

**COMMUNITY ATTITUDES TOWARDS PREVENTIVE MEASURES FOR  
HIV/AIDS INFECTIONS IN MOROGORO MUNICIPALITY, TANZANIA**

**BY**

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**ABSTRACT**

A study to assess community attitudes towards HIV/AIDS prevention was conducted in Morogoro municipality, Tanzania, between November 2007 and January 2008. A total of 100 randomly selected households were included in this study, located in five wards randomly selected from the 19 wards of the municipality. Data were collected using questionnaire interviews and focus group discussions (the latter conducted in a different subpopulation). Data were analysed using statistical package for social sciences (SPSS) version 11.5, whereby eigenvalues for key statements were computed following data reduction/ Principal Component Analysis. The study revealed high knowledge of the community on HIV/AIDS. The community had positive attitudes towards HIV/AIDS preventive measures except the use of condoms. Factors that hindered the use of HIV/AIDS preventive measures included alcoholism, low knowledge on some preventive measures e.g. the use of condoms, economic factors, drug abuse, marital status, religion and emotional factors. The study recommends promotion of HIV/AIDS control strategies that are accepted by the community. Further studies are needed to assess whether the accepted strategies are implemented by the community.

**DECLARATION**

I, PAULINE ELIAS KYUNGA, do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own original work and has not been nor concurrently being submitted for a higher degree award in any other University.

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## **DEDICATION**

This dissertation is dedicated to my beloved parents the late Elias Mvunjakambi Kyunga (1990) and Tumwidike Ulanda Lukwale, my brother Ezekiel Elias Kyunga and his family who laid the foundation of my education and whose support and care have made a person in me today.

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**LIST OF ABBREVIATIONS**

AIDS - Acquired Immuno Deficiency Syndrome

DHS - Demographic and Health Survey

DS- Development Studies

DSI – Development Studies Institute

e.g. - For example

FAWE – Forum for Women Educationists

FGD – Focus Group Discussion

GPA – Global Programme and AIDS

HIV - Human Immune Deficiency Virus

i.e. - That is

Ltd- Limited

MRH- Morogoro Regional Hospital

NACP – National AIDS Control Programme

NGO - Non- Governmental Organizations

PCA – Principal Component Analysis

RAWG- Research and Analysis of Working Group

SPSS – Statistical Package for Social Sciences

STD/STI – Sexual Transmitted Diseases/ Infections

SUA-Sokoine University of Agriculture

TACAIDS – Tanzania Commission for AIDS

UK- United Kingdoms

UNAIDS – Joint United Nations Programme on AIDS

URT – United Republic of Tanzania

USA - United States of America

VCT - Voluntary Counseling and Testing

WHO – World Health Organization

## **CHAPTER ONE**

### **1.0 INTRODUCTION**

#### **1.1 Background information**

Acquired Immune Deficiency Syndrome (AIDS) is a fatal condition caused by the Human Immunodeficiency Virus (HIV). The prevalence has been increasing in spite of efforts that have been made to control the problem (UNAIDS & WHO, 2005). The same source reports that the number of people living with HIV, those dying of AIDS and the newly infected in 2006 were 47.1, 3.5 and 6.6 millions worldwide, respectively. It is estimated that an additional 45 million people will be infected by 2010 worldwide. The HIV/AIDS problem is more serious in developing countries particular in Sub-Saharan Africa, which accounts for 63% of people living with HIV/AIDS (TACAIDS, 2005). The highest prevalence is in South Africa where about 32% of all people with HIV globally live and where 30% of deaths are due to AIDS (TACAIDS, 2006). In Uganda, many cases were first detected in early 1980s (Wills, 2002). Similarly, in Tanzania the HIV/AIDS was first noted in 1980s when the first three AIDS cases were clinically diagnosed and reported in 1983 in Kagera region, bordering Uganda (TACAIDS, 2006). The same source reports that by 1986 all regions in Tanzania mainland had reported AIDS cases. According to the findings of a HIV/AIDS indicator survey of 2003 –2004 (TACAIDS, 2005), in Tanzania 7% of people aged 15-49 were HIV positive. The prevalence was higher among women (8%) than men (6%). The highest prevalence was in Mbeya (14%) followed by Iringa (13%) and Dar es Salaam (11%) regions.

The first case of HIV/AIDS in Morogoro region was identified in 1986. In 2001, a total of 10908 AIDS cases were reported, of which 4466 were males and 6442 were females. There has been an increase in the number of infected blood donors in Morogoro regional hospital since the first cases were reported. The sero-prevalence among blood donors increased from 4.4% in 1992 to 9.2% in 2000 (SUA, 2003).

The magnitude and impacts of HIV/AIDS include a reduction in economic growth, an enormous social burden imposed through illness, deaths and orphanage. Extension of the voluntary counseling and testing programme enable individuals to inform themselves of their HIV/AIDS status and thereby reduce transmission (URT, 2003a). Most adults have been found to be more informed about HIV/AIDS, at least two thirds of adults know about HIV/AIDS transmission and prevention (URT, 2003a). In relation to men, women's knowledge of condom use appears to have improved substantially in the last five years (RAWG, 2005). Despite wider spread knowledge of HIV, and some success in its prevention and control, prevalence is still higher in women than in men (URT, 2003a).

Tanzania responded to the HIV/AIDS pandemic through technical support from the World Health Organization Global Programme and AIDS (WHO-GPA), which led to the formulation of the National HIV/AIDS Control Programme (NACP) under the Ministry of Health aiming at developing strategies to prevent and mitigate the impact of HIV/AIDS (URT, 2003a).



As it is with many diseases, prevention is better than cure. Prevention of HIV/AIDS is even more important as there is no cure. Despite promotion of preventive measures for HIV/AIDS such as abstinence, being faithful to one uninfected partner and condom use globally, adoption has been poor (TACAIDS, 2005). In Tanzania, AIDS is still the leading cause of adult mortality in both urban and rural communities (URT, 2004a).

HIV/AIDS consequences include among others adult mortality, increasing number of orphans, loss of household properties, loss of manpower due to illness and deaths, reduction in productivity, increase in dependent families and increase in violation of children and women rights in which they have to play roles which are not within their capacity (URT, 2004b). Since most of people who are affected are in economic productive age, the disease reduces manpower. This study aimed at establishing why some people in HIV affected areas do not abide to HIV/AIDS preventive measures despite the knowledge on consequences of the infections. The study was intended to determine attitudes of the community towards HIV/AIDS preventive measures in Morogoro Municipality, Tanzania, as a basis for planning effective HIV/AIDS control strategies in support of Millennium goals especially the Millennium Development Goal number 6 which emphasizes on combating HIV/AIDS and the Tanzania National AIDS Policy which emphasizes on prevention of the problem.

