

**KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS HIV/AIDS
AMONG BARABAIG PASTORALISTS OF HANANG AND BABATI
DISTRICTS -TANZANIA**

**BY
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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN RURAL
DEVELOPMENT OF SOKOINE UNIVERSITY OF AGRICULTURE.
MOROGORO, TANZANIA.**

2010

ABSTRACT

Change in the mode of pastoralist livelihood activities and resultant consequent activities have made pastoralist to move out of their traditional safety environment. Despite of pastoralist being exposed to HIV risk they are holding strong cultural practices some of which are HIV spread risk factors. The HIV/AIDS pandemic continues to grow with thousands of new infections occurring every day. Prevention remains the backbone of programs to curb the HIV/AIDS pandemic, and will be effective only if they can address the factors that put communities at risk and reach the majority of people at risk. Understanding of cultural context, specific prevention needs and characteristics of key groups help the tailoring of programs focusing on the main modes of HIV transmission in any given community. General objective of this study was to shed light on the level of knowledge, attitude, and practices towards HIV/AIDS among Barabaig pastoralists and come up with recommendations to guide implementers on HIV/AIDS interventions in pastoralist community. Study adopted a cross sectional design. A sample of 100 randomly selected households was used. In addition 160 of respondents participated in focus group discussions. The analytical technique used was The Statistical Package for Social Science (SPSS) version 11.5. Findings indicate that, majority (98.9%) of Barabaigs have heard about HIV/AIDS. Majority (66.2%) have low to moderate level of knowledge on HIV/AIDS transmission, with females having low level of knowledge compared to males. Misconception was wide spread. Majority (54.8%) does not believe (have negative attitude) if they can also contract HIV/AIDS. Risk practices (rites, sexual network and circumcision) are prevalent. Main sources of information were radio and village meeting with limited HIV/AIDS interventions.

Based on the findings, Study recommends implementation of more comprehensive HIV/AIDS programmes targeting pastoralist basing on prevention, care, treatment, support, females empowerment and reduction of traditional risk practices.

DECLARATION

I, MAJALIWA HAMIS, do hereby declare to the Senate of Sokoine University of Agriculture that, this dissertation is my own original work and has not been submitted for a higher degree award in any other institution.

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(MA. Rural Development)

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The above declaration is confirmed by

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(Supervisor)

Date

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ACKNOWLEDGEMENT

First and foremost, I am thankful to the **Almighty God** who provided me with health, knowledge, strength, and protection throughout the period of this research work. May this dissertation be to His glory and His name be praised. Amen.

I extend my sincere and deep gratitude to my supervisor Dr. Joyce Lymo-Macha for her tolerance during the whole period of supervising my work. Her constructive criticism and good comments broadened my understanding on the study theme, thus assisted me highly to put this dissertation in a proper context.

I am also grateful to the Director General for Development Cooperation of the Government of Belgium through the Belgian Technical Co-operation (BTC) agency in Dar es Salaam for financing my studies at Sokoine University of Agriculture including this research work without which it would have been impossible.

I'm also gratefully indebted to the following staff in Development Studies Institute: Prof E. A. Mwangeni, Dr. J.S Mbwabo, Dr. S. M. Simon, Dr. K. A. Kayunze and Mr. E. E. Chingonikaya for their constructive comments which helped me improve this work.

My special thanks go to my beloved parents Mr. Hamis Mpembee and Mrs. Sitra Kinyangaa and the family, my sister Mrs. Tatu, brother in law Mr. Salum, my housemaid Miss Lydia and Miss. Mariam for their love and moral support which has always been a source of strength and encouragement during my research work.

My heartfelt thanks also go to the entire Kinyangaa's and Mpembee's family for laying my education foundation, and standing by my side as I endeavoured to put together my study.

The list of my family members would not be complete without mentioning my beloved daughter, Rebekah with whom I experienced the difficulties of being separated albeit temporarily while she is still a toddler and need me most. I am thankful to her for her tolerance and for bearing with me as I was not able to spend quality time with her because of my long absence from home while working on this dissertation.

I extend my gratitude to Barabaigs pastoral community in study areas who, in spite of their busy schedule, spared their time so that they could respond to my inquiries. In that connection, I thank the district council officials and FARM Africa who, processed and arranged logistics for me to meet and discuss with pastoralist in sampled households and focus group discussions. I would like to mention Mr. Hisham H., Mr. Mwita M., Mr. Ally B., Mr. Marochi E. and Ms. Mary G. for their help during data collection, as they were part and parcel of the process.

I thank my friends, Ms. Matlida, Mrs. Kemilembe, Mr. Kajimbwa, Mr. Emalaba-Peter, Mr. Mduda, Mrs. Anneth, Mrs. Asteria, Mr. Mwelelwa, Mr. Alex, Mrs. Jelly, Mr. Mkupasi, Mrs. Stellabitanyi and Mr. Kayuni for their academic and moral support during the whole time of my study. Regardless of the fact that this work is a result of contributions from many people, I am personally responsible for the final version of this dissertation and the shortcomings therein.

DEDICATION

I dedicate this dissertation to my beloved parents Hamis Mpembee and Sitra Kinyangaa who laid the foundation for my education. I also dedicate this work to my beloved daughter Rebekah A. D. Natai for enduring my long absence from home. I was away when you most needed me but you gladly supported my pursuit for academic excellence.

