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Qualitative Methods for Study Pre-Exposure Prophylaxis Among Gay Men Who have Sex with Men of Color in the US: A Review of the Literature

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Qualitative Methods for Studying Pre-Exposure Prophylaxis Among
Gay Men Who have Sex with Men of Color in the US: A Review of the Literature

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Abstract

Pre-exposure prophylaxis (PrEP) is an effective HIV-prevention method that includes HIV-negative individuals taking a daily anti-retroviral medication and regularly visiting a provider. Since 2012, when Truvada was approved, uptake has been increasing but is still low, and disparities exist among gay and other men who have sex with men (GSM SM) of color. This review identifies the qualitative methods used in PrEP studies and compares approaches used in studies with samples of white GSM SM and GSM SM of color to those only sampling GSM SM of color. To locate peer-reviewed studies of the social dimensions of PrEP, published between 2010 and 2020, I searched data bases using key words, excluding quantitative studies, and ended up with a total of 49 articles. Studies using samples of GSM SM of color were more likely to take extra steps to study men of color, compared to scholars who sampled GSM SM of color and white GSM SM. The findings suggest that, to build trust and comfort among GSM SM of color, it would be useful for PrEP scholars to reflect on the relationship between the researcher and participants, as it relates to race, ethnicity, sexuality and gender, to recruit from and collect data in places created by and/or for GSM SM of color, and to take additional steps to protect their privacy. Additionally, in published manuscripts, PrEP scholars need to report more details about methodological strategies used so that practices for studying these hard-to-reach populations can be evaluated and improved.

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**Qualitative Methods for Studying Pre-Exposure Prophylaxis Among
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In the United States, approximately 1.2 million individuals are living with Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) (U.S. Statistics, 2021). Gay and other men who have sex with men (GMSM) bear a disproportionate burden of the HIV/AIDS epidemic (Center for Disease Control and Prevention, 2020). Approximately 69% of all new HIV diagnosis accounted for male-to-male sexual contact and 86% of diagnosis are among males (U.S. Statistics, 2021). Of GMSM, Black and Latino GMSM, especially those who are between the ages of 15 and 29, are disproportionately impacted, representing a large percentage of the HIV-positive population and accounting for the bulk (45%) of new infections (CDC, 2018). Between 2011 and 2015, HIV diagnoses among all Black GMSM remained stable but diagnoses among Black GMSM aged 25 to 34 increased 30% (CDC, 2018). Additionally, half of Black GMSM are projected to acquire HIV in their lifetime, compared to 25% of Latino GMSM and just 9% of White GMSM (Hess et al., 2017), despite Black GMSM having fewer sex partners and HIV-related risk behaviors than their White counterparts (Friedman, Cooper and Osborne, 2009).

Pre-exposure prophylaxis (PrEP) is a relatively new, highly effective HIV-prevention method that includes HIV-negative individuals taking a daily antiretroviral medication and visiting a medical provider quarterly to test for sexually transmitted infections (STIs) (Fonner et al. 2016; Spinner et al., 2020). In 2012, the U.S. Food and Drug Administration approved the fixed-dose combination of tenofovir disoproxil fumarate and emtricitabine (TDF-FTC), or Truvada, for PrEP, and, in 2019, a second drug, Descovy (emtricitabine and tenofovir alafenamide) was approved (FDA, 2019). PrEP awareness has been growing among GMSM.

However, compared to white GSM SM, a lower percentage of GSM SM of color, including those who have health insurance, were using PrEP, underlining a need to address racial and ethnic disparities in PrEP awareness, interactions with providers, and use (Jenness et al., 2019; Kanny et al., 2019; Rawlings et al., 2015; Smith, 2018). PrEP use is particularly low among young GSM SM of color (Hosek et al., 2015; Siegler et al., 2018).

Barriers to PrEP among GSM SM of Color

Scholars have identified several barriers that GSM SM of color face when accessing information about and attempting to use PrEP, including a lack of insurance and cost of the medication, provider visits, and laboratory fees (Okafor et al., 2017), concerns about side effects (Brooks et al., 2015; Golub et al., 2013), not having a trusted primary care provider (Quinn et al., 2019), and stigma about PrEP, HIV, and sexuality (Eaton et al., 2017; Haire, 2015; Schnarrs et al., 2018). In addition to its impact on PrEP uptake, stigma can potentially impact adherence and discontinuation of PrEP use (Haire, 2015). Among those using or considering PrEP, stigma can impact interpersonal relationships with friends, sexual and romantic partners, family, and healthcare providers (Brooks et al., 2018; Mimiaga, Closson, Kothary & Mitty, 2014). Moreover, GSM SM of color face PrEP barriers because of racism and homophobia (García & Harris, 2017; Lelutiu-Weinberger & Golub, 2016; Quinn et al., 2019) and a lack of trust in the government and the medical community (Eaton et al., 2015; Parsons et al. 2017; Quinn et al., 2019), including HIV/AIDS conspiracy beliefs (Brooks et al., 2018).

The Intersections of Racism and Homophobia

García and Harris (2017: p. 4) argue that “MSM of color encounter unique systemic barriers associated with racism and homophobia from healthcare providers, which hinders efforts in increasing PrEP awareness and preventing MSM of color from making informed decisions.”

GSM SM of color also have a lack of trust in the government and medical community, are less likely to have a primary healthcare provider, and are more likely to believe medical conspiracy theories relating to PrEP, HIV, and AIDS (Lelutiu-Weinbeger & Golub, 2016). In a survey of 699 GSM SM in the southeastern U.S., Eaton and colleagues (2014) found that a lack of comfort talking to a provider about having sex with men and race-based medical mistrust were PrEP barriers for Black GSM SM. Quinn and colleagues (2019) also found that, among Black GSM SM, racism, homonegativity, and HIV-stigma informed identity disclosure decisions in healthcare settings and PrEP use. Eaton and colleagues (2015) state, “the implications of this mistrust among Black adults have also been identified as a barrier to engaging in routine healthcare...mistrust in treatment of HIV is damaging to clinicians’ abilities to engage in those in need of care. Trust in healthcare providers has been directly linked to health outcomes such as antiretroviral adherence and good mental health” (p. e76). Communities of color are also generally more distrustful of academic institutions and academic research, stemming from the educational gap between researchers and participants, and participants feelings of being devalued, exploited, or deceived when researchers use participants’ experiences to benefit their careers, while participants do not perceive benefits (Smirnoff et al., 2018). Indeed, while PrEP researchers commonly discuss how medical distrust impacts PrEP perception and use, they have not discussed how medical and academic mistrust may directly impact their ability to study GSM SM of color.

The lack of researchers of color conducting HIV prevention studies in communities of color adds to mistrust among these communities (Adams et al., 2018; Wheeler et al., 2018). Researcher reflexivity is an attitude of attending systemically to the context of knowledge construction, as it relates to the researcher, at every step in the research process. As Malterud

(2001) states, “a researcher’s background and position will affect what they choose to investigate, the angle of the investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and framing and communication of conclusions” (pp. 483-484). Being reflexive in the research background is important, as Probst’s (2015) finds, the “benefits of reflexivity included accountability, trust-worthiness, richness, clarity, ethics, support and personal growth—beneficial for the integrity of the research process, the quality of knowledge generated, the ethical treatment of those being studied and the researcher’s own well-being and personal growth” (p. 42).

