EFFECTIVENESS OF HIV/AIDS CAMPAIGNS ON SEXUAL BEHAVIOUR AMONG THE YOUTHS IN BUNDA DISTRICT, TANZANIA

BY

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ABSTRACT

Despite campaigns against HIV/AIDS, youths continue to be affected disproportionally by the pandemic. Therefore, there is a need of measuring the effectiveness of HIV/AIDS campaigns among the youths since there is no cure of HIV/AIDS infection. The general objective of this study was to determine the effectiveness of HIV/AIDS campaigns on sexual behaviour among the youths in Bunda District, Tanzania. The specific objectives were documentation of main messages of campaigns on sexual behaviour among the youths; determination of the attitude of youths towards campaigns against HIV/AIDS, assessment of the level of awareness about HIV/AIDS; assessment of their sexual behaviour; and determination of the correlation among the attitude towards campaigns against HIV/AIDS, knowledge about HIV/AIDS. The study adopted a cross-sectional design and a sample of 142 respondents was used. Data were collected through questionnaire – based interviews, 8 Focus Group Discussions and key informant interviews. The Statistical Package for Social Sciences (SPSS) Version 12 was used to analyse the data. Descriptive statistics, likert scales and correlation of variables were used to gauge levels of risky sexual behaviour, misconceptions about means of HIV/AIDS transmission, level of awareness about HIV/AIDS, attitude of youths towards campaigns against HIV/AIDS, and attitude towards use of condoms. The major findings indicate that the main messages for HIV/AIDS campaigns were about HIV/AIDS transmission, VCT, and HIV infection prevention. The overall attitude towards HIV/AIDS was positive (30.5 out of 50.0); the overall awareness was high (39.2 out of 50.0); and the overall attitude towards condom use was 38.7 out of 50.0. The correlation between attitude towards campaigns against HIV/AIDS and sexual behaviour was not significant ($p = 0.712$). In view of the conclusion it is recommended that HIV/AIDS control programmes should measure the effectiveness of their campaigns against HIV/AID so as to enable them to come up with interventions for HIV/AIDS prevention.

DECLARATION

I, ZILIPA ZABRON LUKUBA, do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own original work and that it has neither been submitted nor being concurrently submitted for degree award in any other institution.

Zabron 09/09/2011

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(M.A. Rural Development Candidate)

The above declaration is confirmed

9/9/2011

Dr. Kim. A. Kayunze — Date

(Supervisor)

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DEDICATION

This work is dedicated to the Almighty God and to my beloved parents Mr. Zabron Korong'wa Titho Lukuba and Mrs. Cecilia Mang'alada Paul Lukuba whose love encouraged me to accomplish this academic achievement.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

ADRA	Adventist Development and Relief Agency
AICT	African Inland Church of Tanzania
AIDS	Acquired Immune Deficiency Syndrome
AMREF	African Medical Research Foundation
BTC	Belgium Technical Cooperation
CBO	Community Based Organization
DED	District Executive Director
DEO	District Executive Officer
DSI	Development Studies Institute
FGD	Focus Group Discussion
HIV	Human Immune-deficiency Virus
MCH	Mother and Child Health
MDGs	Millennium Development Goals
NACP	National HIV/AIDS Control Programme
NSGRP	National Strategy for Growth and Reduction of Poverty
NSMF	National Multisectoral HIV Prevention Strategy
SNAL	Sokoine National Agriculture Library
SPSS	Statistical Package for Social Sciences
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
SUA	Sokoine University of Agriculture
TACAIDS	Tanzania Commission for AIDS
TDHS	Tanzania Demographic and Health Survey
TVs	Televisions

UNAIDS	United Nation Programme on HIV/AIDS
URT	United Republic of Tanzania
VCT	Voluntary Counselling and Training
WHO	World Health Organization

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

HIV/AIDS is a cross cutting issue affecting people of all age groups and is a worldwide epidemic. The estimates of the United Nations are that there were 30.8 million adults and 2 million children living with HIV at the end of 2007 (UNAIDS 2008). Promising development has been seen in recent years in global efforts to address the AIDS epidemic, including increased access to effective treatment and prevention programmes. However, the number of people living with HIV continues to grow as does the number of deaths due to AIDS. A total of 39.5 million people were living with HIV in 2006 which is 2.5 million more than the number of 2004 (UNAIDS, 2006). In many regions of the world, new HIV infections are heavily concentrated among young people (15-24 years of age). Young people accounted for 40% of the new HIV infections in 2006 (UNAIDS, 2008).

The Sub-Saharan African region is by far the worst affected region in the world by the AIDS epidemic (www.avert.org.2009). And this has just over 10% of the world's population. However, 67% of all people living with HIV are from the Sub Saharan Africa region. An estimate amount of 1.9 million adults and children were infected with HIV during 2007. This brought the total number of people living with HIV/AIDS in the region to 25 million by the end of the year 2007.

Tanzania is one among the countries of Sub-Saharan Africa facing the HIV/AIDS epidemic which is the cause of negative impact of the country's development. The first cases of AIDS were reported in 1983 in Kagera. Since then, HIV infection has spread to all regions and districts of the country including Bunda however it varies within the country (NMSF, 2003).

Mbeya, Iringa and Dar es Salaam regions have the highest rate of HIV/AIDS with prevalence of 16% for Iringa, 9.3% for Dar-es-salaam and 9.2% for Mbeya. Mara Region has infection rate of 7.7% which exceeds the national average rate of 5.7% (URT, 2008) Other regions like Kigoma, Manyara and Singida report low HIV prevalence rates of 1.8% for Kigoma, 2.7% for Singida and 1.59% for Manyara among ante-natal attendances of the epidemic and have stayed with relatively low infection rates over the past twenty years. However, even in the regions there are substantial differences. Zanzibar has the lowest infection rate of less than 1% (THMIS, 2008).

The current effort on combating HIV/AIDS in Tanzania is to provide strategic leadership for national multi-sectoral response to the epidemic. This would lead to the reduction of further infections of associated diseases and the adverse socio-economic effects resulting from the epidemic. The new HIV/AIDS infection rate is very disturbing despite that the entire population is knowledgeable on HIV/AIDS and how to avoid it. The urgent need is to intensify prevention efforts to prevent new HIV infections in our society. The launching of the voluntary HIV testing campaign by His Excellency President Jakaya Mrisho Kikwete in July, 2007 signifies the government commitment to intensify the fight against the epidemic (NMSF, 2007).

Nevertheless, many challenges still exist in Tanzania's effort to achieve reduction of in new HIV infections. It is estimated by UNAIDS that about 130 000 Tanzanians between 15- 49 years are infected with HIV each year (UNAIDS, 2009). This can be attributed in part to widespread risky behaviours. For example, in 2008, 18% of men and 3% of women reported having had multiple sexual partners in the previous year, and 29% of married or cohabiting men, and 16% of such women, had had extramarital sex (NMSF, 2009).

Campaigns on HIV/AIDS in Bunda District have largely been conducted at the National level through mass media such as radio, television and newspapers. Various slogans are used to convey the necessary message and these include dramas such as "SIDANGANYIKI" means youths are not easily convinced to sex, "FATAKI" which is the special name given for aged men who sex with young girls, use of comedians such as "FUTUHI" and Ze Comedy" means the names of the comedians' programmes. Also, special education programmes using health workers, and debates among students have been used to convey information on issues of HIV/AIDS to communities through radio and television media.

Accessibility to the information conveyed depends on exposure and possession of radio and or television. In the rural areas such as those in Bunda, people having television sets are few. However, a good proportion of the populations have radios. Health centres are mostly available at the district towns but quite few in villages. Thus, education and or campaigns on HIV/AIDS through these centres have limited accessibility to rural communities.

In Bunda District campaigns and education on HIV/AIDS have largely been conducted by health institutions including the District Medical Office on the part of the government, NGOs including the African Inland Church of Tanzania (AICT), CBOs, schools and colleges, AMREF, ANGAZA, M.C.H centres, hospitals, TACAIDS, the RED CROSS, ADRA Tanzania, and communities. In these programmes, information is given on education on transmission, prevention messages, voluntary counseling and testing, and resistance to temptations. Primary and secondary schools include HIV/AIDS in curricula and hence pupils and students are exposed to the issues.

The current effort on combating HIV/AIDS in Tanzania is to provide strategic leadership for national multi-sectoral response to the epidemic. This would lead to the reduction of further infections of associated diseases and the adverse socio-economic effects resulting from the epidemic. The new HIV/AIDS infection rate 68 000 of people per year is very disturbing despite the entire population being knowledgeable on HIV/AIDS and how to avoid it. The urgent need is to intensify prevention efforts to prevent new HIV infections in our society. The launching of the voluntary HIV testing campaign by His Excellency President Jakaya Mrisho Kikwete in July, 2007 signifies the government's commitment to intensify the fight against the epidemic (NSMF, 2007).

1.2 Problem Statement

Bunda is among the districts in which there is a lot of HIV/AIDS epidemic prevention campaigns through mass media such as television, radio, videos, fliers/posters, newspapers and "slogans" such as "sidanganyiki" "meaning a youth is not tempted to have penetrative sex in exchange for money or otherwise." Up to the moment the spread rate of HIV/AIDS infection in Bunda District is high about 7%, which implies presence of bad sexual behaviour, in spite of the HIV/AIDS campaigns which are conducted in the light of the National Policy on HIV/AIDS (URT, 2001). The district uses measures such as provision of free of charge condoms, Voluntary Counseling and Testing, and Education on Prevention and Transmission. Other efforts include poverty alleviation programmes such as provision of loans to most vulnerable groups, development projects, agricultural priority programme "Kilimo Kwanza", which indirectly assist in an effort to prevent HIV/AIDS spread in the society. This is supported by HIV/AIDS prevention campaigns consistent with the National policy on HIV/AIDS and the National Multisectoral Framework on HIV/AIDS (NMSF, 2008). However, the problems of sexual behavioural practices that are risky for HIV/AIDS transmission among the youths still exist in Bunda

District. The pandemic continues to spread despite its HIV/AIDS campaigns. The campaigns in Bunda District have been addressing mainly issues of education on prevention and transmission, voluntary counseling and testing, and mother to child transmission.

Up to the moment the country has no plans to measure the effectiveness of HIV/AIDS campaigns. Though (Ishi) did a baseline survey on sexual attitudes and behaviour change among youths in Tanzania in five regions which are Arusha, Dar es Salaam, Dodoma, Mbeya and Mwanza, these regions are not enough for the provision of better solutions for the epidemic. That is why more efforts are needed to measure effectiveness of HIV/AIDS campaigns among the youths within the districts including Bunda District.

1.3 Justification

Since the youths in Bunda District are productive resources of the nation, it is very important to assess the effectiveness of HIV/AIDS campaigns on sexual behaviour change among them. Using Bunda District as a case study and taking into consideration that its social and physical infrastructures are almost the same compared with some other districts in Tanzania, it was important to conduct a study aiming at finding out the extent to which HIV/AIDS preventive campaigns have been effective.

Results of this investigation will help to come up with new strategies for control of HIV infection in Bunda and other districts. The National Policy on HIV/AIDS has the main goal of providing a framework for leadership and coordination of the National multi – sectoral strategic response to the HIV/AIDS epidemic. This includes formulation by all sectors of appropriate interventions which will be effective in preventing transmission of HIV/AIDS and other sexually transmitted infections. Similarly, this will aim at protecting

and supporting vulnerable groups and mitigating the social and economic impacts of HIV/AIDS (NSMF, 2008). It also emphasizes on research activities on HIV/AIDS and promotes dissemination and use of research findings (URT, 2001). Prevention and control of HIV/AIDS will very much depend on effective community based prevention interventions.

1.4 Objectives

1.4.1 General objective

To determine the effectiveness of HIV/AIDS campaigns on sexual behaviour among the youths in Bunda District, Tanzania.

1.4.2 Specific objectives

(i) To document the main messages of campaigns against HIV/AIDS conducted in Bunda District

(ii) To determine the attitude of youths towards campaigns against HIV/AIDS

(iii) To asses the level of awareness about HIV/AIDS among the youths.

(iv) To assess the sexual behaviour of youths

(v) To determine the correlation among attitude towards campaigns against HIV/AIDS, knowledge about HIV/AIDS and sexual behaviour.

1.4.3 Null Hypothesis

There is no statistically significant correlation between attitude towards campaigns against HIV/AIDS and points scored on sexual behaviour.

1.5 Conceptual Framework

The conceptual framework shows that the effectiveness of HIV/AIDS campaigns is dependent on background and independent variables (Fig.1). Background variables

include age, sex, education, religion, marital status and main occupations of respondents. The dependent variable includes sexual debut, abstinence, fidelity and use of condoms. Intermediate variables include VCT, leaflets on HIV/AIDS, seminars, mass media and advertisements. Independent variables include knowledge about HIV/AIDS prevention and attitudes towards sexual behaviour change. The operational definitions of the variables indicated in the frame and how to measure them are given in Appendix 1.

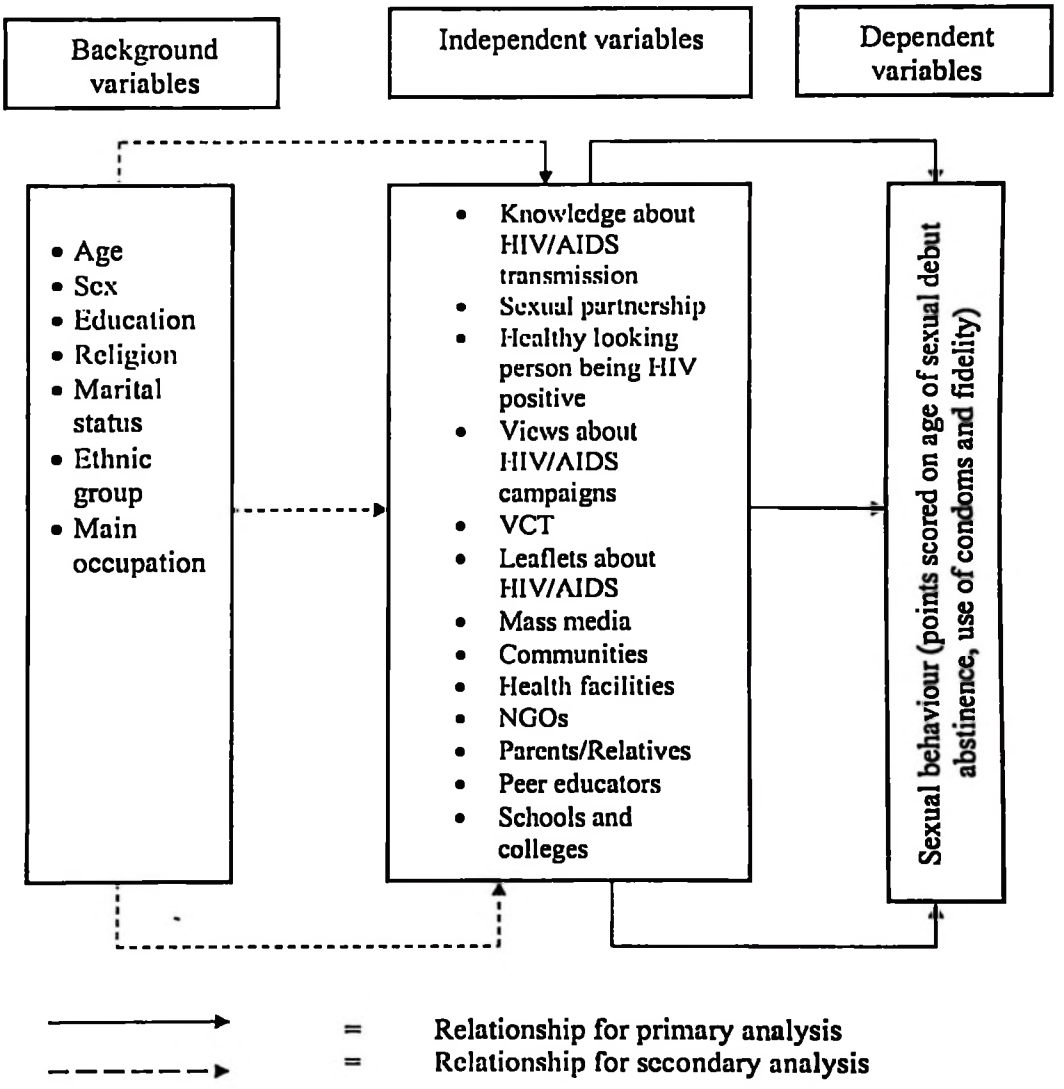

Figure 1: The conceptual framework of the research

1.6 Limitations of the Study

(i) Some respondents were scared and not comfortable when approached by the researcher for interview, especially concerning some issues which were too personal. For example, the age when one had penetrative sexual intercourse for the first time and if they used a condom. Also the number of sexual partners they had in the previous twelve months at the time of data collection and when they had penetrative sexual intercourse for the last time. The researcher managed to collect the required information after telling the respondents that the information given would be kept confidential and was meant for academic purposes.

