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Sexual Health, HIV Care and Pre-exposure Prophylaxis in the African Immigrant Population: A Needs Assessment

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Abstract

The objective was to gain insight, from the perspective of healthcare professionals, non-medical service providers and community-based organizations working with a large majority of African immigrant patients or clients, regarding sexual health and the potential for the use of HIV PrEP in this priority population. Thirty key informants participated in a needs assessment. A questionnaire was used to obtain information through focus groups, structured interviews and by self-administration. There are cultural and linguistic barriers to engaging Africans in discussing sexual health issues. Key challenges to uptake of PrEP are multi-dimensional: socioeconomic [immigration status, housing]; cultural [talking about sex 'taboo', HIV related stigma, no concept of preventive care]; provider-related (cultural competency, inadequate PrEP education, language barrier); and individual (lack of awareness, perception of HIV risk). Meeting basic needs like housing, assuring access to care (including PrEP), community-based education, relevant training of providers, and tailored messaging are strongly recommended. Effectively addressing HIV incidence in the African-born immigrant population redonequires a multi-pronged approach.

Keywords African-born immigrants · HIV/AIDS · HIV pre-exposure prophylaxis · Sexual health

Introduction

The goals of the National HIV/AIDS Strategy focus on completely ending the incidence of HIV, enhancing care and quality of life for persons living with HIV, and eliminating persistent disparities in specific populations [1]. A priority group that continues to be disproportionately affected by HIV in the US is the African-born (AB) immigrant population [2]. These are persons born in an African country but are currently resident in the US. With the aggregation of race/ethnicity in the national HIV surveillance data, HIV incidence and prevalence in this population have not been accurately reflected and likely under-estimated [3]. This

poses a challenge to the monitoring of HIV trends and evaluation of programmatic efforts in this population.

The state of Minnesota, where this study was conducted, has disaggregated data that captures HIV surveillance among African-born immigrants. Surveillance reports over a 10 year period (2006–2016) show that the increase in HIV incident rates in the foreign-born population is largely driven by new HIV cases among African-born persons [4]. While AB persons constitute only 1% of the population in Minnesota, new HIV cases in this population went from 36 in 2006 to 80 in 2016 [4]. African-born women are even more disproportionately affected; accounting for 49% of new HIV cases among females in 2016 [4]. This may be due in part to the lift on the travel ban that prohibited entry of persons living with HIV into the US prior to 2010 [5]. In their host countries, African immigrants tend to have sexual networks that are predominantly amongst people from their own country or similar cultural background [6]. This clustering may explain the higher HIV incidence in African immigrant populations compared to the general population in the US. Recent research findings by Kerani and colleagues provide substantial evidence that there are new cases of HIV infection within African communities here in the United States

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[7]. It is imperative that efforts are focused on HIV prevention in this population.

The observed trend in HIV among African immigrants suggests that there are vulnerable groups in this population that are at substantial risk of acquiring HIV. In a recent needs assessment, cultural norms and beliefs were reported as significant drivers of HIV particularly in women [8]. These included intimate partner violence, stigma, discriminatory cultural beliefs and normative values that made accommodation for men to engage multiple sexual partners, and having unprotected sex with husbands who have sex with other men without disclosure. Findings from several studies in Africa also demonstrate that intimate partner violence is associated with HIV infection among women [9–12]. Socioeconomic dependence of persons in the low socioeconomic stratum (SES) often leads to exchange of sex for financial benefit. The need for social support and the challenge of securing housing due to lack of income and/or undocumented status typically lead to clustering in specific residential areas for African immigrants in the United States. This, also significantly increases the risk of HIV transmission.

