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Original Paper

Racial and Ethnic Disparities in the Governance of Opioid Crisis in the United States

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Abstract

Context: *For two decades, opioid-related overdose fatalities have surged among White, non-Hispanics in rural and suburban communities across the United States, often seen as the face of this epidemic. However, urban minority communities have also experienced a significant rise in opioid overdoses, a trend not fully addressed in the literature.*

Methods: *We used the CDC's WONDER platform to obtain age-adjusted drug overdose mortality rates per 100,000 population for Hispanic and non-Hispanic individuals between 2010 and 2023. The data showed significant differences in mortality rates over the years, underscoring the changing nature of substance abuse crises. The analysis was conducted by year, state, drug type, and race and ethnicity.*

Results: *We observed the racial and ethnic disparites in the governance of Opioid Crisis in the United states. According to CDC data, from 2010 to 2021 in the United States, White, Non-Hispanics experienced the highest rates of opioid overdose deaths amongst any ethnic group. However, greater increases have been reported for Blacks during the same timeframe, with AARs rising from 3.5 overdoses per population of 100,000 in 2010 to 12.9 overdoses per population of 100,000 in 2021, highlighting a troubling escalation in opioid-related fatalities within the Black community. This paper shows that deaths among non-Hispanic Black men appear to account for the disproportionate increase in rates of opioid overdose deaths for all older adults since 2013. Simultanoeusly, we observed different patterns across race/ethnicity groups for opioid and stimulant treatment rates among males between 2010-2021. Racism may be associated with these disparities. In terms of racism, many potential factors could contribute to higher fatality rates among the non-Hispanic Black population in general and among men in particular. These factors include the consequences of structural racism, such as disparate access to SUD treatment;*

bias in addiction treatment; residential concentration in low-resource communities with limited access to good schools, health care, and healthy foods; medical mistrust; and raially biased drug policies. State-specific data from 2023 further reveal that the mortality rate for Black people in some states has far exceeded that of white people. For example, in Michigan, the Black death rate was 70.0 per 100,000 people, compared to 24.0 for white people. In Washington, D.C., the Black death rate was 58.0 per 100,000 people, also significantly higher than the white death rate of 20.0 per 100,000 people. The death rate for Hispanics and American Indians/Alaska Natives (AI/AN) in some states also exceeded the national average (23.7 per 100,000 people). These data highlight the severe impact of the opioid crisis on minority communities.

Conclusion: *Over the past two decades, the face of the opioid crisis has been one of White middle class prescription users in contrast to the War on Drug's minority heroin users. Inaccurate portrayals of opioid use have led to different policy approaches, with minorities viewed as addicts rather than victims in comparison to their White counterparts. Punitive versus rehabilitative policy approaches can have long lasting negative and devastating effects in disadvantaged communities. While opioid-related overdoses have predominantly affected rural and suburban White, non-Hispanic communities, there has been a significant rise in deaths among Black and Hispanic minority communities in recent years. Despite this, the media often portrays the epidemic as a crisis primarily impacting White, non-Hispanic rural and suburban areas. Consequently, the governance including intervention strategies and policies have failed to adequately address the severity of the problem in minority communities and to provide culturally adaptive prevention and treatment options. This paper will examine the impact of the Opioid Crisis on Black and Hispanic minority communities. It will compare the current U.S. government's approach to the epidemic in rural and suburban White America with its past criminal justice response to drug crises in urban minority communities. The paper will also discuss cultural adaptive policy recommendations to mitigate and offer treatment options for the opioid epidemic in these minority communities. This paper suggests that 'Whitewashing' this epidemic has led to the neglect of rising death rates in minority communities. To rethink policy implications, the U.S. government must change its approach to ensure that everyone affected by the opioid epidemic, regardless of race or ethnicity, is included in the dialogue to address this crisis.*

Keywords

Race, Ethnicity, Opioid Crisis, Governance recommendations, Racial disparities

1. Introduction

In the last decade, the Opioid Crisis has been depicted as a National public health crisis that is spreading across rural and suburban communities in the United States at an alarming rate. Trump formally declared US opioid crisis a "public health emergency" in 2017. The U.S. overdose crisis is increasingly severe, with over 100,000 drug overdose deaths in 2020 (Jones, Santos-Lozada, Perez-Brumer, Latkin, Shoptaw, & El-Bassel, 2023), particularly related to increases in synthetic opioids (e.g., fentanyl) and stimulants

(e.g., cocaine and methamphetamine) (Ciccarone, 2021). Notably, cocaine-involved deaths increased by nearly 300% (2.14 in 2002 vs. 6.03 in 2018), despite no significant increase in cocaine use during the same period (Cano, Oh, Salas-Wright, & Vaughn, 2020). While the opioid epidemic initially affected whites more strongly, the acceleration of opioid-involved overdose death for African Americans now outpaces that of whites and signals a growing disparity (Debra Furr-Holden, Adam J. Milam, Ling Wang, & Richard Sadler, 2020). The latest state-level data in 2023 shows that in Michigan, the age-adjusted mortality rate among the black population is as high as 70.0 per 100,000, far exceeding that of the white population at 24.0 per 100,000. In Washington D.C., the rate for blacks is 58.0 per 100,000, while for whites it is only 20.0 per 100,000. In Maryland, the rate for blacks is 32.0 per 100,000, which is also higher than that for whites at 25.5 per 100,000. While it is known that drug overdose deaths and the need for drug treatment are increasing, data disaggregated by race/ethnicity, and assessed in comparison to prior decades of data, are limited and warrant additional focus.

As the face of the opioid epidemic has been Whitewashed or told through the narratives of Whites, there has been a shift in the public's negative perceptions and attitudes toward the drug abuser themselves (Kane-Willis & Bechteler, 2018). A recent public policy poll in 2017 indicated that the public is in support of opioid users receiving treatment, 61% for heroin users and 72% for prescription opioid abusers (Commitment To Privacy, 2020). Inaccurate portrayals of opioid use have led to different policy approaches, with minorities viewed as addicts rather than victims in comparison to their White counterparts (Williams, 2019). Over the past decades, the face of the opioid crisis has been one of White middle class prescription users in contrast to the War on Drug's minority heroin users. An inaccurate portrayal of opioid use results in different policy approaches. Punitive versus rehabilitative policy approaches can have long lasting negative and devastating effects in disadvantaged communities (James & Jordan, 2018).

