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Beyond HIV prevention: a qualitative study of patient-reported outcomes of PrEP among MSM patients in two public STD clinics in Baltimore

Cui Yang, PhD¹, Nandita Krishnan, MHS¹, Earl Kelley², Jaidence Dawkins², Omolola Akolo², Rashauna Redd², Ayodeji Olawale³, Commia Max-Browne², Luke Johnsen, MD², Carl Latkin, PhD¹, Kathleen R. Page, MD^{2,3}, Melissa Davey-Rothwell, PhD¹

¹Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health

²Department of Baltimore City Health Department

³Department of School of Medicine, Johns Hopkins University

Abstract

Pre-exposure prophylaxis (PrEP) could have a substantial impact on the HIV epidemic within the US. However, implementation of PrEP interventions outside of clinical trials has been slow and faces considerable barriers. The aim of the current study was to qualitatively explore PrEP-related patient-reported outcomes (PRO) among MSM patients who enrolled in a PrEP program at two public STD clinics in Baltimore. We conducted in-depth interviews with 18 PrEP patients who self-identified as MSM at two Baltimore City Health Department STD clinics between March and November, 2017. A codebook was developed using an iterative process. During analysis, the study team identified various biomedical and psychosocial PrEP-related PRO among MSM PrEP patients. In addition to HIV prevention, PrEP-related PRO included greater peace of mind, better continuity in care and awareness about health and well-being, relationship solidarity with serodiscordant partners, and access to social services. These findings on PrEP-related PRO can potentially contribute to improving patient-provider communication, leading to increased engagement in care and uptake of PrEP by MSM.

Keywords

PrEP; patient-reported outcomes; MSM; qualitative; HIV

INTRODUCTION

Pre-exposure prophylaxis (PrEP) could have a substantial impact on the HIV epidemic within the US. However, a real-world implementation of PrEP outside of clinical trials has been slow and faces considerable barriers (Siegler, Mouhanna Mera Giler, et al. 2017). PrEP

Corresponding author: Cui Yang, PhD, Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health, 2213 McElderry St. 2nd FL, Baltimore, MD 21205, Phone: 410-502-5368, Fax: 410-502-5385, cyang29@jhu.edu.

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promotion has focused largely on its biomedical outcome as a HIV prevention medication, but such an approach may have missed other potential benefits of PrEP that could better resonate with populations at risk of HIV. Patient-reported outcomes (PRO), “a measurement based on a report that comes directly from the patient” (Food and drug administration (FDA), 2009), have been used to improve health services by prioritizing patient values in clinical decision-making in many health care settings, including HIV treatment (Engler, Lessard, & Lebouche, 2017; Engler, Lenart, Lessard, Toupin, & Lebouche, 2018). Understanding patients’ perspectives could help healthcare providers better engage with patients’ needs, values, perceptions and experiences of their care (Barry & Edgman-Levitan, 2012). The aim of the current study was to qualitatively explore men who have sex with men (MSM) patients’ perspectives on PrEP-related PRO at Baltimore City Health Department (BCHD) STD Clinics.

METHODS

Study design

The study was conducted between March and November 2017. Participants were eligible for the study if they were 18 years, biologically male sex at birth, reported having sex with a man in the past 90 days, and were enrolled in the BCHD clinics PrEP program at the time of recruitment. Participants were recruited by PrEP Peer Navigators. In-depth interviews were conducted by trained qualitative researchers not affiliated with the health department. All interviews were audio-recorded and transcribed. Participants received \$30 as compensation for their time. This study was approved by the City and University institutional review boards.

Data analysis

Transcripts were analyzed by applying a combination of inductive and deductive codes. All transcripts were coded by a single coder and reviewed by other members of the study team. The study team discussed the interpretation of codes, which led to modifications of the coding framework in an iterative process. Coded text segments were then grouped into broader themes, and illustrative quotes were extracted to depict salient findings from each theme.

RESULTS

Participant characteristics

A total of 18 participants completed interviews. The average age of participants was 28 years. 15 participants were non-Hispanic Black/African American, two patients were Caucasian, and one was Hispanic.

Main findings

“Peace of mind”—Many participants indicated that using PrEP in combination with condoms reduced anxiety associated with HIV infection.

Just knowing that there's a better chance of you not catching HIV. The more preventative medicines there are, the better. Just having that in your head that, "You know, I'm on this medication. This medication is going to – it may not protect me fully from HIV, but it's going to help."

- P9, 21 years

Several participants described "peace of mind" from knowing that PrEP protects them from getting HIV when they engaged in condomless sex.

I'm taking [PrEP] to make sure – protection, peace of mind. Some people will be risky, like they want to have unprotected sex. Some people – I've heard someone within a relationship with someone who has HIV, so they need that extra protection, too. .. I've slipped up before, in the moment, you know. Risky behavior. I'm just like, "Uh gosh, I need that."

