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How do gay and bisexual men “make up” for missed PrEP doses and what impact does missing a dose have on their subsequent sexual behavior?

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Abstract

HIV pre-exposure prophylaxis (PrEP) is currently being adopted by members of key populations, such as gay and bisexual men (GBM), to reduce their risk of HIV acquisition. Given that adherence to a daily PrEP regimen ensures a maximum protective effect, it is critical to understand GBM’s behavioral responses to having missed PrEP doses. We report on data from one-on-one semi-structured interviews with GBM taking PrEP ($n = 97$). Using thematic analysis, we identified three distinct yet sometimes overlapping behavioral responses after identifying that a dose had been missed: (1) 59% continued with their next scheduled dose; (2) 49% described ‘making up’ for a missed dose by taking medication as soon as possible, within 24 hours of its scheduled dosing time; and (3) 11% reported ‘doubling’ their next PrEP dose. Participants provided potentially contradictory narratives about their sexual behavior after a missed dose: (1) 54% described making no changes in their sexual behavior; (2) 49% described adjusting their sexual behavior; and (3) 10% said the decision to adjust their behavior would be contingent upon how many doses they missed. Many participants presented multiple behavioral responses. Participants’ beliefs often paralleled current guidelines and empirical data on PrEP effectiveness in the event of a missed dose. However, participants varied in their reports of how best to navigate behavioral HIV risk in the context of a missed dose and for specific sex acts (e.g., oral versus anal sex). For PrEP prescribers, our data provide a useful lens to understand patients’ lived experiences with this

new and dynamic HIV prevention tool. With the rise of infrequent or ‘on-demand’ PrEP dosing strategies, further research is needed to inform evidence-based interventions.

Keywords

Pre-Exposure Prophylaxis (PrEP); adherence; gay and bisexual men; HIV; qualitative data

INTRODUCTION

HIV pre-exposure prophylaxis (PrEP; currently in the form of once daily tenofovir disoproxil fumarate/emtricitabine) is recommended for members of key populations like gay and bisexual men (GBM) for preventing HIV acquisition. The Centers for Disease Control and Prevention estimates that 1.2 million individuals are at risk for HIV (Smith et al., 2015), yet only 136,000 individuals in the U.S. were taking PrEP as of mid-2017 (Mera Giler et al., 2017; Smith et al., 2015). Further, although data suggests that PrEP adoption was initially slow, trends show that PrEP prescriptions increased 73% percent each year since 2012 (AIDSvu, 2018). However, despite improvements in adoption, PrEP uptake remains incommensurate with eligibility and need (AIDSvu, 2018; Mera Giler et al., 2017; Parsons et al., 2017; Patrick et al., 2017), particularly for Black and Latino GBM, as well as in the Southern region of the United States (AIDSvu, 2018; Elopre, Kudroff, Westfall, Overton, & Mugavero, 2017; Snowden, Chen, McFarland, & Raymond, 2017). Beyond these gaps in PrEP adoption, some have expressed concerns that individuals already taking PrEP may not maintain sufficient adherence to benefit from its protection (Golub, Gamarel, Rendina, Surace, & Lelutiu-Weinberger, 2013; Taylor et al., 2017; Van der Elst et al., 2013).

Researchers have identified external factors that may interfere with PrEP uptake and PrEP adherence. One factor is the stigma of taking the medication, e.g., perceptions of being “sexually promiscuous” for taking PrEP, fear of being thought of as HIV-positive for taking anti-retroviral medications (Calabrese & Underhill, 2015; Schwartz & Grimm, 2017). Another factor is the structural barriers, like access to insurance to pay for PrEP or difficulty finding a provider willing to prescribe the medication (Krakower, Ware, Mitty, Maloney, & Mayer, 2014; Patel et al., 2017). Forgetting to have medication available and overall forgetfulness can also lead to missed doses (Liu et al., 2014). For individuals taking PrEP, little is known about how they respond to missed doses in both medication-taking and sexual behavior.

Clinical trials have shown that PrEP remains highly protective even in the event of an occasional missed dose (R. M. Grant et al., 2014; Krakower, Jain, & Mayer, 2015). Individuals who take the equivalent of four or more PrEP daily doses a week appear to maintain 96% risk reduction from HIV (Anderson et al., 2012; Grant et al., 2014). Further, one pharmacokinetic study found that an active blood concentration of PrEP is retained for up to one week after patients discontinued daily dosing, allowing them to retain 90%–94% risk reduction though this period—after which PrEP’s protection declines precipitously (Seifert et al., 2015). Although the CDC does not yet recommended event-based or on-demand dosing—whereby PrEP is taken only around episodes of condomless sex—it has

been found to be effective at protecting GBM from contracting HIV (Molina et al., 2015; Molina et al., 2017).

