Archives of Sexual Behavior (2020) 49:2129–2143
https://doi.org/10.1007/s10508-019-01593-x

ORIGINAL PAPER

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

Katherine G. Quinn[1] · Erika Christenson[1] · Antoinette Spector[2] · Yuri Amirkhanian[1] · Jeffrey A. Kelly[1]

Received: 29 April 2019 / Revised: 18 November 2019 / Accepted: 23 November 2019 / Published online: 3 February 2020

Abstract
Pre-exposure prophylaxis (PrEP) is a promising part of HIV prevention, yet racial disparities in PrEP uptake persist. Evidence indicates that Black gay, bisexual, and other men who have sex with men (GBM) face numerous social and structural barriers to PrEP, including stigma, medical mistrust, and exclusion from the healthcare system. However, little research has examined how social networks can influence PrEP use and help Black GBM overcome these identified barriers. To understand the influence of peers and social networks on Black GBM's perceptions of and decisions about PrEP use, we conducted in-depth interviews with 46 Black GBM in Milwaukee, WI and Cleveland, OH. Data were analyzed using multistage inductive coding and thematic content analysis, using MAXQDA software. Results indicate that participants' primary source of information on PrEP was other Black GBM in their communities. Peers and social networks served three primary functions with regard to PrEP: (1) filling informational gaps left by healthcare providers, (2) increasing trust of PrEP, and (3) reducing PrEP stigma. Participants described the "movers and shakers" in Black LGBT communities who have been influential in educating others and advocating for PrEP. Well-respected vocal advocates for PrEP have emerged in the Black LGBT community as PrEP champions who have successfully influenced young Black GBM's views on PrEP. Our results reveal the role social networks and peer groups can play in increasing PrEP use among Black GBM. Social network interventions may help overcome the stigma and mistrust that are contributing to PrEP disparities.

Keywords PrEP · Men who have sex with men (MSM) · Social networks · Racial disparities · Peer support

Introduction

HIV pre-exposure prophylaxis (PrEP) is a promising biobehavioral HIV prevention intervention that has the potential to significantly alter the course of HIV. Modeling studies indicate that PrEP use may halve HIV infections among gay, bisexual, and other men who have sex with men (GBM) over the next ten years (Jenness et al., 2018). Yet, there is evidence of disparities in PrEP prescription and usage. PrEP use remains low among young GBM and Black GBM; Strauss et al. (2017) estimated that just 2% of high-risk candidates have been linked to PrEP. In particular, young Black GBM have 84% lower odds of having ever used PrEP in comparison to their White counterparts (Kuhns, Hotton, Schneider, Garofalo, & Fujimoto, 2017). Furthermore, despite increasing rates of PrEP use across the U.S., nearly 50% of all PrEP users in 2016 resided in just five states: New York, California, Florida, Texas, and Illinois (AIDSVu, 2018). PrEP usage has been particularly low in the Southern and Midwestern regions of the U.S., with much lower uptake across midsize cities in the Midwest (Huang, Zhu, Smith, Harris, & Hoover, 2018). Additionally, the majority of research to understand PrEP uptake and barriers in these regions is focused on larger cities such as Chicago and Atlanta. To better understand PrEP use among Black GBM in the Midwest, this research unpacks the role of peers in influencing perceptions and use of PrEP among young Black GBM in two midsize midwestern cities: Milwaukee, WI and Cleveland, OH.

Despite extensive scientific efforts to understand and address barriers to PrEP, the role of peer support and social networks remains understudied in PrEP research. Social networks are critical for norm formation and behavioral adoption

✉ Katherine G. Quinn
kaquinn@mcw.edu

[1] Department of Psychiatry and Behavioral Medicine, Center for AIDS Intervention Research, Medical College of Wisconsin, 2071 N. Summit Ave., Milwaukee, WI 53202, USA

[2] Institute for Health and Equity, Medical College of Wisconsin, Milwaukee, WI, USA

in populations at risk for HIV (Schneider et al., 2013). Social network connections can influence health behaviors through diffusion of innovation, social support, norms, and access to community resources and information (Amirkhanian et al., 2013; Berkman, 2009; Kelly et al., 2010). For example, HIV prevention and sexual risk behaviors are often shaped through processes of peer influence (Kelly et al., 2010; Tieu et al., 2015), social norms (Latkin & Knowlton, 2005), and various social network characteristics (Schneider, Michaels, & Bouris, 2012; Shah et al., 2014). Diffusion of innovations (DOI) theory examines how new ideas or practices spread in a social network and become normative (Rogers, 1995). DOI has been applied to HIV prevention (Bertrand, 2004), with more recent research applying DOI theory to adoption of PrEP among healthcare providers (Krakower & Mayer, 2016; Zimet, Kahn, Lally, & Mullins, 2015) and individuals at risk for HIV (Holt et al., 2018; Hosek et al., 2015). Relatedly, the popular opinion leader model (POL; Kelly et al., 1991) has also been used to study the influence of social networks on PrEP use. Studies based on the POL model indicate that the most popular member in a social network can influence the behavior of other network members (Kelly, 2004; Kelly et al., 1991). Preliminary findings from research with young Black GBM suggest POL may be critical in encouraging PrEP engagement within this community (Young et al., 2018).

Other social network factors have also been shown to influence decisions surrounding PrEP use. For example, peer network size is associated with PrEP. Individuals with a larger number of other young GBM in their social network are more likely to use PrEP (Kuhns et al., 2017). Compared to non-users, PrEP users are also more likely to know other PrEP users and a larger number of people living with HIV, suggesting that characteristics of social network members may facilitate awareness of PrEP (Holt et al., 2018). Identification as gay or having an affiliation with the House/Ball Community is also associated with increased awareness of PrEP among young GBM (Khanna et al., 2016; Pulsipher et al., 2016), which highlights the potential importance of community and social networks in raising awareness about PrEP. Social networks and peer support may also reduce stigma. Greater perceptions of HIV stigma within one's social network can contribute to greater HIV risk behaviors (Wagner et al., 2016). The same may be true for protective behaviors like PrEP, wherein HIV stigma or PrEP stigma (the perception that PrEP users are sexually irresponsible) may inhibit PrEP use. Concerns about taking PrEP may decrease if a majority of one's social network members are using PrEP, as social networks can increase familiarity and confidence in PrEP and reduce stigma (Holt et al., 2018).

