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HIV Stigma, Testing Attitudes and Health Care Access among African-Born Men Living in the United States

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Introduction

The number of African-born immigrants to the United States (US) has grown from 35,000 in 1990 to over 1.5 million in 2009 [1], with almost half arriving in 2000 or later [2]. More than half of these immigrants reside in one of seven states, including Massachusetts, which is home to more than 66,000 African-born residents [3]. This population has a high risk of HIV infection. Indeed, the largest proportion of non-US born persons in Massachusetts diagnosed with HIV infection from 2007 to 2009 (N = 209; 33%) was from Sub-Saharan Africa [3]. Despite the increasing numbers of immigrants from Africa and their high HIV risk, few studies have specifically focused on HIV-testing attitudes and stigma among this population [1] and even fewer studies have focused on African-born men living in the US. Therefore, little is understood about how best to provide culturally appropriate HIV prevention and screening activities for African-born men.

What is known is that African-born immigrants have a high rate of HIV seropositivity [3], present at a late stage of HIV disease [4], and experience significant HIV-related stigma [5]. The issue of stigma in this population extends far beyond HIV infection; it includes barriers and misconceptions about the US health care system as well as legal and linguistic challenges, leading to a reluctance to seek both screening and care [1]. In addition, it is common for African-born men to use fewer health services because of difficulty taking time off from work due to multiple competing demands, cultural barriers, immigration issues, stigma concerns, and mistrust [8]. Therefore, interventions are needed to reduce barriers to HIV testing, decrease stigma, and increase access to health care services for African-born US residents [1, 2, 4, 6, 10-12].

In Massachusetts, HIV prevention, education, and screening services are provided to African-born communities by Africans For Improved Access (AFIA), a program of the Multicultural AIDS Coalition (MAC) [12]. Staff work closely with African-born community members, organizations, civic groups and businesses to provide services in a way that understands, respects, and incorporates culture. One HIV-awareness program developed by AFIA in collaboration with community members is the African Health Cup (AHC) [8].

The AHC is a soccer tournament held annually to improve HIV awareness by “couching” HIV testing and prevention education within general health promotion activities [8]. This program, which capitalizes on Africans' love for the game of soccer, began in 2010 with six teams and has grown to 12 teams. Attendance at the tournament reaches over 500 people. As part of the AHC, soccer players and coaches commit to taking part in a 30-minute discussion that focuses on HIV-related topics, including HIV testing, care, treatment, prevention, and stigma [8]. To reduce stigma and normalize HIV testing, other health screenings (e.g., blood pressure, glucose, cholesterol) are offered during the AHC. HIV testing is done by AFIA staff who have been certified in HIV testing and counseling.

The purpose of this study was to survey and describe HIV-testing attitudes, HIV-related stigma and access to health care in African-born men who take part in the AHC. Although a small number of women were interviewed ($N = 1$) and participated in the survey ($N = 17$) the number was too small to draw conclusions; therefore we chose to focus this manuscript on the male participants in our study.

Methods

This community-based participatory research study had two components: a cross-sectional descriptive survey, and qualitative interviews. All study-related procedures were approved by the University of Massachusetts Medical School Institutional Review Board before participant recruitment. Returned anonymous surveys were considered consent to participate in the survey. Those who agreed to be interviewed signed a written informed consent document.

Sample

Participants were venue sampled during the AHC in 2012. AHC attendees were eligible for both study components if they were 18 years old, African-born and living in the US, able to read English, and willing to give informed consent to participate. Women ($N = 17$) and individuals born in the US to African born parents were not included in this analysis ($N = 20$). The survey was completed by 135 African-born men. Twenty-seven players, coaches, and spectators agreed to be interviewed.

