

ADOLESCENT SELF-RATING OF THE CHANCES OF CONTRACTING HIV IN PLATEAU STATE, NIGERIA

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Abstract

This paper explains differences in adolescents' rating of their chances of contracting HIV in Plateau States, using their level of knowledge of HIV/AIDS, individual and school level characteristics. It was found that majority of the students (63%) rated themselves as having no chance at of contracting HIV, the remaining 37% indicated different levels of chances of contracting the virus. Students who were categorized as having high knowledge of transmission (odds ratio, OR = 1.82), prevention (OR= 1.62 those previously exposed to some form of HIV/ AIDS education (OR = 1.46), those attending mixed schools (OR =1.76) or mission schools (OR = 3.91) were significantly more likely to express some chances of contracting the virus than the other students. The implications of the findings to self-risk assessment, preventive practices among in-school adolescents are discussed and it is recommended that adolescents need more information to properly to properly assess themselves against the background that these adolescents engaged in risky behaviors.

Introduction

According to UNAIDS 2001, today's young people are the AIDS generation, they have never known a world without HIV and Millions have already died. Stopping HIV/AIDS requires comprehensive strategies that focus on youth. While not recognized at the onset, the HIV/AIDS epidemic is now clearly worst among the youths. Over a period of 20 years, more than 60 million people have been infected with HIV; half of them became infected between the ages of 15 and 24, (UNAIDS/WHO, 2001). Currently, an estimated 11 million people between the ages of 15 and 24 are living with HIV/AIDS, (UNAIDS, 2006).

Macdonald et. Al., (1994), point out that although young people suffer most from HIV/AIDS the epidemic among youths remain largely invisible, both to young people themselves and to the society as a whole. Studies have shown that young people often carry HIV for years without knowing that they are infected. As a consequence, the epidemic spreads beyond high risk group to the broader populations of young people, making it even harder to control, (Population Report 2001). It was estimated that up to 6,000 young people between the ages of 15 and 24 years were being infected by HIV every day (UNAFDS 2006).

Already, AIDS has become common among youths in almost half of sub-Saharan Africa population. An estimated 5% or more of young women ages 15 to 24 are infected with HIV in nearly 20 Sub-Saharan African countries. As a new generation of young people reach productive age, another wave of infection becomes likely (UNAIDS, 2005).

Current statistics show that the HIV/AIDS epidemic in Nigeria has assumed alarming proportions. Those worst hit are aged 15 to 49 years and of whom 3.6 million are already positive (FMOH, 2005). In spite of current efforts to reduce the rate of infection, many Nigeria do not appear to consider the epidemic as a serious problem and are therefore, not taking enough precautionary measures to avoid the infection. Low levels of awareness and ignorance have been attributed as being responsible for the spread of HIV, finding also showed that even among those who are aware of the consequences of the disease, no serious preventive efforts are taken towards avoiding infections (Adeokun, et., al., 2005; Ajuwon et.al., 1994; Akinrinola et al., 2004; Araoye et. Al. 1996).

Studies conducted among young people on condom use in different places in Nigeria showed that while almost all those interviewed acknowledged the efficacy of the condom as a barrier method for infection, majority of the respondents did not use condom in sexual encounters with someone they were meeting for the first time. And among the young people who are sexually active, only a few acknowledge exposure to the infection while majority believed in their invincibility to being infected with HIV, (UNICEF/WHO, 2002; NPC 2004).

As the AIDS epidemic spreads, more of the younger age groups are becoming exposed to the risk of HIV (Hitchcock and Fransen, 1999). Infection spreads to younger age groups as men choose increasingly younger sexual partners and believe, probably correctly, that younger girls are less likely to be infected with

