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Perspective Chapter: Centering Race, Stigma and Discrimination - Structural Racism and Disparities in HIV among Black Sexual Minority Men

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Abstract

Structural racism is a fundamental cause of health disparities in the United States among racial/ethnic and sexual/gender minorities. Although there are well-documented disparities in the access of HIV prevention, care, and treatment services, the impact of structural racism on HIV/AIDS remains not well understood. The purpose of this chapter is to provide a detailed description of (1) the theoretical underpinnings of the link between structural racism and HIV, (2) a review of the evidence of these associations, and (3) a culturally appropriate, trauma-informed agenda that addresses intersectional, multi-level structural racism and its myriad manifestations to reduce HIV vulnerability for racial/ethnic and sexual/gender minorities, particularly Black sexual minority men.

Keywords: structural racism, structural discrimination, Black MSM, men who have sex with men, MSM, Black sexual minority men, pre-exposure prophylaxis (PrEP), human immunodeficiency virus (HIV), sexual and gender minorities, racial and ethnic minorities, stigma and discrimination

1. Introduction

After 40 years of the discovery of the human immunodeficiency virus (HIV) that causes autoimmune deficiency disease syndrome (AIDS), HIV remains a critical public health concern, particularly among racial/ethnic and sexual/gender minority populations. During the intervening years, there have been enormous advances in biomedical prevention strategies (e.g., pre-exposure prophylaxis (PrEP) and treatment therapies antiretroviral therapy (ART) that have transformed HIV from a death sentence to a chronic condition. Yet, despite these lifesaving treatments and therapies, the benefits have not been equally shared. There are still alarming numbers of new infections disproportionately impacting racial/ethnic and sexual/gender minorities, particularly Black gay and bisexual men in the United States. Notably, Blacks represent less than 13% of the population, but Black MSM accounts for 42% of all new HIV infections [1]. There are marked racial/ethnic disparities in health in the US, with Blacks or African-Americans faring substantially

worse compared to their white counterparts, including diabetes prevalence, colorectal cancer incidence and death, and mortality due to coronary heart disease and stroke [2–4]. These disparities are particularly acute in HIV, particularly for Black men who have sex with men (Black MSM). It is estimated half of Black MSM in the U.S. can be expected to become HIV positive in their lifetime [5]. Current surveillance data show that most of the HIV cases are clustered in the Southern U.S., a region marked by racial and structural inequalities as a result of racialized chattel slavery and Jim Crow segregation, where a large majority of the Black population continues to live in neighborhoods, that are divided and unequal reflecting previously codified racial divisions in housing, employment, education, healthcare, public utilities, and infrastructure [6].

While studies have shown African Americans do not have higher rates of sexual risk behaviors than their white counterparts and biomedical advances are effective at prevention and transmission of HIV/AIDS, at issue is accounting for the enormous racial/ethnic disparities in HIV-related outcomes [7]. In this perspective chapter, we explore the evidence underpinning the relationship between structural racism and high rates of HIV among racial and sexual minority populations in the U.S., particularly Black men who have sex with men (MSM). We examine the social, economic, and political policies and practices that engender a social and structural, and built environment that may increase or reduce an individual's HIV vulnerability to exposure to HIV. An examination of structural racism and HIV is timely given the ongoing debates around race and Covid-19, the Black lives matter movement and the ending the HIV epidemic initiative [8–10]. This work builds on previous work on race and HIV by incorporating emerging research employing an intersectional lens to understand the role of multiple identities and interlocking oppressions in explaining differential outcomes around HIV [11–13]. First we will review the origins of HIV using a social-ecological lens to better understand the influence of structural factors on increasing barriers to HIV prevention, care, and treatment services among racial/ethnic and sexual/gender minorities. Next, we provide an overview of the types of structural racism followed by a description of the intersectional stigma framework that underpins our conceptualization of how structural racism operates to increase HIV vulnerability. Then we embark on a review of the literature providing evidence linking structural racism and HIV-related disparities. Finally, we end with conclusions, key policy recommendations, and future directions of research to address the unique needs and structural barriers that create the conditions ripe for HIV to flourish among racial and sexual minority populations. While this chapter focuses primarily on the experience of Black sexual minority men in the U.S., it is our hope this information will have broader relevance to other populations and settings to inform the development and implementation of structural level programs and interventions to reduce the number of new infections among racial/ethnic and sexual/gender minority populations, both in the U.S. and beyond.

