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Systemic Injustices in Opioid Treatment Access and Outcomes, A Two-Tiered Crisis

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ABSTRACT

Opioids are a class of analgesic drugs that are commonly prescribed for pain management. Opioids do, however, possess an immense addictive potential due to their activation of the brain's reward pathways. This can oftentimes result in physical dependence and fatal overdose.

Over the past two decades, the United States has experienced an unprecedented public health emergency characterized by increasing rates of opioid use disorder (OUD) and overdose mortality.

However, the crisis doesn't affect everyone equally. It impacts low-income and minority communities at a much deeper level. This systematic literature review goes into investigating structural disparities in access to medications for opioid use disorder (MOUD) and long-term therapeutic outcomes using evidence that has been collected from 19 different studies. These studies revealed that Black and Latino patients are less likely to receive office-based buprenorphine therapy compared to White patients, who receive it at higher rates. Instead of buprenorphine therapy, minority communities are far more likely to be channeled into tightly restricted methadone clinics that require daily, in-person visits and long commutes. These daily hurdles are the cause of severe drop-off rates from treatment programs and many patients leave treatment within six months. This results in higher relapse rates and rising synthetic opioid overdose deaths in urban areas.

Ultimately, this literature review points to a two-tiered system kept in place by policy barriers and unequal access to proper medications for opioid use disorder. Fixing this crisis requires actions like legislative reform, broader access to medications at local pharmacies, and opioid reduction programs.

INTRODUCTION

Opioids are a class of analgesic drugs prescribed for clinical pain management, including prescription medications such as oxycodone, hydrocodone, and morphine. While effective for pain suppression in the human body, opioids possess high addictive potential due to their activation of the brain's reward pathways, leading to misuse, dependence, and fatal overdose (Umukoro et al.; Entress). The opioid epidemic in the United States has escalated substantially over the past two decades, representing an unprecedented public health emergency (Webster). Since 2000, national age-adjusted overdose mortality

has more than doubled. In 2015 alone, over 33,000 deaths were attributed to opioid overdoses, positioning opioid toxicity as the leading cause of accidental death among American adults (Pantano et al.). However, epidemiological data demonstrates that overdose mortality and treatments for opioid use disorder are not uniformly distributed across demographic groups, revealing major disparities across racial, ethnic, and socioeconomic levels (Liao et al.).

A central driver of these unequal health outcomes is the structural disparity in access to and quality of evidence-based medications for opioid use disorder (MOUD). High-income and White patients predominantly receive flexible, office-based MOUD options such as buprenorphine and naltrexone, which require minimal clinical supervision and carry fewer burdens related to regulation (Guerrero et al.). Conversely, Black and Hispanic patients are disproportionately channeled into highly restrictive methadone clinics that require rigid, daily in-person attendance and long-distance travel, severely compromising long-term treatment retention and therapeutic efficacy (Barnett et al.). Both illicit opioids, such as heroin, and illicitly manufactured synthetic opioids, such as fentanyl, have intensified these socioeconomic and health consequences, straining healthcare infrastructure and speeding up cycles of addiction in marginalized populations (Sharma et al.).

These systematic disparities stem from broader environmental and institutional barriers, including poverty, implicit provider bias, geographic isolation, and underfunded community healthcare facilities (DeBruin and St. Marie). While privileged populations access flexible, outpatient care pathways, marginalized communities are forced to navigate higher-risk, highly regulated care environments that worsen long-term health outcomes (Amiri et al.). Minorities face severe economic barriers and regulatory burdens that systematically restrict MOUD access, accelerating overdose rates in under-resourced urban environments (Husain et al.; Khatri et al.; Liao et al.). The purpose of this systematic literature review is to evaluate these structural disparities in MOUD access and quantify their direct impact on long-term therapeutic outcomes and mortality.

METHODS

This systematic literature review was conducted to identify and analyze disparities in access to and outcomes of treatments for opioid use disorder across racial, ethnic, and socioeconomic groups. The review also goes through how these disparities contribute to the opioid crisis. All the searches were performed in databases like PubMed and Google Scholar using keywords related to opioids. Some keywords included “Opioids,” “Opioid use disorder,” “Racial disparities," “Gender disparities,” “Naloxone,” “Methadone,” and “Opioid Treatment Disparities.”

Studies that were published after the year 2015 were included to also ensure relevance to current opioid treatment practices. Inclusion criteria included ideas like OUD treatment access, treatment outcomes, racial disparities, and economic disparities in opioid treatment. Studies were excluded from the review if they focused on non-opioid substances, or did not provide clear data on treatment disparities. By analyzing and combining a total of 19 articles, this review goes over how systematic inequality in society

and healthcare play a huge part in unequal opioid treatment access and outcomes, redefining the idea of the two level opioid crisis (see fig 1.1).