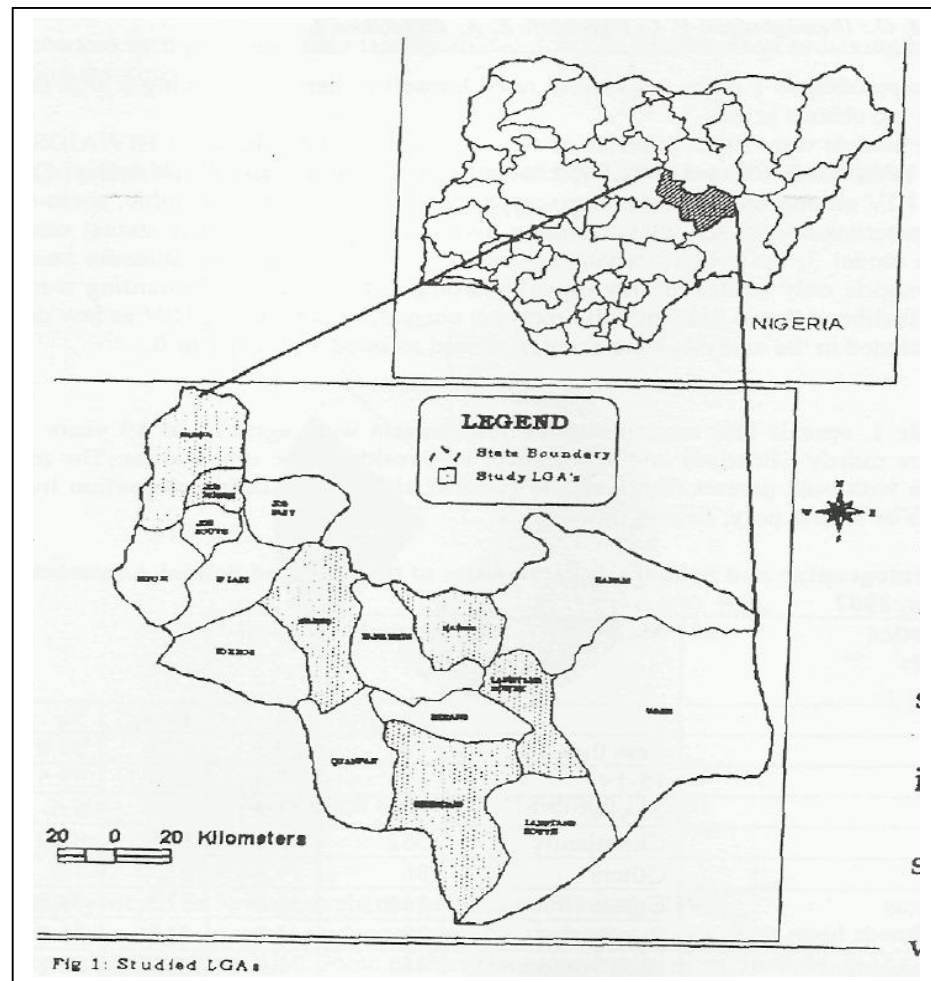
HIV, while others hold the mistaken belief that having sex with a virgin can cure AIDS (Rao Gupta, 2000).

Young women face substantial risk of being infected. In their research, Royce et al., (1997), point out that the risk of becoming infected with HIV during unprotected sex is two or four times greater for a woman than for a man. The reason being that male to female transmission is more likely because during vaginal intercourse a woman has a larger surface area of her genital tract exposed to her partner's sexual secretions than does a man and worst still the cervix of adolescent woman are less mature and less resistant to HIV and other STDs compared to adult women. HIV concentration is generally higher in a man's semen than a woman's sexual secretions (Lawrence, 1999).

It is observed that few adolescents take measures to prevent the consequence of unprotected sex and many are likely to have multiple sex partners. Careless attitude makes them particularly vulnerable and this contributes to the steady rise, particularly among youths, in the incidence of HIV infection. This is against the background that many still considered themselves not to be at risk (UNICEF, 2002; Olayinka and Osho, 1997). Many factors account for this ignorance and poor attitude to HIV prevention. Against this background this paper analyzes how adolescents rated themselves concerning their chances of contracting HIV in Plateau State based on their knowledge of the disease and other contextual issues to determine what factors inform such self-ratings.

Data and Methodology

The data for this report came from a survey conducted in 24 schools systematically selected from six out of the 17 LGAs that make up Plateaus State. The sampled LGAs were; Jos North, Bassa, Mangu, Langtang North, Kanke and Shendam LGAs, Details of the study design and data collection have been described elsewhere.



A total of 1304 adolescents in secondary school participated in the study. Information was collected concerning the demographic characteristics of individual respondents, their self-rating of the chances of contracting HIV and what strategies or behavior informed their rating. The questionnaire was designed to collect information on the parents of the respondents whether or not they live together, and whether the respondent live with one or both parents. Because the study was conducted in schools information on the location of the school was collected. These include whether the school was located in the rural or urban areas, whether the school was owned by government or by individuals or groups of individuals, was a religious or secular institution and whether the school was a boys or girls school only or coeducational and whether it was a day or boarding school. Information was also collected on the class of the respondents and their religion. Detailed information was also collected from the students on exposure to any systematic HIV/AIDS education and what their dominant sources of information on HIV/AIDS were.

