

Put Yourself First: Acceptability of a Culturally Tailored eHealth Video Intervention to Promote PrEP Awareness and Uptake Among Young Black Women

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Abstract

Background: Black women experience disproportionately high rates of HIV infection, yet their awareness and uptake of pre-exposure prophylaxis (PrEP) remain critically low. Barriers such as stigma, misinformation, and healthcare inequities hinder PrEP utilization. eHealth interventions, particularly culturally tailored educational videos, have shown promise in improving health literacy and addressing disparities in underserved populations.

Objective: This study aimed to develop and evaluate a culturally relevant eHealth video intervention to increase awareness and uptake of PrEP among young Black women. The intervention sought to address misconceptions, promote self-care, and encourage open conversations about HIV prevention.

Methods: The study employed a four-phase approach: (1) exploratory focus groups to identify barriers and facilitators to PrEP uptake; (2) intervention mapping guided by the Information-Motivation-Behavioral model; (3) content creation of a three-part animated video series incorporating culturally tailored messaging; and (4) evaluation focus groups to assess the video's usability, acceptability, and impact on PrEP knowledge. Participants (N=26) were young Black women aged 18–25 recruited from New York City community-based organizations and social networks.

Results: Participants found the video engaging and easy to follow, with its conversational and relatable style making information about PrEP accessible and natural. The video effectively corrected misconceptions and reinforced PrEP's relevance for women, though some participants raised concerns about partner perceptions and suggested balancing discussions on side effects. While the video improved knowledge of PrEP's availability, consistent use, and safety, participants recommended incorporating real-life scenarios, clearer messaging on adherence, and practical strategies like home testing to enhance its impact.

Conclusions: This study highlights the potential of culturally tailored eHealth interventions to improve PrEP awareness and utilization among young Black women. By addressing barriers at personal, social, and structural levels, such interventions can empower women to prioritize their sexual health and reduce disparities in HIV prevention. Future research should explore the long-term impact of these interventions and refine their design to enhance realism and engagement. Clinical Trial: Not applicable

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Keywords: *PrEP, HIV prevention, Black women, eHealth, health disparities, culturally tailored interventions, health education, stigma*

Introduction

Despite Black women's vulnerability to HIV transmission and the availability of pre-exposure prophylaxis (PrEP) in the United States, many Black women continue to lack essential information about its benefits and accessibility^{1,2}. A report from the Centers for Disease Control and

Prevention (CDC) indicated that only a small percentage of eligible Black women were aware of PrEP, and even fewer were utilizing it³, highlighting significant gaps in knowledge and accessibility identified in the research on PrEP awareness and utilization among Black women⁴⁻⁶. Cultural and structural factors, such as inadequate representation in PrEP advertising and provider discomfort discussing HIV prevention options with Black women, further hinder PrEP adoption⁷. Previous research has highlighted the importance of culturally relevant messaging and the need for targeted outreach efforts to increase awareness and acceptance of PrEP among Black women to address these knowledge and resource gaps⁸⁻¹⁰. These studies underscore the necessity of tailored educational interventions to address the unique concerns and barriers faced by Black women regarding PrEP, such as low perceived HIV risk, medical mistrust, stigma, and limited healthcare access^{5,7,11,12}. Addressing these multifaceted challenges is crucial for increasing PrEP uptake and reducing HIV disparities among Black women.

Research suggests that animated educational videos can be effective tools for improving health knowledge and health literacy across diverse populations¹³⁻¹⁵. These videos are generally well-received by participants and can raise awareness, facilitate engagement, and reduce anxiety^{16,17}. Studies have demonstrated that video interventions are more effective than traditional methods, such as written materials, in enhancing comprehension of health-related information, especially among individuals with low literacy levels^{18,19 20,21}. Video interventions have been found to increase knowledge, reduce uncertainty in decision-making, and improve patient outcomes in clinical settings^{22,23}. Video interventions have shown promise in increasing knowledge, awareness, and intentions to use pre-exposure prophylaxis (PrEP) among various populations^{24,25}. Different multimedia formats, such as animation²⁴ and delivery channels, such as video messaging in mobile applications,²⁶ have been effective in increasing PrEP knowledge among Black American women. Studies have demonstrated that web-based PrEP educational videos can improve understanding and comfort in discussing PrEP with providers^{27,28}, especially during sexual history-taking²⁹. A recent

longitudinal study with young Black women reveals that barriers to PrEP initiation evolve over time, emphasizing the importance of ongoing support and education, such as integrating PrEP education into women's health clinics and developing culturally appropriate interventions³⁰. Overall, video-based interventions appear to be a valuable tool for enhancing health literacy and patient education across diverse healthcare contexts, including PrEP initiation^{18,31}.

The literature indicates that eHealth interventions, particularly video-based educational tools, can effectively increase awareness and knowledge about PrEP among Black women²⁴. By addressing the current gaps in awareness and utilizing engaging multimedia formats, there is potential to overcome barriers to accessing PrEP and ultimately improve health outcomes in this underserved population. The purpose of this study is twofold. First, we aim to develop an eHealth video specifically targeting Black women to increase their knowledge and awareness about PrEP. This video will serve as an educational resource, addressing misconceptions, providing vital information about the effectiveness of PrEP, and encouraging open conversations about sexual health. Second, we seek to gather feedback on the video's content and delivery to assess its effectiveness and identify areas for improvement. By using video as a medium to communicate information about PrEP, the proposed intervention aims to improve knowledge retention and empower Black women to make informed choices regarding their sexual health. As the following sections will illustrate, developing a culturally competent eHealth video is crucial to enhancing PrEP awareness and utilization among Black women.