In addition to interventions promoting safer sexual practices, HIV pre-exposure prophylaxis (PrEP) is also available. Approved in 2012, emtricitabine and tenofovir disoproxil fumarate (TDF/FTC) is a prescription-only medication found to be effective in lowering the chances of HIV transmission in populations at substantial risk of HIV when taken once daily [13, 14]. According to the CDC, indicators of substantial risk of HIV infection include ongoing relationship with an HIV-positive partner, non-mutual monogamous relationship with an HIV-negative partner, multiple sexualpartners, recent diagnosis of bacterial sexually-transmitted disease (STD), history of inconsistent or no condom use; commercial sex work, residence in an area of high HIV prevalence, and injection drug use [15]. Based on evidence of its effectiveness in reducing new HIV infections, PrEP is considered important in efforts to end HIV. Therefore, increase in the uptake of PrEP is one of the indicators of progress identified in the National HIV/AIDS Strategy [1]. Recent reports show that there is significant increase in PrEP prescriptions [16-18]. However, uptake remains disproportionately lower among Blacks, and women in particular [19].

Currently, there is no comprehensive data on uptake of HIV PrEP among African-born immigrants in Minnesota or nationally. This needs assessment therefore explored perceptions on sexual health and HIV PrEP in this priority population. The goal is to implement more effective intervention strategies for HIV prevention, including access to PrEP for persons at substantial risk who stand to benefit from it.

Study Objective

The specific objective was to gain insight regarding sexual health and the potential for the use of HIV PrEP in the AB population, from the perspective of health care professionals, service providers and community-based organizations (CBOs) working with this population.

Methods

Inclusion Criteria

Recruitment efforts targeted persons who were actively engaged with or an integral part of the AB community. Key informants fit into one or more of the following criteria:

- i. Health care professionals and providers of HIV-related services with the majority of their clients being from the AB immigrant population.
- ii. Agencies that receive Ryan White Funding and work directly with clients from the AB population.
- Persons engaged with entities who primarily focus on health and/or social issues that impact AB communities
- iv. Persons known to be strong advocates for AB persons living with HIV through their active involvement in any HIV-related work as volunteers or service providers.

Data Collection

A needs assessment questionnaire developed by one of the investigators was used to collect data by (i) facilitating focus group discussions; (ii) conducting structured interviews; or (iii) by self-administration. The assessment tool had four sections—demographics (who is being served), sexual health, HIV pre-exposure prophylaxis (PrEP) and HIV care.

This was a participatory needs assessment with the aim of gaining insight into the needs of the AB immigrant population specific to HIV. Both formal and informal approaches were adopted in collecting information. Based on the stated inclusion criteria, 30 participants were purposefully recruited. Initial recruitment was through existing relationships. Further recruitment was through a snow-balling technique, with initial participants making referrals to other potential participants.

Each of the 30 key informants provided a medical or non-medical service and had AB immigrants constituting at least 50% of their client population and/or African-born immigrants constituting at least 50% of their staff (self-reported). The key informants included physicians (n=5), medical case



managers (n=9), PrEP case managers (n=4), community advocates (n=6), program directors for community-based organizations (n=3), an HIV outreach coordinator, an HIV tester and a licensed alcohol and drug counselor. Of these 30 key informants, eight were direct HIV service-providers. This subset of participants completed all portions of the assessment tool, including questions related to the provision of HIV care which are relevant to the current report. Each of these providers completed the assessment by either structured interview or self-administration.

The interviews and focus groups were conducted by the same investigator (SW). There were three focus groups with a variety of participants (see Table 1). Extensive notes were taken when informants did not consent to being audiorecorded. Participants who self-administered the needs assessment survey checked applicable response categories where provided, and wrote narrative responses to openended questions. Data collection was done between October and December of 2015.

Data Analysis

Data was summarized in frequencies if response categories were provided. One investigator (OO) identified themes from responses to open ended questions and summarized these under broad categories. The other investigator (SW) reviewed the themes for congruence with the data. A comprehensive report and a summary of findings were sent back to the key informants to review and confirm that the data as presented was an accurate reflection of their perceptions on the HIV-related issues addressed in the needs assessment. The findings were revised based on feedback received. This current report focuses on the findings associated with sexual health, HIV care and HIV PrEP use in the African-born immigrant population.

