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HIV/AIDS Knowledge and Beliefs Among Haitian Adolescents in Miami-Dade County, Florida

Louis Herns Marcelin,

Louis Herns Marcelin, PhD, is Director of Research at the Family and Youth Community Research Center, Inc. and Research Assistant Professor, Department of Anthropology and Department of Epidemiology and Public Health, University of Miami.

H. Virginia McCoy, and

Louis Herns Marcelin, PhD, is Director of Research at the Family and Youth Community Research Center, Inc. and Research Assistant Professor, Department of Anthropology and Department of Epidemiology and Public Health, University of Miami. H. Virginia McCoy, PhD, is Professor of Public Health, Director, Office of Public Health Practice and Director, Center for Health Research and Policy Public Health, Florida International University.

Ralph J. DiClemente

Ralph J. DiClemente, PhD, is Charles Howard Candler Professor of Public Health and Associate Director, Emory/Atlanta Center for AIDS Research, Emory University.

Abstract

This study examined HIV/AIDS knowledge and beliefs in Haitian adolescents in an HIV epicenter, Miami-Dade Florida. This study examined survey data from 300 Haitian adolescents, aged 13 through 18, from both low- and middle-income neighborhoods. A sub-sample of 80 adolescents was selected for in-depth interviews and continuous observations with their families and networks of friends, which added rich descriptions to the quantitative data. Overall knowledge about HIV/AIDS was high with the majority of adolescents identifying unprotected sex and sharing injection drug needles as HIV transmission routes. Moreover, approximately 75% of the adolescents reported condom use as an effective preventive strategy. However, misconceptions that could reduce adolescents' adoption of HIV preventive strategies were also identified. The adolescents' sources for information about HIV/AIDS as well as implications for prevention interventions are discussed.

Keywords

Haitian-American adolescents; immigration; HIV/AIDS knowledge; HIV/AIDS beliefs; Miami-Dade; Florida; immigrants' health

Risk for HIV infection among minority populations is among the most serious problems currently confronting public health in the United States (Centers for Disease Control [CDC], 2002). In Miami-Dade County, as in other urban centers, HIV surveillance data indicate that HIV and AIDS disproportionately affect minority populations, especially those of African descent. According to the CDC, adolescent and adult black males, for example, had an estimated rate of new HIV infections of 108 per 100,000 in 2002; approximately nine-fold that of adolescent and adult white males (12.3 per 100,000 (CDC, 2002). Minority populations are, however, diverse with respect to their sociocultural contexts, and among black populations in

Address correspondence to: Louis Herns Marcelin, Department of Anthropology, University of Miami, PO BOX 248106, Miami, Florida 33124-2005 (E-mail: lmarcel@tmed.miami.edu)

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the United States, critical factors such as immigration pattern and status, degree of acculturation, and family processes as well as national background have been found to influence adolescents' attitudes toward health-related issues and their engagement in health-related behaviors (CDC, 2003; Marcelin et al., 2005; NIDA, 2003).

A number of studies have examined the HIV knowledge, attitudes, and perceptions of U.S. adolescents in general, and a few have focused on Black/African groups specifically, but Haitian-American adolescents, a subpopulation at high-risk for HIV infection, remain understudied and underserved.

The aim of this study is to address this identified health disparity by assessing Haitian adolescents' HIV-related knowledge and determine whether HIV knowledge levels varied by gender, age, sexual experience, place of birth, neighborhood of residence, and length of time living in the United States. This article is one of the first to report empirical data regarding Haitian adolescents' knowledge, beliefs, and perceptions about HIV and AIDS, incorporating both qualitative and quantitative data.

