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Health education and HIV/AIDS prevalence in Rusekere secondary school, Hikabaale district, Western Uganda

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Abstract

Background: Despite numerous Uganda's efforts to reduce HIV/AIDS prevalence the pandemic continues to rise in both incidence and prevalence.

Objectives: To determine the effect of health education on HIV/AIDS prevalence in secondary students in Hikabaale district Uganda.

Methods: In this cross-sectional descriptive study self-administered semi-structured close-ended questionnaire and key informants' interview guide were to generate information from consenting participants about health education and HIV/AIDS prevalence. Standard methods were used to analyze the information generated.

Results: The listed factors and corresponding percentage distribution (unknown HIV/AIDS- 83%; unprotected sex-76%; High rate of sexual contact- 65%; having a network of sexual partners- 33% and limited source of information- 13%) were the identified underlying factors encouraging HIV/AIDS distribution in the studied population. The ABC (abstinence, being faithful, or condom use) principle was unanimously suggested as the best preventive method to reduce HIV/AIDS prevalence in the school.

Conclusion: Poor health education and a high rate of sexual activity involving unprotected sexual networks among a population with unknown HIV/AIDS status might explain the observed HIV status in the studied population. Secondary school students should not be underestimated or left out in any HIV/AIDS prevention program organized for the communities and wider public.

Keywords: Assessment of health education, the prevalence of HIV/AIDS, Hakibaale Western Uganda.

Introduction

According to the world health organization (1), 35million people are now living with HIV/AIDS, 3.2 million of this population are children less than 15 years, 24.7 million live in sub-Saharan Africa, about 2.1 million became newly infected in 2013 and 19 million currently do not know their status (2). The 5 to 14 age group represents the one most likely to be free from HIV, therefore often termed the “window of hope.”

While various stakeholders advocate increasing educational attainment levels for youth to halt the spread of the pandemic, there has been relatively little research on the correlation between levels of education and actual HIV prevalence and/or incidence rates. In contrast, much has been published on the socio-economic impacts of the HIV/AIDS epidemic on the education sector for current and future generations, and even more so on the effects of HIV/AIDS prevention education on youth. Instead, there has been more examination of the influence of formal education (both primary and secondary) on sexual behavior patterns such as condom use, several non-marital sexual relationships, and age of first sexual experience. Walque et al, (3) state, “In the absence of a vaccine and widely available treatment, the primary focus for HIV control programs must be on reducing transmission...the main method of reducing heterosexual transmission is by behavior change.” Examining the effect that years of educational attainment have on sexual behavior is, therefore, key to understanding the complex relationship between levels of educational attainment and HIV prevalence rates.

According to Kelly (4), Education helps reduce the sufferings of victims in three different ways through three different stages as follows: First; in an infection-free society, it: provides knowledge and skills for self-protection; promotes behavior for infection risks reduction, and enhancing capacity to help risk or vulnerable population to protect themselves against risk. Second; during an infection outbreak: education helps the victims by

strengthening the ability to cope with personal and/or family infection; promoting care for those who are infected; helping young people stand up for the human rights that are threatened by their personal or family HIV/AIDS condition; and reducing stigma, silence, shame, discrimination. Third when AIDS has brought death: health education helps victims in coping with grief and loss, in the re-organization of life after the death of family members, and the assertion of personal rights

Education has also been established as a fact that impacts the ability of victims of HIV to think and act towards their health protection and promotion. The benefits of education include increased comprehension of HIV prevention information, better access to health services, reduced social and economic vulnerability that exposes women to risky activities, and a higher probability of involvement in community groups that nurture protection against AIDS. There is evidence that higher education levels are associated with higher HIV rates and more years of education are increasingly associated with safer sexual behavior and lower HIV prevalence. This is particularly true for young women with secondary education, who demonstrated significantly lower HIV prevalence rates than their peers who had dropped out of school earlier.

