Abstract

This literature review compares the impacts of substance abuse policy on labor and public health outcomes in the United States and Norway. Specifically, their histories of substance abuse and criminal justice policies, workplace and parolee drug testing practices, and access to rehabilitative medications and programs (Opioid Substitution Therapy) in the general population and prisons are compared to determine what changes the US should make to its policies in order to optimize outcomes. This paper takes a focus on Opioid Use Disorder and OST because of the ongoing opioid crisis in the United States. Findings demonstrated that the US should eliminate workplace drug testing in non-safety sensitive positions, and that it should eliminate random drug testing for parolees. Additionally, research indicated that free or affordable access to OST is important to reducing overdose mortality for the general population, and that those in prisons should be able to access OST in order to prevent recidivism and general post-release mortality.

Introduction

In the United States, attitudes towards substance abuse are rapidly shifting. This year, marijuana has surpassed alcohol in terms of daily usage for the first time - with the rate of daily or near-daily usage almost tripling from 2008 to 2022. (Caulkins, 2024) While the positive effects of marijuana and other scheduled substances like ketamine, psilocybin, MDMA, etc. are becoming increasingly salient in terms of their therapeutic applications, substance abuse is still widely criminalized on the federal level. While society has largely adopted the understanding that addiction is a disease that harms one's psyche and relationships, nuanced policy approaches that provide addicts with the economic, medical, and community resources needed to recover simply do not exist at the level they need to - especially for criminals both in prison and on parole.

Additionally, patterns in workplace drug testing seem to indicate that the rate of positive drug tests is increasing for workers across the US, reaching its highest point since 2001 at 5.7%. Many employers are motivated to reduce or entirely eliminate drug testing requirements in order to hire enough workers to be competitive. (Quest, 2022) For example, in 2021, Amazon removed marijuana from its pre-employment drug screen for its warehouse workers, instead electing to treat marijuana use like alcohol use. (Amazon, 2023) Positivity in drug tests after workplace accidents has also grown at a uniquely fast rate, with post-accident positivity for synthetic opioid use being over 2.5 times higher than in pre-employment testing. These patterns are even more exaggerated for workers in federally mandated safety-sensitive positions (like construction workers, police officers, etc.) whose work performance impacts the safety of a proportionally larger number of people. (Quest, 2022) In the context of the opioid crisis, it is becoming increasingly obvious that access to medications for opioid use disorder (MOUD) is crucial to ensuring the safety of recovering users, along with preserving the safety of our communities and workplaces.

On the other hand, Norwegian workplaces typically do not perform drug testing, with the exception of safety-sensitive positions. (ILO, 2006) Despite this, rates of positive workplace drug tests in Norway are little over half of the United States', at 2.9%. (Lund, Bogstrand, and Christophersen, 2011) American overdose deaths occur at a rate that is 432 times higher than that of Norway's - which is seven times higher than it should be when accounting for population size. What Norwegian policies and attitudes towards substance abuse ensure that it ends up with more favorable labor and public health outcomes than the United States? Why is it that the United States lacks the systemic means for handling addiction? How could the United States change in order to develop more robust systems for changes in drug consumption habits?

In this paper, the United States and Norway will be compared in terms of their current and historical illicit substance policies, philosophies towards criminal justice, access to MOUD (specifically opioid substitution treatment (OST)) for the general population, workers, and convicted criminals, and drug testing for workers and parolees. Then, these similarities and differences will be connected to their associated labor and public health outcomes in order to determine which policies, ideologies, attitudes, etc. would produce the most positive impacts in the United States.

Methods

This literature review utilized a systematic approach to gather information on various American and Norwegian substance abuse policies, along with their impacts. The search strategy involved using Scopus to find studies and other literature using the keywords “Norway” or “United States” in combination with “drug policy”, “prison rehabilitation”, “drug rehabilitation”, “workplace drug testing”, “parole drug testing”, “opioid use disorder”, “medications for opioid use disorder”, “methadone”, “buprenorphine”, and “opioid substitution therapy”. The initial search on Scopus yielded a wide range of peer-reviewed literature that was then narrowed down based on relevancy to the research question. Each of those articles were then parsed for relevant details and references to other works. Those other works were then analyzed in a similar fashion, and so on and so forth.

If there were particular questions that could not be answered through the previously described process, then Google Scholar and other search engines were consulted for resources that could provide the right information. Throughout this entire process, accredited studies, government documents, peer-reviewed reports, and reputable sources were prioritized in the selection of articles. Additionally, emphasis was placed on current publications to ensure that the most recent trends and changes were accurately captured in this review.

The reason why the United States and Norway were chosen for comparison is due to their large differences in criminal justice and labor philosophies, along with their unique histories prosecuting substance abuse. While both nations adopted a strict prohibitionist policy towards substance abuse in the 1960s and 70s, their approaches became more complex and divergent over the decades.

American History of Criminal Justice and Substance Abuse Policy

The War on Drugs was a campaign begun by President Richard Nixon in 1971. In his State of the Union speech, Nixon proposed a shift towards a more probationary, militaristic approach to stopping drug use. While the public reason for this shift was high rates of substance abuse among Vietnam veterans and soldiers, it was later revealed by one of his advisors, John Ehrlichman, that the Nixon presidency's main goal was to target groups they viewed as a threat: the anti-war left and black people. By making the public associate hippies with cannabis and black people with heroin and crack cocaine, the administration was able to disrupt and prosecute these communities without making their desires explicit. The War on Drugs, combined with already existing structural inequality and racism, produced higher rates of police brutality, longer prison sentences, etc. for black, Hispanic, and Indigenous people of color. For example, sentences for the possession of crack cocaine were 100x longer than sentences for the possession of cocaine. The former is a more impure version of the latter, and is therefore cheaper and more popular within black communities. (Eremin, 2022) These subtle and sinister means of reifying and amplifying structural inequality led to intergenerational impacts on these communities. If a child's parent is incarcerated, they are less likely to have the money and resources to access the education, healthcare, etc. needed to obtain economic mobility or a good quality of life. Additionally, they are more prone to feelings of despair and helplessness

that may also lead to substance abuse - therefore producing a cycle of poverty and addiction. While no one race has a higher probability of abusing substances, products of structural inequality like redlining, economic instability, lack of access to healthcare, etc. that disproportionately negatively impact POC leads to the production of more drivers for substance abuse. Specifically, redlining and racial poverty produced inner-city “drug ghettos”, where young black and Hispanic Americans joined organized crime groups to ensure some level of social status and financial stability. (Eremin, 2022)

Additionally, the administration aimed to produce a threat that would intimidate the electorate, therefore ensuring that they would be more likely to agree to controversial policy decisions and provide their support to the presidency. This all occurred in the context of America’s highly controversial participation in the Vietnam war, where Nixon continuously lied to the American public about the effectiveness of American presence and attacks on North Vietnam. Many Americans believed that the indiscriminate bombings and attacks on not just Northern Vietnam, but also Cambodia, Laos, etc., were morally incorrect and unnecessarily risked the lives of American soldiers. Therefore, the Nixon administration desired a threat that would compel the electorate to put him back in office for a second term, and that threat was drug use.