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Babati District Council is one among the six councils and also the regional headquarters of Manyara. It shares common borders with Monduli in the north, Karatu in the north-west, Mbulu in the west Hanang in south west Kondoia in the south and Simanjiro in the east. Babati district council has an area of 5 609 square kilometres which is equal to 92% of the total area of Babati district. According to the population and housing census of August 2002, it had a population of 237 601 with an annual growth rate of 2.7%. Currently (2008), the population of Babati is estimated to be around 297 519 of which 152 403 males and 145 116 females. Administratively Babati

District Council has four divisions, 18 wards and 82 villages (Babati District Council, 2008).	43
These study areas were selected due to widespread population of a targeted group.	
Furthermore, Manyara region is a new region thus the influx of new residents (foreigners) is expected to get high very fast. So due to the risk of cultural practices which might expose the original inhabitants at risk of HIV/AIDS due to interaction with foreigners, this study found it appropriate to select this area to assess the KAP towards HIV/AIDS pandemic among Barabaig pastoral community who are thought to lag behind because of their strict adherence to the traditional lifestyle although they are being engaged in travelling far away to business centre to sell or buy the livestock and domestic commodities.	
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Women are married at younger age than men (11 – 15 years versus 15 – 19 years respectively). The dominant marriage type is polygamous and majority of males have two to five wives. Prominent reasons for polygamous were need for large family, followed by source of labour force and attraction to wealth of a husband. Marriage arrangement observed was by negotiation including elopement and forced marriage including inheriting of widows.135

Multiple sexual relationships was common, more than half of respondents have girlfriend/ boyfriend, with more male respondents reported to have such relation. Premarital and extramarital sexual relationships were common among the community both in male and female. Males were more likely to report to have had sex in the past 12 months preceding the study. Negligible number of respondents particularly males reported to have been used condom,

during their sexual encounters. Knowledge on the condom and its uses almost none exists. The earliest self reported age at sex debut was 11 years for both male and female but majority were male respondents. The age at sexual debut was ranging from 11 to 25 years. Males are more likely to engage into sexual intercourse earlier than females. Extramarital affairs were prevalent according to the traditional and custom and were socially sanctioned. It involves wife sharing practice among clan brothers with in-laws as well as among age-mate (sexual access of age-mates friends to each other’s wives). The death rite found (widow cleansing and widow inheritance), and circumcision.....135

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune-Deficiency Syndrome
ARVs	Ant Retro-Virals

CBO	Community-Based Organization
CDC	Centers for Disease Control and Prevention
FAO	Food and Agricultural Organization
FGD	Focus Group Discussion
FGM	Female Genital Mutilation
HIV	Human Immunodeficiency Virus
ITDG	International Technology Development Group
IEC	Information Education and Communication
KAP	Knowledge Attitude and Practice
MTCT	Mother-To-Child Transmission
NACP	National AIDS Control Programme
NGO	Non Governmental Organization
PLHA	People Living With HIV AIDS
PMTCT	Prevention of Mother-To-Child Transmission
SNAL	Sokoine National Agriculture Library
SPSS	Statistical Package for Social Science
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
TACAIDS	Tanzania Commission for AIDS
TBA	Traditional Birth Attendants
TDHS	Tanzania Demographic and Health Survey
THIS	Tanzania HIV Indicator Survey
TOT	Training Of Trainers
UNICEF	United Nations Children's Fund

UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
URT	United Republic of Tanzania
VCT	Voluntary Counselling and Testing
VCTC	Voluntary Counselling and Testing Centre
WB	World Bank
WHO	World Health Organization

CHAPTER ONE

1.0 INTRODUCTION

1.1 HIV/AIDS background

The first Acquired Immunodeficiency Syndrome (AIDS) case was diagnosed in the last 25 years and since then an estimated 46 million women, men and children worldwide have become infected with the virus, and 25 million people have died of AIDS. Approximately 13 million children under the age of 15 have lost one or both parents due to AIDS. It is also estimated that by 2010, there will be more than 40 million children orphaned by AIDS (United Republic of Tanzania (URT), 2005a). Although the HIV/AIDS has affected every region of the world, the brunt of the epidemic has been felt overwhelmingly in Sub-Saharan Africa, where 25.8 million people are currently living with HIV. Two thirds of all HIV-positive people, and over three-fourth of the world's HIV-positive women live in Sub-Saharan Africa (URT, 2005a; UNAIDS, 2006).

In Tanzania, the first three AIDS cases were reported in Kagera region in 1983, since then, the epidemic has evolved from being rare and new disease to a common household problem, which has affected most of the Tanzanian families (Heggenhougen and Lugala, 2005; URT, 2003). More than two million people were estimated to be living with HIV/AIDS in year 2002 and that by the year 2005, there will be 2.3 million orphans in the country (URT, 2001). The Tanzania HIV/AIDS Indicator Survey (THIS, 2005) reports that adult prevalence rate is seven percent for Tanzania mainland and less than one percent in Zanzibar. One of the contributing factors in HIV/AIDS spread is poverty. Poverty may drive individuals' economic survival strategies that expose them to high risk of HIV/AIDS (URT, 2003).

Poverty affects almost all communities in Tanzania, but the situation has become exacerbating in pastoralist areas. The oppressive poverty experienced by pastoralist makes it difficult for them to afford some of their basic needs; hence they have been changing from pastoral livelihood style to non- pastoral livelihood style which exposes them to risk of HIV/AIDS (May, 2003; Morton, 2003; Blystad, 2005; International Technology Development Group (ITDG), 2005).

In Tanzania, the Barabaigs practice pastoralism as a livelihood system. In essence, pastoral production systems are those in which 50% of gross household revenue (i.e. the total value of marketed production plus the estimated value of subsistence production consumed within the household) comes from livestock or livestock related activities (Morton, 2003). In fact, according to Lane (1996) Barabaigs “economy is based on livestock production”. However, pastoralism has been facing challenges, which affects Barabaigs pastoral livelihood and has forced them to change from pastoralism to agro-pastoralist and non-pastoralist employment. These changes are tied to other dynamics in the society including pastoral- agriculturalist conflicts, changing weather condition, environmental national policy and the national economy (Coast, 2002a; ITDG, 2005; Blystad, 2005).

To cope with these problems, the Barabaigs have adopted agriculture as an alternative livelihood, selling livestock in better market in urban trade centers as well as migrating to urban areas to search for employment (night watchman) and selling ornaments and medicinal herbs (Lane, 1996; May, 2003; Blystad, 2005; ITDG, 2005). The contact/ migrations by pastoralist to urban centres (high

population density centres) areas are regarded as a factor increasing susceptibility to HIV infection. In fact, according to May (2003) “pastoralist labour migrants to urban areas interact sexually with non-pastoralist women”. Therefore, urban contact/ migration are likely to be as one of the major factors in increasing susceptibility to HIV among pastoralist”.

