

ADDRESSING PrEP DISPARITIES AMONG YOUNG GAY AND BISEXUAL MEN IN CALIFORNIA





“PrEP has changed my life, taking one worry factor out of my sex life has been such a relief, a spiritual awakening in realizing that sex is a positive act, not a sin or a vulgar act people engage in.”

25 year old, Latino gay male

INTRODUCTION

Young gay, bisexual, and other men who have sex with men (YMSM), particularly black and Latino YMSM, are at highest risk for HIV in California and across the United States.^{1,2} The Centers for Disease Control and Prevention estimates that if current rates persist, half of all black—and a quarter of all Latino—gay and bisexual men could be infected with HIV in their lifetimes.³

Pre-exposure prophylaxis (PrEP) is a highly effective HIV prevention intervention that could drastically reduce the number of new HIV infections among YMSM. PrEP uses a well-established antiretroviral medication, Truvada, to block HIV infection in at-risk HIV-negative individuals. When taken as prescribed, Truvada is proven to be over 90 percent effective at preventing HIV.⁴

Recent studies have shown PrEP awareness and uptake to be low among at-risk populations in California and across the United States for a number of reasons, including concerns about side effects, perceived high cost, limited access, and PrEP-related stigma.^{5–9} If barriers to PrEP use among YMSM are not addressed, the benefits of this HIV prevention strategy will not be fully realized.

METHODS

An online survey was conducted from July 9, 2015 through August 20, 2015 to examine current levels of PrEP awareness and use, likelihood of use, as well as various attitudes and perceived barriers to PrEP uptake among YMSM in California. YMSM were recruited through banner ads on several popular "hook-up" apps and websites. Individuals were eligible if they were HIV-negative, a California resident, 18–29 years old, identified as a biological male, and indicated that the gender of their sex partners included males. Given the disproportionate impact of HIV among black and Latino YMSM, this study focused specifically on outcomes for these groups in comparison to their white counterparts. Differences among 18–21 year olds, 22–25 year olds, and 26–29 year olds were also assessed.

SAMPLE

The final analytic sample included 602 YMSM. Most identified as Latino (40.4%), followed by black (32.2%), and white (27.4%). In terms of age, a plurality were 22–25 years old (41.5%), followed by 18–21 years old (29.9%) and 26–29 years old (28.6%). The majority of respondents (97.8%) identified as male with the remainder indicating another gender identity. The majority reported a modest income of \$60,000 or less (73.1%) in the last year with few reporting an income of \$60,000 or more (12.1%).

RESULTS

About 1 in 10 respondents reported having used PrEP (9.6%). The majority (90.3%) of respondents were PrEP naïve, never having used PrEP. PrEP use was significantly higher among white respondents (13.9%) compared to Latino respondents (6.6%). PrEP use among black respondents was 9.8%, though not significantly different from white or Latino respondents. PrEP use was significantly higher among 22–25 year olds (14.0%) and 26–29 year olds (9.3%) compared to PrEP use among 18–21 year olds (3.9%). PrEP use was significantly higher among respondents with annual incomes of \$30,000 or higher (13.0%) compared to PrEP use among respondents with annual incomes of \$29,000 or less (9.9%).

PrEP Awareness among PrEP Naïve Respondents

Nearly three-quarters (73.0%) of PrEP naïve respondents were aware of PrEP. PrEP awareness was significantly higher among respondents identifying as white (87.3%) compared to black (62.9%) and Latino (71.8%) respondents. PrEP awareness was significantly lower among 18–21 year olds (59.0%) in comparison to 22–25 year olds (78.1%) and 26–29 year olds (81.4%). PrEP awareness was significantly higher among gay identified respondents (77.5%) compared to bisexual identified respondents (52.3%). Similarly, a significantly greater percentage of respondents whose sex partners were only men (75.8%) were aware of PrEP compared to respondents with both men and women as sex partners (60.2%).

Sources of PrEP Awareness and Perceived PrEP Knowledge

PrEP naïve respondents who were aware of PrEP (n=397) had primarily heard about PrEP through sources other than their medical providers. These included social media (56.7%), online or the Internet (49.4%), and friends (46.6%) with about a quarter mentioning sex partners (25.9%), LGBT community organizations (25.4%), and HIV/AIDS organizations (25.2%) as other sources. The majority indicated they did not have enough information to make a decision about using PrEP (70.5%) and did not know

where to get PrEP if they wanted to start taking it (61.0%), with Latinos being significantly more likely to indicate lack of knowledge in comparison to white respondents.

