Journal of Culture, Society and Development
ISSN 2422-8400 An International Peer-reviewed Journal
Vol.5, 2015

Acceptability, Sources and Types of Sex Education Messages Received by Young People in Rural Areas: A Case of Maswa District, Tanzania

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Abstract
The study intended to explore parents' feelings and beliefs on issues related to sex education and establish whether parents are ready to discuss with their children or willing to allow sex related information reach their children as a means of reducing the risks of HIV infections. A cross-sectional research design was employed in collecting data from 210 respondents (150 youths and 60 parents) from three community secondary schools namely Sukuma, Malampaka and Kinamwigulu, six primary schools (one from each village) namely Hinduki, Mwadila, Malampaka, Kinamwigulu, Dodoma and Lali. Descriptive analysis and *Chi*-square were used to test the statistical significance of categorical data. The result reveal that parents and religious leaders are the most common sources of messages on sex education to young people, and which is aimed at combating the spread of HIV and AIDS. Other sources (arranged in the order of importance) were open air campaigns, politicians, other adults, the media and teachers. The most popular message in sex education was abstinence. Other types of sex education messages (arranged from the most popular to the least popular) include abiding by ABC strategy, use of condoms and delaying sex debut. Parents have positive attitudes towards sex education which is given to their children as part of HIV and AIDS prevention. The result reveals that parents and religious leaders are the most common sources of messages on sex education to young people. Parents have good knowledge of HIV and AIDS. However, among young people the level of awareness decrease with age. Attitudes of religious leaders and male parents with regard to HIV and AIDS should be re-addressed. Serious steps should be taken to raise the level of HIV awareness among younger people.

Introduction

Sex education, is a process of acquiring information and forming attitudes and beliefs about sex, sexual identity, relationships and intimacy (Campbel, 2003). The introduction of sexuality education among the youth by the government, NGOs and other development partners was made with the anticipation that vulnerable teenagers would be protected from HIV as well as other STDs infections (Rajbhandari, 2008). In the context of HIV and AIDS, young people are prone to peers influences ending up being involved in premarital sex (Rutagumirwa and Kamuzora, 2006). Sex education therefore is about developing young people's ability to make proper decisions. Sex education programs are believed to increase knowledge about AIDS, change attitudes toward sexual risk behaviors, delay the onset of sexual intercourse, and increase condom use among the sexually active people (Klepp *et al.,* 1997). Sex education is therefore a vital part of reaching young people and ensuring that HIV incidence does not continue to increase in the coming years (Avert, 2013). Thus, sex education is being promoted in the interventions against Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV and AIDS).

AIDS principal mode of transmission in Africa, which is sexual intercourse, poses tremendous challenges to social, political and economic framework of many countries, as it threatens the basis by which societies regenerate themselves (Gable *et al*., 2008). The high HIV prevalence rate among young people threatens the social and economic development of all countries (Morolong, 2004). According to Farrell (2013), AIDS seriously weakens the workforce population by killing young people. It is obvious that the social context of underdevelopment and poverty engulfs many communities with the highest rates of HIV infections. In many societies, misconceptions about AIDS still abound (Bogart *et al.,* 2011). Therefore there is need to address the stigma and assist those at the highest risk of contracting HIV infection (Ayranci, 2005). Awareness and appropriate knowledge play an important role in preventing further spread of HIV and AIDS among the general public (Li *et al.*, 2004), which experiences the worst and deadliest pandemic that humankind has ever experienced and which still continues to affect humankind over the years (UNAIDS/WHO, 2003).

African countries have used different strategies in curbing AIDS; such strategies include the use of condoms, promotion of behavioural change, minimizing the risk of HIV transmission through blood transfusion and detection and treatment of STDs within primary health care (Sills and Young, 2003). In spite of these strategies and the recorded marked success in raising people's awareness about the pandemic (Peltzer, 2000), tens of thousands of people become infected with HIV every year (URT, 2009). High incidence of new HIV infections in the country indicates that HIV prevention efforts are not having the desired outcome (TACAIDS, 2009). According to URT (2011), the strategies in the fight against HIV and AIDS are constrained with cultural barriers and lack of appropriate knowledge. For example, some studies show that some educators feel uncomfortable when teaching safe sexual behavior, as the concept conflict with their beliefs or the beliefs of the community (Ahmed *et al.,* 2006). This study intended to investigate reception of sex education which is part of HIV prevention programmes, being given to young people by Non- Governmental Organizations (NGOs), Community Based Organizations (CBOs), Faith Based Organizations (FBOs) and it forms part of schools' syllabus (URT, 2004).