Additionally, livestock and livestock products trading, especially journeys undertaken to markets for selling livestock or livestock products, or to buy cereal foods and consumer goods, can probably also be used to explain increasing susceptibility to HIV among pastoralist. These trips are often long-distance, as marketing centres are far from their homes, and generally undertaken by men, who are exposed to new sexual partners thus increasing their vulnerability to contract HIV/AIDS virus (Morton, 2003).

The migration to urban and travelling to trade centres away from their homes makes the pastoralists interact with other people who might have high prevalence of HIV/AIDS infection than rural areas (Cohen, *et al.*, 1996; Dyson, 2003; May, 2003; Blystad, 2005). Traditionally, the Barabaigs embrace cultural practices, in particular, polygamy, wife sharing, wife inheritance and ritual cleansing. They also use the unsterile instruments in childbirth, female genital mutilation (FGM), male circumcision and surgery by traditional medics and body tattooing all of which have been singled out to be high risk cultural practices towards HIV/AIDS transmission (Coast, 2000; May, 2003; Morton, 2003; IRIN, 2003b; ITDG, 2005).

1.2 Problem statement

Available data from HIV indicator survey on sero- prevalence rate of HIV/AIDS in Hanang district is 9% (NBS *et al*, 2004). The figure is relatively on the higher side compared to the regional and the national average of 2% percent and 7% respectively.

While HIV/AIDS risk practices facing the pastoralist are well documented by May (2003); Morton (2003); Dyson (2003) and ITDG, (2005). There is virtually no information about the level of awareness and knowledge on HIV/AIDS as well as the HIV/AIDS control strategies among Barabaigs pastoral community. Thus the following questions are important: ‘Are the Barabaigs aware of the whole issue of HIV/AIDS transmission and preventive measures? To what extent do they apply any of the four models of HIV risk reduction (abstinence, be faithful, consistent condom use, as well as use of sterilized piercing objects), as advocated by many HIV/AIDS programmes attempting to reduce its transmission. What is the status of traditional/ cultural practices and attitude in respect to the awareness campaign currently in place? Thus this study intends to assess Knowledge, Attitudes and Practices (KAP) towards HIV/AIDS among Barabaig pastoral community. The findings from the study will be useful for planning and implementing programmes on prevention interventions, educational-behavioural and messaging on risky traditional practices, interventions and assisting other HIV/AIDS actors to establish outreach education services and home-based care program in pastoralist areas. Moreover, the results will provide baseline information for subsequent evaluation of interventions by HIV/AIDS actors to the respective community.

1.3 Justification

Available studies indicate that pastoral communities continue to be affected by HIV/AIDS, yet few studies have been undertaken to document the level of awareness/ knowledge, impacts and map out ways in which the situation can be addressed (Morton, 2003; ITDG, 2005). The Barabaigs constitute a cultural minority in Tanzania. They do not even form a majority in their home - Hanang district (Lane, 1996). While there have been enormous national HIV/AIDS programmes, for example National AIDS Control Programme (NACP), and Tanzania Commission for AIDS (TACAIDS), for raising awareness on preventive measures, yet sero-prevalence in the Barabaig area is on the higher side compared to regional and national figures (URT, 2005). Therefore, it is justifiable this research be conducted in order to provide information on KAP towards HIV/AIDS in the Barabaig area. The outcome of the research may help policy makers make informed judgment on how to address the issue of HIV/AIDS in the Barabaigs community. The study is also in line with the sixth Millennium Development Goal (MDG) which emphasise on slowing down HIV/AIDS and Malaria transmission to the population.

1.4 Objectives

1.4.1 Main objective

The general objective of this study was to assess the knowledge, attitude and practices towards HIV/AIDS among the Barabaigs pastoral community. The generated information will provide information to pastoral community and assists policy makers to design more relevant and efficient HIV/AIDS preventive

programmes specifically targeting pastoralist community so as to protect them from risks of HIV/AIDS spread.

1.4.2 Specific objectives

- i. To determine level of knowledge towards HIV/AIDS.
- ii. To determine attitude of Barabaigs towards HIV/AIDS.
- iii. To identify traditional/cultural risk behaviour practices which foster spread of HIV/AIDS in Barabaig pastoral community.
- iv. To identify the sources of information on HIV/AIDS in Barabaig pastoralist community.

1.4.3 Research questions

1. Are the Barabaigs aware of the HIV/AIDS infection?
2. What is the level of knowledge on HIV/AIDS among the Barabaigs community?
3. What is the attitude towards HIV/AIDS among Barabaig pastoralist community?
4. What are the prevalent traditional/cultural risky practices that foster spread of HIV/AIDS among the Barabaig pastoralist community?
5. Are the available sources of information, education and communication on HIV/AIDS appropriate to the Barabaigs community?

1.5 Conceptual framework

The conceptual framework provides the variables to be examined and their likely relationship. The dependent variable is HIV/AIDS spread, influenced by independent variables: awareness and level of knowledge about HIV/AIDS transmission and prevention, attitude towards HIV/AIDS and risky practices which lead to spread of HIV/AIDS as well as source of information where respondents get HIV/AIDS information. The background variable include age, level of education, sex, marital status, religion, occupation, language and location which are also assumed to operate directly or indirectly to the dependent variable (Fig. 1). Operational definition of variable indicators is given in Appendix 3.

