

IDENTIFYING RESEARCH GAPS FOR BLACK MEN WHO HAVE SEX WITH MEN: A WAY FORWARD

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Meeting Summary

Since the conclusion of HIV Prevention Trials Network (HPTN) 061 (The BROTHER'S Study), the first prospective cohort study of Black men who have sex with men (BMSM) in the United States (U.S.), researchers have gained additional insight into the U.S. HIV epidemic among BMSM. There are a number of challenges and issues that are facing this population and the current research landscape is designed to offer incremental steps that will impact the overall epidemic. New and innovative prevention methods and study designs are needed to address the underlying causes for the increased rates of HIV infection among BMSM domestically.

Addressing the potential gaps in research among this key population remains a high priority for the HPTN.

The goal for the think tank was to assemble key community stakeholders, policy makers, federal and local government, researchers, and advocates to develop new recommendations that would generate new research ideas and methods to address the disparities among BMSM in the United States. This think tank could not cover all of the important topics for a potential U.S. focused research agenda. Therefore, the decision was made to focus this think tank on a few key domains critical for moving the research agenda forward.

The think tankobjectives were:

- 1. To highlight HPTN 061: The BROTHERS Study key findings;
- 2. To discuss the current research portfolio for the HIV Prevention Trials Network as related to BMSM, and;
- 3. To outline specific recommendations for the HIV Prevention Trials Network U.S. BMSM prevention research portfolio.

Executive Summary

This report is designed to provide a blueprint for addressing the epidemic among BMSM through the HIV Prevention Trials Network (HPTN). With the help of community leaders and key stakeholders, the HPTN Black Caucus provided a systematic review of the current research landscape and identified deficiencies that exist when attempting to address the HIV epidemic among BMSM.

At the conclusion of this meeting, we developed a list of concrete recommendations to characterize the epidemic among BMSM in the U.S.. Having a deeper understanding of the epidemic among this population, in conjunction with the factors involved in transmission, allows for a better understanding of how this disease is contextualized within the population. With this knowledge, we can design more rapid interventions in order to significantly impact the epidemic.

The following pages contain a brief overview of the current literature and/or study designs that address the continued high rates of incident HIV infections among BMSM. For each identified area, a recommendation is provided where we urge the HPTN to garner additional information to better support knowledge and responses to the epidemic.

We strongly recommend the HPTN adapt and implement the following recommendations for responding to the HIV epidemic among BMSM:

- 1. Incorporation of a Social Systems Model for addressing structural barriers associated with BMSM and healthcare utilization;
- 2. Ensure adequate recruitment, and resources are present for BMSM populations in every MSM protocol implemented through the HPTN;

3. Standardize and prioritize the use of culturally sensitive and appropriate research methodologies for all studies involving BMSM communities, starting with incorporating the "Presence at the Table" workshop as a mandatory training module for all U.S. funded Clinical Research Sites conducting research with BMSM anywhere in the HPTN.

We are thankful for the continued support of the HPTN in addressing the urgent problem of increased HIV rates among BMSM. We strongly urge the network to incorporate the following recommendations into the scientific portfolio. Addressing the growing pandemic among BMSM effectiently should remain a key priority for the HPTN. We look forward to new and innovative strategies as we continue to work together to move towards an "AIDS Free Generation."

Behavioral Approaches

Despite advances in the HIV prevention landscape, Black Men who have sex with Men (BMSM) continue to bear the burden of the HIV disease. In HPTN 061, the BROTHERS study, researchers found an HIV prevalence of 21% among BMSM in six US cities¹. In 2010, an estimated 134,746 BMSM in the U.S. were living with HIV disease, and this population accounted for more than 20% of new infections². Even more astonishing are the rates of new HIV infections in BMSM aged 13-30, with a 48% increase in new HIV infections between 2004 and 2008, while the new HIV infection rates among other racial and ethnic groups has remained stable^{2,3}. Recent research findings have described the disparity that exists among BMSM as structural in nature ^{5,6} although most current initiatives for combating HIV among this vulnerable population are biomedical in nature. Future research protocols should incorporate sociocultural and structural level research designs that will address these impeding relationships that exist among BMSM in the form of barriers to HIV prevention.