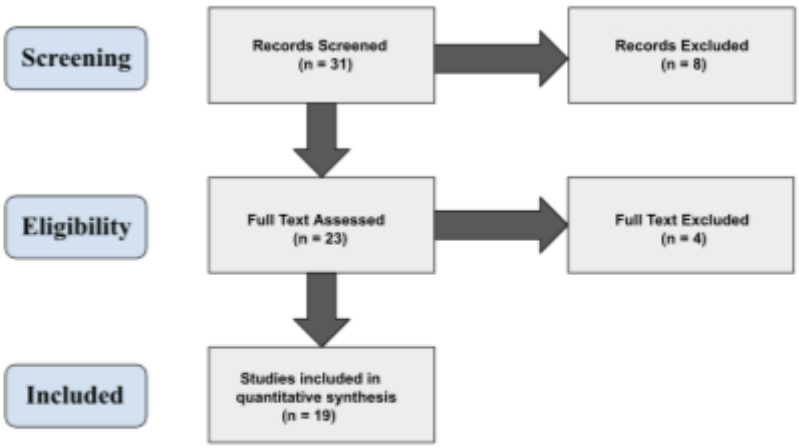


Figure 1.1 PRISMA flow diagram detailing the article screening process for this study

RESULTS

Epidemiological Disparities in Overdose Mortality

Racial disparities were found in the rates of death from opioid overdoses as a result of the national health crisis caused by the opioid epidemic (Liao et al.). Data at the national level for 2017 revealed that the number of deaths from opioid overdoses rose by more than 100% between 2000 and 2017. The total number of opioid-related deaths reached 33,091, with non-Hispanic Black individuals experiencing a 40% greater increase in synthetic opioid mortality compared to White individuals (Pantano et al.). A number of risk factors are involved in the misuse of opioids, which in many cases leads to death. Among these risk factors are a history of substance use, mental health issues, economic difficulties, and inadequate supervision during long-term opioid therapy, since prescriptions for high doses (over 90 morphine milligram equivalents per day) increase the risk of overdose by a factor of two (Webster). A great deal of new research has demonstrated that minority groups suffer higher mortality rates from opioid use disorder due to synthetic opioids (Liao et al.). Synthetic opioids are frequently sold on the street and can be mixed with harmful substances such as fentanyl, which was present in over 70% of the fatal overdose cases among urban Black and Hispanic individuals living below the federal poverty level (Liao et al.).

Structural Inequalities in MOUD Access

Systemic and racial inequalities also exist when dealing with addiction. For instance, there are currently many racial and systemic barriers which prevent members of minority groups from obtaining adequate access to medications for opioid use disorder (Husain et al.). Minority patients are as much as 42% less likely to be given medications for opioid use disorder than White patients, even though their treatment needs are similar or greater (Barnett et al.; Nedjat et al.).

Treatment Retention and Systemic Disparities

Overall, these results show systemic and racial disparities in opioid use disorder mortality rates, with treatment retention dropping by 35% in communities with limited access to medication for people struggling with opioid use disorder, showing how these disparities lead to insufficient treatment for minorities (Zhu et al.; DeBruin and St. Marie).

Table 1: The Two-Tiered OUD Framework

Table 1: Systemic disparities in opioid use disorder (OUD) treatment by medication type and demographic group. The table highlights how treatment access splits into two distinct levels: flexible prescription-based medications (buprenorphine and naltrexone) that are mostly available to White and higher-income patients, versus highly restricted, clinic-based options (methadone) or a lack of care altogether, which disproportionately affect Black, Latino, and low-income patients.

Note: Data presented in this table are for the Results section only and exclude discussion and interpretation of findings.

Stratification Tier & Cities	Primary Demographic Group	Predominant Medication (MOUD)	Regulatory & Structural Conditions	Common Care Settings & Barriers
Tier 1: High-Access / Flexible Care (Schiff et al., 2020; Guerrero et al., 2022; Nedjat et al., 2023; Amiri et al., 2023)	White, Higher-income, Insured populations	**Buprenorphine & Naltrexone**	Flexible prescribing; lower regulatory burdens; standard pharmacy dispensing	Outpatient primary care, lower stigma, fewer required in-person visits, better long-term retention
Tier 2: High-Restriction / Rigid Care (Barnett et al., 2022; Khatri et al., 2023; Guerrero et al., 2022; Rosales et al., 2021)	Black, Latino, Low-income populations	**Methadone** (or untreated)	Highly regulated; daily in-person attendance required; strict federal oversight	Specialized Opioid Treatment Program (OTP) clinics, geographic provider deserts, criminalization history, 5 to 10 times higher access disruptions