METHODS

Participants

A total of 300 Haitian adolescents were recruited through a snowballing recruitment process from three neighborhoods in Miami-Dade County, Florida. The majority of participants (123 or 41%) resided in North Miami, which has a population estimated at 1,018,222 and includes the highest concentration in the county of blacks of various national origins (31.6% compared to 9.8%; Census, 2000). Ninety-eight participants (32.7%) lived, in Homestead/Florida City where 80% of Haitian residents work as seasonal migrant farm workers (Marcelin & Marcelin, 2001). Finally, 79 participants (26.3%) came from Kendall, an ethnically mixed middle-class community. About half were female (51%). The eligibility criteria used for selection of participants were age (13–18), residence (three clusters of neighborhoods in Miami-Dade County), and ancestry, at least one biological parent of Haitian descent. Informed consents were obtained for participants who completed their eighteenth birthday prior to the time of their recruitment. Parental consent for participants younger than 18 was obtained directly by an IRB-certified interviewer prior to adolescent recruitment. Subsequently, adolescents were asked to provide written informed assent.

Design and Procedures

Data reported in this article are derived from three collection procedures: observations, questionnaires, and interviews. The study used a purposive community-based sampling technique of Haitian adolescents selected in neighborhoods predominantly inhabited by Haitian immigrants.

Observations—Haitian adolescents were observed in their sociocultural environment (e.g., homes, nightclubs, parties, and neighborhood "hot spots") where risk behaviors occur. Direct observation was supplemented by informal interviews to help guide the assessment process.

Questionnaire—A semi-structured questionnaire (or interview schedule) was completed with each participant. The semi-structured questionnaire took about one hour to complete. It comprises 110 structured, semi-structured, and open-ended questions administered by field interviewers at participants' homes or a comfortable, private location. Of the 110 questions, 33 questions assessed socio demographics, family history, religious activity, and schooling (see Table 1). The remainder assessed a variety of factors including family and community life, and drug use as well as friendship patterns, forms of sociability, protective and sexual behaviors.

Interviewers were of Haitian descent, extensively trained, and had previous research experience in the Haitian community of Miami-Dade County. Interviews were conducted in English. To insure validity and reliability, an independent rater reviewed the questionnaires for completeness and consistency of responses. Questions were explained to participants to avoid confusion and interviewers encouraged the participants to respond truthfully to the questions by explaining the confidentiality of the information provided and anonymity of the findings (Jemmott, Jemmott, & Fong, 1992). Responses to the questionnaire were used to identify adolescents for potential participation in the in-depth interviews and continuous observations. The final selection of participants for in-depth interviews was based on the variety of social contexts of the adolescents as well as the heterogeneity in the study population (for example, nature of risk behaviors, family configurations, experiences of migration or whether participants were born in Haiti or the United States). The objective here was to ensure that the conclusions of the study account for the entire range of variation of Haitian adolescents in Miami-Dade, rather than only the typical members of a particular range. This selection strategy also allowed us to examine cases that are critical for the formulation of preventive intervention strategies for the variety of conditions in which Haitian adolescents develop.

In-depth interviews—Eighty adolescents selected from the 300 study participants completed in-depth interviews. An interview guide was developed to serve as a conceptual template used by interviewers. It contains topics ranging from adolescents' life experiences, conception of the body and body processes, sex and sexuality, fashion and identity, beliefs about health and illness, understandings of HIV and AIDS and preventive measures, forms of sociability, drug use, and HIV/STD risk factors. In-depth interviews were conducted primarily in English. If participants were uncomfortable in explaining a particular concept in English, then the interviewer would encourage them to formulate their thoughts in their native languages, either Creole or French. Only one participant completed the in-depth interview solely in Haitian Creole.

Measures

Adolescents' knowledge of HIV was assessed using true-false statements to 10 questions (see Table 2). Each response received 1 point for a correct answer and 0 points for an incorrect response, for a possible total score on the HIV knowledge index of 0 to 10.

