

**Barriers to HIV PrEP Usage Among Young African American Men:
A Literature Review**

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Research Question: What are the health disparities and barriers to PrEP usage and HIV prevention services among African American MSM in the United States?

Abstract

Health disparities are prevalent among racial/ethnic groups regarding HIV prevention and PrEP uptake. With the rate of increasing HIV transmission in the United States interventions that address PrEP usage are crucial. The risk factors that are found in this literature come from multiple peer-reviewed articles and academic journals found in different databases. The results found that several factors like limited access to care, socioeconomic status, and attitudes, beliefs and stigma lead to African American MSM being the demographic most at risk for HIV and transmission rates. As research in HIV prevention increases, we can only hope that the incidence of new HIV diagnoses among African American MSM decreases.

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Introduction

Currently Human Immunodeficiency Virus, otherwise known as HIV, attacks the body's immune system and without treatment can eventually lead to acquired immunodeficiency syndrome, also known as AIDS. HIV is spread mainly through sexual contact, whether it is anal or vaginal sex. But can also spread from sharing needles, syringes or other drug injection equipment (Center For Disease Control, 2024). While anyone who engages in sexual intercourse is at risk for HIV infection, in the United States gay and bisexual men, sometimes referred to as MSM, and transgender women are disproportionately at a higher risk for HIV than compared to other demographics (Hammack et al., 2018). Currently, there is no cure for HIV/AIDS.

Symptoms of HIV are synonymous to flu-like symptoms, that include but are not limited to fever, sore throats, night sweats, mouth ulcers, fatigue, chills, rash, muscle aches, swollen lymph nodes, and rash (Center For Disease Control, 2024). Like all viral infections, some people may not present symptoms at all, even if an HIV infection is present in the body (Center For Disease Control, 2024). Long-term effects of HIV infections include coinfections that occur due to the damaged immune system (Center For Disease Control, 2024). These coinfections can include hepatitis B and C, tuberculosis, and pneumonia (Center For Disease Control, 2024). However, in most cases these coinfections do not occur until the advanced stages of AIDs, which can occur 10 years after the initial HIV infection if the person living with HIV is not actively taking antiretroviral therapy drugs (Center For Disease Control, 2024). Antiretroviral therapy drugs, otherwise known as ART are medications prescribed by health care providers, that when

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taken consistently, reduces the amount of HIV is in the blood (Center For Disease Control, 2024). Those living with HIV and taking ART have an undetectable viral load, meaning that they cannot transmit HIV to others through sex (Center For Disease Control, 2024).

Testing for HIV can be done using blood or oral fluid. The most common form of testing done for HIV are antigen/antibody test, which involves drawing blood from the vein and detecting antigens/antibodies in the blood. It is recommended that everyone receive an HIV test at least once in their lifetime, according to the CDC (Center For Disease Control, 2024).

Although, populations who are at risk for HIV at a higher rate are recommended to get tested more often than once in their lifetime, which includes MSM and transgender women (World Health Organization 2024). Fortunately, due to advancements in HIV research the drug pre-exposure prophylaxis, otherwise known as PrEP, has been developed to prevent HIV infections from occurring. PrEP comes in the form of a once daily pill, and more recently an injectable taken every two months, providing 99% effectivity in prevent HIV infections when taken consistently (Patel et al., 2018).

Currently, from recent 2021 data African Americans account for 40% of all new HIV infections, while only being 12% of the population in the US (hiv.gov, 2023). Making African Americans the largest demographic at risk for HIV infections than compared to other ethnic groups. Among that demographic the highest subgroup with the highest prevalence ad incidence of HIV infections is African American MSM. In relation to PrEP usage, African Americans are also the demographic with the lowest percentage of PrEP use, compared to other ethnicities, at 14% (AIDSVu, 2022). There are numerous reasons as to why African Americans, specifically

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African American MSM, are the lowest ethnic group to use PrEP Some of which include barriers such as limited access, socioeconomic status, and attitudes, beliefs and stigma.

