HIV/AIDS Knowledge, Attitudes, and Opinions Among Adolescents In The River States of Nigeria

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Abstract

English:

Sub-Saharan Africa remains the epicenter of the global HIV/AIDS pandemic (Taylor et al., 2003; UNAIDS/UNICEF/WHO, 2000; Eaton, Flishera and Arob, 2002; Prat, et al., 2000). Nigeria is one of the most afflicted sub-Saharan nations (UNAIDS, 2002). Rivers State, a major industrial area of Nigeria and the nerve center of the oil industry, represents a cross-section of Nigeria. The median sero-prevalence of HIV in the state has been estimated at 8 percent (Rivers State HIV/AIDS Control Program, 2002). The purpose of this study was to provide preliminary data on HIV/AIDS knowledge, attitudes and opinions among young people in the state. A 28 item, English-language questionnaire was pilot-tested and administered to secondary school students in the state. There were fairly equal numbers of male and female respondents with a median age of 19. Although 93 percent of respondents had heard of HIV/AIDS, it did not appear to improve their knowledge and perceptions about the disease. One-third to one-half of respondents believe that a person can get infected with HIV through mosquito bites; believe that an infected teacher or student should not be allowed to continue teaching or attending school and have not talked about HIV/AIDS with their boy friend or girl friend or their parents. About 60 percent of respondents admitted that none or few of their friends used condoms in sexual encounters. The results of the study are consistent with similar studies in sub-Saharan Africa (Eaton, et al., 2002; Volk and Koopman, 2001; Adih and Alexander, 1999). Several sociocultural and religious constraints are inferred. Among other strategies, the need for sustained culturally sensitive educational intervention to decrease the incidence of HIV/AIDS in the region is stressed.

Key Words: HIV/AIDS Knowledge and Attitudes, Young People, Port Harcourt, Nigeria

***Spanish*:**

Para disminuir la propagación del VIH/SIDA en Nigeria

Africa sub-Sahara queda el epicentro del pandémico global de VIH/SIDA (Taylor et. al., 2003; SIDANU/UNICEF/WHO, 2000; Eaton, Flishera y Arob, 2002; Prat et. al, 2000). Nigeria es una de las naciones Sub-Sahara más afligida (SIDANU). El Estado Rivers, una zona de mayor industria de Nigeria y el centro principal de la industria petrolera, representa una muestra representativa de Nigeria. El número medio de la sero-prevalencia de VIH en el estado ha sido estimado a 8 por ciento (Estado Rivers VIH/SIDA Programa de Control, 2002). El propósito de este estudio fue el de proporcionar datos preliminares de conocimiento, actitudes y opiniones sobre el VIH/SIDA entre la juventud en el estado. Una encuesta en inglés de 28 puntos fue probada como prueba-piloto, y administrada a estudiantes de escuela secundaria en el estado. Había un número más o menos igual de respondientes hembras y varones de una edad mediana de 19 años. Aunque respondieron el 93 por ciento que sí habían oído del VIH/SIDA, no parecía mejorar ni su conocimiento ni percepciones sobre la enfermedad. Una tercera parte a una mitad de los respondientes creen que una persona puede ser infectada con el VIH a través de una picadura de mosquito; creen que un maestro o estudiante afectado no debe ser permitido a seguir enseñado o asistiendo a la escuela, y no han hablado del VIH/SIDA con su novio o novia o a sus padres. El 60 por ciento de ellos admitieron que ninguno o pocos de sus amigos usan condones en encuentros sexuales. Los resultados del estudio quedan consistentes con estudios semejantes en Africa sub-Sahara (Eaton, et. al., 2002; Volk y Koopman, 2001; Adih y Alexander, 1999). Varias restricciones socioculturales y religiosas se infieren. Se enfatiza la

necesidad de una sostentida intervención educativa y culturalmente sensitiva para disminuir la incidencia del VIH/SIDA en la región.
Palabras claves: conocimiento y actitudes de VIH/SIDA, los jóvenes, Puerto