Clearly, that strategy did not work out for Nixon due to his participation in the Watergate scandal. However, his ideas continued to live on through his successors, with the Reagan administration taking the War on Drugs to new heights. Notably, this period saw an increase in domestic drug-related crimes, along with the partial destruction of the legal barrier for sentencing between “hard” and “soft drugs”. Additionally, Reagan turned much of his focus towards halting the flow of drugs into the United States from other countries. One of the largest scandals of Reagan’s presidency was the Iran-Contras scandal, where American authorities accused Nicaraguan officials of conspiring with drug cartels to provide them with sustainable

drug shipment routes and entry into the United States. However, it was later revealed that drug trafficking was being facilitated by the Contras, a criminal insurgency group funded by the United States. (Eremin, 2022) Another notable contribution from the US administration at the time was Nancy Reagan's "Just Say No" campaign, along with the DARE (Drug Abuse Resistance Education) program. Both targeted students in schools and aimed to promote complete drug abstinence through education about the harms of drugs. However, the strict, prohibitionist mindset promoted by the programs, combined with the lack of actual drug education provided, led to a sometimes adverse effect on student populations. (Eremin, 2022)

The great focus on the criminalization of street drugs and drug importation produced a great blind spot that prevented the American government from appropriately preventing or responding to the opioid crisis. Beginning in the mid-1990s, the opioid crisis largely stemmed from the aggressive over-prescription of Purdue Pharma's OxyContin. Driven by a desire for profit, Purdue lied to doctors and patients and told them that OxyContin was less addictive than other opiates. Additionally, politicians would accept donations from opioid manufacturers to ensure the legal protection of OxyContin, and many Drug Enforcement Agency (DEA) Agents went on to join the pharmaceutical industry after their initial employment. (Koh, 2022) Multiple layers of corruption and systemic failure produced a growing population of people addicted to prescription opioids - many of whom ended up having to seek out opioids on the street when their dosage no longer proved sufficient. The opioid crisis is still ongoing, with over 560,000 Americans having died from an opiate overdose since the crisis began. Currently, the crisis has reached its fourth wave, characterized by the increasing prevalence of fentanyl, an opiate over fifty times more potent than heroin, in other drugs - specifically stimulants like cocaine and methamphetamine. (Arditi, 2024)

The War on Drugs continued through the Clinton, Bush, and Obama administrations - with it officially ending in 2012 with Colorado's legalization of marijuana. Despite lasting through several administrations, each with different ideological perspectives, the War on Drugs was largely a failure due to the unwillingness of officials to change its prohibitionist and punitive ethos. Instead of preventing drug use, the war simply made it harder for drug users and addicts to experience economic and social mobility, along with worsening racial violence. (Eremin, 2022)

The American criminal justice philosophy is best described as being retributive first - or focusing on punishing the criminal in accordance to the degree of harm they caused to others. While there are other legs of this philosophy, such as deterrence and incapacitation, it is clear that punishment, rather than rehabilitation, tends to be the main goal of American prisons. (Small, 2013) Currently, there are over two million people incarcerated in the United States - a number that has grown fivefold over the past four decades. Additionally, black youth are four times more likely to be sentenced than their white counterparts, reflecting the clear racial disparities and dynamics underpinning the criminal justice system. (The Sentencing Project, 2024) The primary social cleavage of American society is that of race, and the foundation of the nation, policing, and incarceration was built on slavery, racism, and anti-blackness. Instances of police brutality against black citizens have become increasingly salient over the past decade, ensuring that the impacts of this structural violence are twofold at the source: violence in policing, and violence in sentencing. (Butler, 2020)

Norwegian History of Criminal Justice and Substance Abuse Policy

While dealing and possession have both been illegal in Norway since the early 1900s, drug use was not effectively criminalized until 1964. The primary reason for this shift was a change in the drug user demographic in Norway in the mid-60s. Instead of being primarily composed of a

small group of adults, middle-class youths began to use drugs at an increasing rate. This symbolized a risk to future society for Norwegian who did not desire the social normalization of substance abuse. Therefore, penal measures were used as the ideal tool to achieve the goal of a drug-free society - a goal that was present in Norwegian state documents until 1996. However, as the suffering of drug users under punitive control became more apparent, the general acknowledgement of addiction as a public health issue led to a more treatment-based, rehabilitative approach that led to the passage of harm-reduction focused policies. (Giertsen, 2012)

Currently, all controlled substances are considered illegal for consumption and distribution in Norway, except in the case of medical prescriptions. In 2018, a special committee was appointed to produce a comprehensive drug policy reform - however, their efforts to decriminalize personal drug use (or ownership of substances under a certain weight/quantity) were shot down in parliament 2021. While there is still hope that the bill will return for consideration, the status quo of complete prohibition will remain for the foreseeable future. (Arctander, 2021)

Despite the fact that Norwegian policies towards substance abuse are strictly probationary, their criminal justice attitudes are largely rehabilitative - especially in the case of inmates with SUDs or drug-related charges. In 2010, 40% of all releases occurred within a month, 72% within three months, and 87% within a year. The longest sentence that can be given to criminals is 21 years, with the exception of those who’ve committed particularly heinous war crimes, like genocide; for war criminals, the longest possible sentence is still only 30 years. However, penal attitudes have not always been this way. A shift towards shorter, more precise sentencing and rehabilitative approach began in the 1970s with the abolition of preventative detention and forced labor.

These reforms were proposed by KROM, or the Norwegian Association for Penal Reform, an (Mathiesen, 1974)

Despite previous reforms, Norwegian recidivism rates remained high - 70% of prisoners would commit another crime within two years of release. Much like the current situation in the United States, long sentences and poor conditions in large prisons led to assaults, riots, and violence. The resulting psychological despair disincentivized prosocial behavior after release, therefore resulting in higher recidivism rates. This spurred the next notable push towards rehabilitation in the 1990s with the abolition of indefinite life sentences, along with the establishment of a maximum sentence of 21 years. Additionally, prisons became decentralized, with there now being 58 total prisons, each with an average of 70 cells. These correctional facilities are typically based in or near the prisoner's community, which allows for them to remain close to family and friends. Most Norwegian prisons allow three visits for prisoners each week, including conjugal visits with spouses. This is to ensure that the prisoner has a community to return to after release to support them in finding a job, obtaining an education, etc. (First Step Alliance, 2022)

While the explicit purpose of Norwegian prison is punishment in the status quo, multiple declarations and policies made by the national government have posited a successful return to society as the main goal of incarceration. For example, the Soria-Moria Declaration of 2005 - an agreement made by the Labor Party, the Socialist Left Party, and the Center Party - acted as a governmental guarantee of return to society for prisoners through the provision of rehabilitation and social welfare services both during and after incarceration. This is because Norwegian criminal justice philosophy views the prisoner as the responsibility of their municipality prior to, during, and after incarceration - meaning that their rights as a citizen of Norway are preserved during their time in prison.

Workplace Drug Testing

Drug use in the workplace has been proven to negatively impact measures of productivity, such as producing higher rates of turnover and absenteeism. (Normand, Lempert, and O'Brien, 1994) (Parish, 1989) In the United States, urine drug tests in the workplace skyrocketed in popularity in the early 1990s due to the diminishing costs of administering tests combined with the probationary ethos created by the Reagan and Bush administrations' War on Drugs. (Normand, Lempert, and O'Brien, 1994)

Traditionally, drug tests in the workplace have had three key issues. Firstly, employees could perceive tests as a violation of their privacy - especially when urine and oral tests may involve the physical presence and direct supervision of the tester. Secondly, drug tests may have limited accuracy when performed by private institutions who may not follow the strict protocols associated with processing a sample. Finally, workplace drug tests screen for the presence of illicit substances in one's urine, saliva, etc., which may remain for several days or weeks after their use. (Normand, Lempert, and O'Brien, 1994) Therefore, the drug test would reflect one's general drug use, rather than their drug use in the workplace. Seeing as marijuana is being legalized for recreational and medical use on a state by state basis, amphetamines like Vyvanse and Adderall are legally prescribed to treat ADHD, ketamine nasal sprays are legally prescribed to treat depression, etc. - employers can no longer even differentiate between legal and illegal substance abuse in their screens, let alone substance abuse on the job. The combination of these three factors may lead to workers developing a sense of resentment towards their employers, along with lower morale. While there needs to be more research done on this topic, it's relatively easy to understand how drug tests may make workers feel as if their employer does not trust them, therefore creating distance between a subordinate and their supervisor. This may disincentive productivity, or produce unproductive anxiety.

