The Influence of Peer Based HIV/AIDS Education on Students Sexual Behaviour: A Case of Mzumbe University, Tanzania

J.S. Kikula

Mzumbe University

Email: jkikula@yahoo.co.uk

Abstract: *Peer education typically involves training and supporting members of a given group to effect change among the members of the same group. Peer education is often used to effect changes in knowledge, attitudes, beliefs and behaviours at the individual level. However, peer education may also create change at the group or societal level by modifying norms and stimulating collective action in policies and programme. Peer education is a tool or strategy to minimize or prevent the spread of HIV/AIDS which is the most dangerous scourge as the most affected group of people are youths capable of driving the wheel of economic development, so it is important to have deliberate strategies in order to fight against this scourge. One of these strategies is peer education, peer education for HIV prevention has been widely implemented in many universities in developing countries, yet the effectiveness of this intervention has not been systematically evaluated. This study was conducted at Mzumbe University (MU) located in Morogoro region to asses peer based education and its influence on students' sexual behaviour. The study adopted a case study research design and used a combination of simple random sampling and systematic sampling techniques to select 200 students as respondents. Data analysis was done using descriptive statistics. Also, inferential analysis was done using an F test to compare points scored on a scale of sexual behaviour by some independent variables. It was found that many students engaged in risky sexual behaviour had multiple sexual partners and were inconsistent in using condoms. This happened despite their having high knowledge on HIV and peer based education, and being positive towards peer educators. These positive attributes have not transformed the students to abandon their risky sexual behaviour. It was recommended that a follow-up study is needed to find out as to the reasons behind this behaviour that students did not change their risky sexual behaviour despite the instrumental role undertaken by peer educators.*

Keywords: Peer education, sexual behaviour, HIV/AIDS, university students

Introduction

Peer education typically involves training and supporting members of a given group to effect change among the members of the same group.

Peer education is often used to effect changes in knowledge, attitudes, beliefs and behaviours at the individual level. However, peer education may also create change at the group or societal level by modifying norms and stimulating collective action in policies and programme. Peer education is a tool or strategy to minimize or prevent the spread of HIV/AIDS which is the most dangerous scourge as the most affected group of people are youths capable of driving the wheel of economic development, so it is important to have deliberate strategies in order to fight against this scourge. One of these strategies is peer education, peer education for HIV prevention has been widely implemented in many universities in developing countries, yet the effectiveness of this intervention has not been systematically evaluated.

All countries in the world have been affected by HIV/AIDs, but sub-Saharan Africa (SSA) has been hit the hardest. In Tanzania, as it is in many developing countries, HIV/AIDS poses a major threat to national development efforts as it attacks the most productive members of the communities (TACAIDS *et al.,* 2013). The HIV/AIDS pandemic has also resulted in an increase burden for the care of people living with HIV/AIDS (PLWHA) and orphans.

There is evidence that HIV prevalence rises with increasing educational level and wealth status and that youths are disproportionally affected compared to other age groups (TACAIDS *et al.,* 2005). According to TACAIDS *et al*. (2013), 5.1% of Tanzanians aged 15 – 49 years are HIV-positive, but the prevalence of HIV is higher (6.2%) among women than among men (3.8%) (TACAIDS *et al.,* 2005). The observed prevalence of HIV for 2007 – 2008 was 2% among young women and men aged 15 – 24, again the prevalence of HIV among young women (6.6%) is much higher than among young men (2.8%), particularly for youths aged 23-34. Since most of the university students fall under these age categories and sexual interactions among different groups of people in and out of the university campuses cannot be prevented, it is likely that new HIV infections are occurring within universities (UDSM, 2006). Sexual behaviour includes practices and activities in which humans experience and express their sexuality, and in so doing, youth in particular may be more vulnerable to HIV infection due to activities that characterize their sexuality, such as sexual exploration with multiple sexual partners, frequent new sex partners and limited use of condoms (EAC/EALP, 2010).

