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Tackling the Spreading of HIV in the Ivory Coast

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Abstract

The spread of HIV in Ivory Coast is examined to evaluate Ivorian perspectives' on which factors explicate the rising of HIV. This study reports the findings of an in-depth mixed method study with 39 teachers, 63 sixth grade students, eight school administrators, and 20 community elders. The study found that factors such as lack of condom distribution in school, high rates of sexual partner change, prostitution, enactment of abstinence education in the school-based curriculum, and lack of classrooms supplies (e.g. projections, electricity) and shortage of teaching materials (e.g. HIV movies and books), and the inadequate time devoted to HIV teaching have led to an HIV/AIDS education that is often insufficient to change either misconceptions about HIV/AIDS or risky practices. Hence people living in Ivory Coast have to get access to HIV education in order to develop life skills required to reduce their vulnerability to HIV infection.

Keywords: HIV literacy and Instruction; HIV/AIDS School-Based Curricula; HIV Prevention; Open Communication about HIV/AIDS; Ivorian School Settings

Introduction

With a national HIV prevalence rate of 2.7%, Ivory Coast is still the most affected country in Western Africa [1,2]. In Abidjan the economic capital of the Ivory Coast; there are prevalent cases of polygamy and permissive adultery. The first cases of HIV in the Ivory Coast were discovered in 1985 [1]. Cultural beliefs in Ivory Coat often reflect ignorance and denial about AIDS [2,3,4,5]. For example, HIV/AIDS may be blamed on witchcraft or derived from the ill will of another person [6,7], and help maybe sought from traditional healers because of traditional perceptions of causes of illness, perceptions of sexuality, and cultural beliefs inhibiting the cause of the condoms [5,8,9]. Hence, the infection of HIV in the general heterosexual population has increased.

In 2016 the number of adults and children living with HIV was estimated at 460,000 [390,000- 520,000] [2,10]. This prevalence rate was also estimated at 2.7% [2.2% - 3.0%] in adults aged 15-49 [2]. HIV/AIDS is the leading cause of death among adult males and second leading cause of death among women [1]. Abidjan, the former capital city has the highest HIV prevalence rate of 5.1% [6,11]. The Demographic and Health Survey (DHS) data (2012) on the Ivory Coast revealed that HIV infection rate was highest among young women in urban areas (2.5%) and it is estimated to be 0.6% for young men in the rural areas [6,11].

Despite the fact that, "War and political/civil unrest …poor infrastructure, especially poor housing, Sanitation… and [HIV] education" aggravates the spreading of HIV/AIDS in the Ivory Coast, the lack of access to quality condoms and low condom use by heterosexual population presents a fundamental barrier to HIV prevention across the Ivory Coast [3,5,8]. With early studies showing that main risk factors for HIV infection such as ignorance of individual's HIV status, illiteracy, and polygamy could augment the spread of HIV, by providing the Ivorian population with adequate HIV/AIDS Information, teaching, and training that are more responsive and inclusive of the Ivorian cultural beliefs; there is hope that the rise of HIV infection can be reduced [10,12]. Although older men and women tend to have multiple partnerships in Ivory Coast, research has found that, "HIV prevention should focus both on commercial sex and transmission between clients and younger females with multiple partners" [4,11].

Since HIV/AIDS risk reduction is a function of people's information about AIDS transmission and prevention, offering HIV/AIDS education In the Ivory Coast, will help alleviate and the spread of HIV in the country and it should be based on culturally relevant material and address information [13,14]. Therefore, it is important to gain a clearer understanding about a large-scale HIV prevention and education that has yet to be implemented fully in the Ivory Coast. With Community mobilization activities in Ivory Coast, consisting of shedding light on risk-taking processes, designing intervention programs, and offering local community

training--HIV marketing support to teachers, students, community elders, and school administrators—can benefit all community members' families and children.

