delivered a coordinated public health response [7].

These shortcomings suggest that the issue may lie not in decriminalization itself, but in how it is enforced. This distinction can be illustrated by comparing Measure 110 to Portugal's decriminalization Law 30/2000. While both policies removed criminal penalties for drug possession, Portugal's system actively directs individuals into care rather than simply issuing citations. Individuals found in possession of drugs must appear before the Commission for the Dissuasion of Drug Abuse, where their situation is assessed and appropriate interventions are determined. In this way, Portugal's model actively directs individuals toward care, creating a more consistent pathway into treatment rather than relying solely on self-initiated action [8].

Rather than a system dependent on voluntary engagement, Portugal's model establishes a structured pathway that actively connects people to care; this has allowed for measurable improvements in public health, including reductions in drug-related harms such as overdose deaths and increased engagement in treatment services [8].

Together, these differences reveal an important ethical gap in the design of decriminalization policies. While Measure 110 reduced the harms associated with

criminalization, it did not ensure that individuals received the care necessary to address addiction. Therefore, although decriminalization may be a more ethical alternative to punitive approaches, it also places an obligation on the state to provide the conditions that support recovery. When policymakers remove punishment without establishing meaningful pathways to treatment, they risk failing to meet their responsibility to support recovery. These distinctions suggest that the question is not simply whether decriminalization is justified, but how it is operationalized in practice. Policies that aim to treat addiction as a public health issue must be designed with clear structures that guide individuals into care, rather than relying on voluntary engagement alone. This includes not only expanding treatment capacity, but also ensuring coordination across healthcare providers, social services, and local governments so that individuals are not left navigating fragmented systems. Without this level of organization, well intentioned reforms become ineffective, and may in turn do harm for those who need help.

To conclude, as illustrated through the laws in Oregon and Portugal, decriminalization represents an important shift in how addiction is understood, but it cannot stand alone as a solution. Ultimately, the implementation of decriminalization policies is only morally justified if they actually provide vulnerable populations with sufficient support. Otherwise, decriminalization risks becoming a symbolic reform rather than a meaningful solution.

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Disparities in Substance Abuse Access/Treatment Across the US: Equity and Ethical Questions

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Substance use disorders (SUD), defined as a medical condition resulting from the misuse of alcohol and/or illicit drugs, have been widely considered one of the most serious health problems facing Americans. According to SAMHSA's 2024 National Survey on Drug Use and Health, 58.3% of Americans were using one of tobacco, alcohol, nicotine, or an illicit drug [1]. Per the CDC, drug-induced overdose was linked to over 100,000 deaths in 2023, and over 178,000 deaths a year can be linked to excessive alcohol use [2, 3]. The mortality and morbidity inflicted by these disorders have made them a major priority for administrations across every level of government, from efforts to curb the smuggling of drugs like fentanyl to public health prevention programs encouraging responsible use of substances [4].

However, not all regions provide equal access to effective treatment options. While no state has perfectly solved SUD care, some states have more robust support for prevention and treatment programs than others. These gaps create multidimensional disparities in recovery efforts and outcomes that grow and become increasingly more difficult to close. Gaps in SUD prevention and treatment efforts and outcomes are among the most pressing aspects of the SUD crisis affecting America, and closing these gaps is an essential step toward reducing the harm they cause, improving public health, and safeguarding communities.

Aspects of a Strong SUD Treatment System

To effectively analyze treatment gaps, it should first be established what constitutes an effective SUD treatment and prevention system. SUDs are complex in development and presentation, with psychological, social, biological and economic factors (among others) all contributing to their development [4]. Therefore, it is paramount that policy and public health approaches to SUDs integrate these various factors to treat them effectively.

States must employ evidence-based public health prevention and harm reduction approaches to reduce the prevalence of severe SUDs. For example, school-based drug education campaigns, especially targeted toward children and adolescents at risk of SUDs, are commonly used to help youth in critical age groups understand and avoid SUDs [4, 5]. Effective intervention programs often combine the mitigation of risk factors (e.g., social deviance) and the promotion of protective factors (e.g., familial support) to promote holistic wellness within target populations and communities [4]. Harm reduction, which targets mitigating harm resulting from SUDs, utilizes strategies like clean syringe distributions, access to naloxone to reverse overdoses, overdose prevention centers that involve

monitoring users when injecting, and fentanyl test strips to avoid accidental ingestion ofone of the most lethal illicit drugs, responsible for over half of overdose deaths and often found in counterfeit versions of other drugs [4, 6].