Should on-demand dosing gain FDA approval, PrEP non-adherence would be less “forgiving” in terms of protection afforded to its users, since the drug concentration would be lower overall. For someone taking PrEP seven days a week, the occasional missed dose may not greatly increase their risk for HIV infection in the event of exposure. For an individual taking on-demand PrEP, the chances of establishing an HIV infection after missing a dose would be significantly higher, as they would be unable to rely on the ‘protective buffer’ afforded by a daily PrEP regimen. Thus, it is important to explore how GBM taking PrEP respond both in their sexual behaviors, as well as medication-taking behaviors, in the event of missed doses. Understanding these behavioral responses could prove important for patient education about PrEP for both daily and on-demand dosing strategies as they occur in the context of GBM’s lived routines.

Current Study

We conducted one-on-one qualitative interviews with 104 GBM on daily PrEP in New York City ($n = 97$ of whom provided usable data for the present manuscript). We asked each participant how they “made up” for missed doses (i.e., medication-taking behavior), as well as their reflections on how having missed doses impacted their subsequent sexual behavior, if it did. We anticipated that participants would have a basic understanding of PrEP’s effectiveness, i.e., that it is most effective when it is taken as prescribed, that they would perceive less protection when they missed doses and, thus, they might alter their sexual behavior to decrease their chances of HIV acquisition if they were to be exposed to the virus. In contrast, as this was an exploratory study, we did not have a priori assumptions about how participants would make up for missed doses.

METHOD

Participant and Procedures

Data for this manuscript were taken from *PrEP & Me*, a prospective study conducted in New York City about urban GBM’s experiences with PrEP. We recruited participants in 2015–2016 via targeted sampling (Watters & Biernacki, 1989). Recruitment methods consisted of advertising and preliminary eligibility screening in sexual-minority concentrated neighborhoods and settings (e.g., gay bars, pride events, LGBT community-based venues), and digital recruitment on GBM social and sexual networking websites/apps, and various social media platforms.

To be eligible, participants had to be 18 years or older; be a cisgender male; identify as a sexual minority (e.g. gay, bisexual, queer); have been taking PrEP for at least 30 days, but not via a research study that provided the PrEP medication (e.g., demonstration project, clinical trial); reside in the New York City area so that they could attend in-person study visits; and have access to the internet such that they could complete the online study assessments (those data presented elsewhere). One goal of the parent study was to examine the role of club drug use on PrEP adherence. Thus, half of the sample self-reported past 30-

day club drug use. The category of club drugs included ketamine, MDMA/ecstasy, GHB, cocaine, and methamphetamine. All participants provided proof that they were taking PrEP by bringing their PrEP prescription bottle (along with their pills), with their name and date printed on it, to a study visit. Participants were compensated \$40 for the assessment that included a one-time semi-structured qualitative interview. All procedures were approved by the IRB of the City University of New York.

Measures

Participants completed a one-on-one, audio-recorded, semi-structured interview that lasted from 30–45 minutes. The interview covered a range of topics such as how participants first learned about PrEP and how they decided to begin taking PrEP. In one segment, the interviewer asked participants to recount their experiences with missed PrEP doses, to describe strategies that would help them avoid missing a dose, and to explore what they do to “make-up” for a missed dose. Additionally, the interviewer asked participants about how they adjusted their sexual behavior (if at all) as a result of missed doses. In this manuscript, we focus on participants’ responses to these questions.

Analysis Plan

Interviews were transcribed verbatim by one staff member, and initial transcripts were independently verified against the original audio file by a second staff member. Using the principles of thematic analysis, members of the research team reviewed the transcripts to code participants’ narratives. Thematic analysis has shown to be an effective method for evaluating this type of qualitative data (Miles & Huberman, 1994; Patton, 1990). A coding team, comprising the Principal Investigator (first author) and two additional staff (the second and third authors), developed a codebook from the interview guide and a close-read of a random subset of ten transcripts. The staff were then trained to use the codebook to identify text that represented the codes (Neuendorf, 2002; Saldaña, 2013). The third author initially coded all transcripts, and those codes were then independently verified by the second author. The first author also reviewed coded transcripts for overlap and discrepancies. Any discrepancies were discussed with the coding team and consensus (100% agreement) was reached over the application of a given code. Throughout the coding process, the team adjusted the codebook to reflect emergent trends in transcript data. Following quotes, we report the participant ID number, their age, and their race or ethnicity.