Though topics such as HIV and sex are viewed as taboo subjects in many traditions in the Ivory Coast, and there are not enough "explicit discussions of sexual practice, drug use, and condom distribution" [3,5,12,15,16,]. Hence, including sex and HIV education within the school curriculum could also be very beneficial instead of being excluded from the educational system in Ivory Coast. Overall, HIV education needs more direct attention, focus, and method of teaching in Ivorian schools [4]. Besides, HIV/AIDS education has been found to be "the best available protection against HIV infection" and the effect of education on change in sexual behavior has been referred to as the "education vaccine" [13]. The building up of a political consensus on HIV education inside the Ivory Coast can lead to a large-scale reform of its education system and to the design, planning, and facilitation of engaging and dynamic activities and opportunities for their schoolchildren with the school day. By implementing relevant and locally-based HIV/AIDS prevention strategies in Ivorian school curricula, it will ultimately teach HIV education content to students, emphasize sexual literacy and decision-making, and contribute to the prevention of new HIV infections.

In the Ivory Coast, the lack of HIV/AIDS education and discourse deserves individual consideration Because HIV/AIDS topics challenge conservative conceptualizations of what is appropriate to teach in school and when, and raise questions around the purity or innocence of students, conservative educators, parents, and communities may feel threatened [15]. Barriers such as personal beliefs and misconceptions about HIV/AIDS that prevent the delivery of HIV/AIDS education within the Ivorian school contexts have to be addressed. Progress can be made by not allowing, "the strong religious beliefs [of many teachers to] shape curriculum development and the teaching" of HIV/AIDS Topics [3]. Gathering both perspectives on HIV/AIDS school-based curricula and instruction can lead to the development of a culturally relevant curriculum that integrates local beliefs and attitudes, what communities in Ivory Coast see as the best recommendations for school curriculum integration and improvement regarding the teaching of HIV/AIDS.

The purpose of this study is to describe and analyze the many factors that explain accurate information about the cause and mechanisms of the increased HIV incidence rates within the Ivory Coast. The research question for this study is: What are the views of students, teachers, school administrators, and community elders on the main factors that contribute to the continued transmission of HIV in the Ivory Coast? How can these perspectives inform future curricular implementation?

Methods

Using a mixed methods approach, both qualitative and quantitative, this study describes and analyzes Ivorian teachers, community elders, school administrators and middle school students' perspectives on the potential causes of the spreading of HIV/AIDS in the Ivory Coast. From interactions with these participants, "the meanings that people [participants] hold for their everyday activities" were understood and their views of their world are reported as well as flushing out their "views on issues" [16,17]. Six middle schools in two school districts in Abidjan, Ivory Coast participated in this study. The data included the collection of individual interviews from 39 civics and science teachers, 20 community elders, 63 sixth grade students, and eight school administrators. Interviews lasted from 30 min to 45 min, and took place in each of the participated school site or in participants' homes. Interviews were conducted using an interview guide that included semi-structured and open-ended questions. Interview questions were administered face-to-face with study participants. The interview guide contained questions on knowledge and spread of HIV/AIDS, cultural beliefs influencing the ways HIV/AIDS concepts were taught in the Ivory Coast, effective ways to teach HIV/AIDS topics, HIV/AIDS curriculum design and delivery, and the cultural factors that influence the integration of HIV/AIDS curriculum in Ivory Coast's school programs (See interview protocol for Students, Teachers, Community Elders, and School Administrators). In addition, document analysis of sixth grade civics and science curriculum materials were collected as well as field notes. All interviews were audio recorded, transcribed verbatim, translated from French into English, and analyzed using the strategy of open and axial coding [18]. The data was categorized and study findings were put together by making connections between themes, reviewing the transcripts, and at the same time engaging in peer debriefing to ensure trustworthiness of the data [19].

Individual interviews were conducted to stimulate discussion on participants' perceptions of HIV/AIDS education in an effort to seek deep understanding about Ivorian experiences. Throughout the data collection process, field notes were used to keep track of more informal interactions with participants, as well as to document any observations that might add depth to the interviews. These field notes provided key information on issues or challenges, as well as successes that might arise unexpectedly [20,17].

After the collection of data, multiple methods of qualitative data analysis, peer debriefing, and writing were used. Using a range of qualitative methods and connecting with multiple groups of stakeholders as well as utilizing multiple data analysis procedures, several themes from the data were identified.