The respondents were required to explain the meaning of HIV /AIDS, and without prompting name the mode of transmission, prevention as well as early signs and symptoms of the diseases. A composite score was calculated and converted to percentage on each area of knowledge for each student.

Logistic regression was used to examine the effects of the adolescents' knowledge of HIV/AIDS, individual and their school characteristics on self-rating of the chances of contracting HIV. We were interested in explaining the reasons given by secondary school students to describe their chance of contracting HIV as either 'moderate', high' or no chance at all'. The dependent variable was recoded as 1 if the respondent rated himself or herself as having a high or low chances and 0 if it is 'no chance at all'.

The models were fitted in series of steps. In model I, knowledge of HIV/AIDS and previous exposure to life skills based on HIV/AIDS education was used to examine self rating of the chances of contracting HIV among the students. The respondent's individual demographic, socio-economic and family characteristics (age, sex, class, religion, living arrangement, locality status) were included in model 2. in model 3, the school variables which described whether the students attends public or private, boys/girls only or mixed, day only, boarding only, or day and boarding were included to predict the likelihood that a student will report his chances of contracting HIV as low or high. All the variables included in the analysis were categorical and recoded as either 1 or 0.

Findings

Table 1, reveals that majority of the respondents were aged 15 to 19 years. The sampled students were mostly Christians and a little over half reside in the urban areas. The majority of the students live with both parents (mothers and fathers), although a sizable proportion live with others like mothers or fathers only, 'aunties "or "uncles."

Table 1: Demographic and School Characteristics of the Sampled School Adolescents in Plateau State by Sex, 2007

Characteristics of Respondents	Male	female	Total					
			Freq	%	Freq.	%	Freq.	%
			190	57.3	223	34.0	413	31.7
Age Group	Less than 15		190	57.3	223	34.0	413	31.7
	15-19		371	57.3	390	59.5	761	58.4
	20yr+		87	13.4	43	6.3	130	10.0
Religion	Christianity		552	85.2	605	92.2	1157	88.7
	Others		92	14.8	51	7.8	147	11.3
Locality Status	Urban		368	56.8	320	48.8	688	52.8
	Rural		280	43.2	336	51.2	616	47.2
Living Arrangement	Both Parents		462	71.3	453	69.1	915	70.2
	Others		186	28.7	203	30.9	389	29.8
Class of respondent	JSS 1-3		267	41.2	299	45.6	566	43.4
	SSI -3		381	58.8	357	54.4	738	56.6
School characteristics	Public		395	61.0	310	47.3	705	54.1
	Private		253	39.0	346	52.7	599	45.9
	Boy/Girls Only		62	9.6	164	25.0	226	17.3
	Mixed		586	90.4	492	75.0	1078	82.7
	Christian Mission		191	29.5	290	44.2	481	36.9

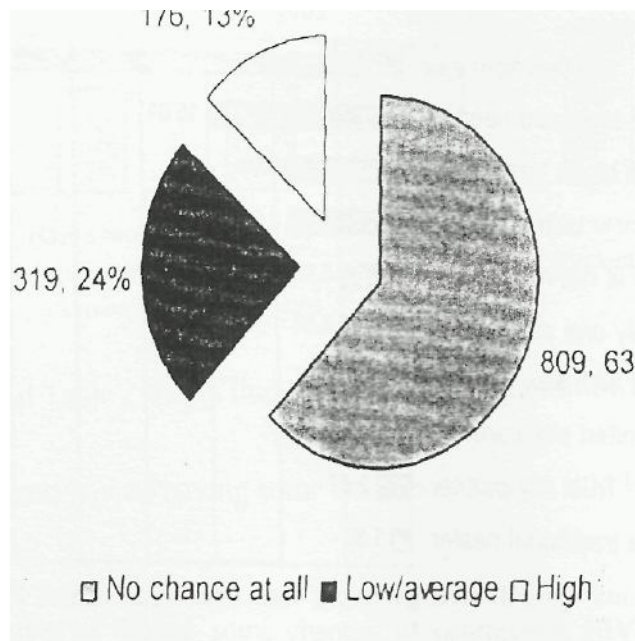
Secular	457	70.5	366	55.8	823	63.1
Day Only	405	62.5	332	50.6	737	56.5
Boarding Only	146	22.5	168	25.6	314	24.1
Day and	97	15.0	156	23.8	253	19.4

There were more senior than junior students in the sample and more students were sampled in the public schools than in the private schools. Most of the respondents attend mixed schools than boys or girls schools only, and secular schools than mission schools. Students who attend day schools constitute majority of the respondents. There were very little differences between male and female students along these variables.