Yet, recent social network research by Phillips et al. (2019) demonstrated that PrEP users tend to have weaker social support systems than non-PrEP users, standing in contrast to previous research indicating that stronger support systems are associated with HIV testing (Scott et al., 2014), condom use (Carlos et al., 2010), and HIV status disclosure (Smith, Rossetto, & Peterson, 2008). Additionally, although supportive social networks can create a safety net for young men and encourage PrEP use, this safety net may be weakened by network members who are unsupportive of PrEP or encouraging of risky sexual behaviors (Wagner et al., 2016). Taken together, these findings indicate a need to unpack how social support networks and peers influence the information people have and the decisions people make about PrEP.

This study draws upon qualitative in-depth interviews with 49 young Black GBM and provides a nuanced understanding of how peers and social networks influence perceptions of and decisions about PrEP use. Findings from this research can be used to enhance our understanding of communication around HIV prevention and PrEP use among young Black GBM and inform peer-based and social network interventions to increase PrEP use among those at greatest risk for HIV.

Method

Participants

Between June and September 2018, we conducted individual in-depth interviews with 49 young Black GBM in Cleveland, OH and Milwaukee, WI. Cleveland and Milwaukee are two midsize midwestern cities with significant racial disparities in HIV and low uptake of PrEP. In both cities, young Black GBM are disproportionately affected by HIV (Ohio Department of Health, 2019; Wisconsin Department of Health Services Division of Public Health HIV Program, 2019). In 2018, 65% of new infections among African-Americans in Ohio were among GBM (Ohio Department of Health, 2019). Similarly, in Wisconsin in 2018, racial and ethnic minorities made up just 18% of Wisconsin's population, yet consisted of 66% of new HIV diagnoses. Geographically, both Cuyahoga and Milwaukee counties in Ohio and Wisconsin, respectively, have a disproportionate share of the states' HIV incidence (Ohio Department of Health, 2019; Wisconsin Department of Health Services Division of Public Health HIV Program, 2019).

Interviews allowed for the exploration of personal experiences with PrEP and provided a depth of information about how young people are talking to each other about PrEP and the influence of their friends and peers. Inclusion criteria required that participants identified as Black or African-American; were assigned male gender at birth; identified as gay, bisexual, or have had sex with another man in the previous 12 months; were at least 18 years old; and reported HIV-negative or unknown HIV serostatus. Non-PrEP users, as well as current and former PrEP users, were eligible. Four of the 49 participants identified as transgender women, which did not provide sufficient data to examine their experiences with PrEP. As a result, we have excluded them from

the present analyses. Additional research is needed to better understand Black transgender women's perceptions of PrEP and the ways in which their peers may influence their PrEP decision-making.

A purposive sample was recruited through partnerships with LGBT and HIV service organizations and PrEP clinics and providers. Our partner organizations and clinics posted flyers and handed out informational cards to potentially eligible individuals. We also conducted outreach using Facebook; community organizations in both cities agreed to share electronic flyers via Facebook and shared basic information about the study with their followers. Interested individuals were instructed to call the study team to be screened for eligibility. Interested participants were screened for eligibility by phone, and eligible individuals were scheduled for an interview. Given the stigmatized nature of HIV, PrEP, and sexual identity, we received a waiver of written consent; all participants provided verbal consent prior to the start of the interview. Upon providing consent, individuals completed a brief demographic questionnaire. Interviews lasted between 30 and 90 min. Participants were compensated $50 for their time and received a resource guide with information on local community HIV, mental health, and LGBT services. The research protocol was approved by the institutional review board at The Medical College of Wisconsin.

Measure and Procedure

A semi-structured interview guide was used to ensure consistency in topics addressed, while providing flexibility to ask follow-up questions and follow the lead of the participant. There were six primary topic areas covered in the interviews: (1) general healthcare (e.g., In general, how often do you see a doctor or healthcare provider?), (2) sexual health (e.g., Tell me about your current or most recent sexual partnerships), (3) perceptions of PrEP (e.g., If you were to start taking PrEP, how do you think it would change your sexual relationships or experiences?), (4) PrEP use among peers (e.g., Do you have any friends who are not taking PrEP that you think should be taking PrEP?), (5) social and cultural factors (e.g., How would you describe the gay or LGBT community in Milwaukee/Cleveland?), (6) friends and peer group (e.g., Thinking about your friendship circle or peer group, what percentage of them, from 0 to 100 are gay/bisexual/transgender?).

Data Analysis

Interviews were audio-recorded, transcribed verbatim, and coded using MAXQDA qualitative analysis software to organize and code the data. To begin, we use a team-based multistage analytic coding strategy to broadly organize our data (Corbin & Strauss, 2015). First, all transcripts were coded with participant characteristics collected from the demographic surveys (e.g., study city, age, sexual orientation, PrEP history, socioeconomic status). This allowed us to examine differences between Cleveland and Milwaukee participants and discern any other differences based on participant characteristics (e.g., age or education level). Second, we coded all transcripts from both cities line-by-line to generate an initial codebook. To enhance reliability, we used a team of three coders who began by independently coding three selected transcripts, generating lists of potential parent codes, subcodes, and code definitions. We met to discuss discrepancies, clarify concepts, and identify code definitions and patterns. Collectively, we created a single codebook that we then applied to an additional three transcripts for further refinement and assessment of fit. The process of refining the codebook and reapplying to additional transcripts continued until we reached consensus on code definitions and reliability of code application among all three members of the coding team. Finally, we used axial coding to identify the dominant themes, group related codes, and draw connections among codes (Boeije, 2002). The final codebook, based on the full content of all interviews, included 35 parent (or primary) codes (most relevant to this study include healthcare providers, homonegativity, gay community, gossip and rumors, and friendships) and 79 subcodes (most relevant to this study include talking to friends about sexual health, involvement in the gay community, friends and partners views on PrEP, PrEP stigma, and talking to a doctor about PrEP), to capture more specific experiences and phenomena. The analysis team then applied the final codebook to all transcripts to organize the data. We coded all interviews twice to refine codes and ensure adequate application of the codebook. Coded transcripts were then analyzed using thematic content analysis (Braun & Clarke, 2006), wherein we identified and defined primary themes and meaning within the data. We then conducted additional analyses to answer the research question examined here and to understand the role of peers and friends in influencing perceptions of PrEP, examining content within and across relevant codes and subcodes, including talking to friends about sexual health, friends' and partners' views on PrEP, experiences of homonegativity, involvement in the gay community, and talking to a doctor about PrEP.