Results

Four numerical tables of results with percentages of adults' perspectives (Community elders, Teachers, School administrators) of the quantitative portion of the data are contrasted with children perspectives on the causes of the increased HIV prevalence rate (War, abstinence education, and HIV/AIDS stigma) to illuminate readers understanding about the spread of HIV/AIDS in Ivory Coast (Table 1,2,3 and 4). 40% of community elders believed that war and civil unrest in the Ivory Coast from 2002 to 2011 was to

blame for the high HIV prevalence rate in the country. Although 13% of school administrators acknowledged that HIV/AIDS was forgotten during that period of war and civil unrest in the Ivory Coast, 16% students mentioned that daughters' prostitution was practiced during the war to remedy the financial burdens of the family. Hence 15% of teachers believed war in the Ivory Coast have brought poverty, rise of prostitution, and decrease some female high school students' awareness of HIV epidemic.

#	Number and percentage of community elders who mentioned HIV Stigma, War, and Abstinence education	Response	Percentage (%)
1	The war and civil unrest that the country faced from 2002 to 2011 was to blame for the high HIV prevalence rate.	8	40%
2	Stigma associated with HIV/AIDS in their communities was high because the Ivorian government did not do enough to educate the public about HIV epidemic.	7	35%
3	Preference of Abstinence education over condom education might be of the major cause for the increased HIV infection.	5	25%
	Total	20	100%

Table 1: Community Elders' standpoints on HIV stigma, War, and Abstinence Education

#	Number and Percentage of School Administrators who mentioned HIV Stigma, War, and Abstinence education	Response	Percentage (%)
1	HIV/AIDS has been forgotten during the time of war in Ivory Coast.	1	13%
2	Abstinence education was easy to teach in School when there were no official HIV/AIDS teaching resources available for Ivorian schools/teachers.	2	25%
3	There was not enough time devoted to HIV and sex education in the Ivorian school curriculum because Ivorian curriculum makers viewed sex and HIV/AIDS as taboo subjects.	5	62%
	Total	8	100%

Table 2: School Administrators stances on HIV Stigma, War, and Abstinence education

#	Number and percentage of community elders who mentioned HIV Stigma, War, and Abstinence education	Response	Percentage (%)
1	Lack HIV/AIDS content knowledge force many teachers to favor abstinence education over condom education.	20	51%
2	War in the Ivory Coast has brought poverty, rise of prostitution, and decrease young people's awareness of HIV epidemic.	6	15%
3	I am uncomfortable teaching HIV/AIDS topics probably because I lacked training in these topics and had some difficulty talking about sex and HIV/AIDS to my students.	13	34%
	Total	39	100%

Table 3: Teachers' outlooks on HIV Stigma, War, and Abstinence education

#	Number and percentage of community elders who mentioned HIV Stigma, War, and Abstinence education	Response	Percentage (%)
1	I was not satisfied with the way HIV prevention was handled in the Ivory Coast because there was no free condoms distribution at school and all us were told to observe abstinence.	25	40%
2	During the war time daughters' prostitution was used to remedy the financial burdens of the family.	10	16%

	Number and percentage of community elders who mentioned HIV Stigma, War, and Abstinence education	Response	Percentage (%)
3	HIV is an imaginary syndrome and that only prostitutes and people who bad characters can get HIV/AIDS.	28	44%
	Total	63	100%

Table 4: Students' viewpoints on HIV Stigma, War, and Abstinence Education

Consequently, 35% of community elders believed that stigma associated with HIV/AIDS was high in their communities because the Ivorian government did not do enough to educate the public about the HIV epidemic. Moreover, 62% of school administrators were convinced that there was not enough time devoted to HIV and sex education in the Ivorian school curriculum because Ivorian curriculum makers viewed sex and HIV/AIDS as taboo subjects. Although 44% of students viewed HIV as an imaginary syndrome and believed that only prostitutes and people who bad characters could get HIV/AIDS, 34% of teachers claimed that were uncomfortable teaching HIV/AIDS topics probably because they lacked training in these topics and had some difficulty talking about sex and HIV/AIDS to their students.