Data Collection

Upon entering the AHC venue, players and spectators were asked to complete the anonymous survey (no identifiers were used). Those volunteering to complete the survey were given a \$5 phone card. The survey took approximately 5 minutes to complete and included the following: age, marital status, country of birth, time in the US, health conditions, health insurance status, health care provider visit within the past 12 months, satisfaction with current health services, ever tested for HIV infection, a 10-item HIV-testing attitudes scale [13] and a 10-item HIV stigma scale [13]. The HIV-testing attitudes and HIV-stigma scales have demonstrated good reliability (Kuder-Richardson-20 [KR-20] = 0.77, and 0.76, respectively) and validity in men and women living in a Black township in South Africa [13]. In the present study, the internal consistency reliabilities of the HIV-

testing attitudes and HIV-stigma scales were adequate (KR-20 =0.69, and KR-20 =0.71, respectively).

Individuals who completed the survey, as well as other AHC attendees, were asked if they were interested in participating in a qualitative interview. Interviews were conducted by three trained African-born interviewers in a private room at the soccer venue. Using a semi-structured interview guide, interviewers asked participants to discuss their experiences with the AHC, AHC health education and screening activities, and access to and satisfaction with health care services in their community. In addition, players and coaches were asked about their experience with the HIV education sessions (since these were only offered to players and coaches). The general population of AHC attendees were approached by AFIA staff and trained volunteers and provided with HIV education and HIV materials at a resource table.

Data Analysis

Survey data were collected in hard copy, assigned a unique identification number, stored securely during the AHC, later entered into a database, and analyzed using SPSS version 19.0. Descriptive statistics were computed for each variable, and reliability estimates calculated for the multi-item scales.

Interviews were audio-recorded and transcribed verbatim by a professional transcriptionist. Some data were missing in the transcripts due to background noise and transcription difficulties due to multiple accents. Data were analyzed using qualitative content analysis. [14] Data were coded and verified by six members of the research team. Data were reported back to the team coaches as a form of member check.

Results

Survey Results

Participant Characteristics—The 135 African-born men who completed the survey represented 20 African countries, with the majority from Liberia and Ghana. Their average age was 29.16 years (Table 1). The majority of participants were single (58.5%), lived in Massachusetts (91%) in urban areas (68.2%), reported no chronic health problems (92%), no mental health issues (100%), had health insurance (80.7%), and had seen a health care provider within the past 12 months (77.8%). Participants without health insurance had been in the US for a shorter period of time than those with health insurance ($p=0.043$). Most participants (92%) planned to stay at the AHC for at least 3 hours, indicating a high level of engagement.

Participants' most common chronic health condition was hypertension ($n=8$, 5.9%). The majority of participants sought health care in hospital-based clinics (31.9%) and community health centers (11.9%); only one participant reported using the emergency room for routine care. Overall, participants were very satisfied (71.9%) or somewhat satisfied (18.5%) with their present health care provider. Most had been tested for HIV infection (80%) and those who were tested were significantly older than those not tested ($p=0.004$).

HIV-Testing Attitudes and HIV Stigma—Attitudes towards HIV testing were mostly positive with a few exceptions (Table 2). One-third of the participants did not see HIV testing as a way to help people from getting HIV. Some participants (24.4%) were concerned that people would leave them if they had HIV and others would assume they had HIV if they decided to get tested (25.9%). Trust was also an issue; with 21.5% of the participants indicating that they did not trust the HIV counselor to keep their test results confidential. Of particular concern is the finding that 26.7 % of the respondents would rather not know their HIV status.

Responses to the stigma items demonstrated low levels of shame (16.3%). However, feelings of guilt, concerns about working with children, feelings of wrong-doing and the need for freedom restrictions were present for more than 27% of the participants. Participants did not differ significantly in their attitudes toward HIV testing ($p=0.80$) or stigma ($p=0.35$) by time lived in the US. However, participants under 28 years old (the median age) scored higher in total stigma ($t=5.01$, $p<0.001$) and negative HIV-testing attitudes ($t=-2.91$, $p=0.004$) than participants older than 28 years.