Results

Our sample consisted of 46 young Black GBM in Cleveland and Milwaukee. The sample characteristics for the total sample and each city are shown in Table 1. Among the total sample, participant age ranged from 19 to 37, with an average age of 25. The majority of participants identified as gay ($n = 36$; 78%). There were few current or former PrEP users in the study; five participants in Milwaukee and four in Cleveland were currently

using PrEP and two individuals in Milwaukee were former PrEP users. Seven participants (four from Milwaukee and three from Cleveland) had exchanged sex for money, drugs, or a place to sleep. Two individuals in Cleveland had never been tested for HIV.

Our analyses explored the influence of social networks and peers on perceptions of PrEP among young Black GBM in Milwaukee and Cleveland. Our results are organized around five major themes that we identified within the data. We begin by examining how young Black GBM talk about PrEP with their friends. We then highlight three primary functions of peers and social networks with regard to PrEP: (1) filling informational gaps left by healthcare providers, (2) increasing trust of PrEP, and (3) reducing PrEP stigma. In our final theme, our results highlight a continued need to support Black GBM to be PrEP advocates in their communities. Excerpts from interviews are used to illustrate these themes. Any differences identified between study cities are noted. Pseudonyms are used throughout.

How Peers Talk About PrEP

Friends and peer groups were the primary source of information on PrEP among study participants. Nearly all participants' awareness of PrEP stemmed from hearing about PrEP from friends or peers in the gay community. Individuals described how they talked to their friends about PrEP and sexual health, through informal conversations and the use of social media. One participant in Cleveland, who had not used PrEP before, described how his friends talked about PrEP:

> We've pretty much come to the conclusion that it is something that's used in unfortunate circumstances, not necessarily to promote promiscuity or carelessness. Yeah, that's pretty much what we've gathered, to prevent yourself from contracting HIV or AIDS. But again, we're not experts. We're just a bunch of people who talk about social issues on the couch while we sip wine. So we're not experts. Aiden (35-year-old, Cleveland)

Although "not experts," conversations participants had with friends about PrEP often influenced how participants viewed PrEP. Individuals with friends who openly discussed sex and PrEP were often more positive about and accepting of PrEP, even if they were not taking it. Constructed or gay families, or networks comprised of primarily other Black MSM friends and peers who consider one another family and provide social support for members (Dickson-Gomez et al., 2014), were also strong sources of social influence among this sample. Several

Table 1 Sample Characteristics

	Milwaukee, *n* (%) *N* = 25	Cleveland, *n* (%) *N* = 21	Total, *n* (%) 46
Age (in years) (mean, SD)	24.7 (3.2)	26.2 (4.6)	25.2 (3.8)
Sexual identity			
Gay	18 (72%)	18 (86%)	36 (78%)
Bisexual	4 (16%)	2 (10%)	6 (13%)
Another identity	3 (12%)	1 (5%)	4 (9%)
PrEP use			
Current PrEP users	5 (20%)	4 (19%)	9 (20%)
Former PrEP users	2 (8%)	0	2 (4%)
Full- or part-time employment	20 (80%)	15 (71%)	35 (76%)
Current Student	3 (12%)	2 (10%)	5 (11%)
Highest level of education			
Some HS	0	2 (10%)	2 (4%)
Completed HS	10 (40%)	7 (33%)	17 (37%)
Some college	13 (52%)	12 (57%)	25 (54%)
Completed college	2 (8%)	0	2 (4%)
Annual income			
< 10,000	7 (28%)	10 (48%)	17 (37%)
10–20,000	7 (28%)	6 (29%)	13 (28%)
20–30,000	5 (20%)	1 (5%)	6 (13%)
30–40,000	6 (24%)	3 (14)	9 (20%)
40 +	0	1 (5%)	1 (2%)
Exchanged sex for money, drugs, or a place to sleep	4 (16%)	3 (14%)	7 (15%)
Ever had HIV test	25 (100)	19 (90)	44 (96%)

participants described how their gay family members influenced their views on PrEP:

> Participant (P): My gay family is my best friends. They my best friends, but they my brothers and my sister and I got my grandma.
>
> Interviewer (I): How has your relationship with your gay family affected your views on HIV and HIV prevention?
>
> P: Well, it really affected me like way more at first, when I was careless about the subject. But when one of my closest friends really got it [HIV], like, I don't even like talking about it…

At this point in the interview, the participant started to cry, recalling the recent HIV diagnosis of his closest friend and gay family member. He then went on to say:

> P: I don't have a gay father or mother, but she tell me all the time, like, basically, she tell me about PrEP all the time. Like help us. She's the mother of the group. Like, she tell us when something wrong what we need to do. She's like the advocate. Randall (20-year-old, Cleveland)

Among those who were part of gay families, their family members were often among the most influential people in their lives, and this narrative demonstrates their potential impact on PrEP. As close, trusted social circles, constructed families can increase awareness about PrEP, particularly for individuals who are "careless about the subject."

In contrast, there were a few participants who noted that their friends rarely talked about sexual health, much less PrEP:

> We are in a community and don't nobody know the community like we do 'cuz we're actually in it. And that is not the topic of, like when you kick it with your friends, like health and sex and HIV, and you know, PrEP and all that? No talk. I'm sorry, but if it is, it's just in a bashing type of way. "He got [HIV]," but it's nothing positive…because it's people out here that do take that and try and use it against you. Michael (20-year-old gay man, Milwaukee)

Fear of gossip, rumors, and the stigma surrounding HIV were notable barriers to talking about, much less using PrEP. Participants described their communities as "messy" and, like Michael noted above, often worried that they could be subject to gossip and stigma if they were too open about their sexual lives. Although his experience was not the norm in this sample, it highlights the diversity in experiences among participants and the barriers some faced in discussing PrEP with friends.

Norms and HIV stigma were particularly evident among participants who had partners living with HIV. One individual in Milwaukee recalled how he took PrEP while in a relationship with someone living with HIV and described the importance of being open about PrEP use to change the social norms surrounding PrEP.

> It all has to do with the social norms of everything… You have to just talk more about it because talking about it itself makes people more comfortable around it. People are generally uncomfortable or scared about things because they don't know about it. Teaching people more. Dwayne (24-year-old gay male, Milwaukee)

As he explained, discussing PrEP and being open about PrEP use can not only increase knowledge, but subsequently increase comfort and change social norms surrounding PrEP. When asked how many friends he thought he had influenced in all of his discussions about PrEP he said, "Honestly, one. But that is all that matters. As long as it reaches one person, that is good enough for me." Peer norms and endorsement of PrEP often motivated young Black GBM to at least become more knowledgeable about PrEP and determine whether it was right for them. In the absence of explicit peer pressure, the idea of being the only one within a peer group not on PrEP was similarly motivating.