In addition, strong SUD prevention systems must also offer robust access to a variety of treatment approaches. These primarily include medications approved for tobacco, alcohol, or opioid use disorders (no FDA-approved treatments exist for other substances) and psychotherapies, including cognitive behavioral therapy, motivational interviewing, and contingency management [4]. SUD treatment systems must also support multiple entry points for patients into care programs, including outpatient and inpatient SUD treatment services as well as appropriate screening in emergency rooms [7, 8]. Given current reliance on these methods for treatment, patients facing SUDs must have equitable, affordable access to these treatments and longitudinal medical care opportunities to navigate their journey to recovery.

Finally, SUD patients must be provided with appropriate social and legal recovery support to navigate their care journey effectively. Recovery support services, including employment support, continuing medical care during early-stage recovery, peer-based support, and housing support, have all been supported by evidence showing they increase engagement with care and reduce relapse, benefiting patients [9]. Justice system-based interventions, such as drug courts diverting patients from incarceration to treatment and reentry-based interventions, also hold promise to reduce both recidivism and relapse rates [10, 11].

Gaps in Treatment, Prevention Policy and Outcomes

Current SUD systems generally do not incorporate all the aforementioned elements of effective SUD treatment, or are unable to reach patients despite their efforts, resulting in disparities in SUD efforts and outcomes between communities. These disparities, which can broadly be classified into gaps in access to treatment (underuse of available resources due to stigma, regulations and insurance), prevention (gaps in state prevention and education efforts) and harm reduction (uneven access to syringes and naloxone), have become significant contributors to the SUD crisis in the United States [6, 12-13].

Many of these gaps result from inadequate or ineffective policies at the local, state and federal levels. Comparisons of selected state health systems and policies surrounding SUD usage (utilizing the Mental Health America opioid crisis response effort ranking) illuminate how these disparities may be driven by policy gaps that reflect or may contribute to disparities in response to and recovery from the opioid epidemic. For example, New York ranks 14th in the nation for health care (reflecting solid screening efforts, good availability of opioid treatment programs, recovery residencies, and practitioners, and population usage

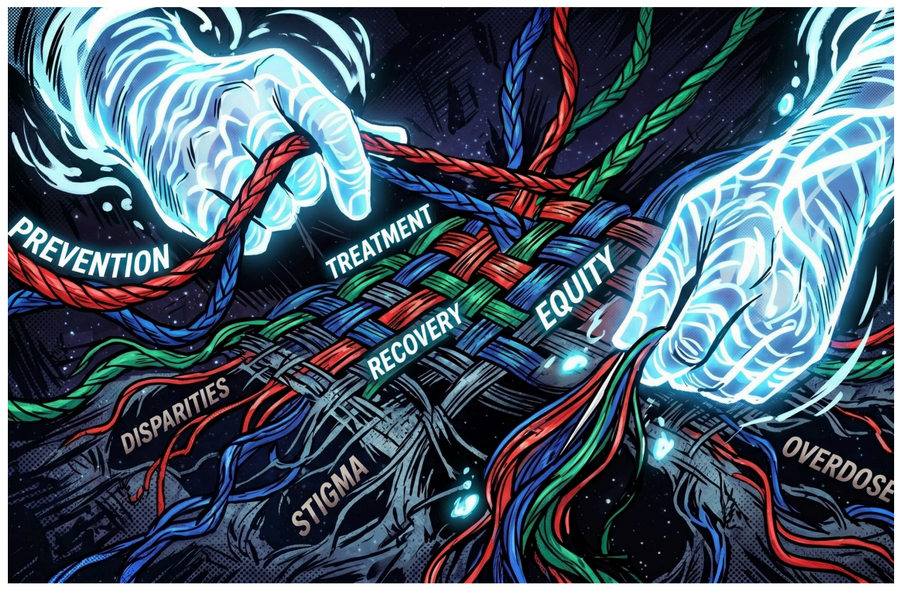
and risk numbers on the lower end), 8th for public health (representing widespread naloxone availability and public awareness of prevention efforts), and 6th for jail-based prevention efforts (representing provision of overdose reversal and medical treatment to detainees upon release) [14]. These are reflected in New York's 43.84% decline in reported drug overdose deaths (highest in the nation, 5th-highest if predicted deaths used) according to CDC data [15]. By comparison, states with more mixed rankings like Arkansas (45th in jail-based prevention and 44th in healthcare, but 1st in public health and 6th in school-based prevention efforts) and California (43rd in public health, 41st in health care, 35th in school-based prevention but 11th in jail-based prevention) had more modest declines (12.36% decrease for California and 6.75% decrease for Arkansas), and sometimes even increases; Colorado, which ranked 42nd for public health, 31st for health care, and 14th for jail-based prevention, was one of four states with a reported and estimated increase in overdose deaths [14, 15].

