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ASSESSMENT OF GENDER DIFFERENCES IN HIV/AIDS RELATED KNOWLEDGE AND SEXUAL BEHAVIOUR AMONG SECONDARY SCHOOL STUDENTS IN BENIN-CITY, EDO STATE NIGERIA

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Abstract
Young people are of particular interest when considering the way out of HIV/AIDS pandemic. We undertook a study to assess if there is any difference in HIV/AIDS related knowledge and sexual behavior between male and female youths in this regard. The survey was cross-sectional covering five secondary schools in Benin City, Edo State. A total of 972 secondary school students 505 (52.0%) males and 467 (48.0%) females participated in the survey. About 77% of the males and 88% of the females were between 15-19 years old. (Mean age for males, 16.8±1.3 , Mean age for females 16.7±1.1). The main source of information about HIV/AIDS was the television (68.5% male, 74.3% females). On the cause of HIV/AIDS, 78.5% male and 80.7% female respondents had accurate knowledge. While 63.8% males had misconception that HIV/AIDS can't be transmitted from mother to child, 60% females indicated same. On sharing shaver blade, 56% males and 50.5% females had misconceptions. Between the ages of 10 – 14 years, 13.7% males admitted having had sex as against 3.0% females with 6.0% males and 3.0% females indicated being forced by their sexual partners. While 13.1% males and 5.1% females indicated condom use during sex, 11.6% females and 5.5% males had between 1 – 3 sexual partners. Although the data of the female respondents showed slightly higher knowledge as compared to that of the males, their overall HIV/AIDS knowledge was not encouraging. Also their sexual behavior encourages the spread of the disease. There is a great need to intensify HIV/AIDS education among our youths.

Key words: **HIV/AIDS knowledge, gender, youths.**

INTRODUCTION

The Acquired Immune Deficiency Syndrome has gotten above a pandemic proportion and has seriously become a threat to the whole world especially sub-Saharan Africa. It is a major public health problem with Sub-Saharan Africa severely affected by the epidemic (Buve, 2002) and has the potential of hindering the realization of the Millennium Development Goals. Its spread promotes poverty, and has unleashed immense suffering on different countries and communities worldwide (United Nations, 2001).

The disease affects the immune system of the body rendering it dysfunctional as it progresses and is spread through the blood, semen, vaginal secretions and breast milk. Heterosexual sex remains the primary mode of transmission for HIV and accounts for 80-95% of HIV infections in Nigeria (Adeyi, 2006). The most common method of transmission is unprotected sexual intercourse with HIV positive partner.

Twenty percent of the world population comprises the adolescents, eighty five percent of whom live in the developing countries. Adolescence is the developmental period between the agesc 10-19 years and is also the period of experimentation which exposes the youth to health risk through drugs, alcohol, tobacco use and irresponsible sexual behaviour. An estimated 11.8 million people ages 15 – 24years were living with HIV/AIDS at the end of 2001 (UNICEF, UNAIDS and WHO, 2010) and more than half of all new cases occur among people under age 25years. Young people are vulnerable to HIV because they are more likely to engage in high – risk behaviours. It must be stated that these risky behaviours are influenced by societal factors that determine people's vulnerability to infection. These include political, economical, social and cultural facets of life. In the same publication by UNICEF, UNAIDS and WHO, it was reported that the vast majority of young people remain uninformed about sex and sexually transmitted infections.

Since HIV/AIDS was first diagnosed in Nigeria in 1986, it has spread to virtually all the states of the country including Edo State. Nigeria has the second highest number of people living with HIV in the world after South Africa. UNAIDS estimated 33.4million people living with HIV in 2008 in the world (UNAIDS, 2009). The prevalence of adult HIV in Nigeria has risen progressively (HIV/AIDS Emergency Action Plan, 2005) from 1.8% in 1991 to 5.8% in 2001 with an estimate of 3.2 million people living with HIV/AIDS (WHO AIDS Epidemic Updates, 2000). Subsequently, the trend reversed and took a downward turn from 5.8% in 2001 to 5% in 2003 and then to 4.4% in 2005 (FMOH, 2001, 2004). Nigeria, with about 2.98 million people living with HIV, makes about 9% of the global HIV burden. However, there is gender inequality in the distribution with males accounting for 1.23 million and females accounting for 1.72 million in the HIV estimates and projections for 2008. Women are more affected in the defining feature of the epidemic with policy implications for prevention of mother to child transmissions (Simon, 2006; Quinn and Overbaugh, 2005) Hence, addressing gender inequality is crucial in the control of the epidemic (Shisana and Davids, 2004; Ezumah, 2003).

