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Research Needed to More Effectively Combat HIV among African-American Men Who Have Sex with Men

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Abstract

It is estimated that nearly half of all African-American men who have sex with men (AAMSM) living in major U.S. cities are already infected with HIV. Without a substantial and committed investment in research in HIV prevention among AAMSM and subsequent evidence-based policies and community programs, it is unlikely that we will ever be able to curtail the HIV epidemic among African Americans in general, regardless of gender, age or sexual orientation. In this paper, we briefly review what is known and what research questions remain in order to curtail the epidemic among AAMSM. Finally, we provide recommendations for future research that include the: 1) development of a national cohort of young AAMSM to prospectively study biological, behavioral, social and contextual factors that place AAMSM at risk for infection with HIV and other STDs; 2) adapting existing interventions in HIV prevention to the unique characteristics of AAMSM and evaluating their effectiveness; 3) evaluating factors such as intracommunity and familial discrimination against AAMSM that may lead to lack of disclosure; and 4) enhancing our understanding of how cultural and social factors can be used in a positive and self-affirming way to strengthen HIV prevention and care for AAMSM.

Keywords

African Americans; sexually transmitted diseases; men's health; HIV/AIDS

IMPORTANCE

It is estimated that nearly half of all African-American men who have sex with men (AAMSM) living in major U.S. cities are already infected with HIV.[1] Indeed, their rates of infection equal or exceed those seen in the most highly impacted sub-Saharan African regions.[2–5] Without a substantial and committed investment in research in HIV prevention among AAMSM and subsequent evidence-based policies and community programs, it is unlikely that we will ever be able to curtail the HIV epidemic among African Americans in general, regardless of gender, age or sexual orientation. In this paper, we identify the urgent research priorities needed to more effectively combat HIV among AAMSM.

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WHAT IS KNOWN

At the beginning of the AIDS epidemic in the United States, the gay white community effectively mobilized and called attention to the epidemic, leading to policy shifts to protect the rights of those infected, substantial and sustained increases in resources to expand testing, prevention, care, treatment and essential basic, clinical, sociobehavioral and public health research.[6] Despite the fact that AAMSM have the highest rates of HIV of any American subpopulation, there has been relatively little community or political mobilization to combat the epidemic among AAMSM. To date, many factors have detracted from such a focused response, including the lack of a politically active and organized AAMSM community in most locales, the economic and health disparities that many African Americans face,[7–9] and the marginalization and stigma[10,11] that AAMSM experience within both the gay and African-American communities. In addition, previous HIV prevention research that has largely focused on African-American heterosexuals and non-African-American gay males cannot adequately account for the special and unique characteristics of AAMSM.[12,13]

After >25 years of developing interventions to reduce HIV in U.S. populations, there exist only 11 HIV behavioral interventions that suggest effectiveness in reducing HIV among African Americans.[14] Notably, none of these interventions have been empirically tested among AAMSM. Given the significant impact of HIV/AIDS on AAMSM, it would be reasonable to expect significant resources be focused on developing effective HIV-prevention interventions for AAMSM. However, in a 2002 review of 137 HIV prevention interventions that included ethnic minorities in the United States in 1985–2000,[15] the authors found only one rigorous, randomized controlled trial with the specific objective of reducing HIV infections in AAMSM.[16] In a more recent systematic review of HIV behavioral interventions published between 2000 and 2004,[17] the authors did not identify even one behavioral intervention showing effectiveness in reducing HIV specifically among AAMSM.

HIV Risk among African-American Males

African-American males represent 71% of the cumulative United States AIDS cases among African-American adults and adolescents,[18] and for more than half, the mode of transmission is unprotected sexual contact with another man.[19] Indeed, among new cases of HIV reported by 33 states with name-based HIV surveillance in 2001–2005, 56% of African-American male cases had reported sex with other men (51.7% male-to-male sex and 4.6% MSM/injection drug users).[20] In a study of young MSM, Harawa et al.[21] found that young AAMSM had nine times the odds of HIV infection compared with young white MSM even though they did not engage in riskier sexual or drug-use activity than white MSM. Thus, in subpopulations with high HIV prevalence, such as AAMSM, “high-risk” behaviors may be more likely to lead to new infections due to the higher probability of being exposed to an HIV-positive partner.