Interview Results

Social Experience at the AHC—Qualitative interviews were completed by 27 AHC players, coaches, and spectators (Table 3). All participants expressed positive experiences related to participating in the AHC, including socializing with other African-born people, making new friends, meeting people from different countries (not just Africans), and feeling united. For example, one participant said, "...to be away from home and feel like you're home" and another stated, "... it is like a World Cup experience." Some participants mentioned ways to improve the AHC, including more advertising on social media sites, playing music throughout the day, and having an onsite medical team.

AHC HIV-Education Session—Most participants were positive about the HIV-education part of the AHC. Some stated that they learned the differences between HIV and AIDS, that testing for HIV is about fighting the virus to support the overall health of the community, about the low rate of mother-to-child transmission, and the need for both HIV-positive partners to use protection during sexual intercourse. They also learned basic information about HIV transmission. One participant commented: "I thought saliva transmits HIV." Two participants mentioned learning about needle/syringe transmission. Even the participants who had attended the AHC more than once mentioned a consistent increase in HIV knowledge. One participant stated, "This is my third time ... I did learn new things, meaning that if you have HIV and you take the medication, at least like you know you can be able to live." Even those who believed they already knew the basics about HIV indicated that it was important to be reminded about HIV-prevention measures and to increase general HIV awareness. Interestingly, most participants did not know someone with HIV infection, but the few who did mentioned that persons with HIV were often "distanced by others in the community."

Several participants offered ideas for improving the HIV-education sessions, including making sure the sessions were before the first game, having a session led by a person living

with HIV infection, offering snacks, and using social media to follow-up on the teaching sessions because “one session is not enough time to do justice to this topic.”

Despite participants' positive remarks about the HIV-education sessions, many of their comments indicated a need for more education to dispel myths and enhance HIV-prevention strategies. For example, three participants talked about their concerns of contracting HIV at barbershops, while several talked about the current cure for HIV (when discussing treatment), and several stated that they have donated blood as a way to get tested for HIV.

Condom Use—Many participants spoke about condom use as a way to prevent HIV and other sexually transmitted diseases and pregnancy. The discussion mainly centered on having multiple partners. Two participants acknowledged acquiring a sexually transmitted disease because of engaging in unprotected sex with multiple partners. Overall, participants' comments suggested poor or inconsistent condom use, with several participants making deliberate decisions not to use condoms “... it [sex] just feels different [with a condom]. Sometimes I just don't want to use it” and “nothing is going to happen to me.” Furthermore, several participants referred to HIV testing as a preventive mechanism versus using condoms consistently. HIV testing was seen as the primary prevention method, and not using condoms was considered an acceptable behavior because of constant testing. One participant reported getting tested every 3 months as a “way to be sure” he does not have HIV, and another participant stated, “... I had scares ...but the thing is I get tested all the time.” Trust and duration of a relationship played a part in participants' decisions to use a condom. Several participants indicated that they tend to use condoms only with female sexual partners who are not their regular girlfriends. One participant stated, “... because they're not my girlfriend. I don't trust them. That's why I used condoms.”

HIV-Testing Experiences and Health Screenings—The interview participants reported that they were tested for HIV (a) for immigration purposes (51.9%), (b) when they had a questionable exposure (14.8%), (c) upon the prompting of significant others (11.1%), and (d) when they were ill (7.4%). Testing frequency differed among participants from once a year to every 3 months. Several participants stated that they were not planning to get tested during the AHC because of “privacy concerns,” “too busy with the soccer tournament,” “in a happy kind of zone” and the need to be “in the right mind” to be tested. One participant recommended having an “outsider” do the testing in a private place due to a concern about confidentiality and community gossip. He stated, “I would feel more secure if it was not an African taking the test – if it is our own people – trust is not there.” It is interesting to note that during the interviews, many indicated that getting tested was important but few were planning to get tested at the AHC. Among those interviewed, 12 (41%) planned to get tested after the AHC. Among all of the persons who attended the AHC, nine persons were tested for HIV during the AHC, and 32 participated in other health screenings (blood pressure, cholesterol and glucose screenings). Several participants offered ideas for improving the onsite health screenings, including providing incentives (e.g., gift cards or a raffle), adding screenings for hepatitis and vitamin D deficiency, as well as providing onsite influenza vaccines.

