University of Nairobi Students' Level of HIV/AIDS Knowledge

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Abstract

The objective of this study was to assess the level of HIV/AIDS knowledge among university students at the University Nairobi, Kenya. The sample of the study comprised 176 female and male participants randomly selected from 400 first and second year students registered for courses in the Department of Psychology. Participants were administered an HIV/AIDS questionnaire consisting of 15 statements/questions. The method of data analysis comprised frequencies, percentage and chi-square. The results showed that there were three categories in the findings. In the first category participants scored very high, followed by those who were above average; the rest had average scores. Such performance was comparable to what other researchers have reported. In conclusion, it was advocated that, educating, motivating, persuading and enabling should be the chief cornerstone of HIV/AIDS public education campaigns. This will go a long way in equipping university students to protect themselves against the scourge of HIV/AIDS.

Keywords: HIV/AIDS, public education campaigns, Kenya adolescents, university students, psychology.

1. Introduction

African countries including Kenya are in a formidable danger of losing their cream of population of their society to the HIV/AIDS pandemic. In the view of Gakahu and Kaguta (2011), HIV/AIDS is the greatest challenge of this century and that such a challenge has the greatest impact on Sub-Sahara Africa, where the infected and affected have their challenge and place of aboard. Kenya happens to be one of the most infected and affected in East Africa (Ethiopia, Kenya, Rwanda & Tanzania); and that students enrolled at higher learning institutions are just affected as any other population group (Gakahu & Kaguta 2011).

In Kenya, HIV is declared to be the greatest challenge Kenyans re confronted with (Gakahu & Kaguta 2011; (National AIDS Control Council (NACC) & National AIDS/STI Control Programme (NASCP)). Despite concerted and enormous effort to bring it under control, the epidemic continues being a threat to lives of millions of Kenyans. By December 2011, 1.6 million Kenyans were living with HIV/AIDS, and it is predicted the number is likely to increase rather than decrease in the foreseeable future, and as the years go by (NACC & NASCOP 2012). Of the 1.6 Kenyans living with HIV/AIDS, 59% are women. The number of HIV/AIDS infected Kenyans is higher than what would be considered reasonable. For example, in 2011 the increase in infection stood at 104,137. Since HIV/AIDS was detected in Kenya in 1984, 1.7 million Kenyans have lost their lives (NACC & NASCOP 2012).

2. Literature Review

As early as 2001, Kelly (2001) investigated seven universities in East and Central Africa on the effect of HIV/AIDS with the conclusion that, HIV/AIDS ignorance prevailed regarding its presence in universities. This was characterised by secrecy, silence, denial and fear of stigmatization and discrimination. Similarly, the Lake Victoria Basin Commission (2010) made a study of 3942 students selected from six universities in Kenya, with the purpose of generating understanding of HIV/AIDS impact on universities, and come up with ways of control, prevention and intervention against its spread and treatment thereof. Some of the results of this investigation was that, though students in general commanded a high level of HIV/AIDS knowledge, they have a high level of HIV/AIDS stigma. Moreover, students tend to take it lightly in their transfer of their knowledge. Meaning that, though their knowledge is very high, there is no transfer of

such knowledge in their sexual behaviour. Nor do many of them subscribe to the possibility of their being infected at any time in their lifetime. In view of this, the Lake Victoria Basin Commission urged universities,

To promote activities and programmes for the prevention of new Infections using every possible socially and ethically acceptable means (2010:52).

At Moi University, Adam and Mutungi (2007) made a study of sexual risk behaviour, HIV/AIDS knowledge and perceptions among 1917 students. The majority of participants had not had access to accurate HIV/AIDS information, thus leaving them unprotected to HIV/AIDS infection purely on the basis of ignorance. Therefore, the study concludes:

The results of this study emphasizes the vulnerability of university Students to HIV infection. Most university students have not had access to accurate HI/AIDS information (Adam & Mutungi 2007)

Othero, Aduma and Opil (2009) carried out an investigation on current knowledge, attitudes and sexual practice. The sample was based on 500 university students selected from Maseno University, Kenya. The results were that, their level of HIV/AIDS was high; 74.3 percent conceded their vulnerability to contracting HIV/AIDS based on their previous risky sexual behaviour. The investigation conclude that there is need for promoting peer education programmes, as a way of combatting the spread of HIV/AIDS (Othero et al. 2009).

