

Gender Differences in HIV/AIDS Knowledge/Awareness among Adventist University Students in Arusha, Tanzania

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Abstract

The objective of this study was to assess university students' knowledge gender differences regarding HIV/AIDS at an Adventist institution in Arusha, Tanzania. This was undertaken on the ground that knowing about HIV/AIDS is one of the main ways by which the formidable disease can be controlled. The sample comprised 97 male (49) and female (48) participants who were administered an HIV/AIDS questionnaire consisting of 15 questions/statements. The data analysis comprised frequency, percentage, chi-square and level of probability. The results showed that on the basis of knowledgeability participants fell under those who scored high followed by those who were above average, average and below average. Similarly on the basis of gender differences, there were two categories, namely in a couple of questions, female participants performed better than their counterparts. In the second category, there was parity of genders, as their performance was equally good or unsatisfactory. In view of HIV/AIDS misconceptions and gender differences observed, it was concluded that the HIV/AIDS knowledge students commanded was not sufficient to lead to reduction in HIV/AIDS transmission. Thus calling for more public HIV/AIDS education in institutions of higher learning in Tanzania.

Keywords: University students and HIV/AIDS, HIV/AIDS knowledge/awareness, living with HIV/AIDS, gender differences Adventists, pandemic, inadequate HIV/AIDS knowledge.

1. Introduction

The number of women affected and infected by HIV/AIDS constitutes the majority worldwide (Paul, Majundarm Akhtar-Danash, Bobin and Sherifali, 2013). The majority of those at greatest HIV/AIDS risk comprise those aged 16-30 years. Burgoya and Drumond (2008) report that comparatively, women in Africa are more affected with HIV/AIDS than is the case with their counterpart the men.

The reasons for such gender difference are many and are as follows: poorly educated, those with rural background, those who are economically dependent on men; taboo imposed on them by their culture regarding discussion based on sexual matters and health, submissive aspect in relationship with men; men dominant role in sexual decision making. All these factors contribute to women being less informed about HIV/AIDS.

According to Gahagan (2012) her investigation in Canada indicates that there is an increase in the number of women contracting HIV/AIDS which constitutes the reason for further investigation into gender inequality in the contraction of HIV/AIDS. She goes on point out many societies place the gender role of women in a position which makes it rather difficult for women to protect themselves against HIV/AIDS transmission. For examples, making it difficult to practice safer sex and being unable to avail themselves with HIV prevention services; women have less access to education, income, employment. In the long run these hold the women's limitations in their negotiation for safe sex and access to prevention to available prevention services

2. Literature Review

According to research findings, there exists a dichotomy in the HIV/AIDS knowledge genderly. In a sample of 126 female and 101 male university students in Ethiopia who were administered an HIV/AIDS questionnaire, there was no gender difference in the scores obtained by male and female participants. In this regard, Paul et al. (2013) argue that there is deficit of HIV/AIDS knowledge among secondary and university students. Similarly, there is less use of precaution, when young people engage in sexual activity. In a study of high school students, there was only 41 per cent female and 44 per cent male respondents who were adequately knowledgeable on HIV/AIDS. In a nationwide study, only male 28.9 and 15.8 female participants were adequately versed in HIV/AIDS knowledge. Lack of parity in HIV/AIDS gender knowledge

was attributed to various factors, namely: 1) contextual gender roles; 2) lower rates of literacy; 3) and lower school enrolment among women, when compared to male participants

Addressing HIV/AIDS in Tanzania institutions of higher education poses a serious challenge based on the following factors (African Medical Research Foundation (AMREF, 2010): 1) Little is known about the vulnerability, prevalence, impact as well as situation of HIV/AIDS in most higher education institutions in Tanzania; 2) There is a tendency on the part of senior academics to presumptuously assume that, matters patterning to HIV/AIDS fall under the domain of junior academics and students; 3) HIV/AIDS is given rather low priority, when it comes to allocation of resources (human, financial, time and space). As a result, there is constraint on integrated and comprehensive institutional HIV and AIDS programmes.