## **1.2 Objectives of the study**

### **1.2.1 Overall objective**

The main objective of this study was to examine community attitudes towards preventive measures on HIV/AIDS as a foundation for planning effective control strategies.

### **1.2.2 Specific objectives**

1. To determine the awareness of the community on HIV/AIDS preventive measures;
- 2 To examine attitudes towards the use of HIV/AIDS preventive measures;
3. To examine factors hindering the use of HIV/AIDS preventive measures.

## **1.3 Conceptual framework**

Scarborough and Kyadd (1992) argue that a conceptual framework should help to indicate the most useful areas in which to focus limited resource and ensure that data collected are relevant to the objectives of the research. The conceptual framework in this study shows HIV/AIDS prevention as dependent variable caused by social-cultural and psycho-social factors such as religion, risky behaviours, attitudes towards HIV/AIDS preventive measures and access to HIV/AIDS information. These variables operate directly or indirectly to HIV/AIDS prevention. The background variables are age, sex, marital status, level of education, and occupation. Conceptual framework diagram and operational definition of variables are shown in appendix i and ii respectively.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 The magnitude of HIV/AIDS**

The human immunodeficiency virus (HIV) leading to Acquired Immune Deficiency Syndrome (AIDS) is the most severe disease condition facing the entire world today (Shorter and Onyancha, 1998). Once a person has developed AIDS, a variety of other ailments occur because the body is incapable of combating other germs or viruses causing diseases (Shorter and Onyancha, 1998). The same source reported that globally, 2.8 millions people died of AIDS in 1999, the highest death rate since the start of the epidemic. Although Sub-Saharan Africa carried only one-twentieth of the world's population, it accounted for nearly 70 % of the world's HIV positive people. Twenty-one countries, which ranked highest in HIV/AIDS prevalence in the world, were in Sub-Saharan Africa (FAWE, 2000). The main mode of transmission of HIV in Sub-Saharan Africa is through heterosexual contact. On such transmission, understanding the aspects of gender is necessary in order to increase efforts to fight against HIV/AIDS (Feddy, 1996). However, other modes of transmission exist, including blood transfusions when blood used is contaminated, intravenous drug injections, injections, circumcision, tissue and organ transplants, and through mother to child transmission during delivery and breastfeeding (Hubley *et al.*, 1995).

#### **2.2 Attitude**

An attitude is a feeling towards people, situations or roles that affects the way a person reacts. If a person's attitude toward something is favourable, the person reacts positively and adjusts well to it and vice versa (Hurlock, 1978). The same source reports that attitudes differ for different people and depend on a person's

temperament, interests and experience. It adds that factors which may affect attitudes are knowledge about a situation, experience in dealing with it and mental flexibility towards it.

### **2.2.1 Methods of measuring attitudes**

There are several methods for measuring attitudes, some of which are discussed below.

#### **2.2.1.1 Likert scale**

Also known as summated scale. It is used in measuring intensity of attitudes in terms of favourable and unfavourable continuum. The scale consists of a number of statements about an issue; the respondent is required to express agreement or disagreement to each statement. A statement is given a numerical score in terms of 3, 5 or 7 degrees of disagreement, eventually scores are added to obtain respondents attitude (Likert, 1932, cited by Dwyer, 1993).

#### **2.2.1.2 Rating scale**

This refers to qualitative description of aspects of an object or traits of a person, it gives a measure of one's position in a continuum like: like-dislike, above average-average-below average, like very much, like somewhat, neutral, dislike somewhat, dislike very much, excellent, good, average, below average or poor. No rule whether to use 2, 3, 4, 5 or 7 position. A number of statements on an issue of interest are composed, continuum is divided into two points (2 to 7) and assigned numerical values and administered to a sample of respondents. Finally, the numerical values are

added to obtain a scale. Rating could be done by graphic rating scale or itemized rating scale (Mwageni, 2006).

#### **2.2.1.3 Thurstone scale**

Uses consensus approach, a researcher designs statements depending on what is to be measured and gives to judges. Judges provides judgments on position of statements on a scale, points used are 7 to 11. (Mwageni, 2006). Respondent is asked to check a statement that best describes his/her feelings in a particular column; several statements related to a problem are composed and given to judges (50 to 100), judgments for each statement is tabulated. Statements with even distribution are selected, and those with uneven distribution are discarded, and finally scale values are rearranged according to distribution assigned by judges. Then the scale is administered to a sample of respondents and scores are computed (Dwyer, 1993).

#### **2.2.1.4 Ranking scale**

Involves relative judgments against other similar objects in which the respondent compares two or more objects and makes a choice, objects are ranked in order from most to least such as ranking students according to performance (Mwageni, 2006).

#### **2.2.1.5 Semantic differential scale**

It is also known as Osgood semantic scale. Measures meaning of concepts or items to individuals, the measure is done on series of 5 or 7 point bipolar scale; bipolar include fair-unfair, clean-dirty, good-bad, large- small, strong-weak, active-passive, hot-cold and fast-slow (Mwageni, 2006). Items to be judged by respondents are

composed and adjectives to be in the scale are decided. Using either a 5 or 7 point scale to evaluate an attribute, numerical values of scale are decided and the tools are administered to respondents. Finally, the scores are summed for every individual as a measure of respondent's attitude (Dwyer, 1993).

#### **2.2.1.6 Cumulative scales**

Also known as Guttman scale or Scalogram; respondents are given a set of question to give Yes/No answer to each other. Considering an issue to be measured, statements are composed, any ambiguous and irrelevant items eliminated and responses are assigned numerical values usually Yes=1 and No=0. Finally, scores for individual respondent are added to obtain attitudes (Mwageni, 2006).

Regardless of many methods for attitude measurement reviewed, this study used Likert scale as it was easier to construct and more reliable than other scales with the same number of items also is the most widely used method of scaling in social sciences (Tittle *et al.*, 1997).

### **2.3 Risk factors for HIV/AIDS transmission**

HIV/AIDS is a social cultural and economic problem, which is mostly determined by individual's life- styles. The risk of HIV infection is highest among young people, especially women due to biological factors, subordination, burden of caring AIDS patients in the affected households and some cultural and economic practices. Unprotected sex with an infected person is the most common means of HIV transmission (TACAIDS, 2005).

## **2.4 The ABC strategy for HIV/AIDS prevention**

Abstinence, being faithful to one uninfected partner or using condom (ABC) are recommended practices in HIV/AIDS prevention (TACAIDS, 2005).