Filling Gaps Left by Healthcare Providers

The reliance on peers and social networks for information on PrEP stemmed from the lack of information participants had received from their medical providers and their providers' lack of knowledge about PrEP. Although a few participants had conversations with physicians about PrEP, most participants described how their primary care providers had not talked to them about PrEP and several reported their physician had never heard of PrEP. PrEP-naive physicians contributed to mistrust of both physicians and PrEP. This was evident when one participant described approaching his doctor for information on PrEP after hearing about it from a friend.

> I really haven't had much information on it. I went to a doctor after hearing about it from a friend. I asked him, and my doctor didn't even know anything about it. I was like, "Whoa. Ok, so definitely not a thing." And I could just kinda from this point move on 'cuz it's not something that really helps. It's just not something that's just like true. So I just kind of put in the back of my mind as a drug that's kinda like diet pills almost. You know how everybody says, "Take these pills, they'll make you lose weight" but they don't work? I kinda put it under the same category. David (20-year-old gay man, Milwaukee)

Some individuals, like the participant above, relied on providers, rather than peers, for accurate medical information. Not surprisingly, when David's physician was unaware of PrEP, it led this participant to believe PrEP was "definitely not a thing" and contributed to his distrust of PrEP. Others described similar experiences with PrEP-naïve physicians and recalled having to educate their providers about PrEP.

> I: How did you first hear about PrEP?

P: I first heard about PrEP though one of my best friends who is currently positive. Basically, he told me like, 'Oh my God. I wish this was out before I was out here.' And that was basically the first conversation we had about it I would say, 3 or 4 years ago.

I: Now I know you told me earlier that you have been seeing the same primary care physician since you were 8. Has that doctor ever talked to you about PrEP?

P: No. Actually, [my doctor] utilizes me for resources in the LGBT community because she does not know. I make sure I let her know because she always questions me about getting HIV stuff. And she writes stuff down because she has other LGBT clients she wants to mention that resources and stuff if they're available… I did make her aware of what PrEP was. When I was thinking about starting the process of PrEP I wanted to contact her first about my bloodwork. So when I reached out to her I got a response back like, 'What are you talking about'. And I'm like, 'Wow! Come on now!'…So that's kind of odd, but she told me she would look into it, but we haven't had a conversation about it since then. Hakim (29-year-old gay man, Milwaukee)

This exchange highlights the challenges young Black GBM face in accessing even basic information about PrEP. Like David, the participant quoted earlier, Hakim also initially heard about PrEP from a friend and sought out additional medical information from his primary are provider. Not only is the burden of initiating the conversation about PrEP falling on patients, many are also educating their providers about PrEP. Furthermore, when this participant did reach out to his physician and provided her with information on PrEP, he was told "she would look into it" but he never heard back, leaving him without adequate information or a PrEP prescription.

Most commonly, if participants had heard about PrEP from a medical professional, it was from someone doing their HIV test or a provider at an HIV-prevention focused clinic. Participants generally perceived these settings to be less stigmatizing and the staff to be more knowledgeable and comfortable discussing sexual health. However, even in many of those interactions, the PrEP information provided to participants was limited and not seen as particularly persuasive.

Whenever I get tested, people will easily bring it up. The last time I went actually, they basically gave me a piece of paper of like a bunch of places where I guess you could go, and they would help you get on PrEP. I haven't actually done that. There was another one. The day he tested me, he told me a month later he would call me about [PrEP] but never did. Jamal (22-year-old gay man, Milwaukee)

Scenarios like this were common where participants received "a piece of paper" with information on PrEP, but this information was rarely sufficient to initiate seeking out PrEP or following through on those recommendations. Another participant similarly described how his doctor suggested he might be a good candidate for PrEP, but provided little guidance on how to begin taking PrEP:

I: Are there any friends or doctors or outreach people that have talked to you about PrEP? Have you had any conversations with these people?

P: One doctor, when I contracted the STD. He was pretty much telling me after that about the PrEP. So that's the one doctor that pretty much talked to me about it. And then, um, a friend.

I: So, he talked to you about it?

P: He didn't give me knowledge. He just said pretty much after I went through my 7-day step with the pills or whatever that was going on at the time, he said that I could read upon PrEP and, you know, get into that because I was negative. Jordan (25-year-old gay man, Milwaukee)

An STI diagnosis is an important intervention opportunity for providers to talk about and initiate PrEP. Although this participant received some information on PrEP, his provider suggested he "read up on PrEP" independently, rather than collaboratively create a care and prevention plan. With such minimal information coming from healthcare providers, it is not surprising that young Black GBM turned to each other for information about PrEP.

Peers Improved the Trustworthiness of PrEP

In addition to filling the information gap left by healthcare professionals, participants also generally trusted information from their friends more than from healthcare providers, and friends were often able to legitimize PrEP. In contrast to the individual quoted previously whose doctors' lack of knowledge reduced his trust in PrEP, most participants were more strongly influenced by their peers' perceptions of PrEP than formal medical recommendations. For many, this was rooted in mistrust of physicians. This was evident in one participants' conversation about how he would be more influenced by his friends than his physician.

P: If someone I look up to started taking PrEP, I would probably consider it more, because I know this person, you know. I know what they do and I trust their judgment. So if they're, you know, gonna take it, I don't see anything wrong with it… because these are people I trust, and I don't think they would put me in harm's way. So if they suggest taking this pill they probably wouldn't, like, force-feed it down my throat, you know. They're prob-

ably just be like, "Hey, just look into this. Maybe this is something you should try out."

I: So let me ask you a little deeper question. Why is that more common to go with more so what our close friends are saying versus what a medical professional could be saying?

P: That's a very good question. I guess for a lot of people it's more of a trust issue I guess you could say.

I: Okay. Trusting the friend or?

P: Trust within this friendship, you know. Like this doctor he checks up on me. He only know me for when I'm there. And, like, my friend, you know, they get checked up all the time, and I've known them half my life. So anything they would try to tell me or try to push up on me I would probably consider it. That's where a doctor, you know, how do I know you're not just trying to get your brownie points? Andre (30-year-old bisexual man, Milwaukee)

Andre described how he might consider taking PrEP if a close friend was using it, believing they would not "put [him] in harm's way." As he further explained, recommendations from friends were seen as more genuine and urgent than those from providers. Participants often questioned the intent of providers' medical suggestions, rooted in deeper medical and pharmaceutical mistrust, whereas friends' suggestions often legitimized PrEP.

The influence of peers and community leaders on individuals' PrEP use was also evident in current PrEP users' narratives about the role their friends played in their decision-making. Although the following participant was not currently using PrEP, he had recently been considering it.