Likelihood of Taking PrEP among PrEP Naïve Respondents

PrEP naïve respondents (n=544) were asked to consider some information about PrEP that included facts about the medication, the purpose of the medication, efficacy, dosage, side effects, and required medical follow-ups. Respondents were then asked to indicate their likelihood of taking PrEP if it were made available to them. The majority of respondents provided ratings of extremely likely and very likely (55.9%) with significantly more Latinos (63.4%) providing these ratings compared to whites (49.3%). Over half of black respondents provided ratings of extremely likely and very likely (51.4%), though not significantly different from white or Latino respondents.

PrEP Attitudes and Perceived Barriers Among PrEP Naïve Respondents

PrEP naïve respondents were asked to provide agreement ratings for a series of statements related to general attitudes and beliefs about PrEP as well as barriers to PrEP use. Significant racial/ethnic and age group differences are highlighted below.

General Attitudes and Beliefs—The majority of respondents agreed that PrEP use should be encouraged (88.6%) and that taking PrEP would be a good way to protect them from getting HIV (89.7%). However, black respondents were significantly less likely than white respondents to agree that taking PrEP would be a good way to protect them from getting HIV.

Access Issues—Less than a third of respondents agreed that they wouldn't be able to take PrEP because they don't have health insurance (30.1%) or don't know how to enroll in health insurance (31.5%). However, black and Latino YMSM were significantly more likely to agree with these statements than whites. In addition, the majority of respondents agreed that they did not know where to go to get PrEP (59.3%) or how

to find a doctor who could give them a PrEP prescription (56.4%), with black and Latino YMSM being significantly more likely to agree with these statements than white YMSM.

Concerns About Cost—The majority (58.9%) of respondents agreed that they would not be able to afford PrEP, with significantly more Latinos agreeing with this statement in comparison to black respondents.

Efficacy Beliefs—The majority (58.4%) of respondents agreed that they were concerned that PrEP is only partially effective.

Provider Comfort and Medical Mistrust—Roughly a third of participants (35.5%) agreed that they did not trust drug companies, with 26–29 year olds being significantly more likely to agree with this statement than 18–21 year olds. Few respondents (14.2%) agreed that they did not trust doctors or healthcare providers. There were no significant racial/ethnic differences with regard to these statements.

Concerns About Side Effects—The majority (63.4%) of respondents agreed that they were concerned about side effects or feeling sick from taking PrEP.

Stigma and Social Norms—The majority of respondents disagreed that they would be concerned about family (55.0%), friends (72.7%), or sex partners (76.9%) finding out if they were to begin taking PrEP. However, 18–21 year olds were significantly more likely to agree that they would be concerned about family members finding out if they were to begin taking PrEP than 22–25 year olds and 26–29 year olds. Black and Latino respondents were significantly more likely to agree that they would be concerned about sex partners finding out than whites.

Sexual Risk Concerns—The majority (70.5%) of respondents disagreed that they would use condoms less if they were to begin taking PrEP. The majority (64.4%) of respondents agreed that they think people who use PrEP take more sexual risks.

RECOMMENDATIONS

1. Targeted education campaigns and interventions are needed to increase PrEP awareness and uptake, especially among black and Latino, low-income, and non-gay identified YMSM.

Our study results showed high levels of PrEP awareness among YMSM in California, but we found significant racial/ethnic and age disparities that demonstrate the need for targeted education campaigns to increase PrEP awareness among YMSM of color, particularly those who are younger. PrEP education and outreach efforts must also be mindful of the specific needs of non-gay identified YMSM as well as men who have sex with men and women. Just under 10% of YMSM in this study had ever used PrEP and younger, low-income, YMSM of color were less likely to be early adopters of PrEP. Given the array of social and structural barriers that may prevent these communities from accessing PrEP (e.g., discrimination, family rejection, lack of stable housing, unemployment, prohibitive immigration policies), targeted strategies are needed to increase PrEP uptake that take these barriers into account.

2. Culturally responsive and linguistically appropriate interventions are needed to increase PrEP uptake among YMSM, particularly Latino YMSM.

The majority of YMSM in this study demonstrated favorable attitudes toward PrEP and indicated a high likelihood of using PrEP if it were made available to them. We found that Latino YMSM were significantly more likely than white YMSM to be interested in taking PrEP if it were available. This finding is particularly interesting given that Latino respondents who were already aware of PrEP were least likely to have enough information about PrEP and least likely to know where to access PrEP compared to other racial/ethnic groups. Culturally responsive and linguistically appropriate interventions are needed to increase PrEP uptake among this population.