It is known that without education, young people are less likely to understand the information regarding HIV/AIDS education provided, and less confident in accessing services and openly discussing the HIV epidemic. Health education and advocacy may protect against the induction and progression of HIV infection through information and knowledge that may affect long-term behavioral change, particularly for women by “reducing the social and economic vulnerability that exposes females to a higher risk of HIV/AIDS than men”, including prostitution and other forms of economic dependence on men.

Much is known about the socio-economic impacts of the HIV/AIDS epidemic on the health sector as well as the national impact of health education on

HIV/AIDS disease induction and progression both for current and future generations, and also much is already known on the effects of HIV/AIDS prevention education on youth's behavior and sexuality. There have been more studies on the influence of formal education on sexual behavior patterns such as condom use, number of non-marital sexual relationships, and age of first sexual experience. While socio-economic and demographic factors underlie HIV/AIDS prevalence among the general population in South Western Uganda (5), the exact situation among secondary school students is not known. Observed differences in the prevalence of HIV/AIDS between the Mbarara, Rukungiri, and Masaka were remarkable according to Agwu et al, (5), there is a need for regular surveillance for updated disease epidemiology.

Unfortunately, little study exists on the influence of education levels on new cases of HIV and the percentage of a population group with HIV infection and AIDS. While global celebrated reports say that health education on HIV/AIDS prevention has significantly impacted the epidemiology of HIV/AIDS in the general population, it appears the report on Hikabaale district, Uganda secondary schools population has remained high raising concerns regarding the root course of the observed high HIV/AIDS prevalence in this sub-region. Health education can debunk the generally misconstrued roles of social, economic, and demographic factors in the spread of HIV/AIDS (5), making continued surveys invaluable. This study was therefore designed to determine the availability, quality, and effectiveness of health education on HIV/AIDS disease prevalence among secondary school students in the Hikabaale district of Uganda.

Materials and Methods

The study was conducted in the Kabarole district. Kabarole District is located in western Uganda 320 Km from Kampala. It shares borders with Kasese, Kamwenge, Kyenjojo, Kibaale, and Ntoroko districts. Kabarole is made up of 3 counties; Burahya, Bunyangabu, and Fort -Portal Municipality.

Hakibaale Sub County is found in Burahya County in the Kabarole district. It has parishes of Itwara, Kibasi, kituule, kabende, kiburara. Semiliki, kahangi and kijura parishes. The population of Hakibaale Sub County in 2014, 36,783 people of which 18,745 are men and 18,038 are women.

The study was a cross-sectional descriptive study that employed self-administered close-ended semi-structured questionnaires (quantitative) and a key informant interview guide (qualitative) in the data collection. The entire study was carried out at Rusekere secondary school, the only secondary school in the sub-county. Key informant's interviews were based on HIV/AIDS knowledge, working at health centers that attend to HIV patients and others.

Simple random sampling was used to recruit 140 consenting participants from the different students registered in the school. Also, eight school teachers from the study secondary school and two health workers from the two health centers in the sub-counties were selected randomly from the staff list and two health key informants were selected from two health Centres. Registered students and teachers were included in this study. Community dwellers at the same age bracket who were not registered students of the studied school were excluded from the study.

A self-administered closed-ended semi-structured questionnaire and a Key Informant interview guide were used in the study. The questionnaire was divided into two sections made of demographic data including age, sex, ethnicity, religion, marital status, educational level, and occupation. The second data needed was about understanding the causes of high HIV/AIDS prevalence among the secondary school, the available health education messages on the prevention of HIV/AIDS among secondary school students, the appropriate preventive strategies that can be used to reach the secondary school students in the prevention of HIV/AIDS.