Currently, 85% of employers in the United States perform drug tests, and there are no real legal or social restrictions determining who is allowed to administer tests or how results should impact employment. (TeamStage, 2024) As previously mentioned, the Drug Free Federal Workplace Act of 1988 is the only piece of federal legislation that requires federal employers to drug test their employees (and some federal contractors). The Department of Transportation also does require that employees in safety-sensitive positions (i.e.: aviation, trucking, etc.) are drug tested, and some states have individual laws and regulations for drug testing. Currently, 40.6% of American workers would be fired for the first positive drug test, and only 18.2% of them would be referred to counseling instead. Additionally, black and Hispanic workers were more likely to be fired for a positive drug test than their white counterparts, indicating systemic discrimination and the associated loss of economic mobility, along with the perpetuation of their addictions due to a lack of treatment. (Oh et. Al, 2023)

However, despite the ultimate goal of drug testing being the creation of a drug-free workplace, American positive workplace drug tests are on the rise. The legalization of cannabis has been a large driving factor in the increase of positive drug tests, with it surpassing alcohol in daily use this past year. (Caulkins, 2024) 5.7% of workplace drug tests came back positive in 2022, meaning that the rate of substance abuse in the US is rising too high for employers to simply turn away everybody who fails a test - as seen in Amazon's decision to no longer test its employees for cannabis use. (Quest, 2022) (Amazon, 2023) Nearly 10% of employers planned to remove marijuana from their drug testing panels in 2021 because of its legalization in multiple states. (TeamStage, 2024) This is just one example of how changing social attitudes and laws regarding drugs are also making it more difficult for employers to place a strict ban on substance abuse. At the end of the day, it's becoming more difficult for firms to fire everybody who fails a drug test, or to only hire everybody who passes it.

The Americans with Disabilities Act (ADA) protects an employee's use of legally prescribed controlled substances, like Adderall (amphetamines) for ADHD, or Spravato (ketamine) for depression. (US EEOC, 2016) However, drug test proctors often screen for a series of substances without taking an employee's prescriptions into consideration. This could lead to the false termination of employment for workers who rely on legally prescribed controlled substances for treatment. However, this has yet to become an issue large enough to warrant academic attention or research.

There generally needs to be more research done on the impacts of workplace drug testing on labor outcomes, especially as the rate of positive drug tests are rising rapidly in the United States. Firms must adjust to shifting attitudes towards substance abuse in a way that allows them to maintain access to a decently-sized and productive labor force.

On the other hand, Norwegian employers generally do not drug test their employees, with the exception of those with safety-sensitive workplaces. (ILO, 2006) Therefore, only about 2,500 of the 4.5 million inhabitants in 2022 were tested for substance abuse at work. Additionally, it appears that general interest in performing workplace drug tests have been declining in recent years. (EWDTS, 2022) Currently, only 2.9% of Norwegian employees have tested positive for illicit substance abuse. (Lund, Bogstrand, Christophersen, 2011) However, this is likely due to the fact that those in Norwegian safety-sensitive positions are less likely to abuse substances because they know they are going to be tested. Similar to the United States, alcohol seems to be the most prominent substance abused by Norwegian employees - with hangovers being the largest detractor from productivity. (Gjerde et. Al, 2010) Because drug tests are so uncommon in Norway, there is a lack of research on how the non-existence on drug testing impacts workers in comparison to other nations like the US where testing is prominent. Ultimately, it can be

assumed that a great majority of Norwegian workplaces circumvent the issues previously described through their lack of drug testing.

Parole Drug Testing

Ideally, the primary goal of parole should be to reintegrate the prisoner into society, therefore making prosocial and labor/educational outcomes incredibly important to measuring its success. American drug testing for parolees and probationers is typically used to surveil their actions, ensure adherence to drug treatment, or detect potential use in a testing and sanctions program. In the United States, drug testing in criminal justice settings is generally very common, with a great majority of supervising agencies including drug tests after the release of drug offenders.

In theory, there are a handful of ways parolee drug testing could impact employment and educational prospects. Firstly, the manner in which tests are administered or punished can impact a parolee's perception of sanctions for using drugs, therefore incentivising or disincentivizing their use. If tests are conducted very rarely or without frequency, parolees may perceive that their drug use is not considered important by their supervising agency or officer. Additionally, a lack of punishment for a positive drug test or a regular user successfully subverting the system and receiving a negative test may also incentivize regular drug use due to a lack of sanctions. (Kilmer, 2007)

Secondly, increased testing may both harm and help the relationship between parolee and parole officer. Frequent tests may increase points of contact between the two parties, therefore enabling the officer to more easily develop a relationship with the parolee and "sell" them programs and services that may help them find a job or develop more prosocial behaviors. On the other hand, constant testing may make the parolee feel like their officer does not trust them and that they are always being monitored, which may harm their relationship. Additionally,

testing and sanctioning helps the officer set a precedent for how seriously they may punish other offenses committed by the parolee, therefore deterring noncompliance. (Kilmer, 2007)

Thirdly, drug tests may be disruptive to any work, training, or schooling the parolee receives by directly removing them from these spaces whenever a test is scheduled. If drug tests are spontaneous or random, the employee will not be able to plan around it and may potentially have to leave their school or workplace during an important event or assignment. Finally, if a parolee is temporarily detained due to a positive drug test, they will not be able to return to prosocial behavior for a prolonged period of time. This disrupts their ability to reap the economic and social benefits of having a job or receiving an education. (Kilmer, 2007)

This may trigger the fourth impact of parolee drug tests, which is sending potentially negative signals to job contractors and employers. If an employer knows about one's drug testing, they may be less inclined to hire the parolee due to the perceived or actual disruption to workflow and productivity caused by scheduled tests, along with the generally negative social perception of drug abusers as being unproductive, unsafe, etc. However, some employers may perceive drug testing as a positive if they believe that it would help keep the parolee off of drugs. Furthermore, many of those who are able to receive jobs immediately after prison rely on personal networks of friends, family, etc. in order to find opportunities. However, those connections may make less of an effort to find jobs for the parolee if they know about the parolee's drug testing, which may harm their perception of the parolee for the previously listed reasons. (Kilmer, 2007)

Similar to the theoretical impacts of parolee drug testing, the real-life impacts of tests on prosocial labor and education outcomes in the US are somewhat mixed. In the RAND ISP programs in the late 1980s, smaller caseloads, increased contact with officers, random drug

testing, etc. did not reduce recidivism and increased proclivity for technical violations. (Petersilia and Turner, 1993) This potentially could've been caused by a larger volume of contact increasing the probability of the parolee committing a technical violation like missing a meeting with their officer, missing a curfew, etc. In the Maricopa County Drug Court Experiment, probationers who received a higher volume of testing were 33% more likely than those in the low or no testing groups to receive a technical violation for failing to appear for a meeting or test (absconding). This is potentially because regular drug users in the high frequency group wanted to avoid detection and sanctions from a positive test. This could've negatively impacted their ability to engage in prosocial behaviors because an excess of technical violations could end their parole and force them back into prison. Additionally, those in the high frequency group were 50% more likely than those in the low or no testing groups to be arrested for a new drug charge, and only 46.7% of them had some type of full-time employment within the next year (compared to 60% for those with no testing). (Kilmer, 2007) In the California Youth Authority Parole Experiment, failed drug tests generally came with no sanctions - however, higher levels of testing led to poorer parole outcomes and an increase in non-drug arrests. It was found in this study that not being assigned to drug testing reduces the probability of not being employed or receiving an education by 11% for the first month post-release. (Haapanen and Britton, 2002)