At one time, like I was not fuckin' with PrEP, would not be on PrEP. But then I got a friend he was tellin' me like, you know, 'I'm on PrEP' or whatever and I'm like, 'oh.' And he was explaining to me that you got one more friend, he was explaining to me too…I would listen to them because it sounded like some good stuff, you know? Especially the news and all the stuff on the news [about HIV]. That really scared me to like, I should just get on PrEP. Matthew (21-year-old bisexual man, Milwaukee)

In the months preceding the interviews in 2018, news outlets in Milwaukee began reporting on an HIV and syphilis cluster in Milwaukee, affecting more than 125 teens and adults. This information "really scared" this participant and, combined with information from friends, prompted an interest in PrEP. However, earlier in his interview, he said that when he had been previously tested for HIV, PrEP was recommended but he was not interested. The Interviewer followed up:

I: Why is it easier for you to hear what [your friends] are saying about PrEP but you kinda like tune out when the people that was testing you were telling you about that?

P: I was listening to my friends all in my ear so that's why I'm like, ok, I should just you know. I finally woke up. Like, I should just try PrEP, you know. Matthew (21-year-old bisexual man, Milwaukee)

Although PrEP had previously been recommended to him in an HIV testing location, it was his friends telling him about PrEP that has been more influential. Again, this narrative highlights the strength of friends' influence, even in the limited instances when physicians and HIV testing staff are providing information on PrEP.

In contrast, however, a few individuals were not as accepting of information from their peers. For example, one participant described being hesitant to accept information about medication from friends:

P: I heard about PrEP through some friends. Just kind of like, 'Hey, have you heard about PrEP? It's like this pill.' I'm like, if I hear about pills from a friend, really 9 times out of 10 I'm gonna tell them I'm gonna disregard it.

I: What makes you disregard it?

P: It's from a friend. I'm not a drug-type person and I don't like taking pills. If it's worth to hear and my doctor doesn't tell me, I'll just disregard. Let it be to the professionals. David (20-year-old gay man, Milwaukee)

Although most individuals in this study described the trustworthiness of information from peers, this excerpt highlights the resistance of some individuals to accept medical information from friends, and a reliance on physicians for information on PrEP. For this participant, his doctor's lack of communication with him about PrEP led him to conclude PrEP was not "worth" hearing about. For individuals, like him, who rely on medical professionals for health-related information, the lack of information from physicians represents a significant barrier to PrEP.

Reducing Stigma and Changing the Narrative Around PrEP

In addition to increasing trust of PrEP, friends were also essential in reducing the stigma associated with PrEP. Many participants described early PrEP adopters in their communities and social circles who had been influential in their own or others' PrEP use. For example, one participant in Milwaukee described the importance of community leaders in the Black GBM community in reducing PrEP stigma:

Being in the community, being a really big figure in the community for me since I was 15 to being 29 now.

> I feel like they took a chance on the pill and from their experience they've reached out. They allowed people to understand what the stigma is about PrEP and breaking stigma. They've touched more people and had an open conversation for them to be able to consider it at least, if nothing else. Hakim (29-year-old gay man, Milwaukee)

Peer leaders in the community not only provided information about PrEP, but perhaps more importantly, were essential in reducing the stigma surrounding PrEP. By "taking a chance on the pill," these early adopters paved the way for younger men to learn more about and in some cases, initiate PrEP. Another current PrEP user described the influence of a well-respected community leader who was open about his own PrEP use and helped use his role in the Black GBM community to reduce PrEP stigma.

> I: Was anyone taking PrEP that influenced you to take PrEP?
>
> P: Yes. Oh God. This was new, it was stigmatized, it was very harshly stigmatized in the beginning and it was someone that I used to hang around a lot that has a big influence on the community. I tried to follow their footsteps by all means. They announced that they were on it. I saw them at Pride, I pulled them aside and I was like, "Hey, are you really on PrEP?" "Yup, I'm really on it! It's not a game." And I'm just like "Tell me just a little bit more about it" and the little bit of glimpse of information was kinda like, "okay, maybe it's not like this government thing that they are trying to like infect us all with HIV secretly." And I still wasn't on it for I think, two years after I talked with that person. But they just kept pushing the envelope and kept talking about it. It was like drilling it. Not like, PrEP, PrEP, PrEP, it wasn't like that. It was just different avenues, different ways of talking about it. So I'm like, ok, let's see. James (25-year-old bisexual male, Milwaukee)

Like a previous participant, James noted the importance of early adopters in reducing PrEP stigma "in the beginning," following its 2012 FDA approval. Community role models and leaders who have "a big influence on the community" and were willing to start taking PrEP when few Black GBM were taking it reduced the stigma surrounding PrEP and helped normalize PrEP use within the community. Although he did not start taking PrEP immediately after hearing one of his role models talk about it, this initial conversation did open up the possibility to PrEP and continued their conversations about PrEP over the next several years until he was ready.

In part because of the influence of role models using PrEP and social network norms around PrEP, few participants in this study held stigmatizing views about PrEP. In fact, many held PrEP users in high regard and described admiration and respect for their friends who were using PrEP.

> Most of the people that have taken PrEP honestly have opened my eyes to see it more of a health thing than more of a gay thing. They have opened my eyes to it because it's something that you don't want to be worried about. You want peace of mind. Actually, the people that do take it, I look up to the people that do take it to high regards as role models because I would want to be moving the way they do. Isaiah (22-year-old gay man, Milwaukee)

His sentiments about his friends on PrEP were common. Several others who were not on PrEP described wanting to be at a place in their lives where they were confident enough to be open about taking PrEP and taking responsibility for their health. Another participant who was not using PrEP because he was in a monogamous relationship described his friends who were on PrEP:

> Pretty much all the friends that me and my boyfriend have together that are not in a relationship are on PrEP… the chances in Milwaukee is a whole lot greater of catching HIV. But just to be safe. I mean, have a one-night-stand and be ok the next morning. So, why not use PrEP? I salute them in a way. I mean, I hold them to a different standard just to know that they're taking care of their health. I mean, a lot of people that are in my age bracket, so that's pretty much from 21 to about 28 to 30, to know they are taking care of themselves at that age. That's very good to know, especially if they are my peers. Amin (21-year-old bisexual man, Milwaukee)

As these excerpts demonstrate, participants often looked up to their peers who were on PrEP. In contrast to stereotypes as promiscuous and sexually irresponsible, PrEP users were more frequently spoken of positively, described as "role models" and individuals "taking care of their health." This positive perspective of PrEP users often seemed to be influenced by participant's friends who were taking PrEP and could help change the narrative on PrEP.