Methods

Study Sample

Women were recruited from community-based organizations (CBOs) and through social networking sites in New York City. A member of the research team screened the women based on the following criteria: (1) aged 18 to 25; (2) self-identified as heterosexual; (3) self-identified as African American, Black, Caribbean Black, or multiethnic Black; (4) self-reported HIV-negative or with unknown HIV status; (5) reported oral, vaginal, or anal sex with a man in the past 12 months; (6)

current or past problematic substance use; and (7) residency in New York City.

Procedures

Study visits were conducted in English by trained research staff in a private space. After rescreening for eligibility into the study, participants underwent a detailed verbal informed consent process before data collection commenced. Eligible women were invited to participate in a Brief Assessment Battery (BAB) survey administered by tablet or paper and a focus group. The BAB comprised validated measures to assess women's initial knowledge of PrEP, HIV knowledge, sexual behaviors, relationship dynamics, self-efficacy, and HIV stigma. Focus groups were comprised of six to seven women and conducted at the CBO site. Four focus groups were completed with 26 participants (Group 1: n = 6; Group 2: n = 7; Group 3: n = 7; Group 4: n = 6) in English. The audio-recorded focus groups took approximately 2 hours to complete and were co-led by the first author and a trained research assistant. Discussions focused on perceived barriers and facilitators to oral PrEP utilization. Participants who completed focus groups were compensated \$45 for the completion of the study and a two-fare New York City Metrocard. The preserved confidentiality data was de-identified, stored in a secured location, and securely transferred electronically to investigators involved in the analysis. The Institutional Review Boards of the National Development Institute of Research, Inc. and New York University reviewed and approved the study.

Study Phases Overview

Overall, Figure 1 illustrates a comprehensive, phased approach to developing and evaluating an innovative intervention for improving PrEP awareness and utilization among Black cisgender women. The study employed a four-phase approach: (1) exploratory focus groups to identify barriers and facilitators to PrEP uptake; (2) intervention mapping guided by the Information-Motivation-Behavioral model; (3) content creation of a three-part animated video series incorporating culturally tailored messaging; and (4) evaluation focus groups to assess the video's usability, acceptability, and impact on PrEP knowledge. Each phase builds upon the previous one to comprehensively

understand barriers and facilitators, develop a tailored intervention, and evaluate its effectiveness. The study emphasizes cultural relevance, empowerment, and the normalization of HIV prevention to effectively address systemic and individual barriers.

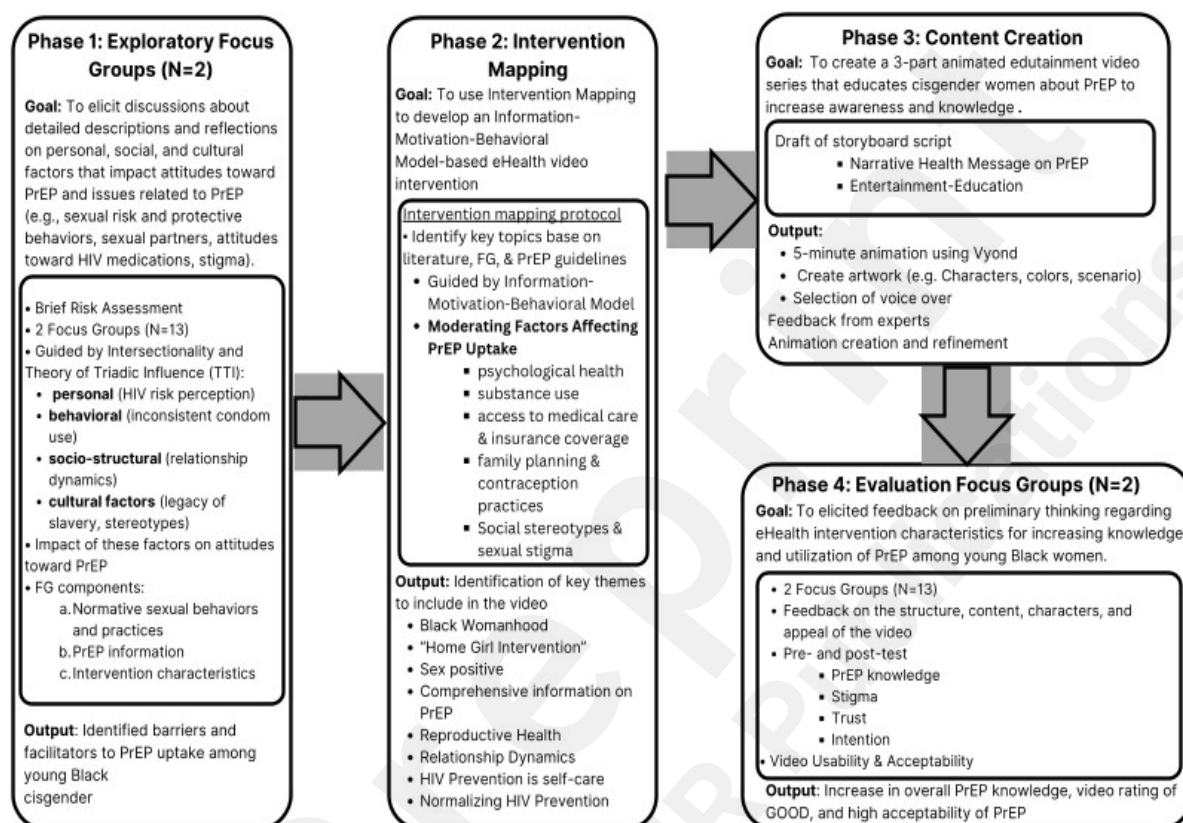


Figure 1. Study Phases

Data Analysis

Descriptive statistics were calculated for the focus group participants using IBM SPSS Statistics for Windows, Version 29.0.2.0³². Audiotapes of the focus group discussions were transcribed. The transcripts were imported into Dedoose³³ software for coding and analysis. Codes were identified by two lead analysts and a research assistant trained in qualitative methods using a multilayered strategy based on the topics the focus group guide addressed. Analysis occurred in two stages, corresponding to the inductive approaches of open coding and axial coding used in grounded theory. The primary author conducted the initial open coding phase. It involved an iterative process, during which codes were reorganized, redefined, divided, and grouped into larger