Tanzania has 28 universities, 19 colleges and 14 centres or institutions of higher learning that are equivalent to universities in their programming

and student body. The population of students at registered universities and institutions of higher learning was estimated at 135,367 in 2013 (TCU, 2013). Accurate and reliable data on HIV prevalence among staff and students are not available in most higher and tertiary education institutions, there is anecdotal evidence that HIV/AIDS-related illnesses and deaths among both staff and students and therefore cannot depict the status of HIV /AIDS among the staff. However, the manifestation of HIV/AIDS related problems is overshadowed due to rapid growth in student populations and due to the fact that many students with HIV related illnesses withdraw from their studies. Subsequently, there is little opportunity of tracking where such students go and what happens to them EAC/EALP (2010). It is generally believed that HIV related absenteeism, the loss of skills, and the overall cost and other impacts due to HIV/AIDS are seriously undermining the capacities of tertiary institutions to achieve their defined educational and research goals (ACU, 2002; Abebe, 2004; cited in EAC/EALP, 2010).

In response to the growing threat of HIV/AIDS in Tanzania, concerted national efforts have been made to halt the spread of the pandemic/scourge. These efforts include formation of the National HIV/ AIDS Control programme (NACP), which has formulated short, medium and long term plans on: health education, decentralization and multi-sectorial response and community participation. The government also instructed institutions to form committees to address HIV/AIDS in work places. Consequently, several measures were put in practice across universities as a strategy to control the spread of the HIV/AIDS. These include formation of standing committees such as Mzumbe University-Technical AIDS Committees (MU-TAC), awareness campaigns using video /TV, erecting sign posts carrying messages that are supposed to be deterrent to HIV/AIDS, distributing condoms, mainstreaming HIV/AIDS issues into undergraduate curriculum, introducing university-wide common course on HIV/AIDS as well as facilitating and supporting formation of peer based HIV/AIDS educators (FOCAL – SENCER, 2003; URT, 2001).

Voluntary counselling testing services are offered in almost all the universities in Tanzania where HIV/AIDS clubs exist. Awareness campaigns and concerts are conducted and supported by various organizations including USAID, PSI, SPW, Engender Health, Tunajali, ROOTS AND SHOOTS, NORAD, TACAIDS, AMREF (EAC/EALP, 2010). Other initiatives adopted to control of HIV/AIDS in higher learning institutions and surrounding communities include: formulating HIV/AIDS policies; promoting research, innovation, establishing care

and support systems; and developing social and human capital to counter the spread of HIV/AIDS on university campuses and within university communities (SARUA, 2006). According to the Southern African Regional Universities Association (SARUA) (*ibid*.), the core elements of HIV/AIDS strategies in higher education institutions in the SADC region are to generate, collect, transmit and expand AIDS-relevant knowledge, wisdom, understanding, and practice as part of an institutionalised and mainstreamed response to the epidemic. The services available in most universities include: availability of HIV/AIDS Control Units (ACU), provision of male condoms, STI care and treatment, peer counselling and having common courses on HIV/AIDS.

Peer education interventions are strategies that are frequently utilized for preventing the spread of HIV and other sexually transmitted infections (STIs) worldwide. Within a target group, peer educators are individuals with similar demographic characteristics with the group that is the target for education provision. They may be similar in terms of age, sex, or in their behaviour, for instance engaging in risky behaviours such as being sex workers or intercessions drug users. Peer educators have been reported to increase awareness, impact knowledge and encourage behaviour changes among members of that same group (Medley *et al*., 2009). In recent years, peer education has been more commonly used in connection with STD/HIV/AIDS prevention (Saito, 2009). Peer educators and counsellors are among the most popular people used by many universities and organisations in controlling and halting the impact of HIV/AIDS. However, little is known about the outcome of such initiatives on students' decision making regarding sexual behaviour and their involvement in risky sexual activities. It is frequently reported in local newspapers and other social media that students in higher learning institutions engage in risky sexual behaviour without substantiation.