Introduction

The high incidence of HIV/AIDS in sub-Sahara Africa has been widely documented (Taylor et. al., 2003; UNAIDS/UNICEF/WHO, 2000; Eaton, Flishera and Arob, 2002; Pratt, et al., 2000). Of the more than 40 million people afflicted with HIV/AIDS worldwide, 30 million are estimated to live in this region of Africa (UNAIDS, 2003). This represents about 70 percent of the global disease burden even though this region of Africa only accounts for about 10 percent of the global population (Eaton et. al, 2002). The most afflicted sub-Saharan African nations include Botswana, Cote d'Ivoire, Ethiopia, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia (The White House, 2003). The unique challenges in combating the continuing spread of the disease in the region of Africa have been discussed by various groups and individuals (UNAIDS/UNICEF/WHO, 2002; Piot, 2000; Butler, 2000; Eaton, 2002).

It is also widely documented that half of all new infections with HIV/AIDS now occur in young people under the age of 25. While the spread of the virus may be slowing among other members of the global community, increases in incidence of the disease appear to be the norm among youth all over the world (Morris, 2003). Of more than six billion people in the world today, one billion are between the ages of 15-24. Half of the population of sub-Saharan Africa is under 18 years of age. One third of those living with HIV/AIDS in the region are between the ages of 15-24 (UNAIDS, 2002). Unless there is global commitment to decreasing the incidence of this contagion in this region of the world, Africa may remain the reservoir for HIVAIDS transmission in the foreseeable future.

A dearth of knowledge about HIV/AIDS etiology among young people globally, constitutes a major challenge to the control of this scourge. Most people become sexually active in adolescence. The need to admit that young people are having sex but lack the proper knowledge to protect themselves is particularly important in the war against HIV/AIDS. Young people are now the epicenter and bear a disproportionate burden of this pandemic (WHO/UNICEF/UNAIDS, 2002). Surveys continue to indicate that young people between 15 and 24 years harbor serious misconceptions about HIV and how it is transmitted (Cohall, et.al., 2001).

The Etiology of HIV/AIDS in Nigeria:

With more than four million persons infected, Nigeria is estimated to harbor over 11% of the global disease burden and is ranked third globally in the HIV infection cluster. Rivers State, a major industrial area of Nigeria representing a cross-section of the country, is located in the oil rich Niger Delta basin. As the nerve center of the oil industry, it attracts entrepreneurs and job seekers from all over Nigeria and beyond. In 2001, the median sero-prevalence of HIV in the state was recorded at about 8 percent. This represented a 120 percent increase compared to a 1999 sero-prevalence survey. Noteworthy are the prevalence rates of 10.5 % in the age group of 15-29 and 7.9% in the 20-24 year age group (Rivers State HIV/AIDS Control program, 2002). The Rivers State Ministry of Health's HIV/AIDS Control Program summarized the knowledge, attitudes and practices in the region as follows:

Between 1997 and 1999, Rivers State was rated as a very low HIV awareness area. Ignorance about HIV/AIDS and its dynamics was all pervading. People engaged in apparently normal behaviors, oblivious of risks of HIV transmission. On the other breadth, there was high stigmatization of the infected. They suffered rejection tending to hostility by employers, friends, and families. Even doctors and nurses denied them care in hospitals and clinics out of uninformed fears and judgmental attitude. This palpable ignorance, apathy, discrimination and stigmatization created room for extreme misinformation and skepticism – the height of which is total denial of the reality of AIDS (pp. 4-5).

Families that will not discuss sexuality issues with their children fearing that it will make them more promiscuous, religious organizations and community activists that preach chastity education and abstinence only, political leadership that would not infuse available resources to match the magnitude of the problem, all contribute to the etiology of HIV transmission in the state. The Nigerian based "Project for Human Development," has argued that "…teaching sex in schools will lead to more involvement of our youths in sex. More over, it is not good at a tender age because this can be dangerous." The organization further states that "…sex education is good within the family but not in the school. It is alien to our people and can destroy our nation." (Vanguard, 2002). Individuals that suddenly learn of their positive HIV status and begin acts of personal vendetta by engaging in unprotected sex have also been implicated in the spread of the disease (The Guardian, 2002). It is clear that this degree of ignorance and attitude relative to sexuality must be addressed if the disease is to be controlled in the region.