The governance of the Opioid Crisis in the United States, which has focused more on preventative and rehabilitative measures rather than punitive measures, has been criticized as one distinct example of the many racial disparities in the criminal justice system. This approach, often characterized by community outreach programs, addiction treatment centers, and harm reduction strategies, contrasts sharply with the harsher punitive responses seen during previous drug crises. In contrast to the heroin and Crack epidemics, which led to epic surges of addiction in urban and minority communities in the decades spanning from the 1970s to the 1990s and also created devastating effects to public health and safety, including soaring rates of overdose deaths, increased crime, and social instability, the opioid epidemic has been now touted as a National public health crisis. The current response involves widespread awareness campaigns, legislative efforts to improve access to medication-assisted treatment (MAT), and initiatives aimed at reducing the stigma associated with addiction. Despite these efforts, the crisis continues to disproportionately affect marginalized populations, highlighting ongoing systemic issues within the healthcare and legal systems.

Tracing the war on drugs to its roots reveals a broader domain in which harsh legislation, prosecution,

and incarceration combine to harm and stigmatize minority populations, while a pervasive ideology of color blindness discourages serious discussion of inherent racial bias in the criminal justice system. The echoes of this systemic injustice reverberate through generations, embedding deep-seated mistrust and fear within these communities. Accordingly, with limitations in healthcare affordability in minority communities, pain management options such as detoxification, rehabilitation, or counseling services are often unattainable. The stark contrast between the availability of resources in affluent neighborhoods and the scarcity in marginalized areas highlights a glaring disparity. The sterile, underfunded clinics that minority populations might access are frequently understaffed, lacking in essential medications, and overwhelmed by long waiting periods, further exacerbating their plight. This cycle of neglect and marginalization perpetuates a vicious loop, where those most affected by drug-related issues find themselves trapped without viable avenues for recovery or support.

2. Methods

Using the Centers for Disease Control and Prevention Wide-Ranging Online Data for Epidemiological Research (WONDER) platform, we obtained age-adjusted drug overdose mortality rates per 100,000 population between 2010 and 2021 for Hispanic and non-Hispanic individuals. The data revealed stark contrasts in mortality rates over the years, highlighting the evolving nature of substance abuse crises. CDC WONDER was used to assess trends of drug overdose deaths, including opioids and stimulants (1999-2020), providing a comprehensive view of the epidemic's progression. In order to obtain the most updated data, we utilized WONDER’s provisional mortality file for 2021, capturing the latest surge in overdose fatalities. We also obtained national and state-level crude overdose mortality rates per 100,000 population for 2010 and 2020 for Hispanic and non-Hispanic individuals, offering a detailed comparison across different regions and demographic groups.

To evaluate trends in drug overdose deaths over time, we assessed any deaths attributed to cocaine, any deaths attributed to opioids, and any deaths attributed to methamphetamines. We meticulously analyzed the data, noting the increasing prevalence of each substance individually. The sharp rise in cocaine-related fatalities was particularly alarming, with many cases showing signs of prolonged use and severe health deterioration. Opioid-related deaths continued to dominate the statistics, often linked to powerful synthetic opioids like fentanyl, which have drastically increased the lethality of overdoses. Methamphetamine-related deaths also surged, characterized by symptoms of extreme agitation, paranoia, and cardiovascular complications.

We then assessed deaths attributed to patterns of opioid and stimulant use: any deaths involving cocaine and opioids, any deaths involving cocaine and methamphetamines, and any deaths involving opioids and methamphetamines. These combinations often resulted in more complex and severe toxicological profiles, complicating both medical response and forensic analysis. For instance, the combination of cocaine and opioids created a dangerous synergy, exacerbating respiratory depression and heart failure. Similarly, the mix of cocaine and methamphetamines led to heightened risk of stroke and acute psychosis.

The interplay between opioids and methamphetamines further complicated the clinical picture, often leading to unpredictable and catastrophic outcomes.

While CDC WONDER allows for identifying overdose deaths involving particular substances, it does not allow us to exclude other substances that may be implicated in those deaths (ex: opioid-involved deaths but no other drugs implicated in those deaths). This limitation means that our data includes cases where multiple substances were present, making it challenging to isolate the impact of individual drugs. Thus, our trends in drug overdose deaths are not mutually exclusive, reflecting the complex and intertwined nature of contemporary drug abuse.

We defined treatment admissions and overdose death rates as the number of treatment admissions and overdose deaths per 100,000 individuals across the various patterns of cocaine, opioids, and methamphetamine each year, meticulously stratified by sex/gender and race/ethnicity. Utilizing CDC WONDER's Census population estimates by race/ethnicity and sex/gender, we ensured precise demographic representation. Subsequently, we plotted detailed trends in treatment admissions for adults aged 18 and older spanning from 1992 to 2019, alongside mortality rates for all individuals from 1999 to 2020. These trends were analyzed by opioid and stimulant patterns, further dissected into distinct race/ethnic and sex groups to uncover nuanced insights.

3. Results

3.1 Overall Descriptive Statistics

Between 1999 and 2023, more than 1,085,000 people in the United States died from drug overdoses, the vast majority of which were related to opioids or stimulants. Among them, approximately 71.2% were male (an increase from the previously reported 68.1%). Overall, 84.9% of deaths were related to opioids, 29.1% to cocaine, and 20.4% to methamphetamine. The use of multiple substances remains widespread: 19.7% of deaths involve both opioids and cocaine, 10.5% involve both opioids and methamphetamine, and 2.3% involve both methamphetamine and cocaine.