Methodology

Description of the study area

The study was conducted in Maswa District. Maswa District share borders with Bariadi District to the north, Meatu District to the east, Kishapu District to the south and Mwanza Region to the west. The district is administratively subdivided into four divisions which are further divided into 18 wards. According to NACP (2002), 10.1% of blood donors in the area were found to be HIV positive.

Research design

This study adopted cross-sectional design. Purposive, random quota and accidental samplings were used in population sampling. This allowed purposively selection of Maswa district in the region. At district level, three wards were randomly selected (one from each of the three divisions) and from these wards two villages were randomly selected. Parents were selected using quota sampling basing on sex and social status (focusing on community leaders, farmers/peasants, Government employees, businessmen/women, and religious leaders). From each village, parents from each of the strata were randomly selected. A total of 60 parents (ten parents from each village) were selected for this study.

Three existing community/ward secondary schools were involved in this study (One from each ward) and six primary schools from each of the selected villages. Quota sampling was used to select respondents among students in secondary and primary schools, and the respondents from among the youths out of school. Sixty respondents were from primary schools, another sixty were from youths out of school and thirty respondents were from secondary schools. Fewer secondary schools in the study area as compared to primary schools led to selection of proportionally fewer respondents from secondary school students as opposed to other groups of young people.

Data collection

Two sets of questionnaires were used for data collection. One set was used to collect data from parents. The set was designed to determine parents' awareness on HIV and AIDS and attitudes towards sex education which is given as part of HIV/AIDS prevention interventions (The questionnaire included awareness and attitudinal tests). The second set was for young people in schools and those out of school. This set was designed to determine common source of information on sex education among young people as a means of HIV and AIDS prevention.

Data analysis

The data collected were analyzed using Statistical Package for Social Science (SPSS) for Windows Version 15 computer software. Descriptive statistics were computed to include means, frequency, percentage, cross tabulations, and various qualitative responses that included description of attitudes, knowledge and feelings of parents towards sex education (resulting from awareness and attitudinal tests). Cross tabulations were used for comparisons of variables such as opinions of certain group of parents with regard to age, sex, and education. Chi-square statistics was used to test for the differences in awareness, attitudes, feelings and beliefs among categories of parents.

Results and Discussion

Sample characteristics

This study consisted of 210 respondents, whereby 150 were youths and 60 were parents. Majority (43.33%) of parents were aged between 21 and 34 years while 66.7% of the young people were aged between 15 and 20 years. Among parents, females constituted a larger proportion (58.3%) of the respondents while males constituted a

slightly larger proportion (50.7%) of the respondents among young people. Sukuma (parents and young people) constituted a larger proportion of respondents in both categories. Christianity, Islamic and traditional religions were identified as major religious groups of the respondents. About 91.7% of parents and 98.7% of young people were Christians.

Table 1: General characteristics of the respondents (N=210)

Respondents age (year) distribution	Percentages (%)	
	Parents (n=60)	Young people (n=150)
<15	0.0	20.0
15 – 20	0.0	66.7
21 – 34	43.33	13.3
35 – 45	33.33	0.0
> 45	23.33	0.0
Sex of respondent		
Females	58.3	49.3
Males	41.7	50.7
Ethnic groups of respondents		
Sukuma	75.0	74.7
Others (Non-Sukuma)	25.0	25.3
Religion of respondents		
Christians	91.7	98.7
Muslims	5.0	0.0
Traditional religion	3.3	1.3

Level of awareness on HIV and AIDS

The level of awareness was determined using awareness test for both parents and young people. Majority (57.4%) of young people scored below 81 points and about 42.6% scored above 81 points (Table 2). Majority (76.7%) of the parents scored above 80 points and only 23.3% scored below 81 points. These results show that parents are more knowledgeable than young people as only 18.6% of the youths managed to score above 90 points as compared to 46.7% of parents who scored the same number of points. Similar trend of results are reported by Ayranci (2005).