Methods

In this literature review, the databases utilized were PubMed and Gale OneFile. PubMed contains literature primarily focused of biomedical information that comes from MEDLINE, life science journals, and online books. Since this topic is related to health and medicine, PubMed presents as an excellent database choice for finding articles and journals about this research. Using the search tools aided in finding articles that best fit this topic with reliable resources.

For PubMed, the first search terms included “hiv” which yielded 190,055 articles. This was the broadest search of articles related to the research question. However, this general search gave the basic information needed to understand this topic at a base level. For narrowing this number, the second search term included “hiv AND prep” which yielded 4,502 results. The following search term included “hiv AND prep AND young African American males” which yielded 164 articles. Even though these search terms were specific to the research topic, the use of filters were necessary in this search. The final search term included “hiv AND prep AND young African American males” followed by using the filters “Free full text” and limiting the search to the years 2020-2024. This yielded 49 articles. From the 10 final peer-reviewed articles chosen, five were chosen from this database search.

For Gale Academic OneFile, the first search terms included “HIV” which yielded 76, 421 academic journals. The second search terms included “HIV AND prep” which yielded 1,623

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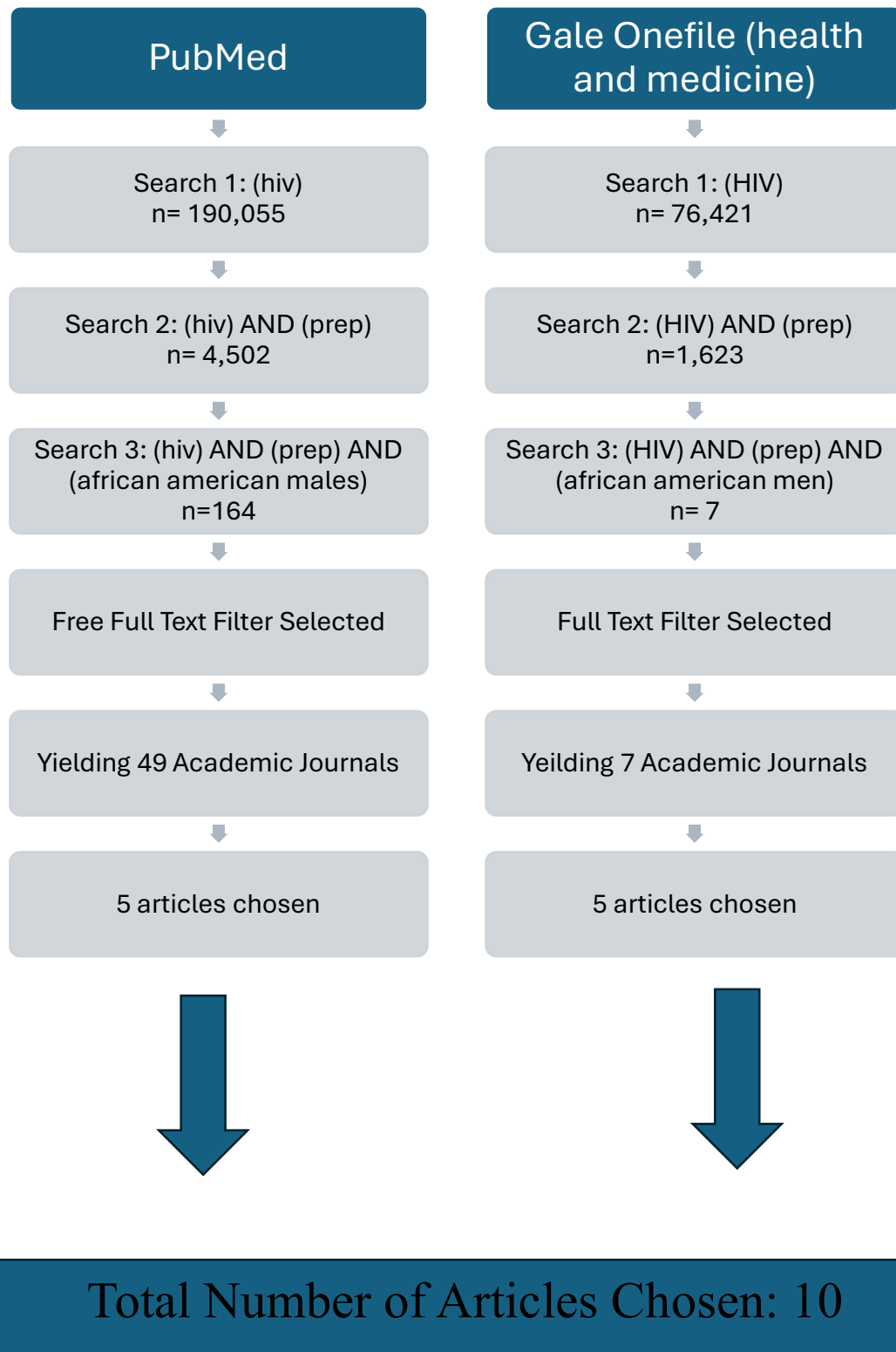
academic journals. The next search terms used were “HIV AND prep AND african american men” which yielded 16 academic journals. This search greatly narrowed down the results and provided articles that were specific to the research topic of HIV PrEP usage among african american men. From this narrowed down search, the “Full Text Documents” filter was used, yielding a total of 7 academic journals. From the 10 final peer reviewed articles chosen, five were chosen from this database search.