While 25% of school administrators claimed that abstinence education was easy to teach in School when there were no official HIV/AIDS teaching resources available for Ivorian schools/teachers, 25% of community elders blamed that the preference of abstinence education over condom education might be one of the major cause for the increased HIV infection in Ivory Coast. Moreover, 51% of teachers understood that the lack HIV/AIDS content knowledge force many teachers to favor abstinence education over condom education. In sum, 40% of students were not satisfied with the way HIV prevention was handled in the Ivory Coast because there were no free condoms distribution at school and all students were told to observe abstinence.

After a thorough analysis of participants' interview transcripts, multiple participants across groups identified several issues that they believed contributed to the spread of HIV/AIDS in the Ivory Coast. Many of the issues they identified were connected to their cultural beliefs, which often reflect ignorance and denial about AIDS. Some of the findings follow:

Abstinence Pedagogical Approach

Amongst study participants, there were conflicting views on which pedagogical approaches to use in the school curriculum. For example, many of the community elders, teachers, students, and school administrators interviewed preferred abstinence education over condom education. A majority of teachers, community elders, students, and school administrators were convinced that "sexual abstinence was the only best method against the spread of HIV/AIDS." However, among these teachers, school administrators, and community elders who favored sexual abstinence some of them recognized that, "sexual abstinence required a lot of faith in religion and it was not easily accomplished." Still these teachers, school administrators, and community elders seemed satisfied to have "their own children learn about sexual abstinence instead of condom use in school." Some community elders were convinced that "talking about condoms in school will make our children fresh and it could force them into sexual debauchery." Similar in thought, a school administrator added:

Our students are too young and immature to handle talk about condoms and HIV/AIDS. Condoms are never well manufactured. They break all the time during sex while they are being used. They are not one hundred percent reliable. I'm glad we have abstinence-based education.

Another school administrator explained the reason he was against teaching about condom use:
Condoms can certainly protect us against HIV/AIDS only when they are great quality condoms, but very often condoms break, have an expiration date, and here in Ivory Coast we have some bad quality condoms cheaply available. Also most cheap condoms vendors expose them to the sun. Because of the exposure to the sun, the plastic is fried. I'm sorry to say our students often do not take into account all these factors when they buy these cheap condoms already exposed to the sun. To completely avoid HIV/AIDS, abstinence is the safest solution.

In sum, abstinence only education was favored in the Ivorian school settings due to moral considerations and the logistical complications people perceived in acquiring reliable condoms.

Political Beliefs

In Ivory Coast civil disruptions and wars generated by political chaos in the country had set back the progress of the poor living HIV/AIDS and contributing to massive HIV spreading. The Ivory Coast has experienced many civil unrest and war due to political beliefs and divisions within the country.

Outcomes of War and Instability

Political beliefs were the major theme on participant transcripts. Many community elders, students, teachers, and school blamed the high HIV/AIDS incidence rate in the Ivory Coast on the past political instabilities and the rise of poverty due to the war and civil unrest that the country faced from 2002 to 2011. One teacher alleged, "During the war, HIV/AIDS was forgotten and the rate of HIV/AIDS has increased."

Another teacher added:
We have a high rate of HIV/AIDS in our communities because of political instability and war that the Ivory Coast has experienced. Now in our towns we have the displaced of the war including our young men and women who engage in prostitution to be able to nourish themselves because of poverty here.

A school administrator revealed:
As long as factors such as the influence of poverty, prostitution, high unemployment and the Ivorian economy remained weak to change the social and economic conditions of the Ivorian, the spread of HIV/AIDS would always persist in our communities.

