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“We in This Fight Together...”: HIV Treatment and Prevention Among Couples of HIV-Discordant Black and Latino Men Who Have Sex with Men

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Abstract

HIV-positive Black and Latino men who have sex with men (MSM) have substantial challenges accessing and engaging in HIV care. Findings presented here are an analysis of 14 HIV-discordant couples ($N=28$) from Atlanta, GA; Baltimore, MD; Chicago, IL; Los Angeles, CA; and Washington, DC. One-hour in-depth interviews were conducted. Interviews were analyzed using a qualitative content analysis approach. Most couples reported relationship fears associated with delayed disclosure, HIV care engagement instigated by the HIV-uninfected partner, and varying knowledge and concern about the impacts of HIV infection and risk reduction. Findings suggest an opportunity to jointly educate and treat MSM of color in HIV-discordant relationships to improve engagement in ART and PrEP care and adherence.

Keywords

HIV/AIDS; LGBTQA; qualitative methods; sex; well-being

HIV incidence and prevalence are higher among gay, bisexual, and other men who have sex with men (MSM) than among any other risk group in the United States. In 2018, preliminary national surveillance data show 66% of all diagnosed HIV infections in the United States were among MSM, with Black MSM accounting for 39% and Latino MSM accounting for 30% of new diagnoses. In addition, incidence rates increased 11% from 2013 through 2017 for Latino MSM (Centers for Disease Control [CDC], 2019).

HIV care and treatment are essential for reducing HIV morbidity and incidence (Christopoulos et al., 2011; Gardner et al., 2011). Persons living with HIV who attain regular medical care can benefit from antiretroviral treatment (ART) as prescribed and monitored by their healthcare provider. ART facilitates viral suppression, and viral

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suppression reduces morbidity. In addition, it is known that risk of sexual transmission is reduced by appropriate use of HIV prevention strategies like condoms or pre-exposure prophylaxis (PrEP), but persons living with HIV who have suppressed viral load have effectively no risk of transmitting HIV infection (Cohen, 2011; Giordano, 2015; Giordano et al., 2005; Insight Start Study Group, 2015; Rodger et al., 2016).

However, HIV-positive Black and Latino men who have sex with men (MSM of color) have substantial challenges receiving and maintaining HIV prevention, care, and treatment (Singh et al., 2017). Among MSM living with diagnosed HIV infection in 2014, Black and Latino men reported low percentages of retention in care (53.6%; 52.2%) and viral suppression (58.4%; 60.7%), respectively (Singh et al., 2017). In addition, even though use of PrEP increased by approximately 500% from 6% to 35% from 2014 to 2017, PrEP use among MSM, especially among MSM of color, remains low (Finlayson et al., 2019).

Prior studies suggest that intimate partnerships (spouses, boyfriends, and other sexual partners) can play a fundamental role in health maintenance, but studies assessing HIV prevention, care, and treatment as it relates to couples are rare (Goldenberg et al., 2013; Mitchell & Petroll, 2012; Tan et al., 2018b; Wrubel et al., 2010). One study among MSM couples showed that HIV-uninfected partners who had partners living with HIV with undetectable viral loads were significantly more likely to use PrEP compared with those with partners who had detectable viral loads (Jin et al., 2021). Unfortunately, data also show that two-thirds of new HIV infections among MSM occur within the context of primary partnerships, which highlights the importance of HIV treatment as prevention and persistent PrEP use (Sullivan et al., 2009).

Intimate partnerships are generally associated with favorable outcomes in HIV care engagement via social support (George et al., 2009). A recent study among Black MSM living with HIV found that those in a relationship were more likely than single men to have reported having a primary healthcare provider or receiving recent HIV care. If their partner was HIV-uninfected, they were more likely to report better ART adherence compared to men whose partners were living with HIV (Tan et al., 2018). Other studies have shown that informal social support from partners is associated with ART adherence and a slower progression of HIV infection (DiMatteo, 2004; Mosack & Wendorf, 2011).

In social role theory, the process of social support for health care can be described as behaviors that are instituted and procured by patients, providers, and members of the patient's social network including family (Heiss, 1990). Social support networks can assist persons living with HIV with care engagement (Cook et al., 2018). The theory asserts that when persons living with HIV disclose their status, they build a support network. This network provides emotional, informational, or instrumental means, which mediate care engagement (Carnes et al., 2020; Smith et al., 2008; Waddell & Messeri, 2006). In examining family structures, persons living with HIV most often include intimate partners and lovers as their chosen families (Grant et al., 2013).

However, due to the high risk for HIV transmission and acquisition, more can be known about how HIV-discordant couples of MSM of color navigate social support from

intimate partners along with implementing HIV prevention, care, and treatment within these relationships. More knowledge can also be gained about effective strategies to further support these couples and to reduce their HIV risk. The purpose of this study is to provide an understanding of the relationship dynamics of HIV disclosure among Black and Latino MSM in HIV-discordant relationships and to also describe the impact of HIV and the barriers and facilitators to HIV prevention, care, and treatment within these couples.

Methods

Between June 2014 and September 2014, a qualitative study with Black and Latino MSM living with HIV and a small subset of their HIV-uninfected male sex partners was conducted in five U.S. cities: Atlanta, GA; Baltimore, MD; Chicago, IL; Los Angeles, CA; and Washington, DC. These cities experience elevated HIV prevalence and large populations of MSM of color (CDC, 2019). The primary purpose of the study was to understand barriers and facilitators of HIV care and treatment (Carey et al., 2018, 2019).

This study reports findings from a subsample of that larger study. A convenience sample of HIV-discordant couples was derived from the participants living with HIV who agreed to provide the contact information for an HIV-uninfected sexual partner, where partners also subsequently agreed to participate in the study. Semi-structured individual interviews were conducted on each of the men within the HIV-discordant couples to understand the impact of HIV on their relationships and barriers and facilitators to HIV prevention, care, and treatment. The Emory University Institutional Review Board approved the protocol. Results of the larger study are described elsewhere (Carey et al., 2018, 2019).

Eligibility and Recruitment

The overall sample was purposively selected to include MSM with a history of diagnosis who were either in or out of HIV treatment. HIV treatment was defined as being in care and prescribed medication for HIV infection under the guidance of a health care provider. In treatment was defined as participants who reported being continuously in HIV treatment and on ART since diagnosis and those who became engaged and remained on ART following a period of delay after HIV diagnosis. Out of treatment was defined as participants who may have never or sporadically sought HIV treatment but were not on ART at the time of interview. A cross-sectional, qualitative research design was used.

Participants living with HIV were recruited from healthcare provider and case manager referrals, listserv postings, community-based organizations frequented by MSM of color, and HIV-related treatment centers via flyers and advertisements. Interested participants contacted the study team via email and/or a toll-free number and were screened for eligibility. During screening, participants were asked if they had a cisgender (one whose gender identity corresponds with their sex assigned at birth) male sexual partner who was not living with HIV or had an unknown HIV status, but was aware that the participant was HIV-positive. If they did, the study team member asked for permission to contact the partner for an interview.