Mwamwenda (2013) investigated the HIV/AIDS knowledge among high school adolescents in Kenya. As a subsidiary objective, the investigation sought to determine whether there was transfer of knowledge in terms of the relationship between participants and their sexual behaviour. The results showed that adolescent high school students had a high level of HIV/AIDS knowledge and that such knowledge had transfer to their sexual relationship as boys and girls.

The sample of the study consisted of 157 participants selected from two high schools in Nairobi. Participants were administered an HIV/AIDS questionnaire. The method of data analysis comprised frequencies, percentage and chi-square. The study concluded that, though the level of HIV/AIDS knowledge was high, there were identified misconceptions which would further justify the continued promotion of public education in the field of HIV/AIDS. Unlike many similar studies, the study showed a correlation between knowledge and transfer of such knowledge to behaviour change.

Macintyre, Rutenberg, Brown and Karim (2004) point out that HIV risk perception is considered an important antecedent for one's adoption of protective behaviour, in so far as contracting HIV/AIDS is concerned. Njogu and Martin (2003) argue that, given the challenge of HIV/AIDS that adolescents encounter in their present and future life experience, it is vital that their awareness of the risks associated with sexual behaviour is made abundantly clear, and the corresponding transfer of such awareness to real life experience as expected.

HIV/AIDS transmission and prevention, a small number of participants were not that well informed moreover there were others who denied the existence of HIV/AIDS

Tagoe & Aggor (2009) advanced the argument that many university students in Africa are not that well informed about HIV/AIDS (Katjavivi & Otaala (2003) As a matter of fact, many university campuses provide an environment that is conducive Van Wyk (2006) reports of an investigation whose objective was to examine university students' perceptions, attitudes and awareness towards HIV/AIDS at a South African University in the Northwest Province. The study was based on a sample of 290 students whose age ranged from 18-23 years both males (41%) and females (59%). The results showed that the majority of participants were knowledgeable about HIV/AIDS. While the majority of participants had a knowledge that was quite detailed regarding e to the contracting and transmission of HIV/AIDS (Tagoe & Aggor, 2009).

Such assertion is supported by the following factors: The age at which students are at university ranges from 19-49 which is the cohort for the large age group contracting HIV/AIDS both in Africa and other parts of the world; Rise in the students population comprising African and international students; Transactional sex among male and female students; Use of alcohol and drugs among students which predisposes them to engage in sexual activity that might lead to HIV infection.

Based on this understanding, Tagoe and Aggor (2009) carried out a study on the university students' perceptions, attitudes, knowledge in relationship to students' sexual behaviour. The sample was based on 375 university students in Ghana. Overall, students had adequate knowledge about HIV/AIDS and its transmission through: blood transfusion, sharing sharp instruments, sex with an infected person. In terms of prevention, they mentioned the use of condom, being faithful to one uninfected partner and being abstinent.

In Namibia, De Beer, Gelderblom, Schellekens, Geeb, Van Roy, MacNally, Wit & Tobias (2012) investigated the extent of HIV/AIDS prevalence, knowledge and attitudes among university students. **The** participants were drawn from the University of Namibia as well as the Polytechnic constituting a sample of 5,000 participants. The end results showed that the HIV/AIDS knowledge was good, though there were some misconceptions regarding HIV/AIDS transmission and perception of one's possible risk of contracting HIV was rather low. Some of the participants tested were HIV positive,

and yet they had not been aware of such status, which is the more reason for improvement in awareness campaigns.