Health Service Access and Satisfaction—All but one of the interviewees had health insurance and received regular health care. Most participants had positive experiences with their health care providers and the places they received this care. Only one participant talked about the difficulty of taking 3 or 4 hours off from work during the day to see his doctor. He recommended evening and weekend clinics for those who work. One participant mentioned that cell phone reminders from his clinic helped him adhere to appointments.

Discussion

Knowledge is like a garden: If it is not cultivated, it cannot be harvested. African proverb

This study reveals that the African Health Cup is an excellent venue for accessing large numbers of African-born men to increase HIV knowledge and conduct health screenings. African-born men who participated in the AHC indicated that they were able to access health care services and were mostly satisfied with the health care they were receiving. Even though only 9 of the approximately 500 persons who attended the AHC got tested for HIV during the AHC, many indicated their intentions to get tested at a later date. Stigma scores and HIV testing attitudes varied greatly by individual item and were consistent with previous reports of high rates of stigma among non-US born Blacks [15] and low levels of HIV-testing acceptance among African-born immigrants [16]. Study participants were not likely to get tested at the AHC for various reasons, including trust and privacy concerns. This result echoes a report that Sub-Saharan and Caribbean immigrants, particularly recent immigrants, face significant barriers to HIV testing due to concerns about privacy, stigma and fatalism [17].

The findings of this study had a real-time impact on programming and services provided by the community partner, AFIA, underscoring the community-based participatory approach as an effective way to translate data into programs or policies to improve individual and community health. This study identified the need to develop strategies that normalize HIV testing and further engage spectators in HIV screening activities. AFIA also identified additional activities to increase HIV awareness and education at the AHC, including broadcasting public service announcements throughout the day and placing lawn signs with HIV facts and testing information throughout the stadium. Findings also showed the value and importance of identifying cultural strengths and assets in the community, and supporting community-led initiatives. The AHC not only mobilizes the community to take action in normalizing HIV, but also cultivates a social environment for bringing African-born communities together.

This study has limitations. Because this was a community event, we had no way of collecting information on the entire population who attended the AHC. Therefore, we are unable to estimate the representativeness of our sample. We do not have the exact attendance at the event; however we estimate the attendance to be around 500 individuals; which includes men, women, children and non-African-born persons. Additionally, we did not collect survey information on the number of times subjects attended the AHC; therefore we were unable to compare findings by prior AHC attendance. This analysis would help us estimate a dose effect and will be considered in future work. Surveys collected by

community members may have introduced a social desirability response bias. To minimize these limitations, all AHC attendees were approached to request that they complete the survey, research assistants were available to answer any questions about survey items and the confidentiality of all responses to both the survey and qualitative interviews were ensured by using no identifiers. Study participation was offered only in English, limiting who could participate. The survey did not ask if participants had HIV infection, and none of the survey respondents listed HIV as one of their medical diagnoses. Future studies should consider these potential sources of bias.

New Contribution to the Literature

To the authors' knowledge, this study is the first to describe the preliminary outcomes of a culturally appropriate HIV intervention specifically for African-born men living in the US. The intervention builds on assets of this community to demonstrate a unique way to access African-born men and engage them in HIV and health-screening activities. This community-based intervention also has the potential to capture trends in HIV testing over time. Our findings suggest that more work is needed to reduce HIV-related stigma and improve HIV-testing attitudes in this population.

