

Bon Sante (Good Health): Factors Influencing PrEP Use Among Haitians/Haitian Americans

Candice A. Sternberg^{1,2} • E. Valerie Daniel³ · Dora Marcelin⁴ · Maurice Junior Chery⁵ · Krisna Maddy¹ · Danelle Richard¹ · Tanya Thomas¹ · Jovanka Ravix¹ · Joshua Warner¹ · Micaelle Titus⁶ · Aline Francois⁷ · Joseph Borick⁸ · Daniel J. Feaster⁵ · Susanne Doblecki-Lewis¹ · Deborah L. Jones⁹ · Maria L. Alcaide^{1,4,5} · Sannisha K. Dale³

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Abstract

Background The HIV/AIDS epidemic has disproportionately affected Black individuals in the USA, and this health disparity has increased over time. Despite the effectiveness of pre-exposure prophylaxis (PrEP) as a prevention tool for HIV, there are disparities in its use, and uptake of this intervention remains low among racial and ethnic minorities, including Haitians/Haitian Americans. In this study, factors influencing PrEP use among Haitians/Haitian Americans in Miami, FL, are explored to provide necessary data to address disparities.

Methods The research team collaborated with local organizations to recruit 30 individuals (Haitians/Haitian Americans) between February 4 and October 1, 2021, and conducted semi-structured interviews. All interviews were audio-recorded and transcribed, and NVivo® was used to analyze the transcripts for emergent themes.

Results The study sample comprised 30 adults of Haitian descent in Miami, FL (50% female, approximately 67% with a high school education or more, mean age = 43.7 ± 13 years, and 74.2% born in Haiti). Four primary themes emerged from the analysis: (1) limited PrEP awareness, (2) underutilization of PrEP, (3) inadequate discussion of HIV prevention strategies, and (4) PrEP delivery encompassing barriers and facilitators for PrEP delivery and promotion strategies.

Conclusion This study indicated that there is a critical need to increase Haitians/Haitian Americans' knowledge regarding PrEP. Health communication interventions tailored specifically for Haitians/Haitian Americans that target stigma, attitudes toward HIV, and risk perception may be significant in increasing PrEP in this population.

Keywords Racial disparities \cdot PrEP \cdot HIV \cdot HIV disparities \cdot Haitian descent

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[☐] Candice A. Sternberg c.aurelus@miami.edu

Department of Medicine, University of Miami Miller School of Medicine, Miami, FL, USA

Division of Infectious Disease, Department of Medicine, University of Miami Miller School of Medicine, 1120 NW 14th Street #858, Miami, FL 33136, USA

Department of Psychology, University of Miami, Coral Gables, FL, USA

Department of Obstetrics and Gynecology, University of Miami, Miami, FL, USA

Department of Public Health Sciences, University of Miami Miller School of Medicine, Miami, FL, USA

⁶ Community Health and Empowerment Network, Miami, FL, USA

Family Action Network Movement, Miami, FL, USA

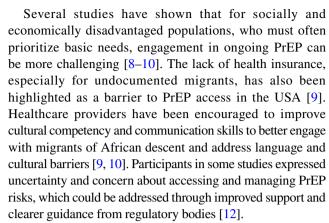
Miami Veteran's Affairs Medical Center, Miami, FL, USA

Department of Psychiatry & Behavioral Sciences, University of Miami Miller School of Medicine, Miami, FL, USA

Background

In the USA, Human Immunodeficiency Virus (HIV) remains a significant public health issue, with an estimated 1.2 million people living with HIV [1–3]. The Centers for Disease Control (CDC) estimates that in addition, approximately 1.2 million people would benefit from comprehensive HIV prevention strategies, specifically pre-exposure prophylaxis (PrEP) [2, 3]. Current CDC guidelines recommend that all sexually active adults and adolescents should be informed about PrEP [4]. For oral PrEP to be prescribed for sexually active individuals, one must have had anal or vaginal sex in the past 6 months and any of the following: a history of inconsistent or no condom use with sexual partner(s), a bacterial sexually transmitted infection (STI) in the past 6 months, or a sexual partner living with HIV [4]. PrEP is also recommended for those who inject drugs and share needles [4].