Background Variables independent variables Dependent variable

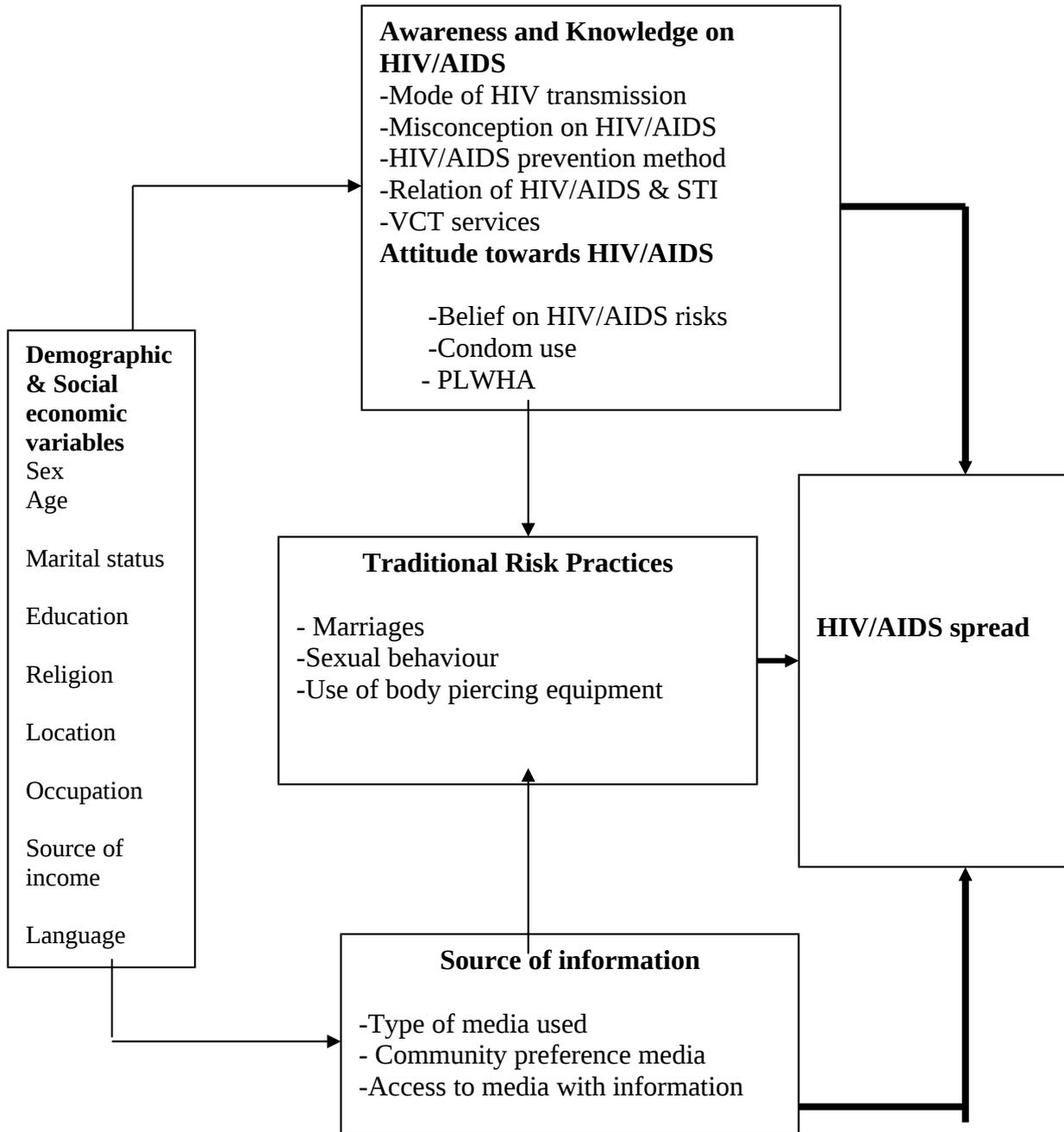


Figure 1: Conceptual framework

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Background

Acquired Immune Deficiency Syndrome (AIDS) caused by Human Immunodeficiency Virus (HIV) was first recognized in America in 1981 and the virus that causes it (HIV) was isolated in 1984 by a French Scientist (Alcama, 2002). Since the first case diagnosed in America, AIDS has grown into an international pandemic (Chin, 1990; Alcama, 2002). HIV infects human cells and uses the energy and nutrients provided by those cells to grow and reproduce (Rick, 1999; Alcama, 2002). In that course it weakens the immune system, making the body susceptible to and unable to fight off infections, known as “opportunistic infections,” and other illnesses that take advantage of a weakened immune system (Guss, 1994; Alcama, 2002). HIV infects cells of the immune system. The virus first multiplies in lymph nodes near the site of infection. Once it spreads through the body, usually about 8- 10 years later, symptoms appear, marking the onset of AIDS. HIV is transmitted through contact with body fluids (blood, semen, vaginal fluids pre-ejaculate or breast milk). Within these body fluids, HIV is present as both free virus particles and virus within infected cells (Fethers *et al.*, 2000).

The three major modes of transmission are unprotected sexual intercourse, Blood transfusion, contaminated needles and transmission from mother to her baby during pregnancy, at birth, or through breast milk. HIV is not spread by casual contact or by mosquitoes or in the air or water (Alcama, 2002). In developing countries, HIV is largely a sexually transmitted disease, and it generally affects sexual active

productive people, with severe economic and social consequences. AIDS has replaced malaria and tuberculosis as the world's deadliest infectious disease among adults and is the fourth leading cause of death worldwide (UN/WHO, 2002). No vaccine or cure exists. However, abstinence from sex, use of condoms or other means to prevent sexual transmission of the disease, blood screening and avoidance of needle sharing has reduced infection rates in some areas. Multidrug 'cocktails' can delay onset of AIDS, but missing a dose can lead to drug resistance (Rick, 1999; UNAIDS, 2002)

Since the first case of AIDS was recognized in the United States in 1981, HIV has spread rapidly throughout the world. Statistics from the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) in 2006 show that the number of people living with HIV at the end of 2005 totalled 38.6 million (33.4–46.0 million). An estimated 4.1 million [3.4 million–6.2 million] were newly infected with HIV and an estimated 2.8 million [2.4 million–3.3 million] lost their lives to AIDS. Although the latest UNAIDS and WHO estimates are lower than those published in the AIDS epidemic update-December 2005, the number of people living with HIV has continued to rise.

HIV/AIDS is a major development crisis as well as a health crisis and is having a devastating impact. The epidemic is most severe in sub-Saharan Africa which has just over 10 percent of the world's population, but where 25.8 million people (about 60 percent of all adults) are infected with HIV. South Africa has the highest number of people living with HIV/AIDS (more than 4 million) and Botswana the highest

prevalence rate (more than 1 in 3 of the adult population has HIV). While HIV transmission in these countries is largely through heterosexual sex, elsewhere in the world, other modes of transmission such as injecting drug use and men having sex with men are the main routes of transmission (UNAIDS/WHO, 2006).