In a sample of six universities selected cross-sectionally based on geographical location, ownership (public, private or faith-based).

There were 2,426 students who constituted respondents. Data was collected on the basis of social survey, interviews and focus discussion groups

Those who believed in dual methods of the HIV/AIDS prevention was low as it fell short of 50 per cent for both males (47%) and females (44%). The dual method means reduction of being susceptible to HIV/AIDS infection by being faithful to an uninfected partner and using condom simultaneously. Otherwise over 70 per cent of males and females held the view that use of condom reduces the chances of contracting HIV/AIDS. There was similar per cent (50%) who believed that having one faithful partner who is uninfected protects one from being HIV/AIDS infected.

Most common misconceptions were contracting HIV/AIDS through mosquito bites, and sharing eating utensils with an HIV/AIDS infected person. Other misconception were: shaking hands with an infected person, sharing toilet with an infected person. There was nevertheless gender difference in rejection of misconception 45 per cent males and 47 per cent females.

In comprehensive knowledge of HIV/AIDS results showed significant difference within universities regarding comprehensive knowledge about HIV/AIDS. By comprehensive HIV/AIDS knowledge is meant consistent use of condom, having one faithful partner knowledge that one cannot be identified as infected on the basis of appearance, 3) rejecting two commonest misconceptions namely mosquito bites and shaking hands with an HIV/AIDS person.

On the basis of this criterion, there were, nevertheless, significant gender differences observed. At one university males students had a significant difference, whereas at another university females knowledge as statistically significant more than was the case in the remaining four participating universities. On the basis of age, males aged 40-44 and female students of similar age were observed to be more knowledgeable than their corresponding counterparts in the other groups. On the basis of year of study, first year male students were less knowledgeable than any other year of study, whereas second year female students were less knowledgeable than any other year of study. The results based on year happen to be more significant for male students than those of female students were not statistically significant.

Mwamwenda (2014) examined gender differences in the belief that adolescents are not at risk of HIV/AIDS infection. The investigation comprised 366 male and female participants selected from Kenya, South Africa and Tanzania. There were statistically significant gender differences in the belief that adolescents were not susceptible to HIV/AIDS transmission. In Tanzania, men had a knowledge score of 76.7 per cent compared to a score of 73.2 per cent for women. Kenya male participants had a score of 79.8 per cent, whereas women had a score of 80.6 per cent. For South Africa, men scored 77.4 per cent compared to 73.4 per cent for women. In all the three countries, the gender differences were statistically significant; with males in South Africa and Tanzania outperforming females, whereas in Kenya the female respondents outperformed male respondents.

In Nigeria, Aluede, Imhonde, Maliki and Alutu (2005) assessed university students level of knowledge about HIV/AIDS with a sample comprising 900 undergraduate students consisting of 520 male and 380 female students. The results showed that the respondents had a highly favourable knowledge regarding HIV/AIDS. Furthermore, the results showed a statistically significant gender differences in HIV/AIDS knowledge with male students showing higher knowledge of HIV/AIDS than was the case with female participants.

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Terry, Mhloys, Masavaure and Adlis (2005) investigated gender differences in HIV/AIDS knowledge among 933

university students in Zimbabwe on the basis of cultural, sociological and economic variables. Male participants expressed the views that: they had the right to dominate women, and that they were the ones to decide the use of condom. In contrast, the women participants acknowledged the gender cultural attitude towards women and went further by asserting their support for women's rights to sexual activity.

In a similar investigation, Ugbona, Kooffeh and Nwauche (2011) examined gender differences in students' knowledge of HIV/AIDS on a sample of 1748 secondary school students aged 12-19 years of age drawn from 12 schools. Their knowledge was high as it stood at 80%. However, there was no gender difference in their knowledge of HIV/AIDS

Montosh, Asagwara and Meriamu (2011) carried out a study of 2399 university students in Lagos, Nigeria, in which participants had a moderate knowledge of HIV/AIDS. It was also reported that female participants were predisposed to contracting HIV/AIDS, because of their engaging in high risk sexual behaviour for financial reasons. In terms of gender difference in HIV/AIDS, no difference of significance was observed.