Ching, Eke-Huber, Enddy & Collins (2005) made a study of 375 Nigerian university students' HIV knowledge, perceived susceptibility for HIV and Sexual behaviour. They reported that female students were more knowledgeable than their counterparts. On the other hand, male students were more knowledgeable on the risk of HIV transmission through oral sex. The female respondents were more knowledgeable on the erroneous belief that antibiotics protect one from HIV infection.

Moreover, female students knew more about needle sharing in steroid use.

The overall results showed that participants' knowledge of HIV/AIDS was high, though when it came to application, some did not do well, given that they engaged in sexual activity that was rather risky and likely to lead to the transmission of HIV. They further considered themselves to be of low susceptibility to HIV/AIDS infection.

Ebeniro's (2010) study aimed at examining the level of awareness of HIV/AIDS among university students in Nigeria. Participants constituted the largest population of those infected with HIV/AIDS. Moreover, the participants comprised those who engaged in risky behaviour, drug addiction and premarital sex, all of which are likely to increase the probability of being HIV/AIDS infected. The sample comprised 162 females and 162 males and their age range was 20-24 years drawn from three universities.

The results showed that the difference in gender perceptions of HIV/AIDS were associated with socio-economic factors, culture and tradition. In response to the behaviour aspects of the questionnaire, 89% were aware that HIV is transmitted sexually; 81% knew that HIV could be contracted as a result of using unsterilized equipment; 89% were aware about transmission through contaminated blood or through injection. There were 31% of the participants who had misconceptions, as they were of the view that HIV/AIDS could be contracted as a result of physical contacts, kissing, hugging and hand shake with an infected person. There were 6% of the participants who did not believe that HIV/AIDS existed and had no knowledge of how it is transmitted.

The study observed that despite the presumed correlation between knowledge and transmission of HIV/AIDS, participants engaged in behaviour that predisposed them to HIV/AIDS infection. For examples, they did not take the necessary precautionary measure in the form of condom; freely used alcohol; they had multiple sex partners.

Odu & Akanle's (2008) study sought to investigate: the relationship between the knowledge of HIV/AIDS and students' sexual activity; different types of sexual behaviour and whether university students have a basic grasp of HIV/AIDS concepts. The sample was made up of 1,420 university students aged 15-30 years drawn from four universities in Nigeria. The results of data analysis showed that the majority of students were sexually active; engaged in high risk sex relationships; casual, same sex, multiple sex partners and sex in exchange for money and favours. Their knowledge of HIV/AIDS was very high. There were also misconceptions regarding the cure of AIDS. There was a significant relationship between knowledge of HIV/AIDS and their sexual behaviour.

Since HIV/AIDS is not curable though manageable, prevention remains the only surety for combating it. Hence, the motivation for the numerous studies on HIV/AIDS knowledge, attitudes, beliefs and perceptions. Moreover, the present investigation is informed by the stated motivation, as well as the many studies undertaken in the quest for a relief, as far as HIV/AIDS is concerned.

3. Method

3.1 Sample

Participants comprised 176 University of Nairobi students, randomly drawn from a class of 400 students in the Department of Psychology, College of Humanities and Social Sciences. Their age ranged from 19 to 53 years with a mean of 27.6 and standard deviation of 5. The participants were in their first and second year of study, taking courses in psychology.

3.2 Procedure

The lecturers offering a module in psychology administered The questionnaire to the participants. This was preceded by briefing students on what the questionnaire was all about, and that responding to the questionnaire was voluntary. As such, they were free to either respond to the questionnaire, or choose not to respond to the questionnaire. There was no report of some of the potential participants refraining from responding to the questionnaire.

3.3 Measuring Instrument

A questionnaire comprising 15 statements and questions commonly used for testing respondents' HIV/AIDS knowledge, perceptions, attitudes, beliefs was used. Each statement and question had three options, namely "Yes, No Don't know". Participants were asked to tick whatever option they thought was true of their HIV/AIDS knowledge. For confidentiality purposes, respondents were advised not to write their names or name of the university affiliated to. They were, however, requested to indicate their gender and date of birth for statistical purposes.