PrEP Use and Stigma

Haire (2015) argues, “the willingness of people at risk of HIV to take up and adhere to PrEP depends greatly upon social understandings – whether it is seen as effective, as a healthy option, and a socially acceptable strategy for preventing HIV along with cultural and structural factors” (p. 242). Eaton and colleagues (2017) studied the relationship between potential barriers to PrEP and interest in PrEP among Black and white men and transgender women who have sex with men in a large southeastern U.S. city. The findings suggest that those participants who believed PrEP is for promiscuous people (stigma belief) had a lower interest in using PrEP and were more likely to report sexual risk-taking behavior. Additionally, the results show that a large minority of the sample (42%) believed conspiracies related to PrEP, and Black men and transgender women were more likely to report conspiracy beliefs than white men and transgender women. Similarly, Schnarrs and colleagues (2018) found that GSM commonly associated PrEP use with sexual immorality, which the authors suggest is likely related to religion. However, white participants knew more people who approved of PrEP use, suggesting their social networks may be more accepting of PrEP, compared to Latino and Black

participants. Additionally, Latino participants were particularly concerned that their families would not approve of PrEP, and both Latino and Black participants expressed concerns that their religious communities would not approve of PrEP.

The Need for GSM SM of Color Research

Despite a growing body of research, GSM SM of color are seriously underrepresented in sexual health prevention research and scholars argue there is a need for more research on PrEP perceptions and use among GSM SM of color (Schnarrs et al., 2018; Vermund et al., 2018; Wilson & Moore, 2009). More studies are needed to understand the nuances of individual-level, historic, and collective mistrust of medical providers and institutions (García & Harris, 2017; Quinn et al., 2019) and the relationship between intersectional stigma and PrEP (Elopre et al., 2018; Quinn, Bowleg, & Diskson-Gomez, 2019). However, scholars have noted that GSM SM are a hard-to-reach population and recruiting GSM SM of color for PrEP studies is particularly difficult (Quinn, Christenson, Sawkin, Hacker & Walsh, 2020).

Although quantitative and qualitative studies are both important for addressing these research gaps, qualitative studies are particularly useful for understanding the meanings GSM SM of color attach to HIV prevention messages and approaches. As Arrington-Sanders and colleagues (2017) argue, qualitative sexual health research can potentially provide a safe, comfortable context for self-reflection and self-awareness about sexuality, risk behaviors, and intentions to change future behaviors. A qualitative research context may be particularly beneficial for GSM SM of color who are not fully “out,” because it may be one of the few contexts where they can reflect on their sexual identity and behavior (Arrington-Sanders, et al., 2017).

Given the disparities in HIV infection and PrEP uptake among GSM SM of color, and the challenges studying this population, the purpose of this review is to (1) identify the qualitative

methods used to study GSM SM; (2) compare the strategies used in studies that include both white GSM SM and GSM SM of color to those consisting only of GSM SM of color; and (3) identify other methodological issues related to studying GSM SM of color reported within these studies (e.g., reflectivity).

Methods

This review included peer-reviewed journal articles published in academic journals between 2010 and 2020, which reflects the period after the first study on PrEP efficacy was established (Grant et al., 2010). Qualitative PrEP articles were selected from Academic Search Complete, JSTOR, and Google Scholar. The research terms, in English, were “HIV”, “pre-exposure prophylaxis”, “interviews”, “United States”, and “men who have sex with men”. To be included, the articles had to concern: (1) HIV-prevention, specifically the social dimensions of PrEP (e.g., PrEP perceptions and access to PrEP information and care); (2) samples of GSM SM, regardless of HIV-status or PrEP use; and (3) studies using qualitative methods. I focused on qualitative methods because they are useful for capturing the meanings GSM SM of color attach to PrEP, including their perceptions and experiences (Arrington-Sanders, et al., 2017). I did not include studies using samples of individuals who were incarcerated, detained, or otherwise part of the criminal justice system.

I found 79 citations on Academic Search Complete and 366 citations on JSTOR. I reviewed the articles and compiled a list of those that were non-duplicate citations. From the 366 citations that I collected, I backtracked using the references contained in them and searched for the new articles using Google Scholar. Once collecting this literature, I applied the inclusion requirement criteria to determine literature that did not qualify. Upon completing this process, I had 212 articles. From here, I then performed an additional inclusion and exclusion criteria by

screening the titles and the abstracts which lead to the elimination of 163 articles because their information did not match the criteria – i.e., (1) studies in countries outside of the United States; (2) studies examining PrEP among women; (3) studies examining PrEP and HIV-Prevention among incarcerated people; (4) retrospective and archival studies; and (5) quantitative studies. After taking all of these exclusion factors into account, I was left with 49 articles. See Figure 1 for an outline of the inclusion/exclusion process. Table 1 outlines the articles included in this review, and identifies the race and ethnicity of study samples, the recruitment and data collection strategies used, and if the researchers reported reflexivity.

Results

Race, Ethnicity, and Age of Participants

Of the 49 articles that were reviewed, 51% (n=25) focused specifically on GSM of color, while 49% (n=24) were based on samples including GSM of color and white GSM. The GSM of color included in the study samples were Hispanic, Latino, and/or Central American, Black and/or African American GSM, and/or Pacific Islanders, Native Americans, and Middle Eastern. The total number of individuals that were invited to the 49 studies included in this review was 3349. Of these individuals, 1997 participated in data collection. Across studies, participants ranged in age between 15 to 70 years old. Forty of these studies included participants that were 18 years of age or older (n=40, 81.6%), while nine (6, 8-10, 17, 19, 20-22) included younger participants between the ages of 15 and 17 (n=9, 18.4%).

Sampling and Recruitment

Most studies used monetary incentives to assist with participant recruitment (n=33, 67.3%), ranging from \$10 USD to \$150 USD (1, 2, 3, 5-8, 12, 13-17, 19, 21-24, 26-30, 32, 36, 37, 40, 42-44, 46, 47, & 49). Many studies used more than one method to recruit participants,

including passive (n=16 or 32.7%) (6, 10, 17, 18, 23, 29, 32, 34, 36, 38, 45-48), online (n=22 or 44.9%) (2-4, 7-9, 13, 14, 16-19, 21, 22, 25, 31, 38, 40, 43, 45-47), and direct outreach in physical, community spaces (n=31 or 62.3%) to recruit participants (1-5, 8, 9, 10-13, 15, 16, 18, 19, 21-24, 27, 28, 32, 34-37, 42, 45-49). Passive recruitment strategies involved the strategic placement of information about the study (e.g., fliers, cards, or pamphlets) in clinical settings, PrEP/HIV-focused organizations and clinics, and social places (e.g., coffee shops, gay bars, and other LGBTQ+ friendly locations). Most studies using online approaches (n=15 or 30.6%) used gay networking apps (e.g., Growlr, Scruff, Black Gay Chat, Manhunt, Jack'd, and He Meets Him) or Facebook community groups and Craigslist (2-4, 8, 13-18, 22, 23, 31, 40, & 43). Online recruitment can be passive or active. For example, Mitchell and colleagues (2016) used an active online recruitment method through interactive Facebook Ads. Passive online recruitment includes posting information about the study on a website or on a gay social networking app without directly engaging potential participants (e.g., sending them a direct message telling them about the study and asking them to participate).