Edo State with a population of 3.2 million people (Nigeria census figure 2006) had a prevalence rate of 4.4% in 1999 to 5.2% in 2004 (Edo SACA, 2004). This alarming prevalence rate makes expedient the need to take action against the epidemic even at state levels.

Several studies have been carried out in Nigeria as regards the knowledge, behaviour and attitude of students toward HIV/AIDS. A research was carried out with 450 students from four Nigerian secondary schools in Ibadan North East Local Government Area in this regard. Eight-three percent (83%) of the students knew AIDS is transmitted sexually but the percentage of those aware of other modes of transmission was very low. First sexual experience occurred at 15.8 years for males and 16.3 years for females. Consistent condom use was reported in only 19.8% of the sexually active students (Fawole *et al.*, 1992).

A survey of knowledge, perception of AIDS and sexual behaviour among 732

randomly selected secondary school adolescent girls (13-18 years old) was carried out in Benin-City, Edo State of Nigeria. Over 94% of the study population was aware of AIDS. While 64% rightly knew that AIDS could be transmitted through sexual intercourse, 9.1% and 3.9% wrongly ascribed AIDS transmission to casual kissing and sharing of utensils respectively. More than 77% of the girls were sexually active and of this, 33% had multiple sexual partners and only 26.9% practiced the use of condoms during sexual intercourse (Unigbe and Ogbeide, 2005).

MAIN OBJECTIVE

Main objective: To assess if there exists any difference in the level of HIV/AIDS related knowledge and sexual behaviour between male and female secondary school students in Benin City.

SPECIFIC OBJECTIVES

(i) To assess the level of misconceptions about HIV/AIDS among the different genders in selected secondary schools.
(ii) To assess if HIV/AIDS related knowledge has altered their sexual behaviour.

STUDY POPULATION

Benin-City, the capital of Edo State, Nigeria was the study site. Benin City comprises of three Local Government Areas with about 22 public Secondary Schools and 33 private Secondary Schools. It has an estimated population of 3.2million people.

DESIGN

The study was a cross-sectional survey carried out in five purposefully selected senior secondary schools in Benin-City.

SAMPLE AND PROCEDURE

Self administered anonymous questionnaires based on HIV/AIDS and consisting of 3parts namely Socio-demographic characteristics, knowledge about HIV/AIDS and sexual behaviour of the respondents were distributed to the students in order to collect data relating to the objectives.
The questionnaire was pre-tested with 20 senior secondary schools students within Benin-City in order to assess their understanding of the questions being asked. Those questions that needed amendments were corrected or reframed as appropriate.
Consent was obtained from the school principals and participants. Teaching staff, non-teaching staff and all who were not senior students were excluded. Participation by the students was voluntary and confidentiality was assured. A total of 972 questionnaires were administered and all were filled and returned.

RESULTS

A total of 972 secondary school students 505 (52%) males and 467 (48%) females participated in the survey. About 77% of the males and 88% of the females were between the ages of 15-19 years old. Nineteen percent (19%) males and 18 females were less then 15years while the remaining respective percentages constituted those aged between 20-24years old. (Mean age for males, 16.8±1.3 , and Mean age for females 16.7±1.1)
The main sources of information about HIV/AIDS were the television (68.5% male, 74.3% females) radio (33.6% males, 36.8% females) and parents (22.3% males, 35.1% females). Only 19.4% males and 33% females mentioned teachers as their source of information. There was however statistical significance with females seeking information more from both teachers and parents than the males, p-values 0.01 and 0.02 respectively (Table 1).