Majority of the articles were selected using the search term “HIV AND prep AND african american men”. This search usage provided articles that focused on the specific issue PrEP usage among african american men, primarily that were HIV-negative and in the United States.

In both databases, similar inclusion was used. The inclusion criteria included narrowing down articles that were free full test, published from 2020 to 2024, focusing on HIV prevention, PrEP use, and determinants of how HIV is approached by African American MSM. *Figure 1* provides a detailed process for the selection of the 10 final peer-reviewed articles.

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Figure 1. Literature Review Article Selection Process



Results

Currently, African American MSM are still the highest demographic to be at risk of HIV transmission. This literature review of this issue identifies three overarching findings that has impacted the prevalence of HIV among this target population. The limited access to prevention resources, socioeconomic status, and attitudes and beliefs surrounding the topic are all factors to consider when evaluating the ending of the HIV epidemic. For a more detailed summary of the articles reviewed, see *Table 1. Detailed Summary of Articles Reviewed*.

Limited Access to HIV Prevention Resources

Like any health issue, when evaluating disparities and gaps among demographic groups, one of the contributing factors that is most prevalent is access. In many clinical trials and breakthroughs regarding HIV and its prevention, African American MSM are least recruited and involved with its development (Xu et al., 2024). Because of this, many in this target population are not as knowledgeable about these breakthroughs or even how access to these new developments. While many programs provide equal treatment and access to HIV prevention services, they are not equitable to the needs of varying ethnic groups across the MSM population (Burns et al., 2023). African American MSM are not often prioritized even though they are the highest rate of newer HIV diagnoses per 100,000 (KFF 2024).

The Covid-19 pandemic also hindered upon the access to HIV prevention services for all demographics, but especially African American MSM (Labs et al., 2022). It was found that from 2020 to 2022, the increase in HIV diagnoses was 15% (Labs et al., 2022). This was attributed to

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decreases in HIV testing and the shutdown of these services, specifically at the start of the pandemic (Labs et al., 2022). Many relied on these services as they may have been the only way to practice HIV prevention, and since the pandemic these services have been slow to recover back to the way they were before ((Labs et al., 2022). Specifically African American MSM who live in suburban and rural areas, a subgroup of the target population, suffered from the long-term impacts of the pandemic and their HIV prevention at a greater scale than their urban counterparts (Labs et al., 2022).