Meanwhile, there is documented evidence showing that knowledge about HIV/AIDS among university students is high, hopefully it will be translated into HIV protective behaviour (Jeckoniah *et al*., 2009). In promoting the adoption of HIV protective behaviour among youths and preventing them from contracting or spreading the scourge, peer HIV/IDS education is recognized as an effective tool. The IFRCS (2009) argues that well designed, targeted and well implemented peer education programmes have potential of improving knowledge, attitudes and skills for HIV prevention. Knowledge obtained from peer educators can also enhance change in the sexual and reproductive health of target populations. The future direction of HIV/AIDS prevention in

Tanzania depends, to a larger extent, on the level of knowledge on how the virus is spread, attitudes of people towards HIV and people living with HIV/AIDS, and consequent sexual behavioural change (TACAIDS *et al*., 2005). Many past studies on the subject have focused on understanding the universities' response to the pandemic in terms of policies and programmes that address HIV/AIDS at work places, and on the appropriateness of such policies and programmes in addressing the problem (van Wyk and Pieterse, 2006, cited by EAC/EALP, 2010). Much less attention has been paid on evaluating the impact of student led initiatives; hence this study aimed at filling this gap. This study sought to assess the association between peer based HIV/AIDS education and students' sexual behaviour at Mzumbe University in Morogoro, Tanzania. In the light of the theory of reasoned action, the study sought to understand whether students' attitudes towards peer based HIV/AIDS education is associated with sexual behaviour change and whether their subjective and normative judgement about peer educators helps them to adopt HIV preventive behaviour.

Methodology

This study was conducted at Mzumbe University which is located in Morogoro region, Tanzania. Morogoro region is a high risk area; residents and travellers including drivers of heavy trucks travelling from Dar es Salaam to and from neighbouring countries who normally have stopover in Morogoro may contract the HIV virus because the region hosts many guests on transit to other parts of the country (Jeckoniah *et al*., 2009) as well as to neighbouring countries. During the years 2011-2013 the region witnessed a resurgence of HIV prevalence from within the range of 3.8% - 4.1% (TACAIDS *et al*., 2013; NBS, 2011) to 7% - 9% among blood donors (Morogoro Municipal Council, 2013). Morogoro is also among the regions that have recorded a high drop-out rate among ARV users in the past (Morogoro Municipal Council, 2013). This poses a high risk among surrounding institutions and the general community.

Efforts to raise the awareness of different groups of people within the region regarding the lurking danger posed by HIV should be an on going concern; peer education on different aspects of HIV and AIDS is among such initiatives. Mzumbe University has had long experience of implementing peer based HIV/AIDS education; hence it is a good case for this study. The study adopted a cross-sectional research design. A combination of simple random sampling and stratifies sampling technique were used to select 200 students as respondents for an interview using a structured questionnaire. Statistical data analysis was done using the Statistical for Social Science (SPSS). Descriptive statistics

were computed to find the distribution of respondents. Index scales were constructed to gauge the level of risky behaviour among the students and their attitude towards HIV/AIDS peer based education. The points scored on the index scales were compared using F-test at the 95% confidence level (5% level significance).

Results and Discussion

Socio-Demographic Characteristics of Respondents

The socio-demographic variables, as presented in Table 1, include age, marital status, and degree programme, place of residence while studying at the University, and year of study. The findings revealed that the majority (91%) of the students were between 20 and 30 years of age, which is the age bracket when people are most sexually active and stand high chances of contracting the HIV virus (FACAIDS *et al*., 2013). Like in many other studies conducted at universities, few respondents were married; in this study 13.5% of the respondents were married while 84.5% of them were single. According to TACAIDS *et al*. (2005) couples and those who were once married such as widow, divorced or separated were likely to contract HIV/AIDS.

Table 1: Socio-demographic characteristics of respondents (Percent n = 200)

Variable	Frequency	Sex (%)		All (%)
		Male	Female	
Sex				
Male	105			52.5
Female	95			47.5
Age (yrs)				
20-24	132	60.0	**72.6**	66
25- 29	50	26.7	23.2	25
30-35	12	7.6	4.2	6.0
36-40	3	2.9	0	1.5
41-45	2	1.9	0	1.0
46 and above	1	1.0	0	0.5
Marital status				
Single	169	82.9	86.3	84.5
Married	27	16.2	10.5	13.5
Divorced/separated	3	1.0	2.1	1.5
Cohabitation	1	0	1.1	0.5
Degree programmes				
Business programmes	66	32.5	32.3	33.0
Business programmes	134	67.2	66.0	67.0
Year of Study				
1st Year Marketing Management (BBA)	60	37.1	22.1	30.0
2nd Year Marketing & Entrepreneurship BBA&ED	87	41.0	46.3	43.5
3rd Year ICT	53	21.9	31.6	26.5