Of the 31 studies that used direct outreach approaches, 16 (51.6%) recruited through community health centers, clinics and HIV/AIDS service organizations (1, 10, 20-24, 26-28, 35, 36, 42, 47-49), seven of which were studies specifically sampling Black/African American GSM SM (1, 10, 20, 21-24). The other studies recruited participants from the LGBTQ+ community spaces, some collected from multiple places (n=8). Such as community events, bars and clubs, sexual cruising areas, entertainment venues, agency referrals, and other LGBTQ+ venues and spaces. Of the studies that directly engaged GSM SM in physical spaces (i.e., clinics and LGBTQ+ spaces), nine studies (9-11, 15, 19, 20, 36, 44, 45) used community stakeholders

or partners to help recruit participants, six of which were studies specifically recruiting only GSM of color.

Data Collection Strategies

Researchers used in-depth interviews (n=38, 77.6%), focus groups (n=12, 24.5%), ethnography (i.e., interviews and participant observations) (n=5, 10.2%), and small group interviews (n=1, 2%) to collect data. Some of these studies used a combination of focus groups and interviews (n=6) (9, 11, 14, 24, 46, & 48), so the total numbers do not add up to 49. About a third of authors (n=17, 34.7%) did not specify the setting where their data collection took place.

Twenty-three of the studies interviewed participants in a private office (n=16) or meeting space (n=7) (1-3, 5-11, 16, 18, 25, 29, 31, 35, 36, 41, 42-44, 46, 48). Of the interviews that took place in a private office, eight (n=8) were conducted in health or HIV-related clinic (1, 18, 29, 35, 42, 44, 46, 48), one (n=1) was conducted at a university office (7), and one (n=1) was conducted at a community-based organization (5). Four (n=4) of these studies used a combination of these including three studies that used a university-based research clinic (2, 3, 16), while one used both a university and community-based centers (25). Two of these studies did not specify the specific location where their private interviews were held (6 & 8). Three studies collected data online through a skype meeting or by telephone (31, 36, 41) and four studies interviewed participants in personal or community spaces, such as their homes and public cruising areas (9-11 & 43). Of the studies that reported where interviews happened, 14 were studies focused specifically on GSM of color and 10 included samples with white GSM and GSM of color.

Nine (18.4%) of the 49 studies reviewed took additional steps to protect participants privacy, either by obtaining waivers from Institutional Review Boards to abandon written or

parental consent (5, 13, 15, 22, 26, 44, 45, 47, & 49), obtaining a Certificate of Confidentiality from the National Institutes of Health (13, 15, 45, & 49), allowing participants to “leave a mark” or use their initials on the consent form (44), asking participants to use a pseudonym to schedule the interview (47), or not asking participants their immigrant status during recruitment and focus group sessions (5). Of the nine studies that took additional steps to protect participants’ privacy, five sampled only GSM of color (5, 13, 15, 22, & 26).

Researcher Reflexivity

Nearly all of the studies used members of the research team to conduct their studies (n=48, 98%), whereas one study (Lippman et al., 2015) used peer educators and outreach workers to collect data (n=1, 2.1%). Only eleven (22.4%) of the 49 studies reported information about how the researchers’ race, gender, sexuality and/or PrEP use related to participants’ characteristics. Six studies (n=6, 12.2%) reported that the researcher’s race and/or ethnicity was the same as the participants (2-4, 12, 21 & 22). Seven (14.3%) studies report that the researcher’s gender was the same as participants’ gender (2, 3, 12, 16, 21, 22, & 26), and one study (Devarajan et al., 2020) reported the gender of the researcher (i.e., cisgender woman) was different than the gender of the participants. Seven studies reported the researchers’ and/or the interviewers’ sexual identity (2, 3, 9, 12, 16, 21 & 22). Six (n=6, 12.2%) of these studies reported the race, gender, and sexuality of their interviewers. Nine of the eleven studies reporting some aspect of researcher reflexivity were studies only sampling GSM of color.

Similar, most studies (n=42, 85.7%) did not report information about the race, gender, and sexuality of the research team members who analyzed the data. Of the 49 reviewed studies, only 4 (8.2%) reported the race or ethnicity of the researchers who analyzed or coded the data (3, 12, 21, & 22), and these were Black and Latinx researchers specifically studying samples of

GSM SM of color. Two studies (4.1%) reported the gender (i.e., a woman) of the researcher who analyzed the data (30 & 36) and only one (2.1%) reported that a man and a woman analyzed the data (27).

Discussion

I reviewed peer-reviewed, qualitative PrEP studies, published between 2010 and 2020, to identify the methods used to study PrEP perceptions and use among GSM SM and to compare studies sampling both white GSM SM and GSM SM of color to those only sampling GSM SM of color. When considering recruitment and data collection strategies scholars reported using, my review suggests that researchers using samples of GSM SM of color, compared to those using samples of GSM SM of color and white GSM SM, were more likely to take additional steps to recruit and collect data from GSM SM of color, including employing strategies to protect participants' privacy and foster trust.

Sampling and Recruitment

Regardless of sample type, scholars used similar strategies for recruiting GSM SM. For example, researchers recruited from HIV/AIDS clinics, gay social networking and dating apps, LGBTQ+ community spaces, service organizations, bars, and other entertainment venues. However, scholars only sampling GSM SM of color were more likely to recruit from places (e.g., health and HIV clinics, LGBTQ+ service organizations, etc.) and social networking webpages and apps (e.g., Craigslist, Facebook Groups, Grindr, Horney, etc.) that served GSM SM of color or places created by and for GSM SM of color. For example, Dolwick and colleagues recruited Latino immigrants from day laborer pickup locations. To protect potential participants' privacy and develop trust and comfort, the researchers did not ask participants their immigration status during recruitment or, later, at the focus group interviews. Fields and colleagues (2019) recruited young

Black or African American GSM SM using social networking apps but did so in specific census tracts with a high community viral load and predominantly Black residents. Frye and colleagues (2015) recruited Black, African American, Caribbean Black, African Black, or multiethnic Black participants via local Black organizations, a local community health clinic serving Black and Latino LGBT persons, and face-to-face at two events in gay, Black subcultural spaces (i.e., a Kiki ball and “The Piers”).

In addition to using social media (i.e., Facebook) and apps (i.e., Grindr), Martinez and colleagues (2016) recruited Latino male couples from community-based organizations serving predominately Spanish-speaking Latino MSM and used community stakeholders to help develop their recruitment materials. Smith and colleagues (2012) used outreach staff from two community-based, HIV program centers for GSM SM of color to recruit young African American GSM SM. Underhill and colleagues (2014; 2015) took additional steps to recruit their sample of GSM SM, but these efforts focused on recruiting sex workers of various races and ethnicities, including white men. Noting privacy, Underhill and colleagues (2015) allowed participants to use a pseudonym to schedule the interview.