Since the aforementioned report was published, the incidence of HIV/AIDS in the state has increased 120% (Rivers State Ministry of Health, 2002). On this basis, in 2002, this researcher undertook a pilot study in Port Harcourt, the most industrialized city in the state and the epicenter of the epidemic in the country.

Purpose of the Study

The purpose of the study was to provide preliminary data on HIV/AIDS knowledge, attitudes, and opinions among young people in a region of Nigeria that is noted for high prevalence of HIV/AIDS. Little research has been undertaken in this target population in the Rivers State of Nigeria even though the region attracts people from all over the country and beyond because of better socioeconomic opportunities offered by the oil industry. This study could add to the body of knowledge related to HIV/AIDS etiology in Nigeria.

Methods

Survey population

A convenience sample of 100 secondary school seniors in a large social studies (capstone) course was selected for the study. This was a special population of students in a state remedial program to better prepare them for the high school diploma examination. Based on the researcher's experience and information obtained from the site, this population would appear to be typical of secondary school seniors across the region.

The Survey Instrument

A 28-item English-language questionnaire was adapted (for cultural relevance) from HIV/AIDS Knowledge and Attitude Survey instruments from The Population Council's HIV/AIDS Survey Library and Centers for Disease Control and Prevention (Population Council, 2001; C.D.C, 2002). There were structured and open-ended questions aimed at measuring respondents' knowledge and attitude regarding HIV/AIDS etiology in Nigeria. The questionnaire focused on knowledge level about HIV/AIDS among secondary school students. For example, knowledge based items included:

a. healthy looking persons and HIV infection
b. mosquito bites and HIV transmission
c. condom usage and discussion among friends and relatives
d. The reality of HIV/AIDS in Nigeria

Some attitude related items included the following:

a. worries about HIV infection
b. the infected teacher or student and attendance at school,
c. personal commitment to condom use, and
d. condom use among peers

A randomly selected panel of six secondary school students pilot-tested the questionnaire for clarity and validity. Only minor changes to the instrument were deemed necessary. Local research assistants were subsequently recruited and oriented in an hour-long seminar to the etiology of HIV/AIDS among adolescents in Port Harcourt, Nigeria. The State University of New York, College at Cortland, granted Institutional Review Board approval.

Instrument Administration

Questionnaires were then administered and retrieved by these trained field research assistants in a social study class-meeting period. Participants were given an hour to complete the questionnaire. Upon completion each participant submitted his or her instrument to a research assistant who placed it in a large envelope. At the end of the class period, all envelopes were collected, sealed and returned to the researcher. Of the 100 questionnaires administered to the target population, 90 were retrieved and analyzed.

Data Analysis

The data was first coded and then entered and analyzed using the Statistical Package for the Social Sciences (SPSS) software. The data was then subjected to simple descriptive statistical analysis since the intention was not to generalize findings. Open-ended responses from some participants were separated and then integrated into the narrative

Results and Implications:

There were fairly equal numbers of male and female respondents (47: 43) with a median age of 19. It was interesting to note that 93 % of the respondents in this study had heard of HIV/AIDS. Most common sources of their information about the disease were television, radio and school, in that order. However, Cohall and colleagues have noted that levels of awareness do not necessarily reflect an understanding of how sexually transmitted infections (STI's) such as HIV can be transmitted or prevented (Cohall, 2001).

Even more troubling in this study was that having an awareness of HIV/AIDS did not appear to improve misconceptions or translate into personal actions and precautions to avoid becoming infected with the virus. On the other hand, the aforementioned sources cited by respondents constitute good media for educational intervention programs for this group.

For example, when queried about how worried they were that they might get HIV/AIDS (Table 1), 35 of 90 respondents (45 %) said that they were not worried. About 67 percent of respondents (most of whom had heard of HIV/AIDS), were either not worried or were somewhat worried. This has serious implications for high-risk behavior, especially among these youth.