Table 2: Scores categories among categories of respondents with regard to HIV and AIDS awareness

Respondents	Score categories (%)				
	Below 71	71 - 80	81 - 90	Above 90	Total
Parents	13.3	10.0	30.0	46.7	100
Young people	20.7	36.7	24.0	18.6	100

Factors influencing the level of awareness

Several variables were tested for their influence on the level of HIV and AIDS awareness (Table 3). These variables include age, sex, education, religion, ethnic group and occupation. Differences in age, sex, education, ethnic group and occupation were found to have a significant influence on the respondents' level of awareness while religion did not have any influence on the respondents' HIV and AIDS awareness.

Table 3: Influence of some variables on HIV and AIDS awareness

Variables		χ^2	DF	P	Remarks
Age	Parents	0.340	2	0.844	
	Youths	14.826	2	0.001	***
Sex	Parents	0.522	1	0.470	
	Youths	4.503	1	0.034	*
Education	Parents	4.376	3	0.224	
	Youths	40.832	2	0.000	***
Religion	Parents	1.711	2	0.425	
	Youths	1.508	1	0.219	
Ethnic group	Parents	3.106	1	0.078	
	Youths	16.764	1	0.000	***
Occupation	Parents	8.966	3	0.030	*

* = significance difference at $p \leq 0.05$

*** =significance difference at $p \leq 0.001$

Age and HIV and AIDS awareness among youth

As for the level of awareness among young people of different age categories, about 80% of those aged above 20 years (oldest category) scored above 81 points (more aware) while only 26.7% and 40% of those aged below 15 years and 15 to 20 years respectively scored above 81 points. Similar findings has been reported by others showing that, younger people are poorly informed about HIV and AIDS (Li *et al.,* 2004; CDC, 2007; UNFPA, 2007; Maswanya, 1999). As shown in Tables 8 and 9, the differences are statistically significant ($p = 0.001$).

Sex and HIV and AIDS awareness

About 65.8% of male young people were poorly informed as they scored below 81 points, and only 34.2% scored above 81 points (Table 8). On the other hand, 51.4% of female young people scored above 81 points, which is better than what males scored. Thus, female young people are significantly more aware about HIV and AIDS than male young people ($p = 0.034$). However the difference is not significant among parents of different sex ($p = 0.47$). In this case, these findings are in contrast to a common belief that girls and women are poorly informed about HIV and AIDS unlike men (Maswanya, 1999; UNFPA, 2007; UN, 2004). However, these results are in line with the results by Tayoosi *et al.* (2004) who reported that female young people have a slightly higher level of knowledge compared with male students.

Education level and HIV and AIDS awareness

From the findings of this study, awareness on HIV and AIDS increased with an incease in the level of education among young people (Table 8). Those with a slightly higher level of education scored better than respondents in other categories. Statistically, the difference is significant ($p = 0.000$). Generally, HIV and AIDS awareness levels of those with higher level of education are expected to be higher than HIV and AIDS awareness levels of those having lower educational levels (Ayranci, 2005; UN, 2004). However, according to UN (2004), though high education is associated with greater and better knowledge on HIV and AIDS, in countries where HIV and AIDS awareness is high, even those without any formal education are also aware of HIV and AIDS.

Ethnicity and HIV and AIDS awareness

The study results reveal that young people from ethnic groups other than Sukuma were more aware (with scores above 80 points) than was the case with young people from Sukuma tribe who scored the same marks (Table 8). This difference is statistically significant ($p = 0.000$). The difference among young people's awareness on HIV and AIDS may be due to the fact that majority of Sukuma young people are children of peasants who have limited means of getting information through radio, TV or newspapers. Other tribes in the rural areas of Maswa district have different cultural backgrounds and majority are government employees working in rural area in the district; and these may have contributed to an increase of awareness amongst their children.