A recently published literature review examined twelve hypotheses that were thought to explain the high rates of HIV among BMSM⁶. In 2012, published data suggested that internalized homophobia may promote acquisition and transmission of HIV infection among BMSM⁴. Research also supports examining HIV in the broader context of BMSM lives as a larger syndemic that requires a holistic approach to HIV prevention and/or HIV treatment ⁸. This syndemic occurs not only at the biological level, but includes the behavioral, psychosocial, and structural factors that influence the health of BMSM ⁹.

Individual level risk behaviors alone do not explain the cause for the HIV disparity that exists among BMSM, comparable to other similar risk groups. It has been observed that BMSM often engage less in HIV risky behaviors (e.g., drug use and unprotected sex) than non-BMSM

populations ^{10, 11}. Furthermore, independent associations between HIV infection and incarceration, multiple sex partners, and HIV circumcision cannot explain the racial disparity among Black and White MSM ¹². Recent research has shown that understanding the psychosocial and systemic issues surrounding BMSM may account for the misunderstanding of the cultural responses to the epidemic ^{10,13,14,15}. Societal level factors (i.e., community, intra-inter personal responses), however, may play an important role in increasing HIV infection risk among BMSM and warrant close examination ^{16,17,18,19}.

To understand the impact of structural factors that influence and/or facilitate HIV acquisitions among this population, we must examine the dynamic relationships that exist among cultural and structural factors within this population. Research has shown an inextricable linkage between the social and economic environments of BMSM that are often overlooked in HIV prevention research^{18, 19}. In particular, focus on concepts of stigma, marginalization, and structural inequalities highlights the social systems theoretical framework model that begins to address certain complexities that exists among BMSM communities. The intersectionality that exist at the micro (i.e., immediate social and physical contexts), meso (i.e., systems within more immediate institutions in which individuals and groups are involved), and macro levels (i.e., socio-political, economic, and cultural contexts and the social institutions that shape social organizations with the broadest reach) ¹⁶ provide a conceptual framework to address the epidemic among BMSM in the US.

Recommendation:

We propose a menu-driven approach that addresses structural barriers among BMSM, applying a social systems theoretical framework as a conceptual framework. We believe that addressing factors at the micro, meso, and macro levels will help to end the epidemic, including but not limited to strategies to increase HIV testing (public and private settings), increase awareness of status testing among HIV-uninfected and young BMSM (18-30), increase education levels, linkage to care and treatment services for HIV-infected individuals, and provision of individualized sexual risk assessment.

These strategies incorporate efforts that will help to reduce new HIV infections among HIV-negative BMSM and increase treatment efforts for HIV-infected BMSM. Strategies should include prevention for positives, as well as for HIV sero-discordant male couples. Individuals should be empowered to develop their own combination prevention strategy to either prevent HIV acquisition or increase linkage to treatment and care for HIV-infected individuals.

Biomedical Approaches

Recent scientific advances in the prevention and treatment of HIV have added new tools in our response to the epidemic. The iPrEX study was the first biomedical intervention using oral antiretroviral chemoprophylaxis that significantly decreased HIV incidence among MSM²⁰ in the Americas (U.S., Brazil, Equador, Peru), South Africa, and Thailand. While this provides hope for MSM communities, little is known about the effect among BMSM due to the co-occurrence of other health inequalities. Currently, the HPTN is conducting HPTN 073, a study that is examining PrEP initiation and uptake among BMSM in three U.S. cities in concert with client centered care coordination. The combination of higher HIV-infected concentrated social and sexual networks among BMSM and the occurrence of STIs continue to be a driver for BMSM in the US. Issues surrounding meaningful access to, expected use and cost of, and basic understanding of biomedical approaches in BMSM communities remain unanswered and contribute to our lack of understanding how effective PrEP will be for BMSM.