Socioeconomic Status

Socioeconomic status and healthcare costs are also factors to consider as barriers to HIV prevention among this target population. Structural factors like housing, neighborhoods, and economic empowerment also affect PrEP uptake among this population (Fields et al., 2020). These structural factors present on stressors which contribute to an increase in sexual intercourse without condoms, therefore increasing the risk of HIV transmission (Fields et al., 2020). Healthcare professionals also have to work in conjunction with these stressors and barriers to provide equitable care to this target population (Burns et al., 2023). Whether that's providing resources for navigating insurance costs for PrEP and its options or even resources to testing centers and how to get there (Burns et al., 2023).

Attitudes, Beliefs and Stigma Surrounding HIV Prevention

Beliefs and attitudes surrounding HIV and its prevention play a key role regarding its relationship with the target population. Specifically with the acceptability of PrEP and those who use it (Okeke et al., 2021). Many within this target population do not believe they are at a high

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risk for HIV, therefore believing that PrEP isn't as necessary for them (Okeke et al., 2021). This commonly held belief prevents people from taking the steps to prevent HIV (Psaros et al., 2024). The likely root of this belief may come from the stigma surrounding those who take PrEP (Fields et al., 2020). Across many studies, participants have noted that there is an assumption that if someone takes PrEP, or thinks they need to, that person is promiscuous or "sleeps around" (Fields et al., 2020). As African American MSM are already stigmatized in society, the believed stigma about those who use PrEP may be further cause for low PrEP uptake in this at risk population (Okeke et al., 2021).

Table 1. Detailed Summary of Articles Reviewed

	Author(s)	Year	Article Title and Journal	Purpose of article	Sample info	Type of Research	Research Findings	Limitations of article
1	Fields, E. L. Hussen, S. A. Malebranche, D. J.	2020	Mind the Gap: HIV Prevention Among Young Black Men Who Have Sex with Men	To evaluate the significant health inequities and gaps among young black MSM in relation to hiv diagnoses and treatment outcomes.	Young Black MSM	Mixed Methods	Findings include that young black MSM are disproportionately at risk for HIV. Due to partly having higher rates of undiagnosed hiv within their community. There are also many common barriers to hiv prevention services. Some of these barriers include stigma, medical mistrust and costs.	Some limitations of this article include the sample size. This article is not completely generalizable to all young black MSM across different regions.
2	Remy, L. Enriquez, M.	2019	Behavioral Interventions to Enhance PrEP Uptake Among Black Men Who Have Sex With Men: A Review	To review behavioral strategies to increase PrEP uptake among black MSM.	Young Black MSM	Systemic Review	Findings include that despite black MSM have high risk of contracting HIV, their PrEP uptake is among the lowest. With interventions, it was found that the inclusion of people black MSM trusted and knew were more successful in addressing PrEP uptake	Some limitations of this article include the limited sample size represented in the studies. Also, how some interventions are only done of the individual level, rather than systemic.