Would You Rate Your Chances of Getting HIV as High, Average, or no Chance at all?

Figure 2, contains information on students self-ratings of the chances of contracting HIV in Plateau State. Some of the students described their chances as low/average (24%) a few (13%) described their chances as high, while the majority (63%) described themselves as having no chance at all of contracting the virus.

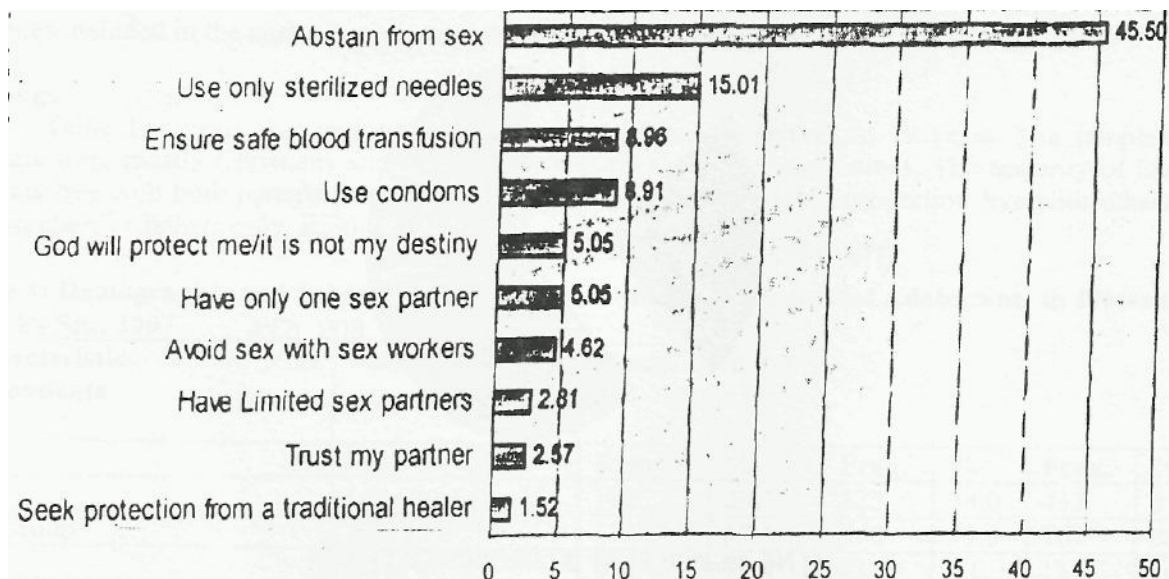
Fig. 2: In-School Adolescents' self-Rating of the **Chances** of Contracting HIV in Plateau State, 2007



Why would you rate yourself as having no chance at all of contracting HIV?

Figure 3, contains some of the unprompted responses by students on why they rated themselves as having no chance at all contracting HIV. Some of the reasons generally given include, seek protection from a traditional healer, trust my partner, limited sex partners, avoid sex with sex workers, have only one sex partner, God will protect me because it is not my destiny, use condoms, ensure safe blood transfusion, use only sterilized needles and abstained from sex.

Fig. 3: Reasons generally given by adolescents in secondary schools for rating self as having no chance at all¹ of contracting HIV in Plateau State



Why" do "you think you have a chance of contracting HIV~(or the virus that causes AIDS)?

Without prompting, the reasons given by the respondents for rating themselves as having some chances of contracting HIV are presented in Figure 4. Majority of the students in this category cited multiple sexual partnering as the reasons for rating themselves high of contracting HIV; this is closely followed by non-use of condom during sex and or have had sex with sex workers. Other reason gives by these adolescents include blood transfusion, sharing of sharp objects and having sex partners who have other partners. These are risky behaviors and practices that put these adolescents at risk of contracting HIV.

schools owned by religious organization were significantly more likely to report that they have some chances of contracting HIV.