Students' Sexual Behaviour

In this study, sexual behaviour of students refers to actions related to sexual intercourse such as: if the respondent has ever had sex, number of sexual partners, condom use and consistence in using condom, as well as incidences of STDs. These variables were the central focus in comparing the impact of HIV/AIDS peer educators interventions on behaviour. The results presented in Table 2 indicate that the majority of the respondents were sexually active, and most of them were inconsistent in using condoms. The findings (Table 2) indicate further that the majority (97.5%) of the students had experienced sexual encounters before, and of these 93.5% reported to have a few sexual partners (1). The average numbers of sexual partners was 1.3, which compares well with similar findings by TACAIDS *et al.* (2013) which reported that men and women aged 15 to 49 years had two or more sexual partners in the previous 12 months. Similar findings were reported by Dennis *et al.* (2012) indicating that, in Kenyan universities, students had two or more lifetime partners. Having multiple sexual partnership is one of the risk factors which increase chances of contracting the HIV virus.

Table 2: The extent of Sexual behaviour (Percent, n = 200)

Variable	Frequency	Sex (%)		All (%)
		Male	Female	
Ever had sex				
Yes	195	97.1	97.9	97.5
No	5	2.9	2.1	2.5
Number of life sexual partners				
1	173	84.8	88.4	86.5
2	14	5.7	8.4	7.0
3	8	5.7	2.1	4.0
4	2	1.0	1.1	1.0
5 or more	3	2.9	0	1.3*
Mean*				
Age (years) at first sex				
9-12	5	3.8	1.1	2.5
13-15	21	12.4	8.4	10.5
16-18	102	45.7	56.8	51.0
18 and above	72	38.1	33.7	36.0
Condom use for the first time they had sex				
Yes	91	57.1	32.6	45.5
No	109	42.9	67.4	54.4
Condom use for the last time they had sex				
Yes	98	60.0	36.8	49.0
No	102	42.9	67.4	54.5
General condom use				
Sometimes	43	29.5	12.6	21.5
Every time	32	16.2	15.8	16.0
Almost every time	125	54.3	71.6	62.5

Incidence of STDs				
Yes	23	15.2	7.4	11.5
No	177	84.8	92.6	88.5

***Mean number of life sexual partner**

Age at first intercourse is of particular interest since in Tanzania HIV is mainly transmitted through heterosexual contact. In this study, it was found that the minimum self reporting age for the sexual intercourse was 9 years and the mean age for the first sexual engagement was 18 years. Most (52%) respondents had engaged in their first sexual intercourse at the age between 16 and 18 years. This implies that they started sexual intercourse when they were biologically and emotionally mature. Similar findings have been reported by TACAIDS *et al.* (2003), which established that 9% of young women and 10% of young men had started sexual intercourse at the age of 15 to 24 years. Among those aged 18-24, 50% of the young women and 43% of the young men reported having sex for the first time at the age of 18 years. These findings reveal that male youngsters initiate sexual intercourse somewhat earlier than females, but the category above 18 years of age comprised a higher proportion of women engaged in sex at an earlier age. A study by EAC/EALP (2010), similarly, reported that university students in Tanzania start having sexual intercourse at a very young age. For example, among male students aged 20-49 years, 9% had sex before they were 15, while 18% had sex before they were 18 years and 23% had sex by the age of 20 years.

It has been documented that condoms are an effective method of preventing unwanted pregnancy, STDs and HIV/AIDS and that it is the best way for those who cannot abstain from sex (NACP, 1999; Kegeles *et al.*, 1988). This study found that students were generally inconsistent in using condoms during sexual intercourse. Only 16% of the respondents reported using condoms every time they had sexual intercourse. Such behaviour, of not using condoms consistently, put them at a high risk of contracting and spreading the HIV virus within and outside the university campus. Many studies (including EAC/EALP, 2010) have reported that university students believe that consistent use of condoms during sexual intercourse can prevent one from contracting the IHV virus. Nonetheless, consistent condom use amongst university students is low (EAC/EALP, 2010; Jeckoniah *et al.,* 2009). During informal discussion with students, it was further revealed that most of the sexual intercourse encounters occur without prior planning and preparations; thus they sometimes meet in areas where they cannot easily find condoms. Male students also revealed that some female students are