### **2.4.1 Abstinence**

Abstinence is refraining from vaginal, oral or anal intercourse (Fan *et al.*, 1995). People may choose to abstain to protect against sexually transmitted infections such as HIV/AIDS, Chlamydia, Gonorrhoea, Syphilis or unwanted pregnancies. Sometimes abstinence can be due to moral issues (religious and ethical beliefs) or medical reasons (e.g. during treatment of STI or urinary tract infections post-operative recovery from episiotomy or vasectomy, or late in the third trimester of pregnancy) (Cohen and Tate, 2005).

### **2.4.2 Being faithful to one uninfected partner**

This is a very difficult method, as it is difficult to determine if one is faithful or not. It is most advised to married couples (Hubley *et al.*, 1995).

### **2.4.3 Using condom**

A condom is a thin membranous tube, usually made from latex rubber that covers the penis to prevent semen from entering the vaginal / anus during sexual intercourse (Hubley *et al.*, 1995). Use of condoms is the mostly promoted strategy worldwide through television, radio, newspapers, meetings, seminars, posters and offering condoms in guest houses (Andrew, 2002).

The study carried out in Botswana showed that attitudes which acted as barriers to HIV/AIDS prevention were alcohol, beliefs that condoms were not effective, emotional reaction, culture, tradition and complacency (Mbaki and Marando, 2004). Another study which was done in Rwanda found that voluntary counseling and testing (VCT) was associated with increased use of condoms and reduced the rate of gonorrhoea and HIV transmission (Allen *et al.*, 1993)

### **2.5 Knowledge on condom sources**

Accessibility of condoms by people plays an important role in prevention of sexually transmitted infections and unwanted pregnancies. It is reported that more than 50 % of young women and 72 % young males know where to obtain condoms (TACAIDS, 2005). This knowledge is higher in young urban women than in young rural women and men in Tanzania mainland. Knowledge of condom source increased with increase in education level of both women and men (TACAIDS, 2005).

### **2.6 Sexually transmitted diseases and AIDS management**

There is a strong epidemiological association between AIDS and other sexually transmitted diseases (STDs) in both industrialized and developing countries. Sexually transmitted diseases can increase the risk of HIV/AIDS transmission because of ulcerations (Alcamo, 2002). Strategies to prevent and control STDs through condom promotion, use of peer educators and periodic treatment with antibiotic have been the focus of several studies (Andrew, 2002).



Despite efforts in the promotion of HIV/AIDS prevention strategy, the problem is still high in many developing countries including Tanzania. It is thus not clear whether or not the recommended preventive measures are adopted by the communities. It was the aim of this study therefore to assess attitudes towards preventive measures for HIV/AIDS in Morogoro municipality, Tanzania.

## **CHAPTER THREE**

### **3.0 MATERIALS AND METHODS**

#### **3.1 Study area**

This study was conducted in Morogoro municipality, which is in Morogoro Region. The Region is located between latitudes 5° 50' and 10°0' South of the Equator and longitude 35° 25' and 38° 30' East of Greenwich Meridian (URT, 2002). The Morogoro municipality is located in the North of Uluguru mountains and the area covers about 65 km<sup>2</sup> (URT, 2003b). In 2002 national census, the Morogoro municipality had a population of about 230 000 in which 110 000 were males and 120 000 were females (URT, 2002). The municipality is subdivided into 19 administrative wards and 275 streets (URT, 2003b).

Morogoro municipality was chosen because it had HIV/AIDS prevalence ranging from 7.1% to 11.1%, which was higher compared to the national prevalence of 7% (MRH, 2006). Besides, Morogoro is located along the Zambia, Malawi and Mwanza highways, making it more vulnerable to high risk of the epidemic. There were no studies on HIV/AIDS similar to this which were conducted in the area.

#### **3.2 Research design**

A cross-sectional research design was employed in this study. This design had been found to have a greater degree of accuracy in social science studies than other designs, as it allows collection of indepth data on different groups of respondents at one point at a time which also minimises time and financial resources (Casley and Kumar, 1998). Both qualitative and quantitative data were collected. The main

instruments used for data collection were questionnaire and Focus Group Discussion (FGD) guides.

### **3.3 Study Population and sampling procedures**

The study population involved individuals aged 15-49 years from five randomly selected wards. The wards included were Kingolwira, Kihonda, Kilakala, Boma and Mjimkuu. A total of 100 respondents were interviewed. The sample size was based on Bailey (1998) who suggested that at least 30 respondents are needed to allow the use of statistical analyses. A simple random sampling technique was employed in which five wards were randomly selected from nineteen wards. In each ward, two streets were also randomly selected, in which ten households were randomly selected. Within the household only one individual was interviewed.

### **3.4 Methods of data collection**

Quantitative data were obtained through structured and semi-structured questionnaire while qualitative data were obtained through Focus Group Discussions (FGDs) and informal dialogue. Information on attitudes towards preventive measures for HIV/AIDS and awareness was major. In order to identify individual's attitude, the Likert scale was used whereby statements were designed in which respondents were supposed to strongly agree=1, agree=2, neutral/undecided=3, disagree=4, or strongly disagree=5. The questionnaire was formulated with open ended and close ended questions while during FGD, a check list was used.

### **3.4.1 Primary data**

#### **Administration of questionnaire**

A face to face questionnaire was administered to respondents in order to obtain the required information. The questionnaire was administered to the head of the household. If the head of the household was not present another member of the household was interviewed.

#### **Focus Group Discussions**

In each of the selected wards, two focus group discussions were conducted. Different actors of different sexes, education level, marital status, occupation and age were considered and care was taken to make sure that individuals who were involved in focus group discussions were not involved in the questionnaire interviews so as to avoid repetition of ideas/opinions from one respondent.

#### **Informal dialogue**

Informal dialogue with local leaders allowed free expression of personal feelings and experiences, provided supplementary informations which were used to cross check the reliability of those obtained through other methods.

#### **Pre-testing of the questionnaire**

The questionnaire was pre-tested before their actual use. This was done in order to ensure the validity and reliability of the instrument. Necessary adjustments and corrections were made before final administration of the questionnaire.

### **3.4.2 Secondary data**

Secondary data were collected from different sources such as journals, magazines, books, internets and various reports from District and Municipal offices, Non-Governmental Organizations (NGOs) and Libraries.

### **3.5 Limitation of the research methodology**

This study faced several limitations. It was a big problem in getting literatures and other studies related to the present study which made it difficult in making comparison of the results, few studies were done out side the country. Some respondents participated conditional to payments. Also there was a delay in obtaining local research permission, which took approximately two months. Another limitation was that most people paid little attention to the subject under the study, simply because the topic seemed to them as a common phenomenon. Some said that they did not see the reason behind taking a lot of their time discussing this common issue instead of doing other activities.