Prostitution

Some community elders referred to the rise of prostitution in Ivory Coast as "a reliable source of income" and they believed it was in vogue in the Ivory Coast because, "when money is short, parents are broke and have no other alternatives of getting out of their poverty, daughters' prostitution can help put food on the table and remedy the financial burdens on the family." Most of the teachers, community elders, and students felt outraged to see young girls ages 13 through 16 engaged in prostitution in order to provide financial support for themselves and their parents. But others put the blame on these young girls for being "lazy and wanting to get ahead in life without hard work." A school principal and a community elder both revealed similar comments: These girls are so into making money so quickly that they were sometimes unaware of the danger of HIV/AIDS. Both of them, the school administrator and the community elder, claimed "many of these young adolescent girls were recruited to work in X-rated bars", thus risking their chances of HIV/AIDS and other sexually transmitted diseases.

Furthermore, a student revealed that her friend who worked as a prostitute "had two sets of prices while prostituting herself--sex with condom and sex without condom." A school principal stated that, "sex without condom is more expensive than sex with condom. Very often the price to engage in sexual intercourse with these girls ages 13-16 is 2000 FCFA ($4) with a condom and without a condom the price is 5000 FCFA ($10)."

Another student said:
My friend, who is working as a prostitute, has a special amulet from her traditional healer that she wears around her waist right above her buttocks, which protects her against any HIV/AIDS infection when she engages in unprotected sex. Because of her anti-HIV/AIDS amulet, she says that she is able to convince many of her clients to have sex with her without condoms so that she can earn more money faster.

Looking back at the spread of HIV/AIDS and prostitution a community member was saying, "How ironic it was that government officials, military and the police who were supposed to crack down on these girls and X-rated bars were the clients of these bars." However, few community elders, students, and school teachers suggested that these "X-bars be closed down and that the government should not turn a blind eye to them if the Ivorian government wanted to reduce HIV/AIDS prevalence rate in youth." A teacher advised the following, "we must not blame prostitution but it is the mentality of the Ivorian that needs remodeling. The Ivorian government needs to educate Ivorian people about the danger of infidelity, sexual debauchery, and unprotected random sexual intercourse."

HIV/AIDS Stigmatization and Fears

A major theme was stigmatization and fears that people had about HIV/AIDS that influenced its integration into the school and science curriculum. Here, HIV/AIDS was perceived as a shameful disease because of the religious and cultural values that many people in the Ivory Coast held. A community elder summarized this feeling, noting that, "HIV/AIDS is a dishonorable disease in our communities. Some members of our community hide their HIV/AIDS status as soon as they find out they have this disease." Powerful moral judgment surrounding HIV/AIDS and coupled with fear made HIV/AIDS a topic that was not frequently discussed at home.

For example, many students and a retired banker said, "HIV/AIDS is a curse. Only prostitutes and people of bad character get HIV/AIDS. The whole community should stay away from those who have this curse of HIV/AIDS." Another community elder, who is a retired doctor, disclosed the following:

People who have HIV/AIDS in our communities are able to hide their HIV/AIDS status very well and do not speak of their illness to anyone except their doctors. I think they hide their HIV/AIDS status to protect themselves from being stigmatized by the people in their communities.

Information surrounding HIV/AIDS is not straightforward. Secrecy and taboo about the disease that raises fear is still widespread. Moreover, the same community elder who worked as a doctor added this:

The stigma of HIV/AIDS is so high in our Ivorian communities that our brother and sisters who suffer from HIV/AIDS transfer their HIV/AIDS medicines (ARVs) that we give them in the hospital into different prescription bottles which have nothing do with HIV/AIDS in order to protect themselves from their own families. Otherwise, people infected with HIV/AIDS will be rejected very quickly and departs from community involvement because of the fear that disease creates in some of our members of our communities.

Another community elder explained how fear influences her peers' decisions about HIV/AIDS:
People in my community do not have enough information and knowledge about HIV/AIDS. Many of my community members are not interested in finding out their HIV status. For many of them doing their HIV/AIDS test means exposing themselves to the eyes of their community. There are a lot of secrecy and silence about this disease.