Despite these overwhelmingly positive views of PrEP, the role of PrEP in committed relationships was more nuanced. While some individuals felt that PrEP still offered them control and protection in a committed relationship, others questioned the reason one would need PrEP in a committed relationship. Similarly, partners' views on PrEP were particularly influential. One participant described his partner's role in his decision to stop taking PrEP:

> My current boyfriend doesn't like the idea. He feels like that is a reason to cheat. Like, you are on PrEP, what are you protecting yourself against? You don't trust me or you are doing stuff. That's how he feels. Bret (25-year-old gay man, Milwaukee)

As Bret noted, his boyfriend viewed PrEP as a "reason to cheat" and, like many participants, saw PrEP within a relationship

as an indication of questionable commitment or infidelity. In response to his boyfriend's views on PrEP, this individual stopped taking PrEP, highlighting the influence of sexual partners in decision-making around PrEP and the potential for partners to negatively influence PrEP use. Thus, even when an individual is interested, and in this case was already taking PrEP and had a supportive peer network, an unsupportive sexual partner may be particularly influential.

A Need for More Leaders in the Black GBM Community

Despite generally positive discussions around PrEP, those who had few peers or friends using PrEP had more limited awareness of PrEP and noted greater PrEP stigma than those who knew many PrEP users. It was clear in our study that not all participants had access to local community PrEP advocates and social circles to help reduce PrEP stigma and promote PrEP use. One participant in Milwaukee discussed his interest in PrEP, but noted that his family's lack of knowledge about HIV and the potential stigma of PrEP was a barrier.

> The only thing that would make it difficult to take is being around family. I probably wouldn't even want them to know that this is an HIV prevention pill 'cuz in their head they would still probably think the worst, thinking I have HIV…It's sad, but being around my biological family, anything that has HIV on it or homosexual is hidden. Tyrone (25-year-old gay man, Milwaukee)

For Tyrone, the stigma associated with HIV as well as being gay presented barriers to PrEP. Later, when asked if he had any friends taking PrEP, he explained how friends could help him get the confidence to take PrEP:

> P: I don't have any friends that's taking it. If they are, they haven't told me. But I do know different Facebook friends that share that they take it and different things. So I know a couple of people who state that they take it, but not factual.
>
> I: If your friends started taking PrEP, how would that change what you think about PrEP?
>
> P: Maybe I wouldn't feel like I would have to worry my family. I would just do it anyways for extra precaution cuz I don't wanna deal with the ignorance. But one of my friends, that would make me more, I probably would become an advocate, like, "Hey, this is something that works. We should talk about this." So it would make me more comfortable and make it acceptable. Especially as part of the community wanting to advocate for it more. Tyrone (25-year-old gay man, Milwaukee)

Despite his interest in PrEP, "the only thing" that would make it difficult for Tyrone to take PrEP was his family. Yet, he also described how having friends taking PrEP could not only make him more comfortable with his own PrEP use, but also help him be an advocate for others. Like Tyrone, many participants in this study recognized the importance of having peers to whom they looked up to advocating for PrEP.

> I mean, who not gonna follow they friends? Like, especially best friends. Like, "Damn, my whole circle on PrEP except me?" So I ain't saying you want to be a follower, you know, get myself into something that I don't wanna get in, but I mean, if I do it, they all gonna wanna do it…Who not gonna believe their best friend? Matthew (21-year-old bisexual man, Milwaukee)

Even among those who did not want to be considered "a follower," participants often described the social influence friends had regarding PrEP, including increasing awareness of and trust in PrEP. Yet, despite recognizing the importance of supportive peers, many participants also noted a lack of peer leaders in their communities who were using and vocal about their PrEP use. One participant in Milwaukee, for example, described the need for more Black GBM in his community to spread information about PrEP and help reduce PrEP stigma.

> I ask people, "who are the movers and shakers in the Black communities?" I just think the information needs to be revamped and revised because now they are looking at it as, this pill means we don't have to wear condoms, which is not the case. James (25-year-old bisexual male, Milwaukee)

Many participants recognized the need to identify the "movers and shakers" in Black communities, or local, visible peers and influential social network leaders, and provide them the tools to be advocates for PrEP, disseminate accurate information, and reduce the stigma surrounding PrEP. Participants recognized the power in peer advocacy and leadership, yet many felt there were too few advocates in Black GBM communities. Leaders were necessary in crafting the narrative around PrEP and framing PrEP in a non-stigmatizing manner.

The lack of friends or influential community leaders taking PrEP was often cited as a reason more Black GBM were not taking PrEP:

> I: How willing to take PrEP do you think Black gay men are in general?
>
> P: I'm not sure, cuz Black, as far as Milwaukee, [Black men] don't see people like them doing it. Marcus (24-year-old gay man, Milwaukee)

Although Marcus was currently using PrEP, he talked about the difficulty in taking a chance on something that he didn't see other gay Black men in Milwaukee doing. Another participant in Cleveland attributed his preference for condoms to the fact that his friends were not using PrEP.

> I would probably go with the condom. I mean, just because I don't really know much about the pills because I never used it before. None of my friends have ever told me they used it. So, I just really have no education on the pill. Johnny (23-year-old gay man, Cleveland)

Like the influence of peers described earlier, the participant above attributed his limited knowledge on PrEP to the lack of PrEP use in his social circle. This excerpt also highlights the expectation that friends serve as the conduit to this type of information, rather than a medical provider or social media campaign. Participants generally looked to their friends for the most up-to-date information on what was happening within their community, including with regard to sexual health. Another participant similarly described how he would be more interested in PrEP if he knew his friends were taking PrEP.

> P: I don't have negative thoughts about PrEP, but I just think if I knew someone, if I looked up to them and they were on it I would probably more likely take it because I definitely would be more comfortable asking questions and finding out like if there's any side effects. You know, how you feel?
>
> I: Would you be more interested in taking PrEP if you know several of your friends were taking PrEP?
>
> P: I think that might, that might increase it a little bit. But again, like I'm interested in taking it, but I think it's just something about the power in numbers. When you know people are doing it and not necessarily being a follower, it's more of the uncertainty about it…I guess if it's more popular then I guess, as crazy as it sounds, I probably would be more likely to take it. Shawn (37-year-old gay man, Cleveland)

Shawn's sentiment about not "being a follower" mirrors what was said earlier by another participant who explicitly noted he was not a follower, although he would take PrEP if it was popular within his social circle. As Shawn explained, there is "power in numbers," especially when those individuals were trusted friends.