themes or experiences described by participants that characterized their perceptions of oral PrEP. The codebook was refined through comparison, categorization, and discussion of the interpretation of codes. The analyses took an inductive approach that involved the continual development and refinement of codes used to identify themes and interactions among phenomena and establish relationships within major themes. Finally, all rater themes and lists were independently reviewed and aggregated according to the transcript questions. This coding process allowed for the extraction and sorting of the text by themes, which helped elucidate the range of participant experiences and perceptions and enabled the exploration of new and unanticipated relationships, interactions, and patterns. Our goal was to understand the perspective of factors that facilitate and impede YBW's interest in PrEP and investigate the feasibility of using a brief e-health intervention to increase awareness and motivation for PrEP. Here, we present the formative research that supports the development of an eHealth video to increase knowledge and address challenges to PrEP uptake among YBW. All analysts worked separately to identify codes to ensure that themes represented the data consistently.

Results

Sample Description

Table 1 presents the demographic and socioeconomic characteristics of the 26 participants in the LOVE study focus groups. The mean age of participants was 22 years (SD = 2.6), and the majority (92%) were US-born. In terms of education, 54% had completed some college or trade school, while 40% had achieved a high school diploma or GED. Employment status showed that most participants were either unemployed (46%) or working part-time (39%). A significant portion of the group (73%) reported an annual income below \$19,999. All participants (100%) had health insurance, and 77% indicated having a primary care provider. Regarding relationship status, most participants (62%) were in committed relationships, with the remaining 39% identifying as single. These characteristics provide a detailed profile of the focus group participants, offering context for

understanding their perspectives and experiences.

Table 1. Description of LOVE study focus group participants (N=26)

Characteristics	N (%)
Age (Mean, SD)	22 (2.6)
US Born	
Yes	24 (92)
No	2(8)
Education	
Less than High School	1 (4)
High School or GED	10(40)
Some College/ Trade school	14 (54)
College degree	1(4)
Current Student	
Yes	11 (42)
No	15(48)
Employment	
Full-time	4(15)
Part-time	10(39)
Unemployed	12(46)
Annual Income	
Less than \$19,999	19(73)
\$20,000-39,000	2 (8)
More than \$40,000	5 (19)
Health Insurance	
Yes	26 (100)
No	0
Primary Care Provider	
Yes	20 (77)
No	6(23)
Has Children	
Yes	6(23)
No	20 (77)
Relationship Status	
Committed	16(62)
Single	10 (39)

Phase 1: Exploratory Focus Groups

In Phase 1, the study conducted two focus groups (n=13) to explore personal, social, and cultural factors influencing attitudes toward PrEP. Guided by the intersectionality approach^{6,34} by using Black Feminist Thought³⁵ and the Theory of Triadic Influence (TTI)³⁶, this phase examined personal factors like HIV risk perception, behavioral factors such as inconsistent condom use, and socio-structural influences like relationship dynamics and cultural stereotypes.

Exploratory Focus Group Discussion: Theoretical Basis and Content

The frameworks of the Black Feminist Thought³⁵ and the Theory of Triadic Influence (TTI)³⁶ guided the development of the focus group guide. TTI explains behavior as the result of three causes of behavior (*intrapersonal, interpersonal, and sociocultural-environmental*) that flow through several levels of causation (ultimate → distal → proximal)³⁶. Factors in each of the three streams interact with factors in the other streams and converge on decisions/ intentions as the final predictor of behavior³⁶. The study aimed to create an eHealth health education video on PrEP targeting Black women. Therefore, it is important to identify a theory, such as Black feminist thought, that reflects Black females' social location and those individuals that they interact with³⁵. Black feminist thought further acknowledges that Black women have a shared history and heritage that impacts the multiple oppressions (race, class, and gender) on their lives³⁵. The use of both Black feminist thought and TTI supports an analysis that encompasses the multilevel influences of PrEP utilization among young Black women, allowing Black women to define their own realities as it is applied to biomedical HIV prevention strategies. The discussions addressed normative sexual behaviors, attitudes toward HIV prevention, and key characteristics of interventions. The primary output of this phase was identifying barriers and facilitators to PrEP uptake, providing a foundation for subsequent phases.

Focus group discussions were divided into three parts. Part One the women's perceptions of normative sexual behaviors, intimate relationships, and sexual risk, including approaches to risk reduction and the personal, behavioral, and socio-structural factors that influence risk and risk-reduction attitudes and behaviors. At the beginning of Part Two, participants watched a five-minute video that explained oral PrEP (e.g., dosing schedule, cost, potential side effects, and how to access PrEP). This was intended to ensure that all respondents had accurate information about this medication. Additionally, participants were given a written summary of this information they could refer back to, if necessary, during the subsequent discussions. Next, participants were asked

what they liked and disliked about oral PrEP; respondents were encouraged to focus on specific likes and dislikes that could be unique to Black women. Part Three, participants elicited feedback on preliminary thinking regarding eHealth intervention characteristics for increasing knowledge and utilization of PrEP among young, heterosexual Black women.