Results

Demographic Characteristics

There were a total of 30 participants. Eight of the participants were male and 28 were AB immigrants. The subset

of participants that provide direct HIV services (n=8) who filled out all portions of the assessment included:

- A human services agency that serves African immigrants and refugees with culturally and linguistically appropriate HIV/AIDS and chronic health education and social services;
- A licensed social worker providing counseling, training and support group services to some of the African-born agencies in the community.
- Three medical case managers.
- A community assistant and community HIV tester.
- An LGBT coordinator and insurance/outreach specialist.
- A physician.

Among those providing HIV-related services, the areas served spanned Minneapolis/St. Paul and the surrounding suburbs. The proportion of African-born clients served by participating providers ranged from 30 to 99.9% (self-reported). The income level of the clients served varied, but participants reported that the majority of the clients were at the federal poverty level or below. Services provided included—housing, support groups, case management, HIV testing, community outreach, access to insurance and clinical care.

Sexual Health-Related Topics Discussed with HIV Patients

This aspect of the needs assessment was completed by the eight providers who were engaged in direct HIV care. All eight respondents indicated that they talked to their patients about sexual health particularly HIV/AIDS. From the list provided, other sexual health-related topics that respondents commonly indicated included condom use (n=6), STI/STD (n=6), PrEP (n=6), health and wellness (n=6), health insurance (n=6), and mental health (n=5). Fewer providers indicated talking to their patients about healthy relationships (n=4), men who have sex with men (MSM) (n=3), transgender (n=2), sexual abuse (n=2), anal sex (n=2), abortion (n=1) and sex trafficking (n=1). Respondents mentioned discussing other topics not listed. These included prevention for positives, reproductive health, education, nutrition,

Table 1 Focus Group Discussion Participants

Focus group discussants | Group 1

Focus group discussants | Group 2

Focus group discussants | Group 3

African community-based organization serving PLWH—participants included social worker, program administrator, outreach coordinator, peer advocate, case manager, the agency director

Group of African community advocates—3 medical case managers, outreach program director, African health program director, Women's Health Organization CEO, family planning clinic program manager

HIV clinic—prevention specialist, 3 medial case managers, eligibility specialist



chemical health, transportation, employment, housing, and medication adherence.

All eight respondents indicated that having *multiple sexual partners*, and *not using condoms* were the primary sexual behaviors that put the AB population at risk. Six of the respondents also indicated *heterosexual sex* as putting both AB men and women at risk. Other Less frequently indicated risky sexual behaviors included men who have sex with men (MSM) (n=4), sex trafficking (n=4), commercial sex work (n=2) and being transgender (n=1). These eight respondents identified barriers to engaging AB clients in sexual health-related topics.

Barriers to Talking About Sexual Health

Cultural norms, linguistic challenges and time constraints were identified as the key challenges in talking with Africanborn clients about their sexual health.

Theme #1: Cultural Norms Around Sex and Sexuality

Participants acknowledged that, due to cultural norms, persons from African communities generally viewed sex as a taboo subject and were reluctant to engage in such discussions. This they reported, was more difficult if the encounter with the client was not in a private space or if the client was not acquainted with the service provider.

"The different African community groups I work with stay away from intimate and sensitive sexual health concerns and topics. They treat them like they do not exist". [Provider #7|Psycho-education facilitator] "... some people do not want to talk about their sexual health behaviors while completing a health insurance application because they do not know me, or if it is an outreach activity we do not always have the privacy to discuss issues right out in the open." [Provider #6linsurance specialist and outreach worker]

Theme #2: Linguistic Challenges

Providers described challenges engaging with clients who did not speak English or who spoke heavily accented English. This, they reported, made communication difficult. Some providers resorted to using written materials to communicate medical information. When interpreters were used, discussing sexual health issues through a third party became even more awkward for the client, given the taboo nature of the subject.

"Sometimes if an accent is too thick or too hard to understand I just talk to them and make sure they are listening to the information about sexual health resources, access to services and at risk behaviors, I also send them with a hand out, brochure or something they can read." [Provider #5|HIV community Tester and Community Program Assistant]

Theme #3: Time Constraint

From a provider perspective, participants reported that clinic encounters were often too brief to accommodate sexual health discussions in addition to addressing the health problems the patient presented with at the clinic.