WONDER online databases utilize a rich ad-hoc query system for the analysis of public health data database display：In the historical statistics from 1999 to 2020, a total of 583,408 deaths related to opioids or stimulants were reported by all ethnic groups in the United States, among which opioid-related deaths accounted for more than 90%. Updated data shows that as of 2023, the cumulative number of opioid-related deaths alone has exceeded 850,000. This astonishing figure further highlights the severity of the crisis.

Among them, the cumulative death toll of the white non-Hispanic group has exceeded 650,000 cases, still accounting for the vast majority. However, it is worth noting that in recent years, the growth rate of excessive deaths among African Americans and Hispanics has been significantly higher than that among whites. For instance, during the period from 2021 to 2023, the opioid-related mortality rate among African Americans rose to 42.7 cases per 100,000 people, which was higher than the 36.4 cases among whites. Although the mortality rates of other ethnic groups (including Asians and Native Americans) are

relatively low in absolute terms, the mortality rates in some areas (such as Native American reservations) have reached the highest levels in the country, reflecting a severe impact of imbalance.

The report shows that the main substance driving the crisis remains synthetic opioids (especially fentanyl), which were involved in over 74,000 deaths in 2023, accounting for more than 68% of all drug overdose deaths. In contrast, the contribution of prescription opioids has declined, but they remain an important part of the crisis. Synthetic opioids, due to their extremely strong efficacy and extremely low lethal dose, have a particularly significant promoting effect on the overall trend of excessive mortality.

3.2 Trends by Race and Ethnicity

According to CDC data, from 1999 to 2023 in the United States, White, Non-Hispanics continued to experience the highest cumulative number of opioid overdose deaths; however, recent years show that Black, Non-Hispanics now have the highest Age-Adjusted Rates (AARs), surpassing Whites since 2020. The AAR of overdoses for White, Non-Hispanics peaked at 36.4 per 100,000 in 2022, representing a more than seven-fold increase compared to 1999 (when the rate was 5.0 per 100,000). This reflects a dramatic escalation in opioid misuse and addiction within this demographic over the past two decades.

During this same period, AARs for opioid overdose deaths (OODs) for Hispanics rose from 3.5 per 100,000 in 1999 to 19.3 per 100,000 in 2022, indicating a substantial and accelerating increase, far exceeding the relative rise reported in earlier years.

However, the largest increases have been reported among Blacks: their AARs rose from 3.5 overdoses per 100,000 in 1999 to 42.7 per 100,000 in 2022, marking an over twelve-fold increase, and positioning Black communities as disproportionately impacted by the current fentanyl-driven crisis. This trend underscores the troubling escalation of opioid-related fatalities within the Black community, particularly in urban areas hardest hit by synthetic opioids.

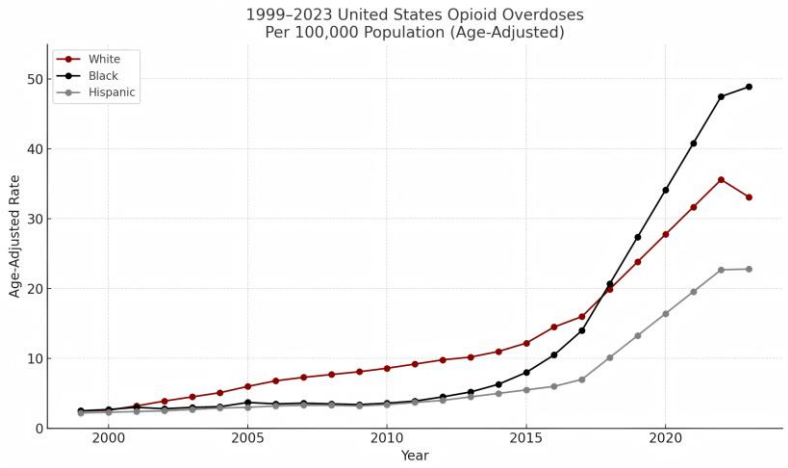

Figure 1. United States Opioid Overdose Deaths by Race and Ethnicity 1999-2023

Source: reproduced from Kaiser Family Foundation analysis of Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Available at: http://wonder.cdc.gov/mcd-icd10.html

3.3 Trends in Opioid Overdose Related Deaths by State, Age, Race and Ethnicity

This growing trend is demonstrated in Figure 2 below, which provides 2022–2023 data for States where the AARs (Age-Adjusted Rates) of OODs for minority groups were higher than the National U.S. average AAR of 32.6 deaths per 100,000 in 2022 (updated from 14.9 in 2017). In comparison to the U.S. national average AAR of 32.6 opioid-related deaths per 100,000 in 2022, the opioid epidemic continues to disproportionately impact Black, Non-Hispanic populations. Blacks led the AAR of opioid overdoses in the District of Columbia (84.2), Illinois (35.2), Michigan (59.5), Missouri (47.8), West Virginia (68.0), and Wisconsin (44.6). In the District of Columbia, Black, Non-Hispanics experienced an AAR of 84.2 deaths per 100,000 in 2022, compared with 52.1 for White, Non-Hispanics. Similarly, in Michigan, the Black population reported 59.5 deaths per 100,000 compared to 50.1 among Whites, highlighting persistent racial disparities. Interestingly, West Virginia once again led the nation in opioid overdoses. In 2022, West Virginia recorded AARs of 62.0 deaths per 100,000 for White, Non-Hispanics, while Black, Non-Hispanics experienced an even higher rate of 68.0 per 100,000, the highest in the country. In addition, Hispanics continued to experience AARs of OODs well above the U.S. national average of 32.6 in several states. For example, Connecticut (27.9 in 2017→41.5 in 2022), Massachusetts (29.0→45.7), Ohio (30.7→38.9), and Rhode Island (39.2→52.0) all reported sharp increases among Hispanic populations. These updated findings demonstrate that racial and ethnic disparities in opioid overdose deaths have not diminished but instead widened in several states between 2017 and 2022. The crisis continues to weigh disproportionately on minority communities, underscoring the need for targeted interventions and equity-focused public health responses.