In Tanzania, the first three AIDS cases were reported in Kagera region in 1983. Since then, the epidemic has evolved from being rare and new disease to a common household problem, which has affected most of the Tanzanian families (Heggenhougen and Lugalla, 2005; URT, 2003). By 1986, all regions in Tanzania mainland had reported AIDS cases. The population of mainland Tanzania is estimated to be 38 329 000. An estimated 1.4 million people, or 3.7% of the total population, are HIV-positive (UNAIDS, 2006). Antenatal HIV prevalence is 7%. The urban-rural population ratio is 33:67, and urban-rural antenatal prevalence 11.2% vs 3.7% (WHO, 2005). About 110 000 children are living with HIV, and there are an estimated 1 100 000 orphans aged 0-17 due to AIDS (UNAIDS, 2006). Zanzibar has a population of approximately one million people and an overall HIV prevalence of less than 1%. However, in selected sites antenatal prevalence is over 2 %. (Zanzibar AIDS Commission, 2006).

In mainland Tanzania, HIV prevalence varies considerably by age and sex. However, for young people aged 15-19, the prevalence is about the same (2.1%). This pattern changes in other age groups; for example, for 20-24-year-olds the comparative rates for females and males are 6% vs 4.2%, and for 25-29-year-olds, 9.4% vs 6.8%. Prevalence peaks at 12.9% for women in the 30-34 age groups, and

at 12.3% for men in the 40-44 age groups. HIV prevalence extends to older age groups, with 5.8% of women and 6.7% of men aged 45-49 being HIV positive. HIV prevalence among males and females aged 15-49 also varies by region and religion. Prevalence ranges by region, from 2% in the Manyara region to 13.5% in the Mbeya region; and by religion, from 6.3% among Protestants, 7.5% among Muslims, to 8% among Catholics (NBS, 2005).

2.2 HIV/AIDS prevalence among pastoralist

With in-built uncertainties over definitions, and the fact that pastoralists are often poorly covered even by relatively effective national censuses, it is hard to produce reliable figures for pastoralist populations (Coast, 2000). However, pastoralists are said to represent, beyond doubt, an important proportion of the population in the East African countries that were among the first to suffer the ravages of HIV/AIDS; perhaps 7.5 million people or 25% of the population in Kenya, over a million people or 5% of the population in Uganda and significant numbers in Tanzania (Morton, 2003).

In East Africa there appears to be virtually no data on sero-prevalence disaggregated to pastoralists as a category or to specific pastoral communities, although Coast (2002) mentioned levels of 18% in Kenyan districts largely populated by Maasai. In Tanzania Hinderaker et al., (2001) reported that to date there is still very low HIV prevalence among Barabaigs pastoral community. This is at least partly related to the relative remoteness of their lands and to their relatively limited interaction with non-Barabaig. It has reported that nothing however

indicates that this people will be spared when HIV fully enters this area. On the contrary, there are indications that particular norms and practices may facilitate particularly rapid spread of the virus. Pastoral movements, relatively low literacy rates, limited competence in Swahili (the *lingua franca* of Tanzania), and relatively strong adherence to local custom, have been pointed out as particular challenges confronting health prevention campaigns among Tanzanian pastoral peoples (Blystad, 2005; May, 2003; Morton, 2003; Coast, 2006).

Furthermore, May (2003) and Morton (2003) reported that due to prevailing changes in pastoralists mode of life style (pastoralist to non pastoral activities such as migrating to town for employment as night watch-men, travelling far distance for trading livestock and products, beads and other commodities) have made them to be exposed to risky environment as well as risky behaviours and thus they are hypothesizing or it is even assumed that pastoralists are highly vulnerable to the impacts of AIDS, and may be highly susceptible to HIV infection. Much of this stems from the fact that many pastoralists are poor. Pastoralists are vulnerable above all to drought, as part of a nexus of vulnerability to long-term effect (Morton, 2003; ITDG, 2005). Trends (such as encroachment on grazing lands) and shocks (such as armed conflict) (Morton, 2003) makes Pastoralists to be *marginalised* in multiple ways: environmentally, economically, socio-culturally and politically (Morton, 2003). Such marginality has severely affected their access to, and use of, health care and preventive health services. All in all, their poverty and vulnerability, as well as their numbers and importance in countries and the great HIV/AIDS risks they are facing, make further study of HIV/AIDS among pastoralist an urgent

priority. This study will attempt to bring to light the foundations for existing gap on the knowledge, attitude and practice towards HIV/AIDS among Barabaig pastoralist to allow intervention of appropriate measure in order to protect this minority group from HIV/AIDS pandemic.

2.3 Impact of HIV/AIDS on pastoralism

Pastoral production systems are those in which 50% of gross household revenue (i.e. the total value of marketed production plus the estimated value of subsistence production consumed within the household) comes from livestock or livestock related activities (Morton, 2003). From 1994 up to now, there have been a few reports that have explicitly and systematically looked at the effects of HIV/AIDS on the livestock sector. This also refers to mitigating food insecurity and malnutrition from causes other than AIDS in Africa (Haslwimmer 1994; FAO 1995; Engh *et al.* 2000; Goe and Stranzinger 2002; Coast 2002). With the exception of Coast (2002), Studies have focussed mainly on livestock production as part of smallholder farming systems. Haslwimmer (1994), whose work also forms part of FAO (1995) and various other FAO documents, described the situation in Rakai district, Uganda, as an area of extreme endemicity, reported a loss of livestock through forced sales to meet medical and funeral expenses, loss of labour through deaths of adult men, and the inability of widows and orphans to acquire the necessary livestock production skills. She also comments on the decline of veterinary extension services both through deaths of staff and difficulty in arranging meetings with farmers. These problems have contributed to a serious medium-term decline in the livestock economy, although this raises a serious problem of attribution as encroachment on

grazing lands and serious animal health problems are also cited as reasons for the decline. FAO (1995) goes into more detail on the impact of HIV/AIDS on the BaHima pastoralists, again mentioning forced sales of livestock for medical care, but also raising similar problems of attribution. The costs of treatment leading to forced sales and loss of labour (including failure of transmission of livestock skills), also mentions the direct effects of AIDS on the veterinary service. They also mention specific social institutions that can be used to deny inheritance of a dead man's livestock to his widow and orphans. Dealing with mixed farming systems, they mention the losses of draught power and manure that result from declining livestock numbers. They mention a long-term decline in sales and marketing of livestock. Goe and Stratzinger (2002) reported that loss of labour and forced sales may contribute to the erosion of sound breeding practices that preserve indigenous breeds/strains of cattle at risk of extinction.