Figure 2 categorizes factors influencing attitudes toward PrEP at individual, social, and structural levels, highlighting facilitators and barriers. At the individual level, facilitators include empowerment through having an additional HIV prevention method and prioritizing HIV prevention in sexual health practices. At the same time, barriers involve concerns about adhering to the regimen and potential long-term health effects. Social-level facilitators emphasize the importance of peer support, healthy patient-provider relationships, and improved communication about safer sex practices. In contrast, barriers include fear of rejection by partners and stigma associating PrEP use with infidelity or HIV. At the structural level, facilitators focus on improving accessibility to PrEP and providing culturally tailored education for Black women. At the same time, barriers include misinformation about PrEP guidelines and medical mistrust, with some participants citing conspiracy beliefs about pharmaceutical companies prioritizing profit over health. Together, these factors comprehensively understand the challenges and opportunities in promoting PrEP use. The primary goals of the exploratory focus groups were to elicit detailed descriptions and reflections on personal, social, and cultural factors that impact attitudes toward PrEP and issues related to PrEP (e.g., sexual risk and protective behaviors, sexual partners, attitudes toward HIV medications, stigma).

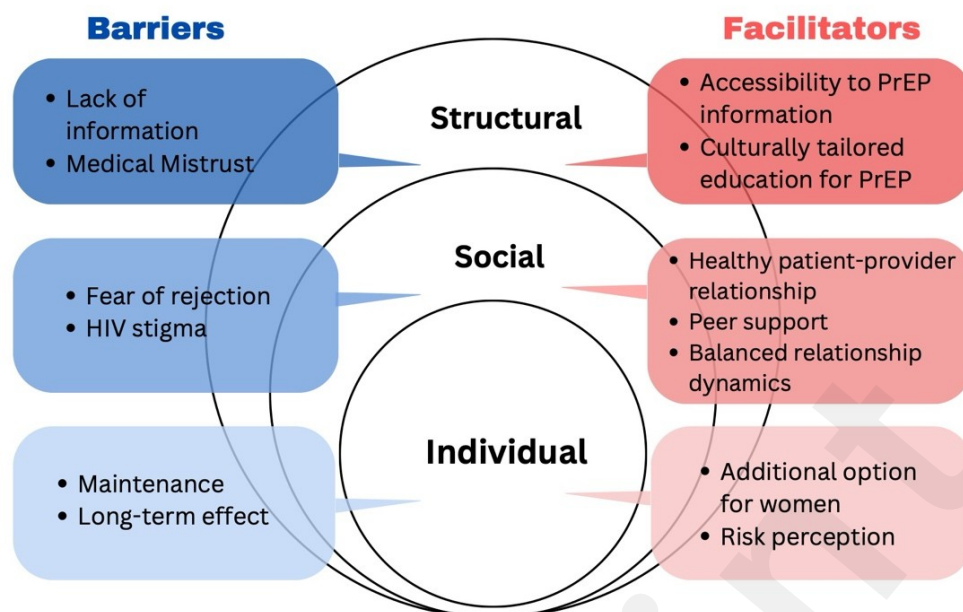


Figure 2. Summary of Facilitators and Barriers to PrEP utilization among Black women uncovered in the Exploratory Focus Groups based on the Triadic Theory of Influence

Phase 2: Intervention Mapping

During Phase 2, intervention mapping using the Information-Motivation-Behavioral (IMB) model was used to design the eHealth video intervention. This process synthesized findings from the literature, exploratory focus groups, and PrEP guidelines to identify relevant topics and moderating factors affecting PrEP uptake. Table 2 provides an overview of the key themes, which include sexual agency, peer support, comprehensive PrEP information, reproductive health, relationship dynamics, stigma, healthcare access, and HIV prevention as self-care. This phase emphasized the importance of culturally tailored messaging to address stigma, promote empowerment, and normalize HIV prevention by centering on Black womanhood.

Table 2. Key Themes from Exploratory Focus Groups

Key Theme	Description	Illustrative Quotes
Empowerment and Self-Care	The central message revolves around prioritizing personal health and well-being. Iman emphasizes the importance of taking proactive measures, like using PrEP, to protect oneself from HIV, advocating for self-care over societal expectations to put others first.	<i>"If we're just preventing ourselves from catching HIV, which is what most people don't want, then that shouldn't be a problem."</i>

Comprehensive PrEP Information	Educates about PrEP as an effective HIV prevention method, breaking down medical terminology and addressing its accessibility, side effects, and safety. It also dispels myths about HIV transmission and prevention among Black women.	"If PrEP was available tomorrow... I'd want to know how effective it is and what the side effects are."
Addressing Stigma and Misconceptions	Confronts stigma associated with PrEP, such as perceptions that it is only for gay men or those at high risk due to risky behaviors. It also challenges assumptions that Black women are not at risk or that using PrEP implies infidelity.	<i>"There's still stigma—like if a woman uses a condom or takes PrEP, people think she's hiding something or stepping out."</i>
Barriers to Healthcare	Highlights structural and social barriers that women face in accessing PrEP, including financial concerns, lack of awareness, and the burden of regular medical monitoring. Iman provides practical solutions, such as insurance coverage, assistance programs, and resources like the PrEP Locator.	<i>"Doctors and clinics should make things approachable; otherwise, people feel judged and don't go back."</i>
Gendered and Racial Health Disparities	It acknowledges the disproportionate impact of HIV on Black women and explores how systemic inequities and cultural factors contribute to their vulnerability. The dialogue addresses the complexity of Black women's lives and the need for tailored health interventions.	<i>"Just in general, people generalize Black women with stereotypes. Like we're overtly sexualized, loud, or don't know anything."</i>
Community and Peer Support	Emphasizes the role of friendship and community in spreading knowledge and supporting health decisions. Iman shares information with her friends, embodying the idea that women can uplift each other by sharing knowledge and resources.	<i>"Sometimes our friends' experiences are the only source of real advice we get on sex and protection."</i>
Reproductive Health and Family Planning	Touches on how PrEP fits into broader discussions of reproductive health, explaining its safety during pregnancy and its role in preventing HIV in serodiscordant couples aiming for conception.	<i>"When thinking about family planning, it's important to protect yourself first. There are ways to ensure both the health of the mother and the child, like using PrEP or ensuring both partners are tested and healthy."</i>
Sexual Agency	A recurring theme is that being	<i>"When I started learning about</i>

	informed about health options, like PrEP, empowers women to make decisions that align with their needs and circumstances. It highlights the value of understanding and advocating for one's health.	<i>HIV, I realized it's serious but manageable with the right tools like PrEP and education."</i>
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Phase 3: Content Creation