The review suggests that, when scholars are specifically studying GSM SM of color, the issues of race and ethnicity are more likely to surface when they are making methodological decisions. Considering GSM SM of color are underrepresented in PrEP studies (Schnarrs et al., 2018; Vermund et al., 2018; Wilson & Moore, 2009), the findings of this review suggest that it would be advantageous for qualitative PrEP researchers who are recruiting samples of GSM SM of various races and ethnicities to also recruit from places or networking apps serving and/or created by GSM SM of color, rather than focusing only on LGBTQ and HIV places broadly. Additionally, this review suggests that qualitative PrEP scholars, and editors of journals where

this research is published, need to fully describe their recruitment strategies in manuscripts so that, overtime, other scholars can make informed decisions about approaches for studying these hard-to-reach populations, especially GSM SM of color.

Data Collection

Like sampling and recruitment strategies, regardless of sample type (i.e., only GSM SM of color or white GSM SM and GSM SM of color), qualitative PrEP scholars collected interview or observational data with GSM SM in private offices at universities, HIV or LGBTQ service organizations or health clinics. Though, many studies did not report where interviews took place or only noted they happened in a “private office,” not specifying where the office was located. Like issues related to recruitment, this review indicates that it is important for scholars to provide more details about where qualitative data collection takes place. This may be particularly important for GSM SM of color, since they are more likely to distrust medical or academic institutions (Eaton et al., 2015; Parsons et al., 2017; Quinn et al., 2019; Smirnoff et al., 2018). Certainly, it may be beneficial for scholars studying GSM SM of color, regardless of if the sample is only GSM SM of color or includes white GSM SM, to avoid conducting interviews at medical and academic facilities whenever possible. Garcia and colleagues (2015; 2016) ethnographic approach may be particularly helpful for studying PrEP among GSM SM of color. They interviewed and observed Black GSM SM in their homes, at their parties, and in public spaces (e.g., parks, streets, events). Similarly, Quinn and colleagues (2019a; 2019b) conducted focus group interviews with Black GSM SM in a community setting, on weekends and evenings to better ensure all participants were able to join. Since Quinn and colleagues specifically mentioned using gay Black men to develop the focus group guide, facilitate focus groups, and assist with data analysis (the lead author, Quinn, is a White, heterosexual, cisgender woman), I assume

focus groups were conducted in the Black gay community. Though, I cannot say for certain because Quinn did not provide the information, further emphasizing the need for scholars to report more details about data collection in their publications.

The studies reviewed generally reported collecting data in the same types of place (i.e., private office of a clinic or university), with only a few exceptions relevant to GSM of color, discussed above. All of the reviewed studies reported following basic human subject protocols for protecting participants' privacy. However, the studies that only sampled GSM of color were more likely to take additional steps to protect participants' privacy, which is particularly important given that GSM of color report greater concerns about discretion, and the HIV and PrEP stigma they may face if their confidentiality is not protected (Arnold et al., 2017; Cahill et al., 2017; Devarajan et al., 2020; Elpore et al., 2018; Mimiaga et al., 2016, Mitchell et al., 2016; Patel et al., 2018; Rogers et al., 2019; Smith et al., 2012). Multiple studies (Garcia 2016; Martinez, 2016; Quinn, 2019a; 2019b), all of which only sampled GSM of color, used a confidentiality certificate to assure their participants' information would be kept private. The confidentiality certificate is provided by the National Institute of Mental Health (NIMH) is designed "to protect the privacy of research subjects, [identifiable] information is prohibited from being disclosed, sensitive research information [cannot and will not] be disclosed or informed to anyone [who] is not connected to the research except when the subject consents or in a few other specific situations" (NIH Grants & Funding, n.d.). Underhill and colleagues (2015; 2016), who used a sample of white GSM and GSM of color, also obtained a certificate of confidentiality for NIMH, but stated that they did so because the sample included GSM who are sex workers.

Additionally, to provide additional layers of privacy and increase comfort and trust, studies sampling only GSM SM of color were more likely to request waivers of written consent from Institutional Review Boards. Martinez and colleagues (2016) received permission to waive written consent for screening potential participants and Quinn and colleagues (2019a; 2019b; 2020) and Smith and colleagues (2012) obtained a waiver of written consent at all stages of the study. Instead of written consent, these scholars obtained verbal consent from participants. In addition to waiving written consent for participants 18+, Garcia and colleagues (2016) obtained permission to waive parental consent for their participants under 18 years of age. Underhill and colleagues (2015; 2016) were the only scholars using samples of white GSM SM and GSM SM of color to request a waiver of written consent and instead used verbal consent. However, as discussed above, Underhill et al. (2015; 2016) noted that they did so because their sample included GSM SM who are sex workers.

The review suggests that all PrEP scholars, regardless of the racial and ethnic makeup of the samples they are seeking, should consider taking additional steps to protect participants' privacy. Establishing a strong foundation of confidentiality for GSM SM, particularly GSM SM of color, to participate in PrEP research is vital because it "creates greater trust between the researcher and participant" (Gibson & Benson, 2012, pg. 24), and GSM SM of color appear to be particularly distrustful of medical and academic institutions (Eaton et al., 2015; Parsons et al. 2017; Quinn et al., 2019; Smirnoff et al., 2018). Taking steps to protect participants' confidentiality can mitigate some of the concerns about information being disclosed when GSM SM of color are talking about their sexual practices, HIV-status, and PrEP perceptions and use. Additionally, scholars need to clearly report if and when they communicated to potential participants that they obtained waivers of written and/or parental consent or a Certificate of

Confidentiality. I include the discussion of waivers and certificates as an issue related to data collection, since this is the stage of the process when participants commonly give consent (i.e., before an interview). I can assume that scholars shared their use of these measures to protect privacy with potential participants in advertisements or recruitment interactions. However, I cannot be sure because this level of methodological detail was not always clear in the published manuscripts, and it needs to be to assist future PrEP research.

Researcher Reflexivity

Most studies did not report researcher reflexivity. However, like the other methodological issues discussed above, those studies that only sampled GSM of color were more likely to report some form of reflexivity. Reflexivity is an important methodological tool because it allows for the “participant’s view [of the researcher to be perceived] as the kind of person who ha[s] shared similar experiences to [their] own [and is] comfortable speaking candidly about them” (Bishop & Shepherd, 2011, pg. 1285). In their research with Latino immigrant GSM, Dolwick and colleagues (2015) emphasized that the researchers and the outreach team members comprised individuals from various ethnic backgrounds, who were aware of cultural and linguistic appropriateness of the interview questions. Additionally, two Spanish-speaking moderators were present during the focus groups. Elope and colleagues (2018) used Black interviewers, two of whom were cisgender women, and one was a cisgender gay man, to collect data with their sample of Black GSM. In their ethnographic study, which happened in Black gay community spaces, Garcia and colleagues (2015) noted that the ethnographer’s (i.e., the author) racial-ethnic and sexual identity was the same as the study participants’ identities. Likewise, the focus group facilitators in Kubicek et al.’s (2015) study with Black/African American and Latino/Hispanic GSM included one Latino man and one African American

woman. Nieto and colleagues (2020) also referenced that one member of the research team matched many of the demographic characteristics (e.g., race, sexuality and PrEP use) of the study population.