KNOWLEDGE ABOUT HIV/AIDS

HIV/AIDS related knowledge among the males and the females showed a slight difference as can be seen in table 2. In the area of the cause of HIV/AIDS, 80.7% females as compared to 78.5% males had accurate knowledge with greater percentage of males having the misconception that bacteria can cause HIV/AIDS, p- value < 0.05.

Knowledge on the modes of contact and prevention was generally poor among both sexes although the females had a slightly higher knowledge in the areas of having penetrative sex, a healthy looking person infecting others, avoiding casual sex, p- value < 0.05. While 63.8% males had the misconception that HIV/AIDS cannot be transmitted from mother to child, only 59.96% females indicated same, on sharing shaver blade 56.0% males, 50.5% females, contact with HIV infected blood 47.1% males 46.0% females had misconceptions respectively with no statistical significance but contact from public toilet with 6.3% males and 10.3% females had statistical significance, p-value < 0.05.

On HIV/AIDS prevention, there were no gender differences as both sexes had a very poor knowledge of the various modes of prevention and transmissions except on avoiding casual sex, where the knowledge of the females (63.8%) was higher than that of the males (55.4), p- value < 0.05. Only 27.3% males and 29.1% females knew that avoiding breast feeding by a HIV/AIDS positive mother is one of the ways to prevent HIV/AIDS (Table 2).

Sexual behaviour of respondents to HIV/AIDS Survey in Selected Secondary Schools in Benin-City.

On the over all, the male respondents started having sex earlier than the female respondents. Also the number of the male students involved in sexual activities was more than the female students.

At ages 10 –14 years, 13.7% of the males had sex as compared to 3.0% of the females.

In the area of sexual practices, the percentage responses scored by the male respondents in all the questions asked were nearly doubled that of the females.

These questions included the followings: respondents having sex with a person 10years older than him, male indicated 6.9%, females 4.3%, being forced by the person whom he/she had sex with, 5.9% males 3.0% females. On the use of condom during sex, 13.1% males, 5.1% females while 12.3% males and 6.0% females respectively have used condom when having sex with commercial sex workers in the last 12 months. Had sex to make money, males 4.5% and females 0.8% but none gave any statistical significance.

As per the number of partners respondent had sex with, the female respondents doubled their male counterparts. Percentage of females indicating having 1 – 3 partners was 11.6% as against 5.5% males while those having 7-9 partners was 1.5% females as against 0.8% males (Table 3).

DISCUSSION

HIV/AIDS Knowledge

This study assessed HIV/AIDS related knowledge and sexual behaviour among genders in some selected secondary schools in Benin City, with a view of finding ways to stop the ugly trend of HIV/AIDS pandemic. We found that more than half of the young people between the ages of 15-24 years were unaware of critical prevention and transmission methods. This agrees with a study in 34 countries in sub-Saharan Africa which indicated that in none of the countries were more than half of the young people between the

Table 1: Demographic characteristics and sources of information of students to HIV/AIDS survey in selected secondary schools in Benin-City

Age (Years)	*Males n= 505(52%)*	*Females n= 467(48%)*
<15	97 (19.2)	86 (18.4)
15-19	391 (77.4)	372 (79.7)
20-24	17(3.4)	9 (1.9)
Sources of information	**of the respondents**	
Television	346 (68.5)	347 (74.3)
Radio	170 (33.7)	172 (36.8)
Internet	71 (14.1)	45 (9.6)
National Newspapers	100 (19.8)	121 (25.9)
Teachers	98 (19.4)	154 (33.0)
Parents	113 (22.6)	164 (35.1)

Table 2: Respondents' knowledge about HIV/AIDS regarding these questions

Cause of HIV/AIDS	*Correct answer*	*Males responding correctly n=505(%)*	**Females responding correctly n=467(%)**
Bacteria	No	474 93.9)	419(89.7)
Evil Spirit / Witchcraft	No	489(96.8)	419 (89.7)
Virus	Yes	396 (78.4)	377 (80.7)
Fungi	No	493 (97.6)	456 (97.6)
Excessive drinks of alcohol	No	494 (97.8)	461 (98.7)