Eligibility criteria for the sample of participants living with HIV included self-reported HIV diagnosis, having reported oral or anal sex with another man at least once in the past 6 months, identification as cisgender male, being 18 years of age or older, identification as Black and/or Latino of any race, having the ability to be interviewed in either English or Spanish, and being at any stage of the HIV care continuum (diagnosed with HIV, linked to HIV care, engaged or retained in HIV care, on ART, or achieved viral suppression). Eligibility criteria for the sample of uninfected intimate partners included not having an HIV diagnosis (unverified self-report HIV-uninfected or unknown status), being 18 years of age or older, identification as cisgender male, and in an ongoing oral and/or anal sexual relationship with an HIV-positive participant in the study. Relationship status was determined by participants living with HIV's referral of an HIV-uninfected oral and/or anal sexual partner and those partners' confirmation of an ongoing sexual relationship with the partners who referred them at time of study. Respondents were screened by phone or in person. Eligible participants identified a convenient time and place to conduct an in-depth interview in their city with a member of the study team. Each partner in a couple was interviewed separately.

Procedures

A brief structured survey and a semi-structured in-depth interview were administered to all participants. The structured, close-ended survey was administered prior to the semi-structured interview. Validated survey questions from the National HIV Behavioral Surveillance study that covered demographics, socioeconomic indicators, and household composition were utilized (CDC, 2010). Two qualitative interview guides were developed, one for participants living with HIV and one for their HIV-uninfected cisgender male sexual partners. Participants living with HIV were asked about their HIV diagnosis (Nelson et al., 2014), HIV disclosure within relationships and the impact of HIV (Crepaz & Marks, 2003; O'Connell et al., 2015; Przybyla et al., 2014), social support systems (Burgoyne, 2005; Waddell & Messeri, 2006), barriers to HIV care and treatment adherence (Quinn & Voisin, 2020), understanding of HIV laboratory tests and treatment plans (Horne et al., 2007; Sewell et al., 2017), experiences with HIV providers (Roberts, 2002), and sexual risk behavior (Van Kesteren et al., 2007). HIV-uninfected participants were also asked about HIV disclosure within their relationship and the impact of HIV (Crepaz & Marks, 2003; O'Connell et al., 2015; Przybyla et al., 2014), social support systems (Burgoyne, 2005; Waddell & Messeri, 2006), barriers to HIV prevention and care and their partner's treatment adherence (Muessig & Cohen, 2014; WHO, 2012), understanding of their partner's HIV laboratory tests and treatment plans (Horne et al., 2007; Sewell et al., 2017), experiences with HIV providers (Goldenberg & Stephenson, 2015), and sexual risk behavior (Darbes et al., 2014). In addition, HIV-uninfected partners were asked about their HIV testing history and their understanding of advances in HIV treatment as prevention (such as the meaning of undetectable viral load and pre-exposure prophylaxis or PrEP). Interviews were recorded digitally and transcribed verbatim. Senior project staff reviewed transcripts for quality assurance. Personally identifying information was redacted. Spanish interviews were translated into English during transcription.

Analytic Methods

In-depth interview transcripts were coded for themes present in the data using a qualitative content analysis approach (Schreier, 2012). An initial codebook was developed utilizing the questions from the interview guide to generate theory-driven main categories or parent codes. Subcategories or child codes were developed through constant comparison and interpretation of the participants' answers to interview questions and probes. A new subcategory or code was created whenever a new concept or emergent theme developed during textual analysis. All data were analyzed using NVivo 10.0 software (QSR International [Americas], Inc.) by a team of experienced qualitative researchers as part of the larger study (Carey et al., 2018, 2019). To ensure reliability in the coding process across coders, intercoder agreement was assessed using Cohen's kappa (Hruschka et al., 2004). The coders' average kappa scores were between 0.6 and 0.7 across all codes, with 70% of codes having a kappa of 0.8 or higher, indicating substantial intercoder agreement. Any remaining coding disagreements were resolved through discussion among the coders. Final codes assigned to each respondent were then subsequently used in a two-step iterative analysis process. In Step 1, a qualitative dyadic analysis approach was used to determine how each couple understood HIV care and treatment (Eisikovits & Koren, 2010). Responses to interview questions and coded themes for each partner in a couple were compared to understand how HIV prevention, care, and treatment were experienced, and the role of the HIV-uninfected partner in providing support for HIV treatment and care. This was done by abstracting coding by couple and creating charts and narratives for the couple using codes, demographics, and treatment status to understand the context of the couple. Frequencies were also assessed by partner type within couples for relevant codes, that is, person living with HIV and HIV-uninfected/unknown status. Two qualitative researchers abstracted the coded data and frequencies for each partner and couple into the following categories: HIV treatment and care history, HIV testing, impact of HIV on the relationship, disclosure of HIV status, access to HIV care, care challenges, social support, impact on sex, how HIV laboratory tests are understood, and how PrEP is perceived. From these categories, a joint narrative was developed describing how the couple perceived the impact of HIV on their relationship and support for HIV treatment and prevention behavior, identifying areas of convergence (where couples had similar perceptions and experiences on the same category) and divergence (where they expressed different perceptions and experiences on the same category). Narratives specific to HIV care and treatment for each couple were discussed and agreed upon by both researchers. In Step 2, researchers compared the joint narratives of all couples via an additional round of constant comparison and content analysis to identify shared findings that resulted in a final set of frequently occurring themes. The COREQ checklist was used to ensure our qualitative methods, analysis, and presentation of study findings were applied systematically (Tong et al., 2007).

Results

Sociodemographics

Findings presented here are an analysis of 14 HIV-discordant couples ($N = 28$). More than half of the men in our sample were Black (57%, $n = 16$), and 36% were Latino ($n = 10$). The median age of participants was 46 years old (range 22–57). Most participants (71%, $n = 20$)

lived in low-income households with total annual earnings of \$0–25,000. Thirty-two percent ($n = 9$) indicated that they were employed for wages or self-employed, while 54% ($n = 15$) reported they were unemployed or unable to work. Most participants had attained greater than high school education (i.e., at least some college, an associate's, technical degree (39%, $n = 11$), or a bachelor's degree (29%, $n = 8$)). More than half of the participants also reported having health insurance in the past 12 months (57%, $n = 16$) (Table 1).

Qualitative Findings

Frequently occurring themes among HIV-discordant couples included relationship fears associated with delayed disclosure, HIV care engagement instigated by the HIV-uninfected partner, and varying knowledge and concern about the impacts of HIV infection and risk reduction.

Relationship Fears Associated with Delayed Disclosure.—Most partners living with HIV described initial difficulties disclosing their HIV status in the relationship and to others. These difficulties were primarily related to fears based on perceived or anticipated rejection and/or partner loss. One HIV-positive partner described it as:

I have fear of rejection. I have a fear. I think everybody is going to turn on me, I do. The whole world. If I tell somebody, they are going to turn on me, that's what I think in my mind. Interviewer: Is that in general or because of the HIV status?
Respondent: HIV. I'm a good dude; I'm just HIV-positive, you know?

(HIV-positive partner, Couple 6)

We met, you know we got to know each other months on down, and then before I brought the subject that he would have to get tested before we got intimate, and he came clean and told me about what was going on.

(HIV-uninfected/unknown status partner, Couple 6)

For this couple, fears of rejection due to HIV infection caused a delay in disclosing HIV status. Another couple struggled similarly with communication about HIV status. The partner living with HIV feared what others would think about his HIV status, which resulted in avoidance behavior. However, he enlisted outside support from providers and social support staff:

The only person I told was my partner. I have been with him for four years. And I gathered some bravery, and I told him. I brought him, he got tested, and we saw he was okay. We protect ourselves, and I take care of him as much as I can. Because this is not something I sought out. And I don't want the rejection. I care what people think, but I don't want to be made fun of, and I know my character. I prefer to come here [community-based organization] and be with people who are the same, in groups, we share, we talk, but that's it.