"Sometimes patients come in for specific health issues and there is no time to discuss sexual prevention or to do counseling." [Provider #8|Physician]

Pre-exposure Prophylaxis

Challenges associated with the uptake of PrEP in the African immigrant population were identified by all the 30 key informants. These were multi-dimensional and included socioeconomic, cultural, provider-related and individual level factors.

Socioeconomic Factors

The two socioeconomic barriers identified were (1) undocumented immigration status and (2) unmet basic needs as priority.

Theme #1—Undocumented immigration status Subthemes included (a) lack of insurance coverage; and (b) non-disclosure of HIV-status. Undocumented *residents* were unwilling to engage in any service that required some form of identification or the documentation of personal information for fear of deportation. Being undocumented often meant that the person did not have insurance coverage. This raised the question of who would pay for PrEP medication.

"People who are undocumented [and] in need of care, how do you get them on PrEP if they need it, they are scared to complete paper work, or go to places where they think some type of authority will be and so they will not access many HIV care related services like medication or doctor's visits." [FGD1 participant]

Another nuance to the undocumented status was that persons in this category who were living with HIV were unlikely to seek care or disclose their HIV status to sexual partners. Partners who could be potential beneficiaries of PrEP, were therefore unaware of their risk of HIV infection.





"... for patients that are undocumented. There is always the fear that the system can track them if they reach out to get care. By hiding their status, they are a risk to others but they do not seek care because of the fear of being found out." [FGD2 participant]

Theme #2—Unmet basic needs as priority According to the key informants, the more immediate basic needs like housing take priority over HIV PrEP. They emphasized the need for programming that provides these basic amenities to economically-disadvantaged AB immigrants as complementary efforts to HIV prevention.

"People in need of housing, if people's basic needs are not met you can't begin to talk with them about medical care or PrEP. People also in need of housing, are 70% less likely to address medical care needs related to HIV care. .. if they do not have a place to call home. Their main concern is to locate housing, this percentage doubles if there are children or an elderly parent in the family." [Housing need—FGD1 participant]

Cultural Barriers

Participants reported that cultural norms and values shaped perceptions and attitudes toward PrEP. They also emphasized the integral place of religion in African cultures; the most dominant religions being the Islamic faith and Christianity. They acknowledged that the tenets of these religions greatly influence the social dynamics around sexual decisions, choices and freedoms. Another element noted was the diversity of cultures across the continent. However, the three culturally-related themes that were identified as common across most cultures and religions included (1) HIV-related stigma, (2) sex a 'taboo' topic, and (3) preventive care a low priority.

Theme #1—HIV-related stigma Even though potential beneficiaries of PrEP should be persons who are HIV negative, the mere association of the medication with HIV was thought to make it less acceptable to this population. From a cultural and religious perspective, there was the expectation that persons who were not married should not be having sex, while persons married should be faithful to their partner(s). Hence, HIV was associated with promiscuity or infidelity. HIV PrEP may therefore be perceived as an indication that one was engaging in unacceptable sexual behaviors.

"I am not HIV positive so what will people think if they see me taking this drug every day. How do I explain to people I am on this drug and why am I on this drug? Am I having sex with someone who is positive, my husband, my wife, what behaviors am I engaging in, why do I need to be on PrEP." [FGD 2 participant]

Theme #2—Sex a 'taboo' topic Informants acknowledged that within families, sex and sexual health were hardly ever discussed, even when children reached puberty and matured into adolescence. They described AB adults as generally reticent about these topics even with healthcare providers. As a result, members of this population were unlikely to engage with health care providers about risky sexual behaviors that put them at substantial risk of HIV.

"... their inability to talk about and communicate about sex and their sexual health needs..." [sex; HIV Tester/Community Program Assistant]

For many generations and in many traditional settings, the lifestyle of the African does not allow for conversations about sex. Young people have been left to make decisions on their own about sexual activates and behaviors. Now that there is a prevention in place with PrEP the conversation can come up and be talked about. Talking about sex in the African Born community is a challenge, now add LGBTQ, and young people and HIV into the mix, no one is talking." [Medical Case Manager]

Theme #3—Preventive care of low priority In addition, preventive care was said to be a concept not well understood in the context of African cultural norms and values. Health care was associated with having a medical condition that needed treatment. Hence, treatment when one was not experiencing ill health was not considered priority, especially in the light of other perceived needs.