2. Understanding the structural origins of the HIV epidemic

Significant success in the prevention of HIV infection in the United States has been achieved. However, those successes were hard-won with significant opposition from hostile government officials, religious groups, and the public at large. In the early days of the AIDS epidemic, there was widespread misinformation about AIDS with many believing it was a disease that affected only homosexuals and was a punishment from God for their turning away from the teachings of the Bible. Alongside these common misinterpretations, longstanding homophobia and anti-gay stigma and discrimination were the norm. It was within this socio-political

context of government inaction and societal scapegoating where HIV went undiagnosed and untreated and allowed to flourish within the Black community, particularly among Black MSMs.

Much of the initial response was largely limited to activities organized by LGBT community-based organizations and the gay community focusing primarily on behavioral change and lifestyle factors including harm reduction (e.g., drug and substance use, sexual risk behavior) or uptake of biomedical therapies (e.g., condoms). The first community-led activities were launched in San Francisco and New York City where the first cases of HIV occurred [14]. These early activities were designed to increase awareness and to educate the gay community about how the virus is transmitted and risk reduction strategies to prevent HIV.

As time progressed, the government stepped in launching HIV prevention programs to reduce the spread of the disease. These early government initiatives led by the CDC continued the focus on individual-level programming around behavioral change including: (1) the development of the National AIDS Information Line (1983), (2) National AIDS Clearinghouse (1987), (3) America Responds to AIDS, a national public information campaign (1987), and (4) the development and dissemination of Understanding AIDS (1988). Understanding AIDS was groundbreaking, being the first public education campaign utilizing the U.S. postal service to deliver health literacy information to every home in the United States [15]. However, early approaches in delivering basic HIV education and awareness, changing attitudes, and harm reduction among most-at-risk populations often did not address the unique needs and realities of racial/ethnic communities. These programs targeted priority populations deemed at elevated risk including high-school and college-aged persons, pregnant women, and healthcare workers [16]. While important advances were made in the gay community benefitting the white gay community, however, they did not substantially reduce HIV risk for African American and LatinX communities. In the late 1980s, we start to see the development of more targeted evidence-based interventions such as the five-city CDC AIDS Community Demonstration Projects (1989), CDC HIV Prevention Research Synthesis Project, and the CDC Diffusion of Effective Behavioral Interventions (DEBI) project [17, 18]. While these studies and interventions were more tailored for marginalized populations such as injection drug uses, sex workers, and racial/ethnic minorities, they were primarily individual-level behavioral change initiatives with only a few structural interventions.

3. A conceptual framework for the association between structural racism and HIV

Researchers in the area of public health, sociology, geography, and urban planning have shown macro-level factors at the structural level can influence health on a number of health-related outcomes including mental health, cardiovascular disease, maternal health, diabetes, and HIV [19–26]. According to Link and Phelan in their theory of fundamental causes they argue that structural factors, that is, socioeconomic status (SES) contribute to inequalities in health [27]. Extrapolating from this premise and building on socio-ecological frameworks, we posit that the broader dynamic and interactive macro-level social, political, and economic processes structure access to societal resources and opportunity structures which are mediated through the built environment has profound consequences influencing sexual risk behavior and access to HIV prevention, care and treatment services. Our model draws inspiration from the following structural frameworks: Structural violence, social determinants of health, neighborhood effects, weathering and intersectionality [13, 28–30]. Each of these theories and frameworks center upstream, macro-level