Black individuals bear the greatest burden of HIV throughout the USA and are still less likely than White individuals to take PrEP [2-5]. In 2021, 40% of new HIV diagnoses in the USA were of Black individuals suggesting that the population is severely underutilizing the preventative regimen [2]. Among US cities, Miami, FL, has one of the highest incidences of new diagnoses. Since the beginning of the epidemic, Black and African American individuals have been disproportionately affected by HIV, and the disparities have increased over time [2–4]. Although Black individuals account for 14% of the Miami-Dade County population, they constituted 24% of newly diagnosed HIV cases in 2020 [5]. Haitians and Haitian Americans account for an estimated 8.2% of the population in Miami-Dade County [6]. Among this group, it is difficult to determine the relative percentages of Haitian Americans and Haitian-born individuals. Notably, among new HIV diagnoses in Miami, 5.5% are of Haitianborn individuals [7]. The route to HIV prevention is not a singular one. Recognizing that certain socio-economic and environmental factors affect HIV risk can help in developing structural approaches for prevention. The CDC also reports other demographic characteristics, such as age, education, socioeconomic status, location, and housing status, which are associated with HIV prevalence, as it is understood that the use of preventative measures varies in different populations [2]. This paper focuses on PrEP knowledge, attitudes, practices, and preferences for use among Haitians/Haitian Americans living in Miami, FL, via interviews with community stakeholders and members. There is a gap in sexual health literacy among migrants of African descent regarding HIV self-risk perception and PrEP knowledge, including among Haitians/Haitian Americans [8–10]. Low HIV self-risk perception and lack of PrEP knowledge create barriers to PrEP use, particularly for Black migrants who are uncertain about its efficacy, required clinical follow-up, and side effects [8–11].



Awareness of PrEP for HIV prevention is growing overall, but little is known about the knowledge or willingness to use PrEP among Haitian/Haitian Americans [13]. Given the lack of use of PrEP among Black individuals, and the upcoming potential expansion in PrEP modalities and methods of delivery [14], understanding the reasons and preferences for PrEP among Haitians/Haitian Americans is critically important. The multiple studies proving the effectiveness of PrEP suggest that to lower the rates of HIV incidence and prevalence in the Haitian community, PrEP must be more widely utilized [15, 16]. This is especially important among those who inject drugs and share needles and among those who are sexually active, having anal or vaginal sex in the past 6 months, in combination with any of the following: history of inconsistent or no condom use with sexual partner(s), bacterial STI in the past 6 months, or a sexual partner living with HIV [4].

To understand the differences in utilization of PrEP, it is vital to recognize that Haitians/Haitian Americans face unique barriers to care related to socioeconomic status and insurance [17, 18]. HIV stigma has impacted Haitians/Haitian Americans for over three decades [19]. In the 1980s, prior to the scientific community naming HIV, AIDS was labeled "the 4H disease," standing for Haitians, homosexuals, hemophiliacs, and heroin users [19]. At that time, the 4Hs were thought to represent risk factors for HIV [19]. We now reject the discriminatory 4H labeling and know that the risk factors for HIV are more broad and include sexually active individuals without respect to ethnic or racial background [4]. This historical stigmatization, however, amplified barriers to receiving care for Haitians/ Haitian Americans [19]. In addition, Haitian health belief systems, cultural barriers, the cost of healthcare, and lack of transportation may have played a role in HIV disparities [20, 21]. This population also faces linguistic barriers and those related to immigration status and, fear of deportation, or government harassment [17, 20, 21]. Furthermore, some Haitian immigrant communities have very little knowledge about HIV/AIDS prevention [17].



This study utilizes interviews with community stakeholders and community members and focuses on PrEP knowledge, attitudes, practices, and use preferences among Haitians/ Haitian Americans living in Miami. Results can be used in developing PrEP interventions for this population with a goal of ultimately decreasing new HIV diagnoses.