2.4 Knowledge on HIV/AIDS

More than three decades ago, when the first case of AIDS was reported, the Government has declared HIV/AIDS a national disaster and impressed on the entire national, including the Government, political, religious and civil leaders and non-governmental organization and community on the importance of taking new measures to put the national on a war footing against the HIV/AIDS epidemic. Each of these was required to plan and implement HIV/AIDS intervention according to their comparative advantage (URT, 2003). Following that the HIV/AIDS awareness increased rapidly in Tanzania. About 91.0% of women and 94.0% of men had heard about AIDS in 1989/90. By 1999, AIDS awareness was

almost universal among both men and women. Specific knowledge about AIDS also increased overtime (Heggenhougen and Lugalla, 2005; TDHS, 1996). Although AIDS awareness was high, misconception about HIV/AIDS were also common. In 1996, only 54.0% of women and 59.0% of men thought it was not possible to get AIDS from mosquito bites, while 41.0% of women and 36.0% of men thought that sharing of food or eating in the same utensils with an AIDS patient could transmit HIV. However several report and survey show that although HIV/AIDS knowledge is increasing; risk perception has not changed significantly since 1994. The proportional of men who perceived themselves at risk of HIV was 37.0% in 1994 and 46.0% in 1996, while for women it was 40.0% in 1994 and 43.0% 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 or practice surveillance on a specific population is therefore, important to establish the level of knowledge and risk perception in order to make comparison to national and regional levels so that to guide the implementers for appropriate HIV/AIDS intervention in that particular population.

2.4.1 Knowledge on modes of HIV/AIDS transmission

HIV can be transmitted from one person to another in a number of ways. Heterosexual contact: The majority of infections are transmitted through heterosexual contact. For instance in Tanzania heterosexual intercourse accounts for about 80% of all infections (URT, 2001; Kapinga, 2005; URT, 2006). Although the probability of transmitting HIV in a single act of intercourse can be quite low, a

number of factors increase the risk of infection dramatically. The two most important are the presence in either partner of a sexually transmitted disease (STD), like syphilis or gonorrhoea, and having a large number of sexual partners (Lamptey *et al.*, 2006). A significant number of African adults suffer from STDs and many have a number of sexual partners. As a result, about 88% of new HIV infections are due to heterosexual contact (POLICY Project, 2001; Hrdy, 2006). Therefore the programs designed to slow the spread of HIV need to focus on reducing transmission through sexual contact.

Mother-to-child transmission: Many children are infected perinatally; that is, they receive the infection from their mothers during pregnancy, at the time of birth, or through breastfeeding. About 25-40% of babies born to infected mothers will themselves be infected. For example, about 19% and 10% of new HIV infections in Tanzania and southern Africa are due to perinatal transmission respectively (URT, 2006; POLICY Project, 2001). Any woman who is pregnant or considering becoming pregnant and thinks she may have been exposed to HIV even if the exposure occurred years ago should seek testing and counselling. However the challenge is people in rural areas where there is limited health facilities, do they really seek or aware of these facilities? Therefore there is a need for a study to establish the awareness of the pastoralist on the maternal health concerning HIV/AIDS and inform the policy makers on the situation for appropriate interventions.

Blood transfusion/contact: These include transmission through blood transfusion; exposure to infected blood in various settings, including healthcare facilities; exposure to infected blood through needle-sharing as part of intravenous drug use and/ or

piecing instrument used for body scarification, tattooing and traditional medical procedure involving bloodletting through cuts and ear piercing. Laboratory studies show that infectious HIV from sharing needles or syringes with someone who is HIV infected can survive in used syringes for a month or more (Alcamo, 2002; Hrdy, 2006).

After transmission of HIV, a person does not develop AIDS immediately. There is often a lengthy period from infection with HIV to development of the disease AIDS that may last from two to 12 years or even longer. It is generally assumed that it takes about 7 -10 years for a person in Tanzania to progress from HIV infection to development of AIDS related diseases and, eventually dies (URT, 2003). For most of this period, the person may not have any symptoms and, therefore, may not even be aware that he or she is infected. This contributes to the spread of HIV, since the person can transmit the infection to others without knowing it. People with full AIDS, of course, remain infectious. For children the incubation period is much shorter because their immune systems are not yet fully developed. Therefore knowledge on HIV/AIDS and awareness on VCT should be established from a particular population so that to reduce the speed of infecting others.

2.4.2 Misconception about HIV/AIDS transmission

Many people have been observed to have misconception about various wrong ways which they thought can cause HIV transmission from an infected person to uninfected person. For example a study on knowledge, attitude, and practice among farmers and pastoralist in Ethiopia revealed a wide spread of misconception on the

ways on how HIV can be transmitted from one person to another that, for instance, many thought HIV could be transmitted through eating raw meat, raw eggs, bananas, oranges, tomatoes, sugar cane; breathing, sleeping and close contact with an infected person and mosquito bites. There were also wide spread stigma as many confessed that they would not buy food from a shopkeeper living with HIV/AIDS, they believed PLWHA should be quarantined, and they were unwilling to allow infected youths to look after their cattle or let PLWHA attend community meetings (Bishop-Sambrook, 2004).