While outcomes are mixed, it appears that there is generally a correlation between higher rates of (specifically random) drug tests and poor criminal, labor, and educational outcomes for parolees. It appears as if it is a similar story in Norway in terms of post-release addiction treatment, where treatment is generally good, but has its downsides. Norwegian parole officers oversee the creation of pre-trial reports, along with overseeing community sentences (alternative for sentences less than a year long) that may involve things like community service, treatment programs, meditation, etc. Additionally, while they supervise those who were recently released from prisons, parole officers do not oversee aftercare post-release or after the end of a

community sentence. This responsibility typically goes to the Drug Court service, and tends to be more focused on treatment and reintegration. (ICPS, 2008) The Norwegian Drug Court program exists as a full or partial alternative to jail time for drug offenders, where in exchange for being able to remain in their communities, prisoners must participate in addiction treatment and rehabilitation. (Seim, 2018) This entails things like therapy, medication, etc., and offenders who violate the terms of their parole are sent back to prison, reprimanded, or placed under tighter supervision. (Seim, Dorum, NIADR, 2016) For example, when Norway was trying out an Electronic Monitoring model for parolees, they found it extremely important to send parolees back to prison immediately if they were caught doing drugs. This was largely to deter use in a less controlling environment, and to be consistent in order to set up a precedent. (Øster and Rokkan, n.d.) Ultimately, it is unclear as to whether or not officials perform random drug testing, but officials do at least perform drug testing and try to sanction parolees for violations. (Seim, Dorum, NIADR, 2016) It also appears that, within programs, officials try to be consistent with sanctions in terms of which events trigger them, along with their severity. But at the end of the day, Norwegian prisoners are oftentimes treated on a case-by-case basis, where various tactics may be used to obtain reintegration into society. (Seim, 2018)

Parolees in Drug Court programs are typically made to replace drug habits with work or education, which is in line with Norway's former government's "reintegration guarantee" - or a guarantee that individuals coming out of prison will be able to have a job, reintegrate into their communities, etc. (Seim, 2018) Ultimately, while this policy sounds very good in theory, it is ultimately difficult to execute in practice due to the great administrative struggles that come with it. The work of resettling prisoners is dispersed throughout different authorities, where Drug Courts and social services typically handle treatment, and local municipalities handle things like housing. Even within these branches, individuals may have different opinions on how to handle addiction, which is a highly politicized issue. Additionally, handling the treatment and housing of

recently released prisoners is burdensome and difficult. As a result, many prisoners end up homeless or couch surfing in their first days coming out from prison, therefore resulting in their recidivism. (Larsen and Ødegård, 2024) Some prisoners even consider participation in Drug Court programs as being harsher than prison time, largely due to the long-term commitment to work, treatment, and monitoring within the community. (Seim, 2018) While it may be good that the Norwegian government tends to be more hands-on with ensuring access to work and reintegration, their approach produces a series of new issues. It can be easy to idealize the Norwegian criminal justice system due to its more rehabilitative, egalitarian ideals. Ultimately, this should be avoided - while Norway acts well as a model to take good practices away from, it also acts as an example to learn about which practices to avoid.

Case Study: Covid-19

During Covid-19, substance abuse increased sharply in both the United States and Norway, with the former seeing a 46.8% increase in overdose deaths, and the latter seeing a 57% increase 2-3 months after the peak of pandemic-related disruptions to movement. This spike could be attributed to many causes, including psychological distress from the lockdown, the disruption of healthcare services (like a lack of access to addiction treatment programs and medication), lack of access to harm reduction services, etc. Additionally, the “iron law” of prohibition and drug markets dictates that any efforts to crack down on or forces that hamper illicit drug trade will ultimately lead to the production of stronger formulations that are easier to transport because they are compact. Due to a reduction in travel capacity during the pandemic, drug traffickers were motivated to produce more potent drugs that they potentially could later cut with a cheaper substance; or, in the case of the American increase in fentanyl distribution during the pandemic, the stronger formula is cheaper itself. In Norway, fentanyl isn’t commonly used, so heroin of a higher purity was distributed during this period. (Friedman and Gjersing, 2023)

However, despite the causes of this spike being very similar in both nations, their approaches to solving this crisis were extremely different and led to divergent public health outcomes. In Norway, overdose death rates returned to baseline after 4-5 months. However, in the United States, overdose death rates were maintained at the same level until the end of 2020. Why was this the case? Access to universal healthcare came with affordable access to treatment for addictions, along with harm-reduction techniques like safe injection sites, ensured that those in Norway were better equipped to bounce back from drug usage. Additionally, a generally better pandemic response and a smaller incarcerated population also left Norway in a better position to avoid overdoses and their triggers. (Friedman and Gjersing, 2023)

While this pattern is clearly evident for drugs writ large, Norway's superior addiction treatment systems are the most evident when it comes to handling Opioid Use Disorder - which is what this paper will focus on next.

Why OUD?

This paper will specifically focus on Opioid Use Disorder, along with access to medication and treatment for it. The reason why this focus is taken is because OUD has been a massive problem for both the United States and Norway in the past decade, largely due to the opioid crisis and Covid-19 pandemic. Additionally, the recent introduction of fentanyl and other synthetic opioids into the drug market has increased the dangers of opioid overdose. Because of this, fentanyl and other synthetic opioids are responsible for 70% of all drug overdoses. (DEA, 2022)

The American opioid crisis has had four phases, with the first being the abuse of prescription opioids like OxyContin in the mid-2000s, the second being the abuse of heroin after users' tolerance to opioids rose (or they desired heroin's lower prices) in the 2010, the third being the

use of synthetic opioids like fentanyl after users' tolerance rose (or producers cut heroin with fentanyl because it's cheaper) in 2013, and the fourth being the abuse of fentanyl with stimulants after 2019 - often times unintentionally because the user's methamphetamine, cocaine, etc. was cut with fentanyl. (Friedman and Shover, 2023). Each wave was more dangerous than the last, with overdose deaths increasing from wave to wave. Simultaneously, healthcare and social frameworks were not capable of keeping up.

Additionally, the risks of OUD do not just stop at overdose, with the practice of needle sharing for IV drugs like heroin increasing the probability of Hepatitis C exposure, among other bloodborne diseases like AIDS. OUD, like other addictions, will also take an individual away from their loved ones and society, thus producing a cycle of behaviors that may isolate an individual and promote further use. It can also prevent one from securing stable employment and consume a large quantity of their earnings, therefore stunting one's economic mobility.

What is OST?

The largest risk to individuals receiving treatment for OUD is relapse. When an individual returns to using a substance after a period of abstinence, their tolerance decreases. If cravings and withdrawal symptoms drive one to relapse and use again, they may choose to consume the same dose they did when they were actively using. This may lead to an overdose, which could end in death. Opioid Substitution Therapy (or Opioid Maintenance Therapy) is a form of Medication for Opioid Use Disorder (MOUD) that has been proven to reduce cravings and withdrawal symptoms, therefore reducing the probability of relapse, overdose, and death for users. Additionally, the use of maintenance medications eliminates the need for one with OUD to obtain or inject heroin (or other opioids), therefore reducing the probability of criminal activity (i.e.: stealing in order to obtain opioids) or the transmission of HIV. By securing one's health and safety, OST has been extremely helpful in providing patients with a sense of normalcy, along

with the opportunity for socioeconomic advancement. (Harris, 2016) The two primary medications used for OST are Methadone and Buprenrophine, and they work by occupying and activating opioid receptors in the brain either completely or partially (respectively). In doing so, maintenance medications prevent withdrawal symptoms without producing a euphoric high - therefore curbing their addictive potential. The former is a schedule II drug while the latter is a schedule III drug because of their different potentials for abuse. This informs differences in treatment supervision and strictness. (US GAO, 2016)

Methadone has been used to treat opioid dependency since the 1950s, and it is dispensed through specialized, long-term opioid treatment programs. Because Methadone is a complete opioid agonist, it has a higher potential for abuse. (Harris, 2015) Therefore, patients typically must travel to the clinic on a daily basis to take their dose under medical supervision for months, or even years. Close supervision, combined with the bitter, liquid form Methadone is provided in, is meant to prevent patients from smuggling the medication out of treatment centers for abuse.