Yet another community elder shared how close relatives often "abandoned people living with HIV/AIDS." He had also volunteered to help people with AIDS in hospital, and "noticed that there was not a single-family member to give them a bath. HIV/AIDS stigma still runs supreme in the minds of some of our community members. HIV/AIDS brings shame and dishonor to the family. No one would ever have the courage to tarnish his family reputation intentionally. This is the reason many community members would never reveal that they are HIV positive. Here there is dead silence on HIV/AIDS. We only see people with HIV/AIDS on television and in our hospitals but not in our communities."

A sixth grade shared his experience with HIV/AIDS stigma:
My big brother is HIV positive after a bad blood transfusion. He has lot of pimples on his skin, he is really thin, and he does not eat much. Because of him nobody comes to say hello to us anymore. Some people in our community look at us, as we are aliens and stay away from us. Other people call my brother fruitcake and don't associate with us because of him.

A community elder spoke of hidden truth about death by AIDS and the shame associated this illness:
African society in general and in particular the Ivorian society judges strong way the members of his community. Because of that reality, often some of our communities hide the truth about the death of a brother or sister who died of HIV/AIDS. Instead of saying this person died of AIDS simply, we often lie and say for example that she died of kidney failure. The people here are so concerned about what others think of them they prefer to suffer in silence when they have HIV/AIDS. They are so ashamed of HIV/AIDS that they are unable to seek treatment at the hospital.

In Ivory Coast, people living with HIV/AIDS were not well received. Many community members still feared and felt discomfort at the idea of associating with people living with HIV/AIDS. Many community elders shared this sentiment stating, "When I hear the word HIV/AIDS, it is a heavy word, I really fear for my life. I don't care what people say, but I cannot associate myself with people living with HIV." A student shared the following:

My parents advised me to greet people with HIV/AIDS from far away and they told me to avoid having any physical contact with someone who has HIV/AIDS since a person living with HIV/AIDS can infect me.

The stigma associated with HIV/AIDS contributed to fears that people have about discussing the topic, whether in general, or in relation to their specific situations. This lack of dialogue about HIV/AIDS contributed to deeply held misunderstandings and misconceptions about HIV/AIDS with the Ivorian community.

Misconceptions about HIV/AIDS

Some study participants expressed examples of misconceptions they had about HIV/AIDS. One student participant went to the extreme of denying the existence of HIV/AIDS, explaining "HIV/AIDS was an imaginary syndrome to deceive young people and keep them from having sex." Another student understood that the transmission of HIV/AIDS was only through "sexual intercourse." In addition, many community elders also had misconceptions. During the individual interviews, several revealed that they did not know what HIV/AIDS stood for. One admitted, "HIV! I don't know what HIV stands for." Furthermore, another community revealed:

I don't know what AIDS stands for either that's why I don't talk about HIV/AIDS to my children. How can you talk about something you don't understand to your children? I don't know how to read and I am counting on Ivorian schools to educate my children about this disease.

Even those community elders who demonstrated that they had real understanding of some HIV/AIDS information also held inaccurate beliefs about other HIV/AIDS concepts. During an interview, one grandfather stated, "I don't know what HIV stands for. I don't know what AIDS stands for either." He later added, "Yes, you can get HIV from mosquitoes because mosquitoes give you somebody else's blood when they bite you." However, when pressed, the community elder was unable to explain in any clear way why he held this belief. He expanded:

I never read a single book on HIV/AIDS. The source of my HIV/AIDS information is based solely on hearsay. This is new information for me. I am just explaining it the way I see it. From personal experience, any time I killed a mosquito, there is a blood spill and I am convinced that these mosquitoes can give you HIV/AIDS by transferring blood from one person to another person. I heard on TV that the infection of HIV/AIDS is through blood route. I am sure through mosquito bites we can get HIV/AIDS.

The community elder had an inexperienced, naïve point of view about contracting HIV from mosquitoes. He believed that people could get HIV through daily lived experiences such as being bitten by an insect. Here the grandfather was just repeating what he thought was a memorized fact or opinion from the Ivorian HIV/AIDS media campaign. He just repeated answers that fit his everyday intuitions.