(HIV-positive partner, Couple 12)

Every time that I talked about HIV, he kind of like, you know, changed the subject and I started like noticing some kind of, like...defense stance somehow, although not aggressive. And after six months or so, we were a little bit, it was my 19th

birthday, and we were like a little bit drunk and then he, he honestly told me. He was crying. He told me that he didn't want to lose me. So, he told me that his case manager and all of the people in the clinic told him that he needed to tell me in case if something happened. And so, he did, you know. He was devastated, but I told him that I wasn't gonna, you know, let him go. I was gonna stay with him even though it was like in a really short period of time.

(HIV-uninfected/unknown status partner, Couple 12)

In some cases, disclosing HIV status took a long time to happen and affected other aspects of relationships based on various unspoken assumptions. One couple described their experience as:

I didn't tell my partner for four years. All the time that I didn't take meds until I got sick. Interviewer: Why did you not tell him? Respondent: I was afraid. Before I was thinking "Oh, he not gonna get infected because of the sex that we having." [But] if I got infected, he could have been infected, too. So also, I was afraid to lose him. Yeah, to his reaction. He knew—when it happened that I became HIV-positive while I was with him, [but] he stayed with me.

(HIV-positive partner, Couple 13)

I was angry. I was really, really angry for what had happened. I was angry because I was faithful. I didn't want to go out with somebody else. I would't sleep with somebody, you know what I mean, and I guess it's hard to say, but it was not me who made the mistake. I had to control myself, but I was angry. I couldn't fight with him because he was ill. He was really close to die and you cannot fight with somebody like that. So, I [tested for HIV] to make sure that I was fine and then I was fine and then I was happy for that, but I was worried for him.

(HIV-uninfected/unknown status partner, Couple 13)

For this couple, the partner's fear of disclosing his HIV infection was compounded by it also revealing that the seroconversion occurred while in the relationship. The fear of that revelation and disclosure of HIV status delayed care for the partner living with HIV. It also generated anger and unrealized sexual risk for the HIV-uninfected/unknown status partner.

In other cases, disclosure of HIV status was immediate, but was still accompanied by a multitude of fears, which were remedied by educational opportunities in this couple:

I didn't want to infect him, and I wanted to give him an option if he wanted to continue with the relationship or not. Plus, it's against the law to even have sexual contact with someone knowing that you're positive and they're not. [Non] disclosure is against the law in Georgia. [Afterwards] he left for a few days. I continued to talk with him. I continued to text him and eventually he came around and he wanted to know more about it and...we went to certain classes for preventing it...and we're constantly on the internet making sure that everything that we are doing is correct that would keep him from being infected. He's younger than me so I didn't want to infect him and maybe shorten his life span because I've

already lived. So, I really wanted him to know, and I wanted that decision to be up to him if he wanted to continue.

(HIV-positive partner, Couple 2)

No. I didn't learn [about his status] until that part [sex] came. He told me and then from there, [sex] got cut out until I went and educated myself. But he's older than me, so he kind of educated me more on it, and then when I went and you know read up online, googled it, and all of that. I figured like yeah you can still be with someone that has it [HIV infection] so then after that we were sexual. It actually made the bond closer cause he told me rather than, you know... you got honest even though I could have turned you down after that. So, it made us closer, I think.

(HIV-uninfected/unknown status partner, Couple 2)

For this couple, HIV disclosure served as a catalyst for HIV prevention and education. It also created relationship dynamics wherein there was brief separation and then a rekindling. The experience strengthened the relationship via honest communication and a renewed establishment of trust.

HIV Care Engagement Instigated by the HIV-Uninfected Partner

HIV-uninfected/unknown status partners played a substantial role in assisting partners living with HIV with their care and treatment. Most of the couples provided in-depth descriptions of the means and levels of support provided and received. One couple described it as:

He said, "Well, we in this fight together." He said, "I just want you to know something," he said, "I will tell you right now it lives with you, you don't live with it, you got it?" I said, "Ok, I got it, I understand. It lives with me; I don't live with it." It's living with me, I'm going to take care of it, I'm going to do what I have to do with it because it lives with me.

(HIV-positive partner, Couple 3)

I feel that if I'm involved more with his treatment that he doesn't seem all alone. Cause a lot of times he'll feel like he's – it's all by himself, and he's not by himself; he's in a relationship. Anything that happens to him is happening to me, too. I mean he got HIV, but you can pretty much say I got it too because I have to deal with it the same way he has to deal with it. I have to watch him take his meds, go through his changes and the same thing...I go through my changes, too.

(HIV-uninfected/unknown status partner, Couple 3)

For this couple, the partner's HIV infection ultimately unified them and provided an opportunity for support of both mental and physical health. For example, the HIV-uninfected/unknown status partner assisted the other partner with processing his HIV infection in a supportive and uplifting way. He was also able to reframe his partner's individual experience living with HIV as one that they both were on together as a couple. In other cases, support was through direct communication with providers and by actively participating in decision-making regarding care.

At that time [I was out of treatment] I thought I was going to die because—weighing 85 pounds and with only two cells, and I wasn't eating much. At that time my partner had already bought my coffin; he was already getting ready for that because I was on my last days. My partner told the doctor at that time to try liquid—before they used to give [medication] to you in liquid, and by giving it to me spoon by spoon I started to get better, then they started giving me pills.

(HIV-positive partner, Couple 11)

We just go, and since he already has an appointment, he has a schedule. He takes no more than half an hour. Since he is taking his medications—he even has, I think, twenty years infected. Since he takes the medications, his viral load is good. They have told him that he is good. I think that's why I don't worry much.

(HIV-uninfected/unknown status partner, Couple 11)

For this couple, the HIV-uninfected/unknown status partner had a role in caretaking. This involvement in his partner's HIV treatment allowed him to be knowledgeable about his partner's laboratory values to monitor his care. In other cases, the support transcended HIV care and treatment and delved into the emotional well-being and mental health aspects of living with HIV and remaining adherent to medication.

There are times when I see everything like, foggy. I lose my vision. I lose balance. A lot of depression... I am tired. I get tired [of taking medication]. But, when my boyfriend talks to me, and I recuperate. And I swear and I promise that I won't do it [skip doses] again. I don't know, you can see that he has me. And he checks daily. So, when I decide not to take them, I flush them in the toilet. So, it will look like I took them. So now, he has seen that I go into the bathroom, he says "I want to see you taking the pills. If I'm not there, wait for me to get there." So, he buys me milk, he buys me the juice I like, or the ice cream I like, to make milkshakes. To not feel the symptoms.

(HIV-positive partner, Couple 12)

Well, it's kind of hard to see him not taking his medication. Also, he's, like, depressed. You have to constantly be taking care of yourself and your partner, you know, and it's been something hard. I support him and, you know, he supports me, so, I take him to the hospital if he gets sick or something. I need to push him a little bit forward, you know...because he get depressed and then he opts to not take his medication and that really scares me. I push him. Whenever I see that he's not taking his medication—sometimes he lies to me and he tells me that he takes his medication, but honestly, I know that he didn't, you know, but every time that I see him not taking it, I tell him to do that soon after.

(HIV-uninfected/unknown status partner, Couple 12)

Here, HIV infection negatively affected their mental health and caused issues with ART adherence. The HIV-uninfected/unknown status partner described the challenges of being both emotionally supportive and assertive regarding HIV treatment.