On the other hand, Buprenorphine was the first medication approved by the FDA for prescription by certified physicians through the Drug Addiction Treatment Act in 2002. (Malandro, 2005) As a partial opioid agonist, Buprenorphine's potential for abuse is relatively limited, meaning that patients do not need to attend their opioid treatment program daily. While the frequency of treatment administration varies by clinic and stage of treatment, patients will typically only have to visit their treatment center once a week or less. Take-home treatments may take place later in the phase if the patient is deemed as being trustworthy and unlikely to abuse the substance. (ASAM, n.d.) This increases patients' ability to hold down a job, receive an education, etc., which generally improves their labor and economic mobility outcomes in the long run.

Suboxone is a combination product made up of Buprenorphine and Naltrexone, an opioid antagonist which blocks the activation of opioid receptors. Buprenorphine is the primary active ingredient in the medication, with the Naltrexone only being activated when the pill is tampered with or crushed up for misuse. (Recovery Care, n.d.)

OST Access for the General Population

In the United States, access to buprenorphine and methadone have traditionally been dictated by one's income and race. Buprenorphine is typically more accessible for white individuals with private insurance, while methadone is usually more accessible for Black and Hispanic people of color who are publicly insured. (Mitchell, Curtin, and Magliocca, 2023)

Because methadone treatment requires daily attendance at the clinic and higher levels of monitoring, those receiving it have significantly limited economic and social mobility in comparison to those receiving buprenorphine. It becomes difficult to hold down a job or be a full-time student if patients need to devote hours traveling to, receiving treatment in, and being monitored at the clinic. This replicates and amplifies both general income and racial inequality by restricting the economic mobility of black and Hispanic Americans, along with restricting the mobility of those who are simply publicly insured or low-income. On the other hand, higher-income and white Americans are more likely to be privately insured and can receive buprenorphine from a doctor, which gives them the leeway to only have to travel to the clinic once a week or less. As previously stated, this makes it significantly easier for buprenorphine patients to receive an education or obtain a job - therefore improving their economic mobility and reinforcing racial and economic structural discrimination.

However, access to maintenance medication in the United States is shifting. While inequalities in access to OST due to income and type of insurance still remain, some data demonstrates

that access to both forms of maintenance medication are higher for segregated black and integrated white and black urban communities rather than segregated white communities in terms of distance. It is those living in rural areas that see the furthest distance from and largest lack of access to maintenance treatment. (Mitchell and Magliocca, 2023) Traveling several hours on a daily to weekly basis simply may not be sustainable for individuals living in rural areas, especially since those who are working on farms must be able to consistently attend to their crops, livestock, etc. On the other hand, other studies indicate that there are still physical distance barriers preventing minorities from accessing buprenorphine, so it is difficult to definitively say what the current status of treatment access is. (Amiri, Panwala, and Amram, 2023)

Individuals covered by Medicaid also face barriers to accessing OST on a state by state basis; only 52% of buprenorphine providers accept medicaid. This proves especially problematic in the context of rural providers being more likely to accept Medicaid than urban providers, along with the higher rate of public insurance used by BIPOC, low-income Americans. Additionally, while the Omnibus Bill eliminated DATA waiver requirements, which were the federal requirements for practitioners to submit a Notice of Intent waiver to prescribe medication, barriers to buprenorphine access remain. Currently, nearly every buprenorphine provider is at patient capacity, meaning that workforce limitations are the largest barrier to increasing access to the most mobility-conducive form of treatment. (Mitchell and Magliocca, 2023) These factors have led to only 22% of the estimated 2.5 million people in the USA with OUD receiving MOUD treatment, with 58% being non-Hispanic white and 58% living in large metropolitan areas. (NIDA, 2023)

Furthermore, while geographic accessibility is important for patients, it is not the only factor that goes into treatment adherence. Social determinants, like homelessness, food insecurity,

exposure to violence, etc. all indicate unmet health-related social health needs that can reduce one's health and use of healthcare services, like MOUD. This ensures that racial inequality still occurs on the medication adherence level, with black and Hispanic Americans having lower referral, induction, adherence, and completion rates of OST treatments than their white counterparts. (Mitchell and Magliocca, 2023) Racial economic inequality (and associated structural violence) ripples outwards and produces these impacts that harm the efficacy of MOUD treatment for communities of color on multiple levels. It could also be inferred that this effect also impacts those in rural areas, with many rural communities experiencing poverty, poor health and physical infrastructure, food insecurity, etc. The structure of MOUD access not only reifies economic structural inequalities for racial minorities, the economically impoverished, and those in rural areas - the inequalities it replicates also prevents those who are being discriminated against from properly adhering to and reaping the benefits of medication.

On the other hand, Norway provides universal healthcare to all of its citizens - therefore, economic inequality doesn't play a hand in access to MOUD. Initially, in the 70s and 80s, the provision of MOUD in treatment was largely rejected in Norway due to a strong belief in drug-free treatment, that the provision of OST would occur as a result of the lack of faith in recovering addicts' will to recover, and that methadone would produce life-long dependence on opiates. In 1994, a trial in Oslo demonstrated to officials that OST was effective in aiding heroin addiction recovery. (Skretting and Rosenqvist, 2010) Therefore, in 1998, OST was implemented as a Norwegian national program. OST is also nationally regulated through a universal guideline created in 2010, meaning that patients can receive free and standardized care for OUD from nearly every part of the country. (Gabrhelik et. Al, 2020) In 2019, there were approximately 9,000 high-risk opioid users in Norway, and 7,762 of them used OST by the end of 2019 - that's 86.2%. (Pedersen et. Al, 2022)

The racial makeup and racism present in Norway is fundamentally different from that of the United States, with 81.5% of the population being ethnically Norwegian, 8.9% being of other European descent, and only 9.6% being from other continents. (CIA, 2021) However, that is not to say that racism and structural discrimination do not exist in Norway. More research is needed to determine the manners in which racial structural inequality impacts the ability for racial minorities in Norway to access MOUD. Ultimately, Norwegian access to public healthcare precludes a large amount of the structural barriers to access seen in the US, therefore making it a large explanatory factor for the 64.2% difference in access to MOUD for documentend individuals with OUD between the two nations.

Because of the higher access to overall harm reduction and treatment combined with the significantly smaller level of access to synthetic opioids in Norway, only 18% of its 247 drug-related deaths in 2021 were attributed to synthetic opiates. Simultaneously, 66% of the US' 106,699 documented drug-related deaths were caused by synthetic opiates during the same time period. (Gumas and Baumgartner, 2023) Even accounting for population size, there were 5,509,591 Norwegians and 334,998,398 Americans in 2021, which made the American population size approximately 60.8 times larger than Norway's. (CIA, 2021) If the Norwegian drug overdose number was scaled up according to American population size, it would only be approximately 15,018 people. The quantity of drug-related deaths in the US was actually approximately 432 times higher than that of Norway's, making it approximately 7 times larger than it would have been had it been proportionate.

Accounting for synthetic opioid abuse, extrapolating from the previously stated statistics, approximately 45 individuals in Norway and 70,421 individuals in the US overdosed due to synthetic opioid overdose in 2021. Scaling up the Norwegian quantity of synthetic opioid overdose deaths to the American population size in 2021 yields a number of 2,736 total deaths.

The quantity of synthetic opioid related overdose mortality in the US was actually 1,565 times higher than that of Norway's, making it approximately 26 times larger than it would have been had it been proportionate.