RESULTS

In Table 1, we provide the self-reported demographic characteristics of the sample. The mean age of the participants was 32.5 years and 63.1% had been taking PrEP for less than one year. Half of the participants were men of color, most (79.6%) had at least a 4-year college degree, and 42.8% reported an annual individual income over \$50,000. Overall, participants reported that they were highly adherent to PrEP, identifying an average of 1.6 missed doses in the 30 days prior to the interview ($SD = 3.0$). However, 87.8% of participants reported missing at least one PrEP dose since beginning PrEP.

Participants described PrEP as highly effective even in the event of an occasional missed dose, though we did not assess how participants came to this belief. Participants consistently described a “missed dose” as failure to take a daily dose on a given day or within a few hours of their normal routine. Notably, of those who missed at least one PrEP dose, approximately 18% described heightened anxiety about their increased HIV risk following a missed dose.

“I got used to like the little bit of a safety net, so when I’m not on [PrEP], it makes me anxious.” (30347, 22 years old, Latino)

“I would [change my sexual behavior]. I definitely would, because I would be a lot more anxious about my HIV status [following missed doses].” (30336, 27 years old, Latino)

“If I missed multiple days and had unprotected sex, I would be [concerned], like I was before I was on PrEP. You know, nervous, and schedule a doctor’s appointment [for HIV testing].” (30301, 36 years old, White)

Strategies to make up for missed doses (medication-taking behavior):

We asked participants about the strategies they used to ‘make up for’ a missed dose in terms of their medication-taking behavior. Among the 85 participants who reported having missed at least one dose, their strategies fell into three categories. Note that participants’ reports of the strategies they used were not mutually exclusive, i.e., some participants reported more than one, even if they contradicted each other. These were typically instances in which participants recounted multiple missed doses in their time on PrEP, and subsequently described using one strategy one time, and a different one another.

Over half (58.6%) of participants waited to take their next scheduled dose on time.—Participants detailing this strategy often emphasized their desire to maintain their regular PrEP schedule as a rationale for waiting until their next dose. Additionally, some cited recommendations from a medical provider as a reason to return to their regular dosing interval. Further, some participants explained that they chose to employ this method specifically in lieu of “double-dosing,” which they reported having been advised against by a medical provider or in online, social media, or in popular media coverage about PrEP.

“No, as far as I know you’re not supposed to do that [double dose]. You just take your next one as normally scheduled as possible. You don’t take two to make up or whatever, that much I knew. I don’t remember who told me that or if I read it or whatever but – actually I think I did see it on a video [online].” (30365, 37 years old, White)

“If I missed it, and I’m off by a substantial amount of hours...if it’s like two or three hours, it’s fine, but if I missed it eight hours ago, I usually would not be like, ‘Oh my God, you have to take it now!’ Because that would off sync my schedule. So I would wait until the next day to take my next dose.” (30309, 24 years old, Multi-racial)

“Well I’m told that you shouldn’t take two in the same day, so I don’t do that. My doctor told me if you miss a dose just continue on to be as normal and make sure not miss another dose.” (30265, 21 years old, Latino)

Nearly half of participants (49.4%) took their medication within, approximately, 24 hours of its scheduled dosing time, and then resuming dosing on schedule.—Many men reported that their decision to take their medication later than scheduled depended on how much time had lapsed since their missed dose. These participants were concerned about the potential side effects of taking two doses proximate to one another.

“[I normally take my PrEP in the morning] I’ll take [the dose I missed] if it’s before five o’clock in the afternoon. If it’s after five o’clock, I’m not gonna do it because then if I take a five o’clock dose, and then like at 9 AM...I feel like it’s too close together. One per 24 hours [is my rule].” (30007, 30 years old, Latino)

“If I remember after two o’clock [P.M.], it’s very likely that I will just take it then because that’s just a couple hours after. If it’s more like 7 o’clock in the evening, then I’ll just skip it.” (30243, 23 years old, Multiracial)

Some (11%) reported “doubling” their PrEP dose in response to a missed dose.—Of these participants, some reported taking two pills upon remembering, or the following day. Others described taking one pill early the following day and then continuing with their scheduled dose shortly after, effectively double-dosing for that particular day. Additionally, some participants cited their recent sexual behavior as the determining factor about whether to double-dose or not, with some choosing to double-dose only after a recent or risky sexual encounter.