Nuances exist in this comparison: several confounding factors contribute to increases and decreases, underreporting disrupts counts across the nation, mismatches between MHA rankings and overdose data, like Massachusetts, and certain states exhibit higher rates and lower decreases due to being at different points in the drug epidemic[14, 15]. However, this analysis appears to reflect a need for strong performance across prevention, treatment and education efforts by governments and healthcare systems to effectively combat the SUD epidemic. The gaps identified above may manifest in comparing states' rankings; California and Arkansas' poor rankings in opioid health care potentially reflect a need for increased access to treatments compared to New York, for example. Across other substances beyond opioids, disparities in outcomes and prevention/treatment efforts also may be driven by differences in state policy.

Ethical Drivers to Overcome the SUD Epidemic

Policymakers and healthcare systems have an ethical duty to close these gaps. As the above analysis demonstrates, connections may be drawn between the strong performances of certain states (eg, New York and Rhode Island) in MHA overdose prevention rankings and major declines in overdose rates and deaths in these states. Considering the ethical duty of policymaking toward the common good, particularly in healthcare contexts [16], and given the public health burden SUDs have exerted on Americans and communities over the past years [1-3], evidence-based solutions must be developed and implemented across governmental levels with input from patients and providers to address the SUD crisis and close the outcome gaps between states.

For example, approaches like expanding access to drug-checking equipment (e.g., fentanyl test strips), which are endorsed by research and expert policy recommendations, must be



implemented in a targeted fashion, supporting states struggling most with SUDs and learning from communities that are successfully using this equipment. Simultaneously, policymakers must engage with principles such as nonmaleficence (doing no harm) and autonomy when drafting and implementing health policy, ensuring that policies aimed at combating the SUD epidemic are not used to harm the communities they are meant to benefit [16]. Policymakers should also strive to address factors such as social determinants of health that contribute to public health crises, including closing gaps in access to education about SUDs and breaking down stigma surrounding SUDs in society [16, 17]. This process must be carried out collaboratively, with communities and states successfully combating SUDs, understanding what helps them overcome them, and sharing policies and strategies with other communities to support SUD prevention and treatment efforts nationwide. Through robust engagement with scientific and public health evidence and research efforts and informed policymaking and advocacy, America can accelerate its pursuit of a future without SUDs.

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The Unequal Weight of Pain: Bias in Addiction Treatment

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A teenage girl is prescribed opioid painkillers after a routine procedure to remove her wisdom teeth. At first, the medication helps dull the
pain, but eventually, the relief it provides becomes something she begins to crave. What started as treatment slowly turns into dependence, and over time, that dependence leads her to heroin. Years later, she finds herself alone in a dim hotel room, her body weakened, her heart racing from drug use. This is the story of Tracey Helton Mitchell, a former heroin user who later became an addiction specialist and spoke honestly about her own path through heroin and into recovery. But her story is not solely her own [1].

This isn't unusual. Every year in the United States, more than 100,000 people die from drug overdoses- yet most people struggling with addiction never receive meaningful treatment [2]. That gap says a lot. Addiction touches every kind of community, but who gets treated, and how, depends heavily on things like race, income, where you live, and whether you can access healthcare [3]. Science can tell us what addiction does to the brain. What it can't explain is why some people are left to fight it alone- or why so many are treated with shame instead of care. Although addiction affects every community, access to treatment remains deeply unequal, shaped by systemic barriers such as race, income, geography, and policy rather than medical need alone.

The Science of Addiction

Addiction isn't a moral failing or a lack of self-control- it's a chronic, relapsing brain disease. According to the National Institute on Drug Abuse, it disrupts the parts of the brain responsible for reward, stress, and decision-making, which makes it genuinely hard for people to change their behavior, even when they want to. And the longer substance use continues, the more the brain adapts around it- quietly rewiring itself in ways that make compulsive use feel like the only option [4].

At the center of this is dopamine- a chemical the brain uses to signal reward and reinforce behavior. Normally, it nudges us toward things we need to survive, like food or connection. But addictive substances flood the system with far more dopamine than anything natural can produce. Over time, the brain comes to treat the substance like a basic need- something closer to survival than a choice. And as it adjusts to the repeated surges, it takes more and more of the substance just to feel normal, pulling the person deeper into dependence [5].

Stress and trauma make all of this harder. Research on adverse childhood experiences shows that people who grow up surrounded by chronic stress or instability are significantly more likely to develop substance use disorders later in life. That's because prolonged stress changes the brain- particularly the systems that handle fear and reward- leaving people more vulnerable to addiction. In that sense, addiction doesn't occur in a vacuum. For many people, it's also a response to pain they were never given the tools to process [6].

Understanding addiction means letting go of the idea that it's simply a choice gone wrong. It's the result of real, measurable changes in the brain, shaped by chemistry, by trauma, and by circumstances that many people never had control over. That doesn't mean recovery is impossible. It means that how we respond to addiction matters. When we treat it as a character flaw, we make it harder for people to ask for help. When we treat it as what it actually is- a medical condition, often rooted in pain- we open the door to something more just. Compassion isn't just the humane response. It's the effective one.