REDCap (Research Electronic Data Capture (REDCap®), an application which allows for data storage and descriptive statistics) by the study staff [22]. The survey assessed race and ethnicity, date of birth, gender, age, education level, religion, housing, income, work/school status, and country of birth. Sociodemographic assessment data are in Table 1.

Methods

Study Design and Procedure

The Bon Sante (Good Health) study used a qualitative research design with a general inductive approach to analyze data. The research entailed sociodemographic surveys and semistructured interviews conducted with individuals of Haitian descent residing in Miami, FL. The objective was to examine the perspectives of community stakeholders and members concerning PrEP. The study recruited 30 Haitians and Haitian Americans by partnering with local organizations including the Family Action Network Movement and Community Health and Empowerment Network. Both organizations promote wellness through providing information regarding common health conditions, such as diabetes and high blood pressure, in the Haitian community in Miami, FL. The research staff were bilingual in English and Haitian Creole. The staff included both women and men with experience in qualitative research. Data were collected in Miami, FL, between February 4, and October 1, 2021, at multiple sites, including churches and community-based organizations. Participants were recruited through convenience sampling. The principal investigator, research associate, community consultant, and three research team members conducted the interviews. The staff conducted the study in English or Haitian Creole, and all participants gave verbal informed consent. The study team conducted 30 sociodemographic surveys and semi-structured interviews, including 15 with community stakeholders and 15 with community members. Bilingual researchers of Haitian descent conducted the interviews over the phone or in private rooms. The interviews lasted between 45 and 60 min and were audiorecorded and then transcribed verbatim. Interviews in Haitian Creole were transcribed and translated into English text. Participants received \$30 gift cards for their participation. The University of Miami's Institutional Review Board approved this study.

Measures

Sociodemographic Assessments

A sociodemographic survey was administered verbally to study participants. Their responses were placed in

Table 1 Demographic characteristics of 30 participants

Variables	
Mean age (SD)	43.7 (13.00)
Gender $N(\%)$	
Female	15 (50.0%))
Male	14 (46.7%))
I choose not to answer	1 (3.3%)
Birthplace N (%)	
Haiti	23 (74.2%)
USA	6 (19.4%)
Other	1 (6.4%)
Education $N(\%)$	
Some 12th grade or lower	9 (30.0%)
High school graduate or GED	3 (10.0%)
Some college/college graduate	12 (40.0%)
Graduate school	5 (16.7%)
I choose not to answer	1 (3.3%)
Religion $N(\%)$	
Christian (Catholic, Baptist, Protestant)	26 (84%)
None	4 (16%)
Housing arrangement $N(\%)$	
Renting a house or apartment	20 (66.7%)
Living in a house or apartment owned by you or someone in your household	8 (26.7%)
Other (temporary/transitional stay)	2 (6.6 %)
Household income $N(\%)$	
Less than \$5000	4 (13.3%)
\$5000-\$24,999	9 (30.0%)
\$25,000–\$49,999	13 (43.3%)
\$50,000 or greater	3 (10.0%)
I choose not to answer	1 (3.3%)
Employment $N(\%)$	
Full-time/part-time work	21 (70.0%)
School	3 (10.0%)
No school nor work	3 (10.0%)
On disability	3 (10.0%)
Mode of referral to the study N (%)	
Community partners/research staff	23 (76.7%)
Flyers	4 (13.3%)
Healthcare provider (i.e., nurse, doctor, counselor)	1 (3.3%)
I choose not to answer	3 (6.7%)