Yet, several current PrEP users in this study viewed themselves as PrEP advocates and influential in their communities, sharing their own experiences on PrEP within their social networks. They recognized their responsibility as leaders or role models in the community and the impact they had, particularly on younger GBM. One Milwaukee participant currently using PrEP described how he advocated for PrEP within his social circle:

> I: Do you ever talk to your friends about PrEP based on your experience?
>
> P: All the time. And I'm so amazed when people tell me that I have such a big influence and people listen to me and you know, they look up to me, and I'm like, 'Holy shit! I am a big piece of work and people are looking up to me?' So yeah, let's start here with the education and knowledge…I go to a lot of house parties. People hanging out, people are drinking, and then I'm like, cut the music off and everybody's like, look around. Like, "Hey, thank you all for coming. I'm glad we're in a safe space tonight and everyone is enjoying themselves and having fun, can I talk to you about PrEP? I have stories, I have condoms. I know we joked about it a whole lot when it was first introduced, but let's get serious. I just want like five minutes of you guys' time and then we back to drinking and doing whatever."
>
> I: How does that usually go over?
>
> P: People listen to me; I don't take shit from people easily. James (25-year-old bisexual male, Milwaukee)

James was a vocal PrEP advocate who used his social influence to educate others, particularly younger Black GBM, about PrEP. He also noted how his friends "joked about [PrEP] a whole lot when it was first introduced," but he used his experience on PrEP to legitimize PrEP and have conversations about its potential benefits. Individuals like James may be particularly beneficial in educating other Black GBM on PrEP and helping to reduce PrEP stigma.

Discussion

This research aimed to understand the role of peers and social networks on perceptions and use of PrEP among Black GBM in two midwestern cities. Our results demonstrate the importance of friends and social networks in improving PrEP awareness and trust and reducing PrEP stigma. Previous research has found that young Black GBM are talking with each other about PrEP (Mutchler et al., 2015), but this is among the first studies to examine how such conversations influence perceptions of and decisions about PrEP. Our results provide evidence of the positive reinforcement surrounding PrEP that friends can provide and the potential influence of peer leaders. Even among those who were not taking PrEP, participants described how friends and trusted community leaders have provided needed information on PrEP, reduced PrEP stigma, and increased trustworthiness of PrEP.

Participants' conversations around PrEP in part stemmed from the lack of information they received from health care providers. This is particularly relevant to Black GBM, who may encounter numerous social and structural barriers to accessing healthcare, including racism and homonegativity (Irvin et al., 2014; Quinn, Dickson-Gomez, Zarwell, Pearson, & Lewis, 2019b). Although many sought out information from providers after hearing about PrEP from friends, PrEP-naïve physicians

contributed to distrust of PrEP and the belief that that PrEP was "not a real thing." This is concerning, as there is already risk for elevated medical mistrust and mistrust of providers among young Black GBM (Cahill et al., 2017; Quinn et al., 2018). For example, LGBT persons of color are more likely than non-Hispanic White LGBT individuals to lack a regular source of healthcare (Macapagal, Bhatia, & Greene, 2016) and more likely to have negative experiences with providers or postpone care due to sexuality-related discrimination (Eaton, Driffin, Bauermeister, Smith, & Conway-Washington, 2015; Li, Matthews, Aranda, Patel, & Patel, 2015; Quinn, Bowleg, & Dickson-Gomez, 2019a). Furthermore, there is evidence that racial biases and sexual stereotypes among health care providers can contribute to inequitable PrEP prescription practices (Calabrese, Earnshaw, Underhill, Hansen, & Dovidio, 2014; Quinn et al., 2019a, 2019b). A negative or minimal response to inquiries about PrEP from health care providers may further alienate young Black GBM from healthcare, spread inaccurate information about HIV prevention options, and fuel mistrust of PrEP. Our results highlight the need for continued training and educational interventions for physicians. Several studies have characterized providers' knowledge and comfort-level surrounding PrEP, consistently demonstrating low levels of awareness (Petroll et al., 2017; Seidman, Carlson, Weber, Witt, & Kelly, 2016; Smith, Mendoza, Stryker, & Rose, 2016). However, even as broad awareness begins to increase, physician knowledge of prescription guidelines and familiarity with PrEP safety and efficacy remain low, yet interest in additional training and education among providers is high (Tortelli et al., 2019). Significant efforts are needed to improve awareness of and comfort prescribing PrEP among primary care providers while also reducing implicit bias and mistreatment of racial and sexual minority individuals in health care settings.

Although PrEP-naive physicians contributed to some mistrust of PrEP, friends were often able to improve PrEP awareness and legitimize PrEP. We found that individuals who had a greater number of friends or peers who were using PrEP and those with peers who talked more openly about sexual health tended to have more knowledge about PrEP, less stigmatizing attitudes toward PrEP, and a greater willingness to consider PrEP for themselves. However, our findings highlight the need for greater attention to the influence of partners' PrEP perceptions on acceptance and use of PrEP. For example, even if friends are using and supportive of PrEP, a partners' negative or discouraging views on PrEP may be more influential on individual decisions about whether to initiate or maintain PrEP use. Only a few participants in this study described the influence of a partners' negative views on PrEP, yet this deserves additional empirical attention. Monogamous GBM tend to have low HIV risk perception (Stephenson, White, Darbes, Hoff, & Sullivan, 2015), yet data indicate that 32–68% of new HIV infections among GBM occur through main partnerships (Goodreau et al., 2012; Sullivan, Salazar, Buchbinder, & Sanchez, 2009). Research on the influence of partner views on PrEP can inform dyadic interventions that reduce the stigma surrounding PrEP use in relationships.

Our findings also suggest considering how both injunctive norms (perceptions of who would approve of PrEP use) and descriptive norms (perceptions of who might be using PrEP) may influence young Black GBM's perceptions of PrEP. Descriptive norms refer to the perceived prevalence of a behavior in a group, or what people believe their peers are doing, whereas injunctive norms refer to perceived peer approval or disapproval of their behaviors. Men who assume others use condoms (descriptive norms) or approve of them (injunctive norms) are more likely to use condoms themselves (McKechnie, Bavinton, & Zablotska, 2013; Pererson & Bakeman, 2006). The same may be true for PrEP use, and interventions that focus on changing norms within social networks may increase PrEP uptake. For example, descriptive norms that associate PrEP use with sexual responsibility and self-empowerment, which was evident among young Black GBM in this study, may enhance interest in PrEP. Highlighting positive perceptions of PrEP users may also help reduce the stigma surrounding PrEP and break the connotation of PrEP use with high-risk sexual behaviors or promiscuity. Similarly, supporting peer leaders in becoming PrEP advocates may improve injunctive norms about who within one's social network approves of PrEP. Support of risky sexual behaviors within a social network are associated with higher risk behaviors among individuals in the network. For example, perceived low peer support of condom use and the presence of a network member who condones risky sex is associated with greater sexual risk behaviors (Peterson, Rothenberg, Kraft, Beeker, & Trotter, 2009; Schneider et al., 2013). Social network research that assesses network perceptions of sex and PrEP would be useful in understanding how and whose views within networks are most influential.