According to a cross-national survey carried out in Ethiopia, Mali and Nigeria 97-98% of men had a knowledge of HIV/AIDS compared to 86-90% for women who were just as knowledgeable. Similar survey carried out in Kenya and Madagascar showed gender difference showing that men showed more than women. The study carried out in Rwanda, however, showed no gender difference in HIV difference in HIV/AIDS between females and males.

Durojaiye (2011) refers to HIV/AIDS is one of the most dreaded and devastating diseases in human recent history. It is therefore argued that behaviour change on the part of men and women presents the most effective way of controlling transmission and infection of HIV/AIDS. In a sample of 315 students consisting of both married and single participants. Their knowledge of HIV/AIDS was very high. It was observed that participants who were married were more knowledgeable than those who were single. On the other hand, a statistical analysis the gender differences between male and female participants were non-significant.

In Malaysia, Wong, Chin, Low and Jaafar (2008) young adults' knowledge of HIV/AIDS was moderate given that they had of 4.6 out of 17 points. The majority of participants knew what HIV/AIDS was about. There were gender differences with female participants showing higher scores than male participants. Mundingayi, Lutala and Mupenda (2011) in Kinshasha, Democratic Republic of Congo, advance the argument that knowledge has a prominent role as predictor of HIV risk behaviour. As a result of HIV/AIDS knowledge, the following are likely to hold true: deferred onset of sexual relationship; consistent use of preventive measures during sexual intercourse; reduction in the number of sexual partners; increase in relating to HIV/AIDS infected persons positively. Their investigation of HIV/AIDS knowledge was high for both female and male participants. As such, there

In a comprehensive response to the HIV/AIDS epidemic in Jamaica, Figueroa, Duncan, Byfield, Harvey, Gere, Hylton, Kong, Hamer, Williams, Carrington and Braithwaite (2008) describe HIV/AIDS rates in Jamaica as being higher among men than in women which is attributed to : men's heterosexual males behaviour involving high sexual risk behaviour, given that they have multiple partners, involvement in commercial sex and HIV rates being high among men having sex with men. The reports further points out that, while HIV/AIDS infection among women is on the decline, for men it is on the increase. This is attributed to women practicing safer sex than men; assessing HIV testing and continued high rates of HIV among MSM (Figueroa et al., 2008). It is nevertheless important to note that among adolescents, HIV/AIDS transmission is immensely dramatic. With adolescents the rates of HIV/AIDS among females is three times higher than males (Figueroa et al., 2008).

In Nigeria, Oladokun, Jiboye, and Akichemi (2010) conducted an investigation on in-school students' HIV awareness and sexual behaviour. They preambled their presentation by pointing out that knowledge about HIV and sexual practices plays an important role in the prevention of HIV/AIDS transmission. This served as motivation for pursuing the assessment of school adolescents. The results were that based on 1045 participants with a distribution of 501 males and 544 females, 02% had a good knowledge of HIV/AIDS. Statistical analysis of gender difference showed that their knowledge was at par, as there was no statistically significant difference between male and female respondents.

The preceding review of literature served as a motivation and backdrop for undertaking the present investigation, with the purposes of finding out the HIV/AIDS level of knowledge and whether such knowledge would significantly differ genderly, as well as whether such findings would either affirm or deaffirm what other researchers have reported, as presented in the review of literature.

3. Method

3.1 Sample

The sample of the study comprised 97 university students pursuing their studies at an Adventist University in Arusha at

the foot of Mount Kilimanjaro, Tanzania, the highest mountain in Africa and only second to Mount Everest in Nepal, the highest mountain in the world. Of the total participants, there were 48 females, whose age ranged from 18 to 47 years, and had a mean of 26.9 years with a standard deviation of 7.9. Males' age ranged from 20 to 54 years with a mean of 30 and a standard deviation of 9.2. The majority of participants were young and single, whereas a few were married which was applicable to both men and women.