Semi-structured Interviews

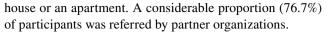
The semi-structured interviews covered participants' knowledge, attitudes, practices, and preferences for PrEP delivery in the Haitian community, stigma, acculturation, medical mistrust, and attitudes toward HIV testing. One semi-structured interview guide was created for community stakeholders and one for community members. Those questionnaires were used to comprehend the participants' knowledge and stance on the topic. Questions such as "Do you know about PrEP? "or "Would you want to take PrEP?" were used to understand the community members' knowledge and their willingness to use PrEP. The stakeholders were questioned regarding how they viewed PrEP from a community leader's perspective. The semi-structured interview guide was developed by the principal investigator and a senior study team member. The interview guides were reviewed, and modifications were made using the feedback from leaders at the Family Action Network Movement and Community Health and Empowerment Network. The interview guides were piloted with the community consultants to ensure cultural competency and appropriate comprehension. Interview guides are in Tables 2 and 3 as supplemental data.

Data Analysis

The principal investigator, a study team member, and the supervising researcher developed a codebook. Three team members each coded three to four interviews for a total of ten and noted common themes. With discussion together, the three team members reached a consensus on the themes and their definitions to include in the codebook. They used this codebook to create codes in NVivo® [23]. The principal investigator and the same study team member coded a subsample of 3 transcripts and found consistency among the coders, with Kappas of 0.70 or higher. Any discrepancies between coders were discussed to come to a consensus. Then, the research team coded the rest of the transcripts. Data saturation was achieved with the 30 interviews.

Results

Table 1 displays the socio-demographic information and survey statistics of the 30 participants. The sample consists of 50% women and 46.7% men, with 74.2% (n=23) born in Haiti and 19.4% (n=6) in the USA. The average age of participants was 43.7 years (SD=13.00) with 66.7% having a high school education or more. The majority (86.7%) of participants identified as Christian (Catholic, Baptist, or Protestant). Concerning household income, 86.6% earned less than \$50,000, and 66.7% reported renting either a



Several broad themes emerged from discussions among participants. Specifically, these themes pertained to HIV prevention, knowledge of pre-exposure prophylaxis (PrEP), utilization of PrEP, PrEP dispensation, factors that either aid or impede PrEP usage, and promotion of PrEP. The subthemes that emerged were HIV stigma, medical mistrust, and fear of HIV testing.

Inadequate Engagement in HIV Prevention

Participants said that in the Haitian community, HIV is rarely discussed perhaps as a result of the stigma historically directed specifically at Haitians. Some participants seemed to believe that others in the community chose to ignore the existence of HIV rather than actively try to prevent it. They suggested that others believe that "ignorance is bliss" (female, community stakeholder). In addition, HIV stigma is another barrier to engagement in HIV prevention and is "a big issue in the Haitian community," one that has an "impact on PrEP" (male, community member). Others pointed to a fear of testing, especially for those "who know they have [HIV]" (male, community member). Some participants believed that they did not need to actively try to prevent HIV if they "stay with the same partner" (male, community member).

Lack of PrEP Knowledge

Overall, there was a general interest in prevention and knowing more about PrEP, but participants felt they did not currently have enough information about the medications. The findings of the study indicate that while there is a general interest in disease prevention, there appears to be a lack of knowledge, specifically regarding PrEP. The need for more PrEP education and awareness was highlighted by the participants. One participant expressed his support for PrEP and quoted a Creole proverb "Evite miyò pase mande padon (Better to prevent than treat)" (male, community member). Another participant believed that people would be willing to take PrEP to avoid becoming ill: "I think they will be happy to take it to avoid getting sick, you understand. They are trying to avoid the disease" (female, community member). However, there were also participants who expressed a lack of knowledge about PrEP "I don't know... really.... About PrEP. What is it?" (female, community member). Another who called PrEP a "miracle drug" said that "if they talked about it more in educating people more...., people would know more about it, because like I said I didn't know PrEP existed until about three years ago" (female, community stakeholder).