Our findings provide encouraging evidence of more positive peer perceptions of PrEP users than previously documented (Dubov, Phillip, Altice, & Fraenkel, 2018; Golub, Gamarel, & Surace, 2015; Schnarrs et al., 2018). Many participants described PrEP use as responsible and an indication of self-love and empowerment, and there were few disparaging or stigmatizing comments made about PrEP users. In part, this may stem from the fact that many participants knew other PrEP users, which may reduce the stigma or uncertainty surrounding PrEP. Research has demonstrated the positive influence of social network leaders at reducing HIV stigma (Li, Guan, Liang, Lin, & Wu, 2013). Intervention research and social marketing campaigns that use peer leaders, celebrate PrEP users, and focus on empowerment and control over one's sexual health, may be effective at reducing PrEP stigma among young Black GBM. Although participants' views of PrEP and PrEP users were primarily positive, there was evidence that participants faced PrEP stigma, HIV stigma, and homonegativity from family or within

their communities, which are additional barriers to PrEP use (Quinn et al., 2019a, 2019b).

Despite the importance of social networks in influencing perceptions of PrEP among young Black GBM, many men face barriers to harnessing supportive social networks. As was evident in this study, some Black GBM do not have friends with whom they can comfortably discuss sexual health or talk about PrEP. Several participants had never talked about sex with peers in a non-joking or disparaging way and did not know of anyone in their social circle using PrEP, highlighting the need to cultivate peer PrEP advocates and leaders among diverse networks. Men who are excluded from larger and more influential networks or have weaker network ties may have more limited knowledge about sexual health and may require alternative strategies for engagement and greater support in becoming peer leaders. Black men tend to have smaller networks with fewer members with whom they can talk about their health and are also less likely to attend gay venues to form network connections than White men (Zarwell & Robinson, 2019). Thus, social network interventions must consider the barriers to social network connections and unique social network characteristics experienced by Black GBM, including more limited affiliation to LGBTQ social groups. Similarly, many Black GBM face other social stigmas and disadvantages that can inhibit social network connections. Gendered social norms and heterosexism may inhibit social support and make it difficult to be open about same-sex relationships among young Black GBM (Rosario, Yali, Hunter, & Gwadz, 2006). Additionally, racial and structural inequalities can influence social networks. Black GBM who experience racism, homonegativity, and financial hardship have lower levels of social support (Ayala, Bingham, Kim, Wheeler, & Millett, 2012).

Our findings lend support to interventions that utilize existing peer networks to prevent HIV among young Black GBM (Hosek et al., 2015; Kelly, 2004; Theall, Fleckman, & Jacobs, 2015). Interventions are needed that capitalize on the support and information friends are already sharing to support prevention behaviors, continue to reduce PrEP stigma, and enhance normative PrEP use. Peer support persons may also be essential in helping young Black GBM navigate a healthcare environment in which they continue to face racism and homonegativity and struggle to find culturally competent PrEP providers (Quinn et al., 2019a, 2019b). Notably, our findings also provide insight into preferred sources of information on PrEP. While the majority of study participants preferred their peers or "community leaders" as trusted sources of information on PrEP, others preferred and prioritized health care providers for medical information. Interventions that engage popular opinion leaders and social network leaders, which have been found to be successful at decreasing sexual risk behavior and HIV stigma among young Black GBM (Hosek et al., 2015), may similarly enhance awareness and trust in PrEP. Participants described the influence of community leaders and influential peers and many described themselves as leaders within the community who are already educating their peers about PrEP. Interventions that support peer leaders in improving awareness and perceptions of PrEP may be essential in increasing PrEP use within Black GBM communities. Yet, our findings also highlight the necessity of interventions to increase awareness of PrEP and minimize patient barriers to PrEP uptake. Some young Black GBM prefer receiving sexual health information from providers, yet PrEP-naïve providers may inadvertently contribute to stigma and mistrust of PrEP and limit uptake among young Black GBM. Interventions that combine peer leaders and health care providers may be useful in meeting the diverse preferences of young Black GBM and enhance trust and use of PrEP.

There are limitations to this study. In both cities, much of our sample was recruited through networks of LGBT service providers and stakeholders. Black GBM who are younger, have more limited engagement with the LGBT community, are not open about their sexual identity, or are unable to access service organizations may have experiences not represented here. For example, although our study found positive perceptions of PrEP users, PrEP stigma may continue to be strong among those without LGBT community connections or other Black GBM social support networks. Additionally, more research is needed to understand perceptions of PrEP among those with limited connections to other Black GBM. Finally, we did not explore social network or friendship strength and relationships, which may provide essential information about how and for whom social networks are influential. Although participants described "community leaders" and "best friends" as being particularly influential, the scope of their networks and strength of ties may be important factors in considering how young people can support each other in HIV prevention. Finally, our sample was mixed with regard to PrEP use experience. We did not identify any differences in social network influence among current, former, and never-PrEP users, yet our samples of current and former PrEP users were small (9% and 4%, respectively). Future research should consider examining differences among these samples.

This study offers useful insight into the role friends and networks can play in increasing PrEP use among young Black GBM, demonstrating the importance of peers in increasing awareness, reducing stigma, and increasing trustworthiness of PrEP. There is a need for interventions that capitalize on young peoples' trusted peer support networks to enhance knowledge and combat the social barriers to PrEP.

Acknowledgements We are grateful for the contributions of the study team members at the Center for AIDS Intervention Research and the AIDS Taskforce of Greater Cleveland. This research was funded by the National Institute of Nursing Research (R01-NR017574; Kelly, Amirkhanian) and the National Institute of Mental Health (P30-MH52776; Kelly and K01 MH112412; Quinn).

Compliance with Ethical Standards

Conflict of interest The authors have no conflicts of interest to disclose.

Informed Consent All study procedures were approved by the Institutional Review Board of the Medical College of Wisconsin. All study participants completed a signed informed consent prior to participating in any study procedures.

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