### **3.6 Data analysis**

Qualitative data were analyzed using structural functional analysis approach whereby the collected information/opinions were summarized and only strong points were taken for discussion in relation to the study objectives. While quantitative data were analysed using statistical package for social science (SPSS) version 11.5. The data were first classified into meaningful categories by assigning codes to assist in the analysis. Analysis was done by the use of descriptive statistics where frequencies were computed. The attitude index was computed after running Data

reduction/Principal Component Analysis (PCA). Data analysis was done at Sokoine University of Agriculture, Morogoro, Tanzania.

## **CHAPTER FOUR**

### **4.0 RESULTS AND DISCUSSION**

#### **4.1 Overview**

This chapter presents results of the present study, which are presented in line with the specific objectives.

#### **4.2 Background characteristics of respondents**

A total of 100 respondents (50 males, 50 females) were interviewed in this study.

The demographic characteristics of respondents are presented in Table 1.

A key determinant of life style and status of an individual is education as it affects many aspects of human life including individual's attitudes towards adoption of innovations such as the use of HIV/AIDS preventive measures (RAWG, 2005). Unfortunately, this study could not analyse the effect of education on attitudes towards HIV/ AIDS preventive measures because respondents who had never attended formal education were very few (about 7%). Nevertheless all respondents were aware of HIV/AIDS preventive measures. The reason could be because the study was conducted in an urban area where majority of people are accessible to various sources of information about HIV/AIDS including television, posters, radio and newspapers. However, larger studies are needed to ascertain this finding.

Another very important demographic factor is occupation which implies to what one does in order to get money for subsistence. Occupation is assumed to have an influence on one's attitudes towards the use of HIV/AIDS preventive measures (RAWG, 2005). The questionnaire survey indicated that most people were

economically active with exception of 29% who were mainly students. In qualitative assessment one sex worker said “In my activity, some of my customers do not like to use preventive measures like condoms and once they use it the payment is low. Therefore, I opt not to use condom to earn more money as to me it is better to live good life for short time than living difficult life for a long time”.

**Table 1: Demographic characteristics of respondents (n=100)**

<b>Age category</b>	<b>Frequency</b>	<b>Percent</b>
15-25	33	33.0
26-36	33	33.0
37-49	34	34.0
<b>Total</b>	<b>100</b>	<b>100.0</b>
<b>Sex of respondents</b>		
Male	50	50.0
Female	50	50.0
<b>Total</b>	<b>100</b>	<b>100.0</b>
<b>Marital status</b>		
Married	42	42.0
Single	23	23.0
Others	18	18.0
Widowed, divorced, separated	17	17.0
<b>Total</b>	<b>100</b>	<b>100.0</b>
<b>Education level</b>		
Primary school education	47	47.0
Secondary and tertiary	46	46.0
None	7	7.0
<b>Total</b>	<b>100</b>	<b>100.0</b>
<b>Occupation</b>		
Farmer	30	30.0
Business	21	21.0
Employed	20	20.0
Others e.g. students	29	29.0
<b>Total</b>	<b>100</b>	<b>100.0</b>



All respondents were aware of HIV/AIDS regardless of their background characteristics. This finding is similar to previous findings of the DHS (1996) and Swai (1998), which reported awareness of 97.0% and 99.0% in male and female, respectively in the general population of Tanzania. The main question here is whether such high level of awareness has indeed been translated into actual behaviour change to prevent the problem, which merits further studies.

#### **4.4 Awareness on mode of transmission of HIV/AIDS**

The most commonly mentioned way to acquire HIV/AIDS was through unsafe sexual intercourse followed by contaminated blood (Table 2). NACP (2004) reported that the predominant mode of HIV/AIDS transmission was through heterosexual contact, which accounted for over 90% of new AIDS cases in Tanzania, followed by prenatal transmission, whereby the mother passes HIV virus to the child during pregnancy or through breastfeeding. Also Hubley *et al.* (1995) found that HIV/AIDS was transmitted through unprotected vaginal sexual intercourse between two partners when one partner is infected with the virus. The same source reported that receiving contaminated blood, unprotected anal or oral sex, mother to child during delivery or breast feeding or sharing sharp objects can also transmit HIV/AIDS. Most respondents knew that mosquito bite does not transmit HIV/AIDS. In addition, they knew that shaking hands and sharing food do not transmit HIV/AIDS and that HIV/AIDS is recognized through blood testing and not by simple observation of a person. This knowledge was consistent with scientific theory (Fan *et al.*, 1995).

**Table 2: Distribution of respondents by awareness of HIV/AIDS transmission means (n=100)**

<b>Ways/Means</b>	<b>Frequency</b>	<b>Percent</b>
Unsafe/Unprotected sex	63	63.0
Contaminated blood	19	19.0
Mother to child	9	9.0
Sharing sharp objects	8	8.0
Deep kissing	1	1.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

#### **4. 5 Awareness on HIV/AIDS preventive measures**

When respondents were asked about how HIV/AIDS could be prevented, various responses were given (Table 3). A respondent could mention more than one method but the questions were close ended in order to get the major consideration on HIV/AIDS prevention. The most widely cited mode of prevention was abstinence which accounted about 38%. Some key informants said that they were aware of more than one HIV/AIDS preventive measures, but the only method they trusted was abstinence. Abstaining completely from sex is the safest way of avoiding infection even though the method is unrealistic for most of people (Fan *et al.*, 1998). The same source reported that restricting number of sexual partners or using condom sporadically will not guarantee avoiding HIV/AIDS.

**Table 3: Distribution of respondents by awareness on preventive measures of HIV/AIDS (n=100)**

<b>Method</b>	<b>Frequency</b>	<b>Percent</b>
Abstinence	38	38.0
Fidelity	33	33.0
Condom use	28	28.0
Good friend	1	1.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

#### 4. 6 Source of information about HIV/AIDS preventive measures

The most commonly cited source of information on HIV/AIDS prevention in both males and females was the radio, which accounted 18%males and 10% females respectively (Table 4). There was variation in sources of information about HIV/AIDS between sexes of respondents. For example females were more than twice likely to get information from health worker compared to their male counterparts. This could be because HIV/AIDS issues are frequently discussed during prenatal and antenatal clinics, which only women attend. The percentage of females who cited the presence of AIDS patient as a source of information was about twice that of males. Rugalema (1999) observed that providing physical care to the sick is perceived as a domestic responsibility and therefore it is within the domain of women. Women are more likely than men to have the first hand experience of nursing AIDS patients. Such experience remains live in their memories and becomes a rich source of information. Males in the study seemed to have more exposure to different sources of information from those of females, indicating differences in hobbies and roles in their lives.