DISCUSSION

The results show that racial minorities face more struggles with Opioid Use Disorder and face a higher mortality rate from opioids. Minority populations experience higher barriers to accessing office-based medications such as buprenorphine. White patients receive buprenorphine at nearly 3.5 times the rate of African American patients and are more likely to receive care in highly regulated methadone settings, contributing to unequal treatment engagement and outcomes (Schiff et al.). These outcomes show that structural factors in the healthcare system play a major part in shaping the harm that results from the burden of Opioids (Guerrero et al.). Research has shown that structural racism in healthcare delivery, including differential prescribing practices and a 50% lower concentration of certified MOUD providers in predominantly minority communities, contributes to unequal access to medications for opioid use disorder (Amiri et al.; Khatri et al.). Additionally, restrictive federal regulations surrounding methadone distribution and historical criminalization of substance use in minority communities have reinforced disparities in treatment access (Husain et al.). These systemic barriers enhance a cycle in which minority patients are more likely to encounter obstacles at every stage of care (Rosales et al.). This means they may have trouble getting prescriptions, travelling more than twice as far to reach licensed clinics, staying in treatment, or affording their medication (Amiri et al.; Husain et al.). As a result, treatment discontinuation rates exceed 60% within the first 180 days for marginalized groups, making them more likely to relapse or experience an overdose (Zhu et al.).

Pharmacy-Led Interventions and Harm Reduction

Some ways that the issue of opioids can be addressed are if pharmacists take a more active role in expanding equitable access to treatment and harm reduction services (Saari et al.). Community pharmacists can increase naloxone distribution to lower community overdose mortality by up to 27%, provide culturally competent counseling, and reduce stigma associated with medications for opioid use disorder (Ettienne et al.). Pharmacists are also positioned to identify patients at risk for misuse through prescription monitoring programs and intervene early with education and referral to treatment services. Expanding pharmacy-based buprenorphine dispensing, particularly in underserved and minority communities, may reduce treatment gaps and improve access to office-based care (Elkader and Sproule). Additionally, implementing implicit bias training within pharmacy settings and standardizing dispensing practices could reduce the 30% gap in pharmacy-level MOUD fulfillment across racial and socioeconomic groups (DeBruin and St. Marie).

Legislative and Policy Reforms

Policy groups can also help address the opioid crisis by reforming regulations that limit access to treatment in minority communities (Guerrero et al.). Lawmakers and public health agencies can also help by expanding funds for treatment centers in underdeveloped areas (Amiri et al.). They can also reduce strict requirements surrounding methadone access and increase support for Medicaid coverage of

medications for opioid use disorder (Husain et al.). Policies that promote equal provider distribution and reduce administrative barriers can help ensure that all populations have fair access to effective treatment options (Amiri et al.).

Community-Level Advocacy and Public Action

Civilians may also play a role in creating systemic change (Rosales et al.). Community members can reduce stigma by supporting individuals in recovery and advocating for affordable healthcare policies (Khatri et al.). Voting for representatives who prioritize public health funding, participating in local awareness campaigns, and encouraging open conversations about addiction can help shift societal attitudes (DeBruin and St. Marie). When communities actively support treatment access and harm reduction efforts, community-led overdose prevention initiatives have been shown to increase long-term treatment retention by up to 40%, contributing to reducing disparities and improving outcomes for those affected by opioid use disorder (Rosales et al.).

Future Research Directions

Overall, current research provides robust quantitative and qualitative evidence connecting structural healthcare barriers to racial disparities in OUD treatment outcomes. However, the existing literature relies heavily on retrospective cohort studies and regional demographic datasets. Future research should prioritize longitudinal studies evaluating the long-term impact of policy reforms—such as expanded pharmacy-based buprenorphine dispensing and methadone deregulation—specifically within historically underserved minority communities.

CONCLUSION

The opioid crisis continues to impact millions of people in the United States of America, but its effects are not experienced equally based on the research conducted in this review. This review shows that racial and socioeconomic disparities play a major role in overdose mortality rates and access to treatment options for opioid use disorder. Minority populations face many struggles to obtain the right opioid treatment and they often experience higher death rates from synthetic opioids such as fentanyl.

These disparities are largely driven by systemic inequities in overall healthcare access, provider availability, and treatment regulations by the government. Solving this crisis requires making sure more people can get proven medications that can help, reducing the stigma around treatment, and changing policies that make it harder for people in impoverished communities to get help. Acting now is very important to lower overdose deaths and make sure everyone has fair treatment access to opioids.

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