Misconception about means of transmission and prevention are also common in Tanzania. Approximately four in five men and women in every hundreds people know that a healthy looking person can have the AIDS virus and that a person cannot become infected by sharing food with someone who has HIV/AIDS and about three quarters know that HIV/AIDS cannot be transmitted through mosquito bites (TDHS, 1996). There is a long way yet to educate people in order to eradicate these misconceptions and stigma. They should know that in actual fact the HIV is not an easy virus to pass from one person to another just through casual contact. Mosquitoes, fleas, and other insects as well as donating blood at a blood bank do not transmit HIV (POLICY Project, 2001; www.amraf.org). The findings in above studies highlight that knowledge about HIV/AIDS is high among the general population. However, caveat in knowledge level harbours serious misconception which need to be corrected to enable people have correct knowledge on how HIV/AIDS is transmitted and stand better chance to protect them against the deadly disease.

2.4.3 Knowledge on modes of HIV/AIDS prevention

Awareness of HIV/AIDS and basic Knowledge about ways to prevent the sexual transmission of the virus is generally high in Tanzania (although for many people, the level of knowledge may be superficial). Large majorities of the population are aware that an HIV – positive person may appear healthy, and most people can reject basic misconceptions about AIDS (such as that HIV can be spread through mosquito bites). However, knowledge about ways to prevent mother to child transmission of HIV is generally lower than knowledge about ways to prevent sexual transmission. Only about one- third of the population, for example knows that there are drugs a pregnant woman can take to reduce the risk of transmitting HIV to her baby.

The most effective prevention program promote or include interventions such as abstinence, delay in sexual debut and mutual fidelity, as well as limiting the number of sexual partners; consistent and correct condom use; STI treatment; counselling and testing, and a supportive social and policy environment (UNAIDS, 2000). For example following interventions in Tanzania in 2004, the age of sexual debut was 17.6 years for a women and 18.6 years for men. These numbers represent slight delays in sexual onset for Tanzania youth: in 1999, the average age of first sexual activity was 16.8 for women and 17.6 for men. Regarding faithfulness, according to the Tanzania HIV/AIDS Indicator Survey (THIS), 2003 – 2004, 6% of sexually active women and 27% of sexually active men had multiple sexual partners during the previous 12 months. THIS also reports that almost 4 in 10 women and half of men used a condom during their most recent higher risk sex (sex with non marital

partner) (URT, 2006). But for the community which have the customary marriage arrangement for example pastoralist there is a need to establish the age at marriage, type of marriage due to the importance of marital status being one of the factor of exposure to HIV/AIDS pandemic.

A program that focuses only on a few components may not serve the entire population and will have minimal national impact. The most effective mix of these components depends on cultural context as well as specific prevention needs and characteristics of key group. Effective program also consider the economic, social and cultural factors that may affect individuals behaviour. Sexual debut at young age, multiple sexual partners, intergenerational sex, STI infection and unprotected sex are HIV/AIDS risks factors that can be mediated through behavioural change. But convincing people to change their behaviour is difficult, especially if they believe that they are not personally at risk or that they can be successful treated for AIDS (Campbell, 2003; Lamptey et al., 2006).

Abstinence is prevention method emphasized in programming directed at youth, the demographic with the highest rate of new infections. Strategies to promote abstinence include changing social norms, sex education and peer education. Cultures which discourage premarital sexual intercourse and premarital pregnancy have been on positive side with this prevention principle. For instance in Barabaig pastoral community there are set sexual norms among non-marital relationships. These norms have been reported to favour abstinence (Blystad, 2005). One of these norms is that sexual intercourse is strictly prohibited for unmarried Barabaig girls.

However the freedom, excitement, and sexual play are cherished and encouraged attributes of non-marital relations. Sexual play among non marital youth has been reported being violated despite of set sexual norms. Therefore more understanding is required on that culture regarding sexuality so that brings the issue of risk related behaviour/ practice into much clear focus in terms of interventions necessary to reduce youth risk.

While mutual monogamy with an uninfected partner are effective preventive behaviour they may be difficult to maintain or meaningless or can also be criticized for being unresponsive to the needs of people whose cultural practices are based on polygamous marriage, sexual network as tool for social organization and procreation. For instance, Blystad (2005) reported that in Barabaig pastoral community not only is marriage polygamous, but a large number of married women and men have potential sexual rights in each other through the *rata* (sexual and procreative relationships with a husbands' clan 'brothers' being deemed good and acceptable) and *orjetedameyda* institution (institutions, which facilitates sexual relationships) between individuals who have established a fictive kinship relation. In these circumstances, partner reduction and condom use are unrealistic prevention option for Barabaig pastoral community. In this case there is a need to understand their cultural practices more clearly which will bring the issue of risk related sexual behaviour into much clear focus in terms of interventions necessary to reduce society risk.

Consistent condom use has been very effective in protecting against the transmissions of HIV/AIDS and other STDs in the people who are sexual active. Condoms reduce the risk of HIV infection by 85-90% when used properly and consistently. However in culture where sexual intercourse among married people means procreation this leads couples to engage into sexual risk behaviour. For instance, Blystad (2005) reported that in Barabaig pastoral community culture, the sexual intercourse between married people is meant for procreation, thus the whole idea of preventing procreative fluids from passing between procreative bodies (within the recognised categories) is a contradiction in terms. The notion of sexual intercourse without the linked notion of potential conception is highly alien. The relevance of the condom can be comprehended with regards to the highly controversial sexual relations with outside girls who sell sex in district centres where conception obviously is not the aim. In these circumstances, condom uses are unrealistic preventive option for Barabaig pastoral community.

Studies have been reported that beliefs also can influence negatively the use of condom. For example May (2003) reported that Maasai were having negative attitude towards the use of condoms. That condoms have been infected with HIV virus (May, 2003) and that condoms are just town men business. Their concentration is that if condoms protect people from HIV/AIDS then why people in the town keep dying from HIV/AIDS. Furthermore, cultural beliefs of some ethnic group can also prevent use of condom as Coast and IRIN (2003; 2003b) reported that the Maasai pastoral community believe that the Maasai circumcised penis is taboo to be covered with a condom because the Maasai believe that condoms are for

uncircumcised penis. The society should be changed so that to cope with the prevailing risk situation. These changes require education about modes of HIV/AIDS transmission, education on how to delay onset of sexual debut, strategies to eliminate high risk sex or adopt safer behaviours or seek services and access to supplies or services needs for protection. Negotiation skills and empowerment are also important so people, especially women and girls can protect themselves.