Varying Knowledge and Concern About the Impacts of HIV Infection and Risk Reduction.—A few of the HIV-discordant couples were not engaged in HIV care and treatment. These participants living with HIV were not currently taking antiretrovirals for their HIV infection at the time of the interview. They reported that this was due to feeling healthy and not currently experiencing challenges living with HIV infection. However, they were open to beginning antiretrovirals to further reduce risk of transmission or to treat illness, when necessary, and in one case, were actively seeing a provider for HIV care. One HIV-discordant couple in this circumstance described it as:

I've gone to the doctors, almost consistently, not that regularly though, like every six months just to get a check-up to find out how my vitals are, and they always give me a report that I'm pretty much healthy and nothing's quite wrong with me yet. The viral load is still very low, so with that being said, I've always felt like I, it doesn't seem quite real to me yet, but since I've been married, the conversation has come up about me receiving treatment for it, so this week I'm actually supposed to go to the doctor and give him a date to start the medication and treatment. With my husband, he doesn't like to use condoms, so we don't and he's still negative. But with talking to my husband, he wants to make sure he's protected. I want to make sure he's protected, so to prevent the spreading, I'll start medication. If I wasn't married, I probably wouldn't start it as of yet. I have an extremely low viral load.

(HIV-positive partner, Couple 8)

When we first met, I don't think he was receiving care regularly. To me, it's very important that he receives the medical attention and care that he needs. Currently he's not on medication. But we are in discussions in regards to getting him to start medication. I think the health care is important for the long term. I've been to his doctor's appointments. His viral loads are low, he's not in any immediate danger, so I'm not too concerned with it right now, but I do know that if he was on the medication, he could be at an undetectable status. I think for the long term that it would be better for him.

(HIV-uninfected/unknown status partner, Couple 8)

For this couple, HIV treatment was being negotiated at the time of the interview. The partner living with HIV was contemplating starting ART with the impetus being his HIV-uninfected/unknown status partner's health and safety. The HIV-uninfected/unknown partner supported and encouraged the HIV-infected partner to seek ART for better health outcomes. Another couple reported a similar perspective for the HIV-positive partner. It was described as:

I was diagnosed in 2006. I basically didn't receive treatment after that because I just wasn't feeling sick. I don't feel like I'm sick enough to get treatment. I've already been on disability for something else...so I just felt like while my health is like it is, why bother it...I'm not saying that I would never need treatment, but right now I don't feel like I do, but if I ever did I would if I want to live, and I do want to live. I know that eventually that I'm going to have to go on meds, but once again I just want to reiterate, I'm not running from the doctors. Right now, I just feel like I can make it without them.

(HIV-positive partner, Couple 1)

The partner living with HIV in this couple was also contemplating HIV treatment; however, he was adamant that he would begin ART in his own time.

Most participants discussed the importance of knowing CD4 and viral load numbers and had a basic understanding of what each value meant and the impact they have on health and HIV transmission:

[Understanding labs is] very important because it lets you know that whatever you are taking is working or whatever you're doing has to be done differently. So, it's very important to know that my numbers, my viral is undetected, and my CD4 count is constantly going up. It's very important to know that because if it stops moving then something needs to be done; there's a change that needs to be made.

(HIV-positive partner, Couple 2)

Undetectable...that's all I know now, it's something a d4c count or CD4. I don't even know. See, he tries to explain, but it gets so complicated. As far as I know I guess the viral load is what – that's the HIV in your body-so, I guess the lower it's undetectable the lower it is the better.

(HIV-uninfected/unknown status partner, Couple 2)

For this couple, the partner living with HIV was aware of his laboratory values and reportedly educated and relayed his values to his HIV-uninfected/unknown status partner. However, he was unsure of what those values mean. In other cases, HIV-uninfected/unknown status partners described observing fluctuations of these values over the course of the relationships as it related to their partners' adherence to HIV treatment plans:

Yeah, for over a year he wasn't taking any HIV medicine at all. So, that was a scary point for me. I think it scared me more than it did him. But when it was over, they got him on a great medicine. He's undetectable. He's got a high CD4. More CD4 sometimes than a lot of healthy people. It's over twelve hundred and his viral load is undetectable and has been for years.

(HIV-uninfected/unknown status partner, Couple 10)

Here, the HIV-uninfected/unknown status partner was fully aware of his partner's HIV treatment history. He was knowledgeable of his past non-adherence to ART and was present for his return to HIV treatment. He was also able to describe his treatment status at the time of interview.

HIV Prevention and Testing.—Most of the participants that were uninfected with HIV reported screening for HIV every three to six months based on their known HIV-discordant sexual relationship.

I never got tested before. I was scared. I know I had done a lot of sleeping around with women and men, you know. I didn't even want to know my status. I had a few herpes breakouts, cold sores so I'm thinking like damn I might have a STD or herpes or something. So, I was pretty much scared for that; then I got with him and

he told me that – he said it’s real important, you know, to take care of your health. So, he pretty much convinced me. I get tested on a regular too. Like probably every 60 to 90 days.

(HIV-uninfected/unknown status partner, Couple 5)

For this couple, being HIV-discordant supported the HIV-uninfected/unknown status partner to engage in care for their own sexual health. He described being avoidant of screening for sexually transmitted infections until he received encouragement from his partner living with HIV.

However, despite being in an HIV-discordant sexual relationship, a few of the other participants reported less frequent HIV testing. “I got tested about five years ago. I haven’t gotten tested now [due to] neglect, lack of time. I feel good” (HIV-uninfected/unknown status partner, Couple 11). Another HIV-uninfected/unknown status participant stated:

After I started the relationship with him, let’s see, 2003, then the next time I was tested was (pause) years went by, really. It was as if I didn’t want to know. I just sort of went into this cocoon of like ignorance. I did not want to know. My testing since then has been kind of infrequent. I really haven’t been as on top of it as I should be. In fact, I’ve been tested more in the last two years than I have been tested the whole years before.

(HIV-uninfected/unknown status partner, Couple 14)

These HIV-uninfected/unknown status partners tested for HIV sporadically and likely exhibited avoidance behavior for determining their HIV status. Most couples reported various methods of HIV prevention to reduce the risk of HIV transmission. Most couples reported use of condoms for anal intercourse. One HIV-uninfected/unknown status partner described it as:

I liked to have sex without protection at that time before this. Before this, when it [disclosure of partner’s HIV infection] happened. But then after that, I had to use protection... That’s what we did. That’s what I did. That’s what we do. We both agree, yeah, to do that that way.

(HIV-uninfected/unknown status partner, Couple 13)

Another couple described consistently using condoms. “We’ve been protective and I hope no rubbers have busted or anything. You see what I’m saying because we’ve always used protection” (HIV-positive partner, Couple 1).

When me and him [are] sexually active I use protection, so you know, I know I’m straight [worry-free] so it don’t really interest me. But if he gets sick, he knows I’m there for him. So, you know anything happens I’m right there... as long as I keep doing what I’m doing, protecting myself, I’m not worried about getting it.

(HIV-uninfected/unknown status partner, Couple 1)

Others also described their knowledge of relative HIV risk reduction based on sexual positioning as it related to the importance of using condoms.

I guess maybe because I'm the receiver, he's the giver. I guess the chances of anything contracting more is like higher risk than if I was the giver and he was the receiver, I think. It's like no oral stuff, you know, it's just everything has to be like protection, protection, protection.