Leaders in the study area reported that there was only ward health committee which was dealing with general health issues but not specific for HIV/AIDS.

**Table 4: Source of information about HIV/AIDS (50 males, 50 females)**

Source of information	Male		Female	
	Frequency	Percent	Frequency	Percent
Radio	18	18.0	10	10.0
Newsletter/Magazine	8	8.0	5	5.0
Television	5	5.0	9	9.0

Health worker	2	2.0	6	6.0
Community meeting	5	5.0	7	7.0
AIDS patient	4	4.0	8	8.0
Pamphlet	1	1.0	1	1.0
Others	7	7.0	4	4.0
<b>Total</b>	<b>50</b>	<b>50.0</b>	<b>50</b>	<b>50.0</b>

#### 4.7 Respondents attitudes towards HIV/AIDS prevention

This section is based on 11 statements designed to answer the question as to whether there were attitudes in the community that affected the prevention of HIV/AIDS. Table 5 presents percentages of responses on attitude variables. After data reduction/ Principal Component Analysis, eigenvalues were obtained (Table 6). Principally, eigenvalues above 0.3 are the one taken into consideration, but sometimes values may be below 0.3 but practically important, therefore included.

**Table 5: Attitudes (percentage) of respondents towards HIV/AIDS preventive measures (n=100)**

Statement number	Strongly agree	Agree	Neutra I	Disagree	Strongly disagree
1	9.0	40.0	15.0	19.0	17.0
2	78.0	13.0	-	6.0	3.0
3	70.0	19.0	4.0	7.0	-
4	48.0	29.0	7.0	11.0	5.0
5	8.0	22.0	37.0	23.0	10.0
6	1.0	5.0	25.0	47.0	22.0
7	3.0	6.0	22.0	42.0	27.0
8	2.0	11.0	26.0	30.0	31.0

9	4.0	9.0	21.0	36.0	30.0
10	1.0	4.0	25.0	29.0	41.0
11	5.0	10.0	20.0	35.0	30.0

### **Key**

1= Condoms make sexual intercourse not enjoyable

2= Condoms encourages prostitution in both men and women

3= From religious point of view using condom is not ethical

4= Individuals who use condoms are not faithfully

5= Condom using is time consuming

6= Having one sexual partner is an indicator of being sexually inactive

7= Men with one sexual partner are economically poor

8= Staying without sexual intercourse weakens reproductive organs

9= Having many sexual partners is a prestige

10= Women with many sexual partners increase their economic well being

11= Without involving in sexual intercourse one is segregated

**Table 6: Statements on attitude and eigenvalues**

<b>Statements</b>	<b>Initial</b>	<b>Extraction</b>
1	1.644	1.387
2	0.975	0.452
3	0.757	0.222
4	1.453	1.196
5	1.179	0.730
6	0.742	0.172
7	0.984	0.514
8	1.149	0.647
9	1.198	0.748

10	0.917	0.406
11	1.301	1.042

### **Key**

1= Condoms make sexual intercourse not enjoyable

2= Condoms encourages prostitution in both men and women

3= From religious point of view using condom is not ethical

4= Individuals who use condoms are not faithfully

5= Condom using is time consuming

6= Having one sexual partner is an indicator of being sexually inactive

7= Men with one sexual partner are economically poor

8= Staying without sexual intercourse weakens reproductive organs

9 = Having many sexual partners is a prestige

10= Women with many sexual partners increase their economic well being

11= Without involving in sexual intercourse one is segregated

#### **4.7. 1 Condoms make sexual intercourse not enjoyable**

In this study, there were respondents who had the perception that condoms interfered with sexual pleasure, they regarded using condoms it was like eating ripe banana without peeling so no enjoyment, this was indicated by 40% of respondents who agreed and 9% who strongly agreed with the statement (Table 5). Similarly Habley *et al.* (1995) found that some individuals did not like to use condoms because they reduced the sexual pleasure. This implies that those individuals will have negative attitude towards HIV/AIDS prevention through condom use.

#### **4.7. 2 Condoms encourage prostitution in both men and women**

Most respondents strongly agreed about 78% that condom use encouraged prostitution to both men and women. This statement had the highest percentage (Table 5) and this means that these people would have negative attitude towards condom use. In the focus group discussions there was a consensus of the perception. They added that for sex workers, condom would facilitate them to proceed with the business as they believed that they would be free from HIV/AIDS, other STDs and unwanted pregnancies. Fan *et al.* (1999) observed that prostitutes in Spain used condoms more than other groups of individuals.

#### **4.7. 3 Religious views on HIV/AIDS prevention**

In this study 70% of the respondents strongly agreed that using condom was religiously unethical (Table 5). Although in running the data reduction/Principal Component Analysis this factor was extracted, the study included it because practically it seemed to be among attitudes which affected individuals on HIV/AIDS prevention especially condom use. The FGDs revealed that both Christian and Muslim faiths discouraged the use of condom. Both regarded that using condoms was an indication of being immoral and they preached people not to be involved in sexual intercourse before marriage. In addition, after marriage couples are not allowed to use condoms because they have to reproduce. The researcher had a discussion with two religious leaders (Roman Catholic and Muslim). The leaders said that HIV/AIDS in religious point was thought to be a punishment from God and that it could only be solved through prayers and not use of condoms. According to them

condoms encourage sins. They both said that condom use was strongly discouraged because it was contrary to God's wishes and that sexual intercourse was only for official marriages. They added that HIV/AIDS would only be prevented by living religious life, abstaining and being faithful. Fan *et al.* (1999) advised that before promoting condom use one should consider cultural values related to it to predict its adoption in a particular cultural setting. Strategies to change negative attitude should be designed in collaboration with the target community. Where they are not changeable, the local community measures should be strengthened and promoted.

#### **4.7.4 Using condoms indicates lack of faithfulness**

In reference to Table 5, responses on whether using condoms indicated lack of faithfulness had eigenvalue below 0.3. However the researcher decided to include it in the discussion because of its practical importance. This statement was observed to be common in respondents who were married. According to them, sexual intercourse was for married couples only and it was for reproduction purposes, and that using condoms would encourage individuals to have many sexual partners. One respondent commented that if his wife told him to use condom he would think that the wife had another sexual partner and therefore he would divorce her. This implies that it is mostly men who decide on condom use, and the majority of married couples had negative attitudes towards condom use.