In Phase 3, the study developed a three-part animated edutainment video series to educate young women about PrEP (screenshots in Figures 3 and 4). The narrative incorporated health messages and entertainment-education principles to make the content engaging and relatable. The videos featured diverse characters and scenarios, designed using Vyond, and incorporated expert feedback for refinement. The final output was a 5-minute animation with tailored artwork, voiceovers, and refined content ready for deployment.

Put Yourself First (PrEP Ehealth Video)

Key themes from the exploratory focus groups (Figure 2 and Table 2) were identified to develop a video addressing the barriers and facilitators to PrEP uptake and increasing PrEP literacy. These themes collectively serve to educate, empower, and inspire Black women to take charge of their sexual health and to foster open, stigma-free discussions about HIV prevention. The script titled "Put Yourself First" is a conversational narrative designed to educate Black women about PrEP (pre-exposure prophylaxis), its benefits, and its relevance to HIV prevention. It unfolds through a casual lunch conversation among three women—Iman, Michelle, and Nikki—highlighting the misconceptions, barriers, and stigma surrounding PrEP while promoting self-care and informed health decisions.

The dialogue opens with Iman bringing up the topic of PrEP to her friends, Nikki and Michelle, who initially have limited knowledge about it. Iman explains that PrEP, specifically the drug Truvada, is a daily pill that prevents HIV infection and is not just for gay men or those living with HIV. She emphasizes that it provides an extra layer of protection, especially for women who may find it challenging to negotiate condom use. Michelle and Nikki voice common concerns,

including the notion that PrEP could imply infidelity, potential side effects, and the inconvenience of regular doctor visits. Iman responds to these concerns by stressing the importance of self-care and dispelling myths about how HIV spreads among Black women. She clarifies that the side effects are typically mild and diminish over time. Regular check-ups ensure safety. Iman also confronts societal norms that lead women to prioritize others over themselves, advocating for personal health as a priority.

The discussion expands to cover misconceptions about PrEP, including its compatibility with pregnancy and cost. Iman reassures her friends that PrEP does not negatively affect pregnancy and is a safer option for serodiscordant couples. She outlines financial assistance options, such as insurance coverage, Medicaid, and pharmaceutical support programs, and mentions resources like the PrEP Locator to help individuals find affordable access. The conversation concludes with the women agreeing on the importance of being informed about PrEP, even if it's not suitable for everyone. They recognize that knowledge is empowering and essential for self-love and health advocacy. The script ends with a reflection on the strength of women uplifting one another, reinforcing the message of community support and empowerment. Key details about PrEP are embedded within the video, such as its definition, eligibility criteria, and usage requirements. It also highlights its limitations, including the need for consistent use, ongoing medical supervision, and the importance of combining it with other preventive measures like condom use. The script is an educational and motivational tool, encouraging women to take charge of their health while fostering open dialogue and community support.



Figure 3. Screenshot 1 of *Put Yourself First* Video

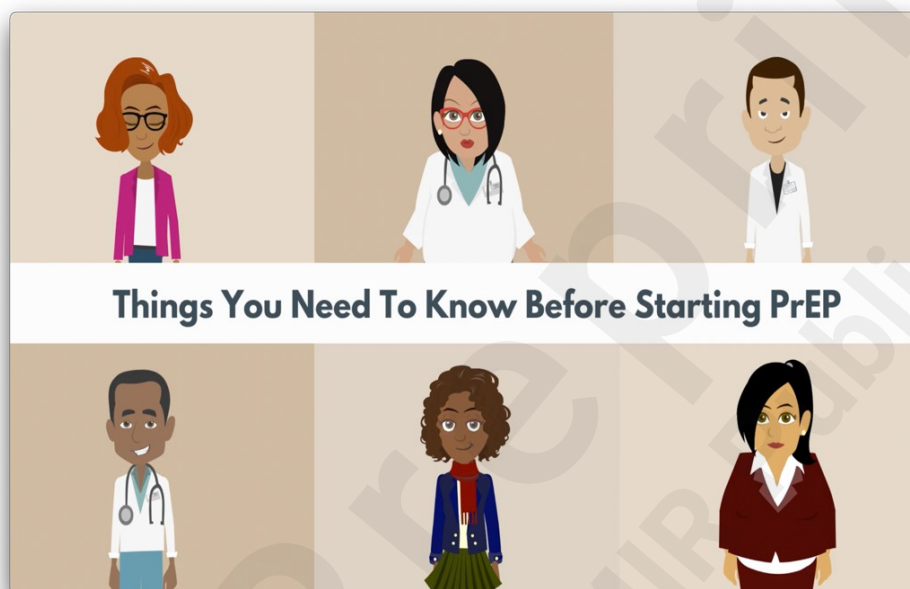


Figure 4. Screenshot 2 of *Put Yourself First* Video

Phase 4: Feedback from Explanatory Focus Groups

In Phase 4, the explanatory focus groups assessed the video's effectiveness through two focus groups (n=13). Focus group participants provided feedback on the video's usability, structure, and appeal.