(HIV-uninfected/unknown status partner, Couple 2)

However, there were other couples who reported not consistently using condoms but were aware of the relative HIV risk reduction of sexual positioning. They described their HIV prevention practice as:

With my husband, he doesn't like to use condoms, so we don't and he's still negative. We did some research online and it was a slimmer chance for a receiver to pass it to a top, so in those instances, you know.

(HIV-positive partner, Couple 8)

Interviewer: Do you think you should be doing more [to protect against HIV]?
Respondent: Yes. Probably wearing protection. Interviewer: So, you don't do that consistently? Respondent: Not at all. Interviewer: How worried or not worried are you about getting HIV? Respondent: I'm not worried.

(HIV-uninfected/unknown status partner, Couple 8)

A few other couples also did not report consistent condom use, but they described knowledge and practice of HIV treatment as prevention to reduce the risk of transmission and acquisition.

Currently he and I we really don't use any protection. But we're safe, you know. We really don't use any protection at all. We don't like it. Neither one of us—we hate it. Most guys hate it. There's no bodily fluids coming in contact between me and him. I'm a very low risk because I'm undetectable. I'm very good my—I'm 1012 [CD4 count] and my viral load is 34, can't be over 40, I'm 34. So, it's like you can't really like get it from [me] but just to be safe me and him currently looking to start the PrEP.

(HIV-positive partner, Couple 3)

Well, I'm going to have to be honest with y'all as far as our sexual behavior, we haven't been careful. It's only God that I haven't gotten HIV. Cause it's a lot of times we didn't use no condoms and we just you know got caught up in the moment and it was what it was. So recently I said you know what? I don't like using luck, but I said I've been lucky that I haven't caught nothing yet and it's—you know, just playing Russian roulette and he brought it out to me that he's taking his meds. He takes his meds to protect me.

(HIV-uninfected/unknown status partner, Couple 3)

Each of these couples described myriad ways that they utilized tools or strategies to reduce the risk for HIV transmission. However, the couples who faced challenges with HIV care and treatment also reported avoiding discussing HIV prevention or treatment. One of the couples described this as:

I'm just scared. I don't want to take all them pills at one time. Cause like, I don't know my viral load, I don't know my t-cell count. I never really asked him about his status, or have he been checked, so as far as I know he's negative. So, when he came to me and asked me [my status], of course I just went on and told him what was going on.

(HIV-positive partner, Couple 1)

I don't go to the doctor with him, you know what I'm saying. You know he still try to be kind of private about it, you know. He don't want me in his business... I just don't like the doctor period (laughs). I don't like the hospitals, none of that, you know what I'm saying, you know, and he understands that. I don't know viral load...or T count. I just—I heard him say something about T count. He went to the doctor or something and his T-count was low. That's the only thing I – all the rest of it...this really my first-time hearing about it. I don't—it don't interest me.

(HIV-uninfected/unknown status partner, Couple 1)

For this couple, both partners avoided in-depth discussion about HIV prevention, care, or treatment after HIV status disclosure. The HIV-uninfected/unknown status partner was also unconcerned about his partner's HIV treatment out of respect for privacy and overall discomfort with healthcare.

PrEP use is when people at risk for HIV take a daily medication to prevent HIV infection. Most of the HIV-uninfected/unknown status participants were relatively knowledgeable about PrEP as a tool for HIV prevention. However, none of them were taking PrEP at the time of interview despite this knowledge. One mentioned a plan to start PrEP, "I'm going to be put on a regimen—starting on the [day]. I'm going to be put on a regimen of Truvada" (HIV-uninfected/unknown status, Couple 3). Most expressed ambivalences about PrEP based on misinformation and/or fears. One participant stated his concern about the regimen:

I decided not to do it. Because, you know, when I heard, first, when you take some HIV medication, it's not going to prevent you from getting HIV. But then again, I heard, yes, you can take it. Then I heard, that yes, but if you do start taking it, you have to take it for the rest of your life. Or, then I heard that you have to take it like, seven days prior to when you're having sex. I'm like, how am I supposed to know that? (laughter) So, my best thought was, why don't I just go with condoms and call it a day.

(HIV-uninfected/unknown status partner, Couple 9)

Another participant was more aware of non-occupational post-exposure prophylaxis (PEP). PEP is a short course of HIV medicines taken very soon after a possible exposure to HIV to prevent the virus from taking hold in your body. He stated:

His doctor mentioned [PrEP], but my doctor did not. I don't know too much about it. I know that there's like a "morning after" pill, or, you know, in-so-many-words (laughter). I know I should be using condoms. The pill is more so for if there is

accidental exposure, such as condom breaks or something like that, but that's pretty much all I know.

(HIV-uninfected/unknown status partner, Couple 8)

These HIV-uninfected/unknown status partners were less inclined to initiate PrEP for HIV prevention.

Discussion

Intimate partners of HIV-positive persons can play a fundamental role in HIV prevention, care, and treatment. Within HIV-discordant couples, the HIV-uninfected partner may encourage and support the HIV-infected partner's engagement in care and adherence to treatment, while the HIV-infected partner may also work to prevent transmission by maintaining a suppressed viral load and supporting their HIV-uninfected partner with PrEP care, if desired, in order to further reduce the chance of HIV transmission within the relationship. This offers the potential for HIV-discordant couples to be unified in their approach to HIV prevention, care, and treatment.

The narratives in this study describe the relationship dynamics of HIV disclosure, how support for health seeking occurs, and the impact of HIV and the barriers and facilitators to HIV prevention, care, and treatment in HIV-discordant couples of MSM of color in five U.S. cities with elevated HIV prevalence. Most couples reported relationship fears associated with delayed disclosure, HIV care engagement instigated by the HIV-uninfected partner, and varying knowledge and concern about the impacts of HIV infection and risk reduction.

Our findings illustrate that, despite advances in biomedical tools for HIV prevention, there remains increased risk for HIV transmission in HIV-discordant couples of MSM of color. These data demonstrate how it is possible for new HIV infections among MSM to occur within the context of primary partnerships (Sullivan et al., 2009). In addition, these findings did not confirm data that showed HIV-uninfected partners who had partners living with HIV with undetectable viral loads were significantly more likely to use PrEP compared with those with partners who had detectable viral loads, as none of the HIV-uninfected participants in this study were taking PrEP at the time of interview (Jin et al., 2021).

These findings also illustrate that MSM of color in HIV-discordant couples face myriad challenges regardless of the social support provided by the HIV-uninfected/unknown status partner. These data show that fear of rejection and partner loss affects disclosure of HIV status and support other studies that have shown mixed results on the effect of disclosure and social support on HIV care engagement (Carnes et al., 2020; Hamilton et al., 2007; Kelly et al., 2014; Wohl et al., 2011). In addition, this study shows that HIV care engagement can be instigated by the HIV-uninfected/unknown status partner. The couples within this study acknowledged the importance of emotional and social support for partners living with HIV. Support encouraged engagement in care, ART adherence, and overall mental and emotional well-being. This finding confirms prior studies that show social support from intimate partners aids in HIV treatment (Cook et al., 2018; Geter et al., 2018). However, these effects appear to be mediated by health status with those whose HIV infection has

not caused adverse complications delaying engagement in care and/or taking ART. Lastly, these data show a need for improvement in knowledge about HIV and risk reduction. This study shows that the HIV-discordant couples generally understand laboratory values, such as viral load and CD4 counts, and are aware of their HIV prevention impact. Most couples had HIV prevention strategies that included monitoring laboratory values along with regular HIV testing, condom use, sexual positioning, and treatment as prevention.