Fifteen minutes were allocated for the completion of the questionnaire, following which the questionnaire was collected.

4. Results

Table 1 shows the results based on: frequencies, percentage, chi-square and level of probability. The response to whether a person would contract HI/AIDS as a result of drinking water from the same glass with an HIV/AIDS infected person was rejected by 95% of the respondents. According to the χ^2 test (1df, N175)=153.7, this was statistically significant at $p < 0.001$. When asked whether kissing an infected person would lead to contracting HIV/AIDS, 68% rejected this hypothesis with χ^2 (1df, N175)=44, was also significant at $p < 0.001$. Whether one would be infected as a result of taking care of an HIV/AIDS person was also rejected by 89%, as a source of transmission. This was further confirmed by the chi-square contingency Table χ^2 (1df, N175)=91.4, $p < 0.001$. Receiving blood from an HIV/AIDS person was acknowledged as leading to infection by 91%. This was accepted χ^2 (1df, N175)=120, $p < 0.001$, as one of the ways of being infected with HIV/AIDS. Being infected by having sex with an infected person was acknowledged by 85% of the participants, and was statistically significant: χ^2 (1df, N175)=90, $p < 0.001$. As regards HIV/AIDS being God's punishment was rejected by 78% of the respondents, which statistically significant, χ^2 (1df, N175)=64.7, $p < 0.001$.

Whether Africans have a cure for AIDS was rejected by 91%. Calculation of χ^2 (1df, N175)=130, $p < 0.001$ was significant.

The majority of participants (86%) did not think that research has identified the cure for HIV/AIDS, which was statistically significant: χ^2 (1df, N175)=99, $p < 0.001$. Whether participants were vulnerable to being HIV/AIDS infected was rejected by 71% of the respondents, and this was significant: χ^2 (1df, N175)=40.7, $p < 0.001$. Whether they would agree to sit next to an HIV/AIDS infected person, 87% respondents did not think there was a problem with such behaviour, which was statistically significant: χ^2 (1df, 175)=156 $p < 0.001$. Shaking hands with an infected person was not considered a source of transmission by 96%. This was significant: χ^2 (1df, N175)=100.6, $p < 0.001$.

Only 14 per cent (lowest score) agreed with the statement that HIV/AIDS persons should be held responsible for contracting such disease. The overwhelming majority took the position that infected persons should not be blamed for their disease. Whether HIV/AIDS infected children should attend school with uninfected children, the majority of participants (95%) thought that was the right thing to do: χ^2 (1df, N175)=153.5, $p < 0.001$. Whether there is a cure for HIV/AIDS, 75% did not think so. In response to whether participants would agree to being tested for HIV/AIDS, the majority of participants (98%) said they would. This was statistically significant: χ^2 (1df, N175)=71, $p < 0.001$. In response to whether participants were careful in their relationships with members of the opposite sex, for the purpose of guarding against being HIV/AIDS infected, most of them (95%) agreed with the statement significantly: χ^2 (1df, N175)=161.3, $p < 0.001$. The statement that there was no such thing as AIDS was rejected by 98% of the respondents, and was significant: χ^2 (1df, N175)=156, $p < 0.001$.