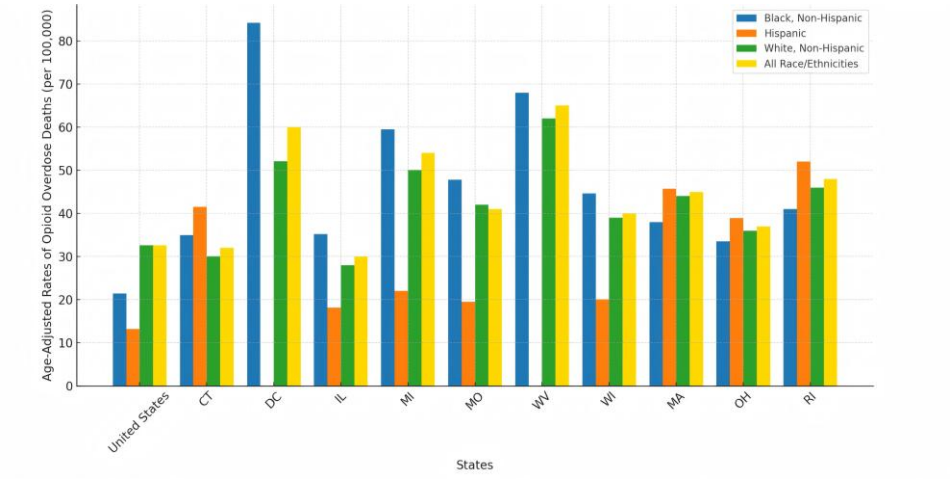

Figure 2. States with Minority Opioid Overdose Death Age-adjusted Rates Higher than the U.S. National Average in 2022

Source: reproduced from Kaiser Family Foundation's State Health Facts, Centers for Disease Control and Prevention (CDC), and National Center for Health Statistics.

Some research shows that deaths among non-Hispanic Black men appear to account for the disproportionate increase in rates of opioid overdose deaths for all older adults since 2013. This is concerning and may signal future increased rates of opioid overdose deaths for older adults, given that the proportion of older adults who are non-Hispanic Black is growing rapidly compared with non-Hispanic White men. The data highlights a stark contrast, revealing that non-Hispanic Black men over the age of 65 have experienced a significantly higher rise in fatal overdoses, often linked to prescription painkillers and illicit opioids. The rapid demographic shift towards a larger population of non-Hispanic Black older adults underscores the urgency of addressing this public health crisis. Factors such as socioeconomic disparities, access to healthcare, and historical biases in medical treatment may contribute to this trend, necessitating targeted interventions and policies to mitigate the risk of opioid misuse and overdose among this vulnerable group (Fulmer, Reuben, Auerbach, Fick, Galambos, & Johnson, 2021).

It is notable that the beginning of the increase in opioid overdose deaths among older non-Hispanic Black men coincides with what the Centers for Disease Control and Prevention has identified as the third wave in the opioid epidemic, characterized by the increased presence of fentanyl, a powerful synthetic opioid in the drug supply. This surge in fentanyl-laced drugs has led to a sharp rise in fatalities, often due to its potency and the difficulty users have in accurately gauging dosages. The stark contrast in the impact on older non-Hispanic Black men highlights systemic issues within healthcare access and addiction treatment, exacerbating the crisis within this demographic. The grim reality of this wave is underscored by the harrowing scenes of emergency responders administering naloxone to revive individuals whose respiratory systems have been severely compromised by fentanyl's effects (Centers for Disease Control and Prevention, 2021). However, it is unclear why other older adult subgroups did not experience concomitant increases in opioid overdose rates. These differences could be, among other factors, related to differences in the characteristics of the drug supply accessed by subgroups and/or whether substances contributing to the overdose were illicit or prescription. Further investigation is needed to elucidate the reasons behind these disparities.

3.4 Trends in Polysubstance Overdose Deaths in the U.S.

Recently, scholars have argued that the ‘fourth wave’ of the US overdose crisis has begun, in recognition of rapidly rising polysubstance overdose deaths involving illicitly manufactured fentanyls, with stimulants playing a key role (Ciccarone, 2021). Recent studies have highlighted an increasing rate of polysubstance overdose deaths involving fentanyls and stimulants, disproportionately affecting racial/ethnic minority communities (Townsend, Kline, Rivera-Aguirre, Bunting, Mauro, Marshall, et al., 2022). A wide range of polysubstance formulations have been noted in drug checking and overdose mortality data, with myriad substances implicated across numerous drug classes (Lin, Bohnert, Blow, Gordon, Ignacio, Kim, et al., 2021). However, more evidence is needed about exact geographic, temporal, race/ethnicity and demographic trends, as well as which emerging polysubstance formulations are most commonly involved in fatalities.

The polysubstance characteristics of fentanyl-involved overdose mortality shifted dramatically

throughout the 2010 to 2021 period, reflecting a complex interplay of evolving drug trends, increased accessibility, and changing patterns of substance abuse. Initially, fentanyl was often found in combination with heroin, creating a potent and lethal mix that overwhelmed many users' tolerance levels. As the years progressed, fentanyl began to infiltrate other drug markets, including counterfeit prescription pills and illicit substances like cocaine and methamphetamine. This diversification of fentanyl's presence led to a broader demographic of overdose victims, encompassing not just traditional opioid users but also individuals who might have been unaware of the fentanyl contamination. The shift was marked by a rise in fatalities among younger populations and those with varying histories of substance use, highlighting the drug's pervasive reach and the urgent need for targeted public health interventions.