“Fifteen percent [of the time], I will take a double-dose the next day... If it’s in a sexually active period, definitely I will.” (30352, 46 years old, White)

“I would want to kind of double up on a dose here and there...there’s sometimes that I may double up a dose if I needed to, to make sure that I got it in my system.” (30333, 34 years old, Black)

Sexual Behavior After Missed Doses

Participants who reported missed doses were also asked about whether their sexual behavior changed after the fact. On this question, participants were divided.

More than half of participants (54.1%) reported no change in sexual behavior as a result of a missed dose.—Many felt that missing one dose did not warrant a change in sexual behavior, as they believed they were still significantly protected due to the PrEP remaining in their system. Those endorsing this behavioral pattern were often brief in their response, simply stating ‘no’, they did not change their sex behavior in the event of a missed dose, with little follow up or elaboration. Our interview protocol did not include an assessment as to how participants came to this decision.

“No [I would not alter behavior], because it was only one and as far as I know, as long as I’m 90% covered [adherent], I’m good.” (30146, 27 years old, Latino)

[Interviewer] “Okay. So how has or how did your sexual behavior change as a function of missing a dose? [Participant] “It hasn’t.” (30003, 46 years old, Black)

Nearly half of participants (49.4%) reported adjusting their sexual behavior as a result of a missed PrEP dose.—For these participants, adjustments took the form of behavioral modifications to reduce HIV transmission risk. Many disclosed strict condom use as a response to a missed dose, while others reported abstaining from sex entirely for from two to seven days. Some participants communicated that in the event of a missed dose, they would consciously engage in sexual behaviors that convey lower HIV transmission risk, such as mutual masturbation or oral sex, in lieu of anal sex. Some reported that a change in sexual behavior was determined by assessing how much PrEP remained in their system and, therefore, their sexual behavior was contingent upon how many doses were missed (explored in next section).

“I think it would certainly make me less likely in the next week or so to have unprotected receptive anal sex...I think that’s probably about the only activity that I would alter my behavior around a missed dose for.” (30262, 46 years old, White)

“I just wouldn’t engage in anything that I felt was risky, so I maybe stick to oral or mutual masturbation or something like that if I knew that I had missed a couple of doses.” (30333, 34 years old, Black)

“I kind of pretend for a couple weeks that I’m not on PrEP, you know, strict condom use. But that’s about it... it wouldn’t change the acts or the frequency or the partners.” (30136, 27 years old, White)

“I would say on the days that I didn’t take PrEP I wouldn’t be on a [hook-up] app [looking for sex] or something. ‘Cause it’s like ‘oh well, missed my pill today.’” (30222, 23 years old, White)

“Oh, I’m definitely not going to be meeting up with somebody [for sex]. I’m definitely not going to be doing any anal sex at all tonight...” (30293, 26 years old, White)

Just under 10% explained that their decision to adjust their sexual behavior in response to missing PrEP doses was contingent upon how many doses were missed.—Often participants cited one missed dose as “safe” and thus did not believe it necessary to alter their sexual behavior. This assessment hinged on the participant’s perception of how their protection decreased with each missed PrEP dose. Further, those endorsing this system of risk assessment cited adjusting their sexual behavior toward safer sex practices in the event of multiple missed doses. However, the number of missed doses resulting in sex behavior changes varied from person to person.

“Well not missing one, but when I was on it originally, I remember I missed three days and I was like, ‘Okay, I’m not having unprotected [sex] for like four days’” (30313, 28 years old, White)

“If it’s only one [dose], no. I mean now if it was two [doses], I might wait a day or whatnot, but I’m aware that if you don’t take it every day, that the effectiveness does go down. But as I understand it, it doesn’t really go down unless you miss several consecutive [doses], so one here or there...you’re still pretty good [protected].” (30342, 31 years old, Multiracial)

“For when I missed a day, no. No. In the past, if I had missed like a week, then I would, you know, go back to doing the full 21 days of [daily dosing]...before even trying to have sex.” (30185, 30 years old, Latino)