willing to have sex without insisting on use of condoms. In their study, EAC/EALP (2010) found that the management of some universities plays an important role towards promoting use of condoms to protect students from contracting HIV while other universities do not allow promotion of such preventive actions for religious reasons. It is, however, prudent to promote HIV/AIDS prevention methods because when most students join the university, they are around 20 years old, which is the second most vulnerable age group for HIV infection. Most of them came from boarding secondary schools; others came from day secondary schools and home based environment where students' parental or guardian protection limits their behaviour. Even students who live away from their parents at day secondary schools, renting rooms close to their schools, have some protection from the presence of teachers and other elders within the community. At the university, these youngsters face sudden immense freedom that is coupled with attraction and peer pressure to conform to a new lifestyle at the university with much room for self-management and experimentation. In such an environment, in the absence of or inadequate guidance and counselling, they may adopt risky sexual behaviour, which puts them at a high risk of contracting STDs and the deadly HIV virus.

Measurement of Risky Sexual Behaviour

In order to determine the overall level of risk of sexual behaviour, an index scale was developed using six sexual behaviour variables. These were: (i) if a respondent had ever had sex, (ii) a number of sexual partners, (iii) condom use for the first time during sexual intercourse, (iv) condom use during the last time of sexual intercourse, (v) general condom use and (vi) incidences of STDs. For each variable, a "Yes" response was given a value of 1, which indicated high risk, while a "No" response was given a value of 0, representing low risk.

Table 3: Level of risk sexual behaviour (Percent n = 200)

Variable	Frequency	Sex (%)		All (%)
		Male	Female	
0.00	11	6.7	4.2	5.5
1.00	24	18.1	5.3	12.0
2.00	40	24.8	14.7	20.0
3.00	41	20.0	21.1	20.5
4.00	70	23.8	47.4	35.0
5.00	14	6.7	7.4	7.0
Level of risk of sexual behaviour				
Low (Score 0 – 2)	75	49.5	24.2	37.5
Medium (Score 3)	41	20.0	21.1	20.5
High (Score 4 – 5)	84	30.5	54.7	42.0

Based on the responses, an index scale ranging from 0 (meaning low risk) to 6 (meaning high risk) was developed as an indicator of the level of risk with regard to sexual behaviour. Table 3 shows the frequencies and levels of risk of sexual behaviour among students. The mean score on the index scale was 2.9 out of a maximum possible score of 5.0. The values scored on the index were further categorized into low risk (0-2 points), medium risk (3 points), and high risk of sexual behaviour (4-5 points) for comparison among risk categories. As per study findings, 42.0% (30.5% male and 54.7% female) of the students were in the high risk category while 37.5% (49.5% male and 24.2%) were categorized in the low risk group, and less than a quarter (20.5%) (20.0% male and 21.1% female) were in the medium risk category. These results compare well with similar findings by EAC/EALP (2010), which reported relatively high levels of risky sexual behaviour in universities (30.5 % male and 54% female).

HIV/AIDS and Peer Counselling Initiatives

With regard to peer counselling initiatives, this study established that the majority (67%) of the respondents had some knowledge regarding peer based initiative, which is consistent with findings by TACAIDS *et al*. (2005), who reported that the overall knowledge among Tanzanians about HIV/AIDS is high. However, the current study established that about one-third (33%) of respondents had low knowledge about university based HIV/AIDS peer counselling/educators. Respondents who reported to be aware of the peer based initiatives were further requested to describe the functions and purpose of peer based education. Their responses are presented in Table 4.