OST in the American Workplace

While the ADA makes it illegal for an employer to make discriminatory employment decisions on the basis of prescription drugs, it is still perfectly legal for an employer to not hire a worker because they believe their daily methadone clinic appointments would prevent them from completing an adequate amount of work during the workday. (Hazle, Saxon, and Hill, 2021) This is problematic because, as previously stated, it produces structural inequality that negatively impacts black, Hispanic, Indigenous, and low-income Americans. However, on a more basic level, it forces workers to choose between receiving treatment or having a job - both of which they need to sustain themselves. As previously explained, those without private health insurance are more likely to utilize Methadone, indicating that they are likely already unemployed or do not have long-term or higher-wage employment. If the individual chooses methadone treatment over full-time work, it will severely limit their economic mobility and may prevent them from coming out of poverty if they are already impoverished. Psychological despair and perceived hopelessness may make one inclined to return to opiate abuse as a means of escape. On the other hand, if the individual chooses full-time employment over methadone treatment, they are significantly more likely to experience withdrawal symptoms and eventually relapse - therefore increasing the probability of their overdose and death.

In the United States, it has been documented that those in safety sensitive positions are especially vulnerable to OUD, and that their rates of opioid abuse are rising. Specifically, their rates of post-accident positive drug tests are exaggerated in comparison to the general population, with it increasing for safety-sensitive workers by 41.9% from 2017 to 2021,

compared to 26% for the general population. (Quest, 2022) This is because many of those involved in major workplace accidents are prescribed opioids to manage their pain during and after treatment. This increases their risk of OUD, and an increased tolerance from continuous use (or the price of prescription drugs, especially for those who are uninsured) can push a worker towards the use of illicit opioids. Therefore, the prevention or mitigation and eventual elimination of OUD is vital to the safety of these workers.

While the ADA protects an employee's use of prescription drugs, workers may not be able to take their medication if it is deemed a risk in a safety-sensitive position. Many American construction workers are not allowed to take buprenorphine, seeing as they operate heavy machinery, and opioid agonists have been associated with cognitive and psychomotor impairment that could prove to be dangerous. (Hazle, Saxon, and Hill, 2021) As previously stated, this forces workers to choose between life-saving treatment and their jobs, and many oftentimes choose the latter because they need money to support themselves. Because of this, safety-sensitive workers with OUD are more susceptible to overdose and death, which could potentially endanger those they are responsible for in their professions. More research is needed in this area to determine the scope of damage potentially caused by keeping OST from those in safety sensitive positions.

Addiction Rehabilitation and OST Access in Prisons

In the United States, two thirds of the general prison population has a Substance Use Disorder (SUD), and at any given moment, over 200,000 out of the total prison population of 2 million is incarcerated for a drug-related offense. Due to the high prevalence of SUDs amongst inmates, overdose deaths rank highly as the third most common cause of death during incarceration. Additionally, recently released inmates face a uniquely high risk of overdose death without prior rehabilitative care in prison. For the first two weeks after release, inmates are up to 129 times

more likely to die of an overdose than the general public. (Nall et. Al, 2024) When the root cause of addiction is not addressed, inmates are left to continue patterns of use established either prior to or during incarceration. This proves to be especially problematic in the context of OUD - prisoners who have recently left prison tend to have a lower tolerance to opiates, and they are likely unaware of recent increases to the toxicity and potency of synthetic opioids, like fentanyl. These factors combined lead to a significantly greater risk of overdose, especially since fentanyl is currently being used to cut not just opioids, but other substances like methamphetamine and cocaine.

Because of previously described structural inequalities in policing and sentencing that lead to higher rates of incarceration amongst people of color, specifically those who identify as Black, Hispanic or Latino, and American Indian or Alaskan Native are more likely to experience an overdose. (Friedman and Hansen, 2022)

As previously explained, MOUD and OST have been proven to be effective in rehabilitating those with OUDs. While many groups and individuals have advocated for the inclusion of MOUD and other addiction rehabilitation strategies (i.e.: therapy) in prisons, American prisons have been reluctant to adopt these forms of treatment. This approach largely stems from strict prohibitionist anti-drug sentiments that equate maintenance medications to illicit opiates themselves. (Wakeman, 2017) This is partially due to the risk of prisoners smuggling and abusing maintenance medication.

Right now, approximately 5% of incarcerated individuals receive either Methadone and Buprenorphine, despite the fact that 15% of the prison population has an OUD. (Mancher and Leshner (Eds.), 2019) The positive impacts of medication-assisted treatment (MAT) in American prisons are clear - a retrospective cohort analysis of prisoners in a Rhode Island correctional

facility revealed that the quantity of overdose deaths following release decreased by 60.5% after the implementation of a MAT program for OUDs. (Green et. Al, 2018)

Drug rehabilitation programs in Norwegian prisons were first established through the contract model in the 1980s, with prisons offering prisoners rewards like a higher amount of day leaves in return for constraints like random drug tests. Over time, this shifted towards group-based therapy and accountability, and progressed further towards programs that focused on determining prisoners' motives for substance abuse, making them recognize them, and helping them navigate treatment after release. There is certainly a heavy focus on helping the prisoner reenter society and receive the treatment they need after incarceration through things like therapy and medication. The maximum sentence for a minor drug-related offense is only six months - ensuring that criminals are able to return to their communities successfully and with the tools they need to reintegrate. (Giertsen, 2012)

18 out of the 57 total Norwegian prisons provide access to drug rehabilitation programs, and 10% of all prisoners receive OST out of the total 14.3% of prisoners who have an OUD. (Lothe, 2023) (Bukten et. Al, 2024) Results from the Norwegian Prison Release Study indicate that access to OST significantly reduces the probability of overdose and all-cause mortality for prisoners. (Bukten and Stavseth, 2024) This is largely because those who start OST in prison are significantly more likely to continue after release, which is what Norwegian prisons often aim to do through Drug Councils and post-release rehabilitation efforts. (Boksan et. Al, 2022) Half of the prisons who provide drug rehabilitation services are smaller facilities that foster a greater sense of community by helping prisoners feel more connected to their surroundings. Many of these smaller facilities act as halfway houses, where the prisoner enters the community during the day to work and returns to the prison to sleep at night. Ultimately, this helps prisoners communicate, strengthen relationships with their peers, feel as if they are adding value to the

surrounding community, etc., therefore decentralizing their thought processes from drug consumption. (Lothe, 2023) Access to OST, coupled with community engagement and therapy can help prisoners reenter society with greater ease. However, please keep in mind the issues previously discussed in regards to Norway's imperfect reentry system.

Conclusion

The results of this literature review indicate that the American criminal workforce, justice system, healthcare system are incapable of handling changing substance abuse attitudes and behaviors. Firstly, workplaces should eliminate drug testing, at least in the case of marijuana, with the exception of safety-sensitive positions. Too many individuals are failing tests in order for the workforce to remain productive if each of them were fired. Random parolee drug testing should also be eliminated, seeing as it is largely associated with poor educational and labor outcomes. Secondly, while the Norwegian model is not perfect in practice, its provision of universal healthcare is crucial in its ability to handle OUD amongst its population. The US should implement some form of universal healthcare program or, at the very least, widely accessible and free OST in order to effectively curb the opioid epidemic. This would also mostly circumvent structural inequalities in access to OST along the social cleavages of race, economic status, and rurality. Those in safety-sensitive positions should also have their OST covered under the ADA - while there may be some risk in the diminished dexterity or focus of workers using OST, it is ultimately safer to have them utilize treatment than overdose or use opiates on the job. Finally, OST should be provided to all prisoners who are suffering from OUD, seeing as it significantly reduces the risks of their overdose after release, and it increases the probability that they continue their treatment. Ideally, the US should also adopt a more rehabilitative attitude towards prisoners writ large, but especially for those with addictions and OUD - this would reduce the risk of recidivism, and ensure that the rights of prisoners are preserved, and they can return to their communities as functioning members of society.