3.2 Questionnaire

The respondents were administered an HIV/AIDS questionnaire of 15 statements/questions to which they were asked to tick the most correct response on the basis of the three options provided, which were "Yes", "No" "Do not know". The questionnaire was administered by one of the academic member of staff at the University that, the researcher happens to have known for many years. All protocol observed, necessary permission was sought and granted from the senior management of the University. Similar consent was solicited from participants.

For confidentiality purpose, respondents were asked not to write their names on the questionnaire. For biographical information, they were requested to indicate their date of birth and gender in the space provided on the questionnaire.

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 HIV/AIDS, as a result of drinking water from the same glass with an HIV/AIDS infected person was rejected by 69% male and 71% female respondents. Both scores were above average. The gender difference was not statistically significant based on a chi-square test. When asked whether kissing an infected person would

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

N= 97

No.	Statement	Males		Females		χ^2	P
		Freq.	%	Freq.	%		
1	Drinking from the same cup used by AIDS person	34	69	34	71	0.024	ns
2	Kissing a person who has AIDS	30	61	32	67	0.311	ns
3	Taking care of person who has AIDS	20	41	19	40	0.533	ns
4	Receiving blood from a person who has AIDS	26	53	25	52	0.009	ns
5	Having sex with a person who has AIDS	24	51	24	50	0.096	s
6	AIDS is God's punishment for sexual sin	31	63	32	67	0.123	ns
7	Africans have a cure for AIDS	40	82	40	83	0.049	ns
8	Research has finally found the cure for AIDS	27	55	35	73	3.34	0.05*
9	There is no way I will be infected with AIDS	14	29	10	21	1.472	ns
10	Would you sit next to a person who has AIDS?	44	90	39	81	1.434	ns
11	People who have AIDS are responsible for it	10	20	38	80	2.407	0.10*
12	AIDS children should attend school with others	45	92	46	94	0.667	ns
13	Would you accept being tested for AIDS?	39	80	43	90	1.852	ns
14	Are you careful in your relationship with boys/girls to avoid getting AIDS?	46	94	47	98	1.001	ns
15	There is no such thing as AIDS	39	80	35	73	0.597	ns

ns= nonsignificant; * Significant

Whether HIV/AIDS infected children should attend school with uninfected children, the majority of participants (96%) thought that was the right thing to do. Whether kissing an HIV/AIDS would lead to contracting HIV/AIDS, 61% of male and 67% female students rejected this hypothesis. The scores for the two genders were above average and there was significant gender difference (0.05) in favour of female participants.

Whether one would be HIV/AIDS infected, as a result of taking care of an HIV/AIDS person was also rejected by 41%, male and 40% female participants as a source of transmission. Both male and female participants scored below average which was statistically significant (0.05), meaning that more respondents believed that one would contract HIV/AIDS as a result of caring for a person living with AIDS. This is a misconception of HIV/AIDS.

Receiving blood from an HIV/AIDS person was acknowledged as leading to infection by 53% and 52% female students. Both scores fell under the average performance category. This was accepted as one of the ways of being infected with HIV/AIDS. There was no gender difference. Being infected by having sex with an infected person was acknowledged by 51% male and 50% female of the participants.

As regards HIV/AIDS being God's punishment was rejected by 63% male and 67% female of the respondents. The scores were comparable and therefore there was no gender difference. Whether Africans have a cure for AIDS was rejected by 82% male and 83 female students. Both scores fell under the category being very high. No gender difference was observed as participants were equally knowledgeable about HIV/AIDS. The majority of female participants (73%) thought that researchers have not identified the cure for HIV/AIDS, compared to 55% male participants who thought the same way. The score of female participants fell under high, whereas that of males was average. The gender difference was significant (0.05) in favour of female respondents.

Whether participants were vulnerable to being HIV/AIDS infected was rejected by 71% male and 79% female of the respondents, which was incorrect. Both correct scores fell under very low, and there was no gender difference. Whether they would agree to sit next to an HIV/AIDS infected person, 90% male respondents did not think there was a problem with such behaviour, compared to 81% female respondents. The two scores were very high and gender difference was not significant. In response to the statement that HIV/AIDS persons should be held responsible for contracting such disease, the majority of female respondents (80%), whereas there only 20% of the males who felt thus. The gender difference was statistically significant (0.10) in favour of female respondents, taking the position that infected persons should be blamed for their disease.