factors as foundational to health disparities and provides a useful conceptual lens to understand the spatial legacies of chattel slavery and contemporary effects of racial capitalism and structural racism. Farmer's theory of structural violence emerged from Paul Farmer's groundbreaking work in HIV in Haiti and argues that structural consequences, for example, slavery, colonialism, Jim Crow, and other forms of oppression have profound material consequences for individuals and populations, particularly racial and ethnic minorities. Next, social determinants of health argues that unequal access to basic needs and resources (i.e., employment, education, housing, and healthcare) disadvantages certain individuals and groups affecting their health outcomes [28]. Diex Roux's neighborhood effects framework highlights the importance of spatial and geographical variations in health arguing the larger structural environment shapes neighborhood/community conditions and features that may influence health outcomes [29]. Finally, we include Geronimus' Theory of weathering which helps us to better understand how effects of structural racism (e.g., residential segregation, poor-quality schools, environmental racism) 'gets under the skin' creating stress in the form of allostatic load which has been shown to affect health outcomes [30]. These active and ongoing adjustments necessary to manage these multiple interacting structural forces and stressors can create wear and tear on the body leading to poor health outcomes, particularly increasing HIV vulnerability for historically marginalized and stigmatized groups such as Black MSM. Moreover, we employ an intersectional approach to emphasize the intersections of multiple and intersecting identities (e.g., race, gender, and sexual orientation) and interlocking systems of oppression (e.g., racism, homophobia, and classism) that may influence an individual's behavior and access to resources and opportunities that impact their health and well-being [11–13]. By utilizing an intersectional perspective, it allows us to center the multiple stigmatized identifies and contend with the insidious and harmful direct effects of intentional and unintentional state-sanctioned race-based, structural factors and processes that distribute resources and opportunities that increase HIV vulnerability for Black sexual minority men. Our conceptual model presented in **Figure 1** is informed by the aforementioned socio-ecological frameworks and divided into three levels: (1) structural level, (2) neighborhood level, and (3) individual level, representing the multilevel and multivalent nature of structural racism. The structural level is defined as macro-level forces (e.g., social, political, economic, and legal policies) developed by governments and powerful institutions that govern the organization and structure of society. The structural racism interpretation of HIV proposes that macro-level structural level forces are paramount in understanding HIV-related health disparities and as such foundational to explaining differential HIV-related outcomes. Neighborhood level refers to the community environment including both social and built environment aspects of neighborhoods. The construct of the neighborhood is derived from the neighborhood effects framework which explicitly acknowledges that relative deprivation in the form of neighborhood structural disadvantage (e.g., access to employment, housing, public transportation, etc.) may influence health-seeking behavior and limit access to HIV prevention, care, and treatment services. Finally, the individual level includes both sociodemographic characteristics (e.g., race, gender, age, and education) and risk factors (e.g., condom use, number of sexual partners) that are derived out of an unequal distribution of resources and exposure that create barriers to healthy behaviors and access to healthcare. Illustrated in **Figure 1** are pathways that are represented by arrows in the diagram modeling key risk factors theorized as having a significant impact on HIV vulnerability and explaining differential HIV-related outcomes, particularly among Black MSM. The arrows indicate the dynamic and interactive nature of structural racism which has both direct and moderating effects that either reduce or increase an individual's exposure to HIV.