Parents' occupation and HIV and AIDS awareness

All (100%) religious leaders involved in this study were more aware (with the score above 81 points) compared to 94.1% of Government employees, 83.3% of business persons, and 61.3% of peasants ($p = 0.030$). Compared to the peasants, government employees, business persons and religious leaders are generally more educated and thus more exposed to HIV and AIDS information thus they are more aware. According to Shrotri *et al.* (2003), education level and occupation was found to have positive correlation with knowledge on HIV and AIDS. Those with high education and those with high ranking positions are expected to be more informed about HIV and AIDS.

Parents' attitudes towards sex education

Six issues were tested namely, the use of exact genital names, puberty, wet dreams, menstruation, human reproduction, and safe sex. Five point likert scale was used with two extremes of strongly agree and strongly disagree. Table 4 summarizes the results. Concerning use of exact names of genital organs in sex education, 41.7% of the parents strongly agreed to use exact genital names in sex education to girls as opposed to 33.3% of the parents who strongly agreed to have exact genital names in sex education be used to boys (Table 4). Only 5% of the parents strongly disagreed that exact genital names in sex education be used for boys and girls. About half (i.e. 48.3% and 51.6%) of the respondents strongly agreed that puberty lessons should be taught to girls and boys respectively. None of them strongly disagreed that puberty lessons should be taught to either girls or boys.

Table 4: Distribution of Parents' attitudes towards the current sex education

Topics in sex education classes	To whom to be taught	Attitudes of parents (%)					
		Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Total
Correct names of genitals	girls	05.0	05.0	25.0	23.3	**41.7**	100
	boys	05.0	03.3	21.7	**36.7**	33.3	100
Puberty	girls	00.0	18.3	01.7	31.7	**48.3**	100
	boys	00.0	05.0	01.7	41.7	**51.6**	100
Wet dreams	girls	11.7	15.0	**28.3**	26.7	18.3	100
	boys	13.3	13.3	15.0	25.0	**33.3**	100
Menstruation	girls	00.0	05.0	06.7	35.0	**53.3**	100
	boys	06.7	31.7	**33.3**	20.0	08.3	100
Human reproduction	girls	01.7	03.3	13.3	28.3	**53.3**	100
	boys	01.7	08.3	13.3	**41.7**	35.0	100
Safe sex (to girls)	girls	18.3	20.0	5.0	23.3	**33.3**	100
	boys	20.0	18.3	03.3	26.7	**31.7**	100
AVERAGE SCORES							
Overall average score for negative attitudes		**18.03**					
Overall average score for positive attitudes					**66.79**		

As for whether or not wet dreams topics should be taught to youths, 28.3% of the respondents were undecided whether the topic should be taught to girls and 33.3% strongly agreed that the topic should be taught to boys. More than half (53.3%) of the respondents strongly agreed that menstruation issues can be taught to girls while 33.3% were undecided as to whether or not the topic should be taught to boys. On the other hand, 31.7% of the respondents disagreed that the topic should be taught to boys while only 5% of the respondents disagreed that the topic should be taught to girls. As to whether human reproduction topic should be taught to youths, 53.3% of the respondents strongly agreed that the topic should be taught to girls as opposed to only 35% of the respondents who strongly agreed that the topic should be taught to boys. Thirty three point three percent (33.3%) of parents strongly agreed that safe sex lessons be taught to girls as opposed to 31.7% of the parents who strongly agreed that the topic should be taught to boys. On the other extreme end, 18.3% and 20% of the parents strongly disagreed with the statement that the topic should be taught to girls and boys respectively.

From these results (Table 4), the average score for positive attitudes is higher (66.79%) than that of negative attitude towards sex education (18.03%). Thus, it can be concluded that parents in this study have positive attitudes towards sex education contrary to the earlier belief that parents had negative attitudes towards sex education (URT, 2005). A change in attitudes among parents may be a result of perceived threat of HIV and AIDS among young people. These results are comparable to results of a study carried out in Uganda on parents-adolescents communication on sexuality with respect to HIV and AIDS in Uganda (Luwaga, 2004). These results also reveal gender bias as parents like some topics to be taught to boys and other topics to girls. For example, some parents preferred wet dreams to be taught to boys and menstruation to be taught to girls (Table 4).

Sources of sex education messages received by young people

Parents, other adults, teachers, religious leaders, the media, politicians and HIV and AIDS campaigns were identified to be the sources of sex education to young people (Table 5).