Engagement and Effectiveness of the Video

Participants found the video effective in delivering essential information about PrEP in an appealing way. Participants found the video engaging and informative, describing it as "cute" and

effectively delivering essential information about PrEP. “It's a nice way to get information out.” For some participants, the video served as a valuable educational tool by introducing new information about PrEP's availability for women. As one participant noted, “It gives you more of that knowledge and info so you understand it a little bit more.” The video successfully addressed the misconception that PrEP is only for gay men, reinforcing its relevance for women. They appreciated how it addressed and clarified misconceptions, such as the belief that PrEP is only for gay men. As one participant shared, “It's helps with the message because the main person that was talking was a black lady and she was just basically letting them know it's not only for gay people and you know, whatever the case may be. And it's good for women to take it because it helps as an additional to the condoms you know.” The video's clear and direct approach effectively answered key questions, including women's use of PrEP, the importance of consistent use, and its safety during pregnancy. Many participants described the video's message as powerful and informative, providing a better understanding of PrEP's purpose and its role in preventing HIV. Participants valued the emphasis on PrEP being a choice for oneself, with one saying, “powerful message” and another adding, “It gives you more of that knowledge and info so you understand it a little bit more”.

Relatability and Authenticity

Participants found several scenarios in the video particularly relatable, highlighting examples that resonated with their experiences. Many appreciated the conversational style, noting the realistic portrayal of three friends casually discussing PrEP over coffee, mirroring how “home girls” would talk among themselves, which added credibility to the message. - “It was just a conversation between 3 home girls. I say home girls having coffee or whatever. You know it wasn't ... Well of course it's scripted, but it didn't feel scripted. It felt like you were just watching like three characters having a normal conversation.” This interaction mirrored how they might chat with their friends, making the message authentic. One participant noted that the friends' reactions to PrEP reflected how her peers would respond, with some being receptive and others skeptical. “I feel like that's how my friends

would react, the way her friends were reacting. You know you're trying to tell people things to help them, especially your friends, but everybody has their own opinion and everybody do things on their own time." Participants emphasize how the characters engaged in a mutual exchange of information about PrEP, making the learning process feel organic and authentic. As one participant highlight the collaborative and peer-driven learning aspect of the video, "The good thing was that all three of them was sharing information about PrEP to each other. They was actually learning from each other." Rather than a one-sided lecture, the conversation allowed them to educate and empower each other, reinforcing the idea that discussions about sexual health can happen naturally within social circles. This dynamic approach to learning made the information more relatable and impactful for viewers.

Navigating Relationships and Prioritizing Personal Health

Many participants resonated with the challenge of balancing personal health decisions with concerns about how a partner might perceive PrEP use, including fears of mistrust or judgment. A discussion centered around how introducing PrEP might raise questions in a relationship: "It probably would raise questions, but at the same time, then it's like, you know, why are you taking this all of a sudden?". A recurring theme in the discussion was the tendency for Black women to put others' needs before their own, particularly in relationships, making it difficult to prioritize personal health. The scenario where a character contemplates her partner's response to her using PrEP resonated deeply, reflecting common experiences among participants. One participant highlighted this dynamic, stating, "One of the characters was like, 'What about what he thinks,' and she was like, 'That's the problem with Black women. They always put people first before themselves.' I closely identify with that, but I never really thought about it. I think that's one of our biggest traits." Another participant echoed this sentiment, emphasizing the tendency to prioritize a partner's feelings over personal health: "She's not thinking about herself first. She's thinking about what he's going to think." Concerns about a partner's perception of PrEP use also emerged, as one participant explained, "I would say letting her partner know. I mean, like, to be honest, for some women, they would feel

some type of way because you're taking something to prevent them, so probably the man that she's with is going to feel like she's doing something."

Structural and Practical Barriers to PrEP Adherence

Participants found the video's depiction of a character's reluctance to adhere to the medical visits required for PrEP highly relatable. Many agreed that frequent doctor visits pose a structural barrier to adherence, as women often juggle multiple responsibilities, making it difficult to schedule regular healthcare appointments. To improve accessibility, some participants suggested including alternative options, such as home testing, in the messaging. One participant emphasized this point, stating, "The biggest issue is the inconvenience of having to go to the doctor. A home test would make a big difference. Along with your prescription, you get a home test." The video also sparked a discussion on the varied perspectives surrounding adherence and healthcare engagement. While some participants expressed a strong sense of personal responsibility in maintaining their health, others highlighted the challenges of staying consistent with medical visits. One participant explained, "I say it could, but it depends on who you are. Some people like to keep up with themselves... Like me, I'm the type of person like, I don't want anything to happen to me. I'm overprotective. I try to protect myself from a lot of stuff, you know. You only get one life. So some people are different." However, others acknowledged that even if someone is committed to taking PrEP, maintaining regular medical visits can be difficult. Another participant noted, "I think some people may just take the medication but just not go to the doctor how they're supposed to. It's not to say it's going to stop them from taking the medicine, but they just might not go to the doctor every three months like they're supposed to." This suggests that the video could further emphasize solutions for making healthcare access more convenient.

Additionally, the conversation explored the feasibility of taking PrEP alongside birth control, a common concern among participants. Some felt confident in their ability to manage both medications, with one stating, "Fine, because if you can remember to take your birth control pill

every day, you're going to remember to take the PrEP too." However, others pointed out the challenges of maintaining a daily medication routine. One participant shared, "I always miss my birth control pills because I have alarms. Sometimes I'm like, 'Oh my god. It's nine o'clock,' and I miss my pill. I'm not really good with pills, to be honest. I'm not really good with it, but I try my best or I'll ask somebody else to remind me. But if it's important like that, I feel like it should be a priority." This suggests that the video could acknowledge real-life struggles with adherence and offer practical strategies for staying on track. Beyond forgetfulness, concerns about misuse also emerged, with some participants expressing worry that individuals might treat PrEP similarly to birth control, believing they could compensate for missed doses or use it as a justification for engaging in riskier behaviors.