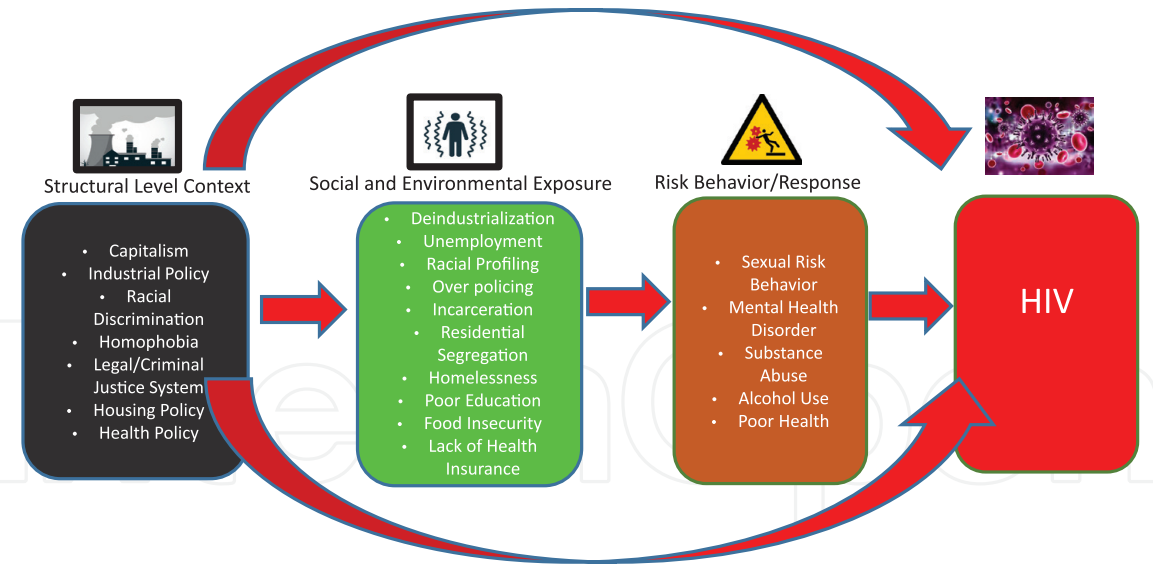


Figure 1.
Structural racism and HIV vulnerability conceptual framework.

4. Evidence linking structural racism and HIV

While there is growing recognition of structural racism and its impact on health, yet there is limited research examining the relationship between structural level factors impact on health HIV-related outcomes. A full accounting of structural racism and HIV disparities among sexual and racial minorities is beyond the scope of this chapter; rather instead we will provide an overview of the research focusing on the role of structural racism in fostering conditions that increase HIV vulnerability for Black MSM. We also acknowledge there is significant diversity within the Black MSM rubric (e.g., gay, bisexual, transgender, gender non-conforming; and same-gender-loving) with each subgroup experiencing varying levels of structural racism at the intersection of race, class, sexual, and gender identity, gender expression and HIV. Several researchers have critiqued the use of the term MSM because of who it includes and excludes, however again due to the limited scope of this chapter, we use the more traditional definition of Black MSM—an individual who identifies as Black or African American, assigned male at birth (MAB) and gay, bisexual and other men who have sex with other men [31–33]. In this section, we divide structural racism into five key domains: (1) Neighborhood Effects, (2) Social Determinants of Health, (3) Access to HIV Prevention Care and Treatment Services, (4) Incarceration, Criminal Justice System and HIV, and (5) Stigma, Cultural Competency, and Medical Mistrust. We will attempt to address each in turn.

5. Neighborhood effects and HIV

Research has shown characteristics of the neighborhood can shape HIV risk environments with differential impacts, particularly among sexual and racial/ethnic minority populations [34–40]. Segregated residential patterns concentrate high rates of HIV and community viral load in a small geographical region increasing a person’s likelihood of having a sex partner who is HIV-positive and not virally suppressed [41–43]. A study of Black MSM in Chicago found that an additional infected person into your sexual network increases the odds of seroconversion by a factor of thirteen [43]. The Chicago Metropolitan Statistical Area is ranked 5th in the nation with a dissimilarity score of 83.6. The index of dissimilarity is a

measure of residential segregation that measures how one racial group is distributed across census tracts in the metropolitan area compared to the other group. Scores ranging from 0 to 100 with a value of 60 or above is considered very high. In Chicago, a score of 76.9 indicates a high level of segregation which aligns with low viral suppression rates, thereby increasing HIV vulnerability for Black MSM [44]. Residential segregation has also been shown to affect the choice of sexual partner's by limiting their social network contributing to increased levels of HIV transmission and susceptibility among the Black MSM population. A study of the effect of partner characteristics on HIV infection in Los Angeles found Black MSM are more likely to have Black sexual partners than other groups, thus increasing their potential of encountering an HIV-positive sexual partner [45]. In this study, Black MSM were 4.4 times more likely to be HIV positive than their white counterparts. Moreover, data suggest an association with neighborhood conditions and HIV-related outcomes. Another study of Black MSM residing in New York City found a measure of neighborhood physical disorder (e.g., boarded up and vacant housing) was associated with lower odds of serodiscordant condom less intercourse (AOR = 0.43; 95% CI 0.19, 0.95) among Black MSM suggesting the physical environment foster conditions and situations that influence sexual risk behavior [46].