Underutilization

Although many reasons have been proposed for the Haitian community's underutilization, such as cost, accessibility, and stigma, which are, indeed, important factors, the results of this project suggest that lack of knowledge is the primary cause of PrEP's underutilization. In fact, when informed about PrEP's effects, participants were enthusiastic and wanted more people to know about it. For those who did know about PrEP, many felt it was a good medication, but the percentage of people who knew about it was low, leading to underutilization. One participant thought it was especially useful for a transient population and for Haitian women: "I think it's a great medication, if it can prevent HIV. Especially with our population that is so transient you know. A lot of Haitian women, and men, well not as much, but a lot of Haitian women live here, while their husbands go back and forth to Haiti." (female, community stakeholder)

Preference for PrEP Delivery by Provider or Modality

In general, participants preferred receiving PrEP from their doctor in a clinic setting to ensure privacy: "Anybody would want it in a private setting, I mean no one wants anybody to be in their business" (male, community stakeholder). In fact, for this same reason, some participants suggested that an injection might be preferable: "Most likely an injection. So, nobody can know their business" (female, community stakeholder).

Facilitators to PrEP Use

Facilitators of PrEP use included culturally responsive education and age. Participants thought it was important to be informed and treated by people they felt were similar to themselves. Participants believed that education also played a crucial role in the willingness to take the medication, with higher levels of education leading to greater acceptance. One participant stated that "I think the factors that would allow [Haitians/ Haitian Americans] to say yes, is the ones that are more educated, if they have people more like themselves coming to talk to educating them more and making them more familiar. I think they'd be more willing to say yes" (female, community stakeholder). Additionally, there was a suggestion that younger individuals may be more receptive to using PrEP: "in my generation with the millennials, we are more educated" (male, community stakeholder).

Barriers to PrEP Use

A barrier to PrEP use might be a concern regarding safety. Medical mistrust also plays a role in decisions. In addition, some noted that cost and accessibility could be a barrier to use. Furthermore, the frequency of visits needed was identified as a potential barrier. Another potential barrier which may be more prevalent among Haitians/Haitian Americans than other minority communities was the preference for natural remedies which historically have formed an important part of Haitian culture [24]. Most participants were okay with taking an HIV test, but several participants expressed concerns regarding testing due to fear of a potential positive test.

The study identified several potential barriers to the use of PrEP among participants. One concern was the safety of the drug, which was highlighted by some participants. Medical mistrust was also noted to play a significant role in decisionmaking. One participant noted that "Medical mistrust is a big thing.... It does play a big role... if I don't trust my doctors..... I won't be completely honest with them" (female, community member). The cost was also noted as a barrier as adherence might "depend on the medication price. Now if it is expensive, it might be an issue. Especially if an individual wants to take it, they might not be able to because of the price" (female, community stakeholder.) Accessibility was also cited as a barrier, as was the frequency of visits required: "Um, yeah, I would say meeting the doctor's appointments. I mean, how many? How many appointments would I have to go to? And how frequent with the appointments be any appointments? Maybe too many or too frequent? I probably won't do it. Okay, that's all it takes is taking up more time out of my day" (female, community stakeholder). Some participants believed that others in the community had a preference for natural remedies, which could be another barrier to the use of PrEP, saying that they "Drink water, drink garlic, drink onion, drink this. The culture still strongly believes in natural medication, that they are not looking towards modern medication. I won't say that they are not, but I don't see that that's their strong point" (male, community stakeholder.) Finally, while most participants were open to taking an HIV test, some expressed concerns about others' feelings about a potential positive result, which they might find intimidating: "The mentality. They are scared about the results." (female, community stakeholder).

PrEP Promotion

The church, TV, and radio were all seen as avenues for PrEP information delivery. Many participants felt that the church was an avenue to help promote PrEP knowledge. Based on the participants' responses, it was observed that the church, TV, and radio were perceived as viable channels



for disseminating information about PrEP: "Everywhere like at Church, on TV, radio" (male community member). One participant mentioned the importance of engaging with church leaders and the Haitian community to spread the word about PrEP: "Like I told you, get involved with the church community and leaders, all of the Haitian churches, so they will accept you and go talk and tell them" (female, community member). Another participant emphasized that the church was a suitable platform as many members of the congregation attended church regularly: "I would say church because you find most of them praising the Lord" (female, community stakeholder).