Table 5: Sources of sex education messages received by young people

Messages	Identified sources (%)						
	Parents	Other adults	Teachers	Religious leaders	Media	Politicians	Campaigns
	n=150	n=150	n=150	n=150	n=150	n=150	n=150
Abstinence	**74.7**	21.3	23.3	**70.7**	22.7	21.3	22.0
Avoiding unsafe sex	25.3	**44.0**	21.3	18.7	**41.3**	16.0	20.0
Sticking on ABC strategy	0.0	16.0	19.3	2.7	36.0	**47.3**	**51.3**
Delaying sex debut	0.0	18.7	**36.0**	8.0	0.0	15.3	6.7
	100	100	100	100	100	100	100

Parents as source of sex education to young people
Majority (74.7 %) of the young people reported to have heard parents insisting on abstinence (Table 5), while only 25.3% of the respondents reported to have heard parents insisting on the use of condoms as a means of avoiding HIV infections. This may be attributed to the fact that in many African cultures, parents expect young people to abstain (Chihwai and Tsodzo, 1999). In such cultures, virginity is a qualification for a girl to get married; thus girls are expected to protect their virginity.

Adults as source of sex education to young people
Contrary to parents, other adults were reported to have been insisting more on the use of condoms rather than abstinence (Table 5). There was more diversity with messages given by adults than was the case with messages given by parents. By delivering such messages, they (adults) play a major role in curbing HIV and AIDS in the community (URT, 2001).

Teachers as source of sex education to young people
As it can be seen on Table 5, teachers are playing important role in providing sex education. Having skills which can be useful, teachers can take this responsibility of giving sex education to young people (Luwaga, 2004).

Religious leaders as source of sex education to young people
Like parents (Table 5), religious leaders insisted much on abstinence as 70.7% of the respondents said religious leaders had advised them to abstain, 18.7% reported to have been told to use condoms, 8% said to have been advised to wait until finishing schooling, and 2.7% to have advised to observe ABC.. As it was expected, religious leaders insisted on abstinence as it is believed that AIDS is a punishment from God since it is transmitted through sexual intercourse (Luwaga, 2004). It is believed that God created sex organs for the exercise of love within marriage and for the purpose of reproduction and not for mere self gratification. Religious leaders argue that sex is the main cause of HIV infections therefore good conduct should be promoted instead of condoms.

Media as source of sex education to young people
Three types of sex education messages were reported to have been received from the media (Table 5). About 41.3% of the respondents said to have received messages insisting on the use of condoms, 36% of them said the media insisted on ABC strategy and only 22.7% said the media insisted on abstinence. The use of condoms is frequently insisted by the media as a means of HIV prevention, though this may be done for commercial purposes by condom distributing companies. However, it is obvious that the media play an important role in HIV and AIDS prevention and education as they make huge efforts in supporting HIV and AIDS prevention campaigns (URT, 2001).

Politicians as source of sex education to young people
Politicians were reported to have been advising young people on HIV and AIDS (Table 5). Politicians as policy makers are expected to behave in accordance with the National policy on HIV and AIDS whereby appropriate approaches in the prevention of HIV and AIDS which include abstinence, being faithful to same partner, correct and consistent use of condom, voluntary counselling and testing and delaying engagement in sexual practices

(URT, 2001) need to be promoted.

Open air campaigns as source of sex education to young people

Like politicians, open air campaigns insist on ABCs as a means of HIV prevention (Table 5). Campaigners insist on ABC options thus people are advised to play it safe either through abstinence, being faithful to one partner or through using condoms. Open air campaigns is an effective strategy which use entertainment such as theatre and music to draw people and to provide them with information and skills they need to protect themselves.

Conclusions

Parents have positive attitudes towards sex education which is given to their children as part of HIV and AIDS prevention interventions in rural areas regardless of cultural barrier believed to constrain provision of sex education as a means of HIV and AIDS prevention in rural areas.

The result reveal that parents and religious leaders are the most common sources of messages on sex education to young people, and which is aimed at combating the spread of HIV and AIDS. Other sources (arranged in the order of importance) were open air campaigns, politicians, other adults, the media and teachers. The most popular message in sex education was abstinence. Other types of sex education messages (arranged from the most popular to the least popular) include abiding by ABC strategy, use of condoms and delaying sex debut.