6. Social determinants of health

Poverty-related factors (e.g., low-income, unstable housing, incarceration, etc.) have been shown to be a driver of the HIV epidemic creating significant barriers to access to HIV prevention services and poorer HIV-related outcomes [47–49]. Housing instability has been shown to be negatively associated with risk of HIV infection; viral suppression and uptake and retention of PrEP and ART [50–52]. One study of Black MSM in Massachusetts found those with unstable housing were four times more likely to report engaging in unprotected sex. A systematic review of housing status and HIV-related outcomes found lack of stable, secure, adequate housing is a significant barrier to consistent and appropriate HIV medical care, access and adherence to antiretroviral medications, sustained viral suppression, and risk of forward transmission [53]. In a recent six-city study of Black MSM, 12.1% had experienced homelessness in the last 12 months and reported difficulty in maintaining adherence to ART compared to stably housed respondents [54]. Millet et al. found housing instability, income, and marijuana use explained higher rates of HIV among Blacks compared to whites [44]. In another study of Black MSM in Atlanta, one-third of respondents reported experiencing unstable housing with the majority of those being homeless [55]. Being unstably housed was associated with declines in viral suppression. In addition to housing, the study found living below the federal poverty level, and being incarcerated in the last 12 months was also associated with statistical differences in viral suppression between Black and White MSM [55]. For many racial/ethnic and sexual gender minorities maintaining health-promoting behaviors and/or medication regimens such as PrEP compete with other survival needs, such as securing stable housing.

7. Access to HIV prevention care and treatment services

Historically, African Americans have faced significant challenges obtaining affordable, quality healthcare and often delaying seeking healthcare resulting in an expensive emergency room visit and increased morbidity and mortality [56]. Due to their stigmatized and marginalized status as Black, gay and poor, Black MSM in

particular face a myriad number of challenges to accessing affordable culturally competent, quality healthcare across the HIV continuum. Access and uptake of HIV prevention biomedical therapies (e.g., HIV testing, pre-exposure prophylaxis (PrEP), and antiretroviral therapy (ART)) is essential to improving HIV-related outcomes for people living with HIV (PLWH) and as an effective HIV prevention strategy to eliminate transmission of HIV [57]. However studies show Black men are less likely to use ART and have low rates of adherence. In 2017, a study found Black MSM were less likely to secure ART, after controlling for less education, lower-income and access to healthcare [58]. Pre-exposure prophylaxis (PrEP), which has been found to be highly effective at reducing the transmission of HIV, remains alarmingly low among Black MSM [59]. A recent study found approximately 500,000 African Americans could benefit from PrEP, but only 7000 prescriptions (0.014%) were filled [60]. Several studies have found Black MSM are less likely to use PrEP than their White counterparts [61, 62]. For example, a study utilizing the National HIV Behavioral Surveillance survey conducted in San Francisco among MSM showed only 7.7% of Blacks used PrEP compared to 22.9% of their White counterparts.

There is growing evidence that suggests structural racism-related access to social and economic resources affects access to HIV prevention, care, and treatment programs among Black MSM. Numerous studies have shown Black MSM face significant barriers to accessing health insurance. In a meta-analysis of risk factors associated with disparities in HIV infection among MSM in Canada, UK, and the USA, Millet et al. found Black MSM were less likely to have health insurance compared to their white counterparts [63]. In this same study, the authors found pronounced disparities across a number of structural barriers that increase HIV vulnerability for Black MSM. Black MSM was more likely to be unemployed, have low educational attainment, have lower income, and ever been incarcerated which exacerbate efforts to obtain healthcare. A study examining access to healthcare found expansion of Medicaid was associated with a decline in new HIV diagnoses [64]. A recent study of Black MSM found 31% had no access to health insurance [65]. Another study found an association between having health insurance and being unaware of one's HIV status demonstrating the importance of having a primary healthcare provider [66].