There is more research needed on the impacts of workplace drug testing on productivity and morale, racial inequality and other inequalities in the context of Norway's universal healthcare, and the shortcomings of Norway's prison rehabilitation.

Bibliography

Caulkins, J. P. (2024). Changes in self‐reported cannabis use in the United States from 1979 to 2022. *Addiction*, *119*(9), 1648–1652. https://doi.org/10.1111/add.16519

Quest Diagnostics. (2022, March 30). Workforce drug test positivity climbs to highest level in two decades, finds Quest Diagnostics Drug Testing Index analysis. PR Newswire. https://www.prnewswire.com/news-releases/workforce-drug-test-positivity-climbs-to-highest-level-in-two-decades-finds-quest-diagnostics-drug-testing-index-analysis-301513730.html

Amazon, B. G. S. V. P. O. P. E. a. T. A. (2023, June 8). *Amazon is supporting the effort to reform the nation's cannabis policy*. https://www.aboutamazon.com/news/policy-news-views/amazon-is-supporting-the-effort-to-reform-the-nations-cannabis-policy

International Labor Organization. (2006). Coming Clean: Drug and alcohol testing in the workplace. In *International Labor Organization* (wcms_082253). Retrieved

September 12, 2024, from https://www.ilo.org/media/323001/download#:~:text=In%20France%2C%20Norway%20and%20the,drug%20tests%2C%20not%20the%20employer.

Lund, H. M. E., Bogstrand, S. T., & Christophersen, A. S. (2011). Results of workplace drug testing in Norway. *Norsk Epidemiologi*, *21*(1). https://doi.org/10.5324/nje.v21i1.1426

A Eremin, A. (2022). Why prohibition tactics do not work? A critical evaluation of historic experience of the United States in fighting alcohol and drugs. *Social Evolution & History*, *21*(2). https://doi.org/10.30884/seh/2022.02.03

Koh, H. (2024, April 17). *What led to the opioid crisis—and how to fix it*. News. https://www.hsph.harvard.edu/news/features/what-led-to-the-opioid-crisis-and-how-to-fix-it/

Arditi, L. (2024, July 9). Stimulant users caught up in fatal “fourth wave” of opioid epidemic. *NPR*. https://www.npr.org/sections/shots-health-news/2024/07/09/nx-s1-5015243/stimulant-users-meth-cocaine-coke-in-overdose-fourth-wave-opioid-epidemic

Small, D. (2013). *TOO MUCH JUSTICE: QUESTIONING THE UNITED STATES’ PURSUIT OF RETRIBUTION*. https://willamette.edu/law/resources/journals/sjelj/publications/pdf/4-1/4-small.pdf

The Sentencing Project. (2024, June 20). *Research - Get the Facts - the sentencing project*. https://www.sentencingproject.org/research/

Butler, P. (2020). The System Is Working the Way It Is Supposed to: The Limits of Criminal Justice Reform. *Freedom Center Journal*, *2019*(1), 6. https://scholarship.law.uc.edu/fcj/vol2019/iss1/6/

Giertsen, H. (2012). Policy on drugs in Norwegian prisons: Increased control, answers to poverties and looking for a life after release. Nordic Studies on Alcohol and Drugs, 29(6), 589–604. https://doi.org/10.2478/v10199-012-0049-0

Arctander, K. (2021, July 15). *The Norwegian drug policy reform is dead, but the movement has grown*. Dianova. https://www.dianova.org/opinion/the-norwegian-drug-policy-reform-is-dead-but-the-movement-has-grown/

Mathiesen, T. (1974). The prison movement in Scandinavia. *Crime and Social Justice*, *1*. https://www.jstor.org/stable/29765889

First Step Alliance (2024, May 2). What We Can Learn From Norway's Prison System: Rehabilitation & Recidivism. *First Step Alliance*. https://www.firststepalliance.org/post/norway-prison-system-lessons#:~:text=Perh

aps%20unsurprisingly%2C%20there%20has%20only,the%20way%20people%20are%20sentenced.

Normand, J., Lempert, R. O., & O'Brien, C. P. (1994). *Impact of Drug-Testing programs on productivity*. Under the Influence? - NCBI Bookshelf. https://www.ncbi.nlm.nih.gov/books/NBK236244/#:~:text=More%20recent%20surveys%20of%20workplace,1990%3B%20Hayghe%2C%201991).

Parish, D. C. (1989). Relation of the pre-employment drug testing result to employment status. *Journal of General Internal Medicine*, *4*(1), 44–47. https://doi.org/10.1007/bf02596490

TeamStage. (2024). *Drug testing in the workplace Statistics: Is it ethical in 2024?* Retrieved September 15, 2024, from https://teamstage.io/drug-testing-in-the-workplace-statistics/#:~:text=Between%202020%20and%202021%2C%20the,mandatory%20pre%2Demployment%20drug%20test.

Oh, S., Hodges, J., Salas-Wright, C., Smith, B., & Goings, T. C. (2023). Ethnoracial differences in workplace drug testing and policies on positive drug tests in the United States. *Drug and Alcohol Dependence*, *247*, 109898. https://doi.org/10.1016/j.drugalcdep.2023.109898

US EEOC. (2016, December). *Depression, PTSD, & other mental health conditions in the workplace: your legal rights*. https://www.eeoc.gov/laws/guidance/depression-ptsd-other-mental-health-conditions-workplace-your-legal-rights

EWDTS. (2022). *WDT in Europe*. https://www.ewdts.org/wdt-in-europe.html

Gjerde, H., Christophersen, A. S., Moan, I. S., Yttredal, B., Walsh, J. M., Normann, P. T., & Mørland, J. (2010). Use of alcohol and drugs by Norwegian employees: a pilot study using questionnaires and analysis of oral fluid. *Journal of Occupational Medicine and Toxicology*, *5*(1), 13. https://doi.org/10.1186/1745-6673-5-13

Kilmer, B. (2007). Does Parolee Drug Testing Influence Employment and Education Outcomes? Evidence from a Randomized Experiment with Noncompliance. *Journal of Quantitative Criminology*, *24*(1), 93–123. https://doi.org/10.1007/s10940-007-9040-4

Petersilia, J. R., & Turner, S. (1990). *Intensive supervision for high-risk probationers: Findings from three California experiments*. https://www.rand.org/content/dam/rand/pubs/reports/2007/R3936.pdf

Haapanen, R., & Britton, L. (2002, March). *Drug testing for Youthful Offenders on parole: An Experimental evaluation | National Institute of Justice*. National

Institute of Justice. Retrieved September 15, 2024, from https://nij.ojp.gov/library/publications/drug-testing-youthful-offenders-parole-experimental-evaluation

International Centre for Prison Studies. (2009). *SUMMARY INFORMATION ON PROBATION IN NORWAY* [Report]. https://www.cep-probation.org/wp-content/uploads/2018/10/Summary2008-information-on-Norway.pdf

Seim, I. (2018). The Norwegian Drug Court Model—An alternative to incarceration for criminal drug addicts. *www.jstor.org*. https://www.jstor.org/stable/26586182

Seim, I., Politician Odd Einar Dørum, & The Norwegian Institute for Alcohol and Drug Research (SIRUS). (2016). DRUG TREATMENT PROGRAM SUPERVISED BY THE COURT (ND): AN ALTERNATIVE TO IMPRISONMENT FOR CRIMINAL DRUG ADDICTS - THE NORWEGIAN DRUG COURT MODEL. In The Norwegian Drug Court, *THE NORWEGIAN DRUG COURT MODEL*. https://www.cep-probation.org/wp-content/uploads/2018/10/CEP-Bucharesti-2016-pdf-Workshop-A.pdf

Kylstad Øster, M., Rokkan, T., Norwegian Ministry of Justice and Public Security, the Correctional Services Department, & Correctional Services of Norway, Staff Academy, Research Department. (n.d.). Curfew as a means, not as an end –