DATA ANALYSIS

Quantitative Analysis

The results of the interviews were analyzed using the SPSS statistical package. Because the nature of the study was primarily exploratory, quantitative analyses of the sociodemographic data were predominantly descriptive and non-parametric. Bivariate chi-square analyses were utilized to examine specific hypotheses related to the relationship between sociocultural characteristics and knowledge and beliefs about HIV and AIDS.

Qualitative Analysis

Narrative and field notes recorded during observations and in-depth interviews were analyzed with reference to the structure and aims of the study and coded categories. Descriptive frequencies have been clarified with the coded text segments from selected respondents. Identification of relationships between rich qualitative data with the statistical data helped capture the various meanings of specific HIV related knowledge and beliefs. Analysis of field notes and in-depth interviews proceeded first with searches of text for relevant passages, followed by arraying of passages by coded categories. This technique allowed us to derive from the narratives a sense of participants' own view of their sociocultural context of risk. They

have structured their responses to broad stimulus questions in their own way, and that structure has provided information on processes that lead to risky behaviors in terms of expectations and practical outcomes. Searches also identified vocabulary used by the participants in describing their beliefs and practices related to their body, sexuality, and HIV/AIDS.

RESULTS

Sample Description

The sample comprised 300 Haitian adolescents; 51% were female. Ages ranged from 13 to 18 with nearly half of the participants being at least 17. Almost two-thirds were born in the United States, and one-third were born in Haiti. The majority (90%) reported that both of their parents were born in Haiti. Over half (53%) self-identified as Haitian-American and 43% self-identified as Haitian. Over three-quarters (77%) reported residing in the United States for at least 5 years. Most (85%) of the adolescents lived with their mothers. Other living arrangements included living with stepmothers, stepfathers, siblings, and other adults who may have had kinship ties. The majority (58%) of adolescents reported that religion was very important and 61% reported attending church services weekly. One-third (33%) reported that their religion was Protestant and 43% reported that they were Roman Catholic. A minority (14%) of the study sample had used illicit drugs; primarily marijuana but half (50%) had tried alcohol. About 40% were sexually experienced (see Table 1 for participant demographic data).

Knowledge of HIV/AIDS

HIV knowledge questions were asked of all study participants regardless of whether they were sexually active (Table 2). A knowledge index, comprising the number of correct responses to ten items, was constructed. The mean of correct responses was 6.9. The percent of correct responses for individual items varied markedly, ranging from a low of 43.3% correct (e.g., HIV transmitted by mosquitoes) to a high of 94.3% correct (HIV can be transmitted by sharing drug needles).

Both male and female adolescents provided correct responses to a mean of almost 7 statements. There was a small, but statistically significant difference by age, with the general pattern indicating more correct responses with increasing age. The greatest difference was between 14-year-olds who had a mean of 5.96 correct responses and 18-year-olds who had a mean of 7.40 correct responses. Differences by place of birth and by neighborhood were small and not statistically significant. Time in the United States, however, was significant. Adolescents who had lived in the United States for five or more years had greater knowledge scores (mean = 7.22 correct responses), compared to those who had resided in the United States for four or fewer years (mean = 5.85). Difference by sexual experience was in the expected direction, with a mean of 7.15 correct responses for those who were sexually experienced, compared to 6.79 for those who were not sexually experienced; however, this finding did not achieve statistical significance.

Additional knowledge statements not included in the index were also assessed (Table 3). In terms of sexual behavior, the great majority (94%) agreed with the statement that a person could become infected with HIV by having sex only one time. However, slightly over one-quarter of participants (27%) agreed that having one sex partner at a time (serial monogamy) is protective of HIV and over one-quarter (29%) agreed that a person must have many different sex partners to be at risk for HIV. About one-tenth of adolescents agreed that sex is safe if the man pulls out before orgasm. Half of the adolescents agreed that mutual masturbation and body rubbing are low HIV risk behaviors. A majority (79%) agreed that anal sex is risky because it transmits HIV.