Whether HIV/AIDS infected children should attend school with uninfected children, the majority of both gender participants (92% men and 83% women) thought that was the right thing to do. Both scores were very high and the gender difference was not statistically significant. Whether participants would be ready to be tested for HIV/AIDS, 94% males responded positively which was similar to 98% females giving a similar response. The scores for both genders were very high and there was no sex difference in their performance.

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, 94% male participants were in agreement with the statement. Similar response was applicable to 98% female participants. The scores were very high and there was no significant gender difference. In response to whether there is no such thing as AIDS, 80% male participants rejected the statement, while 73% female participants were in agreement with their counterparts. While the male score was very high, that of females was high. There was no significant gender difference. The statement that there is no such thing as AIDS was rejected by 80% male and 73% female participants. The gender difference was not significant.

5. Discussion

The purpose of this investigation was of twofold, namely to assess the HIV/AIDS knowledge of university students at a faith-based (religious) institution in Arusha, Tanzania. The second objective was to examine the gender differences in the performance of participants comprising 49 male and 48 female respondents. The underlying motivation was the established fact that, there is no known cure for HIV/AIDS and that, in view of this knowledge of HIV/AIDS is the only option available in the control of HIV/AIDS transmission. Such a stance is taken on the understanding that being knowledgeable about HIV/AIDS will empower potential victims to guard against being HIV/AIDS infected. Oladokun et al. (2010) argue that knowledge about HIV/AIDS plays an important role in the prevention of HIV/AIDS transmission

The findings of the data analysis showed that participants' performance fell into three categories comprising those who performed very highly which ranged from 80% and above; those who performed highly with the range of 70%; the third category was above average whose scores fell in the 60%; followed by average scoring within 50%; the lowest category was those who scored below 50%. In terms of gender difference, in some statements/questions female participants performed better than male participants. In others male participants did not outperform female participants to a significant level. In the third category, the set of participants were at par in their performance. The parity was of dual nature in as much this held true in two directions. In terms of performing well this held true for both genders. The other direction was that for those who performed unsatisfactorily, it applied to both genders. Mwamwenda (2014) examined gender differences in the belief that adolescents are not at risk of HIV/AIDS infection. The investigation comprised 366 male and female participants selected from Kenya, South Africa and Tanzania. There were statistically significant gender differences in the belief that adolescents were not susceptible to HIV/AIDS transmission. These findings are in agreement with what has been reported in the present investigation.

Similarly, Alued et al. (2005) reported similar findings. Part of the findings of the present study showed that there

was parity in terms of gender difference where females and males were equally knowledgeable or un knowledgeable in their HIV/AIDS awareness. This confirms what similar studies have reported (Durojaiye, 2011; Mantosh et al; Paul et al., 2013; Ugbona et al. 2011). In terms of gender differences in which case either one of the gender performing better than the other, such findings have support from similar investigations in various parts of the world (AMREF, 2013; Aluede et al. 2005; Wong et al. 2008; Mwamwenda, 2014). This held true only for female respondents outperforming their counterparts.

6. Conclusion

In keeping with the objective of the investigation, it is clear that the participants were familiar with the HIV/AIDS knowledge considered essential for guarding against contracting HIV/AIDS. Similarly, the gender differences in the knowledge of HIV/AIDS was indicative of familiarity with the subject matter. However, it would not be correct to conclude that, the participants know all that is to be known about HIV/AIDS.

The number of HIV/AIDS misconceptions manifest by both female and male respondents are a clear evidence that more must be done in the provision of HIV/AIDS public education. Even where it is thought that enough public education has provided, there is need to ensure that the situation is monitored and reconsolidated on a regular basis. Short of this, we will be faced with the peril of losing the battle to the scourge of HIV/AIDS, which has left (those living with HIV/AIDS) and claimed millions of Africans in Sub-Saharan Africa.

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