Electronic Monitoring in Norway. In *EuroVista* (Vols. 2–2, pp. 90–92). https://www.cep-probation.org/wp-content/uploads/2019/01/VOL-2.2-Curfew-as-a-means-not-as-an-end-%E2%80%93-Electronic-Monitoring-in-Norway.pdf

Larsen, B. K., & Ødegård, A. (2024). Resettlement after prison for prisoners with substance abuse issues in Norway: a wicked problem? *Cogent Social Sciences*, *10*(1). https://doi.org/10.1080/23311886.2024.2372066

Friedman, J., & Gjersing, L. (2022). Increases in drug overdose deaths in Norway and the United States during the COVID-19 pandemic. *Scandinavian Journal of Public Health*, *51*(1), 53–57. https://doi.org/10.1177/14034948221075025

DEA. (2022). *Operation Engage*. DEA.gov. Retrieved September 12, 2024, from https://www.dea.gov/engage/operation-engage-spokane

Friedman, J., & Shover, C. L. (2023). Charting the fourth wave: Geographic, temporal, race/ethnicity and demographic trends in polysubstance fentanyl overdose deaths in the United States, 2010–2021. *Addiction*, *118*(12), 2477–2485. https://doi.org/10.1111/add.16318

United States Government Accountability Office. (2016). OPIOID ADDICTION laws, regulations, and other factors can affect Medication-Assisted Treatment access.

In *Report to the Majority Leader, U.S. Senate* [Report]. https://www.gao.gov/assets/gao-16-833.pdf

Harris, S. (2015). To be Free and Normal: Addiction, governance, and the therapeutics of Buprenorphine. *Medical Anthropology Quarterly*, *29*(4), 512–530. https://doi.org/10.1111/maq.12232

Malandro, J. (2005). *Buprenorphine for office-based treatment of patients with opioid addiction*. (2005, June 1). PubMed. https://pubmed.ncbi.nlm.nih.gov/16118361/

ASAM. (n.d.). *A patient's guide to starting buprenorphine at home*. https://www.asam.org/docs/default-source/education-docs/unobserved-home-induction-patient-guide.pdf

Recovery Care. (n.d.). What is Suboxone? 4 Facts Every Patient Should Know. *Recovery Care*. https://www.recoverycare.org/blog/what-is-suboxone-4-facts-every-patient-should-know

Mitchell, P., Curtin, K. M., & Magliocca, N. R. (2023). Race, rurality and geographic accessibility to medication for opioid use disorder in the U.S. *Journal of Maps*, *19*(1). https://doi.org/10.1080/17445647.2023.2270632

Amiri, S., Panwala, V., & Amram, O. (2024). Disparities in access to opioid treatment programs and buprenorphine providers by race and ethnicity in the contiguous U.S. *Journal of Substance Use and Addiction Treatment*, *156*, 209193. https://doi.org/10.1016/j.josat.2023.209193

NIDA. (2023, October 2). *Only 1 in 5 U.S. adults with opioid use disorder received medications to treat it in 2021 | National Institute on Drug Abuse*. National Institute on Drug Abuse. https://nida.nih.gov/news-events/news-releases/2023/08/only-1-in-5-us-adults-with-opioid-use-disorder-received-medications-to-treat-it-in-2021

Skretting, A., & Rosenqvist, P. (2010). Shifting focus in substitution treatment in the Nordic countries. *Nordic Studies on Alcohol and Drugs*, *27*(6), 581–598. https://doi.org/10.1177/145507251002700604

Gabrhelík, R., Handal, M., Mravčík, V., Nechanská, B., Tjagvad, C., Thylstrup, B., Hesse, M., Minařík, J., Jarkovský, J., Bukten, A., Clausen, T., & Skurtveit, S. (2021). Opioid maintenance treatment in the Czech Republic, Norway and Denmark: a study protocol of a comparative registry linkage study. BMJ Open, 11(5), e047028. https://doi.org/10.1136/bmjopen-2020-047028

Pedersen, M. H., Danø, A., Gibbons, C., & Jensen, R. (2022). Administration and patient-incurred costs associated with opioid agonist treatment in Norway.

Current Medical Research and Opinion, *38*(11), 1959–1965. https://doi.org/10.1080/03007995.2022.2129230

CIA. (n.d.). *Population - the World Factbook*. World Fact Book. https://www.cia.gov/the-world-factbook/about/archives/2021/field/population/country-comparison

Gumas, E. D., Baumgartner, J. C., & Commonwealth Fund. (2023). U.S. overdose deaths remain higher than in other countries — How harm reduction programs could help. In *Commonwealth Fund* (p. June 2023) [Blog]. https://www.commonwealthfund.org/sites/default/files/2023-06/Gumas_intl_overdose_blog_post_APPENDIX_v2.pdf

Hazle, M. C., Saxon, A. J., & Hill, K. P. (2022). Buprenorphine in safety-sensitive positions. *The American Journal of Drug and Alcohol Abuse*, *48*(3), 255–259. https://doi.org/10.1080/00952990.2021.2003809

Nall, S. K., Jurecka, C., Ammons, A., Rodriguez, A., Craft, B., Waleed, C., Dias, D., Henderson, J., Boyer, J., Yamkovoy, K., Swathi, P. A., Patil, P., Behne, F., LeMasters, K., Brinkley-Rubinstein, L., & Barocas, J. A. (2024). Identifying structural risk factors for overdose following incarceration: a concept mapping study. *Health & Justice*, *12*(1). https://doi.org/10.1186/s40352-024-00265-w

Friedman, J. R., & Hansen, H. (2022). Evaluation of increases in drug overdose mortality rates in the US by race and ethnicity before and during the COVID-19 pandemic. *JAMA Psychiatry*, *79*(4), 379. https://doi.org/10.1001/jamapsychiatry.2022.0004

Wakeman, S. E. (2017). Why It's Inappropriate Not to Treat Incarcerated Patients with Opioid Agonist Therapy. *The AMA Journal of Ethic*, *19*(9), 922–930. https://doi.org/10.1001/journalofethics.2017.19.9.stas1-1709

Mancher, M., & Leshner, A. (2019). Medications for opioid use disorder save lives. In *National Academies Press eBooks*. National Academies Press. https://doi.org/10.17226/25310

Green, T. C., Clarke, J., Brinkley-Rubinstein, L., Marshall, B. D. L., Alexander-Scott, N., Boss, R., & Rich, J. D. (2018). Postincarceration Fatal overdoses after implementing medications for addiction treatment in a statewide correctional system. *JAMA Psychiatry*, *75*(4), 405. https://doi.org/10.1001/jamapsychiatry.2017.4614

Lothe, J. (2024, September 13). Norway: bridging the gap. *Prison Insider*. https://www.prison-insider.com/en/articles/norway-bridging-the-gap

Bukten, A., Virtanen, S., Hesse, M., Thylstrup, B., Kvamme, T. L., Seid, A. K., Chang, Z., Skjærvø, I., Tverborgvik, T., & Stavseth, M. R. (2024). The prevalence of substance use disorders among people in Norwegian, Danish and Swedish prisons: A multi‐national cohort study, 2010–19. *Addiction*, *119*(7), 1264–1275. https://doi.org/10.1111/add.16477

Bukten, A., & Stavseth, M. R. (2024). Estimated effects of opioid agonist treatment in prison on all-cause mortality and overdose mortality in people released from prison in Norway: a prospective analysis of data from the Norwegian Prison Release Study (nPRIS). *The Lancet Public Health*, *9*(7), e421–e431. https://doi.org/10.1016/s2468-2667(24)00098-7

Boksán, K., Dechant, M., Weiss, M., Hellwig, A., & Stemmler, M. (2022). A meta-analysis on the effects of incarceration-based opioid substitution treatment. *Medicine Science and the Law*, *63*(1), 53–60. https://doi.org/10.1177/00258024221118971