Table 3 Odds ratios Predicting that Secondary School Students will Report a Chance of Contracting HIV in Plateau State 2007

Variables		Model 1	Model 2	Model 2
		Exp (B)	Exp (B)	Exp (B)
Score on knowledge of HIV/AIDS	Above average on awareness/meanings	0.93	0.90	0.99
	Below average on awareness/meaning (r)	1.00	1.00	1.00
	Above average on transmission	1.42*	1.53**	1.82***
	Below average on transmission (r)	1.00	1.00	1.00
	Above average on Prevention	1.71****	1.71***	1.61***
	Below Average on Prevention (r)	1.00	1.00	1.00
Life Skill/HIV Education	Exposed to HIV/AIDS education	1.49*	1.44*	1.46*
	Not exposed to HIV/AIDS	1.00	1.00	1.00
Age	Aged 10-14 years		0.92	0.87
	Aged 15-24 years (r)		1.00	1.00
Sex	Male		1.21	1.11
	FEMALE (R)		1.00	1.00
class	In Senior Secondary		1.23	1.28
	In junior secondary school (r)		1.00	1.00

Living Arrangement	Live with mother or father only		0.90	0.87
	Live with both parents (r)		1.00	1.00
	Christianity		1.03	1.13
Religion	Others (r)		1.00	1.00
Locality Status	Urban		0.82	0.77
	Rural (r)			1.00
School characteristics	Public School -			0.31***
	Private School (r)			1.00
	Mixed school			1.76**
	Non coeducational (r)			1.00
	Religious (faith based) school			3.91***
	Non religious school (r)			1.00
	Day school			0.92
	Boarding School (r)			1.00
-2 Log likelihood				

* P< = 0.05, **P< - 0.01, ***?<: - 0.001

Discussion and Conclusion

Majority of adolescents in our sample (63%) in secondary schools reported no chance at all of contracting HIV virus indicating low sense of risk. Yet this category of students were more likely to be categorized as having low knowledge of the HIV/AIDS. Studies have shown that part of the

reasons why HIV is spreading very rapidly among adolescents is because their self perception of the risk of contracting the virus is very low (AMI, 2003). Consequently, this affects their self protective practices. The students who recorded higher knowledge of HIV/AIDS were more likely to report low or high chances of contracting HIV probably because they know that nobody is immune to the virus.

Self rating of the chances of contracting HIV was further analyzed to see whether these can be explained by knowledge of HIV/AIDS controlling for other characteristics of these adolescents. The multivariate analysis further confirmed that adolescents will rate themselves as having a chance of contracting HIV if they were categorized as having high knowledge of the mode of transmission (odds ratio = 1.82 prevention (odds ration - 1.610) in school where HIV/AIDS education is offered (odd ratio = 1.46), in mixed school (1.76) or in faith based schools (odds ration = 3.91) than other category of students.

Adolescents' perception of the risk of contracting HIV will affect their self- protective practices. The implication of the findings is that many students who reported that they have no chance at all of contracting HIV were probably those with poor knowledge of the virus particularly how it is transmitted and who have not been exposed to any systematic HIV/AIDS education in school. Poor knowledge coupled with the notion that one has not the chance of contracting the virus will no doubt affect the attitude of these adolescents to people living with HIV/AIDS, the level of stigma in the community and hence the spread of the virus. Adolescents with poor knowledge are more likely to have the misconception that they were not at risk on such reasons as it is not their destiny or God's plan for them even when they engage in risky behavior.

Adolescents' knowledge needed to be improved through more aggressive campaign and HIV/AIDS curriculum education. The school setting provides a good opportunity for this and should be used for the benefits of young people to reduce the scourge of HIV in the community, the state and Nigeria in general. Elsewhere it has been found that school setting provide veritable means of educating youths on HIV/AIDS (Farley et al., 1991; Jones and Bund-Binuste, 1993; Main et al, 1994).

Some of the reasons generally given by the students for rating self of having some chance of contracting HIV is a source of concern. Such behaviors include; multiples sexual partnering, lack of condom is, having sex with commercial sex workers, sharing sharp objects and keeping sex partners who have other partners. These are clearly risky behaviours which can predispose these adolescents to HIV and other sexually transmitted diseases. By implications these students are sexually active and should be encouraged to protect themselves. Abstinence is clearly re commended for their age and that is that is the behavior the society expects from them. However, where this is not the case like among these adolescents they should be encouraged to use condom if the rate of HIV spread in the state is to be reduced and the ongoing HIV/AIDS education is to effective.

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