Drugs	No	490(97.0)	458 (98.1)
Ways one can contact HIV/AIDS			
Mosquitoes	No	474 (93.9)	436 (93.4)
Having penetrative	Yes	346 (68.5)	354 (75.8)
Contact with blood of HIV infected person	Yes	267 (52.9)	252 (54.0)
Shaking hands with HIV positive person	No	495 (98.0)	458 (98.1)
Sharing same bed with HIV positive person	No	484 (95.8)	441 (94.4)
Sharing injection needle	Yes	236 (46.7)	248 (53.1)
Public toilet	No	473 (93.7)	419 (89.7)
Sharing shaver blade	Yes	222 (44.0)	231 (49.5)
Kissing and hugging HIV person	No	424 (84.0)	395 (84.6)
Mother to child transmission	Yes	183 (36.2)	187 (40.0)
Being in a place where HIV positive person is coughing and sneezing	No	479 (94.9)	439 (94.0)
A healthy looking person can infect person with HIV/AIDS	Yes	330 (65.34)	338 (72.37)

HIV/AIDS can be cured	No	16 (1.6)	13 (1.3)
Modes of HIV/AIDS	**prevention**		
Avoid casual sex	Yes	280 (55.4)	298 (63.8)
Avoid sex with HIV infected person	Yes	241 (47.7)	224 (48.0)
Avoid sex with prostitutes	Yes	189 (37.4)	169 (36.2)
Not sharing injection needles	Yes	249 (47.3)	233 (49.9)
Avoid contact with HIV infected person	No	449 (88.9)	399 (85.4)
Reject transfusion of unscreened blood	Yes	187 (37.0)	159 (34.0)
Avoid breast feeding by HIV positive mothers	Yes	148 (27.3)	147 (29.1)

Table 3: Sexual behaviour and practices of respondents to HIV/AIDS survey in Benin City

Age (Years) the first time respondent had sex	*Males n=505(%)*	*Females n= 467 (%)*
10 – 14	69 (13.7)	14 (3.0)
15-19	41 (8.1)	23 (4.6)
20 – 24	3 (0.6)	5 (1.1)
Sexual practices of respondents (Respondents who said yes to these)	**Males n=505(%)**	**Females n= 467 (%)**
Respondent has ever had sex	106 (21.0)	47 (10.1)
Respondent had sex with a partner who is	35 (6.9)	20 (4.3)

older by 10 or more years		
Respondent was forced at the time he/she had sex with the person	30 (5.9)	14 (3.0)
Respondent used condom to have sex with the person he/she had sex with in the preceding 12months	66 (13.1)	24 (5.1)
Respondents had sex with commercial sex worker in the last 12months	19 (3.8)	10 (2.1)
Respondent had sex to make money	16 (4.5)	3 (0.8)
Number of persons respondent had	**Sex with in the**	**Preceding 12months**
No	Males n=505(%)	Females n= 467 (%)
1-3	28(5.5)	54(11.6)
4-6	2(0.4)	8(1.7)
7-9	4(0.8)	7(1.5)
10-12	0(0)	0(0)

ages of 15-24 years aware of critical prevention and transmission methods (UNICEF and UNAIDS, 2005). On the whole the knowledge base of these students concerning HIV/AIDS was very poor although the data of the female respondents showed slightly higher knowledge as compared to the data of the male respondents. This study agrees with the previous studies carried out in the same direction by some researchers (Brook, 1999; Green *et al.*, 1991). However another study found boys more knowledgeable in this matter and gave the explanation to the fact that boys feel freer in discussing issues relating to sex than girls (Agraval *et al.*, 1999).

Several studies in South Africa found that particularly poor young people run high risks of being infected with HIV/AIDS. Young people start having their first sexual experience at an even younger age but often lack the knowledge and the skills to protect themselves. Young people receive conflicting messages about sex and sexuality, adhere to myths and cultural beliefs that may even increase their risk for HIV/AIDS and do not tend to acknowledge the disease to be a problem that may affect their personal lives or their immediate environment.(UNICEF, 2005). Research in South Africa, for example, found that peer pressure, curiosity, coercion (particularly for young girls) and material gain were some of the main reasons why the HIV prevalence among the South African adolescents remains so high: 15.6% of the South African youths between the ages of 15 and 24 years is infected with HIV. Increased knowledge and awareness about HIV/AIDS has not necessarily been translated into substantial changes in the sexual behaviour of young people. Overall, adolescents did not practice safer sex and more than 50% of the sexually active adolescents have never used a condom (Hartell, 2010).