Result

A total of 140 consenting respondents received the questionnaires filled and returned them as requested, while 8 key informers from the school and two from the health centers all cooperated

well during the interview. Their ages ranged from 14 to above 34 years. The higher age range was 14 to 18 years with 93 respondents. More than half (54%) were females and 46% were males. Respondents were mainly students (93%) while 7% were nonstudents. Most respondents (92%) were single while 8% were either married or divorced. Sixty-seven percent (67%) of participants were at an ordinary level of education while 33% were either at an advanced level of education or already had post-secondary education qualification. Most 93% of respondents were Roman Catholics and only (7%) were Adventists. Unknown HIV/AIDS status was identified as the highest (83%) contributor of the observed prevalence of HIV/AIDS among the studied participants followed by 76% unprotected sex, 65% observed rate of sexual activity, and 33% involvement of participants in many sexual networks with different partners. Furthermore, the observed HIV/AIDS prevalence may also be due to poor resources with emphasis on observed 13% of participants who said poor resources about HIV/AIDS information center played a key role in the pattern of HIV/AIDS prevalence among the studied population. The major health education strategy was school counseling (65%) followed by 53% Voluntary Counselling and testing and the least was 10% sexually transmitted infections.

The Appropriate preventive strategies on HIV/AIDS prevalence among the secondary school youth was (56%) identified abstinence as the best way of preventing HIV/AIDS from increasing among the youth. Being faithful to partners (14%), condom use (10%), VCT (9%), media programs related to HIV/AIDS prevention (7%), and formation of dance and drama clubs (4%) Also parental involvement (10%) and health workers community outreaches (35%) are also among the appropriate preventive strategies on HIV/AIDS prevalence among the youth in Hakibaale sub-County.

Discussion

The majority of the respondents have constantly heard about HIV/AIDS but their knowledge on that causes it was very limited. It appears that

hearing about HIV/AIDS were seen as different from knowledge about the disease (6) because although most people have heard about the disease they lacked enough information or example to inform a behavior change.

Sexual intercourse was identified as the main mode of HIV/AIDS transmission and mother-to-child transmission was the least cause of the infection. The problem of HIV/AIDS and the increasing rate of sexual activities among participants have made it necessary to inquire from them how much understanding they have about HIV/AIDS and its prevention and how they react to the concept of HIV/AIDS positivity. They have the awareness of HIV/AIDS prevention, but little can be said about what they understand or believe about the reality of HIV/AIDS because of their increasingly risky sexual activities. From the questions asked to the students about sexual networks, (21%) said they have more than two sexual partners while 25% didn't know how many sexual partners they currently have. We found it difficult to agree with some of the participants who said they do not know how many sexual partners they currently have because they denied being commercial sex workers which could have explained the inability to count how many customers have bought sex from them per unit time. It may be that they simply could not disclose their real sexuality due to stigma and social embarrassment.

Unknown HIV/AIDS status was identified as the major factor which may encourage the observed 83% prevalence of HIV/AIDS among secondary school students. The majority of the students who have not tested for HIV to know their status simply did not see the reason to do so. This population expressed fears of societal and family response should the result become positive.

Unprotected sex sexual contact were other factors identified to be causing the observed prevalence of HIV/AIDS among the participants. Most of the participants admitted to already be involved in early sexual encounters while having multiple partners, as well as not using protection. Lack of: sufficient information and self-control including stigma and carelessness were among the reasons

why the secondary school students studied were involved in risky unprotected sexual behavior with multiple partners in their sexual network. Adequate passage of information and knowledge would help most students to diverge from risky sexual behavior (7).

Furthermore, HIV/AIDS is increasing in frequency and distribution due to limited sources of information and this may be so because very few youths get information concerning HIV/AIDS from parents who are the immediate people to approach for such information. It is traditionally difficult to see parents or guardians who are willing to engage their child in sexual health education and/or promotion because of the fear of being misconstrued by their child that such educational engagement is proof that their parent has sanctioned early and premarital sexual activity. However, the breakdown of the education system represents a missed opportunity to provide young people with the knowledge and skills necessary to lead a healthy sexual life (8).