Conclusions

Comparing qualitative PrEP studies that only sampled GSM SM of color to those that sampled GSM SM of color and white GSM SM, the purpose of this review was to examine the recruitment and data collection approaches used and if the researchers discussed reflexivity. The review suggests that, when studies focus specifically on GSM SM of color, the challenges pertaining to race and ethnicity are more likely to surface when methodological decisions are being made and reported in journal manuscripts. The findings indicate that it would be valuable for PrEP researchers who are recruiting GSM SM of color to do so from places that are created by or designated to serve these GSM SM, rather than focusing on the broader LGBTQ community or HIV organizations. Additionally, the review indicates that PrEP scholars need to report more details about the recruitment and data collection strategies used so that they can be better understood and evaluated. Journal editors publishing qualitative PrEP research can help make this critical information available by requiring that it is reported. It may also be beneficial for researchers who are studying GSM SM of color to perform interviews outside of the medical and academic institutions to mitigate feelings of mistrust that members of these groups experience. Likewise, it would be useful for qualitative PrEP researchers to take additional steps to protect participants' privacy, regardless of their racial and ethnic background. There is also a need for researchers to be reflexive, as they design studies, recruit participants, and collect and analyze data, because this methodological tool may allow them more opportunities to build a greater sense of trust, understanding, and reliability with participants. Ultimately, this can provide

researcher with the connections and space to collect richer data during the collection process, which can provide richer data on the perceptions of PrEP in GSM of color in future research.

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Figure 1 – Study Inclusion and Exclusion Strategy

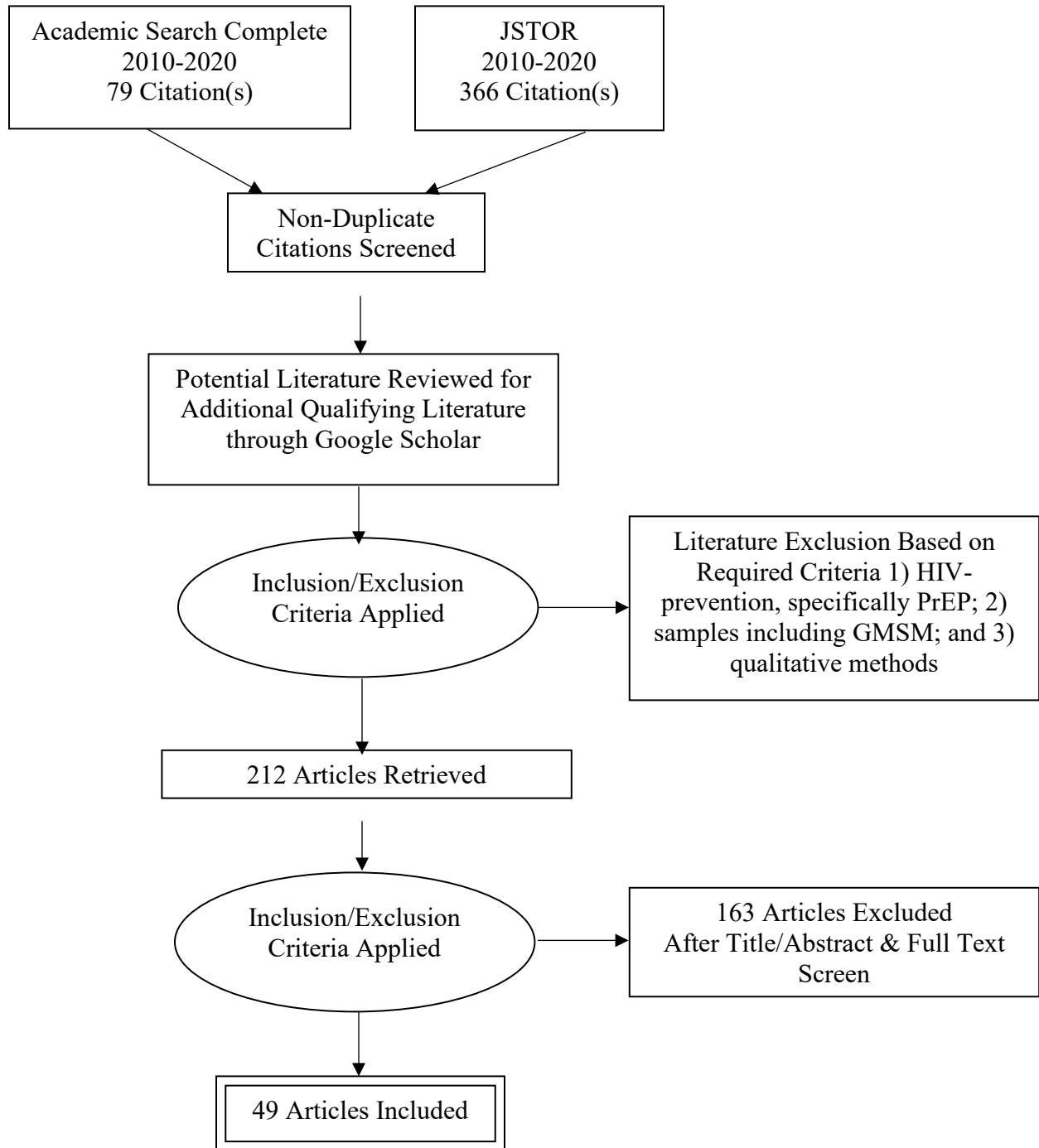


Table 1: Summary of the Literature Complied on GSM SM of Color and Mixed Samples of GSM SM