Table 4: Peer counselling on the campus (n = 200)

Variable	Frequency	Sex (%)		All (%)
		Male	Female	
Knowledge about peer based initiatives (n=200)				
Yes	134	61.9	72.6	67.0
No	66	38.1	27.4	33.0
Functions of peer based HIV/AIDS educators (n=200)				
Distributing leaflets, posters and brochures on HIV/AIDS (n = 200)	114	26.7	24.2	57.0
Distributing condoms (n = 200)	51	53.3	61.1	25.5
Sensitizing students to stay faithful to one un affected partner (n = 200)	29	16.2	12.6	14.5
Sensitizing students on abstinence (n = 200)	6	2.8	2.1	3.0
Perceived purpose of peer based initiatives				
Awareness creation on the risk of contracting HIV/AIDS	75	40.2	44	42.1
Provide educations on preventing HIV/AIDS and STIs	61	25.5	33.1	29.3
To stop new HIV infections in University campuses	22	3.9	19.5	11.7
To prevent students from engaging in risky sexual behaviour	16	7.8	9.4	8.6
To promote access and use of condoms	8	2.0	6.	4.3
Educating students on the impacts of HIV/AIDS	4	2.0	2.2	2.1
Giving helps o students living with HIV/AIDS	2	2.0	0.2	1.1

The findings presented in Table 4 reveal that peer educators were involved in imparting knowledge about HIV prevention to students including distribution of leaflets, posters and distribution of male condoms. Peer educators were also involved in sensitizing students to stay faithful to one unaffected partners as a means of protecting themselves from contracting the deadly HIV virus. The respondents had their own perceptions regarding what the roles of peer educators were. Some of their responses were as follows: Peer educators were expected to raise awareness among students regarding the risk of contracting HIV/AIDS they were also expected to provide education on the impact of HIV/AIDS and the strategies for preventing the spread of new HIV and AIDS infection among students; minimizing the tendency of students to engage in risky behaviour such as having multiple sexual partners and engaging in casual sexual encounters as well as increasing the use condoms during sexual interactions. The respondents also had the perception that peer based initiatives were supposed to help students

who were living with HIV and AIDS. Methods that were used to create awareness include stimulating debates amongst students on different means of avoiding contracting HIV virus and how to avoid risky sexual behaviour. Based on these important activities, it was anticipated that such initiatives would positively impact on students sexual behaviours. Similar initiatives have also been reported to increase respondents' HIV/AIDS knowledge levels and help participants acquire positive attitudes towards HIV/AIDS (Kitala, 2011; Medley *et al.,* 2009). In another example, a study by EALP (2010) on HIV sero-behavioural in six universities in Tanzania found that 63% of male students and 56% female students received information on HIV and AIDS from health campaigns conducted at the universities by peer initiatives and various organizations from outside the universities. They further reported that such initiatives helped students in adopting HIV protective behaviour.

Perceptions on Peer Counselling Initiatives

The effectiveness of peer counselling was also reported by respondents as presented in Table 5. The majority (64.5%) perceived that peer education has the potential to help students to avoid risky sexual behaviour, while 57.5% perceived that peer counselling could help students to change their risky behaviour. Another 61.5% of the respondents had the view that peer counselling rewards students who change their sexual behaviour by minimizing risks towards contracting HIV viruses and other sexually transmitted diseases. Nevertheless, some respondents (54%) did not agree that counselling would bring positive attitude change among university students regarding their sexual behaviour while another 52% were of the view that peer counselling could not lead to sexual behavioural changes among students.

Table 5: Perception on effectiveness of HIV/AIDS Peer counselling (n = 200)

Variable	Frequency	Sex (%)		All (%)
		Male	Female	
Peer counselling enhances changes in sexual behaviour				
Yes	129	66.7	62.1	64.5
No	7133.3	37.9	35.5	
Peer counseling impacts on students sexual behaviour change				
Ye	115	60.0	54.7	57.5
No	85	40.045.342.5		
Peer counseling rewards students who change their sexual behaviour				
Ye	123	60.0	63.2	61.5
No	77	40.0	36.8	38.5

Peer counselling brings positive attitude among university students on sexual behvaiour				
Yes	92	46.7	45.3	4.0
No	108	53.3	54.7	54.0

Attitude towards peer based HIV/AIDS Educators

In order to gauge the attitude towards peer based HIV/AIDS educators within the student community, an index scale of attitude towards peer based HIV/AIDS educators was developed based on ten statements, five being positive toward peer based education followed by five that were negative towards peer education. For each statement, respondents were asked to provide one among three responses, namely: agree, uncertain or disagree. For all positive statements the response "Agree" was given a weight of 3 while "Uncertain" was given a weight of 2 and "Disagree" was given a weight of 1. For all negative statements every: Agree" response was given a weight of 1 while "Uncertain" was given a weight of 2 and "Disagree" was given a weight of 3. The list of variables and their values are presented in Table 6. Based on the statements given in Table 6, an index for each respondents was constructed as a measure of their attitude towards HIV/AIDS with scores ranging from 10 to 30, as presented in Table 6.