The television served as the most common source of information for the respondents. Although this was consistent with some studies (Verma, 1997), it has been found through other studies conducted in South East Asia that most media houses have done little to bring about the desired changes in existing cultural practices regarding sex and the plight of those living with HIV/AIDS. With the increasing reports concerning rapid spread of HIV/AIDS in the various population one would have expected these students explore sources of information available unto them.

Misconceptions

There was a greater level of misconception among the male respondents on what causes HIV/AIDS as compared to the female respondents. There was really no tangible gender difference on the misconceptions about HIV/AIDS transmission, prevention and treatment as both sexes still thought that people can be infected with the HIV Virus when they use the public toilets, shake hands and stay in the same place with HIV persons. Previous studies (Unigbe and Ogbeide, 2005; Sikand *et al.*, 1996) have also identified this problem. The students also had misconception by believing that AIDS can be cured fully. Misconception is one of the risk factors for contacting HIV/AIDS and spread of same. Incorrect responses may be based on cultural and other beliefs that may need special educational efforts to change. Many believe that repeated talks with teachers, parents and friends about this disease will help reduce the spread.

Sexual Behaviour

The starting age of between 10 -14 yrs of sexual intercourse among such a high percentage of the boys is alarming while the female respondents can be

said to be on the promiscuous side as they claimed to be involved in sexual relationship with more partners. This study found that few of the respondents had sex with partners ten years older, were forced to have sex and actually had sex for money. According to another work (Kaaya *et al*., 2002), the age of 13 to 14 years is an important transition point for interventions that aim to delay the onset of sexual activity among adolescents. Condom use among the males was slightly higher than that in the females although in the two groups, its use was still not encouraging as consistent use was only reported among a limited percentage. This result is similar to that obtained in Ibadan where consistent condom use was reported in only 19.5% of the sexually active students.

The early initiation of sexual intercourse with multiples partners is an indication of gross looseness, lack of knowledge and lack of sexual discipline. This finding differs from a review of South African youths where the majority of school students who had ever experienced sexual intercourse reported at the most one partner in the previous year with a persistent minority of between 1 – 5% of females and 10 – 25% males having more than four partners per year (Eaton *et al*., 2003). Increased knowledge and awareness about HIV/AIDS have not necessarily been translated into substantial changes in the sexual behaviour of young people. Protecting young people against HIV/AIDS is a huge challenge. The promotion of abstinence, fidelity and consistent condom use is the credo of the so-called ABC approach which is at the core of many of HIV/AIDS prevention programmes targeting young people. The main goal is to encourage young people to delay their first sexual experience, to reduce the number of sexual partners and to use a condom when having sex. The implementation of this approach, however, is quite complicated as vulnerability for HIV/AIDS is determined by a combination of several cultural, political, social, economic and legal factors. Early sexual experience is not only a matter of choice but also related with a series of contextual factors such as household poverty, access to education, access to health care, place of residence, ethnicity, gender and legal protection (Hallman, 2004).

CONCLUSION

This study revealed an urgent need for educational intervention to disseminate correct information about HIV/AIDS among the general populace especially among the youths who are at the center of HIV/AIDS pandemic. This is due to the fact that their HIV/AIDS related knowledge though satisfactory in some areas cannot be said to be satisfactory generally to sustain adequate HIV/AIDS respond in widespread or high prevalence. Therefore, increased knowledge about transmission and prevention of HIV/AIDS among the youths could greatly lead to slowing this pandemic.

The media, parents, politicians, teachers, religious bodies and NGOs, who know what is at stake, should take it upon themselves to impact HIV/AIDS knowledge to the youths especially in the areas of contact and prevention of same. The inappropriate sexual behaviour of these students is very glaring and calls for inclusion of sexuality education into the school syllabus.

Nelson Mandela, former president of South Africa has pleaded for urgent action against AIDS saying “we must recognize that for most of the time, the pandemic was spreading like wild fire” (CNN, 2000). Let all join hands to put out this wild fire from the entire world.

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