"... the possibility that PrEP might not be forefront in a patient's mind as they have so many other issues to deal with and the patients tend to put their health last and this is also the reason why diagnosis is usually so late. The sense that their health is not a priority and you only need to go to the hospital when you are sick hence the unlikely nature of going to the hospital to seek out PrEP." [FGD2 participant]

Provider-Related Barriers

Challenges associated with the provider included (i) lack of cultural competency, (ii) inadequate education and training on PrEP, (iii) linguistic challenges, and (iv) lack of AB immigrant providers and agencies that are engaged in HIV prevention with PrEP.

Theme #1—Lack of cultural competency Key informants reported that most health care providers were not trained on how to engage African clients in a culturally-responsive manner and did not understand their cultural norms around sex and sexuality. With the prevalent perception of not being understood, African immigrants tended to limit their interaction with the healthcare system. In addition, the diversity



of the cultures and religions in this population was seen as a significant challenge given that these shape beliefs and influence communication patterns and styles.

Theme #2—Inadequate education and training Most of the participants recognized that they did not know as much about HIV PrEP as they would like. They acknowledged that it was common knowledge that it was a single pill for the prevention of HIV, recommended for persons at high risk, and to be used with other risk reduction strategies. According to some of the participants, information about PrEP was mostly through conferences. They acknowledged that the inadequacy of knowledge and relevant skills for administering PrEP made providers less willing to recommend PrEP.

Theme #3—Linguistic challenges Communicating about PrEP to African immigrants who do not *speak* English or have low English proficiency, posed a challenge. They pointed out that there were a limited number of trained medical interpreters in the various African languages, respectively.

Theme #4—Lack of advocacy Another factor thought to be a facilitator, if in place, was having providers and service agencies who are from this population, or already engaged with the communities as strong advocates of HIV prevention with PrEP. The expectation was that PrEP would be more acceptable within AB communities, if recommendations for it come from AB healthcare providers and service agencies.

Individual Level Factors

Themes associated with the individual included (i) lack of awareness and knowledge, (ii) continuity of access and care, and (iii) unknown or misperception of HIV risk.

Theme #1—Lack of awareness and knowledge of PrEP Key informants reported that most AB persons at high risk of HIV who could benefit from PrEP were unaware of the existence of this pharmacologic agent for HIV prevention. There were also those who though aware of PrEP, did not know how the medication worked, or where and how to obtain it.

"... many people in the community and providers do not know anything about PrEP. Getting to know PrEP, what is it?" [Outreach coordinator]

Theme #2—Continuity of access and care There were reports of anticipated concerns about access, continuity of care while on PrEP and cost implications, especially for persons who do not have insurance coverage.

"How do I ask for PrEP, does my insurance cover PrEP---- how long do I have to take it, what are the side effects of this drug, and who can give me on going care regarding this drug." [FGD1 participant]

"In some instances, people want to get on PrEP but because of insurance issues people cannot get money to pay for the prescriptions." [FGD3 participant]

Theme #3—Misconception of target clientelle Participants reported that PrEP was perceived as a medication targeting gay white men. Therefore, AB persons at substantial risk of HIV may not consider themselves as potential beneficiaries of preventive treatment with PrEP.

"... one of the major barriers is that many who could benefit from PrEP do not believe that they are at risk ----. ... There are also very vulnerable at-risk subpopulations within these populations that could benefit from PrEP like sex trafficked women and intravenous drug users. However, if I am looking at PrEP as a "pill for gay men" or for men that have sex with men, then I do not meet the criteria for PrEP and therefore I am not at risk." [Physician]

Theme #4—Unknown or misperception of HIV risk There was considerable discussion on the perception of HIV risk. Informants reported that the picture of living with HIV/AIDS that many immigrants have, stemmed from their experiences back in their home country prior to immigration. This tended to distort their perception of HIV risk. The prevalent belief was that a person living with HIV looks emaciated. People thus felt safe to have sex with a healthy-looking person and not question their HIV status.