Prevalence of Homosexual and Bisexual Behaviors

Previous research of men residing in large urban areas indicates that while the prevalence of homosexual behavior among African-American males may be lower (3.1%) than among white males (9.1%), a higher proportion of AAMSM report sexual behaviors with females compared with their white counterparts.[22] A higher prevalence of bisexual behavior reported by AAMSM has led to speculation that African-American women have been disproportionately exposed to HIV through bisexual male partners compared with women of other race/ethnicities. Sufficient evidence to support this hypothesis is not currently available.[23]

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Prevalence of Unrecognized HIV Infection and Sexually Transmitted Diseases

Despite the fact that young AAMSM are much more likely to be infected with HIV than their white and Latino counterparts,[4,24] they are much less likely to know that they are infected.[25] Data collected on adult MSM in five urban centers for the Centers for Disease Control's National HIV Behavioral Surveillance system in 2004 indicated an HIV prevalence of 46% among AAMSM participants, compared with 21% of white MSM and 17% of Latino MSM.[1] Fully two-thirds of the AAMSM participants (67%) had previously unrecognized HIV infection, compared with 18% among white MSM and 48% among Latino MSM. The fact that AAMSM are much more likely than others to be infected with HIV—and to not know that they are infected—is likely a major contributor to the continued spread of HIV within this subpopulation.[26,27]

In a qualitative review of 12 hypotheses to explain the higher risk of HIV infection in AAMSM compared to other MSM, Millett et al.[28] found scientific evidence to support only two existing hypotheses: 1) AAMSM are less likely to know their HIV status and thus may unknowingly transmit to their partners and 2) AAMSM are more likely to contract sexually transmitted diseases (STDs) that facilitate HIV transmission. In fact, previous research has shown that AAMSM have a higher prevalence of both past and current STDs compared to other MSM.[29–32] In a subsequent quantitative meta-analysis of 53 studies involving both African-American and white MSM, Millett et al.[33] further investigated behavioral factors that may account for the higher HIV risk among AAMSM. The meta-analytic results showed AAMSM to have a higher prevalence of lifetime or current STD, greater rates of unrecognized infection, and among HIV-positive men, lower rates of antriretroviral therapy use among AAMSM compared with white MSM. Again, the authors reported no significant differences in HIV risk behaviors between these groups except that AAMSM reported fewer sex partners, were less likely to use any drugs or use drugs associated with HIV infection, and were less likely to identify as gay or to be open about their same-sex behaviors.

Other factors that have been cited by researchers as possibly contributing to higher rates of HIV among AAMSM include ethnic differences in partner-selection patterns among MSM, less social support and a high prevalence of incarceration. Bingham et al.[34] observed that the high risk for HIV infection among AAMSM as compared with white MSM may be partially explained by ethnic differences in sexual networks. In a study of risk behaviors of 23–29-year-old MSM, they found that the higher risk of HIV infection among AAMSM compared with white MSM was related to AAMSM having older and more African-American male partners than white MSM.

Due to a variety of factors, including social expectations and constraints, religious prohibitions, societal discrimination and self-hatred due to same-sex attractions, many African-American men with same-sex partners or attractions do not disclose information about their same-sex relationships to family and friends. Previous research indicates that concealing one's sexual identity may actually limit opportunities to receive important social support, which in turn may result in riskier HIV sexual practices.[12,35–38] Because of an actual or perceived lack of social support and acceptance upon disclosure, AAMSM in particular may be less likely than white MSM to be open about their homosexual behavior.[39–42]

Beyond the documented general reticence of AAMSM to disclose their sexuality to others, recent attention has focused on the number of AAMSM who are “on the down low” and their impact on African-American women's high HIV/AIDS rates. Men on the down low, defined as bisexually active, nongay-identified men who are not open about their bisexual behavior, are the subject of a recent literature review by Millett et al.[23] Contrary to expectation, the authors' findings suggest that African-American men on the down low may engage in fewer

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risk behaviors with men and are less likely to be HIV positive than black men who are more open about their sexuality. Moreover, the authors found that HIV-positive gay- or bisexually-identified AAMSM who are HIV positive are more likely to report sex with women than HIV-positive heterosexually-identified AAMSM.[43] Sexual behavior among AAMSM may be more fluid than among other American MSMs, giving them options to choose male as well as female partners, regardless of whether they self-identify as gay, bisexual or heterosexual.[44] Such fluidity, however, may complicate the ability of these men to get social support for such behavior from heterosexuals or other MSM.[45] It may also complicate the ability to reach AAMSM through prevention messages that principally target heterosexuals or MSM.

Finally, while many have suggested that the high rates of HIV in the African-American population are directly linked to high rates of incarceration among African-American men and their subsequent homosexual behaviors while incarcerated,[9] evidence to support this theory has not been substantiated.[46] The vast majority of AAMSM are likely to have been infected with HIV outside, rather than within a jail or prison setting.[47,48]

WHAT IS NOT KNOWN

Currently there are several gaps in the research literature that dampen an effective response to reducing HIV/AIDS among AAMSM and their sexual partners. We have identified several important areas of research inquiry that have thus far eluded focused attention. These areas include research to: 1) examine and reduce the impact of unrecognized HIV and STD infection on continued HIV transmission, 2) develop community-level interventions to reduce the HIV/AIDS stigma, and 3) develop community-level interventions to reduce intracommunity and familial discrimination toward AAMSM.