As overdose deaths rose in the United States from 38 329 in 2010 to 106 699 in 2021, the percent involving both fentanyl and stimulants concurrently rose from 0.6% (n = 235) to 32.3% (n = 34 429). The proportion of deaths involving fentanyl without stimulants also rose from 7.2% in 2010 to a peak of 35.7% in 2020, before declining slightly to 33.9% in 2021. The proportion with stimulants and no fentanyl remained relatively more stable, from 14.8% in 2010 to 17.9% in 2021. The proportion containing neither fentanyl nor stimulants fell from 77.3% in 2010 to 16.0% in 2021. Particularly, according to the data from CDC WONDER in 2021, the percent of fentanyl-involved overdose deaths co-involving stimulants in black or African American was 52.9%, which compared the White's 47.7% (Joseph Friedman & Chelsea, 2023).

In 2022, synthetic opioid–involved overdose deaths soared to 69,893, with 53.6% of them also involving stimulants—marking a continued rise in polysubstance lethality and acceleration of the fourth wave of the epidemic. In 2023, approximately 70% of stimulant-involved overdose deaths co-occurred with illicitly manufactured fentanyl (IMF), underscoring the critical role of fentanyl in recent stimulant-related fatalities. Moreover, while overall overdose deaths slightly declined by 3% in 2023 to 107,543, deaths involving psychostimulants like methamphetamine increased from 35,550 to 36,251, and cocaine-related overdose deaths grew from 28,441 to 29,918—even as synthetic opioid deaths declined modestly.

3.5 Trends in Opioid and Stimulant Treatment Admissions in the U.S.

Simultanoeusly, we observed different patterns across race/ethnicity groups for opioid and stimulant treatment rates among males between 1992-2019. First, Non-Hispanic Black men had dramatically higher rates of cocaine-only treatment, although this fell to under 250 per 100,000 in 2015. Opioid-only treatment rates were also higher among Non-Hispanic Black men (1999: 140 per 100,000; 2020: 211 per 100,00) than among Non-Hispanic White men over this period (1999: 74 per 100,000; 2020: 165 per 100,00). However, we observed a large increase in opioid treatment rates for Non-Hispanic White men over this period; additionally, we observed more steady increases (albeit at a lower level) for methamphetamine only, cocaine and methamphetamine, and opioid and methamphetamine treatment for Non-Hispanic White men. For Non-Hispanic Asian or Pacific Islander men, we observed increased treatment for opioid-only and methamphetamine, but rates were significantly lower compared to other racial/ethnic groups. Non-Hispanic AI/AN men experienced the highest treatment rates for

methamphetamine only; they also had an increase in opioid-only and opioid and methamphetamine treatment between 2005 and 2019. Hispanic men had an earlier peak in opioid-only treatment but saw declines in opioid-only treatment, unlike other racial/ethnic groups. They also experienced consistent declines in cocaine-only and opioid and cocaine treatment but increased methamphetamine-only treatment. Across all groups, cocaine and methamphetamine treatment rates were low.

4. Discussion

4.1 Racial and Ethnic Disparities in Prescripition Opioids

Prescripition opioids, such as morphine, oxycodone, hydroco-done, or codeine, have contributed to the large number of OODs in, both, the urban and rural communities (Paulozzi & Xi, 2008). Although prescripition opioids were initially marketed to physicians as safe, and non-habit forming options by large pharmaceutical companies, the devastating effects of these drugs in recent years have led to hundreds of lawsuits against these companies for understating the dangerous addictive properties of these drugs (Lyon, 2017). This led Purdue Pharma to reformulate its signature drug, OxyContin, as an abuse-deterrent by making it harder to crush and to snort pills, which led to an immediate shortterm period of decline in overdoses attributed to this drug (Facher, 2019). However, this limited decline in the number of OxyContin Rx abuse overdoses was countered with a surge in the number of heroin overdoses and the transmission of infectious diseases, such as Hepatitis C, which is fueled by the use of contaminated needles by users during intravenous drug use (Cicero & Ellis, 2015).

Although the prevalence and availability of Rx opioids have created increases in OODs in the U.S. across all races and ethnicities, previous research has suggested that the increasing threat of the opioid epidemic is worst in black and urban, minority communities, such as in Chicago (Knopf, 2016), and may be attributed to several fac-tors, such as the under-prescribing of Rx opioids to minorities, the availability of potent new non-methadone synthetic opioids, and the lack of evidence-based treatment solutions (James & Jordan, 2018). Under-prescribing in minority communities can be the result of several factors, which include but are not limited to the lack of accessibility to health insurance and/or cognitive biases of healthcare professionals that minorities have higher pain tolerances than Whites. As a result, healthcare professionals may limit pain management Rxs for minorities. Other more general contributing factors to the opioid epidemic may include an increase in the number of pain clinics opened in urban areas, misconceptions that Rx medications are safe and non-habit forming and patients who “doctor” shop, which results in the possibility of multiple prescribers for various pain medications for an individual patient.

Disparities in the under-prescribing of Rx opioids in minority communities were once thought to shield these communities from the devastating effects of the opioid epidemic (Buchmueller & Carey, 2018). However, several studies have suggested that this racial disparity in the under-prescribing of Rx opioid medications in urban communities may cause minorities to access illicit preparations of these drugs, which are often laced with potent synthetic opioids, such as fentanyl. In recent years, many urban

communities have experienced a significant spike in the number of opioid overdoses, which may be linked to the availability of synthetic opioids, such as fentanyl or carfentanil. These potent synthetic opioids, which are roughly over 100 times more potent than morphine, are lethal at very low levels and are often used as cutting agents in illicit drugs, such as heroin and cocaine. It has also been suggested that the addition of these potent synthetic opioids to street drugs and counterfeit pill preparations that are available on the black market may also be linked to the increased rates of overdoses over recent years in minority communities. In 2019, a research study found that the prevalence of Rx opioid use amongst Blacks to be comparable in, both, rural and urban communities (Rigg & Nicholson, 2019). It has also been suggested that the lack of legal pain management options, due to the under-prescribing of Rx opioids for Hispanics and Blacks, may be linked to increased abuse of illicit phar-maceuticals and other drugs, such as cocaine and heroin (Netherland & Hansen, 2017). This is further evidenced in places with large minority populations, such as in Cook County, Illinois, where there was a historic surge of 342 fentanyl-related opioid deaths, which was reported by the Cook County Medical Examiner's Office between April 2005 and December 2006 (Schumann, Erickson, Thompson, et al., 2008). Moreover, with limitations in healthcare affordability in minority communities, pain management options such as detoxification, rehabilitation, or counseling services may not be attainable.