"There is an issue with the feeling of immortality. The feeling that 'I cannot have it' and 'I cannot get it'. There is a picture of what the patient with HIV/AIDS would look like. If someone really has the disease, there is an expectation that he or she should be a skinny person as seen in patients in some African countries however this is rarely the case with HIV in the United states." [FGD2 participant]

Informants also reported that persons living with HIV may not disclose their HIV status to their spouse or significant other. Therefore, persons at substantial risk of HIV infection may not consider PrEP simply because they are unaware of their risk and to their knowledge are not engaged in risky sexual behavior.

"... a major problem is that it is not only about receiving the medication for PrEP, it is also about disclosing your status to your partner for them to get on PrEP and some HIV positive patients are not willing to disclose their status ----. ... it may be easier to convince the married people if the disclosure issue is overcome. There is also the problem if insurance coverage as some insurance companies will only cover for discordant married couples and this goes back to the issue of disclosure." [FGD2 participant]



Recommendations

There were five key recommendations to enhance uptake of PrEP—(1) provider education and training; (2) community-based education and awareness; (3) client-targeted education with complementary access to PrEP; (4) culturally-responsive sexual and reproductive health education for women; and (5) tailored media products and messaging.

Recommendation #1—Provider education and training: The recommendation for provider education and training was on two fronts—HIV PrEP and cultural-competency. Key informants emphasized the need to educate providers about PrEP, including information about resources related to access and how cost can be covered to ensure continuity of care. Informants anticipated concerns that clients would have and recommended that providers be equipped with ready answers (see Table 2). They also stressed the importance of cultural competency training to ensure more culturally-responsive care from providers who are not African.

Adequate education on PrEP was recommended for African providers. Cultural competency at a system level would also mean ensuring access to African immigrant providers trained on PrEP, as provider-patient concordance may be a preference for some members of the AB population. There was some emphasis on adequately training primary care physicians on PrEP as these providers often make more frequent and regular contact with persons at high risk of HIV than infectious disease specialists.

Recommendation #2—Community-based education and awareness: Informants recommended educating communities and creating awareness of PrEP through already established institutions—faith-based organizations, social groups, and community-based agencies already serving these communities. This would ensure that members of these

communities receive correct information addressing some of the myths and culturally-shaped misperceptions about HIV.

Recommendation #3—Client-targeted education and complementary access: Participants anticipated questions and concerns from clients (see Table 2). There was discussion around providers having adequate knowledge to educate clients about how PrEP works, the benefits, the treatment expectations about continuous monitoring, potential side effects and contraindications. However, they stressed the importance of ensuring that if clients opt to use PrEP, it was readily available, easily accessible, and affordable.

Recommendation #4—Culturally-responsive sexual and reproductive health education for women: It was commonly acknowledged, and also confirmed by HIV statistics for this population, that AB women were at significantly higher risk of acquiring HIV. Therefore, targeted education was strongly recommended. They proposed a strategy of using a curriculum focused broadly on sexual and reproductive health within which there would be emphasis on HIV prevention (including, but not limited to PrEP).

Recommendation #5—Tailored media products and messaging: The key informants urged the use of media campaigns, particularly through local radio stations. However, they cautioned that messaging about PrEP that targeted African immigrants should be tailored to this population. They reported that in the current efforts to promote PrEP, there were no images of members of African communities taking PrEP. They argued that most of the images were of gay men and transgender persons, thus this population did not feel included as potential beneficiaries of PrEP.

Table 2 Some anticipated questions about PrEP among African-born clients

How do undocumented clients (accessing health care/not engaged in healthcare) access PrEP?

How will undocumented clients access PrEP on a regular basis as they need to?

If I take PrEP will I be able to have children?

How can PrEP be presented to people at high risk who do not think they are at risk?

When should I use PrEP?

How long should I be on PrEP? Can I only take PrEP for 1 year, or 1 month?