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Table 1**Characteristics of survey participants (N=135)**

Characteristic	Mean	Median	SD	n	%
Age (years)	29.16	29.17	8.4		
Time in the US (years)	7.5	6.0	5.2		
Country of birth					
Liberia				46	34.1
Ghana				28	20.7
Zambia				11	8.1
Nigeria				9	6.7
Kenya				6	4.5
Cape Verde				5	3.8
Sierra Leone				5	3.8
Tanzania				4	3.0
Uganda				4	3.0
Cote d'Ivoire				3	2.2
Guinea				3	2.2
Cameroon				2	1.5
Rwanda				2	1.5
Angola				1	0.7
Benin				1	0.7
Congo				1	0.7
Mali				1	0.7
Senegal				1	0.7
Partner Status					
Single				79	58.5
Married				41	30.4
Cohabiting				13	9.6
Divorced				2	1.5
Any health problems					

Characteristic	Mean	Median	SD	n	%
Yes				11	8.1
No				124	91.9
Any mental health problems					
Yes				0	0
No				135	100
Health insurance					
Yes				109	80.7
No				26	19.3
Doctor appointment in last 12 months					
Yes				105	77.8
No				30	22.2
Satisfaction with current health care					
Very satisfied				97	71.9
Somewhat satisfied				25	18.5
Not satisfied				3	2.2
Don't know				6	4.4
Missing				4	3.0
Ever tested for HIV					
Yes				108	80
No				27	20

Table 2
HIV-testing attitudes and HIV stigma (N = 135)

HIV attitude items	No	Yes	Missing
	n (%)	n (%)	n (%)
Getting tested for HIV helps people feel better	20 (14.8)	112 (83.0)	3 (2.2)
Getting tested for HIV helps people from getting HIV	44 (32.6)	88 (65.2)	3 (2.2)
People in my life would leave me if I had HIV*	97 (71.9)	33 (24.4)	5 (3.7)
People who test HIV positive should hide it from others*	107 (79.3)	21 (15.6)	7 (5.2)
I would rather not know if I have HIV*	96 (71.1)	36 (26.7)	3 (2.2)
I trust the HIV counselors to keep my information confidential	29 (21.5)	104 (77.0)	2 (1.5)
People would assume I have HIV if I decided to get tested*	97 (71.9)	35 (25.9)	3 (2.2)
I am afraid someone would find out I was tested for HIV*	108 (80.0)	23 (17.0)	4 (3.0)
I would not get tested for HIV because I would be asked information that was too personal	109 (80.7)	23 (17.0)	3 (2.3)
I could easily discuss HIV antibody testing with my family	26 (19.3)	105 (77.8)	4 (3.0)
HIV stigma items			
People who have HIV/AIDS are like everybody else	28 (20.7)	103 (76.3)	4 (3.0)
People who have HIV/AIDS should be ashamed*	110 (81.5)	22 (16.3)	3 (2.2)
It is safe for people who have HIV/AIDS to work with children	49 (36.3)	77 (57.0)	9 (6.7)
A person with HIV/AIDS must have done something wrong*	92 (68.1)	37 (27.4)	6 (4.4)
I do not want to be friends with someone who has HIV/AIDS*	106 (78.5)	25 (18.5)	4 (3.0)
People who have HIV/AIDS should be isolated*	113 (83.7)	14 (10.4)	8 (5.8)
People who have HIV/AIDS are cursed*	110 (81.5)	22 (16.3)	3 (2.2)
People who have HIV/AIDS must expect restrictions on their freedom*	99 (73.3)	32 (23.7)	4 (3.0)
People who have HIV/AIDS cannot be trusted*	105 (77.8)	24 (17.8)	6 (4.4)
People who have HIV/AIDS have nothing to feel guilty about	56 (41.5)	75 (55.6)	4 (3.0)

* Negative attitude and stigma items

Table 3
Characteristics of qualitative interview participants (*N* = 27)

Characteristic	Mean	Median	SD	<i>n</i>	%
Age (years)	27.3	27.0	5.9		
Time in the US (years)	5.6	4.0	4.8		
Role					
Player				22	81.5
Spectator				3	11.1
Coach				2	7.4
Country of origin					
Ghana				7	25.9
Liberia				7	25.9
Nigeria				4	14.8
Cameroon				2	7.4
Cape Verde				2	7.4
Uganda				2	7.4
Zambia				2	7.4
Benin				1	3.8
Number of AHCs attended					
First time				16	59.3
Second time				4	14.8
Third time				7	25.9