(ii) Some respondents, especially key informants, were interviewed while working; this was considered as a problem to the research due to the fact that it reduced the possibility of getting more clarification of the questions which were asked.

(iii) Some respondents requested some compensation before the interview. They claimed that due to their understanding, most HIV/AIDS issues are funded by donors so they felt free to request for the allowance. They also said that it was customary whenever they were invited for HIV/AIDS seminars/workshops to be paid. This forced the researcher to spend more time explaining the purpose of the research so as to make them accept to participate.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 HIV/AIDS Prevalence in the World

The human Immunodeficiency Virus (HIV) is the virus that causes the Acquired Immune Deficiency Syndrome (AIDS). HIV attacks the immune system and destroys the biological ability of the human body to fight off opportunistic infections and other diseases (TACAIDS *et al.*, 2005). There are four routes of transmission of HIV which are sexual intercourse, prenatal, blood transfusion and contaminated health care equipments. Mother to child transmission accounts for 19% and other means constitute 1% (TACAIDS *et al.*, 2005). HIV/AIDS is a cross cutting issue affecting people of all age groups and is a worldwide epidemic. The estimates of the United Nations are that there were 30.8 million adults and 2 million children living with HIV at the end of 2007 (UNAIDS, 2008). Promising development has been seen in recent years in global efforts to address the AIDS epidemic, including increased access to effective treatment and prevention programmes. However, the number of people living with HIV continues to grow as does the number of deaths due to AIDS. A total of 39.5 million people were living with HIV in 2006 which is 2.5 million more than the number of 2004 (UNAIDS, 2006). In many regions of the world, new HIV infections are heavily concentrated among young people (15 to 24 years of age). Young people accounted for 40% of the new HIV infections in 2006 (UNAIDS, 2008). Because the number of new infections exceeded the number of AIDS deaths, the epidemic further expanded in 2007. The number of new infections was 2.5 times greater than the increase in the number of HIV-infected individuals on antiretroviral therapy, underscoring the urgent need for more effective HIV prevention to preserve the future viability of treatment initiatives (UNSG, 2008). However, 67% of all people living with HIV are from the Sub-Saharan Africa region. More than two out of three infections worldwide are in Sub-Saharan Africa (UNAIDS and WHO, 2007).

Although individual behaviour change programmes and initiatives that target groups at highest risk retain an important place in the region's HIV prevention continuum, meaningful reductions in HIV prevention levels will require major population-wide changes in social norms with regard to sexual and relationship norms and gender equity (UNSG, 2008). An estimated amount of 1.9 million adults and children were infected with HIV during 2007. This brought the total number of people living with HIV/AIDS in the region to 25 million by the end of 2007.

2.2 HIV/AIDS Prevalence in Sub Saharan Africa

Sub-Saharan Africa is the most severely affected region in the world. According to the Joint United Nations Programme on the HIV/AIDS pandemic update (UNAIDS, 2005) at the end of 2005 the infection rate for adults in the productive years, i.e. those aged between 15 and 49, was 7.5% to 8.5% for Sub-Saharan Africa as a whole. Sub-Saharan African countries experienced almost three times as many HIV/AIDS deaths in 2005 as the rest of the world combined (UNAIDS, 2005). The disease has different outcomes in different parts of the continent. Eastern and Southern Africa are more severely affected than Western and Northern Africa. Even though the prevalence rates are low in Northern Africa, the visible trend is that HIV/AIDS infection is increasing (Mayer, 2003). Africa is the global epicenter of HIV/AIDS, and it is estimated that 83 percent of all world's HIV/AIDS cases/deaths are from this continent.

2.3 HIV/AIDS Situation in Tanzania

Tanzania is one of the countries hard hit by the HIV/AIDS epidemic. Recent reports from the Ministry of Health indicate that since the first 3 cases were reported in 1983 about 600 000 people have developed HIV/AIDS, and about 2 million people have been infected with the HIV/AIDS virus. HIV/AIDS has become the primary cause of death among

adults in the country and is decimating the most productive age group leaving behind misery and devastating impact on national development (TACAIDS *et al.*, 2008).

Over the time, various measures have been put in place by the government and stakeholders to combat the pandemic. However, it was found to be very essential to have an organ that provides strategic leadership and that coordinates and strengthens the efforts of all stakeholders involved in the fight against HIV/AIDS. To that effect, on 1st December 2000, the formation of the Tanzania Commission for AIDS (TACAIDS) was declared by the President, and it was enacted under the act No. 22 of 2001 by the Parliament (TACAIDS *et al.*, 2008).

However, the HIV prevalence rates show variations within the country. The situation of HIV infection is unevenly distributed across geographical areas, gender, age groups, and socio-economic classes in the country. The percentage of the population infected with HIV ranges from less than 3% in some areas across the country most of the country to more than 44.4 percent in certain sub-populations. The epidemic has struck more the most economically active group adults aged 15-49 years (URT, 2004) (www.tz.gov.org). It is estimated that an average of almost 350 Tanzanians would die from AIDS every single day between 2005 and 2020, making a total of 1.24 to 3.17 million deaths, respectively (TACAIDS *et al.*, 2005).

Mother to child transmission appears to be on the increase as more pregnant women continue to become infected. The youth and women have been the most affected groups (URT, 2004). A situation analysis of the HIV/AIDS epidemic in Tanzania, which was performed by Family Health International in 2004, reported that there is a rapid spread of

HIV/AIDS into rural areas thereby increasing the previously low rural prevalence to more than 10%. This has been contributed to by economic, socio-cultural, anatomical and biological reasons. The survey recognized that mobile population groups have also been categorised as vulnerable to HIV infection as their occupation forces them into high risk sexual behaviour. The mobile population groups include commercial sex workers, petty traders, migrant workers, military personnel and long distance truck drivers (URT, 2004).

Industries are losing skilled workers due to deaths caused by AIDS. The costs of training and recruitment of new personnel are high. Also the labour force for agriculture is declining. Since agriculture is the backbone of the economy of Tanzania, taking into consideration that most agricultural workers are in the age group of 15-45 years, if they are affected by the epidemic, agriculture is going to decline. As the epidemic spreads to rural communities, production of food and cash crops is bound to suffer as the labour force gets sick and dies from HIV/AIDS (TACAIDS, 2002).

Tanzania has adopted a multi-sectoral approach in combating HIV/AIDS coordinated by the Tanzania Commission for AIDS (TACAIDS). The main stakeholders in HIV/AIDS control are Government ministries, the private sector, Non-Governmental Organizations, and support groups for people living with HIV/AIDS. Some International collaborating partners and other organizations are also engaged in the national fight against HIV/AIDS. However, the situation is still worse (TACAIDS *et al.*, 2005).

Tanzania is one among the countries of Sub-Saharan Africa facing the HIV/AIDS epidemic which is a cause of negative impact on the country's development (NMSF, 2003). However, the HIV prevalence rates show wide variation within the country. Mbeya, Iringa and Dar es Salaam regions have the highest rates of HIV/AIDS prevalence

of 16% for Iringa, 9.3% for Dar-es-Salaam and 9.2% for Mbeya. Mara Region has an infection rate of 7.7% which exceeds the national average rate of 5.7% (URT, 2008). Other regions like Kigoma, Manyara and Singida report low HIV prevalence rates of 1.8% for Kigoma, 2.7% for Singida and 1.6% for Manyara among ante-natal clinic attendees and have stayed with relatively low infection rates over the past twenty years. However, even in these regions there are substantial differences. Zanzibar has the lowest infection rate of less than 1% (TACAIDS *et al.*, 2008).

2.4 HIV/AIDS in Bunda District

Bunda has major road networks and is the connection centre of major roads from Ukerewe, Mugumu, Musoma and Mwanza. There is easy flow of visitors and migrants within the district. The result of this flow is social interaction with new people which leads to easy spread of HIV. Bunda District is among the districts infected substantially with HIV. It is estimated that 7% of the total population of Bunda is infected with the HIV/AIDS epidemic (Benson, Mturi personal communication, December, 2009), unlike the national HIV/AIDS prevalence rate that is 5.7% (URT, 2008).

The HIV/AIDS epidemic has many effects on societies such as generation gap, poverty, human resources erosion and stigma. Up to the present time there is no officially known permanent cure of HIV/AIDS. However, there is antiretroviral treatment only. The only alternative is to put more efforts on preventive measures of the HIV/AIDS epidemic including effective campaigns. In Tanzania, almost every person is aware of the HIV/AIDS epidemic. However, new HIV/AIDS infections vary and is disturbing since the entire population is knowledgeable on HIV/AIDS and how to avoid infections (NMSF, 2008).

2.5 Mode of Transmission and Risk of HIV/AIDS Infection

HIV/AIDS is spread through body fluids including blood, semen (sperms) and vaginal fluids. HIV infection can also be transmitted from a mother to her child during pregnancy and during child birth or from breast feeding. Other modes of HIV/AIDS transmission can be through infected blood, blood products, donated organs or bone grafts and tissues, common use of needles or other sharp objects (URT, 2001; TACAIDS *et al.,* 2005).

Due to the fact that HIV/AIDS infection is mainly through heterosexual intercourse, HIV/AIDS is a behavioural, social, cultural and economic problem, which touches on the private lifestyles of individuals. The risk of HIV/AIDS infection is highest among young people and especially girls (URT, 2001). HIV/AIDS affects mainly the sexually active members of population. About 94% of the HIV/AIDS cases are between the ages 15-55 years, 4% below five years, and a negligible two percent between 7-14 years (NACP, 1999).

Adolescents and young adults are at higher risk of HIV/AIDS infection since they are at an early stage of sexual behaviour, changing partners frequently. According to NACP (1988), the youth in Tanzania form a group which is mostly affected by the HIV/AIDS epidemic. Young people (15 to 24 years old) account for half of all new HIV/AIDS infections worldwide. More than 6000 people become infected with HIV/AIDS worldwide everyday (UNAIDS/WHO, 2005).

2.6 Misconceptions about Means of HIV Transmission

Awareness and knowledge of transmission of HIV/AIDS among Nigerian youth is high (Orubuloye, 2000). Also he reports that misconceptions about modes of HIV/AIDS transmission were generally high, and this was higher in rural areas than in urban areas.

About 40% of young people in Nigeria had between one and four major misconceptions about HIV/AIDS.

In a HIV/AIDS related knowledge study that was carried among high secondary school teachers and students, in Kassala, Eastern Sudan (Elzubier *et al.*, 1996) high frequency of HIV/AIDS related misconceptions was found, especially among females and among teachers. The overall mean score for misconceptions was five out of a possible total seven.

Misconception about means of HIV transmission and prevention are common in Tanzania. Approximately four in five men and women in every hundred people know that a healthy looking person can have HIV/AIDS and that a person cannot become infected by sharing food with someone who has HIV/AIDS. About three quarters know that HIV/AIDS cannot be transmitted through mosquito bites (TDHS, 1996).

2.7 Determinants of Sexual Behaviour

Sexual behaviour is part of normal human experience; it is one kind of human behaviour which demands an understanding of socio-cultural contexts in which it takes place (Coast, 2003). Human sexuality is influenced by many factors including age, gender, religion, family, friends, culture, ethnicity, economics, sexual orientation, and past experiences, both positive relational experiences of abuse, discrimination and oppression. As a result, sexual behaviour is expressed in a variety of ways. The future direction of HIV/AIDS depends, to a large part, on the level of knowledge on how the virus is spread, and consequently in sexual behaviour (TACAIDS *et al.*, 2005). Though some studies have shown that increasing the level of knowledge about HIV/AIDS does not guarantee reduction in risky behaviour and adoption of safe sexual behaviour (Muturi, 1998), knowledge is still a necessary condition for reducing the rate of new infections

(Dinkelman *et al.*, 2004). Cultural, social, moral and socio-economic factors are frequently cited as determinants of sexual behaviour.

These factors are also said to facilitate behavioural change (Muturi, 1998). Since most of risky sexual behavioural practices that are associated with the transmission of the HIV/AIDS are practised in highly private contexts, and the fact that these behavioural practices are also difficult to change, it is important to identify the barriers that prevent behavioural change to ensure that as far as possible, a supportive environment for sustaining this change exists (Heggenhougen and Lugalla, 2005).

Many public health studies have tried to measure the causal effect of HIV/AIDS information on risky behaviour (Dinkelman *et al.*, 2004). Several robust patterns about HIV/AIDS knowledge have been reported; usually men tend to have better knowledge of HIV/AIDS prevention methods than women; urban residents tend to have better knowledge about HIV/AIDS than their rural counterparts, but this gap has often fallen (slightly) over time. HIV/AIDS knowledge is strongly positively correlated with education, and older cohorts tend to have better information about the disease than do the under -20 cohorts (Dinkelman *et al.*, 2004).

2.8 Sex

Sex of youths has something to do with sexual behaviour (Zaba *et al.*, 2004). It has also been reported that boys appear to initiate sexual intercourse earlier than girls. However, girls catch up by the late teens (Nzioka, 2001). The timing of puberty is a significant influence for boys, while for girls it appears that social controls exert a greater influence than does the onset of puberty. Boys are more likely to believe that sexual coercion is justifiable and more likely to respond to anti-social peer pressure.

UNFPA (1996) reports that in developing countries socially accepted gender roles and the position of females in many African societies has a strong impact on the needs of adolescent girls. For some girls, sexual relationships are not entered into willingly, but come about as a result of force or abuse, including incest. They may have no control over whether, whom or when they marry, sometimes before they have reached puberty.

2.9 Age at First Sex

Age at first sexual intercourse is of particular interest as HIV in Tanzania is mainly transmitted through heterosexual contact (TACAIDS *et al.*, 2008). Age at first sex is of particular interest in the study of sexual behaviour, especially in an area where the predominant mechanism of HIV/AIDS transmission is through heterosexual contacts (TACAIDS *et al.*, 2005). In addition to that, age at first sex is an important indicator of exposure to risk of pregnancy and transmitted infections during adolescence. Sexual behaviour has been found to be associated with changes in age at first sex, rates of partner change, sexual mixing patterns, and condom use. In Uganda, a rapid increase in age at first sex in urban areas between 1990 and 1995 was considered a major contributing factor in the observed HIV/AIDS prevalence decline in young pregnant women (Zaba *et al.*, 2004). It has been observed that sexual activities begin at the adolescence stage among the majority of people. However, in many countries unmarried boys and girls are sexually active by the age of 15 years. Adolescents who start having sex early are more likely to have sex with high risk partners or multiple partners and are less likely to use condoms (UNICEF/UNAIDS/WHO, 2002).