One participant explained, "I kind of just look at this stuff like, just like the birth control pill, women who use the birth control pill will use the PrEP. But I feel like people would be less responsible as far as, like, with the birth control pill. 'Oh, I just missed a day. I can just double up this day,' or 'I could have unprotected sex, but I know if I just take the pill...' or 'If I take the PrEP, if I double up this day, I can have unprotected sex this day.' People will abuse it like they abuse everything else."

This concern suggests that the video could benefit from reinforcing clear messaging about proper PrEP adherence and dispelling misconceptions about its use.

Empowerment and Health Autonomy

The video's message about taking PrEP as an act of self-care resonated strongly, reinforcing the importance of prioritizing one's health over others' opinions. One character in "Put Yourself First" emphasized taking PrEP for oneself rather than for others. Participants recognized the significance of making their own health decisions without feeling pressured to seek validation or

approval from others, especially their partners. One participant said, "I just don't feel like he needs to know that. It's going to lead to another conversation. I don't think he needs to know everything. They don't need to know every detail because they don't tell us every detail." This quote underscores the belief that women should have autonomy over their health choices and should not feel pressured to disclose every aspect of their healthcare decisions. Another participant reinforced this perspective, asserting, "You don't have to tell your partner about it," highlighting that PrEP use is a personal choice and women should feel empowered to take control of their sexual health on their own terms. Affirming this theme of self-determination, another participant stated, "You're doing it for yourself at the end of the day," further emphasizing the message that prioritizing one's health is an act of self-care and autonomy. Overall, these scenarios and messages were praised for authentically representing the realities and concerns of young Black women considering PrEP.

Critical Feedback and Suggestions for Improvement

Table 3 outlines critical feedback and suggestions for improvement from 13 participants in explanatory focus groups to improve the educational video about PrEP. While participants found the video informative, they identified areas for enhancement to increase its relatability and impact. Participants suggested making future videos more relatable by incorporating real-life characters and scenarios to enhance impact and engagement. Participants suggested incorporating more storylines that mirror women's daily lives and strategies on how to address the challenges and barriers to PrEP utilization, as well as adding depth to character interactions to make the video more engaging. They recommended replacing animations with real women to create a stronger emotional connection and enhance trustworthiness. Feedback on the content focused on balancing the information provided. While participants appreciated the inclusion of details about PrEP, they expressed concerns that highlighting side effects, such as nausea, could discourage viewers. They suggested presenting sufficient information to educate without overly emphasizing negative aspects, ensuring the benefits of PrEP remain central. Overall, the recommendations focus on making the video more realistic,

solution-oriented, and impactful by helping the target audience develop skills to address challenges related to accessing and maintaining PrEP adherence.

Table 3 . Suggestions for Improvement from Explanatory Focus Groups (N=13)

Area of Focus	Critical Feedback	Suggestions for Improvement
Scenario	<i>Realism and Relatability:</i> While the video was informative, some felt it was a bit “silly” and lacked the realism needed to resonate with the target audience fully. Participants suggested incorporating more realistic scenarios with real people rather than animated characters to make it more relatable and impactful.	<i>More Realistic Storylines:</i> Participants suggested adding a storyline that more authentically reflects women's daily lives and challenges to make the video feel more genuine and engaging. Adding more depth to the character dynamics and their interactions could make the video feel even more realistic.
Characters	<i>Character Relatability:</i> While the characters conveyed the message well, some participants felt the group’s dynamic was a bit unusual. They cited differences in fashion sense as making the group seem less believable as real friends.	<i>Using Real Characters:</i> Participants wanted to see real women (humans instead of animation) discussing PrEP, as they felt this would make the message more trustworthy and more straightforward to connect with.
Content	<i>Side Effects Mentioned:</i> Some participants felt that discussing potential side effects, like nausea, could be off-putting or scare potential users.	<i>Balancing Details:</i> Participants wanted enough information to be well-informed but felt that too many details, especially about side effects, might discourage viewers from considering PrEP.

Discussion

The feedback from participants about the animated video provides valuable insights into both the acceptability and limitations of the animated video aimed at promoting PrEP awareness among Black women. Overall, participants found the video engaging, informative, and effective in delivering key messages about PrEP’s purpose and benefits. Participants appreciated the conversational tone of the video and the relatable peer-to-peer format to convey complex PrEP information. However, they also identified several aspects that could be refined to enhance its impact and resonance with the target audience. These include enhancing realism, recommendations for navigating structural barriers, and relationship dynamics to improve PrEP adoption.

This study reinforces existing research demonstrating that culturally relevant, video-based educational interventions can effectively improve engagement and increase knowledge of PrEP among Black women^{24,27,37,38}. Several studies found that video-based interventions delivered online or in clinical settings can increase HIV testing rates, improve treatment adherence, and reduce risky sexual behaviors among men who have sex with men³⁹⁻⁴¹. Brief educational videos shown in waiting rooms were particularly cost-effective compared to other intervention types⁴². However, the effectiveness varied based on factors like HIV prevalence in the target population and intervention cost per person reached⁴². While animated videos are widely used in health education due to their ability to simplify complex concepts and appeal to diverse audiences, research has shown that successful HIV prevention interventions often incorporate skill-building and motivational enhancement components⁴³. Future research should explore how different eHealth modalities can incorporate skill-building and motivational enhancement components to influence PrEP adoption.