4.2 Racial Disparities in the Criminal Justice Response

According to the previous research, there is also a lack of evidence-based solutions and policies for addressing the opioid abuse problem in urban, minority communities. Although the opioid epidemic has been declared a new emerging threat, it has striking resemblances to the heroin and crack cocaine epidemics, which plagued urban, minority communities in the 1970s and 1980s.Akin to the opioid epidemic that has greatly impacted middle-class White, Non-Hispanics in rural and suburban communities in recent years, these epidemics had lasting and devastating effects in urban, minority communities. The U.S. Government's "War on Drugs" and criminalization of drug offenses during these eras led to the mass incarceration of Blacks (Alexander, 2010, p. 32). However, the War on Drugs did little to reduce street-level drug activity and instead introduce increased police militarization and brutality in these communities (Cooper, 2015). According to the Bureau of Statistics, in 2016, though Blacks made up only 12% of the U.S. population, they comprised over 33% of those incarcerated in the criminal justice system.

There have been similar devastating effects in the Hispanic communities. According to the 2019 Annual Drug Policy Alliance Report, although Hispanics make up approximately 17% of the U.S. population, they make up 50% of all Federal Drug cases (Drug Policy Alliance, 2019). According to Michelle Alexander, who authored *The New Jim Crow: Mass Incarceration in the Age of Colorblindness (2010)*, "nothing has contributed more to the systematic mass incarceration of people of color in the United States than the War on Drugs". Racial disparities in the criminal justice response and re-entry policies and programs have also created racial inequalities in the War on Drugs (Rosenberg, Groves, & Blankenship, 2016). For example, in a 2018 research study of drug-arrests in 78 neighborhoods in St. Louis, racial

profiling and racially discriminatory policing practices were discovered (Gaston, 2018). Due to the traditional criminal justice response to substance abuse in urban communities, minorities may also be less likely to seek rehabilitative treatments out of their fear of incarceration (Alexander, 2010, p. 39).

As a result, the complexities of the urban community's strained relationship with the criminal justice system has to be considered when creating culturally sensitive solutions for addressing the opioid problem in these communities (James & Jordan, 2018). Socioeconomic factors, such as disparities in access to affordable healthcare, that may also create barriers for minorities seeking help from rehabilitative treatment facilities must also be considered (Lagisetty, Ross, Bohnert, Clay, & Maust, 2019). In order to effectively assess and mitigate the devastating effects of the opioid epidemic in minority communities, there is a need to create evidence-based policies which take into account the unique cultural experiences of these populations. These policies should focus on key issues and culturally sensitive solutions to coping with this epidemic, such as exploring minority relations with the criminal justice system, increasing the availability of faith-based rehabilitative treatment alternatives, and the availability of low-cost rehabilitative treatment facilities.

4.3 Structural Racism in the Health System

Black Americans face particular obstacles that make it difficult to get treatment. Limited and low-quality insurance options, housing insecurity, and over-policing of Black communities all stand in the way of treatment for those who need it. Many Black Americans also struggle to trust institutions like health care systems, which they feel have betrayed them, says Dennis Bailer, the overdose prevention program director at Project Weber/RENEW, a non-profit based in Providence Rhode Island focused on drug addiction recovery. "As a person of color, I feel like the answer for Black and Hispanic crack cocaine users [has been] to lock them up," he says. "That's what we've seen in the past, and that's also why so many people are reluctant to engage. It's all about the white opioid user. And a lot of times, we feel like we get the back seat" (Tara Law, 2022).

Risk of death from opioid overdose was associated with not having health insurance. Opioid addiction often occurs amid economic and health problems that can lead to un-insurance (Orgera & Tolbert, n.d.). Affected U.S. population subgroups are heterogeneous. Tailored responses are therefore needed to deliver appropriate mental health, substance abuse, and social services. Affected groups include childbearing women and prenatally exposed infants, those at-risk for or with a history of incarceration, homeless people, and people living with chronic pain. As responses to the opioid epidemic scale-up to address effects of lack of insurance, training of prescribers can help them to distinguish medical needs from situations in which opioids are likely to be diverted for non-medical use (Han, Compton, Blanco, Crane, Lee, & Jones, 2017). Provider education can also maximize harm reduction (e.g. naloxone co-prescribing in the context of pain treatment).

Hispanic Americans questioned the efficacy of specialty treatment services. Many expressed doubts that providers could effectively treat a substance abuse problem or relate to them culturally. Thus, some who wanted treatment instead preferred mutual help groups for recovery support. This finding is concerning,

as it suggests that specialty treatment services may be overlooked, even among those who are seeking help and despite their effectiveness (Alegria, Carson, Goncalves, & Keefe, 2011). Additionally, many described avoiding specialty treatment because their goal was not to be abstinent, and this was particularly common among those with an alcohol problem. This finding is in line with other research highlighting that not all people struggling with a substance abuse problem define recovery as abstinence (Kaskutas et al., 2014). For instance, a study with individuals who self-identified as being in recovery found that recovery-oriented outcomes extended beyond being sober. Being honest with oneself, not using alcohol or drugs to cope with negative feelings, being able to enjoy life and contribute to society, and being spiritually connected were other important elements of how participants defined recovery (Kaskutas et al., 2014). Thus, specialty treatment programs should consider incorporating harm reduction strategies and emphasizing other recovery-oriented outcomes beyond abstinence. Several studies have documented that programs using harm reduction approaches can be as effective as abstinence-based approaches in reducing alcohol consumption and adverse alcohol-related consequences; these programs may also be preferred over abstinence-only programs (Marlatt & Witkiewitz, 2002). Such programs may be key for reaching a significant subset of people in need of treatment, including Latinos, who do not associate recovery with abstinence.