Table 6: Measuring attitudes towards peer based HIV/AIDS educators

S/N	**Positive Statements**
1.	Peer based HIV/AIDS education bring changes on students sexual behaviour
2.	Peer based HIV/AIDS education improves awareness-raising on students sexual behaviour
3.	Peer based HIV/AIDS education motivates and Supports students behavioural change
4.	Peer based HIV/AIDS education promotes use of condoms among students.
5.	Peer based HIV/AIDS education sensitizes the students community to protect themselves against contracting the HIV virus.
	Negative Statements
6.	Peer based HIV/AIDS education in universities is a wastage of time, it does not impact on students sexual behaviour.
7.	Peer based HIV/AIDS educations is not useful as it promotes

	promiscuity such as by advocating for condom use.
8.	Pee based HIV/AIDS education should be supported because it is not sustainable
9.	Peer based HIV/AIDS education should not be supported because it is difficult to qualify the impact on students' behaviour change.
10.	Peer based HIV/AIDS education is difficult to implement at universities as peer educators lack skills and motivation.

Respondents' score: Disagree = 1; Uncertain = 2; Agree = 3

Table 7: Attitude of student towards peer based HIV/AIDs educators (n=200)

Score	**Frequency**		**Sex %**
All %	**Male**	**Female**	
12.00	1	0	1.1
0.5			
14.00	1.0	0	0.5
15.00	2	1.0	1.1
1.0			
16.00	13	4.8	8.4
6.5			
17.00	14	8.6	5.3
7.0			
18.00	29	14.3	14.7
14.5			
19.00	32	16.2	15.8
Atitude towards peer			
16.0			
20.00	44	21.9	22.1
22.0			
21.00	22	8.6	13.7
11.0			
22.00	16	10.5	5.3
8.0			
23.00	14	5.7	8.4
7.4			
24.00	6	3.8	2.1
3.0			
25.00	6	3.8	2.1
3.0			
Negative	92	45.7	46.3

46.0			
Positive	108	54.3	53.7
54.0			

The scale had the of 19.7.The scores on the index were further ategorize in to those representing negative and positive attitudes. Scores below index mean represented respondents who had a negative attitudes towards peer based HIV/AIDs education, whereas score above the index mean represented respondents who had a positive attitudes towards HIV/AIDs peer based education. Results in Table 7 show that more than half of the respondents (54%) had positive attitude towards HIV.AIDs peer educators where as 46/% parent had negative attitude. There was only a small difference between men and women respondents in their level of positive and negative attitude towards peer education on HIV/AIDs. Positive attitude towards peer counselling is an important attribute for one to effectively adopt recommended behaviour or practices.

Attitude towards HIV/AIDS and Risk of Sexual Behaviour

In order to determine correlation between students' attitude towards peer HIV/AIDS education and their sexual behaviour, an F-test was used to compare the mean score on the index for the level of risk of the students' sexual behaviour and the mean score on students' attitude towards HIV/AIDS peer educators. The study established that the association between attitudes towards HIV/AIDS peer educators and sexual behaviour was not statistically significant ($p > 0.05$). However, the men score of students who had positive attitudes was higher compared to those who has a negative attitude. Students who has positive attitude towards HIV/AIDS peer educators were less likely to engage in risky behaviour than their counterparts with negative attitudes, which would contribute towards reducing the impact of HIV/AIDS on university campuses.

Conclusion and Recommendations

The use of peer educators to prevent HIV and other sexually transmitted infections in universities has primarily focused on imparting knowledge and skills to students anticipating that once acquired such knowledge and skills will help them to adopt HIV protective behaviours. The findings from this study show that while the level of knowledge on how HIV can be contracted and spread among university students is high, however, it is expected that there will be an improvement on the transformation on students' sexual behaviour. Respondents of this study cited light reasons for not changing their behaviour, including being

unprepared prior to sexual interaction. Further follow-up studies are recommended to establish why student behaviour does not change despite the initiatives undertaken by peer educators to impart knowledge and personal skills on how to minimize the chances of contracting HIV/AIDS.