Despite the video's strengths, participants noted several challenges that could limit its acceptability. While the video was informative, some participants found the use of animation somewhat limiting in fostering deep emotional connection and trust. They suggested incorporating real-life testimonials from women who use PrEP, live-action scenarios, or documentary-style storytelling on topics such as conversations with partners, healthcare visits, or navigating daily life while on PrEP to enhance authenticity. There was a strong desire to see more authentic scenarios depicting real challenges women face when discussing PrEP with partners and healthcare providers, such as fear of judgment, accusations of infidelity, or negative partner reactions⁶. While women view PrEP as a tool for maintaining health and relationships, women's romantic feelings and expectations can affect their risk perceptions and interest in the utilization PrEP⁴⁴. Imbalanced relationship dynamics, including power struggles, infidelity concerns, and trust issues, significantly influence women's PrEP decision⁴⁵. In addition, framing PrEP within a sex-positive, empowering context that aligns with women's reproductive values may increase uptake^{46,47}.

Beyond awareness, participants highlighted persistent structural barriers to PrEP adoption among Black women, including PrEP stigma, difficulty accessing healthcare, concerns about frequent medical visits, and medical mistrust^{48,49}. While the intervention successfully informed participants about PrEP's effectiveness, it did not fully address logistical concerns, such as navigating the healthcare system, financial accessibility, or alternative care models like pharmacy-based PrEP access or telehealth services. To enhance the impact of future interventions, messaging should include practical strategies to overcome these barriers, such as highlighting mail-order PrEP services, home HIV/STI testing kits, and financial assistance programs. Incorporating these elements could make PrEP education more actionable and directly address real-world access challenges young Black women face.

Limitations

A notable strength of our study is its user-centered approach; however, there are limitations to consider. First, the generalizability of our findings may be limited because participants were recruited from a single urban location, which may restrict the representation of diverse settings and experiences among Black women living in the United States, which may not capture regional differences in PrEP access and stigma. However, the women included in our study did show concerns for similar barriers to PrEP use as women in rural settings or the Southern U.S., where HIV disparities are high among Black women. This highlights the importance of understanding sociocultural factors that impact PrEP adoption. Second, although data collection continued until thematic saturation was reached, the sample size was relatively small, and some perspectives or additional themes may have been missed. Third, the animated video has yet to be formally tested for its long-term effectiveness in changing behaviors. The primary purpose of the video, however, is to increase knowledge and serve as a catalyst for dialogue between women and their healthcare providers, complementing routine sexual healthcare discussions. Lastly, while technological interventions such as animations have shown efficacy in other health education domains, further

research is needed to confirm the effectiveness of this specific tool in improving PrEP awareness and uptake among Black women. Despite these limitations, this study lays critical groundwork for future culturally tailored eHealth interventions aimed at reducing disparities in HIV prevention.

Implications for Future Interventions

The findings indicate that while animated videos can effectively raise awareness, a more human-centered approach may enhance their impact among Black women. Research indicates that animated videos can effectively raise awareness and educate Black women about health topics like HIV prevention and clinical trials^{24,37}. These videos can improve understanding, increase confidence, and address barriers to participation^{37,50}. However, a more human-centered approach may enhance their impact, particularly among Black women. Incorporating community feedback and cultural relevance in the design process can increase ownership and resonance with the target audience¹⁷. Health narratives have significantly persuasive effects on Black women's attitudes, beliefs, intentions, and behaviors⁵¹. Considering the impact of racialized and gendered stereotypes on Black women's well-being^{52,53}, a culturally sensitive, narrative-based approach may be more effective in addressing health disparities and promoting positive health outcomes in this population. Future interventions should create content that provides information, validates women's lived experiences, and addresses their unique concerns. Incorporating a more nuanced, intersectional perspective that recognizes the complexities of race, gender, and socioeconomic status could make PrEP messaging more compelling and relevant^{6,16,54}. Intersectional approaches recognizing the complexities of race, gender, and socioeconomic status are essential for addressing disparities^{55,56}. Importantly, interventions should avoid further stigmatization through targeted messaging and instead focus on inclusive, broad-based approaches that empower women and leverage peer testimonials^{55,57}.

Furthermore, the results highlight the importance of community involvement in developing health communication strategies. Engaging Black women in the design and development process could ensure that the messaging accurately reflects their perspectives and meets their needs. This

collaborative approach could enhance the authenticity of the content and improve PrEP uptake in this population. Moreover, straightforward yet sensitive addressing of structural barriers, such as insurance challenges^{58,59}, stigma, and medical mistrust,⁶⁰ could further enhance engagement and trust in PrEP messaging. Integrating feedback from the target audience at each stage of intervention development will be essential for creating effective and culturally competent health communication strategies. Overall, culturally appropriate content, visual appeal, and representation of Black women in health messaging are key factors in engaging this population across various platforms.

Conclusion

This study highlights the critical need for culturally tailored interventions to enhance PrEP awareness and utilization among young Black women, a group disproportionately impacted by HIV. This research underscores the importance of utilizing innovative, engaging, and culturally relevant educational tools to address the ongoing barriers of stigma, misinformation, and healthcare inequities. The findings show that eHealth interventions, especially animated videos, can effectively raise awareness, dispel misconceptions, and encourage informed decision-making regarding PrEP. However, the study also identified areas for improvement, particularly in making the content more realistic and relatable. Integrating authentic scenarios, human-centered narratives, and deeper explorations of relational and structural dynamics could greatly enhance the video's impact. Addressing these limitations through collaborative approaches that involve the target audience in the design process will be crucial in creating interventions that resonate and promote behavior change. Future research should build on these findings by examining the long-term effects of such interventions on PrEP uptake and adherence. Expanding the research to include additional settings, platforms, and intersectional considerations could further increase the reach and effectiveness of PrEP education. Ultimately, this study emphasizes the transformative potential of culturally competent and innovative health communication strategies in tackling disparities and empowering Black women to take control of their sexual health. Centering their voices and lived experiences can

lead to more inclusive and impactful HIV prevention efforts. As we continue to refine PrEP interventions, it is essential to develop content that resonates strongly with the intended audience, acknowledges their lived experiences, and empowers them to make informed choices about their sexual health.

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