	FIRST AUTHOR, TITLE, (YEAR)	SAMPLE	RECRUITMENT	INCENTIVE	DATA COLLECT	REFLEX
	GSM SM of Color					
1	Arnold, Social structural, behavioral, and clinical factors influencing retention in Pre-Exposure Prophylaxis (PrEP) care in Mississippi (2017)	30 YMSM (25 African American; 5 Non-African American)	PrEP program at a clinic	\$30 gift card	In-depth interviews; Private room at clinic	No
2	Brooks, Persistent stigmatizing and negative perceptions of pre-exposure prophylaxis (PrEP) users: Implications for PrEP adoption among Latino men who have sex with men. (2019).	29 Latino MSM	Gay-oriented sexual and social networking apps (i.e. Grindr and Growlr); community events; and community agency referrals	\$50 gift card	Interviews; Private room at a University-affiliated research clinic	The interviewer’s characteristics (i.e. gender, race/ethnicity, sexual orientation, PrEP use) reflect those of the target population
3	Brooks, Experiences of Anticipated and Enacted Pre-exposure Prophylaxis (PrEP) Stigma Among Latino MSM in Los Angeles (2019)	29 Latino MSM	Gay-oriented sexual and social networking apps (i.e., Grindr and Growlr), community events, and community agency referrals	\$50 gift	Interviews; University-based research clinic	The interviewer’s characteristics (i.e., race, gender, sexual orientation, and PrEP use) reflected those of the study population.
4	Brooks, Experiences of Pre-Exposure Prophylaxis (PrEP)--Related Stigma among Black MSM PrEP Users in Los Angles (2020)	26 Black/African American	Gay-oriented sexual/social networking apps (e.g., Grindr and Growlr); community events targeting MSM of color, and community agency referrals	No	In-depth Interviews	No
5	Dolwick, Qualitative assessment of HIV prevention challenges and opportunities among Latino immigrant men in a new receiving city (2015)	59 Latino immigrants living in the U.S. for 10 years or less	Male Latino day laborers were approached on the street in an area known to immigrants as a pickup location for temporary construction jobs. (2) Participants were recruited from a local workers center that serves Latino immigrants. Participants not asked immigrant status	\$30	Eight focus groups; conducted at one of two well-known community-based organizations serving Latino immigrants; Moderator’s guide was developed through discussions with the Latino Outreach team	Researcher and Latino Outreach teams were comprised of individuals from various countries and as a result, team members were critical of the cultural and linguistic appropriateness of the questions developed based on regional differences. Two Spanish-speaking moderators were present during each focus

			during recruitment or focus group sessions.			group; one moderated the focus groups and the other served as note taker to document nonverbal reactions of the participants. Participants not asked immigrant status during recruitment or focus group sessions.
6	Elopre, Perceptions of HIV Pre-Exposure Prophylaxis Among Young, Black Men Who Have Sex with Men (2018)	25 Black men; 16 to 29 Years	Fliers posted in two local LGBTQ community-based organizations.	US\$30	In-depth interview; Undisclosed private meeting space	Interviewers identified as black, and included two cisgender females and one cisgender MSM
7	Fields, Young black MSM's exposures to and discussions about PrEP while navigating geosocial networking apps. (2019)	17 Black MSM; 18-24 years	Homogenous purposive sampling to at risk YBMSM users on GSN-app potentially using an eligible GSN-app within an eligible area (i.e. census tract) or sex partner meeting venue (e.g. bar or club). Recruited while signed on to a selected GSN-app in one of two scenarios: 1) within a census tract with a high community viral load (CVL), and predominantly Black/African residents or 2) attending a sex partner meeting venue characterized as club or bar with a high venue viral load, which was highly nominated by Black/African American MSM	\$50	Interviews; Private office at John Hopkins School of Medicine	No
8	Frye "Just because it's out there, people aren't going to use it." HIV self-testing among young, black MSM, and transgender women. (2015)	30 Black African American, Caribbean Black, African Black, or Multiethnic Black; between 16-29	Online websites; Mobile apps; and 45 Facebook LGBT related pages and group pages; Online recruitment occurred over a 4-month period (February-May 2014) on sites such as: Craigslist, BGC, He Meets	\$30 and along with a two-way MetroCard for travel	Interviews; Private room	No

			Him, Backpage, Facebook, Grindr, and the homepage of a local black organization (GMAD); face-to-face recruitment at two events (a Kiki ball and “The Piers”)			
9	Garcia, Passing the baton: Community-based ethnography to design a randomized clinical trial on the effectiveness of oral pre-exposure prophylaxis for HIV prevention among black men who have sex with men (2015)	31 BMSM	Community based advisory board (10 staff members of local community health clinic serving Black and Latino LGBT persons)	No	Repeated in-depth interviews with 31 BMSM (3 90-minute sessions per participant), 17 60-minute key informant interviews, and 11 months of participant observation documented in field notes, maps, and systematic jottings; 11 months of observation in: private spaces (homes, parties); public spaces (parks, streets, events); virtual spaces (chat rooms, blogs, social media); and institutions (community organizations, health centers, religious institutions).; 17 informants, including 2 physicians; 3 mental health providers; 4 community organization program administrators; 5 outreach workers; 3 community mobilizers	Ethnographer/author identity as a racial-ethnic minority and a gay man facilitated development of rapport with communities.
10	Garcia, Psychological implications of homophobia and HIV stigma in social support networks: Insights for high-impact HIV prevention among Black Men who have sex with men. (2016)	31 Black MSM	Bars, clubs, community health centers, and the Internet.	No	Interviews	No

11	Garcia, The limitations of 'Black MSM' as a category: Why gender, sexuality, and desire still matter for social and biomedical HIV prevention methods. (2016)	31 Black MSM; 15 to 54 years	Recruitment cards described the study as focused on the life stories of Black men. Did not mention sexual identity/behavior or HIV. Cards were available at health centers, community-based organizations, bars, and online	No	Ethnography, In-depth interviews (3 sessions); Participant observation at community events, public forums for Black GSM , and private events. Waiver of parental consent; Verbal consent; Certificate of Confidentiality	No
12	Kubicek, Attitudes and perceptions of biomedical HIV prevention methods: Voices from young men who have sex with men (2015)	53 total participants (23 Latino/Hispanic and 30 Black/African American)	Purposive sampling techniques in gay-identified venues including service agencies, bars, clubs, and community events	\$25	6 focus groups; Project offices or at partnering social service agencies	Focus groups were facilitated by two team members (one Latino male and one African American female)
13	Martinez, Integration of social, cultural, and biomedical strategies into an existing couple-based behavioral HIV/STI prevention intervention: Voices of Latino male couples (2016)	20 couples (i.e., 40 individual participants) Latino Male couples	Direct contact, Social media networks (Facebook and Grindr), and via community-based organizations serving predominantly Spanish-speaking Latino MSM in the five boroughs of New York City; Community stakeholders recruitment materials; Option to use pseudonyms	\$120	Interviews conducted in Spanish. Certificate of Confidentiality; Waive written consent for screening only; Written consent for focus groups; One partner limited English proficiency, both partners were proficient in Spanish	No
14	Mimiaga, Reactions and Receptivity to Framing HIV Prevention Message Concepts About Pre-Exposure Prophylaxis for Black and Latino Men Who Have Sex with Men in Three Urban US Cities. (2016)	90 MSM, 48 Black and 42 Latino	Online and at community-based organizations in each city	\$50	Interviews & Focus Groups	No
15	Mutchler, Getting PrEPared for HIV prevention navigation: Young black gay men talk about HIV prevention in the biomedical era (2015)	48 Black or African American individuals including 24 target participants and 24 friends; 19 and 24 years of age	Direct outreach at youth groups at LGBT community organizations and targeting commonly used sexual and social networking apps	\$50	Dyadic qualitative interviews	No