2.10 Premarital Sex

The period between first sexual intercourse and marriage is often a time of sexual experimentation; youths are often at greater risk of contracting sexually transmitted

infections, including HIV/AIDS during this time. They are more likely to have shorter relationships with more partners before marriage. About six in ten (62 percent) never married young women in Tanzania reported that they had never had sex, compared with 53 percent of men.

The proportion of unmarried women who had never had sex dropped rapidly from 70 percent for those aged 15-19 to 31 percent for those aged 20-24. For men in these age groups, the corresponding figures were 66 and 26 percent, respectively. Condom use during premarital sex is high; 49 percent of women and men reported that they had used a condom the last time they had sex (TACAIDS *et al.*, 2008). Curtis and Sutherland (2004) established the prevailing level of knowledge of premarital sex by analyzing data from a selected subset of 31 Demographic and Health Surveys (DHS) in ten developing countries including Ghana, Kenya, Tanzania, Uganda, Zambia, and Zimbabwe. These data were collected between 1988 and 2003. Their analysis found fluctuating trends in premarital sex in sub-Saharan Africa. The percentage of never married respondents aged 15 to 24 years who reported having had sex in the 12 months preceding the survey ranged from 5% in 1991 in the Dominican Republic to 49% in 1993 in Ghana. This indicates that youths are engaging in premarital sexual behaviour which puts them at risk of contracting STDs and HIV/AIDS.

Generally, reporting of premarital sex is found to be more common among women in sub-Saharan Africa than in Latin America and the Caribbean (Curtis and Sutherland, 2004). Among men, the percentage reporting premarital sex in the last year varied from 24% in the 1998 Ghana DHS to 65% in the 1991/92 Tanzania DHS. Men were consistently more likely than women to report premarital sex in the previous 12 months, and unmarried women were less likely than unmarried men to report casual partners (Curtis and Sutherland, 2004).

2.11 Peer Influence

In general, boys and girls report similar perceptions of peer pressure, but boys are more likely to submit to peer influence (Billy *et al.*, 1988). The normal process of an adolescent's development involves becoming less dependent on the family and paying more attention to the influence of peers. This is healthy, and in many ways can lead to positive behaviour especially when the peers' influences are positive (Billy *et al.*, 1988).

2.12 Age Difference with Sexual Partners

Age difference with sexual partners is one of the aspects of adolescent sex that has implications for sexual and reproductive health of adolescents. For example, adolescents having sex with older partners have more opportunities to contract HIV (Neema *et al.*, 2006) because the partner had many sexual activities with different other partners. The consequence of this is greater possibilities of being infected by sexually transmitted diseases and even HIV, and adolescent have little choice of selecting appropriate sexual practices.

A study done in four Sub Saharan African countries namely Burkina Faso, Malawi, Ghana and Uganda reported that substantially higher proportions of females than males aged 15-19 years have had older sexual partners and in three of the four focus countries, more than 40% say that their last partner was five or more years senior, compared with fewer than 1% of males (Neema *et al.*, 2006).

2.13 Number of Sexual Partners

The age at first sexual intercourse is an important marker of high risk behaviour and sexually transmitted diseases. Early first sexual intercourse has been associated with risky

behaviours such as not using contraception at first intercourse, having more sex partners and having more frequent intercourse (Durant and Sanders, 1989). Pettifor *et al.* (2004) argue that the greater the numbers of sexual partners young people have, the greater there is potential exposure to HIV/AIDS. Partner reduction is, therefore, one of the key factors of most HIV/AIDS prevention programmes. Among sexually experienced young people in South Africa, 35% reported only having had one lifetime sexual partner. Sexually experienced males were significantly less likely to report having had one lifetime sexual partner compared to females. Fifteen percent of sexually experienced young people reported that they had more than five lifetime sexual partners; 24% of males and six 6% of females. It was found that the number of lifetime sexual partners increased as youths got older.

2.14 Condom Use

The most common way for HIV transmission is through unprotected sex with an infected person. To prevent HIV/AIDS transmission, it is, therefore, important to practise safer sex, primarily through the recommended "ABC" method (abstinence, being faithful to one uninfected partner, and condom use) (TACAIDS *et al.*, 2008).

Along with the postponement of first sexual intercourse, early and consistent use of condoms is a means of preventing youths from becoming infected with HIV. However, condom use is often viewed with stigma in Tanzania; there may have been underreporting of condom use. The recommended and efficient means to reduce the chances of contracting HIV/AIDS is condom use, and the knowledge that condoms can be used to prevent HIV/AIDS is widespread (TACAIDS *et al.*, 2008).

2.15 Alcohol Use Prior to Sexual Intercourse

Alcohol use is among the risky sexual behaviours. According to Bailey (1994), young people with alcohol use disorders are at risk of contracting sexually transmitted diseases including HIV. This is because sexual intercourse done when one or both partners are under the influence of alcohol is more likely than otherwise to be unplanned, and couples are therefore less likely to use condoms (URT, 2005).

2.16 Attitude towards HIV/AIDS

Research focusing on the effects of beliefs of susceptibility to HIV/AIDS indicates that adolescents and adults who report high perceived risk for HIV/AIDS practise safer sexual intercourse, whereas those who perceive low risk for HIV/AIDS report practising unsafe sexual intercourse (Gray and Saracino, 1989; Villarruel *et al.*, 1998). Failure of perceived susceptibility to predict behaviour most likely results from participants' misconceptions about the origins and transmission of HIV/AIDS. For example, some participants reported that anal sex was a safe alternative to vaginal sex (Volk and Koopman, 2001). For these individuals, misconceptions, or lack of accurate knowledge about HIV/AIDS resulted in inaccurate assessments of susceptibility. In this way, it seems that perceived susceptibility must be coupled with accurate knowledge in order to bring about behavioural change.

2.17 Knowledge about HIV/AIDS in Tanzania

After the first three AIDS cases were reported in the early 1980s, AIDS awareness has increased rapidly in Tanzania. About 91% of women and 94% of men had heard about HIV/AIDS in 1989/90. By 1999, HIV/AIDS awareness was almost universal among both men and women. In Tanzania, knowledge of HIV/AIDS transmission and prevention methods is widespread. Studies by Tanzania Demographic Health Survey (TDHS) show that youths aged 15 to 24 years and those who have never had sex have lower level of

knowledge than those in older age groups and those who have sex experience (URT, 2005).

Specific knowledge about HIV/AIDS also increased overtime (TDHS, 1996; Heggenhougen and Lugalla, 2005). Although HIV/AIDS awareness was high, misconceptions about HIV/AIDS were also common. In 1999, only 54% of women and 59% of men thought it was possible to get HIV/AIDS through insect bites such as mosquito bites, while 41% of women and 36% of men thought that sharing food or eating in the same utensils with an HIV/AIDS patient could transmit HIV/AIDS. However, several survey reports show that although HIV/AIDS knowledge is increasing, risk perception has not changed significantly since 1994. The proportion of men who perceived themselves at high risk of HIV/AIDS was 37% in 1994 and 46% in 1999, while for women it was 40% in 1994 and 43% in 1999 (TDHS, 1996). Risk perception is an important indicator of a certain level of knowledge about HIV/AIDS as it helps to show if people perceive the disease to be a threat to themselves or for some other people. Behavioural surveillance on specific populations is, therefore, important to establish the level of knowledge and risk perception as well as to making comparison to the national and regional levels, like the information from Demographic and Health Survey data. Correct knowledge of how HIV is transmitted enables people to protect themselves against contracting the virus. Avoiding HIV is critically important for youths, who are often at greater risk because they may have multiple partners or engage in more risky sexual behaviour (TACAIDS *et al.*, 2008).

According to TACAIDS *et al.* (2008), over 99 percent of Tanzanians aged 15-49 years have heard of HIV/AIDS, and awareness of the modes of transmission and HIV/AIDS is generally high with almost 90 percent knowing that having only one uninfected, faithful

partner can reduce the chances of getting HIV/AIDS. About 25% of respondents thought that HIV/AIDS can be transmitted through mosquitoes and other insect bites (TACAIDS *et al.*, 2005).

2.18 Sexual Behaviour in Tanzania

Studies conducted in Tanzania between 1991 and 1999 show limited changes in terms of age at first sex and pre- marital sexual activity; the median age at first sex is 16.6 years among women and 17.9 years among men (NBS, 2000; Heggenhougen and Lugalla, 2005). In various parts of Tanzania, older men have been reported to have sexual relationships with younger and inexperienced women who are perceived to be at lower risk of HIV/AIDS (Killewo *et al.*, 1993).

Studies that have examined the association between sexual behaviour and HIV/AIDS have revealed conflicting reports. In general, the number of sexual partners has been observed to be positively associated with increased risk of HIV/AIDS infection (Barongo *et al.*, 1992, Mwakagile *et al.*, 2001). The risk of HIV/AIDS has been found to be positively associated with casual sexual partners (Killewo *et al.*, 1990; Kapiga, 1996) and the initiation of sexual activity at an early age (Kapiga *et al.*, 2002). These high – risk sexual behaviours have been shown to be more common in men than women (NBS, 2002).

These findings propose that men's sexual behaviours might be associated with an increased transmission of HIV/AIDS in Tanzania. Other studies have shown that the male partners' sexual behaviour was a major predictor of HIV/AIDS in women not practising high-risk sexual behaviour (Kapiga *et al.*, 1994).

2.19 Determinants of Sexual Behaviour in Tanzania

Kessy and Moshiro (1998) in an assessment of the behavioural risk factors associated with HIV/AIDS among youth in Moshi found that behavioural risk factors associated with HIV/AIDS were different among male youths compared with female youths. Among the subjects, cigarette smoking, marijuana smoking, and having a past history of sexually transmitted diseases (STDs) were significant risk factors associated with HIV/AIDS transmission. The profile of risky behaviour associated with HIV seropositivity calls for an urgent need to target health information and education interventions to bring about a change in behaviour among the youth and hopefully help to reduce the rate of transmission of HIV/AIDS infection.

In another study by Mnyika *et al.* (1997) that was conducted in Arusha on determinants of multiple sexual partners and condom use among adults, significantly more men than women reported having multiple sexual partners (49% versus 25.2%). Among both men and women, early sexual debut was associated with having multiple sexual partners in men only. For both men and women, frequent discussions of HIV/AIDS with family members or friends were associated with condom use.

Mohamed and Masona (1997) in a study of adolescent pregnancies in a prospective survey of contraceptive knowledge and reproductive behaviour in Tanzania found the age at first sexual intercourse to be low: 12 years for boys and 13 years for girls. Most Tanzanian girls practise sexual intercourse for the first time with someone older than them, while most boys practise sexual intercourse for the first time with someone of the same age or younger than them. For most cases, girls' and boys' first sexual experiences are not voluntary. The main reasons for initiating sexual intercourse are curiosity and the

influence of friends. It is excusable for boys to become sexually active at a significantly earlier age than girls, and even expected that they will do so (Sharif, 2000).

2.20 HIV/AIDS Prevention

Prevention activities seek to bring about individual behaviour change by encouraging people to learn their HIV/AIDS status, to take precautions not to transmit HIV/AIDS if they are positive, and to protect themselves against HIV/AIDS infections, if they are negative. According to Birdsal and Kelly (2005), prevention related activities; defined broadly to include both education /awareness activities and specialized interventions e.g. Voluntary Counseling and Testing (VCT) and prevention of mother to child transmission (PMTCT); are extremely common among HIV/AIDS campaigning messages.

The role of VCT as an HIV/AIDS prevention tool must be clearly understood, valued and resourced. This is due to the fact that testing is more than an entry point to treatment services. It is fundamental to addressing HIV/AIDS prevention needs, needs of addressing people's rights to know their status, to facilitating living well with HIV/AIDS and break down myths and misconceptions about what it is to be HIV/AIDS positive (Godfrey-Faussett, 1995).

Birsal and Kelly (2005) pointed out that the prevention activity is the most widespread area of HIV/AIDS response. As such, it is of interest to understand how organizations involved in such work perceive the impact and effectiveness of their activities, as well as the challenges they are seeking to address. However, global HIV/AIDS prevention strategy claims VCT as central to the HIV/AIDS prevention efforts, although many organizations identify lack of information, awareness and understanding about HIV/AIDS

in the community at large as a fundamental challenge to their prevention work (Birdsal and Kelly 2005).

2.21 HIV/AIDS Campaigns through Mass Media

Campaigns through mass media (radio, television, newspapers, fliers, posters, magazines, phones, free of charge services) are the ones which are most commonly used to disseminate information about HIV/AIDS, sexual and reproductive health information to all age groups including youths within the country. Other sources are seminars, meetings, community AIDS groups, health workers, doctors and hospitals, peer educators, parents, and relatives.

In a study done in Uganda, Ghana, Malawi and Burkina Faso youths reported that the radio is a reliable source because it reaches a wide audience; it gets information to young people quickly, thus listeners do not need to go somewhere else for the information (Amuyunzu - Nyamongo *et al.*, 2005).

Campaigns of HIV/AIDS through mass media interventions in the provision of youths with sexual behaviour and reproductive health information vary from country to country. For example in South Africa, a popular television and radio developed two programmes targeting young people. One included story lines for 12 to 18 years old and the other 8 to 12 years old people providing them with information on puberty, sexual intercourse, HIV/AIDS and violence (Goldstein *et al.*, 2003).

Also, a daily newspaper in Uganda government contains supplements called "straight talks" which provide sexual and reproductive health information pieces to youths (Greene *et al.*, 2002). In Zambia, youths write and edit their own newspapers which are distributed

to schools and retail outlets throughout the country, and these provide sexual and reproductive health information including HIV/AIDS (Phiri, 2007). In Tanzania, a youth's television programme known as "Femina Talks Show" is conducted, and a newspaper now known as "Fema" is produced to provide sexual and reproductive health information.

Although the use of mass media is an effective way of imparting knowledge and influencing social norms and facilitating behaviour change (Ross *et al.*, 2006), it has been observed that it has some limitations such as: not every one has access to or uses mass media and one in four adolescents has no access to the mass media (Awusabo - Asare *et al.*, 2006).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Study Location

The study was conducted in Bunda District. The district is among five districts of Mara Region. The district lies between latitudes 1°30' and 2°45' South of the Equator and between Longitudes 33°39' and 34° 05' East of the Greenwich Meridian. The district is bordered by Musoma (Rural) District in the North, Serengeti District in the East, Magu District in the South, and Ukerewe District in the West. Magu and Ukerewe Districts are found in Mwanza Region. The district has an area of 3088 km^2, out of which 200 km^2 is occupied by Lake Victoria and 480 km^2 by Serengeti National Park. The remaining part is dry land, which is used for farming and settlements. According to the 2002 National Population and Housing Census (URT, 2003), the district had a population of 258, 930 people, out of whom 134, 452 were females and 123, 978 were males. The annual population growth rate is 1.8%, and the average population density is 70 people/km^2. There are 42, 605 households with an average size of 6.1 people per household. Larger portions of Bunda District inhabitants are peasants, fishermen, livestock keepers and small-scale traders. These main economic activities contribute more than 81% of the district's Growth Domestic Product (GDP).

3.2 Research Design

A cross-sectional research design was used in this study. The design allows data to be collected once and used in descriptive studies and for determination of relationships among variables. The cross - sectional research design was considered to be favourable because it allows for economical use of financial and time resources for data collection (Bailey, 1994).

3.3 Sampling Procedure

At least thirty cases are considered the minimum for meaningful statistical computation in situations where large samples are limited by inadequate resources (Bailey, 1994). Therefore, in this study a sample size of 142 respondents (73 female, 69 male) was selected for structured interviews using a structured questionnaire. Purposive sampling was done for selecting 4 wards and 10 key informants. Also, simple random sampling was used for selecting 4 villages and 35 respondents from each village for acquisition of data. The sampling unit was an individual respondent.