8. Incarceration, criminal justice system and HIV

There is growing recognition that incarceration is a major structural factor in increasing HIV vulnerability among Black MSM. Structural inequities in the criminal justice system (e.g., stop and frisk, race-based sentencing, bail bonds) have led to disparities in incarceration rates for racial/ethnic minorities, for both Black men and Black MSM [67–70]. Research has shown correctional facilities are sites of HIV infection where HIV prevalence rates are 5 times that of the general population, yet only 20 states conduct HIV testing at the point of admission [71]. A study conducted in North Carolina showed only 31% of male inmates received a voluntary HIV test [72]. While some facilities provide HIV prevention education, it is often inconsistent [73–75]. Also, despite high rates of unprotected sex and HIV infection within the prison system, the provision of condoms is not routine. Only two state prison systems and five county jails make condoms available to their male inmates [76]. Among Black MSM inmates who reported engaging in anal sex, 90% indicated they did not use a condom [77]. Furthermore, a prior history of incarceration is associated with non-adherence to HIV treatment [78]. Over incarceration of African American men and lack of access to HIV

prevention, care and treatment create conditions that drive the transmission of HIV among racial/ethnic minority populations, particularly Black MSM [79].

9. Stigma, cultural competency and medical mistrust

While having insurance and a primary healthcare provider are important in increasing access to needed HIV prevention, care, and treatment services, it does not always guarantee access. For HIV prevention therapies to be prescribed both patients and healthcare providers must be ready and willing to discuss sexual health. Institutional cultural competency and subsequent patient-provider communication have been shown to influence uptake and use of PrEP. Cultural competency and the healthcare provider at the institutional level play a critical role in creating access to HIV prevention care and treatment for Black MSM. Despite advancements in LGBT inclusion and rights, many healthcare providers lack awareness and sensitivity in relation to sexual and gender minorities, particularly Black MSM. Evidence has shown healthcare providers often fail to discuss sexual health as a part of routine medical care which can lead to missed opportunities for critical HIV prevention education, testing, and counseling [66].

Additionally, stigma and discrimination in healthcare settings have been shown to create barriers to care among Black MSM [80–82]. Black MSM who experience institutional racism or health care provider stigma and discrimination are less likely to engage in health-seeking behavior [83, 84]. Research has shown stigma is not only a deterrent to accessing care, but it can lead to longer lapses in care among those who experience it [85–91].

10. Conclusions

There is a growing recognition that structural racism contributes to HIV-related outcomes, particularly for Black MSM [92]. This year CDC declared structural racism a public health concern [93]. Several initiatives to advance our understanding of structural racism and its effect on health have been implemented including NIH Unite Initiative whose primary goal is to address structural racism and promote racial equity and inclusion at NIH and within the larger biomedical research enterprise [94]. In the area of HIV, NIH has recently convened an HIV-Related Intersectional Stigma Research Advances and Opportunities Working Group to develop measures and resources that better help to identify and measure HIV-related stigma and discrimination at multiple levels that pose a critical barrier to the prevention, care, and treatment of HIV; and negatively affect the quality of life in those living with HIV [95].

In an effort to build on these initiatives, we call on national, state, and local governments, policymakers, and community-based organizations to implement the following structural HIV prevention interventions to reduce the number of new infections among Black MSM, marginalized and highly stigmatized population:

10.1 Development and implementation of structural competency training and policy

While there is a growing recognition of structural factors (i.e., structural racism) in shaping HIV-related outcomes, there is an urgent need for training and implementation of structural-based programs and interventions that complement biomedical therapies that address social determinants of health to improve

HIV-related outcomes among Black MSM. The importance of a culturally competent healthcare professional in providing quality health care is well established [96]. Cultural competency is an evidence-based framework utilized by healthcare care systems, agencies, and organizations that establishes a set of behaviors, attitudes, and policies that enables effective cross-cultural communication between healthcare professionals and vulnerable populations leading to improved health outcomes [97]. Similarly, there is a need for the development and implementation of structural competency training including a theoretical framework setting out a set of constructs, measures, and strategies on establishing and maintaining structural competency for health care systems and healthcare professionals.