Inequality, Stigma, and Disparities in Substance Abuse

Addiction doesn't discriminate- but the healthcare system often does. Access to effective treatment, particularly medication-assisted treatment (MAT), the current gold standard for opioid use disorder, is profoundly unequal. Black and Hispanic patients are consistently less likely than white patients to receive these medications [7]. In some cases, Black patients are up to 80% less likely to receive treatment after a high-risk event like an overdose [8]. And it doesn't stop there- minority patients are also less likely to be referred to treatment or followed up with after an emergency room visit [9]. These aren't random gaps. They're patterns, and they point to something systemic in the way care is (and isn't) delivered.

These disparities didn't appear out of nowhere- they were built over decades. When the crack cocaine crisis hit in the 1980s, devastating largely Black urban communities, the government's response wasn't treatment. It was punishment. The Anti-Drug Abuse Act of 1986 created a 100:1 sentencing disparity between crack and powder cocaine- meaning 5 grams of crack triggered the same mandatory minimum sentence as 500 grams of powder [10]. The consequences were staggering. Over 80% of those sentenced for crack offenses were Black, even though most users weren't [10]. Nearly 96% of people convicted of crack trafficking were sent to prison [11]. The message was clear: for some communities, addiction was a crime to be punished, not a condition to be treated.

The contrast with the opioid epidemic, which has hit white, rural, and suburban communities hardest, is hard to ignore. This time, the dominant response has been compassion. Policymakers focused on expanding treatment, prevention, and recovery programs. Reforms like the First Step Act [12] aimed to reverse harsh sentencing and invest

in rehabilitation. The framing shifted from “criminal” to “patient.” But even within this more humane response, access to care has remained unequal. The damage done by decades of punitive policy lingers in healthcare systems, in public perception, and in who is still left behind.

Structural Barriers to Care

Even when addiction is treated as a health issue rather than a moral one, getting actual care is still out of reach for many people. Cost, insurance, provider availability, and geography all quietly determine who gets help and who doesn’t. More than 60% of rural counties in the U.S. don’t have a single physician authorized to prescribe buprenorphine, which is one of the most effective medications for opioid use disorder [13]. That means countless people are either driving hours for treatment or going without it entirely. And even where services exist, money gets in the way. People in low-income communities are more likely to be uninsured or underinsured, making medications, counseling, and long-term care genuinely unaffordable [14]. Insurance restrictions- things like prior authorization requirements and limited coverage for substance use treatment- add another layer of delay, often pushing people further from the help they need.

Then there are the everyday obstacles that rarely make it into policy discussions. Many treatment programs require frequent visits- sometimes daily- but that’s simply not realistic for everyone. If you don’t have a car, live far from public transit, or work a job with no flexibility, showing up consistently becomes its own barrier. Research confirms that transportation is one of the biggest reasons people delay or skip care, especially in low-income and rural communities [15]. One in five adults without reliable transportation reports going without necessary healthcare altogether- and that burden falls hardest on low-income individuals and communities of color [16].

For people trying to get treatment, these obstacles can be the difference between recovery and relapse. Studies show that the longer someone has to travel for care, the less likely they are to stick with it, and dropping out of treatment significantly raises the risk of overdose [17]. One analysis found that more than a quarter of people (~26%) couldn’t reach an opioid treatment program within three hours, and those who could often faced nearly an hour of travel each way, just to get there [18]. Urban areas aren’t exempt either; gaps in public transit and the cost of getting around create their own walls. In rural regions, the problem is even starker, with some people crossing county lines just to access basic care [17].

These challenges hit hardest for people who are already struggling economically, locking many into cycles of untreated addiction with no clear way out. The result is a system where getting help has less to do with how much someone needs it and more to do with whether

they have a car, a flexible schedule, or a treatment center nearby. That's not a series of unfortunate coincidences- it's a pattern of structural disadvantage that consistently leaves the same populations behind and widens an already deep gap in who recovers and who doesn't.

Ultimately, addiction does not discriminate. The systems built to treat it do. Who receives treatment- and how- has never solely been a medical question. It has always reflected an implicit judgment about who is worth helping first. That reality forces a broader question: what kind of healthcare system do we want to build- one that determines worthiness before offering care, or one that treats addiction as a medical crisis regardless of who suffers from it? Addiction outcomes are shaped not only by biology, but by policy, by access, and by the empathy embedded within the institutions designed to respond to suffering. If we are serious about confronting the addiction crisis, then equity cannot remain secondary to treatment. Because when care is accessible, compassionate, and just, recovery becomes possible and lives are saved.

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