- P12, 31 years

Having "peace of mind" by taking PrEP seemed particularly salient among participants who believed their sex partners may not always be truthful about their HIV status.

I have come across it a couple of times where I have asked the person who I was being intimate with their status, and more than once I've been lied to. That makes you scared because then you are yourself wondering what do I do now? ... so PrEP seemed like a very good option just because it doesn't remove the worry but lessens it.

- P2, 27 years

Increased engagement in health care—Public STD clinics often provide safety-net care for patients utilizing short-term care services. Many participants suggested they were able to establish continuity in care through the PrEP program. Continued engagement with the clinic and healthcare providers also facilitated increased access to other health care, resulting in greater self-management of general health and well-being.

I want to take responsibility for myself and have my checkups and things like that. I'm so used to having checkups now, it's almost like going to the dentist... I used to be scared to come to the doctors a lot, but now it's just that first scare, it kind of made me take responsibility to be like, "Okay, well, you come you get seen, things like that." So I don't have a problem.

- P15, 23 years

I've had two STDs and they've helped me take care of them and really shone light on how to take better care of myself. They've really shone light on me, changed my whole way of life....It motivates you to take care of yourself, I will say that.... if I know they're going to check for liver damage and kidney damage, I already have a history of kidney issues so I'm going to drink more water, I'm going to exercise more, I'm going to eat better.

- P1, 26 years

Relationship solidarity—Participants in an HIV serodiscordant relationship described taking PrEP as a way to demonstrate solidarity and commitment to their partner living with HIV/AIDS. Taking medications together becomes a bonding activity and a way to adhere to their respective regimens.

PrEP helps a person to be able to join a person on that journey, but not be paranoid but to help them understand, ‘look, I know what you’re going through, I understand what you’re worried about, but guess what? If you want to value your life, I’m going to value our lives together’.

- P11, 30 years

We take our pills at basically the same time. It’s a challenge, but we acknowledge each other’s status and we acknowledge the protection we need to keep each other healthy.

- P14, 27 years

Assistance with social services—Several patients described linkage to health and social services as a major benefit of the PrEP program,. These included getting connected with health insurance, housing, employment, as well as other social services.

I was working on getting my insurance so I could actually buy it [PrEP] myself, but right now I went through the [pharmaceutical company’s] program and I actually need to talk to Case Manager because of just losing my job. We’ve been working on that too.

- P5, 29 years

DISCUSSION

Participants in this study identified multiple health, psychological and social benefits as outcomes of enrolling in the PrEP program. They reported establishing continuity in health care, increasing access to other health care services, and developing greater awareness about overall health and wellbeing. Another study of 5,857 PrEP candidates in Boston found that PrEP use was associated with increased access to non-PrEP-related health care services such as tobacco and depression screening, thus demonstrating the benefits of integrating PrEP with behavioral health, mental health and other infectious and chronic disease care services (Marcus et al., 2018). Public STD clinics provide prevention-oriented, safety-net services to populations at risk of HIV, and present opportunities for integration of PrEP with existing services. Populations that STD clinics serve often face many socio-structural barriers, and thus greater access to social services, such as health insurance and housing assistance, is needed and described by participants as one of the benefits in the current study.

Reduced anxiety from taking PrEP was reported as an important psychological benefit in the current study. Similar findings of decreased sexual anxiety after initiating PrEP have been observed in another study of 137 MSM (Whitfield et. al. 2019). The current study identified another benefit of increased relationship solidarity with HIV serodiscordant partners. A previous study found that HIV-negative MSM with greater intimacy motivations within their

relationship would be more motivated to take PrEP (Gamarel & Golub, 2015). More research is needed to understand how psychological benefits or positive relationship dynamics from using PrEP relate to the adoption of HIV prevention interventions. Findings from the current study can inform development of a PrEP-related PRO scale that provides important information to providers for effectively orienting patient-provider on the pros and cons of PrEP uptake. This technique, often used in interventions that utilize motivational interviewing, has been shown to promote behavior change, such as HIV medication adherence (Macdonell, Naar-King, Murphy, Parsons, & Harper, 2010).

A few limitations should be noted. The generalizability of findings may be limited to MSM patient populations at STD clinics in an urban setting, and men who experienced the most benefits from taking PrEP were more likely to choose to participate in the study. We also recognize social desirability of conducting interviews with patients at the clinics.

In summary, we identified various PrEP-related PRO among MSM PrEP patients in STD clinics in Baltimore. Our findings can potentially contribute to improving patient-provider communication, leading to increased engagement in care and uptake of PrEP by MSM.

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