#### **4.7.5 Using Condom is time consuming**

Condom use as time consuming was also an important perception. In the FGDs the reason was that condoms were not readily available when needed. Similarly, Hubley



*et al.* (1995) found that men did not like to use condoms because they were cumbersome and not readily available when needed.

#### **4.7. 6 Men with one sexual partner are economically poor**

One key informant on an idea that men who had only one partner were economically poor informed that possession of many sexual partners depended on one's behaviour rather than economic status. In the focus group discussions the explanation was that, some men felt that having one partner was an indication of being sexually inactive. They added that for the case of young boys it was difficult to have a single partner because these young men were sexually very active. Therefore counseling them would be very important.

#### **4.7.7 Staying without sexual intercourse weakens reproductive organs**

In the study some respondents believed that abstaining could weaken their reproductive organs hence reduce their fertility. In the FGDs it was found that having a child proved that one was a real man or woman. Hence a person's status was closely tied to his/her reproductive capability and this implies that individual's with such notion would be having negative attitudes towards abstaining. However, one medical doctor said that the concept on weakening of reproductive organs had not been proven scientifically.

#### **4.7. 8 Having many sexual partners is a prestige**

Mbaki and Marando (2004) observed that both married and unmarried men had multiple partners. In the present study, one key informant said that when he was

young most of men thought that having more than one sexual partner was a prestige, hence, majority were polygamists. However, currently very few are polygamists because of HIV/AIDS problem. During the FGDs it was revealed that African male had positive attitudes towards multiple sexual partners and many children were expected as part of cultural expression, increasing the risks of HIV/AIDS transmission.

#### **4.7. 9 Women with many sexual partners increase their economic well being**

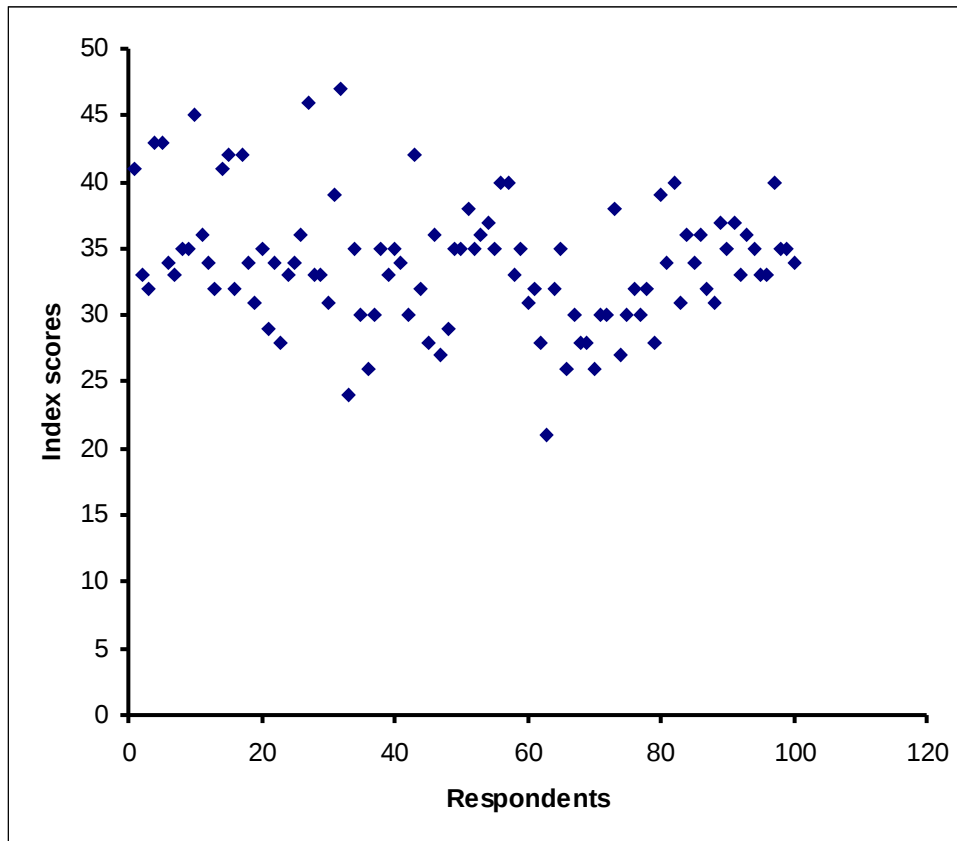
Majority of respondents strongly disagreed or disagreed on the statement (Table, 5) indicating a positive attitude towards avoiding many sexual partners. Nevertheless, two women informed the researcher that in some tribes once a girl matured, there was a special celebration referred locally to as “Unyago” in which a girl was taught how to take care of herself, husband and household. A girl would be informed that the husband would not be able to satisfy her economically, therefore additional sexual partners (the term “Mafiga matatu”) were very important. However, having extra partners was confidential.

#### **4. 8 Attitude index**

After data reduction/Principal Component Analysis (Table 6) and identification of maximum score (based on index scores) whereby in this study it was 47 and the minimum score was 21, the attitude index and respondents percentages in each index category were calculated. The attitude category index were 21-30 which accounted 23% of respondents who strongly agreed or agreed implying that they had negative attitudes towards HIV/AIDS prevention, 31-40 accounted for 67% and above 40 accounted for 10% which included those who were neutral, disagreed or strongly

disagreed meaning that they had positive attitudes towards HIV/AIDS prevention.

Fig. 1 summarizes this information.



**Figure 1: Respondents percentage according to attitude index scores**

Based on Table 5 and 6, respondents had negative attitudes towards statements 1-5, which were about condom use and had positive attitudes towards statements 6-11. This implies that in the ABC strategy, people supported A and B but not C, with C there is still a challenge to work upon.

#### **4. 9 Barriers to HIV/AIDS prevention**

When respondents were asked to mention factors which were barriers to HIV/AIDS prevention, they listed factors which were barriers (Table 7).

**Table 7: Barriers to HIV/AIDS prevention (n=100)**

<b>Barriers</b>	<b>Frequency</b>	<b>Percent</b>
Alcoholism	33	33.0
Low knowledge	20	20.0
Economic factor	15	15.0
Marital status	11	11.0
Drug abuse	10	10.0
Religion	9	9.0
Filling shame	2	2.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

#### **4. 9. 1 Alcoholism**

The most widely named barrier was alcoholism which accounted for 33%. One key informant said that when an individual was drunk, the thinking ability was impaired and one could do something not intended, including unsafe sex. A study by Mbaki and Marando (2004) and UNAIDS (1996) found that alcohol was the main barrier to condom use as it impaired judgments and proper condom use leading to high risk behaviours including unprotected sex. One key informant suggested that the government should increase the prices of alcoholic drinks as a national strategy in order to discourage alcoholism. Focus group discussions revealed that alcoholism led to much risky behaviour especially in areas where people gather for drinking local brew like Chamwino (Tupendane club) area in Morogoro municipal, where people start dinking in the morning throughout the day. They added that, another area with people who drink alcohol most of the time leading to risk behaviour is Kahumba night club, which is located at Morogoro town centre. Prostitution was mentioned as the main on sequence of alcoholism predisposing people to HIV/AIDS.