Racism may be associated with these disparities. In terms of racism, many potential factors could contribute to higher fatality rates among the non-Hispanic Black population in general and among men in particular. These factors include the consequences of structural racism (Phelan & Link, 2015), such as disparate access to SUD treatment (Lagisetty, Ross, Bohnert, Clay, & Maust, 2019); bias in pain treatment (Bonham, 2001), where Black patients often receive less effective pain management compared to their white counterparts; residential concentration in low-resource communities with limited access to well-funded schools, quality health care facilities, and nutritious food options (Firebaugh & Acciai, 2016); medical mistrust, stemming from historical injustices like the Tuskegee Syphilis Study which has led to skepticism towards the medical system (Boulware, Cooper, Ratner, LaVeist, & Powe, 2003); and racially biased drug policies (Provine, 2011), which have disproportionately targeted and incarcerated Black individuals for drug offenses, further entrenching socioeconomic disadvantages..

5. Recommendations for the Governance of Opioid Crisis

According to a 2019 CDC report, concerted efforts from Federal, State, and local jurisdictions are need to offer evidence-based solutions, preventative strategies, and treatment solutions in order to address the opioid epidemic. There is also an urgent need for strong public safety and public health partnerships to address this issue (Scholl, 2020). Although the role of race and ethnicity as it relates to the opioid crisis in minority communities (James & Jordan, 2018), there is a need for more data regarding how this epidemic may uniquely affect these communities in order to provide evidence-based solutions for policy implementation. Previous research has asserted that racially-biased media coverage paints a picture of the opioid epidemic that excludes certain groups of users from receiving the attention they need in order

to determine their specific risks and needs for their addictions (Netherland & Hansen, 2016). Researchers have suggested that the opioid epidemic in the United States is being treated as a crisis rather than a war on drug abuse due to it impacting largely the majority race (Dennis, 2017). Although there is a significant amount of discourse regarding treatment solutions for the opioid epidemic, void from the conversation are culturally sensitive options for disadvantaged minority communities. There is also need for more awareness and scholarly research that addresses the racial divide regarding the opioid epidemic.

5.1 Recommendation 1: Provide Culturally Adaptive Treatment Options

The results highlight the critical need to tailor treatment and harm reduction strategies for different racial and ethnic groups. As the face of the opioid epidemic has been Whitewashed or told through the narratives of Whites, there has been a shift in the public's negative perceptions and attitudes toward the drug abuser themselves (Kane-Willis & Bechteler, 2018). A recent public policy poll in 2017 indicated that the public is in support of opioid users receiving treatment, 61% for heroin users and 72% for Rx drug abusers (Commitment To Privacy, 2020). In contrast, the media portrays minorities as addicts instead of as victims in comparison to their White counterparts (Williams, 2019). This phenomenon is evident not only in regards to opioid use but also for abuse of other drugs, such as methamphetamine (Cobbina, 2008). However, amongst the latest conversations regarding the opioid crisis and policy implications for harm reduction, the role of race is missing. Although research indicates that Blacks and Whites use drugs at the same rate, the response to drug offenses amongst the two groups is different (Rosenberg, Groves, & Blankenship, 2016). Due to the public health crisis of opioid addiction impacting Whites at a disproportionate rate, treatment options and solutions are tailored to the majority population (Lagisetty, Ross, Bohnert, Clay, & Maust, 2019). Some of the treatment options that are being used to address opioid addiction are limited to communities that have access to financial resources and a lower percentage of minorities. Due to the high numbers of opioid overdoses in middle class White America along with racially-biased media portrayal, the response garnered from the government has been to declare the problem as a public health epidemic in need of emergency intervention. Over the past 10 years, the face of the opioid crisis has been one of White middle class Rx users in contrast to the War on Drug's minority heroin users. An inaccurate portrayal of opioid use results in different policy approaches. Punitive versus rehabilitative policy approaches can have long lasting negative and devastating effects in disadvantaged communities. Research has suggested that faith-based rehabilitative treatments have been more effective for minorities (James & Jordan, 2018). There is also a need for concerted efforts by government and community stakeholders in working with forensic science agencies to gather intelligence of the geographic prevalence of dangerous drug cuts (i.e. fentanyl) and in examining drug treatment court records to target hotspots for drug activity and opioid abuse.

Besides, culturally and multifaceted interventions for treating stimulant use may also decrease the disparities between Black and White individuals who use cocaine. Though White and Black individuals are as likely to use cocaine, Black individuals have twice the overdose mortality rate (Cano, Oh, Salas-Wright, & Vaughn, 2020). Black individuals account for 11% of those with past-year cocaine use, yet

27% of cocaine-related overdose deaths (Cano, Oh, Salas-Wright, & Vaughn, 2020). These increases may also be fueled by tainted drug supplies, such as fentanyl and analogs with cocaine (DiSalvo, Cooper, Tsao, Romeo, Laskowski, Chesney, & Su, 2021). Nolan colleagues (2019) found that fentanyl accounted for most of the cocaine-related overdose deaths in New York. Alongside drug contamination, research shows that socio-economic characteristics (e.g., educational attainment, poverty) accounted for some but not all Black/White racial disparities in cocaine-related deaths (Cano, Salas-Wright, Oh, Noel, Hernandez, & Vaughn, 2022). In addition, bias in healthcare has also been noted in negative outcomes for minoritized people who use drugs. Among patients on long-term opioid therapy for pain management, Black patients were more likely to be drug tested than White patients (Hausmann, Gao, Lee, & Kwoh, 2013). Of those who tested positive for cocaine, providers were three times more likely to discontinue opioid treatment if the patient was Black than if the patient was White (Gaither, Gordon, Crystal, Edelman, Kerns, Justice, Fiellin, & Becker, 2018).