Beliefs, Myths, and Misconceptions

In order to make sense of these numbers, it's important to restate the adolescents' own narratives about their beliefs and knowledge as well as their interpretations of their own behaviors. From the qualitative data, a thirteen-year-old boy was unclear about the meaning of a "virus," He explained, "... it's not really a living thing, it's like a factor ... you try to get antibiotics for it, but it won't work because you can't kill the virus ... I guess it comes in the genes ..." A fourteen-year-old boy questioned the severity of HIV. As he said, "... they make it seem like you will get HIV today and die tomorrow ... but look at Magic Johnson ... I just think it's a bad thing to get, cause it shortens your life and you might not reach all your goals." A seventeen-year-old girl suggested that sexually active girls know about HIV but "some people just have to learn the hard way..."

A seventeen-year-old boy reported that a cure for HIV does exist but "... they just won't put it out." Qualitative responses to the question: "What do you know about HIV?" also varied with individual background. One participant expressed it as follows:

(HIV) is a disease. It's like ... and it... that's the first step of getting AIDS and stuff and you get it from having sex and stuff. [. . .] If somebody have a cut and you know they touch you, and you could get it like that, you know I heard something about getting it from drink and stuff I don't know if that's true, but that's what I heard.
(Female, age 15)

Some participants do hold the correct information regarding HIV and AIDS while under the false assumption that there is currently a cure for AIDS. At least 15 out of 80 adolescent in-depth interviews (all of them males) think that Magic Johnson found a cure for HIV. A 17-year-old male reported that most of his friends believe that the cure for HIV exists but it is only available for the rich. This participant argued the following:

Man . . . they got a cure for it, look Magic Johnson, he got like money, for him to get the cure, cause if they don't have the cure for it, they got something that lead, that keep you living like longer than you expect, than AIDS would have you living. Like to me they got the cure for it, they just won't put it out, because they, know if they put it out, and then most people that got AIDS would buy it, but the rich people whoever got money, cause to me it takes money for you to take the AIDS out, to me they got a cure for it, they just won't say it, they won't say nothing about it.

The idea of the cure for Magic Johnson is also associated with a representation of healthy body and a conception of diseases that is asymptomatic. It is a shared idea among some participants that the true HIV infected individual "become(s) skinny . . . , look(s) (with) no body muscles but . . . ribs" (Male, age 17). Most participants generalize the physical symptoms of AIDS and use the term with HIV interchangeably. For example, one participant asked, "How could someone say Magic Johnson got AIDS? He got bigger and stuff to me, you know, he didn't get no skinnier, to me he got the AIDS cure" (Male, age 17).

Some participants also believe in a cure from God as this 17-year-old female explained: "I believe that what God created can be cured ... like the common cold it can be cured, the flu, it can be cured, if it's God that created it, it can be cured .." While the same participant expressed with clarity the HIV transmission pathways: "You catch HIV from needles, sexual contact, blood transfusions, through blood, basically through blood." Though this participant was correct about some of the demographics of HIV positive persons she falsely believes that AIDS is "attracted to African Americans" and "gays."

The great majority (89%) agreed that one can get HIV by sharing tat-too-or piercing-needles and even more (94%) agreed that one can get HIV by sharing needles when using drugs. About

three-quarters (71%) of the study sample agreed that one can get HIV during oral sex, although about 15% endorsed the statement that oral sex is safe if the partners don't swallow.

Belief in the accuracy of HIV tests was also examined. Slightly over half (55%) of the adolescents agreed (correctly) that a negative result can be obtained from an HIV test, even if the person has the HIV virus. Over forty percent agreed that a positive HIV test result could occur even when the person does not have the virus. Almost one-fifth (18%) agreed that most people who have HIV know that they have the virus.