According to CDC STD surveillance data, a greater proportion of AAMSM than MSM of other races and ethnicities was diagnosed with urethral gonorrhea, pharyngeal gonorrhea and syphilis in 2005.[49] Moreover, a recent study of MSM who attended STD clinics between 1990–1999 found that HIV-positive AAMSM were more likely to be coinfected with HIV and an STD than MSM of other races or ethnicities.[50] Since unrecognized STD and HIV are partly responsible for the disparate HIV infection rates among AAMSM, emphasis should be placed on implementing healthcare models that integrate HIV and STD outreach and screening in traditional and nontraditional settings for AAMSM, including testing in bars, bathhouses, emergency rooms and jails.[51,52]

AAMSM are as likely to report ever testing for HIV as white MSM.[27] Nevertheless, AAMSM are much more likely to be HIV infected and not know it than white MSM.[1,24] High rates of HIV incidence observed among AAMSM[1,23,28] would suggest that the CDC's annual HIV testing recommendations for high-risk groups may not be adequate to detect the number and frequency of new infections in groups with a very high prevalence of HIV infection.

The small subsamples of AAMSM in previous studies and the absence of research questions to address undiagnosed HIV infection have precluded an adequate assessment of why so many AAMSM are unaware of their infection. The lack of information is a critical gap, given that many of the new HIV infections are transmitted by those who are unaware of their status[26] and the fact that persons who are aware of their infection adopt behaviors to reduce transmission to others.[53] Research in this area should focus on shifting attitudes and policies to support more frequent testing among AAMSM and developing methods to make testing modalities more convenient and acceptable for AAMSM.

Although AIDS and HIV infection rates among AAMSM have rivaled and surpassed those of white MSM since the early days of the epidemic,[54,55] this has not always been acknowledged by AAMSM, the rest of the African-American community or the American public as a whole.

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[9] This delayed recognition of the magnitude of the HIV problem in AAMSM and the lack of evidence-based and focused responses to curtail it have hampered an appropriate response to the HIV/AIDS crisis in African Americans. Only recently have the media more effectively presented the alarming HIV/AIDS statistics to the African-American community. Research questions that remain unanswered are how to change community norms to better acknowledge HIV risk and how to influence African Americans in general to mobilize in the fight against HIV in MSM.

A final and very important underresearched topic is the extent to which discrimination based upon sexual orientation, also known as homophobia, has contributed to African Americans' disproportionate risk for HIV. The issue of discrimination against MSM within the African-American population as an important contributor to fueling the spread of HIV among all African Americans is of such importance that it is now raised in forums of presidential candidates on how to control HIV within the African-American community.[56] Discrimination against AAMSM within African-American families and communities may help explain why HIV has infected nearly one in two AAMSM in some cities without swift action or response from the African-American community.

RESEARCH RECOMMENDATIONS

We acknowledge that:

- Significant lessons were learned by investigations among primarily gay white MSM that examined the natural history of HIV.[57,58] Such research is now urgently needed for AAMSM. We recommend building upon the work of others[59] and developing a nationally representative cohort of young AAMSM that can be prospectively evaluated for the risk of HIV and STD acquisition, including such factors as sexual and social network characteristics, stigma and discrimination, geographic setting, racial and sexual identity, drug and alcohol use, coinfections and comorbidities, and health and socioeconomic status. Such a cohort may also be used to recruit AAMSM's sexual and social network members to do related studies on the roles of networks, as well as to test the effectiveness of potential interventions.
- We cannot assume that interventions developed for other populations will be successful with AAMSM. We therefore recommend that prior to such interventions being implemented they be rigorously adapted for the unique characteristics of AAMSM, including issues involving intracommunity and familial discrimination, sexual and social networks and coinfections with STDs, among others. Such adapted interventions must be carefully and thoroughly evaluated for effectiveness and sustainability over time before being scaled up to a regional or national level.
- We recommend that additional research be conducted to enhance the understanding of potentially important factors such as STD coinfections, sexual and social networks, knowledge of HIV status and discrimination toward MSM that may place AAMSM at a particularly high risk for HIV acquisition.
- Healthcare models that integrate HIV and STD screening in traditional and nontraditional settings for AAMSM, including testing in emergency rooms and jails, should be developed and evaluated.
- Community and family discrimination toward AAMSM may be related to the lack of disclosure among AAMSM and may make it harder to reach them with prevention messages. We recommend that research be supported and conducted to elucidate effective ways to decrease discrimination toward AAMSM. Interventions should also be developed to assist and support AAMSM who wish to disclose their same-sex behaviors to their partners, friends and families.

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- Finally, we recommend that research be supported that enhances understanding of how resiliency, and cultural and social factors specific to AAMSM can be used in a positive way to strengthen HIV prevention and care for MSM.

In order to control the HIV epidemic among African Americans we must control it among AAMSM. Research must be conducted that helps us better understand the biological, behavioral, social, and system- and contextual-level factors that place AAMSM at risk. Such knowledge must guide our research in developing effective HIV prevention interventions for AAMSM and their partners.

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