5.2 Recommendation 2: Increase Affordable Treatment Solutions.

Previous research has demonstrated the racial and socioeconomic disparities in opioid abuse treatment, where the uninsured minorities and Blacks were found to underutilize opioid treatment options (Krawczyk, Feder, Fingerhood, et al., 2017). According to a 2019 report by the Chicago Urban League, many of the black Americans who experience opioid abuse disorders are socioeconomically disadvantaged, live in urban cities, and are uninsured or utilize public healthcare options, which limit their treatment options (Bechteler & Kane-Willis, 2017). The establishment of a comprehensive Rx monitoring and reporting program that utilizes arrest records to determine drug hubs may also aid in establishing patterns and trends of opioid abuse in minority communities. Additionally, ensuring the availability of resources for in-patient treatment options that are, both, cost-effective and accessible to minority communities will be essential in moving forward with practical solutions to the opioid epidemic in these areas.

Current drug treatment options for opioid addiction include buprenorphine, methadone, naltrexone, and naloxone. Although each drug is available only by Rx, for the uninsured, costs may be an issue, particularly with buprenorphine, as insurances plans often do not cover this drug for opioid abuse disorder. Of the four available drugs, naloxone has limited access and is routinely only administered for reversal of respiratory depression during opioid overdoses (Toderika & Williams, 2018). According to Drugs.com, the cost for naltrexone oral tablets (50 mg) averages around $46 for 30 tablets. This price is associated with a dis-count card for cash paying customers only and is not valid with the use of insurance plans. Although phar-maceutical companies often provide free or discounted medications for low-income patients, currently there are no patient assistance programs for this drug. However, the extended formulation of naltrexone, also known as Vivitrol VR, is much more expensive. The average cost for the once a month injection is $1900, and even with a coupon discount, the average cost is $1300. Depending on the formulation of meth-adone, the cost range is $18.77 for 100 tablets up to $471.34 for 50 grams of the compounding powder. Similarly, available formulations of buprenorphine costs range from $66 to

$261.05. Each of the above-mentioned prices are for cash paying customers who use a discount card (Naltrexone Prices, Coupons & Patient Assistance Programs –Drugs.com 2019).

In light of the potential that racial stereotypes may enter into the decision making, we believe that the safest and most judicious way forward is for clinicians to adhere to the latest guidelines from the CDC, which recommend that urine drug testing be administered to all patients prior to opioid initiation and then at least annually thereafter (Dowell, Haegerich, & Chou, 2016). In turn, clinicians need clearer guidance on how to respond to aberrant toxicology results in a manner that is both less biased and more effective in identifying patients at risk for overdose.

5.3 Recommendation 3: Improve the Racial and Ethnic Individuals' Social Determinants

Compared to people who owned a house with a mortgage, those who rented were at increased risk of fatal opioid overdose. The stress and uncertainty of unstable housing situations often exacerbated mental health issues, leading to higher rates of substance abuse. Renters frequently faced financial strain, limited access to healthcare, and social isolation, all of which contributed to their vulnerability. The lack of a stable living environment made it difficult for them to seek help or maintain sobriety, further increasing the likelihood of fatal overdoses.

Overall, increases in drug overdose deaths among minoritized populations, such as racial and ethnic minorities may illustrate the complex interplay of the social determinants of health and substance use disorders. These communities often face profound social disadvantages, including pervasive poverty, inadequate housing, and systemic discrimination, which exacerbate their vulnerability. Psychiatric challenges, such as enduring trauma, chronic depression, and anxiety, further complicate substance use patterns, drug treatment efficacy, and the likelihood of both fatal and nonfatal overdoses (Tighe, 2014). The harsh realities of high rates of victimization and homelessness, with 85% and 40% of minoritized individuals affected respectively, underscore the urgent need for trauma-informed care that addresses the root causes of their suffering. Additionally, stark regional disparities in the availability and accessibility of comprehensive substance use treatment services can significantly hinder racial and ethnic minoritized individuals from obtaining the essential care they desperately need (Coughlin, Lin, Jannausch, Ilgen, & Bonar, 2021).

Campaigns to enhance quality of life in less affluent housing neighborhoods may also have merit, focusing on improving living conditions, access to healthcare, and community support systems. An unexpected finding of the present study was that homeowners without mortgages had elevated risk of opioid overdose death compared to those with mortgages. One plausible explanation is that the pressure to make scheduled mortgage payments provides routine structure in daily life, creating a sense of responsibility and stability that discourages opioid misuse. This structured financial obligation might serve as a deterrent against engaging in risky behaviors, such as substance abuse, by fostering a disciplined lifestyle and prioritizing financial commitments over harmful habits.

6. Conclusion

Currently, the Opioid Crisis which heavily affects rural and suburban White, Non-Hispanic communities, is being addressed as a public health crisis, unlike the past "War on Drugs" that imposed severe penalties for the sale or abuse of controlled substances in urban, minority areas. However, more media outlets are now highlighting the opioid issue in disadvantaged minority communities. Additionally, scholarly and peer-reviewed articles are increasingly acknowledging the racial divide in the opioid epidemic. Despite the complexity of the opioid problem, there remains a lack of focus on this issue in lower socioeconomic minority communities.

This paper addresses the role of race in the opioid epidemic, emphasizing that urban minority communities should receive the same rehabilitative and non-punitive approaches as rural and suburban White communities. The response to the opioid crisis has been divided by race and class, reflecting a systemic failure to include minorities in discussions about solutions and future policies. The media and government have framed the opioid problem by blaming physicians, drug dealers, and pharmaceutical companies, while overlooking race as a contributing factor. The contrasting government responses, media portrayals, and drug prosecutions between the opioid epidemic and the War on Drugs era highlight alternative narratives. Current criminal justice policies favor Whites when a drug problem affects their communities, compared to minorities who have suffered from heroin and crack epidemics for decades. Researchers suggest that 'Whitewashing' this epidemic has led to the neglect of rising death rates in minority communities. To rethink policy implications, the U.S. government must change its approach to ensure that everyone affected by the opioid epidemic, regardless of race or ethnicity, is included in the dialogue to address this crisis.

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