Prior research shows that MSM are open to and recommend prevention and care for both partners in a couple to develop and enhance relationship dynamics (Burton et al., 2010; Goldenberg et al., 2013; Tan et al., 2018). Our findings support providing comprehensive HIV prevention, care, and treatment for HIV-discordant couples. Most HIV-uninfected/unknown status participants in this study understood the importance of their partner's HIV care and treatment as well as their own transmission risk. These couples developed and incorporated prevention strategies into their partnerships, illustrating an opportunity to engage couples in HIV prevention, particularly where the HIV-uninfected partner may also be interested in PrEP. None of the HIV-uninfected partners in this sample of HIV-discordant couples were on PrEP at the time of interview. Given the timeframe of our study, PrEP was relatively new, so the ambivalence and lack of use found in our sample is not surprising. However, another study with a sample that included MSM who were White (20%), had some college/college degree (64%), and were insured (56%) reported high levels of acceptability and willingness to adopt PrEP in the same timeframe (Brooks et al., 2012). Furthermore, PrEP awareness and use has increased substantially over time for all MSM, albeit higher coverage is still needed among MSM of color (Finlayson et al., 2019).

Couple-based HIV prevention and treatment is complex and can be based on provider specialties for HIV care. For instance, it can involve a dilemma regarding the type of provider that should be responsible for provision of PrEP and subsequent care when the partner living with HIV sees an HIV specialist and the HIV-uninfected partner likely does not (Hoffman et al., 2016). Brief provider-delivered interventions about HIV prevention in HIV-discordant couples may be appropriate for supporting PrEP use, including adaptation of adherence support strategies (Koenig et al., 2013). Allowing couples to jointly engage in HIV and PrEP care where appointments are scheduled together, treatment and adherence is discussed as a team, and laboratory values are openly discussed and understood may prove beneficial and could be conducted by HIV specialists, counselors, interventionists, and other social support staff. It would also allow couples of MSM of color to be unified in their approach to HIV prevention, care, and treatment and instill a sense of togetherness in their fight against HIV transmission. These data also illustrate that joint care options are viable as some HIV-uninfected/unknown status partners regularly attended doctor's visits with their partners living with HIV. These are opportunities for provider-driven interventions that can holistically support the couple's relationship, HIV care and treatment, and PrEP initiation and persistence.

Limitations and Biases

This study has several important limitations. A purposive sampling design for MSM of color living with HIV and a convenience sample for their HIV-uninfected partners were used

to ensure that enough HIV-discordant couples were included from the five cities and two racial/ethnic groups to allow identification of factors related to HIV prevention, care, and treatment. There also may be sampling biases, which means the findings from this study may not be transferable to other couples of HIV-discordant MSM of color, or to individual HIV-uninfected or HIV-positive populations of MSM. Our sampling plan also allowed for recruitment of HIV-uninfected/unknown status partners based on convenience and the willingness of the study participant living with HIV to recruit them. Therefore, the couples could have been married, casual, monogamous, or any other type of sexual partnership. In addition, the partners living with HIV could recruit sexual partners of unknown status, so it is possible that those partners could have been undiagnosed with HIV at the time of interview.

Conclusion

Complex dynamics among Black and Latino MSM exist in HIV-discordant relationships. These relationships face challenges with HIV disclosure and myriad interpersonal obstacles as they relates to HIV and the barriers to HIV prevention, care, and treatment. However, resilience is shown as these data illustrate the varied, and oftentimes unified, roles MSM of color in HIV-discordant couples play as it relates to their own HIV prevention, care, and treatment. Simply put, these couples persevere to maintain their relationships and also develop healthy outcomes.

Therefore, HIV prevention, care, and treatment strategies should pivot from a focus on individual behavior and consider capitalizing on and supporting gay and bisexual men's intimate partnerships, especially those of Black and Latino MSM. The findings from this study provide more context for a means for providers to better engage MSM HIV-discordant couples in HIV treatment, PrEP use, and ART/PrEP adherence.

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References

Brooks RA, Landovitz RJ, Kaplan RL, Lieber E, Lee SJ, & Barkley TW (2012). Sexual risk behaviors and acceptability of HIV pre-exposure prophylaxis among HIV-negative gay and bisexual men in serodiscordant relationships: A mixed methods study. *AIDS Patient Care and STDs*, 26(2), 87–94. 10.1089/apc.2011.0283 [PubMed: 22149764]

- Burgoyne RW (2005). Exploring direction of causation between social support and clinical outcome for HIV-positive adults in the context of highly active antiretroviral therapy. *AIDS Care*, 17(1), 111–124. 10.1080/09540120412331305179 [PubMed: 15832838]
- Burton J, Darbes LA, & Operario D (2010). Couples-focused behavioral interventions for prevention of HIV: Systematic review of the state of evidence. *AIDS and Behavior*, 14(1), 1–10. 10.1007/s10461-008-9471-4 [PubMed: 18843530]
- Carey JW, Carnes N, Schoua-Glusberg A, Kenward K, Gelaude D, Denson D, Gall E, Randall LA, & Frew PM (2018). Barriers and facilitators for clinical care engagement among HIV-positive African American and Latino men who have sex with men. *AIDS Patient Care and STDs*, 32(5), 191–201. 10.1089/apc.2018.0018 [PubMed: 29668307]
- Carey JW, Carnes N, Schoua-Glusberg A, Kenward K, Gelaude D, Denson DJ, Gall E, Randall LA, & Frew PM (2019). Barriers and facilitators for antiretroviral treatment adherence among HIV-positive African American and Latino men who have sex with men. *AIDS Education and Prevention*, 31(4), 306–324. 10.1521/aeap.2019.31.4.306 [PubMed: 31361514]
- Carnes NA, Carey JW, Gelaude DJ, Denson DJ, & Bessler PA (2020). Improving HIV medical care engagement by attending to status disclosure and social support. *AIDS Care*, 33(1), 63–69. 10.1080/09540121.2020.1718588 [PubMed: 31992053]
- Centers for Disease Control and Prevention (2010). National HIV Behavioral Surveillance System: Men Who Have Sex with Men -Round 3 (NHBS-MSM3) model surveillance protocol. U.S. Department of Health and Human Services. https://www.cdc.gov/hiv/pdf/statistics/systems/nhbs/NHBS-MSM3-Protocol_Dec2010_Clean.pdf.
- Centers for Disease Control and Prevention (2019). HIV surveillance report, 2018 (preliminary). <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2018-preliminary-vol-30.pdf#:~:text=%20%20%20Title%20%20%20HIV%20Surveillance,%20%20Created%20Date%20%20%2020090127162303Z%20>.
- Christopoulos KA, Das M, & Colfax GN (2011). Linkage and retention in HIV care among men who have sex with men in the United States. *Clinical Infectious Diseases*, 52(2), 214–222. 10.1093/cid/ciq045
- Cohen J (2011). HIV treatment as prevention. *Science*, 334(6063), 1628. 10.1126/science.334.6063.1628 [PubMed: 22194547]
- Cook CL, Canidate S, Ennis N, & Cook RL (2018). Types and delivery of emotional support to promote linkage and engagement in HIV care. *Patient Preference and Adherence*, 12, 45–52. 10.2147/PPA.S145698 [PubMed: 29343948]
- Crepaz N, & Marks G (2003). Serostatus disclosure, sexual communication and safer sex in HIV-positive men. *AIDS Care*, 15(3), 379–387. 10.1080/0954012031000105432 [PubMed: 12745398]
- Darbes LA, Chakravarty D, Neilands TB, Beougher SC, & Hoff CC (2014). Sexual risk for HIV among gay male couples: A longitudinal study of the impact of relationship dynamics. *Archives of Sexual Behavior*, 43(1), 47–60. 10.1007/s10508-013-0206-x [PubMed: 24233329]
- DiMatteo MR (2004). Social support and patient adherence to medical treatment: A meta-analysis. *Health Psychology*, 23(2), 207–218. <https://psycnet.apa.org/doi/10.1037/0278-6133.23.2.207> [PubMed: 15008666]
- Eisikovits Z, & Koren C (2010). Approaches to and outcomes of dyadic interview analysis. *Qualitative Health Research*, 20(12), 1642–1655. 10.1177/1049732310376520 [PubMed: 20663940]
- Finlayson T, Cha S, Xia M, Trujillo L, Denson D, Prejean J, Kanny D, Wejnert C, Abrego M, Al-Tayyib A, Anderson B, Barak N, Bayang L, Beckford JM, Benbow N, Bolden B, Brady KA, Brandt MG, Braunstein S, ... Zarwell MC (2019). Changes in HIV preexposure prophylaxis awareness and use among men who have sex with men - 20 urban areas, 2014 and 2017. *MMWR. Morbidity and Mortality Weekly Report*, 68(27), 597–603. <https://dx.doi.org/10.15585%2Fmmwr.mm6827a1> [PubMed: 31298662]
- Gardner EM, McLees MP, Steiner JF, del Rio C, & Burman WJ (2011). The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. *Clinical Infectious Diseases*, 52(6), 793–800. 10.1093/cid/ciq243 [PubMed: 21367734]