3. PrEP access points must be available throughout the state, particularly in communities of color, and provider directories should be widely publicized.

We found that over half of all PrEP naïve respondents did not know where to go to get a PrEP prescription or how to find a doctor who could give them a PrEP prescription, with black and Latino respondents being more likely to lack this information in comparison to whites. It is vital to ensure that a sufficient number of PrEP access sites are available throughout the state, particularly in highly impacted communities of color. Several California jurisdictions have developed directories that list contact information for local medical providers that offer PrEP (e.g., pleaseprepme.org, getprepla.com). These directories must continue to be updated regularly and widely publicized.

4. PrEP navigation services tailored to the needs of YMSM of color are essential, and must include screening for and enrollment in health coverage.

Our study results showed that black and Latino YMSM were more likely than whites to agree that lack of health insurance could be a barrier to PrEP use. The Affordable Care Act has greatly reduced the number of uninsured individuals in California. In 2015, however, 1 in 4 of the state's remaining uninsured was between the age of 25 and 34, and more than half were Latino.¹⁰ It remains vital to ensure that YMSM, particularly YMSM of color, are provided with information and resources to help them enroll in comprehensive health coverage. California must also expand access to health coverage for all Californians regardless of immigration status. California recently funded several community-based organizations to provide PrEP navigation services, which will identify individuals interested in PrEP, conduct financial screenings and insurance enrollment, and refer qualified individuals to a PrEP-friendly medical provider. PrEP navigation services must be accessible throughout the state and programming should be tailored to meet the needs of YMSM of color.

5. PrEP education must provide clear and consistent information on side effects and efficacy.

Regardless of race/ethnicity and age, the majority of YMSM in this sample had concerns about side effects from taking PrEP as well as concerns about PrEP's efficacy. YMSM need clear and consistent messaging with regards to the side effects and efficacy of PrEP so they can make informed decisions about whether or not PrEP is appropriate for them.

6. California should use public funds to help pay for PrEP, including PrEP-related clinical ancillary services.

YMSM in this study identified cost as a major barrier to PrEP use. Long-term success of PrEP will require YMSM to have access to PrEP services at low or no cost. Other states, including New York, Washington, and Colorado, have implemented programs to reduce cost-sharing associated with the medication, clinical ancillary services, or both. The California Legislature recently approved the development of a similar PrEP affordability program.

7. California's laws addressing medical confidentiality must be widely publicized, especially for YMSM on another person's health plan.

YMSM ages 18–21 years old were more likely than their older counterparts to be concerned about family members finding out if they were to begin taking PrEP. Minors 12 years of age and older are able to provide consent for PrEP services in California. In addition, California lawmakers recently enacted the Confidential Health Information Act to address privacy concerns of individuals insured as dependents on a parent's or partner's health plan.¹¹ YMSM, medical providers, and PrEP navigators must be informed of patient rights regarding confidential health care.

8. Education campaigns should be developed that challenge stereotypical assumptions about who is an appropriate candidate for PrEP.

Regardless of race/ethnicity and age, YMSM in this study believed that PrEP users engage in more sexual risk behaviors. Education campaigns should be developed that challenge these beliefs, as empirical data suggest risk compensation (e.g., reduction in other prevention behaviors, such as condom use, due to reliance on PrEP) among PrEP users is not universal.¹² These education efforts should help normalize PrEP use among YMSM.

9. PrEP outreach and education efforts must follow the market—online.

Over half of PrEP naïve respondents learned about PrEP through social media and just less than half indicated receiving information about PrEP online. YMSM social networking apps and websites (e.g., Grindr, Scruff, Jack'd, etc.) are important channels to disseminate information about PrEP. Smartphone apps and websites that include risk assessment tools, health insurance screening, opportunities to chat with a medical provider, and other PrEP-specific features could also help improve PrEP access among YMSM.

10. Provider education is essential to increasing awareness of PrEP, including encouraging doctors to talk to patients about their sexual behavior.

Few YMSM in this study reported hearing about PrEP from a doctor. Including questions about sexual behavior in clinical settings and prompting their use through electronic health records systems will help identify patients who may be good candidates for PrEP. In addition, for YMSM who do not engage regularly with a medical provider, HIV test counselors and other front line workers should be encouraged to incorporate brief PrEP questions and PrEP referrals into their services.