#### **4. 9. 2 Low knowledge**

The second mentioned barrier was low knowledge. One key informant (Male, 41yrs) argued that although majority of people were aware about the usefulness of condom, there was still lack of knowledge of the correct use of the tool, including storage in which he said that majority of males stored the condoms in back pockets and females stored them in hand bags with other properties which could crush them. Similarly, Hubley *et al.* (1995) reported that most of people store condoms in very hot conditions and sometimes in a back pocket where they are crushed. Focus group discussions revealed that some old people didn't know that condom was for a single use. One member in the group had an experience with a certain village in another region where some people used to borrow each other the condoms (called "Kifanyio"). Therefore, there should be a clear guideline of the correct use of condoms.

#### **4. 9. 3 Economic factor**

Focus group discussions revealed that lack of financial resources hindered some people to use condoms in two main ways, the first being the sex workers aim to earn more if they don't use condoms, and secondly the failure of some people to afford buying condoms. Hence the government should continue to supply condoms free of charge to promote their use.

#### **4. 9. 4 Marital status**

According to UNAIDS (2005) most women never use condoms with their husbands and those who use are likely to be unmarried. Also men are against condom use. In

the present study, two adult women (age 47 and 40) said that it was very difficult for one partner to tell the other to use condom as everyone was afraid of being seen unfaithful. They added that for women it was even worse as majority were unable to tell their partners to use condoms even if they knew that their counterparts were not faithful. The number of females who cited marital status as a barrier to HIV/AIDS prevention was twice that of their male counterparts. This implies that women are the most affected by marital status and this could be due to male dominance in African culture. TACAIDS (2003-04) observed that women feel powerless to negotiate safer sex with their partners, young girls and women are especially vulnerable to HIV and they don't have power to defend themselves against male pressure on sexual harassment. The two women suggested that female condoms should be made available in a large number and women should be economically empowered. The focus group discussions revealed that once some HIV/AIDS preventive methods like condom use are used they will also act as a family planning method, while according to most African culture a woman who cannot have children can be scorned by in-laws, divorced or even forced to accept her husband's children with other women.

#### **4. 9. 5 Drug abuse**

Drugs appear to have similar effect to users of alcohol because of lack of personal control. In addition, sometimes drug users share needles used in injecting the drugs which increases the risk of HIV/AIDS transmission. UNAIDS (1996) found that use of drugs led to high risk behaviours such as unprotected sex, which finally led into HIV/AIDS infection.

The focus group discussions also revealed the following to be barriers for HIV/AIDS prevention: beliefs that condoms are not effective, emotional barriers i.e. embarrassment at being seen carrying or purchasing a condom, difficulty in discussing condom use with a partner, discomfort in putting on condoms, difficulty in suggesting use of a condom to a person whom one had known for a long time or a respectable partner or one with whom one was in love. They added that some individuals did not use preventive measures like condoms because they believed that they could fail, break, or slip out during sexual act. Furthermore, some believed that condoms had pores through which AIDS viruses could pass, cause itching, cancer; some said that condoms contained AIDS viruses and they could also cause serious diseases.

## **CHAPTER FIVE**

### **5.0 CONCLUSION AND RECOMMENDATIONS**

This was the first sociological study on HIV/ AIDS to be conducted in Morogoro municipality. The study established high level of community awareness on HIV/AIDS regardless of people's background characteristics. The majority of people in the community had positive attitudes towards HIV/AIDS preventive measures other than condom use. Furthermore, alcoholism, low knowledge in condom use, economic factors, drug abuse, religion and marital status were among factors which were barriers to HIV/AIDS prevention.

Measure should be taken to enable the community and policy makers to improve strategies for HIV/AIDS prevention. Although condoms have been the mostly

promoted strategy to control HIV/ AIDS, the practicality of the alternative methods (abstinence and being faithful), which were found to be mostly supported by the community in this study should be investigated. For those preferring condom uses, the condoms should be made available and people should be educated on proper use and care of the condoms.

Emphasis on the dangers of using alcohol and narcotic drugs should be made through increased mass media communication like radios, televisions, newspapers, theatre and small media communication such as posters/flyers and calendars, which could be placed in public places. Community economic empowerment efforts should be increased and religious and government leaders should work together towards HIV/AIDS prevention.

Furthermore, gender specific interventions should be used when promoting the ABC strategy. Nevertheless, working with partners together is very important as dealing with couples is often more effective than working with men or women individually. There must be long term plan to transform the norms that make women subordinate to men as it makes no sense to promote the ABC strategies rather than behavioural response to social mobilization, leadership and empowerment. An environment should be created to make these behavioural responses logical and possible to both women and men.

The communities need to increase and ensure free and wide spread testing so that individuals can be empowered to protect themselves as well as their loved one by being informed of their own and their partner's infection status. Urgent steps are



required to provide factual and empowering information about each of the ABC component in order to counter misinformation, fear and stigma. The sooner we confront HIV/AIDS as the multifaceted and complex issue it is, the sooner we can make important steps towards progress in HIV/AIDS prevention.