10.2 Increase and expand HIV patient navigation services

We call for the development and implementation of patient navigation services that are culturally and structurally tailored to meet the unique needs of Black MSM who are disproportionately impacted by HIV. Evidence has shown patient navigation services increase patient engagement and patient linkage to needed HIV prevention, care, and treatment services [98–100]. Structurally-appropriate HIV services might include provision of non-clinical services, for example, transportation, clothing, food, rental assistance, housing, and workforce development. Additional research and investments in addressing social determinants of health are critical if we are to reach our goals of ending the HIV epidemic by 2030.

10.3 Implementation of innovative HIV structural interventions

There is growing evidence that structural-level interventions reduce HIV vulnerability and improve HIV-related outcomes. There are a number of HIV structural interventions that have been shown to be effective including comprehensive sex education, access to healthcare, and housing assistance. However, there are other examples that may not be widely known, we list a few here to provide you examples of novel and innovative programs that can be scaled up and/or adapted for Black MSM. The Max Clinic in Seattle, WA and Open Arms Healthcare Center (OAHCC) in Jackson, MS are two examples of health centers that have been designed to meet the needs of racial/ethnic and sexual/gender minority populations by providing culturally competent, quality healthcare across the HIV Continuum [101, 102]. Both clinics offer a range of clinical and non-clinical services. OAHCC utilizes an integrated HIV care model consisting of five care components: (1) case management, (2) HIV health care (including primary health care), (3) behavioral health care (i.e., mental and substance abuse screening and treatment), (4) adherence counseling (a pharmacist-led intervention), and (5) social support services (transportation, emergency food assistance, housing, and legal assistance). The Max clinic is based on high intensity, low threshold incentivized care model including walk-in service (no appointment necessary), primary care services, food vouchers, cash incentives, no-cost bus passes, cell phones, as well as intensive case management with cross-agency coordinated care.

10.4 Expand youth friendly HIV Services (YFHS)

Both in the U.S. and globally, adolescents and young people represent a growing share of the newly infected. In the U.S., Black youth make up one-third of the newly diagnosed [103]. There is a large body of evidence supporting the effectiveness of providing youth friendly services that improve the delivery of sexual and reproductive health services. Given youth, particularly young Black gay and bisexual men,

are at elevated risk of HIV, there is an urgent need to implement HIV prevention programs targeting Black MSM early in their pre-teen years. Delivery of quality services that are tailored to young Black MSM may reduce sexual risk behavior and improve adherence to HIV prevention methods such as condoms, PrEP and ART. The WHO has implemented guidelines recommending YFHS should be accessible, acceptable, equitable, appropriate, and effective [104].

10.5 Implementation of multi-level, intersectional, trauma-informed HIV prevention, care and treatment programs and services

Due to structural racism, discrimination, and stigma, Black MSM face a myriad of traumas (e.g., poverty, early childhood adverse events, that is, sexual and/or child abuse, mental health disorder, substance disorder, environmental hazard, poor educational system, lack of healthcare, and substandard housing) which have been shown to have negative effects on an individual's mental, physical, social, emotional, or spiritual well-being and consequently has shown to be associated with HIV vulnerability [105]. There is an urgent need for evidence-based, structural-level trauma-informed interventions to address structural racism and its effects on sexual risk behavior that increase the risk of HIV transmission. Sub-Saharan Africa has been at the forefront of the implementation of structural level, trauma-informed interventions including addressing gender norms and HIV, intimate partner violence, and the use of microfinance to reduce HIV risk among young women [106–111].