3.4 Data Collection Methods

For primary data collection, a structured questionnaire was developed and administered to the selected respondents. For qualitative data collection, a checklist of items for discussion was developed for focus group discussion (FGD) interviews. The checklist sought informants' attitudes, views, practices and behaviours with regard to HIV/AIDS prevention. A pilot study was conducted prior to the actual study to test the questionnaire, FGD guide and key informant interview guide. Secondary data were obtained through reading journals, magazines, books and various reports from libraries, Bunda District Council and NGOs.

3.5 Primary data

Both quantitative and qualitative data were collected as part of primary data collection. The main instrument for quantitative data collection was a structured questionnaire containing both closed and open ended questions (Appendix 2). Both qualitative and quantitative data were collected subsequent to a pilot study conducted in Nyamakokoto Ward one month before the main study. The preliminary study survey was used to test the

clarity, sequence of the questions and the discussion guides proposed as well as estimated time for administering each interview.

The researcher and three trained research assistants administered the questionnaire. During data collection, the principal researcher and the three research assistants worked as a team and each interviewed an average of ten respondents per day. During the field work, the principal researcher supervised the interviews periodically with the aim of making sure that there were proper data collection procedures and to solve any administrative problems. In addition to that, every day the principal researcher went through the completed questionnaire copies to check clarity and accuracy of responses.

3.5.1 Focus group discussion (FGD)

A total of twelve FGD were conducted in the study villages (Kisorya, Nyatwali, Guta and Kabasa). The principal researcher was the discussion facilitator assisted by one research assistant. Each FGD comprised 8 to 10 participants. All the discussions were conducted in Swahili. The facilitator introduced the topic and allowed the group members to discuss. All the discussions were recorded and each of them took about two hours. The FGD were guided by focusing on the topics concerned with the study. In every FGD session probing was done to get clarification on the arguments given by the discussants.

3.5.2 Key informant interviews

Some information collected was obtained from District Medical Officer and all sections which deal with HIV/AIDS issues. Informants were requested to give their views on effectiveness of HIV/AIDS campaigns.

3.5.3 Secondary data

Secondary data were used to enrich the primary data. These were obtained from sources such as District Planning Officer where data on District profile were obtained, reports from various institutions and international organizations dealing with HIV/AIDS issues. In addition to that, secondary information was collected from Sokoine National Agricultural Library (SNAL) and through the Internet.

3.6 Data Processing and Analysis

The data collected were edited, coded, summarized, entered into a computer and analyzed using the Statistical Package for Social Science (SPPS) version 12 computer software in conformity with the objectives of the study. Descriptive statistics particularly frequencies, averages, percentages, minimum and maximum values were computed in the analysis. Cross - tabulation and Chi – square were used to test the associations between HIV/AIDS risky behavioral practices and some independent variables (indicators of campaigns about HIV/AIDS). Correlation and t-test were applied for inferential analyses and testing the hypotheses of the research. Correlation was used to test the first null hypothesis using the following formula:

$$r = \frac{1}{n-1}\sum_{i=1}^{n}\left(\frac{X_i - \bar{X}}{s_X}\right)\left(\frac{Y_i - \bar{Y}}{s_Y}\right) \quad \text{.....(1)}$$

Where :

X_i = i^{th} value of x variable which is individual score of level of knowledge on HIV/AIDS

X= mean of x which is mean score of level of knowledge about HIV

Y_i= individual score of sexual behaviour

Y= mean score of sexual behaviour

r = Pearson's moment correlation

n = number of pairs of observation of knowledge and sexual behaviour

S_x =standard deviation of HIV/AIDS knowledge score

S_x =Standard deviation of sexual behaviour score

t-test was used to test the second null hypothesis using the formula:

$$t = \frac{\text{Sample one mean - sample two mean}}{\text{Standard error of the difference in means}} \quad \ldots\ldots(2)$$

In both cases the null hypothesis was accepted if $p > 0.05$. Alternatively, the alternative hypothesis was confirmed if $p \leq 0.05$. Likert scale was used to quantify abstract variables. According to Bernard (1994), index scale was used to quantify abstract variables and defining them operationally. In this study, index scale was used to measure views on HIV/AIDS campaigns among youths.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Demographic Statistics of the Respondents

A pertinent starting point for presentation of findings in a study of this nature is an examination of socio - demographic statistics of respondents. This provides a background for other findings of the study. The sample size was 142 including 73 females and 69 males. The respondents in the study area were asked about their age, sex, and marital status; their responses are shown in Table 1. Regarding their age, the maximum and minimum ages were 24 and 15 respectively. The mean age of the respondents was 20.42 years. The results in Table 1 show that greatest proportion of the respondents (28.9%) were in the age group of 18 to 20 years. Regarding sex of respondents, the results in Table 1 show that over half of the respondents (51.4%) were females while (48.6%) were males. According to TACAIDS *et al.* (2005), the most affected group with HIV/AIDS are youths aged 5-49 years.

Marriage is an important factor for exposure of women and men to sexual intercourse which is a leading mechanism to HIV/AIDS infections (URT, 1997). The marital statuses of the respondents were grouped into four categories namely single, married, divorced and separated. Results are also presented in Table 1 showing that over half of the respondents interviewed (53.5%) were single. This is probably due to the fact that most of the youths, especially males were still in schools and most of them were not yet ready for marriage due to their low income. Although a good number of respondents (44.4%) were married, it was found that early marriage was still taking place to some of the respondents in rural areas. This is the same as what Mwageni (1996) cited by Mkama (2006) reported that rural youths are more likely to be married earlier than those in urban areas. This is probably

because in rural areas traditions and norms towards marriage are stronger than those in urban areas.

Table 1: Age, sex and marital status of respondents (n=142)

Characteristics	Percent
Age	
15	9.9
16	2.8
17	8.5
18	10.6
19	6.3
20	12.0
21	6.3
22	6.3
23	12.0
24	25.4
Sex distribution	
Male	48.6
Female	51.4
Marital status	
Single	53.5
Married	44.4
Divorced	0.7
Separated	2.0

4.2 Socio-Economic Characteristics of Respondents

Education provides people with knowledge and skills that can lead them to a better quality of life and level of education is correlated with patterns of reproductive and health seeking behaviour (TACAIDS *et al.*, 2008). Respondents' levels of education, religion, and occupation are shown in Table 2. The maximum and minimum years of schooling were 15

and 0, respectively. The average number of years which youths had attended school was 7.94. The majority of them (45.8%) had primary education level, followed by secondary education level which was (40.8%). These good numbers of secondary students could be due to introduction of ward secondary schools within their villages. However, still there was a good number (10.6%) of respondents who didn't have formal education. This is very dangerous to the society like Tanzania having youths who do not have formal education at all. An example is the proportion of adults who had not gone to school on Mainland Tanzania who were 25.2% in 2000/01, according to the 2000/01 Household Budget Survey (NBS, 2002). Lack of formal education also makes the youths not to take precaution measures against HIV/AIDS infection.

In order to determine whether there was any influence of economic activities on sexual behaviour of youths, the respondents were asked to state their main economic occupations. The results in Table 2 show that the greatest proportion of the respondents (48.6%) were farmers, followed by 37.3% who were students. The results were the same as what Mkama (2006) reported that the majority of his respondents were students at the time of interview and most of his respondents from rural areas engaged themselves in agricultural activities.

Religion is of great importance in relation to sexual behaviour change. In some cases the type of religion of an individual has been found to relate to sexual behaviour. Thus, respondents were asked to state the religions to which they belonged. The results obtained are presented in five groups as shown in Table 2. It is clearly shown that most of the respondents were Protestant Christians (34.5%) and Catholic Christians (32.4%), followed by Seventh Day Adventists (19%). Some of them were Muslims (11.3%) and few of them were traditionalists. The results revealed that most of the respondents belonged to different religious faiths which could be used in one way or another to spread the information about

HIV/AIDS. An example is the ADRA programme with the SDA church in Tanzania which was dealing with HIV/AIDS awareness creation, among members within and outside the church. The slogan is: "try conduct not condoms." This means "change your bad sexual behaviour to good sexual behaviour".

Table 2: Socio - economic characteristics of respondents (n=142)

Characteristics	Percent
Education of respondents	
No formal education (none)	10.6
Primary education	45.8
Secondary education	40.8
College education	2.8
Main occupations of respondents	
Farmers	48.6
Civil servants	4.9
Businessmen	8.5
Students	37.3
Fishermen	0.7
Religion of respondents	
Roman Catholics	32.4
Protestants	34.5
Muslims	11.3
Traditionalists	2.8
Seventh Day Adventists (SDA)	19.0

4.3 Main Messages of Campaigns against HIV/AIDS

Information access is essential to increasing people's knowledge and awareness of what is going on around them that they may eventually affect their perceptions and behaviour for the purpose of planning programmes to spread health information, and it is important to identify the populations that are likely to be reached by the media (TACAIDS *et al.*, 2008).

The government and non-governmental organizations have developed and implemented intervention programmes dealing with HIV/AIDS at various levels of society. These programmes include direct provision of health care services, and information dissemination through various media channels such as radios, TVs, newspapers, posters, etc. Also, other sources of information such as meetings, community AIDS groups, health workers, doctors, peer educators, parents, relatives and siblings are still in use to disseminate information about HIV/AIDS. Respondents were asked about sources of information and media through which they got information about HIV/AIDS. Multiple response analysis was done to determine the sources and media through which they got information about HIV/AIDS, and the results are presented in Fig. 2.

The results in Fig. 2 show that the greatest proportion of respondents (13.5%) got information on HIV/AIDS through radios. Probably, this is due to the fact that most of radio receivers use batteries, taking into consideration that most of the villages are not accessible to social services such as electric power which supports penetration of other information technologies such as TV.

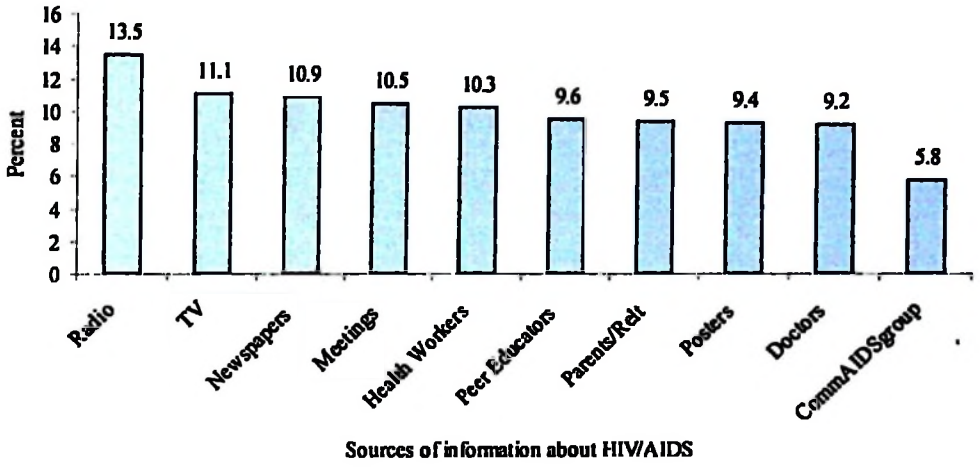

Figure 2: Respondents' sources of information on HIV/AIDS

In addition to that, low costs of available radio receivers enable most of the rural people to possess them. About 11.1% of the respondents got information about HIV/AIDS through the Television (TV). Probably, this could be because most of the youths like to watch TV as part of entertainment, and they get information through TV show rooms in their villages which use generators for TV shows. About 10.9% of the respondents got information through newspapers/magazines. Probably, this could be because of easy penetration of these types of media from towns to villages due to reliable transport and affordable prices of newspapers.

The results show that meetings (10.5%) and health workers (10.3%) were also important sources of information to the respondents. The poorest source of information was community AIDS groups. This implies that the community was not well mobilized to form community AIDS groups which is indicated by the finding that only 5.8% of the respondents had got information on HIV/AIDS from this source. In addition to that, only (9.4%) of the respondents got information through posters and pamphlets.

This is the same as (ISHI, 2004) which reported that radios, televisions and newspapers/magazines were the most common communication channels utilized by youths/respondents. Mkama (2006) reported that the most common media sources of information in both rural and urban areas were radios, newspapers and television. Although road signs/painted walls, stickers are common, they are found more in urban areas compared to rural areas. The respondents were then asked about types of information received upon hearing HIV/AIDS, and the results were summarized in Fig. 3.

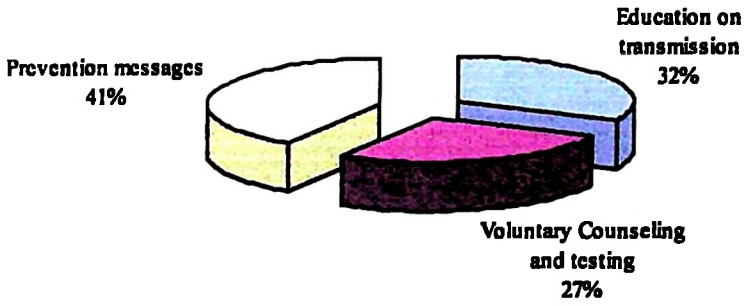

Figure 3: Information received by respondents upon hearing of HIV/AIDS

The results in Fig. 3 show that about two - fifths of the respondents (41%) had received information about prevention upon hearing about HIV/AIDS. This is a very important message to people regarding that the disease has so far no cure and that is why the government and NGOs spread the messages.

There are generally lower costs in prevention than cure in which for the case of HIV/AIDS the costs are endless. The results also show that 32% of the respondents had already heard about the modes of transmission of HIV/AIDS, but only 27% of the respondents had received information about voluntary counseling and testing, in which communities naturally fear of testing; hence they go for counseling and testing if they suspect themselves of being HIV positive. In FGD, one respondent said "HIV testing is not an issue; the issue is to receive test results". Mkama, (2006) reports that the majority of his respondents indicated that the common type of information received by both rural and urban respondents was prevention messages (68.2%) and 77.1%, and education on transmission was (56.5% and 55.9%), respectively.

The least was information on Voluntary Counseling and Testing (27%). Probably this low percent is due to its latest introduction to the people in comparison with the prevention and transmission messages. A person can comfortably live with HIV/AIDS infections by considering good nutrition, use of ARV drugs, and good health practices if he/she knows his/her health status after testing for HIV. In addition to that, this low percent resulted due to the fact that most VCT centres are situated in urban areas compared with the rural areas; so, it was difficult for respondents to access them. However, some of the respondents who were few didn't receive the three important information items (education on transmission, voluntary counseling, and testing and prevention messages) when they heard about HIV/AIDS. The findings in this section 4.4 meet the first objective of the research.

4.4 Awareness about HIV/AIDS Campaigns

The respondents were then asked if they had heard or seen the slogan "fataki" which means "older men about 45 to 65 years who decide to have penetrative sexual intercourse with young girls, especially school girls of 14 to 24 years in exchange for money and gifts

such as mobile phones." Also, the respondents were asked if they had watched TV "Femina" talk show, "the TVs programme dealing with dissemination of HIV/AIDS information to the youths and exchanging ideas with them". The findings are summarized in Table 3.