- George S, Garth B, Wohl AR, Galvan FH, Garland W, & Myers HF (2009). Sources and types of social support that influence engagement in HIV care among Latinos and African Americans. *Journal of Health Care for the Poor and Underserved*, 20(4), 1012–1035. <https://dx.doi.org/10.1353%2Fhpu.0.0210> [PubMed: 20168014]
- Geter A, Sutton MY, & Hubbard McCree D (2018). Social and structural determinants of HIV treatment and care among black women living with HIV infection: A systematic review: 2005–2016. *AIDS Care*, 30(4), 409–416. 10.1080/09540121.2018.1426827 [PubMed: 29376409]
- Giordano TP (2015). The HIV treatment cascade—a new tool in HIV prevention. *JAMA Internal Medicine*, 175(4), 596–597. <http://jamanetwork.com/article.aspx?doi=10.1001/jamainternmed.2014.8199> [PubMed: 25706538]
- Giordano TP, Suarez-Almazor ME, & Grimes RM (2005). The population effectiveness of highly active antiretroviral therapy: Are good drugs good enough? *Current HIV/AIDS Reports*, 2(4), 177–183. 10.1007/s11904-005-0013-7 [PubMed: 16343375]
- Goldenberg T, Clarke D, & Stephenson R (2013). “Working together to reach a goal”: MSM’s perceptions of dyadic HIV care for same-sex male couples. *Journal of Acquired Immune Deficiency Syndromes*, 64(1), 52–61. <https://dx.doi.org/10.1097%2FQAI.0b013e3182a9014a>
- Goldenberg T, & Stephenson R (2015). “The more support you have the better”: Partner support and dyadic HIV care across the continuum for gay and bisexual men. *Journal of Acquired Immune Deficiency Syndromes*, 69(1), 73–79. <https://dx.doi.org/10.1097%2FQAI.00000000000000576>
- Grant JS, Vance DE, Keltner NL, White W, & Raper JL (2013). Reasons why persons living with HIV include individuals in their chosen families. *Journal of the Association of Nurses in AIDS Care*, 24(1), 50–60. 10.1016/j.jana.2012.04.007
- Hamilton MM, Razzano LA, & Martin NB (2007). The relationship between type and quality of social support and HIV medication adherence. *Journal of HIV/AIDS & Social Services*, 6(1), 39–63. 10.1300/J187v06n01_04
- Heiss J (1990). Social roles. In Rosenberg M, & Turner RH (Eds.), *Social psychology: Sociological perspectives* (pp. 94–130). Transaction Publishers. 10.4324/9781315129723
- Hoffman S, Guidry JA, Collier KL, Mantell JE, Boccher-Lattimore D, Kaighobadi F, & Sandfort TGM (2016). A clinical home for preexposure prophylaxis: Diverse health care providers’ perspectives on the “purview paradox.” *Journal of the International Association of Providers of AIDS Care*, 15(1), 59–65. <https://doi.org/10.1177%2F2325957415600798> [PubMed: 26293904]
- Horne R, Cooper V, Gellaitry G, Date HL, & Fisher M (2007). Patients’ perceptions of highly active antiretroviral therapy in relation to treatment uptake and adherence: The utility of the necessity-concerns framework. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 45(3), 334–341. 10.1097/QAI.0b013e31806910e3 [PubMed: 17514019]
- Hruschka DJ, Schwartz D, St. John DC, Picone-Decaro E, Jenkins RA, & Carey JW (2004). Reliability in coding open-ended data: Lessons learned from HIV behavioral research. *Field Methods*, 16(3), 307–331. <https://doi.org/10.1177%2F1525822X04266540>
- Insight Start Study Group (2015). Initiation of antiretroviral therapy in early asymptomatic HIV infection. *New England Journal of Medicine*, 373(9), 795–807. <https://dx.doi.org/10.1056%2FNEJMoa1506816> [PubMed: 26192873]
- Jin H, Biello K, Garofalo R, Lurie M, Sullivan PS, Stephenson R, & Mimiaga MJ (2021). Examining the longitudinal predictive relationship between HIV treatment outcomes and pre-exposure prophylaxis use by serodiscordant male couples. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 86(1), 38–45. 10.1097/QAI.0000000000002522 [PubMed: 33027155]
- Kelly DJ, Hartman C, Graham J, Kallen MA, & Giordano TP (2014). Social support as a predictor of early diagnosis, linkage, retention, and adherence to HIV care: Results from the steps study. *Journal of the Association of Nurses in AIDS Care*, 25(5), 405–413. 10.1016/j.jana.2013.12.002
- Koenig LJ, Lyles C, & Smith DK (2013). Adherence to antiretroviral medications for HIV pre-exposure prophylaxis: Lessons learned from trials and treatment studies. *American Journal of Preventive Medicine*, 44(1), 91–98. 10.1016/j.amepre.2012.09.047
- Mitchell JW, & Petroll AE (2012). HIV testing rates and factors associated with recent HIV testing among male couples. *Sexually Transmitted Diseases*, 39(5), 379–381. <https://dx.doi.org/10.1097%2FOLQ.0b013e3182479108> [PubMed: 22504604]