Table 1: Participants' Frequencies, Percentage, Chi-squares and Probability

N= 176					
No .	Statement				
		Freq.	%	χ^2	P
1	Drinking from the same cup used by AIDS person	168	95	153.7	0.001
2	Kissing a person who has AIDS	120	68	44	0.001
3	Taking care of person who has AIDS	156	89	91.4	0.001
4	Receiving blood from a person who has AIDS	160	91	120	0.001
5	Having sex with a person who has AIDS	150	85	90	0.001
6	AIDS is God's punishment for sexual sin	138	78	64.7	0.001
7	Africans have a cure for AIDS	160	91	130	0.001
8	Research has finally found the cure for AIDS	151	86	99	0.001
9	There is no way I will be infected with AIDS	125	71	40.9	0.001
10	Would you sit next to a person who has AIDS?	153	87	100.6	0.001
11	People who have AIDS are responsible for it	24	14		ns
12	AIDS children should attend school with others	167	95	153.5	0.001
13	Would you accept being tested for AIDS?	172	98	71	0.001
14	Are you careful in your relationship with boys/girls to avoid getting AIDS?	168	95	161.3	0.001
15	There is no such thing as AIDS	172	98	156	0.001

5. Discussion

The current study was motivated by the need to establish HIV/AIDS level of knowledge among students at University of Nairobi. This was in comparison with other similar previous studies across universities in Kenya which have attempted to find out students' knowledge, attitudes, beliefs and perceptions as far as HIV/AIDS in concerned.

The HIV/AIDS menace continues to wreck havoc in many African countries, wiping especially those in their most productive ages. As such, there is need for more similar studies to help in the development of targeted programs in our concerted effort to see an end to the pain caused by HIV/AIDS.

The current study revealed high level of HIV/AIDS knowledge among students at the University of Nairobi. The students seem aware of the modes of contracting or transmitting the disease. These findings echo those of previous studies (e.g. Othelo et al., 2009; Lake Victoria Basin Commission, 2010; Mwamwenda, 2013), which equally registered high levels of HIV/AIDS knowledge among university and high school students.

Again, unlike in the study carried out by the Lake Victoria Basin Commission (2010) in six universities, the current study found low level of HIV/AIDS stigma. The students agreed that AIDS is not God's punishment for sexual sin, and that people who have AIDS are not responsible for it. In addition, they resoundingly supported the idea of children with AIDS to attend school together with others who are not.

Participants in the current study reported high transfer of knowledge to their sexual relationships. They acknowledged to being careful in their relationships with boys/girls to avoid getting AIDS. This finding replicates the observation made by Mwamwenda (2013) in his study among high school students in Kenya. However, other previous studies have observed a disconnect between HIV/AIDS level of knowledge and sexual behaviour (e.g. Lake Victoria Basin Commission, 2010; Othelo et al., 2009). In the study by Othelo and colleagues, for example, despite their high HIV/AIDS knowledge, their participants admitted to engaging in risky sexual behavior.

Another and crucial finding in the current study is that a high percentage (71%) did not concede to HIV vulnerability. That is, they hold dear the impression that they are not vulnerable to HIV infection. It is good to note that such findings are not new. For instance, the findings are similar to those of Lake Victoria Basin Commission (2010). It is argued here that if the sentiments of Macintyre and colleagues (2004) are anything to go by, that risk perception is a critical antecedent for one's adoption of protective behavior, then the stand taken by the students in the current study and those from previous ones could be of great concern.

However, as earlier argued, solace comes in the form of participants' affirmation that they are careful in their sexual behavior.

6. Conclusion

The objective of this investigation was to establish the extent to which students at the University of Nairobi, Kenya are

knowledgeable about HIV/AIDS. This was confirmed by the high level of HIV/AIDS knowledge they have in their possession. The results of this investigation has several implications in the efforts for the prevention of the spread of HIV/AIDS. With such knowledge, it is anticipated that university students, and many others will guard against being HIV/AIDS infected. This is particularly so in view of the fact that there is so far no cure for AIDS, and the only option left is that of prevention. Such findings offer hope to those engaged in HIV/AIDS public education that, their effort is not in vain, as it will bear fruit in transfer of knowledge to sexual behaviour change, notwithstanding the research which has reported to the contrary. The findings further draw attention to the fact that, though the level of knowledge is high, there are still bottlenecks, where there are misconceptions, for which there is need for more refined effort and strategies for halting the spread of HIV/AIDS.

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