References

Dennis, G. M., Peter, W.W., Marion, W. M. and Peter, W.N.L. (2010). Sexual Risky Behaviour among the in Kenya. *Medicine Science*; 1(3),177-87.

EAC/EALP, (2010). HIV Sero-Behavioural Study in Six Universities in Kenya, Study Report, August, 2010. Page 6-8.

FOCAL-SENSER, (2003). Responding to HIV/AIDS in higher education institution in Tanzania. In: *Proceedings of a workshop on mainstreaming of HIV/AIDS in SUA curriculum*, 4-5th September, 2003, ICE conference hall, SUA Morogoro. 1-14pp.

Getllieb, N. H., Vacalia, T.D., Palmer, D.R. and Conlon, R.T. (1981). AIDS-related knowledge, attitude, behaviour and intentions among Texas college students. *Health Education Research Journal* 3:61-68.

International Federation of Red Cross and Red Crescent Societies (IFRCS) (2009). Standards for HIV peer education programmes, Geneva, Switzerland.pp 17-18.

Jeckoniah, J.N., Mwageni, E.A. and Kayunze, K.A. (2009). When Knowledge is not enough: Sexual behaviour among University students in Tanzania. *Journal of African Affairs,* 25 (2), 59-82.

Kegeles, S. M., Andrel, N. E. and Irwin, C. E. (1988). Sexually active adolescents and condoms: Change over one year in knowledge, attitude and use. *American Journal of public health* 81:168-171.

Kitala, J. M. (2011). A Study on the Impact of HIV/AIDS Peer Education Program on the Management of HIV and AIDS at the Ports Authority (KPA). MA Thesis, Stellenbosch University. pp. 73-75.

Medley, A., Kennedy, C., O'Reilly, K. and Sweat, M. (2009). Effectiveness of peer Education Interventions for HIV Prevention in Developing Countries: A Systematic Review and Meta-Analysis. AIDS *Education and Prevention*, 21(3), 181-206.

Morogoro Municipal Council (2013). Health Department, HIV/AIDS Control Evaluation annual report.

NACP (National AIDS Control Programme) (1999). *AIDS Surveillance Report N0. 13*. Epidemiological Unit Ministry of Health Dar es salaam, Tanzania. 14 pp.

National Bureau of Statistics (NBS) and ICF Macro (2011). Tanzania Demographic and Health Survey 2010. Dar es salaam, Tanzania: NBS and ICF Macro.

NBS (National Bureau of Statistics) (2011). Tanzania in Figures. Ministry of Finance. Dar es Salaam pp. 29.

Saito, K. (2009). Performance of Peer Educators on HIV/AIDS Prevention among High School Students in Bangkok Metropolitan, Thailand. MA Thesis Mahidol University. pp. 18-20.

SARUA (Southern African Regional Universities Association) 2006). Institutional Responses to HIV/AIDS from Institutions of Higher Education in the Southern African Development Community. Page 2-6.

Tanzania Commission for AIDS (TACAIDS), Zanzibar AIDS Commission (ZAC), National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF International (2005). *Tanzania HIV/AIDS and Malaria Indicator Survey 2007-08*. Dar es salaam, Tanzania: TACAIDS, ZAC, NBS, OCGS, and ICF International. Page 31-67.

Tanzania Commission for AIDS (TACAIDS), Zanzibar AIDS Commission (ZAC), National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and ICF International (2013). *Tanzania HIV/AIDS and Malaria Indicator Survey 2011-12: Key Findings*. Dar es salaam, Tanzania: TAZAIDS, ZAC, NBS, OCGS, and ICF International. Page 6-8.

TCU (Tanzania Commission for Universities. (2014). Students register. Cited in (http://www.tcu.go.tz/index.php/admission/student-register). Site accessed on 2/8/2014.

UDSM (University of Dar es salaam) (2006). HIV Policy. HIV/AIDS polices/Dar%20es% 20Salaam/DSM%20Policy.pdf). Site visited on 15.12.2012.

URT (United Republic of Tanzania), (2001). National Policy on HIV/AIDS. Prime Ministers office, Dodoma. pp 1-7.