- Mosack KE, & Wendorf AR (2011). Health care provider perspectives on informal supporters' involvement in HIV care. *Qualitative Health Research*, 21(11), 1554–1566. <https://doi.org/10.1177%2F1049732311413783> [PubMed: 21709129]
- Muessig KE, & Cohen MS (2014). Advances in HIV prevention for serodiscordant couples. *Current HIV/AIDS Reports*, 11(4), 434–446. 10.1007/s11904-014-0225-9 [PubMed: 25145645]
- Nelson KM, Thiede H, Jenkins RA, Carey JW, Hutcheson R, & Golden MR (2014). Personal and contextual factors related to delayed HIV diagnosis among men who have sex with men. *AIDS Education and Prevention*, 26(2), 122–133. 10.1521/aeap.2014.26.2.122 [PubMed: 24694326]
- O'Connell AA, Reed SJ, & Serovich JA (2015). The efficacy of serostatus disclosure for HIV transmission risk reduction. *AIDS and Behavior*, 19(2), 283–290. 10.1007/s10461-014-0848-2 [PubMed: 25164375]
- Przybyla S, Golin C, Widman L, Grodensky C, Earp JA, & Suchindran C (2014). Examining the role of serostatus disclosure on unprotected sex among people living with HIV. *AIDS Patient Care and STDs*, 28(12), 677–684. 10.1089/apc.2014.0203 [PubMed: 25397358]
- QSR International (2014). Americas Inc. NVivo (Version 10) <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>
- Quinn KG, & Voisin DR (2020). ART adherence among men who have sex with men living with HIV: Key challenges and opportunities. *Current HIV/AIDS Reports*, 17(4), 290–300. 10.1007/s11904-020-00510-5 [PubMed: 32557117]
- Roberts KJ (2002). Physician-patient relationships, patient satisfaction, and antiretroviral medication adherence among HIV-infected adults attending a public health clinic. *AIDS Patient Care and STDs*, 16(1), 43–50. 10.1089/108729102753429398 [PubMed: 11839218]
- Rodger AJ, Cambiano V, Bruun T, Vernazza P, Collins S, Van Lunzen J, Corbelli GM, Estrada V, Geretti AM, Beloukas A, Asboe D, Viciano P, Gutiérrez F, Clotet B, Pradier C, Gerstoft J, Weber R, Westling K, Wandeler G, ... Lundgren J (2016). Sexual activity without condoms and risk of HIV transmission in serodifferent couples when the HIV-positive partner is using suppressive antiretroviral therapy. *JAMA*, 316(2), 171–181. 10.1001/jama.2016.5148 [PubMed: 27404185]
- Schreier M (2012). *Qualitative content analysis in practice*. Sage Publications. <https://uk.sagepub.com/en-gb/eur/qualitative-content-analysis-in-practice/book234633>
- Sewell J, Daskalopoulou M, Nakagawa F, Lampe F, Edwards S, Perry N, Wilkins E, O'Connell R, Jones M, Collins S, Speakman A, Phillips A, & Rodger A (2017). Accuracy of self-report of HIV viral load among people with HIV on antiretroviral treatment. *HIV Medicine*, 18(7), 463–473. 10.1111/hiv.12477 [PubMed: 28004523]
- Singh S, Mitsch A, & Wu B (2017). HIV care outcomes among men who have sex with men with diagnosed HIV infection - United States, 2015. *MMWR. Morbidity and Mortality Weekly Report*, 66(37), 969–974. <https://dx.doi.org/10.15585%2Fmmwr.mm6637a2> [PubMed: 28934185]
- Smith R, Rossetto K, & Peterson BL (2008). A meta-analysis of disclosure of one's HIV-positive status, stigma and social support. *AIDS Care*, 20(10), 1266–1275. 10.1080/09540120801926977 [PubMed: 18608080]
- Sullivan PS, Salazar L, Buchbinder S, & Sanchez TH (2009). Estimating the proportion of HIV transmissions from main sex partners among men who have sex with men in five US cities. *AIDS*, 23(9), 1153–1162. 10.1097/QAD.0b013e32832baa34 [PubMed: 19417579]
- Tan JY, Campbell CK, Conroy AA, Tabrisky AP, Kegeles S, & Dworkin SL (2018a). Couple-level dynamics and multilevel challenges among Black men who have sex with men: A framework of dyadic HIV care. *AIDS Patient Care and STDs*, 32(11), 459–467. 10.1089/apc.2018.0131 [PubMed: 30339464]
- Tan JY, Pollack L, Rebhook G, Peterson J, Huebner D, Eke A, Johnson W, & Kegeles S (2018b). The role of the primary romantic relationship in HIV care engagement outcomes among young HIV-positive black men who have sex with men. *AIDS and Behavior*, 22(3), 774–790. 10.1089/apc.2018.0131 [PubMed: 27844296]
- Tong A, Sainsbury P, & Craig J (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. 10.1093/intqhc/mzm042 [PubMed: 17872937]

- Van Kesteren NMC, Hospers HJ, & Kok G (2007). Sexual risk behavior among HIV-positive men who have sex with men: A literature review. *Patient Education and Counseling*, 65(1), 5–20. 10.1016/j.pec.2006.09.003 [PubMed: 17098392]
- Waddell EN, & Messeri PA (2006). Social support, disclosure, and use of antiretroviral therapy. *AIDS and Behavior*, 10(3), 263–272. 10.1007/s10461-005-9042-x [PubMed: 16496089]
- Wohl AR, Galvan FH, Myers HF, Garland W, George S, Witt M, Cadden J, Operskalski E, Jordan W, Carpio F, & Lee ML (2011). Do social support, stress, disclosure and stigma influence retention in HIV care for Latino and African American men who have sex with men and women? *AIDS and Behavior*, 15(6), 1098–1110. 10.1007/s10461-010-9833-6 [PubMed: 20963630]
- World Health Organization (2012). Guidance on couples HIV testing and counselling including antiretroviral therapy for treatment and prevention in serodiscordant couples: Recommendations for a public health approach. <https://www.ncbi.nlm.nih.gov/books/NBK138278/>.
- Wrubel J, Stumbo S, & Johnson MO (2010). Male same-sex couple dynamics and received social support for HIV medication adherence. *Journal of Social and Personal Relationships*, 27(4), 553–572. <https://doi.org/10.1177%2F0265407510364870> [PubMed: 20651943]

Table 1.

Sociodemographic Characteristics of MSM Living with HIV and their HIV-discordant Sexual Partners ($n = 28$).

<u>Race/Ethnicity</u>	Percent (n)	HIV Status (n)	
		<u>Positive</u>	<u>Negative/Unknown</u>
African American	57.1 (16)	9	7
Hispanic/Latino	35.7 (10)	5	5
White	3.6 (1)		1
Other	3.6 (1)		1
<u>Age (median)</u>	46 (range 22–57)	48 (range 28–57)	36 (range 22–51)
<u>Education:</u>			
Bachelor's Degree	28.6 (8)	5	3
Some College	39.3 (11)	5	6
High School/GED	10.7 (3)		3
Grades 9–11	21.4 (6)	4	2
<u>In Past Year:</u>			
Any Health Insurance	57.1 (16)	8	8
Public Assistance	57.1 (16)	10	6
Unstable Housing	42.9 (12)	9	7
<u>Employment:</u>			
Unemployed	39.3 (11)	4	7
Unable to Work	14.3 (4)	4	
Student/Retired/Homemaker	14.3 (4)	2	2
Employed	32.1 (9)	4	5
<u>Income:</u>			
\$0–\$25,000	71.4 (20)	11	9
\$25,001–\$50,000	21.4 (6)	2	4
\$50,001+	3.6 (1)	1	
Don't Know	3.6 (1)		1