How Worried Are You That You Might Get HIV/AIDS?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Not	35	38.9	44.9	44.9
	Somewhat	17	18.9	21.8	66.7
	Very	26	28.9	33.3	100.0
	Total	78	86.7	100.0	
Missing		12	13.3		
Total		90	100.0		

Table 1

Misconceptions about HIV/AIDS:

Several misconceptions and negative attitudes were noted throughout this study. Only 70 percent of respondents (Table 2) correctly stated that a healthy looking person could still harbor the human immunodeficiency virus while almost 30 percent either disagreed or were not sure. Even though it is now common knowledge that the HIV agent cannot be transmitted through mosquito bites, 32 percent of respondents (Table 3) agreed that mosquitoes were a good vehicle for HIV transmission. In sub-Sahara Africa where mosquitoes are endemic, this misconception is significant because it implies a defeatist attitude: regardless of what one does, one is subject to HIV infection as a resident of a mosquito infested region. It also poses a compliance challenge for any educational intervention effort targeted at this group.

Can A Healthy Looking Person Have HIV?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	61	67.8	70.1	70.1
	No	15	16.7	17.2	87.4
	Don't Know	11	12.2	12.6	100.0
	Total	87	96.7	100.0	
Missing		3	3.3		
Total		90	100.0		

Table 2

A Person Can Get Infected With HIV Through Mosquito Bites					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	27	30.0	31.8	31.8
	No	49	54.4	57.6	89.4
	Don't Know	9	10.0	10.6	100.0
	Total	85	94.4	100.0	
Missing		5	5.6		
Total		90	100.0		

Table 3

Attitude Towards Victims:

Of more concern is the knowledge and attitude of this target population towards HIV positive students and teachers. They appeared insensitive to the plight of their classmates and teachers whose HIV status was common knowledge, due mostly to ignorance about the mode of transmission of the virus.

When queried about whether an HIV positive classmate or teacher that was not sick should be allowed to attend classes, 41 percent harbored a negative attitude towards an HIV positive classmate while 19 percent had no opinion (Table 4).

Should a Student Who Has HIV Be Allowed to Attend School?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	34	37.8	40.0	40.0
	No	35	38.9	41.2	81.2
	No Opinion	16	17.8	18.8	100.0
	Total	85	94.4	100.0	
Missing		5	5.6		
Total		90	100.0		

Table 4

Similarly, about 35 percent were not in favor of an HIV positive teacher continuing to meet with his or her classes while 16 percent had no opinion (Table 5). It is clear that victims may choose not to disclose their HIV status for fear of being ostracized by society. Loss of human resources can be inferred since talented teachers who become HIV positive may decide to quit their jobs voluntarily before their status becomes common knowledge. Overt discrimination against HIV positive schoolmates could compel parents and guardians to keep their children out of school resulting in missed educational opportunities. Social stigma and ostracism culminate in a quality of life question. It presents additional compelling evidence for mass education against victim blaming, starting with this target population.

Should A Teacher Who Has HIV Be Allowed to Continue Teaching?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	40	44.4	48.8	48.8
	No	29	32.2	35.4	84.1
	No Opinion	13	14.4	15.8	100.0
	Total	82	91.1	100.0	
Missing		8	8.9		
Total		90	100.0		

Table 5

Cultural Constraints and HIV/AIDS Etiology:

In order to determine respondents' beliefs about actions they could take to prevent infection, several questions were posed. Only slightly more than half of the respondents (Table 6) could definitely talk about HIV/AIDS with their boy friend or girl friend.

Could You Talk About HIV/AIDS With Your Boyfriend/Girlfriend?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Definitely	39	43.3	51.3	51.3
	Probably	27	30.0	35.5	86.8
	Probably Not	5	5.6	6.6	93.4
	Definitely Not	5	5.6	6.6	100.0
	Total	76	84.4	100.0	
Missing		14	15.6		
Total		90	100.0		

Table 6

Table 7 shows that over 60 percent had never talked about condoms with their parents or guardians.