16	Nieto, PrEP discontinuation among Latino/a and Black MSM and transgender women: A need for PrEP support services. (2020)	15 Black and Latino men (7 Transgender women)	Sexual and social networking apps, an LGBTQ community agency or participant referral, and community events	\$50 gift card	Interviews; University-based research clinic	One research team member matched many of the demographic characteristics of the study population (e.g., race, sexual orientation, PrEP use)
17	Patel, Pre-exposure prophylaxis for HIV prevention preferences among young adult African American men who have sex with men (2018)	26 African Americans; 18 to 35	Flyers at designated primary care and HIV specialty clinics, community-based organization facilities, and events, clubs, bars, coffee shops, restaurants, bathhouses, websites, and sexual and social networking apps	\$25 grocery card; public transportation passes, if needed	Interviews	No
18	Pérez-Figueroa, Acceptability of PrEP uptake among racially/ethnically diverse young men who have sex with men: The P18 study (2015)	100 interviews were selected; Black, Hispanic/Latino, Asian/Pacific Islander, and multiracial men comprised the majority ($\geq 66\%$) of the sample: 20% Black, 39% Hispanic, and 6% Asian/Pacific Islander; 8 and 19 years old	Recruitment from participants in the larger P18 study.	No	Interviews conducted during a standard follow-up visit for an ongoing study	No
19	Philbin, The Promise of Pre-Exposure Prophylaxis for Black Men Who Have Sex with Men: An Ecological Approach to Attitudes, Beliefs, and Barriers (2016)	31 Black men; aged 15 and up	Outreach in bars, clubs, community health centers, and the Internet	a total of \$150 for participation (\$40 for the first two interviews and \$70 for the third)	Interviews	No
20	Philbin, Gendered Social Institutions and Preventive Healthcare Seeking for Black Men Who Have Sex with Men: The Promise of Biomedical HIV Prevention. (2018)	31 Black men; 17 between 15-24 and 14 over 25+	No info	No	Ethnographic data collection	No
21	Quinn, “The fear of being Black plus the fear of being	44 Black GBM; Between 16 to 25	Partnerships with HIV, LGBT, and youth-focused	\$50	Focus groups; Community setting, on weekends and	The lead author, who also designed this study, is a White,

	gay”: The effects of intersectional stigma on PrEP use among young Black gay, bisexual, and other men who have sex with men (2019a).		service providers that work with the young Black GBM community, as well as through outreach on Facebook		evenings; Waiver of written consent.	heterosexual, cisgender female. Two research associates who identify as Black GBM assisted with the development of the focus group guide, ran the focus groups, and assisted with data interpretation.
22	Quinn, “A gay man and a doctor are just like, a recipe for destruction”: How racism and homonegativity influence PrEP uptake among young Black MSM. (2019b)	44 Black men; 16 to 25	A network of local social service providers that work with the young Black MSM community and/or offer HIV prevention and testing services, and through outreach on Facebook	\$50	Focus groups; Community setting, on weekends and evenings; Waiver of written consent.	Focus groups were led by two research associate who identify as a Black gay men
23	Quinn, The influence of peers on PrEP perceptions and use among young black gay, bisexual, and other men who have sex with men: A qualitative examination. (2020)	45 Black Men	LGBT and HIV service organizations, PrEP clinics and providers, Facebook	\$50	Interviews; Waiver of written consent; used verbal consent	No
24	Rogers, Intervention Messaging About Pre-Exposure Prophylaxis Use Among Young, Black Sexual Minority Men (2019)	29 Black men; between the ages of 18 and 35	Health care clinic that serves individuals at-risk for or living with HIV. The clinic largely serves LGBTQ+ individuals of color--known in the community for providing affirming health care services; flyers, word-of-mouth, and doctor referral	\$50 gift card	Interviews (n=15), Focus Groups (n=14, one groups of 6 and one group of 8)	No
25	Smith, Attitudes and program preferences of African-American urban young adults about pre-exposure prophylaxis (PrEP) (2012)	19 African American men; between 18 and 24 years	Two community-based HIV program centers for MSM of color; Outreach study staff assessed participant eligibility, described the study, and invited those expressing interest to a focus group session.	No	Focus groups in the participants’ communities, ranging from community centers to Georgia State University; Waiver of signature, verbal consent	No
	GMSM Mixed Samples					

26	Brooks, Motivators, concerns, and barriers to adoption of preexposure prophylaxis for HIV prevention among gay and bisexual men in HIV-serodiscordant male relationships. (2011)	50 individuals, 25 gay and bisexual couples; Hisp/Latino 15; White 11; Black 18; Mixed 6	Local AIDS service organizations	\$30	Individual in depth-interviews--each partner participated	No
27	Brooks, Sexual risk behaviors and acceptability of HIV pre-exposure prophylaxis among HIV negative gay and bisexual men in serodiscordant relationships: A mixed methods study (2012)	50 individuals, 25 gay and bisexual couples; Hisp/Latino 8, White 5, Black/African American 10	Local AIDS service organizations	\$30	Interview	No
28	Cahill, Stigma, medical mistrust, and perceived racism may affect PrEP awareness and uptake in black compared to white gay and bisexual men in Jackson, Mississippi and Boston, Massachusetts (2017)	12 white, 21 Black or African American, 2 no answer	Advertising in local bars, cruising areas, and at health centers.	\$50 gift card.	Focus groups	No
29	Collins, The Impact of HIV Pre-exposure Prophylaxis (PrEP) Use on the Sexual Health of Men Who Have Sex with Men: A Qualitative Study in Seattle, WA (2017)	1 Black, 1 Latino, 12 White Men; 22 to 66	Printed ads posted in offices of local PrEP providers.	\$50	Interviews; Private office	A male medical student with previous experience working on HIV and prevention studies with MSM
30	Devarajan, PrEP and sexual well-being: a qualitative study on PrEP, sexuality of MSM, and patient-provider relationships. (2020)	20 men, 15 Black, 2 White, 1 Asian, 2 Identifying with Hispanic Ethnicity and 17 Non-Hispanic Identifying	Gatekeepers and networks and posting flyers in online social media and physical LGBTQ community spaces	\$10	Interviews	Cis-gender women, public health researcher with experience in LGBTQ community engagement
31	Dubov, Stigma and shame experiences by MSM who take PrEP for HIV	43 men, 25 Caucasian, 9 African-American, 6 Hispanic, 2 Asian, and 1 "other"	Social media (Facebook groups with MSM content), as well as smartphone apps and websites that cater to	No	Interviews were conducted in English by a trained interviewer either by phone or online (e.g., Skype)	No