Table 3: Awareness on organizations dealing with HIV/AIDS and exposure to slogans and shows (n=142)

Item	Yes (%)	No (%)
Respondents having heard or seen the slogan "fataki"	93.7	6.3
Respondents having watched Femina "TV" talk show 12 months ago	56.3	43.7
Communities	33.1	66.9
NGOs	39.4	60.6
Health Institutions	78.9	21.1
CBOs	14.8	85.2
Schools and colleges	57.0	43.0
AMREF	12.7	87.3
ANGAZA	28.9	71.1
MCHs	12.7	87.3
Hospitals	31.7	68.3
TACAIDS	7.7	92.3
Red Cross	2.8	97.2
ADRA Tanzania	5.6	94.4
Respondents having heard or attended HIV/AIDS campaigns	68.3	31.7
Education on transmission having been learnt during HIV/AIDS campaigns	81.0	19
Voluntary Counseling and Testing having been learnt during HIV/AIDS campaigns	23.9	76.1

The results in Table 3 show that 93.7% of the respondents had heard or seen the slogan "fataki" which is disseminated in all types of media, implying that most of the respondents had awareness of this slogan "fataki". Also, the results show that (56.3%) of the respondents had watched "femina" "TV" talk show. Probably, this moderate percent could

be because of their residence areas were not facilitated with electricity, taking into consideration that most of the TV show rooms operate by using electricity which is not yet available to most of the rural areas. The results show that 78.9% of the respondents reported that Health Institutions were the most important organizations dealing with HIV/AIDS followed by schools and colleges (57%). This indicates that health institutions and colleges play big roles in education and organizing campaigns on HIV/AIDS and that the institutions should be strengthened and supported. Moreover, 68.3% of the respondents had heard or attended HIV/AIDS campaigns.

However, 31.7% of them reported that they had never heard or attended HIV/AIDS campaigns. Probably this could be because most of HIV/AIDS campaigns are more available in towns than in villages. The results also show that (81.0%) had received education on HIV transmission during HIV/AIDS campaigns. This could be due to the importance of avoiding new infections of HIV/AIDS. Only 23.9% of the respondents had learnt about Voluntary Counseling and Testing during HIV/AIDS campaigns due to its latest introduction to the society.

4.5 Attitude of Youths towards Campaigns against HIV/AIDS

Campaigns against HIV/AIDS prevention are of great importance taking into consideration that there is no cure of the disease. In order to determine the attitude towards campaigns among HIV/AIDS, the respondents were asked to state whether they strongly disagreed (1), disagreed (2), were undecided (3), agreed (4), or strongly agreed (5) with each of them. Then their responses were re-grouped into three groups: strongly disagree and disagree into disagree, agree and strongly agree into agree, and undecided remained as it was. The minimum and maximum numbers of points one could score were 10 and 50 points, respectively. Unfavourable (negative) attitude was represented by 10 to 29 points;

indifferent (neutral) attitude was represented by 30 points; and favourable (positive) attitude was represented by 31 to 50 points. The minimum and maximum number of points that were actually scored were 19 and 40, respectively.

Overall, the youths had positive attitude towards the campaigns because their overall score was 30.5 out of the maximum of 50.0 points. Their positive attitude is also shown by the results in Table 4 which show that the majority of them (83%) agreed that through campaigns, youths practice proper use of condoms. Probably, this is due to the effectiveness of HIV/AIDS campaigns on condom use promotion against HIV/AIDS infection.

Also during FGD they reported that: "Most youths use condoms. However, Fataki can use condoms sometimes" Another member said, "Youths are having first priorities of using condoms". "Condoms first, death late". "If you do not use condoms, you are given a red card" because youths already know about HIV/AIDS; so it is better for them to use condoms" (Nyatwali Village FGD).

In Guta Village during FGD, discussants reported that: "Youths are using condoms; however, at the same time sexual partners share the same towel for cleaning sperms and vaginal secretion after sex". This statement shows that there is great knowledge on how HIV/AIDS is transmitted. It seems that youths are taking other precautions which may not lead them to be infected with HIV while sexing.

The attitudinal aspects which were measured by using Likert scale in Table 4 show that the majority of the respondents (69.7%) did not support the statement that HIV/AIDS campaigns methods stimulate people to engage in sexual activities.

Table 4: Attitudes of respondents towards campaigns against HIV/AIDS

Attitudinal aspects	Connotations	Disagree (%)	Undecided (%)	Agree (%)
Through campaigns, youths practise proper use of condoms	+	9.9	7.0	83.1
HIV/AIDS campaign methods stimulate people to engage in sexual activities	-	69.7	9.9	20.4
Most of the HIV/AIDS campaign methods can be obtained more easily in towns than in villages	-	27.5	9.2	63.4
Through HIV/AIDS campaigns, youths are not practising sex	+	69.0	14.1	16.9
Through HIV/AIDS youths get awareness on prevention methods and mode of HIV/AIDS transmission	+	6.3	1.4	92.3
HIV/AIDS campaigns are easily accessible by youths	+	66.9	19.0	14.1
HIV/AIDS campaigns use clear and simple language understood by the majority	+	93.7	2.8	3.5
Campaigns against HIV/AIDS cannot succeed because sex is so enjoyable that it is impossible to abstain from doing it.	-	49.3	10.6	40.1
HIV/AIDS campaigns messages are not selective; young children also get the messages	-	3.5	2.8	93.7
HIV/AIDS campaigns do not provide detailed explanation on proper use of condoms	-	45.8	11.3	43.0

This shows that nowadays there is clear interpretation of HIV/AIDS campaign messages, especially on condom use though, according to some religious preaching, condoms use is not recommended. During FGD in Guta Village youths reported that: "People continue to

have sex because they have different types of HIV/AIDS protection means, such as condom use". The results in Table 4 show that most of the respondents (63.3%) agreed that most of the HIV/AIDS campaigns are conducted in towns than in villages.

During the FGD in Nyatwali Village youths reported that: "Most of the HIV/AIDS campaigns are easily available in towns than in villages". Probably this is also true, as we can see a lot of innovations of technologies and information starting from towns towards rural remote areas; either they can start from developed countries to developing countries. This could be the same as campaigning against HIV/AIDS. Mkama (2006) reports that there is an effect as a consequence of campaigns against HIV/AIDS including condom use that are stronger and wide spread in urban areas compared to rural areas. About two - thirds of respondents (66.9%) revealed that youths are easily accessible to HIV/AIDS campaigns. This could be a good indicator on consideration of youths in campaigning against HIV/AIDS. In addition to that, results in Table 4 show that the majority of the respondents (93.6%) supported that HIV/AIDS campaigns use clear and simple language understood by the majority of the audience.

During FGD in Nyatwali Village youths reported that: "HIV/AIDS campaigns use clear and simple language understood by the majority". Probably this is because Kiswahili language is used during the campaigns. Kiswahili is Tanzania's national language, and it is almost used everywhere within the country. The majority of respondents (93.6%) agreed that HIV/AIDS campaigns are not selective and that even young ones get the messages.

During FGD in Nyatwali Village youths reported that: "HIV/AIDS campaigns are not selective; they can reach children because they can be disseminated by using different mass media such as radios, TVs, news papers, magazines etc". This is true; in fact we have

seen a lot of HIV/AIDS campaigns being done without considering age groups as all age groups are free to watch TVs, reading news papers, listening to radios at home and other places.

Also the results in Table 4 show that 49.2% of respondents disagreed with the statement that campaigns against HIV/AIDS will not succeed due to sex being enjoyable that one cannot abstain from it. The results on this statement show that it is impossible for some people to abstain from sex; so, through campaigning against HIV/AIDS these people should be educated to use other methods of HIV/AIDS prevention.

Nyatwali Village youths said. "Youths can't abstain from sex because sex is attractive." In addition to that they said: "Youths can't abstain from sex because not only sex is enjoyable but also it is used as a source of income for some girls. Probably this could be true because in our society there are people who do sex in exchange for money and other gifts as their source of incomes."

Some of the respondents (45.7%) disagreed with the statement that campaigns against HIV/AIDS provide detailed explanation on proper use of condoms. This indicates that more education on how to use condoms step by step is needed, but it was vice versa during the FGD session. Some discussants said: "It is true that most HIV/AIDS campaigns explain step by step on how to use a condom". Apart from that the majority of the respondents (69%) disagreed with the statement that through campaigns youths are not practising safe sex. This shows that through campaigns some youths are changing their sexual behaviour so as to prevent themselves against HIV infection.

In addition to that, the majority of respondents (92.2%) agreed that through HIV/AIDS campaigns youths get awareness on prevention methods and modes of HIV/AIDS transmission. As stated above, the majority of youths are aware of HIV/AIDS prevention methods. However, there are other reasons which force them to practise unsafe sex. Taking examples from developed countries, the rate of new HIV infection is low because they are socially and economically stable compared to developing countries. The results presented in section 4.5 meet the second objective of the research.

The results in Table 5 show that (51.4%) of respondents had favourable attitude (31-50 points) towards campaigns against HIV/AIDS. More than two-fifths of the respondents (41.5%) had unfavourable attitude (10-29 points) towards campaigns against HIV/AIDS. However, 7.0% of them had neutral attitude (30 points) towards campaigns against HIV/AIDS. Probably there were other factors which were missing in these campaigns which caused the respondents to have negative attitudes towards HIV/AIDS campaigns.

Table 5: Respondents' overall attitudes towards campaigns against HIV/AIDS

Statements	Frequency	Percent
Unfavourable (10-29)	59	41.6
Neutral (30)	10	7.0
Favourable (31-50)	73	51.4
Total	**142**	**100.0**

4.6 The Level of Awareness about HIV/AIDS

Awareness in this study was defined by the ability of the respondents to respond correctly to some questions related to knowledge about campaigns against HIV/AIDS.

4.7 General awareness

In terms of factors driving heterosexual HIV transmission, it is relevant to note that awareness of HIV is high amongst individuals, but this awareness has not translated into behaviour change (TACAIDS *et al.*, 2008). For any prevention campaign to be successful, it requires the persons targeted to be equipped with the correct knowledge regarding how the disease can be transmitted and how it can be prevented, which in turn helps take care of misconceptions regarding both the transmission and prevention of HIV/AIDS (Mkama, 2006).

Regarding the modes of transmission of HIV/AIDS, the respondents were asked several questions in the form of an index scale so as to know their knowledge level. The responses to the questions were categorized into high awareness (31-50), medium awareness (30) and low awareness (10-29), depending on the scores. For identification of respondents' level of awareness of HIV/AIDS, 10 statements were used to compose Likert scale. In the Likert scale the responses ranged from strongly disagree, disagree, undecided, agree and strongly agree. But for simplicity of analysis, the Likert scale was grouped into three categories of disagree, undecided and agree, whereby strongly disagree and disagree were grouped into disagree and strongly agree and agree were grouped into agree. The respondents' overall awareness about HIV/AIDS was high; they scored 39.2 points out of 50.0 points while the minimum and maximum scores were 26 and 42, respectively. Their high awareness is also indicated by the findings summarized in Table 6.

Generally, as shown in Table 6, there was high awareness and knowledge on HIV/AIDS among the respondents. This observation has also been noted by Barker and Ricardo (2005) as they observed that awareness about HIV/AIDS has increased in most parts of Africa in the past ten years, and research shows that at least 90% of people have heard of

HIV/AIDS. TACAIDS *et al.* (2005) also reported an increase to 96% of HIV/AIDS awareness among Tanzanians.

Table 6: Respondents' general awareness and knowledge about HIV/AIDS

Statements	Percentage of respondents			
	Disagree	Undecided	Agree	Total
Nothing a person can do to avoid getting HIV/AIDS	63.4	2.8	33.8	100
A healthy looking person cannot have HIV/AIDS	89.4	2.1	8.5	100
A person can protect himself/herself from HIV/AIDS by having one uninfected sex partner	22.5	10.6	66.9	100
A person can be infected with HIV/AIDS through supernatural means	86.6	2.1	11.3	100
A person can be infected from HIV/AIDS from mosquitoes bites.	81.7	5.6	12.7	100
A person can protect himself/herself by using condoms correctly every time he/she has sex	20.9	5.4	73.7	100
People can protect themselves by using condoms correctly every time they have sex	33.8	14.1	52.1	100
HIV/AIDS can be transmitted from a mother to a child	9.9	6.3	83.80	100
HIV/AIDS can be transmitted through blood transfusion	7.0	7.8	85.2	100
HIV/AIDS can be transmitted through romance	37.3	16.2	46.5	100

The results show that the majority of respondents (63.4%) disagreed with the statement that nothing a person can do to avoid getting HIV/AIDS (Table 6). This shows that the respondents had good knowledge of HIV/AIDS due to getting it from HIV/AIDS campaigns. FGD discussants in Nyatwali Village reported as follows: "There is

something a person can do so as to avoid getting HIV/AIDS". This means that they knew some ways by which a person can avoid getting HIV/AIDS.

Also, the majority of the respondents (89.4%) disagreed with the statement that a healthy looking person cannot have HIV/AIDS. TACAIDS *et al.* (2008) also reported that the vast majority of Tanzanians aged 15-49 know that an HIV infected person does not necessarily show signs of infection. About two- thirds of the respondents (66.9%) agreed that a person can protect himself/herself from having HIV/AIDS by having one uninfected sex partner. Also this is almost the same as what TACAIDS *et al.* (2008) reported that over 80% of its respondents reported that limiting sexual intercourse to one uninfected partner can reduce the chances of being infected with the AIDS virus.

During FGD in Nyatwali village youths said: "Most of married people like young girls who have small breasts. There is no faithful partner; there are temptations nowadays; "a young girl can sex with an older man. Despite penetrative sex, there are other ways of HIV/AIDS transmission". The majority of the respondents (86.6%) disagreed with the statement that a person can be infected with HIV/AIDS through supernatural means. During FGD in Nyatwali Village youths reported as follows: "A person cannot be infected with HIV/AIDS through supernatural means; however in 2005 there was a magic person called "*popobawa*" who was doing penetrative sex with people in magic ways." The majority of the respondents (81.7%) also disagreed with the statement that a person can be infected with HIV/AIDS virus from mosquito bites. This is almost the same as what TACAIDS *et al.* (2008) reported that at least seven in ten people know that AIDS cannot be transmitted by mosquitoes bites, and at least eight in ten people know that AIDS cannot be transmitted by supernatural means. About three-quarters of the respondents (74.6%)

agreed with the statement that a person can protect himself/herself by using condoms correctly every time he/she has sex.

In an FGD in Kisorya Village discussants said: "A person can use even five condoms in order to protect himself/herself from HIV/AIDS". "Also there is special oil for applying to condoms". URT (2005) revealed that HIV/AIDS prevention measures related to behaviour change included issues of sexual abstinence and faithfulness in sexual relations. Many people don't view abstinence as a reasonable option for prevention. Most of the people cite condom use, and in several settings it is the only preventive behaviour spontaneously mentioned. However, there are various barriers to their use including, religious beliefs, self risk perception, access to condoms and negotiation with a partner (Barker and Ricardo, 2005).

More than four-fifths of the respondents (85.2%) also agreed with the statement that HIV/AIDS can be transmitted through blood transfusion. During FGD in Kisorya youths said: "It is true for a person to be infected with HIV/AIDS by transfusion with unsafe blood" and also (46.4%) agreed that HIV/AIDS can be transmitted through romance, while (37.3%) disagreed that HIV/AIDS can't be transmitted through romance. The discussants said: "No, a person can't be infected with HIV/AIDS through romance unless his/her partner has cuts and bruises" FGD Kabasa Village.

Table 7 summaries the major findings on respondents' statements about major prevention methods which a person can do to avoid getting HIV/AIDS. Some respondents (43.7%) mentioned that fidelity is a major method of avoiding HIV/AIDS infection followed by abstinence (26.8%) and use of condoms (22.5%). Probably, this could be due to the nature of human beings that they can't abstain from sex throughout their life. ISHI (2004)

encourages youths to adopt a specific behaviour of abstaining from sex until they get married.