Have You Ever Talked With Your Parents About Condoms?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	26	28.9	31.7	31.7
	No	53	58.9	64.6	96.3
	Don't Recall	3	3.3	3.7	100.0
	Total	82	91.1	100.0	
Missing		8	8.9		
Total		90	100.0		

Table 7

Even more significant is that 43 percent of the respondents had never talked about HIV/AIDS with their parents or guardians (Table 8).

Have You Ever Talked With Your Parents About HIV/AIDS?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	41	45.5	49.4	49.4
	No	36	40.0	43.4	92.8
	Don't Recall	6	6.7	7.2	100.0
	Total	83	92.2	100.0	
Missing		7	7.8		
Total		90	100.0		

Table 8

The foregoing is indicative of cultural constraints in HIV/AIDS prevention in the region. A recent United Nations Fund for Population Activities Report stressed the fact that discussing sex is taboo in many countries, thus denying a large number of people especially the 15 – 24 age group the necessary information to negotiate safe sex (IBPD, 2004). Pratt, et al. reported on the role of religious organizations in Kenya that are "avowedly against offering sex education in the class rooms." (p. 137). Taylor and colleagues (2003) have stressed cultural and religious mores in their "Multifactorial Intervention Model for HIV/AIDS Prevention." (p. 99). The need to develop a culturally sensitive educational intervention program (if one is to succeed in reversing HIV/AIDS etiology in Nigeria) is inferred. Thus, educational intervention programs in the region must include families, religious organizations as well as traditional leaders.

Beliefs About Condom Use:

While condoms are the best weapons against HIV transmission, studies continue to show limited use of this barrier method in sexual intercourse in sub-Saharan Africa (Eaton, et. al. 2002; Volk and Koopman, 2001; Adih and Alexander, 1999). These studies implicate several socio-cultural and religious factors in the limited use of condoms. Findings in the present research would appear to corroborate earlier studies about condom use and beliefs in Nigeria (Araoye, et al., 1998; Olanyinka and Osho, 1997). When queried about how many of their friends stated that they used condoms in sexual encounters, about one-third of respondents agreed that their friends did not use condoms. Of more concern is that almost 60 percent of respondents agreed that none or few of their friends used condoms in sexual encounters (Table 9).

How Many of Your Friends Use Condoms When They Have Sex?					
		Frequency	Percent	Valid %	Cumulative %
Valid	None	27	30.0	32.5	32.5
	Few	21	23.3	25.3	57.8
	Most	16	17.8	19.3	77.1
	All	19	21.1	22.9	100.0
	Total	83	92.2	100.0	
Missing		7	7.8		
Total		90	100.0		

Table 9

Ladner, et al. also noted similar limited condom use pattern among students in rural Zimbabwe (p. 1889). In the United States, Jemmot (2000) discussed the fact that "although the use of condoms can reduce the risk of …sexually transmitted diseases, most sexually active adolescents do not consistently use condoms" (pp. 4-14). Any educational intervention program must first identify reasons for the low condom use in this target population followed by appropriate incentives to increase usage. In this study, Table 10 specifically shows that 32 percent of respondents would either not use condoms at all or use them only occasionally.

Do You Use Condoms If You Have Sex With a New Partner?					
		Frequency	Percent	Valid %	Cumulative %
Valid	No	11	12.2	14.7	14.7
	Sometimes	13	14.4	17.3	32.0
	Always	51	56.7	68.0	100.0
	Total	75	83.3	100.0	
Missing		15	16.7		
Total		90	100.0		

Table 10

Discussion:

These results provide additional evidence to the dire need for education about HIV/AIDS targeted at young people in Nigeria. Most importantly, the sample indicates that well over half of youth there feel little threat from the disease, have never discussed condoms with
their parents, and have few or no friends who admit to using condoms when having sex.
Equally less reassuring, these survey results strongly suggest that as many as one-third to one-half of Rivers State youth believe that a person can get infected with HIV through mosquito bites; believe that a student infected with HIV should not be allowed to attend school; believe that a teacher infected with HIV should not be allowed to continue teaching school; and have not talked about HIV/AIDS with their boy friend or girl friend or their parents. A positive finding, however, as shown in Table 11, suggests that this target population may be receptive to health education programs. They at least acknowledge that HIV/AIDS is prevalent in Nigeria. For example, when respondents were asked whether they thought that HIV/AIDS was a reality in Nigeria, it was very encouraging to learn that 91 percent agreed.