Parents have good knowledge of HIV and AIDS. However, among young people the level of awareness is high only among those in higher classes and the more aged, than those who are in lower classes and younger.

Recommendations

The District Council is urged to take serious steps are to raise the level of HIV awareness among younger people. The findings of this study indicate that measures implemented to prevent HIV infections may not be focused to younger generation; thus there is a need to change the approach and adjust the existing projects and programs to focus on those in lower classes and the younger ones because they appear to be poorly informed about HIV and AIDS.

Special effort by District Council in collaboration with NGOs, FBOs and CBOs working in the district is required to address the attitudes of religious leaders and male parents with regard to HIV and AIDS and PLWHA. Their stand contributes to consolidated stigma and exclusion of people living with HIV and AIDS. Religious leaders as well as male parents should be encouraged to re-examine their traditions so as to allow all believers and families fight the disease in ways which are respectful of their conscience. This is because religious leaders have tremendous influence particularly at the community level where they have the moral authority to advocate for compassionate care and support for those who are HIV positive and vulnerable children. They have the moral leadership to reverse negative attitudes towards AIDS and promote enabling and caring environments.

REFERENCES

Ahmed, N., Flisher, A. J., Mathew, C., Jansen, S., Mukoma, W. and Schaalma, H. (2006). Process of evaluation of the teachers training for an AIDS prevention programme. *Oxford Journal of Health Education Research* 21(5): 621 – 622.

Avert (2013). HIV and AIDS in Tanzania. [www.avert.org/hiv-aids-tanzania.htm] site visited on 1/ 5/ 2013.

Ayranci, A. (2005). AIDS knowledge and attitudes in a Turkish population: an epidemiological study. *BMC Public Health* 5: 95 – 108.

Bogart, L. M., Skinner, D., Weinhardt, L. S., Glasman, L., Sitzler, C., Toefy, Y., and Kalichman, S. C. (2011). HIV misconceptions associated with condom use among black South Africans: an exploratory study. *African Journal of AIDS Research 10(2): 181 – 187.*

Campbell, J. (2003). Relationships and Family: Teaching children about sex. [Xtrams.co.nz /lifestyle/0,12614-2631798,00.html] site visited on 1/ 5/ 2013.

CDC (2006). HIV/AIDS among Youth. Divisions of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention**.** [http://www .cdc.gov/hiv/ resources /factsheets/youth.htm] site visited on 20/7/2013.

Chihwai, D. S. and Tsodzo, J. (1999). *Acha Ngono Haramu Jenga Maadili*. Bartone Private Ltd., Zimbabwe. 26pp.

Daily News (2013). AIDS still a big threat, says VP [http://dailynews.co.tz/index.php/loc al-news/2534-aids-still-a-big-threat-says-vp] site visited on 2/12/2013.

Farrell, R. R. (2013). Real Truth: The AIDs Pandemic...25 Years Later. Does a Cure Exist? [http://realtruth.org/articles/462-tap.html] site visited on 20/10/2013.

Gable, L., Gostin, L. O., and Hodge, J. G. (2008). HIV/AIDS, Reproductive and Sexual Health, and the Law. *American Journal of Public Health* 98(10): 1779 – 1786.

ICRW (2009). Mwongozo wa kitaifa wa Kuhusisha kupunguza Unyanyapaa na Ubaguzi katika Programu za Virusi Vya UKIMWI [http://www.icrw.org/files/ images/ National-Guide-on-the-Integration-of-Stigma-and-Discrimination-Reduction-in-H IV-Programs-Kiswahili. pdf] site visited on 1/ 5/ 2013.

Klepp, K., Ndeki, S. S., Leshabari, M. T., Hannan,P. J. and Lyimo, B. A. (1997). AIDS Education in Tanzania: Promoting risk reduction among primary school children. *American Journal of Public Health* 87(12): 1931 – 1936.

Li, X., Lin, C., Gao, Z., Stanton, B., Fang, X., Yin, Q. and Wu,Y. (2004). HIV/AIDS knowledge and the implications for health promotion programs among Chinese college students: geographic, gender and age differences. *Health Promotion International* 19(3): 345 – 356.