	prevention: a qualitative study. (2018)		MSM communities (e.g., Grindr, Scruff, Hornet, Manhunt, Growlr).			
32	Galindo, Community member perspectives from transgender women and men who have sex with men on pre-exposure prophylaxis as an HIV prevention strategy: implications for implementation (2012)	30 men, including Black, White, & Latino Mixed MSM (n=24) and transgender women (n=6)	Word of mouth, flyer postings at social service organizations, community planning groups, and passive street recruitment	\$40	Interviews	No
33	Gilmore, Participant Experiences and Facilitators and Barriers to Pill Use Among Men Who Have Sex with Men in the iPrEx Pre-Exposure Prophylaxis Trial in San Francisco (2013)	52 men - majority (66%) were white, 12% were African American, 15% were Latino/Hispanic, and 7% were Asian; Median age was 43 years (range, 22–66)	Men enrolled at the SF Department of Public Health (SFDPH) iPrEx site	No	Focus groups and interviews	No
34	Golub, Demographic differences in PrEP-related stereotypes: Implications for implementation. (2015)	160 men, Black 56; Latino 25; Other 11; White 68	Passive recruitment methods (flyers), active recruitment methods (outreach at bars, events, community-based organizations), and participant referral.	No	Interviews	No
35	Hess, Reasons Why Young Men Who Have Sex with Men Report Not Using HIV Pre-Exposure Prophylaxis: Perceptions of Burden, Need, and Safety (2019)	14 Men, 9 Hispanic, 2 Asian, 2 White, 1 American Indian; 18 to 24	Engaged in the “Good to Go” Program for HIV testing, formerly known as the Early Test Program	No	Interviews; private locations. Interviews: fluent in English or Spanish	No
36	Lippman, Client and Provider Perspectives on New HIV Prevention Tools for MSM in the Americas (2015)	130 MSM; Race/Ethnicity Was Not Reported	By peer educators and outreach workers at each site; In the US, recruiters utilized study advertisements placed at saunas, theaters, bars, clubs, or other places frequented by MSM.	\$50	Telephone Interviews; Conducted by outside consultants with expertise in qualitative research	No
37	Mimiaga, Sexual Partnerships and	40 men, including Black, Latino, Asian-	Gay-oriented bars and nightclubs and community-	\$50	Interviews; Private room at The Fenway Institute	No

	Considerations for HIV Antiretroviral Pre-Exposure Prophylaxis Utilization Among High-Risk Substance Using Men Who Have Sex with Men (2014)	American Pacific Islander, mostly white and black, 33% ethnic/racial minority	based HIV prevention organizations			
38	Mitchell, HIV-negative male couples' attitudes about pre-exposure prophylaxis (PrEP) and using PrEP with a sexual agreement. (2016)	29 couples, mostly non-Hispanic white; 8 couples were mixed race; 19 – 65 years old	Passive recruitment methods and targeted ads placed on Facebook	No	Interviews	No
39	Saberi, Ambiguity, Ambivalence, and Apprehensions of Taking HIV-1 Pre-Exposure Prophylaxis among Male Couples in San Francisco: A Mixed Methods Study (2012)	32 men, white, Black and Latino	Referrals from participants and advertisements were posted on community bulletin boards, clinic waiting rooms, and at community-based organizations	No	Interviews	No
40	Schwartz, Stigma communication surrounding PrEP: The experience of a sample of men who have sex with men. (2019)	38 men, 27 White, 7 Latino, 2 Middle Eastern or North African, 2 Biracial	Ads on two online dating apps	\$30	Interviews	No
41	Spinelli, Missed opportunities to prevent HIV infections among pre-exposure prophylaxis users: a population-based mixed methods study, San Francisco, United States (2020)	8 men, 2 were Black, 2 were Latinx, 1 Native American and 3 White; 3 younger than 25 and 2 over 50	Individuals who HIV seroconverted during or after using PrEP	No	Interviews	No
42	Storholm, Risk Perception, Sexual Behaviors, and PrEP Adherence Among Substance-Using Men Who Have Sex with Men: a Qualitative Study (2017)	30 men, Black and Latino oversampled (16.7% and 23.3%) compared to Asian and White men (20.0% and 40.0%)	Kaiser Permanente San Francisco (KPSF)	\$50 gift card	Interviews; Private office at KPSF	No

43	Tester, PrEP, TasP and the cause sex scripts among serodiscordant gay men (2020)	20 men, 15 white; 2 Hispanic/Latino; 5 Mixed race/ethnicity	Word-of-mouth, online groups, and snowball sampling	\$25 gift card	Interviews	No
44	Thomann , “WTF is PrEP?”: attitudes towards pre-exposure prophylaxis among men who have sex with men and transgender women in New York City (2017)	One group included 11 Black men and one black transgender woman. The other included 5 Black, 3 White, and 3 Latino men, and 1 Latina transwoman;.21 – 50	Advertising at over 200 community-based organizations.	\$50 refreshments were provided	Focus groups conducted at the Public Health Solutions offices. Participants could initial or leave a mark rather than signing.	No
45	Underhill, Could FDA approval of pre-exposure prophylaxis make a difference? A qualitative study of PrEP acceptability and FDA perceptions among men who have sex with men (2014)	38 men, 24 white, 9 black, 4 Latino, 1 other; 16 sex workers and 22 non-sex workers; aged 21 to 61	Outreach and advertising in clubs, bars, entertainment venues, and sex work venues serving MSM, as well as advertisements in local media and websites. Community partners to recruit subsample of MSM in sex work	No	Focus groups (8 total enrolled 4-6 English Speaking Males)	No
46	Underhill, Access to healthcare, HIV/STI testing, and preferred pre-exposure prophylaxis providers among men who have sex with men and men who engage in street-based sex work in the US. (2014)	94 total (38 in focus groups; 56 in-depth interviews); Mostly white but includes African American, Native American, Asian and Hispanic/Latino; HIV-Negative or Unknown; PrEP Users	Direct outreach in entertainment venues, sex work venues, community-based organizations, and clinics, and by advertising in local media serving MSM	\$75	Focus groups and interviews; Private rooms at a clinic	No
47	Underhill, A qualitative study of medical mistrust, perceived discrimination, and risk behavior disclosure to clinicians by US male sex workers and other men who have sex with men: implications for biomedical HIV prevention (2015)	25 non-sex workers, 31 sex workers. Sex workers: 21 white, 6 African American, 1 Native American, 3 Hispanic/Latino; Non-sex workers: 13 white, 3 African American, 1 Native American, 1 Asian, 6 Hispanic/Latino, 1 refused to report	In-person outreach and advertising in sex work venues and community-based organizations and advertising in entertainment venues, clinics, and online and print media. Pseudonym to schedule interview	\$75	Interviews; Private rooms in a clinic or needle exchange. Verbal consent; Certificate of Confidentiality	No

48	Underhill, Explaining the efficacy of pre-exposure prophylaxis (PrEP) for HIV prevention: A qualitative study of message framing and messaging preferences among US men who have sex with men. (2016)	Focus group (38 participants) followed by individual interviews (56); 2 Focus groups African American 8; White 26; Hisp/Latino 4; Indiv Interviews 34 white, 9 hisp/Latino, 2 Native American, 1 Asian, 1 no report; 21-70	Outreach and advertising in local entertainment venues, community-based organizations, clinics, and local media	No	Focus groups and interviews; Private rooms in clinic settings Written consent for focus groups, verbal consent for interviews; Certificate of Confidentiality	No
49	Yang, Beyond HIV prevention: a qualitative study of patient-reported outcomes of PrEP among MSM patients in two public STD clinics in Baltimore (2020)	18 men, 15 non-Hispanic Black/African American, 2 White, 1 Hispanic; Average age 18	Baltimore Community Health Department clinics PrEP program, recruited by PrEP Peer Navigators	\$30	Interviews; Performed by trained qualitative researchers not affiliated with the health department	No