The major health education strategy was school counseling where even the respondents mentioned that they had a school counselor who counseled them about HIV/AIDS prevention. However, the counselor never did anything to attract the attention of the students or to engage them in any activities that will dissuade students from engaging in sexual practice. The counselor only attended to students who went to them for advice. Unfortunately, students usually look for help when they are already in serious trouble. The respondents also mentioned voluntary counseling and testing (VCT) as another commonly used strategy in the sub-county especially done by health workers during community outreaches. The majority of youth were willing to have an HIV test done and willing to go for HIV testing and counseling received from the health workers during their outreaches provided that the outcome would be handled with proper ethical standards. Peers played a role in encouraging the youth to go for testing and the majority who have tested were encouraged by their peers and this was significant. The least strategy used is sexually transmitted infection treatment which is accessed at the health

center III. In this study, the awareness of the interaction of HIV/AIDS, Syphilis, and Gonorrhoea with patients was established. The entire key informants responded that about 75-80% of the school students are aware of STIs/HIV/AIDS because this is being taught at different settings other than in the schools. These findings were also in close correlation although lower than in other study findings(9-10)

Respondents were asked what they thought were the appropriate strategies in preventing HIV/AIDS distribution and they gave the following ideas; Abstinence, with 57% saw abstinence as the best way of preventing HIV/AIDS from increasing among the youth. Sex education that focuses on abstinence is based on the belief of encouraging young people not to have sex until marriage; it is the best way to fight against\reduce HIV/AIDS infection. This approach limits AIDS educators by not providing information about how young people can protect themselves from HIV infection if and when they do choose to have sex It is true that the best preventive measure from getting infected with HIV/AIDS is abstinence.

Condom use (15%) was identified as the second appropriate strategy to help reduce the high HIV/AIDS prevalence. This is safe sex involving the use of a condom, which is however not 100% safe as it can break or slip off during intercourse. It is vital for the prevention of HIV that schools provide comprehensive sex education which educates about the importance of condom use as well as promoting delayed initiation of sex. Condom effectiveness has been demonstrated with casual partners and key populations and they also reduced HIV incidence among zero-discordant couples by 85% in one cohort study. However, even inconsistent use has some level of protection (11).

Media programs related to HIV/AIDS prevention and the formation of dance and drama clubs that promote awareness about HIV/AIDS among the youth are some of the appropriate preventive strategies on HIV/AIDS prevalence among the participants in the studied secondary schools. It has been reported that HIV/AIDS has become a major

public health crisis that stands to significantly hinder development in Nigeria as children and young persons are generally more susceptible to the virus (12). Seminars, lectures, workshops, jingles, and programs on television and radio stations, newspapers, magazines, journals, and billboards talk about HIV/AIDS in various ways today but there seems not to be much impact on the youths and if it is in the academic curriculum of secondary schools, it is still not making the expected impact (13). Churches, mosques, temples, and other places of worship where abstinence is preached should include and emphasize the need for abstinence among young people in the communities' times of worship.

Also, parental involvement and health workers' community outreaches are among the appropriate preventive strategies on HIV/AIDS prevalence. It is so because parents are the first primary sources of sex education information to their children at home. Parents seem to have a negative attitude towards providing sexuality information to their children who may see sex education as a license to being sexually proactive.

In this study health workers and schools were reliable and socially acceptable sources of information on health education messages on the prevention of HIV/AIDS among the youth but it seems contacts with students were not regular and adequate to create a high level of awareness on comprehensive prevention measures to reduce HIV/AIDS prevalence. All the key informants cited that constraints to HIV/AIDS health education information in schools include poor parents commitment/attitudes, untrained teachers, no health education materials / under-stocked library, no time allocated on school general timetable, poor collaborations with health facilities on health education sessions on youth sexual reproductive health.

In **conclusion**, poor health education and a high rate of sexual activity involving unprotected sexual networks among a population with unknown HIV/AIDS status might explain the observed HIV status in the studied population of secondary school students in Western Uganda. Secondary

school students should not be underestimated or left out in any HIV/AIDS prevention program organized for the communities and wider public.

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