Although current PrEP demonstration projects will answer safety, efficacy, and uptake questions, substantive questions will still remain. Additional research will be needed to focus on the knowledge and behaviors of adherence and healthcare utilization among BMSM, primarily among young Black men who have sex with men (YBMSM) (18-30). Subsequently, additional information must be garnered to determine the settings that are conducive for PrEP delivery in BMSM communities. PrEP delivery will require coordination of different components²¹, and efforts should be made to understand these implementation demands for BMSM. Furthermore, various options for PrEP including intermittent dosing, injectable dosing, and other new formulations should be of the highest priority to ensure adequate response to the epidemic.

Recommendation(s):

All U.S. MSM protocols implemented within the HIV Prevention Trials Network moving forward should strive to include recruitment goals of 50% BMSM, with a focus on 18-30 year olds. Protocols should encompass strategies to better facilitate understanding of the dynamic factors associated with uptake of, and adherence to PrEP agents within this population.

Additional efforts should be made to determine the safety and efficacy of novel PrEP agents including intermittent and injectable PrEP options.

Additional research should identify the behavioral and psychosocial factors influencing uptake and adherence of PrEP within BMSM. These efforts would contextualize current barriers for engaging this population within biomedical approaches, and would allow for fast and efficient translation to the real world application of data harnessed through the research protocol.

New Methodologies

Research continues to show that contributing factors to the HIV disparity that exists among BMSM are less likely to be behavioral in nature ^{5,6,9,10,12}. Many researchers posit the contributing factors lie within cultural factors ^{11,12,13,19}. Little is known about the impact that these cultural factors have on HIV acquisition and their long term effects on the HIV epidemic. Effects of racism on the uptake of HIV prevention treatment and services have not been fully examined ¹⁹. Furthermore, additional barriers exist, that prevent BMSM from engaging in the healthcare complex (i.e., healthcare insurance, lack of social support, incarceration, etc.). Gay identity and report of sexual orientation disclosure to healthcare practitioners and researchers can be a barrier for engaging BMSM communities ¹⁷. Although homophobia has decreased among healthcare practitioners, research still shows high levels of negative attitudes expressed towards MSM¹⁹. These barriers facilitate the lack of BMSM disclosure to healthcare providers, leading to potential error of diagnosis and medical mistrust of providers.

Data show that among BMSM, 53% experienced racial discrimination, and 44% reported experiencing discrimination due to sexual orientation in the past year²². Additional reports show the stigma surrounding MSM and HIV/AIDS may lead to a decreased likelihood of discussing sexual practices and HIV prevention with family, friends and sexual partners²³. BMSM also reported avoidance of HIV prevention services and distrust of the provider system and discrimination upwards of 50% among BMSM¹³.

Additionally, clinical trial methodological design problems further perpetuate disparities among BMSM. Measures, surveys, and instrument terminology may not be culturally acceptable for effectively evaluating BMSM risk behaviors¹³. The evolution of science has offered new

innovative approaches to addressing the HIV epidemic, but is void of culturally competent providers who are members of the community.

Recommendations:

HPTN should prioritize research based on the structural determinants of health to address BMSM along the prevention and treatment cascades. Without addressing these individual and community level factors that are associated with hindering involvement of BMSM along this continuum, the HIV epidemic will continue to be exacerbated among this population, particularly YBMSM (18-30).

Increased attention should be placed on ensuring HIV-infected individuals who are unaware of their status are linked to culturally competent health care settings. The HPTN Black Caucus has developed a culturally responsive training for engaging and working with BMSM, *Presence At The Table*, which should be incorporated in clinical research sites that are performing research on BMSM. *Presence At The Table* training enables staff members at clinical research sites the ability to understand their own personal biases and prejudices, which are critical to recognize when addressing sensitive materials for vulnerable populations.