If we are to meet the goal of ending the HIV Epidemic [112] by 2030, then we must radically shift how HIV prevention services are designed and implemented. Evidence supports the rapid roll-out and scale-up of structural-level HIV prevention programs: including comprehensive sex education, stigma reduction, universal condom availability, expanded syringe access for drug users, mental health counseling, and free access to PrEP and PEP. We call for increased investments in programs and policies that address social and structural determinants of health and fundamentally shift political and policy priorities, rethink social norms, and empower and transform historically marginalized communities. A number of structural approaches have been used or may be adapted to address racial/ethnic disparities in HIV including, free healthcare, affordable housing, a living wage, guaranteed income, reforming of the criminal justice system, early childhood education, and free tuition to college. These programs and policies from a wide range of fields and disciplines, including, education, economics, and public health could be used and adapted to address racial/ethnic disparities in HIV [113]. **Figure 2** presents a conceptual model for an integrated, trauma-informed HIV service delivery system. Using an ecological framework, we construct a multilevel, intersectional trauma-informed HIV service delivery model. The fundamental premise of the model is that broader, dynamic, and interlocking oppressions derived out of a distorted, racially-determined political economy, mediated through structural level processes, increase HIV vulnerability by creating barriers to access to HIV prevention, care, and treatment. We have divided the framework into three major constructs (i.e., structural, community and individual). To date, the majority of interventions have been focused on the individual level and to lesser extent community-level interventions. We propose policymakers, researchers and public health officials increase investments in the development and implementation of structural level interventions that will complement HIV prevention efforts. The effects of structural racism are foundational to our understanding of racial/ethnic and sexual gender disparities in HIV and as such it requires a structural level, systems approach to address the underlying structural,

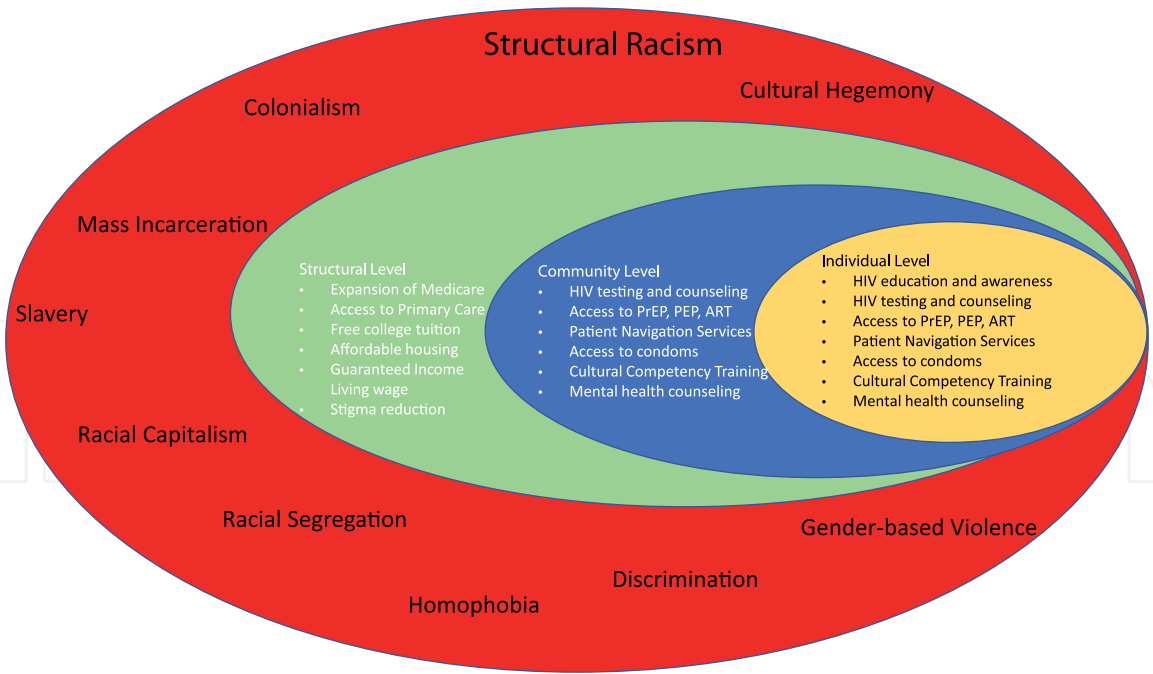


Figure 2.
A multilevel, intersectional trauma-informed HIV service delivery model.

political, and economic processes that structure HIV vulnerability for Black, sexual minority men.

Funding

N/A

Conflict of interest

PB has no conflict of interests.

Availability of data and material

Any datasets generated during and/or analyzed during the current study are not publicly available due to confidentiality concerns but are available from the corresponding author on reasonable request.

Code availability

N/A

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