Do You Believe That HIV Is Real In Nigeria?					
		Frequency	Percent	Valid %	Cumulative %
Valid	Yes	76	84.4	90.5	90.5
	No	4	4.4	4.8	95.2
	Sometimes	4	4.4	4.8	100.0
	Total	84	93.3	100.0	
Missing		6	6.7		
Total		90	100.0		

Table 11

It is important to build on this knowledge that the disease is real by dispelling counterproductive misinformation and encouraging behavior that can reduce personal risk and further spread of the disease. This would involve a multisectorial partnership with government and teaching institutions in comprehensive HIV/AIDS educational intervention programs in the region.

In those countries where there is a political will and unrelenting government commitment to the decline of HIV/AIDS, positive changes have resulted. For example, Uganda in East Africa was the epicenter of the HIV/AIDS epidemic in Africa until 1993.
However, through several educational intervention strategies and the consequent sensitization of the Ugandan population to the enormity of this contagion, there has been a significant decline in the disease burden. Of particular significance is the consistent evidence of declining trends in HIV prevalence for the younger age groups. Prevalence rates of HIV/AIDS among 24 year-olds dropped by more than 60 percent between 1993 and 2000. Similarly, significant change in sexual behavior in Uganda has been documented (Ghys, et.al., 2002). Uganda's AIDS and HIV infection rates have plummeted from 30 percent to 5 percent in slightly more than a decade because of an effective HIV/AIDS educational intervention program. "Uganda's HIV-fighting mantra is referred to as ABC: Abstain, be faithful or use a condom. The government launched a massive campaign on radio, television, and in newspapers to encourage people to get tested and to follow the ABC's" (Wax, 2003). Similar government campaigns against HIV/AIDS in Thailand, Zambia and South Africa are yielding positive results (UN Office for the Coordination of Humanitarian Affairs, 2003). These examples present compelling evidence on the role of sustained education in decreasing the incidence of HIV/AIDS in those regions of the world with the highest disease burden. It is also clear that commitment at the highest level of leadership among nations in Africa is part of the recipe needed to begin reversing the HIV/AIDS trends in the region.

Conclusion and Recommendation:

The high incidence of HIV/AIDS among youth in sub-Saharan Africa remains a major challenge to global development. The dearth of knowledge among these youth about the preventive action that must be taken in order to avoid this incurable disease is alarming. The Centers for Disease Control and Prevention has reiterated the fact that as much as 67 percent of new infections are transmitted by people who are unaware that they are infected. They therefore recommend support at different phases of their lives for HIV negative persons who are at high risk for infection with HIV (CDC, 2002).

In order to reverse the HIV/AIDS incidence in Nigeria, educational and support programs must focus on (a) increasing awareness among Nigerian youth of the link between personal behavior and personal risk of contracting HIV/AIDS, (b) reducing erroneous beliefs among Nigerian youth about HIV infected persons in order to promote positive attitudinal change toward them, (c) recruiting and training peer educators in order to enhance educational intervention efforts among Nigerian youth, (d) increasing condom use among this target population, (e) increasing the level of involvement by government and academic institutions in HIV/AIDS control efforts especially among youth, (f) increasing the number of HIV/AIDS training sites for teachers and other health professionals, and increasing access to HIV/AIDS counseling and treatment for those that test positive. Adopting such recommendations will require enormous resources and the commitment of the international community. However, investments made at this time to match the scope of the problem will cost less compared to later.

Obviously, further randomized research that would allow for generalizations throughout the country is needed in order to overcome a major limitation of the current study.

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