Table 7: Major prevention methods which a person can do to avoid getting HIV/AIDS (n=142)

Statements	Frequency	Percent
Fidelity	62	43.7
Abstaining from sex	38	26.8
Use of condoms	32	22.5
Don't know	5	3.5
Avoiding mosquitoes/insect bites	4	2.8
Avoiding sharing food with people who have HIV/AIDS	1	0.7
Total	142	100.0

More than of one - fifth of the respondents (22.5%) reported that the use of condoms was the major means of avoiding HIV infection. The results show that the majority of the respondents knew the major prevention methods against HIV/AIDS infection. From the results, fidelity is considered the most important method of avoiding getting HIV/AIDS, followed by abstaining from sex and use of condoms. These methods, particularly the first and second one, are consistent with all religious ideologies available in Tanzania. Pointing to the important roles, religious and government institutions (NGOs and CBOs) are playing part in HIV/AIDS prevention campaigns. However, the use of condoms is not supported by almost all of religious teachings as this act encourages illicit sex, be, it safe or not. However, only 3.5% of the respondents didn't know about these major prevention methods. This was consistent with Mkama (2006) who reported that the majority of his respondents knew that there was something a person could do to avoid getting HIV/AIDS.

In order to know effective ways of avoiding contracting HIV/AIDS, it is useful to be able to identify incorrect beliefs about HIV/AIDS. TDHS (1996) report shows that

encourages youths to adopt a specific behaviour of abstaining from sex until they get married.

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In order to know effective ways of avoiding contracting HIV/AIDS, it is useful to be able to identify incorrect beliefs about HIV/AIDS. TDHS (1996) report shows that

misconception about means of transmission and prevention was common in Tanzania. In order to elicit information on misconception, respondents were asked about the major transmission methods of HIV/AIDS which are specifically sharing sharp unsterilized objects, unsafe sex, mother to child transmission and transfusion with HIV/AIDS infected blood.

Table 8: Respondents' knowledge on major methods of HIV/AIDS transmission

Statements	Yes (%)	No (%)	Don't know (%)
A person can get HIV/AIDS by sharing sharp unsterilized objects	91.5	4.2	4.3
Unsafe sex	88.0	12.0	-
Mother to child	45.1	54.9	-
Transfusion with HIV infected blood.	57.0	43.0	-

The results in Table 8 show that 91.5% of the respondents knew that a person can get HIV/AIDS by sharing sharp unsterilized objects. This was followed by 88% of the respondents who knew that a person can be infected with HIV/AIDS by doing unsafe sex, and 57% of respondents who knew that a person can get HIV/AIDS through transfusion with HIV/AIDS infected blood. However, 54.9% of the respondents didn't know that HIV/AIDS can be transmitted from a mother who is infected to her child. This finding is the same as the one reported by ISHI (2004) that the most frequent mentioned modes of transmission were sexual intercourse and sharing of sharp objects like needles or razors. These findings meet the third objective of the research.

4.8 Sexual Behaviour of Youths

Sexual behaviour changed over eight years when comparing the data from the 1999 Tanzania Reproductive and Child Health Survey Report (TRCHS) and the Tanzania Demographic Health Survey (TDHS) (2004/5). Comparing risky sexual behaviour among

the youngest age group (15-19), especially young men, shows that the proportion of young people aged 15-19 who had sex before the age of 15 decreased (for young women) from 15% to 11%, but for young men it has clearly been going down.

Decisions about sexual behaviour are not always rational choices based on available information. These individuals' behavioural elements and the variations among them, are driven by wider community level factors such as social and cultural norms, and society level factors such as education levels, poverty, migration patterns, etc. There is indeed a plethora of research in and about Tanzania that shows how these factors impact on HIV transmission (TACAIDS *et al.*, 2008). In order to prevent HIV/AIDS transmission, it is important that youths practise safe sex through ABC methods (Abstinence, Being faithful to one uninfected partner, and Condoms use) (TACAIDS *et al.*, 2008).

In order to assess the sexual behaviour of youths, respondents were asked about their partners' ages, decision to have sex when they don't feel it, age at first sexual intercourse, use of condoms the first time they had sex, the relationship with the person with whom they had last sex, and number of people they had sex with for the previous twelve months before the interview. Also, they were asked if they always used condoms, if they or their partners were drunk the last time they had sex, and if they had ever had sex with commercial sex workers.

4.8.1 Ever heard about HIV/AIDS

All of the respondents (100%) had already heard about HIV/AIDS. This reveals that almost all Tanzanians have already heard about the pandemic. This indicates that the government and other institutions have done a good job on awareness creation. These results are comparable with those reported by William Fitzgerald in the first annual joint

HIV/AIDS review in Kampala, Uganda who said as follows: "Awareness on HIV/AIDS remains high among the community, but translating it into behaviour change remains difficult" (Rubagumya, 2006).

Despite these high levels of awareness, there continues to be low level of safe sex. A study conducted in Uganda by Walque (2004) revealed that unprotected sex was not initially perceived as dangerous. Despite the information about HIV/AIDS, the epidemic gradually spreading revealing the risk associated with multiple partners and unprotected sex; still there were high practices of unprotected sex.

4.8.2 Age at first sexual intercourse experiences

The period between age at first sex and age at marriage is often a time of sexual experimentation. Unfortunately, in the era of HIV/AIDS, it can also be a risky time. Age at first sexual intercourse is of particular interest given the fact that in Tanzania HIV/AIDS is mainly transmitted through heterosexual contact, and that too young people often don't think of safer and precaution measures during sexual intercourse.

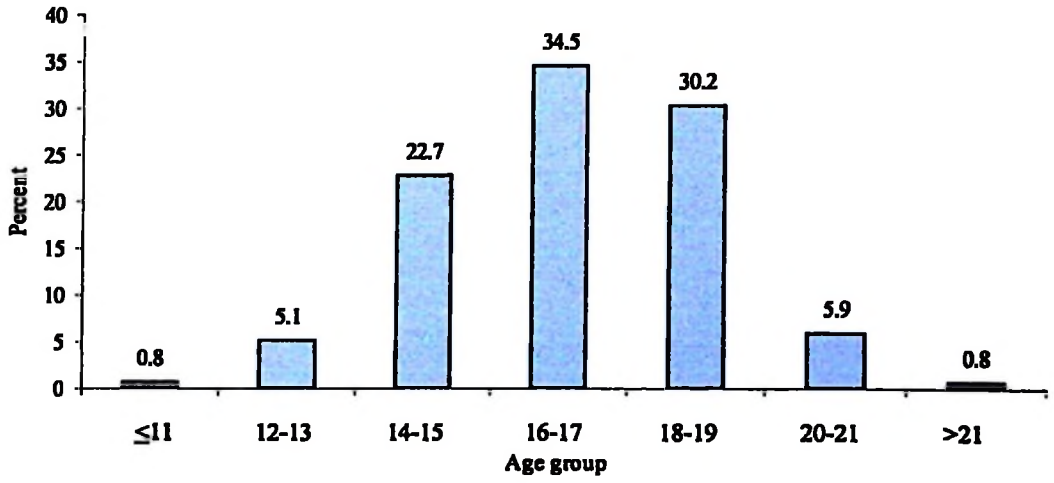

Figure 4: Respondents' ages at first sexual intercourse (n=119)

The respondents were asked about their age at the time when they had first sex. Twenty three out of the 142 respondents had not yet experienced sex. The results in Fig. 4 show that the greatest proportion of the respondents (34.5%) started sex at the age of 16-17 followed by 30.2% of respondents who started sex at the age of 18-19. This is slightly the same as the findings by ISHI (2004) which reported that more than one-third of unmarried adolescents and approximately three-quarters of unmarried young adults were sexually experienced. The median age at sexual debut was similar for young men and women at around 18.4.

Also, TACAIDS *et al.* (2005) reported that age at first sexual intercourse of women and men was almost about 17-18 years. These age groups are very risky, especially for females who are in these age groups. This is due to the fact that biologically women are at higher risks of contracting HIV/AIDS as compared to males. According to TACAIDS *et al.* (2008), youths are experiencing growth stage from childhood to the adolescence stage.

This is a period when their bodies change physiologically, and the youths become more attracted to sexual intercourse activities. This issue is very important to be taken into consideration so as to spread the information about HIV/AIDS infection for youths before they experience first sexual intercourse, taking into consideration that HIV is mostly transmitted through heterosexual contact in Tanzania (TACAIDS *et al.*, 2008).

In many sub-Sahara African countries, first sexual activity takes place before marriage. Among Kenyan women, the median age at first marriage is 18.8 years, while the median age at first sexual intercourse is 16.8 years. Data also show that four percent of Kenyan men are married by 18, although 64 percent experience sexual intercourse before that age (KDHS, 1993). In South Africa it was found that the peak of the rate of entry into sexual

relations occurs at age 18 and that younger cohorts of women are entering sexual relations at a younger age. The rate of entry into sexual relations is 14% to 20% faster for younger cohorts (McDevitt, 1996). According to Noble *et al.* (1996), by age 20, at least 80 percent of all Liberian women aged 15 to 19 have had sexual intercourse, as have 53 percent of Nigerians, 49 percent of Ugandans and 32 percent of Botswana women (Noble *et al.*, 1996). It is, therefore, important to pay more attention to younger community members on HIV/AIDS campaigns including schools and colleges.

4.8.3 Respondents' relationships with persons they had last sex with

The information on the findings about the relationship with a person whom respondents had last sexual intercourse with is presented in Fig. 5. The respondents were asked to state when they had last sexual intercourse with a husband, wife, boyfriend, girlfriend or otherwise.

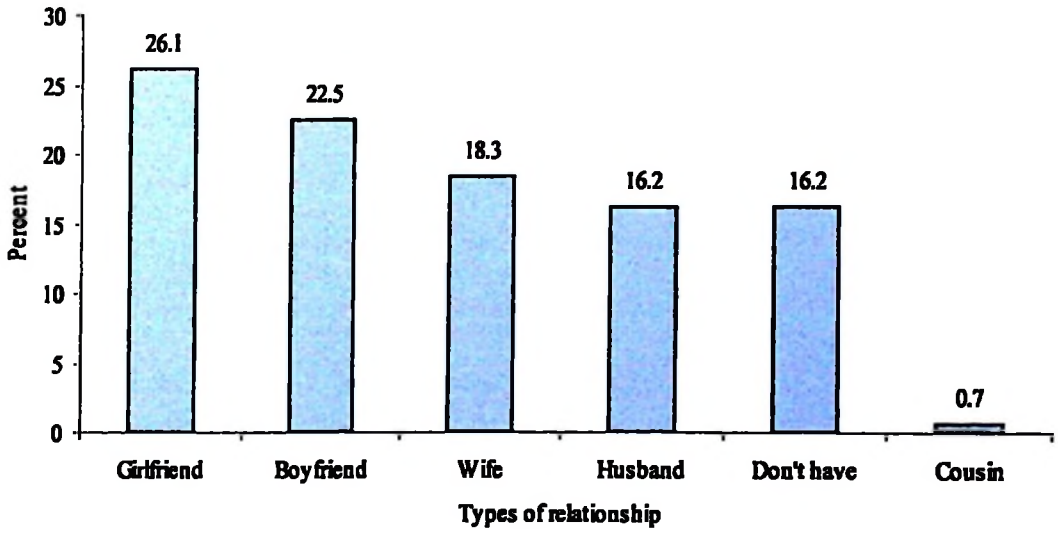

Figure 5: Respondents' relationships with persons with whom they had last sex

The results in Fig. 5 show that most of the respondents (26.1%) had sex with girlfriends, followed by boyfriends (22.5%). This implies that the majority of the respondents were having penetrative sex out of marriage or before marriage. However, there was a good number of respondents (16.2%) who had never experienced penetrative sexual intercourse; they showed a good example to other youths that abstaining from sex is possible. As expected, women and men who were married were far less likely to report having higher- risk sex than their counterparts who had never been married or who used to be married. Urban women and men were more likely to use condoms during sexual intercourse. There were large differentials by region. For example, the proportion of men who had two or more sexual partners in the twelve months before the survey ranged from 6 percent in Arusha region to almost 28 percent in Mtwara Region, (TACAIDS *et al.*, 2008).

4.8.4 The number of people with whom respondents had sex for the previous twelve months

Information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of HIV (TACAIDS *et al.*, 2008). A summary of the findings that is presented in Table 9 shows that the majority of the respondents (49.2%) of male and (64.9%) had sex with four partners in the previous twelve months followed by 15.4% of male and 14% of female respondents who had sex with four different partners. 7.7% of males and 3.2% of females had sex with two different partners. Also the results show that male respondents had ability to sex with different partners compared with their counter parts. This is the same as (TACAIDS *et al.*, 2008) which reports that women are far less likely than men to report having had two or more sexual partners in the previous twelve months.

Table 9: Number of people with whom the respondents had sex for previous twelve months

Number of people	Male Frequency	Percent	Female Frequency	Percent
2	5	7.7	2	3.5
4	32	49.2	37	64.9
5	10	15.4	8	14
6	4	6.2	4	7
7	4	6.2	5	8.8
9	3	4.6	1	1.8
10	2	3.1	-	-
12	1	1.5	-	-
15	1	1.5	-	-
Total	**65**	**100**	**73**	**100**

Mkama (2006) also reported that two-thirds of his respondents had regular partners with whom they had been having sex for a year. He also reported that females had only one regular sexual partner than their counter parts. The results also showed that there were some individuals who still had more than one partner for their sexual intercourse which is very dangerous for their health in this world of the HIV/AIDS epidemic. This calls for more education to communities on dangers of multiple sexual partners on HIV/AIDS spread.

The future direction of HIV/AIDS depends, to a large part, on the level of knowledge of how the virus is spread and consequently in sexual behaviour change. Given the evidence that the vast majority of HIV infections in Tanzania are contracted through heterosexual contact, information on sexual behaviour change is important in designing and monitoring intervention programmes to control the spread of the disease (TACAIDS *et al.*, 2008).

4.8.5 Age differences between sexual partners

A wide gap in age between partners can lead to an imbalance in decision making and put pressure on the younger partner. Age gaps also tend to increase marital instability. This is especially true among young people. Older men who take up sexual relationships with younger women have been nicknamed "sugar daddies" (TACAIDS *et al.*, 2008).

The maximum and minimum ages of respondents were 15 and 24 years respectively. The mean was 20.42. More than one fourth (25.4%) of respondents had sex with a partner of age differences between 36 years. About one thirty (2.8%) had sex with partners of age differences between four years. About one tenth (10.6%) had sex with partners of age differences between fifteen years. Results revealed that there is big variation of age between sexual partners.

Table 10: Age differences between sexual partners

	Frequency	Percent
	14	9.9
	4	2.8
	12	8.5
	15	10.6
	9	6.3
	17	12.0
	9	6.3
	9	6.3
	17	12.0
	36	25.4
Total	142	100.0

Most of the youths were having sex with partners older than them. This is an important aspect of getting HIV/AIDS infection if a person experiences sex at a young age, especially for females who are at high risk of getting the infections (TACAIDS *et al.*, 2008).

Along with the postponement of first sexual intercourse, early and consistent use of condoms is a means of preventing youths from becoming infected with HIV (TACAIDS *et al.*, 2008). The results in Table 11 show that 45.8% of the respondents didn't use condoms at first sexual intercourse. During FGD in Kisorya village youths reported as follows:

"It is difficult for men and boys to use condoms at the time of removing virginity of a girl, most girls and boys do not use condoms for the first time." This implies that most of youths were not using condoms at the first time they had sex. "Youths are not using condoms for the first time they experience sex, and if they use condoms they are not using them properly. "This unsafe sex behaviour can expose youths to be infected with HIV". "Some youths, if they see a girl who has a good body structure, they are convinced not to use condoms when they sex with that girl."