3	Burns, Paul A. Anyimukwu, Chizoba Omondi, Angela A. Monger, Mauda Ward, Lori Poteat, Tonia	2023	Health-Care Providers' Perspectives on an HIV Patient Navigation Training to Improve Uptake of PrEP among Black Sexual Minority Men	To receive the insights and opinions of clinicians and healthcare providers while providing a training program to improve their ability to navigate PrEP usage among black MSM patients.	Black/African American healthcare professionals working in HIV prevention. That are aged 18 and up, as well as residents of the Jackson Metropolitan area.	Cross-sectional study	Findings provided insights into how important culturally competent healthcare professionals can reduce barriers among this population regarding HIV prevention services.	The sample size of this study presents as a limitation. Also, some of the findings may be from social desirability bias.
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4	Labs, Jennifer Nunn, Amy S. Chan, Philip A. Bessey, S. Park, Carolyn J. Marshall, Brandon D. L. Patel, Rupa R. Mena, Leandro A. Goedel, William C.	2022	Projected Effects of Disruptions to Human Immunodeficiency Virus (HIV) Prevention Services During the Coronavirus Disease 2019 Pandemic Among Black/African American Men Who Have Sex With Men in an Ending the HIV Epidemic Priority Jurisdiction	To evaluate the impacts that COVID-19 had on HIV prevention services, especially with black MSM.	Black/African American MSM	Epidemiologic Model Study	Findings like the disruption of HIV prevention services during the pandemic, increased the risk of HIV transmission. Which has affected the goals of ending the HIV epidemic, especially among this population.	This study was limited to Jackson, Mississippi. Some assumptions, like sexual behavior during the beginning of the pandemic, could have been simplified during this study.
5	Okeke, Nwora Lance McLaurin, Tony Gilliam-Phillips, Ruth Wagner, David H. Barnwell, Valerie J. Johnson, Yolanda M.	2021	Awareness and acceptability of HIV pre-exposure prophylaxis (PrEP) among students at two historically Black	To explore the acceptability and awareness of PrEP use among college age students.	Students at two HBCU's in North Carolina	Cross-sectional survey	While many students may not perceive themselves as at risk for HIV, they are still knowledgeable about PrEP	The small sample size limits this study, as well as not centering the population at risk

	James, Osaffo Webb, Padonda B. Parker, Sharon D. Hill, Bendu McKellar, Mehri S. Mitchell, John T.		universities (HBCU): a cross-sectional survey					the most in this survey.
6	Patel, Rupa R. Crane, John S. Lopez, Julia Chan, Philip A. Liu, Albert Y. Tooba, Rubabin James, Aimee S.	2018	Pre-exposure prophylaxis for HIV prevention preferences among young adult African American men who have sex with men	To discover the HIV prevention preferences among black MSM, to improve uptake.	26 Young Black/African American MSM	Mixed Methods approach	That having a range of prevention options to choose from regarding PrEP for black MSM, can improve HIV prevention in this community.	A small sample size and geographic site, serve as limitation of this study. Also, the use of theoretical PrEP options that are currently not available also is a limitation.

7	Pichon, Latrice C. Teti, Michelle McGoy, Shanell Murry, Velma McBride Juarez, Paul D.	2022	Engaging Black men who have sex with men (MSM) in the South in identifying strategies to increase PrEP uptake	To explore strategies and barriers to PrEP uptake that will achieve HIV prevention goals by 2030.	25 participants, aged 15-34, self-reported HIV negative. Located in Memphis, Tennessee	Community Based Participatory Research	There are a range of factor that influence PrEP uptake like attitudes and beliefs surrounding PrEP Others include patient-centered approaches, and better representation among clinicians.	Part of this study also focused on transgender issues, which limited the discussion about the topic population.

8	Psaros, Christina Goodman, Georgia R. Lee, Jasper S. Rice, Whitney Kelley, Colleen F. Oyedele, Temitope Coelho, Lara E. Phanuphak, Nittaya Singh, Yashna Middelkoop, Keren Griffith, Sam McCauley, Marybeth Rooney, James Rinehart, Alex R. Clark, Jesse Go, Vivian Sugarman, Jeremy Fields, Sheldon D. Adeyeye, Adeola Grinsztejn, Beatriz Landovitz, Raphael J. Safren, Steven A.	2024	Factors influencing adherence to injectable PrEP and retention in an injectable PrEP study	To evaluate the differences between injectable PrEP and the daily pill form.	Primarily Black/African American MSM, mean age 27	Clinical Trial/Qualitative Study	That overall injectable PrEP proved to be an effective form of HIV prevention among this target population.	One limitation was that the enrollment for this study was interrupted by the COVID-19 pandemic.
9	Xu, Mia Ann Choi, Jasmin Rosenberger, Joshua G. Zimmerman, Rick S. DiClemente, Ralph	2024	Determinants of an HIV Preventive Vaccine among a Highly Vulnerable Population: African American Men Who Have Sex with Men	To evaluate the perceptions of this target population regarding the development of a HIV preventative vaccine	432 MSM Black/African Americans, aged 18-64 in the US	Qualitative study	Due to medical mistrust, many African Americans have higher rates of vaccine hesitancy compared to other groups. This was evident during the development and introduction the Covid-19 vaccine. Uptake of the Covid-19 vaccine can be used as a predictor on the acceptability of a HIV preventative vaccine among this target population.	Recall bias is one of the limitations of this study due to the interview data being derived from self-reporting.