Discussion

This study explored perspectives regarding PrEP knowledge, PrEP use, HIV prevention, PrEP delivery, facilitators and barriers to PrEP use, and PrEP promotion, among Haitians/ Haitian Americans in Miami, FL, a US HIV epicenter[5]. The results of this study suggest a general interest in HIV prevention, specifically in the context of PrEP; however, we noted a lack of knowledge about PrEP among the participants. Consistent with other studies, PrEP is not wellknown among many minoritized groups, even for younger individuals, Black women living with HIV, and Black men who have sex with men (MSM) [25–28]. This highlights the need for more education and information about PrEP to be made available to those Haitians/Haitian Americans who are at risk for HIV according to the latest CDC guidelines [4]. Despite the interest in prevention, some participants were not able to provide additional information about their preferences for PrEP modality due to a lack of knowledge. More education and access are needed to expand PrEP knowledge, awareness, and use, particularly among groups that are disproportionately affected by HIV. However, among those who were knowledgeable about PrEP, the majority held a positive view of the medication and its ability to prevent HIV.

The most important theme regarding PrEP delivery was the integration of privacy. Patients expressed the importance of privacy in multiple ways. First, they preferred to receive PrEP in a clinical setting with a physician with whom they have established rapport. And second, some expressed preferences for an injectable form of medication, as it provides more privacy than an oral formulation. Dubav et al. examined the trends in PrEP delivery among MSM and found that programs should emphasize protection of privacy to maintain consistent adherence [29]. Concerns for privacy in the Haitian community reflect the underpinnings of the spread of information in these close-knit communities, and what patients perceive to be the consequential stigma associated with an HIV diagnosis. Marc et al. discovered

some of this hesitancy around the disclosure of sexual orientation and HIV diagnosis in Haitian bisexual men and patients with HIV [19]. Thus, it is important to both address this associated harmful stigma, while emphasizing to individuals that their privacy while accessing PrEP is fully protected. Chasco et al. explored the use of home specimen self-collection kits with central laboratory testing in a PrEP program and found that privacy/confidentiality was an important factor considered in patient choice [30]. That is, some patients were hesitant to use at-home selfkits due to the potential for violating privacy. The use of clinical settings for PrEP can in some instances offer greater confidentiality for patients when proper infrastructure is in place. Introducing this medication with providers whom patients have already established trust is another important component of service delivery. The results suggest that education and age are important factors in facilitating PrEP use. Specifically, participants noted that increased education about PrEP and exposure to similar individuals would make them more willing to use it. Younger generations, such as millennials, were also seen as more receptive to PrEP. These findings are consistent with those of other studies [31-34]. The results also highlight potential barriers to PrEP use, such as concerns about safety, medical mistrust, cost and accessibility, frequency of visits, and preferences for natural remedies. Fear of a positive HIV test also discouraged some participants from considering PrEP. These results echo other research on the same topic, especially among migrants of African descent [35–37]. Similarly, a study conducted among African migrants in the UK expressed the importance of tailored messages for their population [38]. It is essential to address concerns about the safety and efficacy of PrEP and increase trust in healthcare providers to improve PrEP uptake [38]. The results also highlight that affordable PrEP and convenient access to healthcare services are needed, especially for individuals who face socioeconomic barriers [38].

Many of the findings related to PrEP knowledge and barriers were similar to those from other minority groups. However, there are several factors which may affect members of the Haitian community differently than other minority groups. For example, historically stigma related to HIV has been directly focused on Haitians in a way that is not paralleled for other minority groups and may have led to a tendency to not discuss HIV at all. In addition, Haitian cultural history has relied heavily on traditional remedies, which may not be equally true for other minoritized groups. Addressing the cultural beliefs and preferences for natural remedies is also crucial to increasing PrEP uptake. Overall, the study's findings provide insights into the complex factors that influence PrEP uptake and can guide the development of effective interventions.