Table 11: Respondents' behaviour towards sexual intercourse

Statements	Yes	No	Don't know	Not yet engaged in sexual intercourse
Whether the respondent can say No to having sex when he/she doesn't feel like doing so have	64.3	27.1	8.6	0.0
Whether the respondents used condoms when he/she lastly had sex.	38.7	45.8	3.5	12.0
Always uses condoms when he/she has sex.	38	46.5	0.7	14.8
Respondents' partners were drunk the last time they had sex	7.7	76.8	2.1	13.4
For females respondents if any one forced them to have sex	16.8	75.8	7.4	0.0
Wife justification to refuse to have sex with their husbands if they know that they have STDs	47.9	42.3	9.8	0.0
If women are justified to ask their husbands to use condoms if they have STDs	69.7	24.0	6.3	0.0
If respondents ever had sex with commercial workers	9.2	86.6	4.2	0.0

During FGD in Guta Village youths reported that: "Some people convince youths not to use condoms by saying that there is more pleasure if a person sexes without condoms." It seems that peer pressures also forced the youth to practise unsafe sex. During FGD in Kabasa Village the discussants said. "People can start sex by using condoms, but when they get used to each other they stop using condoms". This is unsafe sex whether persons are used or not used to each other; infections are there provided that one or both of the partners have been infected with HIV.

During FGD in Nyatwali Village, it was reported that most youths had more than one sexual partner. The discussants said: "Some youths believe that condoms cannot protect them against HIV/AIDS". This is a misbelief because there is a scientific proof that condoms can protect a person from HIV/AIDS infection if he/she uses them properly. There is a slogan which says: "Death is death" "God help". This is a bad slogan; death is death, but it has negative effects to the society, and if there is an alternative for a person to protect himself/herself against a certain type of death why not. In Guta Village the discussants said: "In spite of campaigns against HIV/AIDS, the majority of youths engage themselves in unsafe sexual activities". During FGD in Kisorya Village the discussants said: "If a boy loves a girl, and that girl refuses to have sexual relationship with that boy for a long time, when it happens that, that girl agrees to sex with the boy, the boy will not use a condom."

During FGD at Kabasa Village the discussants said: "There are temptations such as a girl having sexual relationship with older men *'fataki'* at the same time with young boys 'serengeti boys' to have relationship with older women for exchanges of money and gifts such as mobile phones". This shows that young girls are exposed to high risk of getting HIV/AIDS due to the fact that when they have sex for the first time they will experience cuts and bruises so the blood will come out of these cuts and bruises; and also young boys are exposed to high risk of getting HIV/AIDS due the fact that they have no power of negotiating for safer sexes when they sex with older women because they are sexing for exchange for money and gifts. This is also another important possibility of getting HIV/AIDS infection (TACAIDS *et al.*, 2008). Although the data in Table 11 indicate that a number of risky behavioural elements prevail in Bunda community; for example lack of condom use, forced sex, and drunkard partners; wives are not able to refuse sex if their husbands have STDs. Probably this could be due to the fact that most of married women

do not have power to negotiate for safer sex with their husbands. The results in sections 4.8.1 to 4.8.7 meet objective number four.

4.8.6 Respondents' attitude about use of condoms

In order to know about attitude towards condom use, the respondents were asked several questions, and the results are summarised in Table 12.

4.8.7 Attitude on individual statements

Condom use among young people plays an important role in the prevention of transmission of HIV/AIDS and other sexually transmitted infections as well as unwanted pregnancies. In literature, proper condom use is an effective method of prevention of HIV/AIDS transmission, unwanted pregnancies, STDs and that is the best way for those who cannot abstain from sex (NACP, 1999; Kegeles *et al.*, 1988).

A Likert scale was used to determine the attitudes of respondents about their beliefs towards condoms use. According to the results presented in Table 12, most of the respondents (59.2%) supported the statement that condom use is like eating sweets with a wrapper because it reduces sensitivity and pleasure. "Pleasures are not equal" may be this is true because to some extent it reduces sensitivity and pleasure taking into consideration that a condom is artificial and is a new technology which was not there in the past before the advent of HIV/AIDS. And if this technology was there, it was used by few people for protection against pregnancies and STDs which were not dangerous compared to HIV/AIDS, and use of condoms was not promoted as it is nowadays. Probably, due to condom promotion, the majority of respondents had tried to use condoms and experienced the difference. This statement is contrary to what Mkama (2006) reported that 42.5% of

his respondents were not sure of the truth of the statement that condom use is like eating sweets with a wrapper as it reduces sensitivity and pleasure.

However, the notion of likening condom use with eating sweets in a wrapper needs education on compromising death (HIV/AIDS acquisition) with a bit loss of sensation during a short period of sexual intercourse. The majority of the respondents agreed that condoms easily break while having sex. However, during an FGD in Kisorya Village, the discussants reported vice-versa; they said: "condoms do not break easily while having sex". Probably this could be because they didn't know how to use them properly or they had wrong perception about condoms. Also, the majority of the respondents agreed that some young women believe they need men's sperms because it is nourishment that makes them grow hips and breasts. During FGD in Kabasa Village the discussants reported as follows: "It is true that women need men's sperms because if a girl starts to have sex her body structure changes; she grows big breasts and hips". There is no evidence whatsoever that young women need the sperms of men to develop their female attributes (Mkama, 2006). In fact this is not true as they don't take into consideration the fact that if a woman continues to grow also hips and breasts continue to grow. However, it is not applicable for all women to continue growing hips and breasts.

The majority (45.8%) of the respondents disagreed with the statement that using condoms is sinful and is against God's wishes, according to some denominations' preachings. "They say there is no sin mentioned in the Ten Commandments of the bible about condoms use. However, to commit adultery is sinful and is against Gods wishes". Probably, this is true because condoms as condoms are not a sin. However, sexing with condoms outside marriage is a sin, according to religious beliefs. This agrees with

(Mkama, 2006) who reported that the majority of his respondents disagreed that condoms use is sinful against God's wishes, according to religious beliefs.

The results show that the majority of the respondents (69.0%) disagreed that HIV/AIDS can be transmitted through condoms, since condoms have small holes. Also, in FGD in Kabasa Village they disagreed by saying: "There is scientific proof that condoms are safe". The results in Table 12 show that the respondents (93.7%) agreed that condom use can protect a person from being infected with STDs. During FGD in Guta Village youths reported thus: "It is true condoms can protect a person from STDs". This is true due to scientific proof about condoms protection against STDs and people who used condoms while sexing found themselves not infected with STDs.

The majority of the respondents agreed that condom use can protect a person against HIV/AIDS infection. During FGD in Guta Village the youth reported that "Condoms can protect a person against HIV/AIDS if he/she uses them properly". Probably this can be true due to scientific proof, and nowadays people are more knowledgeable about advantages of condom use. Balk *et al.* (1999) reported that if condoms are correctly used, and if they are not torn or broken they can prevent pregnancy, sexually transmitted diseases, and HIV/AIDS.

Table 12: Respondents' attitude towards use of condoms in percentage (n=142)

Attitudinal statements	Disagree	Undecided	Agree
Condom use is like eating sweets with a wrapper because it reduces sensitivity and pleasure	32.4	8.5	59.1
Condoms easily break while having sex	24.6	14.1	61.3
Some young women believe they need men's sperms because it is nourishment that makes them grow hips and breasts	24.0	22.5	53.5
Using condoms is sinful and against God's wishes according to religion	45.8	12.0	42.2
HIV can be transmitted through condoms; others have small holes	69.0	21.0	10.0
Condoms use can protect a person against being infected with STDs	4.2	2.1	93.7
Condoms use can protect a person against infections with HIV/AIDS	12.0	3.5	84.5
Condoms use can protect a woman against unwanted pregnancy	1.4	18.3	80.3
Condoms use enhances sanitation during sexual intercourse	12.7	20.4	66.9
Condoms increase income through manufacturing and selling them	7.8	4.9	87.3

About four-fifths of the respondents (80.3%) agreed with the statement that condom use can protect a woman against unwanted pregnancy. Also during FGD in Kabasa Village youths reported: "Condoms can protect a woman or a girl against unwanted pregnancy and enhances sanitation during sexual intercourse, and also income can be generated through manufacturing and selling of condoms". Therefore, in summary, most respondents had a positive perception on condom use; hence the potential of safe sex using this method was high indicating success of HIV/AIDS campaigns. However, there were cases of divided opinions especially on sinfulness of using condoms.

4.8.8 Overall attitudes towards condoms use

The respondents were asked about the use of condoms. The maximum and minimum points scored on an attitudinal scale about condom use were 47 and 26, respectively. The mean was 38.7. Then determination of overall attitude towards condom use was grouped into favourable (31-50), neutral (30) and unfavourable (10-29) points scored.

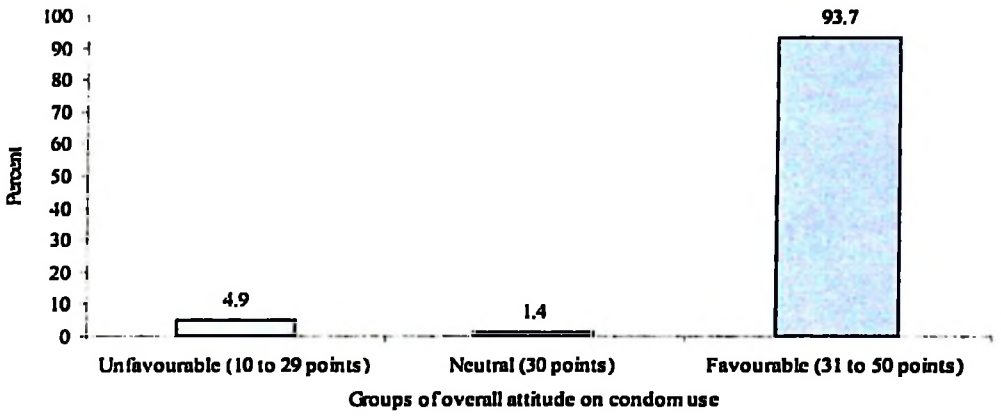

Figure 6: Groups of overall attitude on condom use

The results in Fig. 6 show that the majority of respondents (93.7%) had favourable attitude towards condom use. Probably this could be due to the scientific proof of condoms use that if a person uses condoms correctly he/she protects herself/himself from HIV/ADS, STDs and unwanted pregnancies.

However, some of the respondents (4.9%) had unfavourable attitude towards condom use. This implies that more information about condom use is still required in the society, especially for the youths due to the fact that some of them are growing from childhood to the adolescence stage. At the same time when they are undergoing growth they need important information about HIV/AIDS including condom use so as to protect themselves against HIV/AIDS. TACAIDS *et al.* (2008) reported that, with the

postponement of first sexual intercourse, early and consistent use of condoms is a means of preventing youths from becoming infected with HIV.

In addition to that, 1.4% of the respondents had neutral attitude towards condom use. Probably this could be due to the fact that they didn't receive enough information on condom use in order to protect themselves from HIV/AIDS. Information obtained from

key informants showed that there was a high rate of condom use in Bunda District although people liked to use some types of condoms such as dume, raha, salama and other types which were sold at 100 to 200 Tshs per set of three condoms.

The major challenges on HIV/AIDS prevention in Bunda Districts were abstinence and fidelity. Youths and other people were not stopping having sex at all. There was no faithfulness among partners. However, some people used condoms as their alternative source of HIV/AIDS prevention. According to different statistics available in Bunda District the new infection rate of HIV/AIDS was 4.8% and the people who were most affected were between the age 15 to 54 years.

4.9 Correlation Results

The relationship among various factors involved in the transmission of HIV/AIDS is important in making decision on control measures to reduce or eliminate the epidemic. The relationships among the factors are presented in Table 13. The results showed that overall attitude towards campaigns against HIV/AIDS and sexual behaviour had positive correlation ($r = 0.711$) which was highly significant at the 0.1% level. This implies that the more the youths had information about HIV/AIDS through campaigns the more they were involved in sex. This could be dangerous if they had unsafe sex.

Table 13: Pearson correlation results

Variables correlated		r-value	p-value
Overall attitude towards campaigns against HIV/AIDS	Overall sexual behaviour	0.711(**)	0.000
Overall attitude towards use of condoms	Overall awareness about HIV/AIDS among the youths	0.236(**)	0.005
Overall attitude towards campaigns against HIV/AIDS	Overall attitude towards use of condoms	0.190(*)	0.024

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

However, since the campaigns had good messages for protection against HIV/AIDS, it is very likely that they had safe sex. This likelihood is further denoted by the finding that the youths had high attitude towards condom use and had high awareness about prevention and transmission of HIV/AIDS. Other correlations findings are as seen in Table 13. This finding meets the hypothesis of the research. In this case the null hypothesis that there is no statistically significant correlation between attitude towards campaigns against HIV/AIDS and sexual behaviour is rejected and the alternative hypothesis is confirmed.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Many respondents had information which they got through radios, TVs, newspapers/magazines, meetings, and health workers like to watch and hear slogans from TVs and radios for example they saw the slogans like "fataki" and watched femina TV talk show. On the other hand the poorest source of information was community AIDS group, posters and pamphlets. Their access to those information pieces implies that most people, including youths of Bunda District, are well informed about HIV/AIDS campaigns.

The attitude of youths towards campaigns against HIV/AIDS was positive. Most of them accepted and agreed to use condoms; they did not support the negative statements of some people who claim that HIV/AIDS campaigns stimulate people to engage more in sexual activities. This implies that the youths of Bunda District valued campaigns against HIV/AIDS although their sexual behaviour did not change commensurately.

The level of awareness about HIV/AIDS among youths was high. For example they knew that a healthy looking person could have HIV/AIDS. They said that an individual can protect him/herself from HIV/AIDS infection through those means of protection like by having one uninfected partner, or abstaining from sex or use condoms. This shows that most of the youths in Bunda District have got education on HIV/AIDS prevention, transmission and its control.

Regardless of the good knowledge about HIV/AIDS which they got from different campaigns, some youths of Bunda District have bad and unsafe sexual behaviour. This was shown by the findings on the overall sexually behaviour which showed that 38.7% of the youths had worse sexual behaviour. They started practising sex at early age of 16 to 17 and didn't use condoms at the first time. Also, young girls had sexual relationships with older men, while boys had relationship with older women. This implies that there are other factors such as peer pressure, low level of income and temptations for money. The older partners give monetary incentives to the younger ones.

The correlation between attitudes towards campaigns against HIV/AIDS and sexual behaviour was positive ($r = 0.944$) and highly significant at the level of 0.1% ($p = 0.000$). This implies that the youths of Bunda District practise unsafe sex while they really know its adverse effects of HIV/AIDS infection.

5.2 Recommendations

Based on the conclusion, the recommendations summarised below are given in order to improve HIV/AIDS campaigns for control HIV/AIDS.

5.3 Policy level recommendation

Due to unsafe sex of youth with old people, while they really know its impact, the government should include rules or by laws in the HIV/AIDS policy on the issue of old men who make sex relationship with young girls "fataki," and old women who make sex relationship with young boys. The "fataki" people and the like should be severely punished based on new laws to be enacted.

5.3.1 District level recommendations

Apart from the youths in Bunda District having knowledge on HIV/AIDS, still they are engaged in unsafe sexual behaviour. The District leaders should be initiative on creating different opportunities, where the youths can be placed. For example, the information of different income generating groups and creation of social groups which address HIV/AIDS issues. These organizations should be at village, ward, division level and district levels.

In view of the conclusion that the youths of Bunda District practise unsafe sex while they really know its adverse effects, it is recommended that the campaigns against HIV/AIDS should be intensified so that more youths can abide by the campaign messages to avoid HIV infection and infection.

5.3.2 Community level recommendation

Some youths engage in unsafe sex with different partners for the sake of money and other gifts. This situation can be eliminated by parents and the community at large, through education about HIV/AIDS at family level, then at community level. Also, parents should make sure that their children (boys and girls) are satisfied with their basic needs so that they are not tempted to engage in sex for monetary and non-monetary incentives.

5.3.3 Youths level recommendation

The general economic status of youths in Bunda District is low, that is why they sometimes engage in unsafe sex, particularly girls and women, looking for money. For this case, youths should be engaged in different income generating activities because an idle mind is a devil workshop.