Other beliefs about HIV were also assessed. The majority (80%) of adolescents agreed that HIV infections and AIDS are as bad as people are making them out to be. Almost half of the adolescents (49%) agreed that it is more important to protect oneself against HIV in big cities than it is in small cities. Just over half (57%) worry about contracting the HIV virus or AIDS and a similar percentage (55%) worry about getting sick with HIV or AIDS. Almost two-thirds (60%) thought they were less likely than other people to get infected with HIV or AIDS and very few respondents (1%) thought that they would catch HIV/AIDS sooner or later. However, about one-third agreed that "it would be easy for you to get infected with HIV or AIDS." This apparent contradiction may be partially mitigated by the fact that one-third of the study respondents (33%) agreed that they are afraid to think about HIV or AIDS.

Transmission myths or misconceptions were commonly expressed. About one-quarter of respondents agreed with the statement that drinking out of the same glass as someone with HIV puts one at risk for contracting the disease. Some participants even reported stories of individuals who have been infected by drinking out of the same glass as an HIV infected person. About one-tenth of the respondents noted that one could get HIV by social (dry) kissing. About 30% of the study participants thought that HIV goes through unbroken skin and about 41% reported that mosquitoes could transfer HIV from one person to another. Additional beliefs were recorded in field notes by field researchers in the context of observational conversations with participants. These field notes reported a prevalence of "urban legends" that suggest that there are hypodermic needles in the seats of movie theatres and thus people who do not use injection drugs and are not sexually active still think it would be easy for them to become infected with HIV. Detailed explanations by interviewees recorded by field interviewers reported that the fear of transmission of HIV through drinking glasses is based on the belief that the glass could be chipped and, therefore, both someone with HIV and a non-infected individual could theoretically have blood-to-blood contact.

A fifteen-year-old boy explained that HIV is only transmitted from "sex fluids in the body . . . you can only get it by having sex." On the other hand, a fifteen-year old girl who was sexually inexperienced was afraid of contracting AIDS through casual contact; "... I heard something about getting it from drink and stuff, I don't know if it's true, but that's what I heard." A fourteen-year-old boy explained that anything containing DNA could spread HIV; he also stated that mosquitoes could transfer the virus. An eighteen-year-old boy expressed concern that sharing a toothbrush could spread HIV.

Some adolescents reported conflicting stories of family members who have been victims of Vodoun (popularly known in the United States as Voodoo) spells and ended up dying with AIDS. A few believed, however, that if one has money for Vodoun services one can possibly find treatment for AIDS in Vodoun. One respondent had a brother, 23, who was diagnosed and later died with AIDS. She believed that had her family had money they would "take the disease off her brother.

Like with AIDS, there is a lot of people in Haiti that come up with AIDS. If you have the money, you can do Vodoun, and they would *postpone* (*ranvwaye* in Haitian

Creole) that AIDS. Like for my brother, I don't know how to say it in English, but translating it in words for words I would say: "remove" the disease from him . . . and put it on the wall, you know. . . . (Female, age 17)

However, during the same interview, this participant also suggested the following:

But we don't believe in that, we don't believe in Vodoun. God only can help us, you know, that's the way we think, God is the only one that can help us, he's the only one who can do what ever, God knows what he's doing, if he, if he, something, that's how I got over his death, cause I was devastated, but, God would never put nothing on us that we can't bear, he knows what he's doing, sometimes he allows the devil to do things to us, but that's only to test us, so, that's the way my family carry, we could have been, doing Vodoun, we could have been, you know, doing everything....

Perceived Vulnerability

Most respondents, however, did not feel personally vulnerable to HIV. Overall, the study participants see HIV as a remote possibility that may affect others. This is very common among other adolescent groups who believe that HIV affects other groups but not them (DiClemente, Wingood, & Sionean, 2002; Romer, 2003). The following is an example of how a respondent compares his vulnerability for contracting the virus to hitting the lottery and being the victim of a serial killer:

"It's out there, you know, just like . . . [PAUSE], just like girls know there are rapists out there, and people know there are serial killers out there, but, that that don't make them stay in their house, all day long in fear, you know what I am saying, like they going to encounter one of them ... it's a risk you take every time you do, yeah, but, it's not worth it, but you know what I am saying, I, you just do it, you just do it" (Male, age 16)

Even when a respondent agrees with the idea that HIV is one of the most important health problems of his/her time, he/she perceives the educational service announcements in the media or in other venues as propaganda. The following illustrates a general trend among the population studied:

I think when they advertise it they make it seem like you will get HIV today and die tomorrow or like die within the week, but like once again look at Magic Johnson he got it what like couple of years ago, like maybe ten years ago something around that and look at all the great things he's done. I don't think it's really as bad, I just think it's really a bad thing to get, cause it shortens your life span, you might not reach all your goals. I don't think it's like the worse thing to ever contract. I don't think it is something great to have. (Male, age 14)

Primary Source of Information About HIV

Although data from the semi-structured questionnaire showed that the most important sources of information about HIV/AIDS were school (49%), family (27%), friends (8.4%), and the media-television and radio-(4.8%), in the qualitative interviews, most participants identified friends as their primary source of information. A 15 year old participant puts it in the following terms: "well we learned from each other, stuff you didn't know, somebody else knew, so like in a way, my peers, my friends, a lot of them they're like my family...." (Female, age 15). Still, school is also a venue for knowledge for most participants:

Like there's such a club, like all they do is inform kids, on, AIDS and sexually transmitted diseases, or stuff like that, or you know, I think there are some classes

that, that you can sign up for that... I am not quite sure . . . They'll do like a presentation, in class you know, and they'll talk about AIDS (Female, age 17)

Though this participant acknowledges that there is HIV education available in school, she also described television (e.g., MTV) as her main source of knowledge about HIV.

Knowledge and Beliefs About Prevention

From the knowledge question, nearly three-quarters (74%) thought that condoms provide effective protection against HIV and AIDS (see Table 2). However, fewer than half of the study participants (41%) thought that practicing safe sex alone guarantees protection against HIV.

A thirteen-year-old girl explained that the way to prevent HIV is to “get tested every month, or every week, and use a condom.” A sixteen-year-old boy summed up condom usage as a risk reduction strategy by explaining that, since you never know who might have HIV, “... you ain't got to know, you ain't got to find out. The only partner you got is like your condoms ... if you want to protect yourself, you got to use the condom.” An eighteen-year-old boy explained HIV prevention in terms of risk management. According to him, there are two methods of protection: not having sex which is 100% sure, and using a condom which is not 100% sure. As he explained it, “... it's a lot of risks you take when you do it [have sex], but I guess it's something people don't really think about, like rapists and serial killers . . . you know they are out there . . . but you guys don't stay home and say 'Oh my God, there's rapists out there'. . . so sex is the same way I feel about that.”

DISCUSSION

This sample of Haitian adolescents is at some risk for sexual transmission of HIV infection since almost half are sexually active. Although knowledge of HIV transmission risks alone is not sufficient to prevent risky behaviors, correct information regarding the HIV virus and its transmission is still a necessary prerequisite for risk reduction. Therefore, assessment of HIV knowledge within this specific at-risk population is an important step toward informing future prevention programs. Examples drawn from both the quantitative and qualitative data illustrate the types of confusion and misconceptions that were expressed by study participants. Confusion was indicated regarding HIV transmission methods, HIV prevention techniques and the nature and severity of HIV infection.

This study's average knowledge index score of seven out of ten correct answers is comparable to a recent study of students in technical high schools in Greece in which 72% of questions about HIV were answered correctly (Merakou, Cstapoulos, Marcopoulou, & Kourea-Kremastinou, 2002). The difference in correct responses to different methods of HIV transmission demonstrated by this study is also seen in a study of Asian-Indian adolescents in the United States in which knowledge of HIV transmission methods ranged from 36% to 95% correct (Bhattacharya, Cleland, & Holland, 2000). Another study, conducted in a large public high school in New York City, reported a high level of HIV knowledge, over 90% correct responses (Cohall et al., 2001).