10	Hammack, Phillip L. Meyer, Ilan H. Krueger, Evan A. Lightfoot, Marguerita Frost, David M.	2018	HIV testing and pre-exposure prophylaxis (PrEP) use, familiarity, and attitudes among gay and bisexual men in the United States: A national probability sample of three birth cohorts	To assess the attitudes and familiarity towards PrEP among HIV-negative MSM in the United States	470 MSM, aged 18-59, HIV-negative	Cross-sectional survey	Many participants of this study did not meet the CDC's recommendation of annual HIV testing. Over half of the participants were familiar with PrEP and had a positive attitude towards its use.	This study used a broad category of participants, which serves as a limitation. Also, some risk assessments were not acknowledged during the evaluation of this study.
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Discussion

Over the years in the United States, HIV prevention research and drugs have increased considerably. And while there are drugs offered like PrEP, which is the most effective in preventing new HIV infections among MSM, the incidence of HIV has varied among racial/ethnic groups (Patel et al., 2018). There are numerous studies that attempt to understand and fix this health disparity, however, new HIV diagnoses in African American MSM has only increased in recent years.

Further Research

While advancements in HIV research have increased astronomically in the past 30 years, these advancements have not decreased HIV transmission rates in African American MSM. With further research in HIV prevention, we can expect for more options to receive PrEP that extend beyond a once-a-day pill or bimonthly injection. And with these newer options we can hope that there will be an upwards trend in PrEP uptake not only among this specific target population, but also every population.

Along with these advancements, there is the expectation that the current barriers that hinder African American MSM from HIV prevention services, will also decrease significantly. Such as limited access to these resources, whereas in the future there will be more programs and centers that offer HIV prevention services in every area. And with these widespread resources, more HIV research can be done with a broader and diverse sample size that extends across racial/ethnic groups.

Limitations

This literature review was limited to only 10 research articles and academic journals. This presents as a limitation of this review because of the finite amount of research and information.

There are many limitations that are present while researching this topic. While HIV research has been expansive in recent years, however, there has been ample research pertaining to this specific target group: African American MSM. Specifically with behavioral studies in PrEP uptake, there are only a few that focus on this population exclusively (Remy & Enriquez, 2019). This specific population presents as the main limitation of this research. Because this is a specific subgroup, of an already underrepresented group, there are also a limited amount of the types of research done with this target group and research topic.

Geography also presents as a limitation in this literature review. Most of the academic articles and journals that research this topic are mainly focused on MSM in the Southeast. This is because Young African American MSM are disproportionately affected by HIV in the Southeast United States (Pichon et al., 2022). This limits the geographical expansion of this research topic among this specific subgroup in HIV research.

Conclusion

In conclusion, the current scientific literature indicates a pressing need for future literature and research regarding HIV prevention interventions and services that fix the gaps and disparities among racial/ethnic groups, specifically African Americans MSM. This literature review will hopefully influence healthcare professionals, organizations, and programs to address

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this disparity among racial/ethnic groups when it comes to increasing PrEP uptake to reduce HIV transmission.

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