CONCLUSION

This study offers important insights into PrEP awareness and uptake among YMSM in California. While PrEP awareness and use appear to be increasing among YMSM overall, significant racial/ethnic and age disparities exist. Given the disproportionate impact of HIV among black and Latino YMSM, PrEP implementation efforts must prioritize increasing education and improving access within these communities. This study also identified a number of barriers that may impede PrEP uptake among YMSM including concerns about confidentiality, side effects, efficacy, and cost. Failure to address the PrEP-related concerns and barriers experienced by YMSM, particularly black and Latino YMSM, will only serve to exacerbate existing health disparities and limit PrEP's ability to achieve a population-level effect on HIV transmission.

- Centers for Disease Control and Prevention. HIV surveillance report, 2014 [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2015 [cited 2016 Mar 1]. Available from: <http://www.cdc.gov/hiv/library/reports/surveillance/>.
- Centers for Disease Control and Prevention. NCHHSTP Atlas, 2013 [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2014 [cited 2015 Dec 7]. Available from: <http://gis.cdc.gov/GRASP/NCHHSTPAtlas/main.html>.
- Centers for Disease Control and Prevention. Lifetime risk of HIV diagnosis in the United States [Internet]. Atlanta, GA: Centers for Disease Control and Prevention; 2016 [cited 2016 Feb 29]. Available from: <http://www.cdc.gov/nchhstp/newsroom/docs/factsheets/lifetime-risk-hiv-dx-us.pdf>.
- Anderson PL, Glidden DV, Liu A, Buchbinder S, Lama JR, Guanira JV, McMahan V, Bushman LR, Casapía M, Montoya-Herrera O. Emtricitabine-tenofovir concentrations and pre-exposure prophylaxis efficacy in men who have sex with men. *Sci Transl Med*. 2012;4(151):151ra25.
- Bauermeister JA, Meanley S, Pingel E, Soler JH, Harper GW. PrEP awareness and perceived barriers among single young men who have sex with men in the United States. *Current HIV Research*. 2013;11(7):520-7.
- Brooks RA, Landovitz RJ, Regan R, Lee S-J, Allen VC. Perceptions of and intentions to adopt HIV pre-exposure prophylaxis among black men who have sex with men in Los Angeles. *Int J STD AIDS*. 2015;26(14):1040-8.
- Kubicek K, Arauz-Cuadra C, Kipke MD. Attitudes and perceptions of biomedical HIV prevention methods: voices from young men who have sex with men. *Arch Sex Behav*. 2015;44(2):487-97.
- Mutchler MG, McDavitt B, Ghani MA, Nogg K, Winder TJ, Soto JK. Getting PrEPared for HIV prevention navigation: young black gay men talk about HIV prevention in the biomedical era. *AIDS Patient Care STDS*. 2015;29(9):490-502.
- Smith DK, Toledo L, Smith DJ, Adams MA, Rothenberg R. Attitudes and program preferences of African-American urban young adults about pre-exposure prophylaxis (PrEP). *AIDS Educ Prev*. 2012;24(5):408-21.
- Fronstin P. California's uninsured: coverage expands, but millions left behind Oakland, CA: California Health Care Foundation; 2016 [cited 2016 Mar 25]. Available from: <http://www.chcf.org/~media/MEDIA%20LIBRARY%20Files/PDF/PDF%20C/PDF%20CaliforniaUninsured2016.pdf>.
- SB-138 Confidentiality of medical information [Internet]. Sacramento, CA: California Legislative Information; 2013 [cited 2016 Mar 25]. Available from: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB138.
- Teyssier LS, Suzan-Monti M, Castro DR, Hall N, Capitant C, Chidiac C, Tremblay C, Spire B, Molina J-M. PrEP and condom use in high risk MSM in the ANRS IPERGAY trial. Conference on Retroviruses and Opportunistic Infections (CROI 2016); Boston, MA: CROI; 2016.

Craig A. Pulsipher, MPP, MSW

Jorge A. Montoya, PhD

Aaron Plant, MPH

Phil Curtis

Ian W. Holloway, MSW, MPH, PhD

Arleen A. Leibowitz, PhD

This study was funded by the California HIV/AIDS Research Program (Grant Number RP11-APLA-022). The California HIV/AIDS Research Program fosters outstanding and innovative research that responds to the needs of all people of California, especially those who are often under served, by accelerating progress in prevention, education, care, treatment, and a cure for HIV/AIDS. The California HIV/AIDS Research Program supports two Collaborative HIV/AIDS Policy Research Centers, for research and policy analysis that addresses critical issues related to HIV/AIDS care and prevention in California. These centers include the University of California, Los Angeles; APLA Health; Los Angeles LGBT Center; University of California, San Francisco; San Francisco AIDS Foundation; and Project Inform.

TO READ THE FULL REPORT, VISIT CALIFORNIAAIDSRESEARCH.ORG.