Mistrust in the Government and Western Organizations

Other participants believed that HIV/AIDS infection and the lack of a cure were tied to conspiracies related to the government. Several community elders spoke predominantly of government greed and using HIV/AIDS as an alibi to get money from international institutions. One example was illustrated by the following quote:

My government and its ministry of education purposely want the rate of HIV/AIDS prevalence to remain high among Ivorian schoolchildren so Ivory Coast can continue to receive free AIDS medicine (ARVs) and support from Western countries …This is the reason the Ivorian government makes no effort to devote a lot of time educating our children about HIV/AIDS inside of our schools … if there is a reduced rate of prevalence of HIV/AIDS in the Ivory Coast, then the Ivorian government will lose money from international institutions … If there is a high HIV infection rate, then they will continue to get rich.

Discussion

The findings of the study reveal that HIV/AIDS education and curriculum in Ivory Coast classrooms are minimal. The Ivory Coast contains a good number of people who are HIV positive and yet not enough is done to educate the people and their communities about HIV/AIDS. At least the study data show there is consensus among teachers, community elders, school administrators, and students that something needs to be done about the continuous spreading of AIDS and the teaching of HIV/AIDS content. The findings of this study add to an understanding that Ivory Coast has higher prevalence rates of HIV because of the lack of open communication about HIV/AIDS within the Ivorian communities. The persistent silence that surrounds HIV/AIDS coupled with high-risk behavioral pattern such as multiple sexual partners and outside marriage sexual activity are some of the reasons of increased HIV infection in the Ivory Coast [6]. Nearly all the participants interviewed reported that HIV is spreading in their communities because their people are fearful of being stigmatized for being HIV positive. Therefore some community members indulge in negative coping skills such as denial and practice of secrecy, and by keeping their personal experiences with HIV inward, rather than revealing their HIV/AIDS status to their communities members. Several participants explained that some people in their communities who are HIV positive do not focus on engaging with other members of their communities by educating people about HIV, making a commitment to prevention and getting their larger community involved in HIV/AIDS prevention efforts, but to willingly contaminate the maximum amount of people with the HIV virus so that they did not have to die alone.

This study recommended that Ivory Coast to develop HIV/AIDS educational materials that are culturally responsive for their schools and communities [21]. By exposing both communities and students to accurate information about cause, mechanisms of transmission, and prevention of HIV/AIDS myths and misconceptions can be dispelled if access to HIV resources is provided in the Ivorian schools [22,23]. One key aspect of this study is to get Ivorian leaders to teach their adolescents about sex and HIV/AIDS through respectful and structured discussions of HIV/AIDS disease [24]. Therefore future health education programs in Ivory Coast can be applied to promoting preventive health behaviors that reduce the risk of chronic disease [25] such HIV/AIDS since peer-led AIDS education programs can enhance knowledge, attitudes, and behavior [26]. HIV incidence rate can be simply decreased by raising the awareness of high-ranking officials in the Ivory Coast and by providing HIV/AIDS education to Ivorian youth. Because research has found that health education programs with a family and community base have been successful in improving knowledge, when government officials integrate HIV education in their school curricula, students will ultimately be proficient in sexual education which in turn can result in reduced HIV infection rates [27].

With this study I seek to contribute to policy and practice. This study adds to an understanding of Ivorian perspectives on why HIV/AIDS infections are still problematic throughout the Ivory Coast. Ivorian Ministry of Education has opted for abstinence education rather than condom education; despite the evidence that many studies have shown that abstinence interventions did not reduce risky sexual behavior [28,29].

Conclusion

By infusing HIV/AIDS content into the Ivorian school curricula, Ivorian Ministry of Education may be able to help Ivorian communities and children gain steady knowledge about HIV/AIDS. To stream culturally relevant HIV/AIDS education for Ivorian students, Ivory Coast should invest in time and research about what the local population believes in order to provide opportunities to locally develop curriculum/strategies that address the challenges within the community in relevant and authentic ways. Doing so would give opportunities to its communities to practice for HIV skills in order to prevent new HIV infections. Finally, Ivory Coast needs to influence its community members' sexual behavioral intent through massive HIV/AIDS media campaigns.

Interview protocol for Students, Teachers, Community Elders, and School Administrators

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