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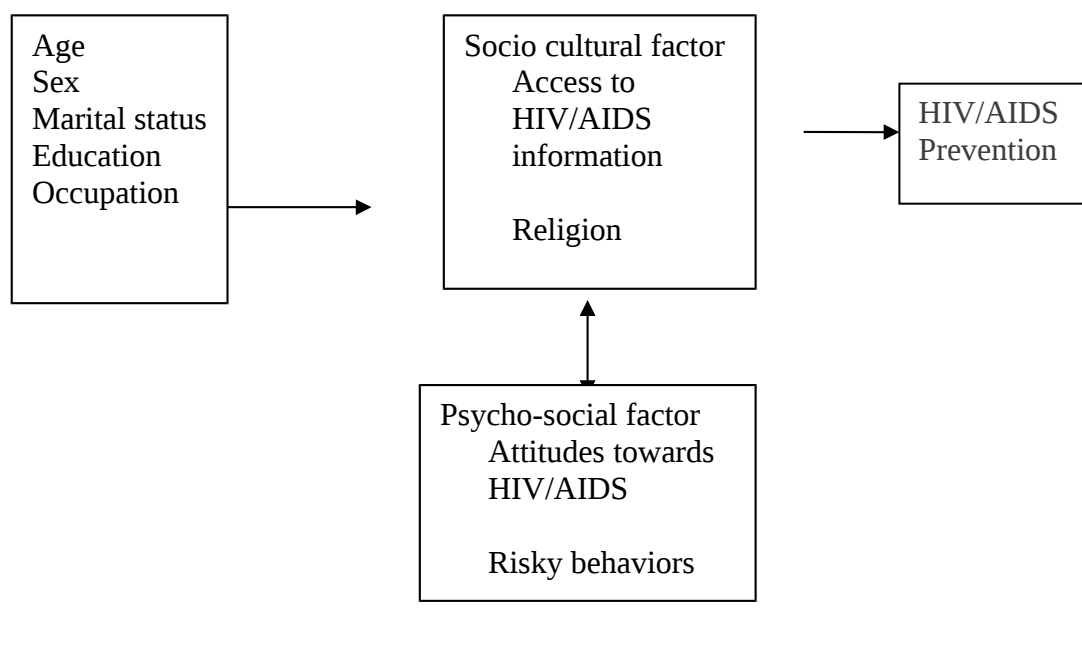
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**APPENDICES**

**Appendix 1: Conceptual framework**

<b>Background Variables</b>	<b>Independent Variables</b>	<b>Dependent Variable</b>
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## Appendix 2: Operational definition of variables and indicators

Variables	Operational definition
<b>Background variables</b>	
Sex	A biological sense of being male or female
Age	Number of years of an individual from birth date
Marital status	A state of being single, married, divorced,



	separated and widowed
Education	Highest level of formal schooling attained
Occupation	Activity which one does for living
<b>Independent variables</b>	
Access to HIV/AIDS information	Where respondents obtain HIV/AIDS informations i.e. radios, TVs, posters etc
Religion/Denomination	Being a Muslim or Christian i.e. Roman catholic, Protestant, etc
Attitudes towards HIV/AIDS	Views/opinions on HIV/AIDS
Risk behaviours	Likelihood in contracting HIV/AIDS i.e. alcoholism, drugs abuse
<b>Dependent variable</b>	
HIV/AIDS prevention	Use of condoms, abstinence and having a single faithful partner

### Appendix 3: Scale statements and scores

Scale	Score
Strongly agree	1
Agree	2
Undecided/Neutral	3
Disagree	4
Strongly disagree	5

**Note:** The maximum score could be 55 resulting from 11 statements if a respondent could decide to strongly disagree on the statements, but in this study the maximum score was 47 basing on Likert scale principles.

**Appendix 4: Questionnaire to assess knowledge and attitudes on HIV/AIDS**

**SECTION A: INDIVIDUAL INFORMATION**

1. Village/Ward.....
2. Age.....
3. Male/Female.....
4. Marital status.....
5. Highest level of formal education.....
6. What is your occupation.....

**SECTION B: AWARENESS ON HIV/AIDS PREVENTIVE METHODS**

1. Have you ever heard of an illness called AIDS.....Yes/No?
2. If yes what is it? .....
3. Can you do anything to avoid getting HIV/AIDS.....Yes/No?
4. If YES/NO explain it in short.....
5. How do people acquire HIV/AIDS, Choose among the following given answers

- (a). Contaminated blood
  - (b). Deep kissing
  - (c). Mother to child
  - (d). Unsafe/ unprotected sex [      ]
  - (f). Sharing sharp objects
6. Can one get HIV/AIDS through mosquito bite?.....Yes/No
7. Having only one faithful sexual partner prevent HIV/AIDS transmission?.....Yes/No
8. Can correct and consistent use of condom every time one having sex prevent HIV/AIDS?.....Yes/No
9. Abstaining prevents HIV/AIDS?.....Yes/No
10. Shaking hands transmits HIV/AIDS?.....Yes/No
11. Food sharing can transmit HIV/AIDS?.....Yes/No
12. How are you going to know that one has HIV/AIDS infection?.....
13. Is it true that HIV viruses can be transferred from mother to child during delivery.....Yes/No
14. Is there any difference between HIV and AIDS? .....Yes/No
15. If YES give the difference .....
16. How do you get information's concerned with HIV/AIDS choose only one from the given sources
- (a). AIDS patient
  - (b). Health worker
  - (c). Community meeting
  - (d). Television

- (e). Radio [       ]
- (f). Newsletter/Magazine
- (g). Pamphlets
- (h). Others

### **SECTION C: ATTITUDES TOWARDS HIV/AIDS PREVENTIVE**

#### **MEASURES**

Please pick a number from the scale to show how you agree or disagree with each of the following statements

1= strongly agree, 2= Agree 3=Undecided/Neutral, 4= Disagree and 5= strongly disagree.

1. Condom makes sexual intercourse not enjoyable.....
2. Condom using encourages prostitution in both men and women.....
3. From Religious point of view condoms using is not ethical.....
4. Those who use condoms they are not faithfully to their partners.....
5. Condom using is time consuming.....
6. Having a single sexual partner is an indicator of being sexually inactive.....
7. For men having one partner is an indicator of being economically poor.....
8. Staying without doing sexual intercourse leads into weakening of reproductive organs.....
9. Having many sexual partners is a prestige.....
10. Women with many sexual partners increase their economic wellbeing.....
11. Staying without involving in sexual intercourse makes one is segregated.....

**Thank you for your cooperation**

**SECTION D: BARRIERS TOWARDS HIV/AIDS PREVENTION**

What is the major barrier to HIV/AIDS prevention in your living area?

- (a). Low lever of knowledge
- (b). Poor economy
- (c). Drug abuse
- (d). Religion [     ]
- (e). Alcoholism
- (f). Marital status
- (g). Filling shame

**Appendix 5: A guide for focus group discussion**

1. How do you feel when you are advised to use condoms?
2. Is there any problem when one stays without engaging in sexual intercourse for a long time or abstains at all?
3. What are the attitudes which act as barriers for the uses of HIV/AIDS preventive measures discuss them into details
4. What are your suggestions?

**Thank you for your cooperation**

**Appendix 6: Checklist for religious leaders on HIV/AIDS**

1. Do you have any programme dealing with HIV/AIDS prevention in your institution or ward?
2. Among the preventive measures which one do you suggest most as a religious leader and why?
3. Can you tell us what is being done in your program?

**Thank you for your cooperation**