5.3.4 Recommendation for further research

There are many strategies in coping HIV/AIDS which are done by NGOs; still the problem of AIDS among youths remains. Therefore, further research by various organisations or individuals can be conducted on the contribution of cellular phones and Internet cafés (phonographic websites) in the spread of HIV/AIDS among the youths.

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APPENDICES

Appendix 1: Operational definitions and measurement of variables used

Background variables	Operational definitions	Level of measurement	Unit or measurement
Age	Number of years since one was born	Ratio	Number of years
Sex	Biological difference between male and female	Nominal	1 Male 2 Female
Religion	Religious faith of a respondents	Nominal	Protestant, Roman Catholic, Muslim other specify
Marital status	Having a spouse or not	Nominal	1 Married, 2 Single 3 Divorced, 4 Widowed
Ethnic group	Group relationships	Nominal	1. Jita 2. Kurya 3. Sukuma 4. Others
Main occupation	A person's regular work	Nominal	Farmer, civil servant, business, others (specify)
Culture	The constitution of the shared basis of social action such as beliefs, ideas, values and knowledge	Nominal	Different types of culture
Independent variables - Abstinence	To refrain from doing sex	Nominal	1. Yes 2. No
- Fidelity	Faithfulness to one's spouse or lover.	Nominal	1. Yes 2. No
- Mass media	Messages delivered to many people through radio, TV, newspapers, leaflets, etc.	Nominal	Types of mass media
- Culture change	Changes in cultural activities which influence HIV/AIDS risk behaviour.	Nominal	1. Yes 2. No
Political will	Policy making involved in HIV/AIDS campaigning	Nominal	Types of policies made
Knowledge about HIV transmission	Respondents' basic knowledge on the mode of HIV/AIDS transmission	Nominal	Types of knowledge acquired
Sexual partnership	Having sexual relationship with a person or more than one person	Nominal	1. Yes 2. No
Condom use	The use of an elastic sheath worn on the penis during sexual intercourse to prevent conception or infection like HIV/AIDS	Nominal	1. Yes 2. No
Attitude towards sexual behaviour change	Number of points scored on statements implying having favourable or unfavourable views about sexual intercourse and practices	Ratio	Actual number of points scored
Abstaining from sex	Not doing sexual intercourse	Nominal	1. Yes 2. No
Abstaining from sex is an effective way of avoiding HIV transmission	Avoiding sexing is an effective way of avoiding HIV transmission	Nominal	1. Yes 2. No
Positive views about HIV/AIDS campaign messages	Positive attitude towards HIV/AIDS campaigns messages	Nominal	1. Yes 2. No

Appendix 2: Questionnaire for Research on Effectiveness of HIV/AIDS Campaigns on Sexual Behaviour among the Youths in Bunda District, Tanzania

Respondent No.....

SOKOINE UNIVERSITY OF AGRICULTURE

DEVELOPMENT STUDIES INSTITUTE, P.O. BOX 3024, MOROGORO

A Questionnaire for Research on Effectiveness of HIV/AIDS Campaigns on Sexual Behaviour among the Youths in Bunda District, Tanzania

By

Zilipa Zabron Lukuba

Introduction

Goodmorning/Goodafternoon

My name is .....from Development Studies Institute of the Sokoine University of Agriculture, Morogoro. I am carrying out a study in Bunda District concerning the effectiveness of HIV/ AIDS Campaigns on sexual behaviour among the youths. You have been selected randomly among other youths from which data will be treated confidentially and used for the purpose of only this study. Therefore, please respond faithfully to the best of your knowledge.

1. Location
   Region .....
   District.....
   Ward .....
   Street/Village.....

SECTION A. BACKGROUND INFORMATION

1. What is your age? [ ] years
2. Sex of respondent
   1 = Male
   2 = Female
3. What is your ethnic group? .....

4. Marital status
   1 = Single.
   2 = Married
   3 = Divorced
   4 = Widow/widower
   5 = Separated
   6 = Living together
   7 = Other (specify)

5. What is your highest education level attained?
   1 = None
   2 = Primary school
   3 = Secondary
   4 = College
   5 = Other (specify)
6. Years of schooling .....

7. Religion
   1 = Roman Catholic
   2 = Protestant
   3 = Muslim
   4 = Traditional
   5 = SDA
   6 = Others (specify).....

8. What is your main occupation?
   1 = Farmer
   2 = Civil servant
   3 = Business.
   4 = Pupil
   5 = Others (specify)

SECTION B: DOCUMENTATION OF THE MAIN MESSAGES OF CAMPAIGNS AGAINST HIV/AIDS.

9. Have you ever heard about HIV/AIDS?
   1 = Yes [ ]
   2 = No [ ]

10. Through which media of information have you learned about HIV/AIDS for the past 6 months?

	Yes	No
1 = Radio	[ ]	[ ]
2 = T.V	[ ]	[ ]
3 = Newspapers/Magazines	[ ]	[ ]
4 = Pamphlets/ Posters	[ ]	[ ]
5 = Meetings	[ ]	[ ]
6 = Other (specify.....		

11. Which are the main community based sources of information you learned about HIV/AIDS?

1= Community AIDS group	[ ]	[ ]
2 = Healthy workers	[ ]	[ ]
3 = Doctor/Hospital	[ ]	[ ]
4 = Peer educator	[ ]	[ ]
5 = Parents/Relatives/Siblings/Guardians	[ ]	[ ]

12. What is the type of information you received when you heard about HIV/AIDS information?
   1 = Education on transmission [ ]
   2 = Voluntary counselling and testing [ ]
   3 = Prevention messages [ ]
   4 = Others (specify).....

SECTION C: ATTITUDES OF YOUTHS TOWARDS CAMPAIGNS AGAINST HIV/AIDS

13. Please state whether you agree or disagree with the following statements. In either case state whether you just agree/disagree or strongly agree/disagree or undecided.

	Connotation	Strongly Agree (1)	Agree (2)	Undecided (3)	Disagree (4)	Strongly Disagree (5)
1. Through HIV/AIDS campaigns, youths practice proper use of condoms in prevention of HIV/AIDS epidemic	+					
2. HIV/AIDS campaigns methods stimulate people to engage in sexual activities	-					
3. Most of the HIV/AIDS campaigns methods can be obtained more easily in towns than in the villages	-					
4. Through HIV/AIDS campaigns, youths are not practising sex. .	+					
5. Through HIV/AIDS campaigns youths get awareness on prevention methods and mode of HIV/AIDS transmission.	+					
6. HIV/AIDS campaigns are free of charge and easily accessible by youths.	+					
7. HIV/AIDS campaigns use clear and simple language understood by the majority	+					
8. Campaigns against HIV/AIDS cannot succeed because sex is so enjoyable that it is impossible to abstain.	-					
9. HIV/AIDS campaigns messages are not selective; young children also get the messages	-					
10. HIV/AIDS campaigns do not provide detailed explanation on proper use of condoms	-					
Overall Attitude (Total)						

14. Have you ever heard or seen the slogan "Fataki"?

1= Yes [ ]
2 =No [ ]
3 =Don't know [ ]

15. Have you ever watched the TV's talk show "Femina" in the twelve months ago?

1=Yes [ ]
2 =No [ ]
3 =Don't know [ ]

16. Organisations which deal with HIV/AIDS
    1. Communities
    2. NGO's
    3. Health Institutions
    4. Governments
    5. CBO's
    6. Schools and colleges
    7. Others (specify)

17. (a) Which organisations are associated with HIV/AIDS prevention campaigns?
    Mention
    1.....
    2.....
    3.....

    (b) Have you ever attended or heard their campaigns meetings?
    1 = Yes
    2 = No

18. What messages have you heard from HIV/AIDS campaigns?
    1.....
    2.....
    3.....

19. Among the campaigns messages which ones do you practice? Mention
    1.....
    2.....
    3.....

Section D: TO ASSESS THE LEVEL OF AWARENESS ABOUT HIV/AIDS AMONG THE YOUTHS

Statements used to measure awareness	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. Nothing a person can do to avoid getting HIV/AIDS.					
2. A healthy looking person cannot have HIV/AIDS.					
3. A person can protect himself/herself from HIV/AIDS by having one uninfected sex partner who has no other partners.					
4. A person can be infected with HIV/AIDS through supernatural means.					
5. A person can be infected with HIV/AIDS virus from mosquito bites.					
6. A person can protect himself/herself by using condoms correctly every time he/she has sex.					
7. People can protect themselves from getting HIV/AIDS by not having sex at all.					
8. HIV/AIDS can be transmitted from a mother to a child.					
9. HIV/AIDS can be transmitted through blood transfusion.					
10. HIV/AIDS can be transmitted through romance?					

20. State one major prevention method that a person can do to avoid getting HIV/AIDS

1 = Abstaining from sex	[ ]
2 = Fidelity	[ ]
3 = Use of condoms	[ ]
4 = Avoiding mosquitoes/insects bites	[ ]
5 = Avoid sharing food with people who have HIV/AIDS	[ ]
6 = Others	[ ]
7 = Does not know	[ ]

21. Can HIV/AIDS be transmitted by sharing sharp objects without sterilizing them?

1 = Yes	[ ]
2 =No	[ ]
3 =Don't know	[ ]

22. Among the listed methods, what is the major method of HIV/AIDS transmission?

	Yes	No
1=Unsafe sex	[ ]	[ ]
2 = Sharing Unsterilized sharp objects	[ ]	[ ]
3 =Mother to child	[ ]	[ ]
4 =Transfusion with HIV infected blood.	[ ]	[ ]

SECTION E: SEXUAL BEHAVIOUR OF YOUTHS.

23. How old is your husband /wife/partner?

0 = Don't have	[ ]
2 = Don't know	[ ]
3 = Age difference of zero to five years	[ ]
5 = age difference of more than five years difference	[ ]

24. If you have relationship can you say "No" to have sex when you do not feel it?

0 = Yes	[ ]
0 = Not yet	[ ]
3 = Don't know	[ ]
5 = No	[ ]

25. How old were you when you had first sexual intercourse?..... years

0 = Not yet
2 = 18 and more than 18 years
5 = Below eighteen years

26. Did you use a condom the first time you had sex?

2 = Yes	[ ]
3 = Don't know	[ ]
5 = No	[ ]

27. What was the relationship with the person with whom you lastly had sex? .....

0 = Don't have, husband, wife
3 = Girlfriend, Boyfriend
4 = Cousin
5 = Commercial workers

28. How many people did you have sex with for the last twelve months? .....

29. Do you always use condoms?
    0 =Yes [ ]
    5 = No [ ]

30. Were you or your partner drunk the last time you had sex?

    0 = No [ ]
    3 =Don't know [ ]
    5 =Yes [ ]

31. Have you ever had sex with commercial workers?
    0 =No [ ]
    3 =Don't know [ ]
    5=Yes [ ]

32. If Yes
    why?.....
    ...

33. If No
    why?.....

34. Is the wife justified to refuse having sex with her husband when she knows he has a disease that can be transmitted through sexual contact?
    1=Yes [ ]
    2 No [ ]
    3 =Don't know [ ]

35. Do you think a woman in the same circumstances is justified in asking her husband to use condoms?
    1=Yes [ ]
    2 =No [ ]
    3 =Don't know [ ]

Appendix 3: Attitudes and beliefs among youths towards use of condoms: say whether you strongly agree, agree, undecided, disagree or strongly disagree

S/No	Item	Connotations	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	Condoms use is like eating sweets with a wrapper because it reduces sensitivity and pleasure	–					
2.	Condoms easily break while having sex.	–					
3.	Some young women believe they need men's sperms because it is nourishment that makes them grow hips and breasts	–					
4.	Using condoms is sinful and against God's wishes according to religion	–					
5.	HIV can be transmitted through condoms: others have small holes.	–					
6.	Condoms use can protect a person to be infected with STD's	+					
7.	Condoms use can protect a person against infections with HIV/AIDS	+					
8.	Condoms use can protect a woman against unwanted pregnancy	+					
9.	Condoms use enhances sanitation during sexual intercourse	+					
10.	Condoms increase income through manufacturing and selling them	+					

Appendix 4: Guidelines For Focus Group Discussion (FGD's)

A: Attitude of youths towards campaigns against HIV/AIDS

1. Through HIV/AIDS campaigns do youths practice proper use of condoms for safer sex?
2. Are HIV/AIDS campaigns methods stimulate people to engage in sexual activities?
3. Do most of HIV/AIDS campaigns methods can be obtained more easily in town than in villages?
4. Do youths practicing safer sex through HIV/AIDS campaigns?
5. Do youths get awareness on prevention methods and mode of HIV/AIDS transmission through HIV/AIDS campaigns?
6. Are HIV/AIDS campaigns free of charge and easily accessable by youths?
7. Do HIV/AIDS campaigns use clear and simple language understood by majority?
8. Are HIV/AIDS campaigns selective?
9. Do HIV/AIDS campaigns provide detailed explanation on proper use of condoms?
10. Do campaigns against HIV/AIDS cannot succeed because sex is so enjoyable that it is impossible to abstain

B: Assessment of level of awareness about HIV/AIDS among the youths

1. Is there anything a person can do so as to avoid getting HIV/AIDS?
2. Can a healthy looking person does not have HIV/AIDS?
3. Can a person protect himself or herself from HIV/AIDS by having one uninfected sex partner who has no other partners?
4. Can a person be infected with HIV/AIDS through supernatural means?
5. Can a person be infected with HIV/AIDS virus from mosquito bites?
6. Can a person protect himself/herself by using condoms correctly every time he/she has sex?
7. Can people protect themselves from getting HIV/AIDS by not having sex at all?
8. Can HIV/AIDS be transmitted from mother to a child?
9. Can HIV/AIDS be transmitted through blood transfusion?
10. Can HIV/AIDS be transmitted through romance?

C: Attitudes and beliefs among youths towards use of condoms.

1. Is condom use like eating sweets with a wrapper because it reduces sensitivity and pleasure?
2. Do condoms easily break while having sex?
3. Do young women believe they need men's sperms because it nourishment that makes them grow hips and breasts?
4. Are condoms uses sinful and against God's wishes according to religion?
5. Can HIV/AIDS transmitted through condoms: others have small holes.
6. Can condoms use protect a person against infections with STD's?
7. Can condoms use protect a person against infections with HIV/AIDS?
8. Can condoms use protect a woman against unwanted pregnancy?
9. Can condoms use enhance sanitation during sexual intercourse?
10. Do condoms increase income through manufacturing and selling them?

Appendix 5: Guidelines for Key Informants' Interviews

Questionnaire on effectiveness of HIV/AIDS campaigns on sexual behaviour among the youths in Bunda District Tanzania.

Basing on your experience of working in this hospital as a Medical officer where research on effectiveness of HIV/AIDS campaigns on sexual behaviour among the youths in Bunda District Tanzania is being carried out, you are requested to provide information to supplement that which will be obtained youths. All of the information will be treated confidentially and will be used for the purpose of this study.

SECTION A: BACKGROUND INFORMATION

1. Sex of respondent [ ]
   1. Male
   2. Female
2. Highest professional qualifications [ ]
   1. Certificate
   2. Diploma
   3. Advanced Diploma
   4. Degree
   5. Other (Specify)
3. What is your field of qualifications?

SECTION B: CAMPAIGNING ABOUT HIV/AIDS AMONG THE YOUTHS

4. Does your hospital provides service concerning with HIV/AIDS?
   1. Yes
   2. No
5. How many days per week does your hospital provide the service?
6. Are you campaigning to individual especially youths about HIV/AIDS?
   1. Yes
   2. No
7. If yes, what are the main messages of your campaigns?
8. How do these youths response concerning campaigns messages?
9. Do they use condoms?
10. Do you provide condoms?
11. What are your views on government campaigns?