Luwaga, L. C. N. (2004). Parent-Adolescent communication on sexuality in the contexty of HIV/AIDS in Uganda, An exploratory study. Thesis for Award of Master of Philosophy in Health Promotion at University of Bergen, Norway, 103pp.

Maswanya, E. S., Moji, K., Horiguchi, I., Nagata, K., Aoyagi, K., Honda, S. and Takemoto, T. (1999). Knowledge, risk perception of AIDS and reported sexual behaviour among students in secondary schools and colleges in Tanzania. *Health Education Research* 14(2): 185 – 196.

Morolong, K. A. (2004). HIV/AIDS Knowledge, Attitudes, Beliefs and Practices Among Students At The Lerotholi Polytechnic In Maseru. Dissertation Submitted In Partial fulfilment for the degree Masters in Developmental Studies in the Faculty of Economic and Management Sciences (Centre for Development Support) at the University of the Free State Bloemfontein.[http://www.uovs.ac.za/faculties/documents/06/003/MDSDISSERTATIONS/9595-Kekletso%20Morolong.pdf]site visited on 4/5/2006.

NACP (2002). *HIV/AIDS, STI Surveillance Report January- December 2001.* Report No. 16. Romejas Ltd., Dar es Salaam, Tanzania. 21pp.

Peltzer, K. (2000). Factors affecting condom use among South African University Students. *The East African Journal* 77(1): 46 – 55.

Rajbhandari, M. M. S. (2008). Impact of Sexuality Education In Preventing STD-HIV/AIDS Among Teenagers of School Going Students. Mini Research Project. In Partial Fulfillment of Requirement For PhD In Educational Leadership in Kathmandu University. Gwarkhu, India. 56pp.

Rutagumirwa, S. K. and Kamuzora, P. (2006). *Secondary School Students' Voice in HIV/AIDS Prevention Interventions in Tanzania: A Case Study of Mbeya Region.* Paper produced as part of a Capacity building programme of the Regional Network on Equity in Health in east and Southern Africa. 15pp.

Shrotri, A., Shankar, A. A., Sutar, S., Joshi, A., Suryawanshi, N., Pisal, H., Bharucha, K.E., Phadke, M. A., Bollinger, R. C. and Sastry, J. (2003). Awareness of HIV/AIDS and household environment of pregnant women in Pune, India. *International Journal of STD and AIDS* 14: 835 – 839.

Sills, E. S. and Young, R. J. C. (2003). HIV in Africa. *Journal of the Royal Society of Medicine* 96(1): 53.

TACAIDS (2009). *Review of HIV Epidemiology and HIV Prevention Programmes and Resources in Tanzania Mainland*. Dar es salaam, Tanzania. 58pp.

Tavoosi, A., Zaferani, A., Enzevaei, A., Tajik, P. and Ahmadinezhad, Z. (2004). Knowledge and attitude towards HIV/AIDS among Iranian students**.** *BMC Public Health* 4(17): 1 – 6.

UN (2004). *HIV/AIDS Awareness and Behaviour, Executive Summary.* United Nations, New York. 5pp.

UNAIDS/WHO (2003). AIDS epidemic updates: [http://www.who.int/hiv/pub/epidemiology/en/epiupdate2003_I_en.pdf.] site visited on 10/9/2013.

UNFPA (2007). AIDS Clock: Women and young people. [http://www.unfpa.org/aids_ clock/] site visited on 20/7/2013.

United Republic of Tanzania (2001). *National Policy on HIV/AIDS*. The Prime Minister's Office, Dar es Salaam, Tanzania. 56pp.

United Republic of Tanzania (2004). *Guidelines for Implementing HIV/AIDS and Life-skills Education Programme in Schools.* Ministry of Education and Culture. Romeja Ltd., Dar es Salaam, Tanzania. 25pp.

United Republic of Tanzania (2009). *National Multisectoral HIV Prevention Strategy 2009 – 2012. Towards Achieving Tanzania without HIV*. Prime Minister Office, Dar es Salaam, Tanzania. 63pp.

United Republic of Tanzania (2011). *HIV/AIDS/STI Surveillance Report.* Report No. 22. NACP, Dar es Salaam. Tanzania. 114pp.