Do I need to tell people I am on PrEP?

Does being on PrEP mean I have a medical condition?

Who should not be taking PrEP?

Are there any clinical trial (results) I can read on PrEP

Will my insurance cover PrEP?

What if my doctor does not want to give me PreP?

Can I only get PrEP from my pharmacy? Can I get PrEP from my case manager or social worker?

What are the implications for those being trafficked?

I have Hepatitis B, will PrEP help me?



Discussion

Understanding the Sexual Health Needs in African Communities

The large proportions of African clients served by the participants who self-identified as African is indicative of the importance of provider-patient concordance to members of this population. However, the findings also suggest that due to stigma, some African immigrants may prefer to engage with providers who are not from their community for HIVrelated care needs. This then brings up the challenge of non-African providers engaging in a culturally-responsive manner. Understanding the cultural norms and values associated with sex, sexuality and sexual health in different African communities and religious groups is therefore critical in effectively addressing the HIV-related needs of the AB population. There is need for cultural competency training specific to African cultures for providers in healthcare facilities that serve African immigrants. This will help to reduce stigma and minimize provider implicit bias towards African communities when members come in for care.

Having multiple sexual partners and not using condoms, identified as the primary HIV risk factors in this population, may have cultural undertones. Importantly, many African cultures promote institutionalized authority of men over women. This makes allowances for relational dynamics that result in men engaging sexually with multiple partners even when married [20]. While some of these practices are covertly done, they are not necessarily frowned upon. A lesstalked about dynamic that puts women at risk, is having a husband who has sex with other men [8]. Culturally, it is a taboo for men to have sex with men, a high risk factor for HIV [21]. In the African context, the use of condoms is often interpreted as a demonstration of distrust on the part of the advocate [22]. This becomes a point of conflict particularly for those in a marital relationship. Therefore, women who are in relationships where the men are having other sexual partners are at high risk of HIV.

From both cultural and religious perspectives, participants acknowledged that though sex outside marriage is frowned upon in African communities, there was the reality that people (especially adolescents and young adults) were engaging in sex. Historically, Africans have had a culture of silence around sexual issues [23]. They may not feel comfortable having open and frank discussions about their sexual behaviors, even with their health care providers. As a result, they may not be getting the appropriate information needed to engage in safer sex. Strategies to effectively educate African communities as recommended by key informants should be explored. Increasing awareness of PrEP and

addressing barriers among persons at substantial risk of HIV has been associated with increase in PrEP uptake [24].

Communication in African cultures is typically oral [25, 26]. Communication is also very contextual using idioms, proverbs and euphemisms rather than making direct references [27]. It can be quite a challenge when a non-African provider is communicating with an African patient and particularly with topics such as sex. Language can be a major barrier in provider-client interactions. More often than not, persons with low English proficiency have little or no education and are very unlikely to read even in their own language. Hence, written materials may not be as useful as intended. These cultural and linguistic challenges to discussing sexual health in clinical encounters with African patients are further compounded by the time constraint. The concept of time in the African context is much more flexible and accommodating [28]. Brief encounters do not allow for sufficient interaction to establish a relationship. Relationship-building is necessary for African patients to feel comfortable enough disclosing information on their sexual behaviors and practices. A more culturally-responsive approach in engaging with AB patients and clients will help build relationships that facilitate more effective care delivery to this population.

Uptake of HIV PrEP

Reports from key informants suggest that immigration status may be a significant factor in HIV risk in this population. Persons who are undocumented are more likely to be socioeconomically vulnerable and therefore less empowered to negotiate safer sex. They are also likely to have no healthcare insurance [29]. Having minimal access to healthcare, there is limited contact with providers to learn about PrEP. Even when aware of PrEP, there is the obvious concern of how to pay for it. Similar characteristics have been noted among immigrants in the Hispanic population [30, 31].