DISCUSSION

In this study of racially and ethnically diverse GBM who were on PrEP, we found that most participants generally reported being highly adherent overall. High overall adherence may be emblematic of the fact that *PrEP and Me* participants were not receiving PrEP as a part of a clinical trial or demonstration project (i.e., they sought out PrEP because they were motivated to benefit from its protection, and they were living in a time in which the clinical effectiveness of PrEP has been established). Nevertheless, nearly all participants reported missing at least one PrEP dose since starting PrEP—reflecting the need for a deeper understanding of GBM’s behavioral responses to missed doses. When responding to the question on how they make-up for a missed PrEP dose, nearly half of participants reported taking their PrEP as soon as they remembered. More than half of participants reported maintaining their regular interval—waiting until their next scheduled dose and continuing on with their regimen. Currently, CDC guidelines suggest that, in the event of a missed dose, patients should take their pill as soon as they remember—unless this would mean taking two pills within a few hours of each other, in which case patients are advised to wait until their next regularly scheduling dosing time. With that in mind, the medication-taking behaviors of this cohort generally aligned with clinical guidelines (CDC, 2014).

In addition, just under half of participants reported taking their pill within a 24-hour period after their missed dose. There was significant overlap across these two responses, with participants often making a calculation about the time that had elapsed since their missed dose, in order to inform their dose make-up strategy. These results are consistent with CDC clinical guidelines, which suggest taking “a single missed dose as soon as they remember it, unless it is almost time for the next dose” (CDC, 2014). However, approximately one in ten participants maintained an endorsement of a double-dosing strategy in the event of a missed dose, which is inconsistent with clinical guidelines for daily dosing. Currently, double-dosing strategies are being investigated as a component of “on-demand” PrEP dosing (Glidden, Anderson, & Grant, 2016; Seifert et al., 2015).

Although half of participants reported no change in sex behavior as a result of a missed PrEP dose, the other half reported adjusting their sex behavior. It was not always clear why those who endorsed “no change” made their choice (which is a limitation of our interview protocol and certainly an area for future research). However, some participants expressed an understanding that their protection from PrEP did not decrease significantly after missing only a *single* dose. Accordingly, the participants’ decisions were based on how many doses

they missed, with a greater number of missed doses increasing the likelihood of subsequent modifications to their sexual behavior. When asking participants about how their sex behaviors changed as a result of a missed dose, many were motivated to share their beliefs about their protection from PrEP in the event of missed doses, and, more often than not, this was in line with recent findings from other studies—suggesting that our sample had fairly high PrEP health literacy.

At present, we lack clear pharmacological data on how the risk of HIV transmission for individual sex acts changes as a result of fluctuations in PrEP blood concentrations. Currently, studies suggest that a 700 fmol PrEP blood concentration (the equivalent of four daily doses per week) provides sufficient protection against HIV (Baeten & Grant, 2013; Robert M Grant et al., 2014). However, there are no clear guidelines about how to counsel PrEP users on HIV acquisition risk across specific sexual behaviors for those who occasionally or frequently miss their doses (e.g., the risk of infection for receptive versus insertive anal sex when three doses are missed). Our analyses suggest that participants understand PrEP is most effective when taken as prescribed and that its efficacy declines when they miss doses. Nevertheless, we saw variation across participants in the behaviors they considered to be low risk after repeated missed doses. This pattern of findings suggests that, although there was a consistent *direction* that one's behavior should take after biomedical protection lapses, there was an inconsistent *magnitude* of behavior change reported by participants about how to respond to these lapses.

Limitations

This research has limitations that are important to consider in interpreting our findings. One benefit of the open-ended nature of our interview was that it allowed participants to describe their thought process and behavior regarding missed doses. In some cases, participants may have identified their most frequent medication-taking and sex behaviors and failed to recall less frequent patterns of behavioral response to a missed dose. Indeed, qualitative methods are used for hypothesis generation and not hypothesis testing and, thus, an adequately powered quantitative study would be needed to assess true prevalence. Had participants been presented with a list of options from which to “select all that apply,” recall might have improved; however, such an approach runs the risk of omitting novel strategies not pre-populated on the assessment. Thus, researchers should evaluate the strengths and limitations of both open-ended and closed-ended questions to investigate PrEP adherence among GBM and other populations. Further, we lack much specificity around how men came to the decisions they made (e.g., where they get information from and how they generated these beliefs). This would be particularly important for men who said their sexual behavior did not change following missed doses.