This study's results also demonstrated that the promotion of PrEP in the Haitian community should include increasing discussion regarding HIV and PrEP through community-centered spaces, including local television and radio. Especially emphasized in this study is the use of churches in the community as a setting for PrEP promotion. Psychosocial and community challenges are important to address in order to promote PrEP and mitigate stigma. Promotion involves communication at both individual and community levels, often done via targeted programs and policies. The church has been a long-standing institution for health promotion in several minority communities [38-40]. The use of faith-based frameworks for health interventions has been well reported in the literature [38–40]. Ultimately, this study's results emphasize the need for a culturally adaptive effort to promote the use of PrEP in the Haitian community. Metayer et al. explored cultural barriers to recruitment into health studies in a study population that was 33% Haitian [41]. They reported that strategic and trusting partnerships are essential facilitators of recruitment, and an understanding of the cultural and social networks is important to building relationships [41]. The Haitian church is a known community pillar; thus, these results confirm the key need for the integration of communitybased, culturally significant places to promote health interventions. Although promoting HIV protection might be difficult in the church environment, it is an avenue worth exploring. Targeted efforts to bring interventions to patients in settings they already frequent can help close the gap in access to information. It also offers an opportunity to approach PrEP education in a way that is both pragmatic and accurate but also reflective of the cultural attitudes which would allow the information to be accepted and well understood. Promoting PrEP presents an opportunity to influence biomedical advances to curb HIV incidence. However, there has been very limited research into biomedical HIV prevention among Haitians/Haitian Americans. This study adds to the growing body of evidence regarding factors influencing PrEP among this population. This study, however, had a small sample of 30 participants. As a result, further and larger studies are needed to explore PrEP use among Haitians/Haitian Americans.

Limitations and Strengths

This study, while providing valuable insights, comes with certain limitations. It was conducted among Haitians/Haitian Americans residing in Miami, limiting its generalizability to those outside this region. The recruitment through

convenience sampling might introduce selection bias, potentially skewing perspectives from specific demographic or psychographic groups. The sociodemographic makeup of the study, where a majority identified as Christian and had incomes below \$50,000, could further narrow the scope of experiences and views captured. Additionally, the translation of interviews from Haitian Creole to English could introduce nuances or interpretations that differ from the participants' original intent. Lastly, the standard deviation of the ages was 13 which may have had a negative effect on our findings, given that generational differences may align with different attitudes and beliefs. On the strengths side, the study's partnership with local organizations and the bilingual nature of the research staff ensured a culturally competent approach, and the use of both sociodemographic surveys and semi-structured interviews offered a comprehensive view of participants' knowledge and attitudes towards PrEP. Further studies could examine this topic in terms of the doubled minority status that many Haitians/Haitian Americans inhabit in the USA as both Black individuals and immigrants.

Conclusion

There has been a scarcity of literature exploring Haitians/ Haitian American's perspectives towards PrEP, barriers, and facilitators to its use. This study indicated that there is a critical need to increase Haitians/Haitian American's PrEP knowledge. In particular, we would need to increase the knowledge of those whom the CDC's guidelines consider at risk and candidates for PrEP use. Health communication interventions tailored specifically for this population that target stigma, attitudes, and risk perception may significantly increase PrEP use. Furthermore, structural barriers within the healthcare system that pose challenges to PrEP access for this high-priority population must be addressed.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s40615-023-01834-9.

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Author Contribution All authors contributed to the study. The first draft of the manuscript was written by CAS, EVD, DM, MC, and KM, and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.



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Declarations

Ethics Approval The University of Miami Institutional Review Board approved this study.

Consent to Participate All study participants gave verbal consent to participate.

Consent for Publication N/A

Competing Interests Unrelated to data in this manuscript, Dr. Dale is a co-investigator on a Merck & Co. funded project on "A Qualitative Study to Explore Biomedical HIV Prevention Preferences, Challenges and Facilitators among Diverse At-Risk Women Living in the United States" and has served as a workgroup consultant on engaging people living with HIV for Gilead Sciences, Inc. All other authors declare no competing interests.

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