The data show a trend toward higher scores on the HIV knowledge index among those who were sexually experienced; but this finding did not achieve statistical significance. This is consistent with a study of psychiatrically referred adolescent Latino girls, which demonstrated strong positive correlations between engaging in sexual behavior and HIV knowledge (Dudley, O'Sullivan, & Moreau, 2002). In this study, Haitian adolescents who have demonstrated higher HIV knowledge were sexually experienced and relatively older.

It is important to recognize that this study of Haitian adolescents demonstrates two types of errors regarding knowledge of HIV transmission. For example, if a participant endorsed beliefs in a false transmission method, this person may experience undue anxiety and may refrain from harmless activities or social interactions. In fact, belief that HIV can be transmitted by activities such as sharing drinking glasses may foster stigma and discrimination toward perceived or actual HIV infected individuals and reinforce their social isolation. On the other hand, if a participant failed to recognize the HIV transmission risk inherent in “actual” risk behaviors, this person may experience a false sense of security and may unknowingly expose himself or herself (or others) to HIV.

LIMITATIONS

This study has several limitations. It relies mainly on self-reported information on knowledge and beliefs, using an interview schedule, observations, and in-depth interviews as the primary sources for data collection. Despite the fact that the participants were assured that information reported would be kept confidential, it is possible that some participants may not have been entirely truthful. However, the multiple data collection procedures mentioned above contributes to our high confidence in the quality of the information collected. This confidence first stems from the fact that through our qualitative methodology, which consists of an interview schedule, continuous observations over time, and in-depth interviewing, the investigators have developed a sustained relationship with participants, thereby establishing a relatively high level of trust. In most cases, the interviewers who elicited the quantitative data were not the same people who conducted the in-depth interviews. We, therefore, assume that we had the advantage of trust for our study and no observer bias in the collection of the quantitative data. Second, the participants in the in-depth studies were selected from the respondents completing the structured interview schedule. The ongoing observation and in-depth investigation of their behavior in their natural environment enabled the investigators to crosscheck responses to items on the interview schedule with observational and in-depth data gathered on the same individuals. Although not all the participants’ data came under this examination, we found sufficient corroboration for the responses to the interviews in the qualitative data to reinforce confidence in the quantitative data, consistent with the concept of triangulation (Bernard, 2000). While we do not have a probability or representative sample from which to generalize the findings, we have used a convenient snowball sampling, which, from a qualitative analysis standpoint, is a useful strategy to access and recruit our target population. Additional studies, using other sampling methodologies, will be needed to confirm and extend these findings.

CONCLUSIONS

Despite the number of Haitians residing in the United States, there is a paucity of empirical information about their knowledge and beliefs about HIV/AIDS. Existing epidemiological reports subsume all black individuals in the generic category “Black or African American” which may obscure important socioeconomic and cultural differences among immigrant black populations; Given the need for culturally tailored HIV prevention interventions, data derived from this study could be useful in guiding the development of programs designed to enhance Haitian adolescents’ knowledge about HIV transmission routes and prevention strategies and dispel erroneous beliefs about HIV.

The findings from this study suggest that many Haitian adolescents are sexually active; however, many are also not equipped with sufficient understanding of HIV/AIDS to make responsible choices that could reduce their risk of HIV infection. As it is the case for other adolescents, popular myths, urban legends, and peers also influence Haitian youth. Unlike other

adolescents, however, specific beliefs that their families brought with them from Haiti when they migrated also permeate their representations about HIV. For example, participants who believed that AIDS can be “sent” as a magical spell to someone by an enemy are more likely to be from immigrant families where the beliefs of “sent sickness” prevail (Farmer, 1990; Wingerd & Page, 1997). Unlike most of their parents, adolescents entertain a blend of scientific knowledge, urban legends, and selected traditional beliefs embedded in their current urban culture. Preventing HIV among Haitian youth within a sociocultural context will require addressing this triad of information sources through multiple venues such as family, religious institutions, and their social networks.