In African immigrant communities, there is often a lack of awareness of available healthcare resources including HIV-related medical services like PrEP for persons without insurance. In most African countries, health care is paid for out-of-pocket. Persons of low SES who are at most risk in this population, by default assume that if you don't have money, you cannot receive medical treatment. Unless otherwise informed, PrEP uptake in this priority population will remain low. However, in educating communities and raising awareness of these resources, messaging must be tailored to ensure cultural sensitivity and acknowledge cultural norms and values. Involving the African communities targeted from the inception of any media campaigns is a best practice that should be adhered to. The need for a communitybased intervention approach has been recognized as critical in promoting PrEP in minority populations at substantial risk of HIV. This approach has been adopted in designing



HIV prevention interventions in both Hispanic and Black communities [32–36].

Efforts at educating providers about PrEP should be more widespread. Currently, many primary healthcare providers are not adequately trained and do not have sufficient knowledge to effectively engage clients who could benefit from PrEP [37–39]. In light of the persistently high incidence of HIV in this population, there is need to adequately train primary care and community service providers who regularly come in contact with AB persons about PrEP In the absence of known HIV infection, persons at substantial HIV risk are unlikely to have contact with an HIV specialist. When they present at clinics with other health care challenges, primary care providers (PCPs), nurses and pharmacists should be able to address questions and concerns that clients may have, including how and where to access PrEP at minimal or no cost. Agencies that work with these communities to ensure that basic needs like housing and food are met, should also receive training and be armed with relevant information about PrEP. Leveraging continuity of care with PCPs and collaborative efforts with CBOs are strategies that address some of the challenges identified, with the aim of enhancing PrEP uptake and treatment [40].

Risk perception is a critical factor in HIV prevention [41]. Several studies have demonstrated the prevalence of the misperception of individual HIV risk among Africans, and women in particular [42–45]. Findings in this needs assessment suggest that self-perceived low HIV risk is a deterrent to HIV PrEP uptake. Education on sexual health (including HIV/AIDS and other STIs) is imperative for accurate self-assessment of HIV risk in this population. This will provide the impetus for PrEP uptake. However, community-based efforts at increasing knowledge and awareness must be complemented by ensuring ready access to HIV PrEP, with well-defined structure and process that assures continuity of care.

Limitations

Sampling for this assessment though purposeful, was by convenience. While the findings may not be representative of the perspectives of all providers serving African immigrants, they do provide useful insight that can aid more effective HIV prevention programming in this priority population. Secondly, key informants focused primarily on barriers faced by AB immigrants of low socio-economic status (SES). While these are the persons most at risk of HIV, PrEP use is not limited to them. The nuanced differences that may exist based on SES are therefore not clearly captured in the study. Also, the needs assessment was done strictly from a service provider perspective.

Representatives of communities of faith were not included as informants. The centrality of religion in African cultures and the influence of religious beliefs in shaping

attitudes towards sex and sexual behavior in African immigrant communities are assumed but not directly addressed in this study. In addition, persons at high risk of HIV were not included as key informants.

Strengths

Most of the participants in the needs assessment were African and well engaged with their communities as service providers and/or strong advocates. They were thus able to share insight reflective of the community norms, values and practices as well as perspectives based on their lived experiences. While the qualitative data analysis did not employ inter-rater reliability, the use of the key informants strengthened the rigor of the process. This technique of 'member check' is used to enhance the trustworthiness and interpretive validity of findings in qualitative inquiry [46, 47].

Public Health Implications

Findings from this needs assessment suggest that effectively addressing HIV incidence and increasing uptake of PrEP in the African-born immigrant population requires a multipronged approach.

- At the structural level, policies need to address immigration issues, housing and access to health care and HIVrelated services. Medical care and social service providers also need to work collaboratively to ensure linkage to available resources.
- Provider-related barriers can be mitigated by appropriate training in cultural competency and HIV PrEP.
- Community-based efforts should be intensified to increase knowledge around HIV and its prevention, and raise awareness about available resources and services for prevention and care. Media campaigns (particularly through radio) and community education while helpful must be culturally-responsive in content and delivery.
- At the individual level, sexual health education will ensure that people are able to appropriately assess their level of risk and engage in sexual and health-seeking behaviors that lower their risk of HIV infection.

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