Participants were overall well-educated, employed, and made a living wage. This may be emblematic of “who” can gain access to PrEP; however, research on populations from a range of socioeconomic statuses is warranted. Our data were collected in 2015 and 2016, when PrEP was beginning to be adopted on a larger scale in NYC. We believe that many of our participants could best be considered “early adopters.” It may be that both GBM on PrEP at the time, as well as GBM willing to participate in a research study about their PrEP

use, are different from those adopting PrEP today. Also, adherence was self-reported, and this may be subject to bias.

By design, half of the recruited study participants were club drug users. We did not observe any differences in sexual behavior and medication-taking behavior responses between club drug users and non-users—that is club drug users appeared to endorse similar responses as non-club drug users in the same tone and frequency. However, it may be important to investigate the unique challenges to medication adherence of various subgroups of GBM. Although we did specify enrollment targets based on race or ethnicity, half of our sample was comprised of men of color. Whereas, prescription data suggest that the vast majority PrEP users are White (Bush et al., 2015; Snowden et al., 2017). Nevertheless, we did not observe racial or ethnic differences in strategies participants reported (in that there seemed to be roughly equal proportions of men of color endorsing a given strategy); however, this too is important to investigate in future studies.

CONCLUSION

The results of this study highlight that PrEP users make decisions about sexual behavior based on an assessment of their protection from PrEP. Although most participants reporting understanding that their protection from PrEP decreased with multiple missed doses, there was considerable variation in their beliefs about how much protection was retained for given sex act. This ambiguity marks an important opportunity for healthcare providers serving GBM taking PrEP to provide guidance, as well as the need for clearer pharmacological data about how variations in PrEP blood concentration protects against HIV across a variety of sex acts in the hours and days since the dosing lapse began. Providers who prescribe PrEP may want to offer a concrete understanding of PrEP's coverage in the event of missed doses. Since participants are making decisions about when to use condoms, or engage in specific sexual activities based on an assessment of their protection against HIV from PrEP, it is important for providers to emphasize consistent adherence practices, as well as provide an understanding of PrEP's diminished coverage after multiple missed doses.

Finally, although data suggest that PrEP is still highly effective even in the event of an occasional missed dose, it remains critical to understand patient behaviors in response to missed doses. This is especially relevant were PrEP to be approved for different dosing schedules (e.g., intermittent PrEP or on-demand PrEP), in which the timing of a dose becomes particularly important in order to maximize PrEP's efficacy (Glidden et al., 2016; Kibengo et al., 2013; Molina et al., 2015; Parsons, Rendina, Groves, Ventuneac, & Mustanski, 2015).

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Table 1.Descriptive demographic characteristics of gay and bisexual men taking PrEP in NYC 2015–2016, *N* = 103

Characteristics	M ± SD or <i>n</i> (%)
Age	32.5 ± 8.7
Race/Ethnicity	
Black	12 (11.7)
Latino	27 (26.2)
White	52 (50.5)
Multiracial	9 (8.7)
Other	3 (2.9)
Education	
High School diploma, GED or less	6 (5.8)
Some College	23 (22.3)
4-year College Degree	53 (51.5)
Graduate School	21 (20.4)
Employment	
Full-time	60 (58.3)
Part-time	24 (23.3)
Unemployed	19 (18.4)
Income	
Less than \$10,000	13 (12.6)
\$10,000 – \$19,999	7 (6.8)
\$20,000 – \$29,999	14 (13.6)
\$30,000 – \$39,999	11 (10.7)
\$40,000 – \$49,999	14 (13.6)
\$50,000 – \$74,999	22 (21.4)
\$75,000 or more	22 (21.4)
Length of time on PrEP	
1–3 Months	15 (14.4)
3–6 Months	24 (23.1)
6–12 Months	27 (26)
1–2 Years	28 (26.9)
More than 2 Years	10 (9.6)
Missed taking PrEP in the last 90 days?	
Yes	63 (61.2)
No	40 (38.8)
How long ago did you miss a dose? Among <i>n</i> = 63	
Today	1 (1.6)
Yesterday	2 (3.2)
2–3 days ago	9 (14.3)
4–7 days ago	18 (28.6)
2–3 weeks ago	15 (23.8)

Characteristics	M ± SD or n (%)
4–6 weeks ago	9 (14.3)
7–9 weeks ago	6 (9.5)
10–12 weeks ago	3 (4.8)

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