Vulnerable Populations

As continued strides are made to address the growing HIV epidemic among BMSM in the U.S., additional focus is needed for YBMSM ages 18-30. Under the current conditions, for a cohort of men aged 18 today, by the time they reach 30, 1 in 2 will be diagnosed with HIV ²⁴ without knowing the contributing factors associated with such a high incident HIV rate. Research for BMSM should continue to involve this subpopulation to address this urgent problem.

Historically, transgender identified individuals have been combined with BMSM for data reporting. This inclusion undermines the significant challenges that directly and uniquely impact transgender individuals. Research protocols should be designed to specifically address the unique needs of this population. Combination prevention should examine the correlation between novel prevention methods and transgendered specific needs (i.e., hormone therapy, etc.). The unique needs of this population require direct observation in a large clinical trial that will identify specific needs to address the epidemic in this population.

Another subpopulation that is often combined with BMSM with respect to data and reporting, are Black men who have sex with men and women (BMSMW). Of the men in HPTN061, a substantial proportion (41%) reported having female partners within 6 months of study enrollment. While HIV incidence over the year was highest among BMSM (3.8%), incidence among BMSMW also was very high (2.7%). These data highlighted the potential for BMSMW to transmit HIV to other BMSM, and to potentially serve as bridges for HIV infection among female members of their sexual networks. What's even more pressing is the fact BMSMW also exhibited elevated vulnerability including more depression, less support and more

substance use including alcohol compared to BMSM²⁵. These men were also more likely to have a history of incarceration²⁶. Given the epidemiologic importance of this subpopulation of BMSM, strategies to include BMSMW into studies that address their unique needs need to be developed. These include but are not limited to understanding intersections of racial, sexual and gender identity and HIV risk and infection.

Lastly, attention must be garnered to address the rates of high community HIV viral load among BMSM communities. Focus should be placed on addressing the gap in the continuum that exists between diagnosis and being HIV-virally suppressed due to the successful use of antiretroviral therapy. New strategies and efforts should characterize what barriers that exist from the point of diagnosis to treatment and care for HIV-infected BMSM.

Conclusion

Research continues to provide a blueprint for addressing the HIV epidemic among populations at risk. As the depth of research grows, so should the understanding of the epidemic among its most vulnerable populations. The HPTN is poised to be a leader in achieving an "AIDS Free Generation" by advancing the science, and better preparing the more marginalized communities to respond appropriately to the epidemic. As research has shown, individual risk behaviors alone do not address the disparity that exists among BMSM; however, a comprehensive approach must be adapted to ensure a full understanding of the factors involved in the U.S. HIV epidemic. HPTN 061 showed that additional contextual and structural factors contributed to the high incident HIV infection rate found in that study among BMSM in the U.S. Furthermore, new scientific approaches to understanding these contextual factors will enable quick adaptability of innovative responses to decrease new HIV cases among BMSM.

We <u>strongly recommend</u> the network to incorporate the following recommendations in the HPTN scientific portfolio:

- Incorporation of a Social Systems Model for addressing structural barriers associated with BMSM and healthcare utilization;
- 2. Ensure adequate recruitment, and resources are present for BMSM populations in every MSM protocol implemented through the HPTN;
- 3. Standardize and prioritize the use of culturally sensitive and appropriate research methodologies for all studies involving BMSM communities, starting with incorporating the "Presence at the Table" workshop as a mandatory

training module for all U.S. funded Clinical Research Sites conducting research with BMSM anywhere in the HPTN.

Incorporating these recommendations will help scientists and community advocates alike begin to understand the critical issues associated with the U.S. HIV epidemic, and provide a framework to achieve an "AIDS Free Generation" among BMSM and vulnerable populations. A combination of the aforementioned recommendations will prove pragmatic in the HPTN's response to the HIV epidemic among BMSM.

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