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TABLE 1
Demographic Characteristics of Haitian Adolescent

	N	% (of 300)
Gender		
Male	147	49.0
Female	153	51.0
Lives with		
Mother	254	84.7
Father	126	42.0
Stepfather	23	7.7
Stepmother	8	2.7
Siblings	228	76.0
Other adults	51	17.0
Adults non-related	11	3.7
Other	51	17.0
Place of residence		
City of Miami/North Miami	123	41.0
Homestead	98	32.7
Kendall	79	26.3
Place of birth		
Haiti	101	33.7
United States	182	60.7
Bahamas	7	2.3
Other	6	2.0
Residence in United States		
0–4 years	61	20.3
5 or more years	230	76.7
Self-identity		
Haitian	128	42.7
Haitian American	158	52.7
Black	3	1.0
Bahamian	2	.7
African American	1	.3
Parents marital status		
Married	125	41.7
Separated	70	23.3
Divorced	53	17.7
Living in common law	20	6.7
Widowed	14	4.7
Single	8	2.7
Other/don't know	6	2.0

TABLE 2**HIV Knowledge Among Haitian Adolescent**

	Yes (% of 300)	No (%) of 300	% Correct
Do you think you can get HIV during oral sex?	213(71.0)	47(15.7)	71.0
Do you think that oral sex is safe if partners don't swallow?	45 (15.0)	171 (57.0)	57.0
Do you think that drinking out of the same glass as someone with HIV puts you at risk for contracting the HIV virus?	72 (24.0)	200 (66.7)	66.7
Do you think that HIV goes through unbroken skin?	88 (29.3)	162 (54.0)	54.0
Do you think that mosquitoes can transfer the HIV virus from one person to another?	124(41.4)	130(43.3)	43.3
Do you think that you can get HIV by social (dry) kissing?	29 (9.7)	255 (85.0)	85.0
Do you think you can get HIV by sharing tattoo or ear piercing needles?	267 (89.0)	21 (7.0)	89.0
Do you think you can get HIV by sharing needles when using drugs?	283 (94.3)	7(2.3)	94.3
Do you think that negative results can happen on an HIV test even if someone has the virus?	166(55.3)	66 (22.0)	55.3
Do you think that most people who have HIV know that they have the virus?	53(17.7)	224 (74.7)	74.7
Overall score (0–10)	Mean = 6.90 Range = 10	Median = 7	SD = 1.91 Percentiles-25 = 6.00 50 = 7.00 75 = 8.00

TABLE 3
HIV Knowledge Score Among Haitian Adolescent

Demographics	N	Mean HIV Knowledge Score (0–10)	Significance
Gender			n.s.
Male	147	6.82	
Female	153	6.99	
Age			F(8,287) = 3.11; p<.006
13	17	6.88	
14	49	5.96	
15	43	6.74	
16	53	7.06	
17	61	7.13	
18	55	7.40	
19	16	7.25	
Place of birth			n.s.
Haiti	101	6.53	
United States	182	7.07	
Bahamas	7	7.14	
Other	6	7.17	
Time in United States			t(289) = -4.75; p<.0001
0–4 years	61	5.85	
5 or more years	230	7.22	
Neighborhood			n.s.
Homestead	98	6.67	
Kendal	79	7.25	
City of Miami/N. Miami	123	6.86	
Sexually Experienced			n.s.
Yes	119	7.15	
No	178	6.79	

Note: Tukey's HSD-indicates significant difference especially between 14 (mean = 5.96) and 18 (7.40) years old groups after harmonizing means for sample size. Also, age by HIV Knowledge bivariate correlation is small, but statistically significant ($r = .20$; $p < .01$)