Many other technologies are available to reduce the risk of HIV transmission through non sexual intercourse, for example: blood screening to prevent transmission through blood transfusion; and infection-control practices, including sterilisation of sharp instruments, needle disposal, use of barrier methods such as gloves, and single-use of syringes and needles, provision of antiretroviral therapy (ART) as part of post-exposure prophylaxis (PEP) to limit the possibility of transmission from mother to child. Knowledge of HIV status is also considered to be an important step in prevention of transmission. Effective promotion of HIV prevention is needed considering all modes of HIV transmission, reviewing risks of exposure, and implement relevant policies, protocols and interventions from the country level to the individual level. In this context, prevention should promote the knowledge about particular modes of transmission and related knowledge of risk reduction or prevention. Improvement of access to information on sexual health education and skills regarding HIV/AIDS, sexuality and reproduction, and provision of appropriate services and technologies to reduce individual's risks and to improve individual's access to it are helpful in reducing transmission risks (UNAIDS, 2000). However, information on status of KAP concerning HIV/AIDS

among pastoralist is very little and virtually none on Barabaig pastoral community (Morton, 2003). Therefore it is important the KAP among Barabaig to be established in order to guide implementers for appropriate intervention.

2.5 Attitude and perceived susceptibility towards HIV/AIDS

An attitude is a feeling toward people, situations or roles that affects the way a person reacts. If a person's attitude toward something is favourable, the people react positively and adjust well to it and vice versa.

Since HIV/AIDS has emerged as a global problem with a disastrous impact on survival and human development, it has created fear, social anxiety and feeling against humanity (THIS, 2005). HIV/AIDS related stigma can partly be attributed to the fact that it is a sexually transmitted disease (THIS, 2005). National Policy on HIV/AIDS has identified stigma as one of the challenges in prevention and control of the epidemic (URT, 2001). People living with HIV/AIDS face discrimination and are sometimes neglected because of the hostile attitude which lead to secrecy and denial, consequently preventing and hindering people from seeking counselling and testing for HIV, which is a crucial first step in fighting the epidemic (URT,2001). Attitude towards HIV/AIDS and those people with AIDS may also help to predict behaviour change; however, the existing literature is conclusive.

Several studies found high levels of empathy, tolerance, acceptance and positive attitudes towards AIDS or person with HIV/AIDS (Serovich and Greene, 1997; Villarruel et al., 1998). However, other findings show neutral, unfavourable, or

unsympathetic attitude towards HIV/AIDS or those persons with AIDS (Carducci *et al.*, 1995; Katz, *et al.*, 1995; Konde- Lule *et al.*, 1989). For example it has report that 80% of Kuwait participants felt that person with HIV/AIDS should not be left to live freely in the community. A possible explanation for the variance in findings among studies is demographic characteristics such as nationality, age, sex, religion, ethnicity and marital status. Knowledge level is another possible predictor of attitude, indicating that increasing knowledge levels of HIV/AIDS may produce more positive attitude towards individual with AIDS (Carducci *et al.*, 1995).

Research focusing on the effect of belief of susceptibility to AIDS indicates that adolescent and adults who report high perceived risk for HIV/AIDS report practicing safer sexual behaviours, whereas those who perceived low risk for HIV/AIDS report practicing unsafe sexual behaviour (Gray and Saracino, 1998; Villarruel *et al.*, 1998).

However, in a study of health behaviour in Kenya, perceived susceptibility to AIDS was not a significant predictor of condom use (Volk and Koopman, 2001). Failure of perceived susceptibility to predict behaviour most likely results from the participants misconceptions about the origins and transmission of HIV/AIDS. For example, some participants reported the belief that anal sex was the safe alternative to vaginal sex (deBruyn *et al.*, 1992; Bezmalinovic *et al.*, 1994; Vasconcelos *et al.*, 1995; Volk and Koopman, 2001) or these individuals, misconception, or lack of accurate knowledge about AIDS, resulted in accurate assessment of susceptibility must be coupled with accurate knowledge in order to bring about behaviour change.

2.6 Traditional/ cultural practices regarding risk of HIV/AIDS transmission

Cultural / traditions practices and ideas may serve two main purposes. They may perform a coping function with new circumstances, where positive new ideas may be adopted and become popular. This is also referred to as the accommodative aspect of culture. The other purpose of culture is to maintain cultural identity and continuity, which is the conservative side of tradition, which resists new innovations, perceived that they may destroy the cultural identity. Since health and illness are linked to culture, these two broad functions of culture may have positive and negative implications when a new disease such as HIV/AIDS emerges in a community (Bukuluki and Kyaddondo, 2006).

While communities need to maintain their values and identity, the HIV/AIDS pandemic demands a fresh review, modification and even the discontinuation of practices that increase the risk of infection. For example the pastoralist, Barabaigs and Maasai communities have fiercely guarded and preserved their cultural practices, traditions and norms in the face of modernization. These pastoralist communities have maintained their social organization, mode of dressing, food, language and even its traditional homesteads made from cow dung, sand and clay. Until recently, the closed and traditional way of life had insulated the pastoralist from the AIDS pandemic. Furthermore, trading, mingling and intermarriage with other communities have resulted to a distortion of their traditional safety environments hence exposed to risky of HIV/AIDS spread and have found themselves at crossroads (Blystad, 2005; May, 2003). Blystad (2005) reported that

the Barabaig informants blamed poor influence of outsiders on Barabaig culture, that Iraqw bring in the night time dances, Swahili people come with foreign brews and drinking parties, pregnancies out of wedlock among Barabaig girls are linked to sexual transgression of teachers in official schools. The manner in which Barabaigs see the dangers of HIV as brought into their communities (referred to as “the house of God”) through immoral mingling. They said that,

“if this illness enters a location like Dang’eyda (one of the Barabaigs villages), it will not leave behind people, not even one. If this illness is transmitted via sex, then these days sex is not like before. It takes place without a plan; - people behave like the puppies of dogs. A person (no longer) ‘eat things’ (has sex) with a plan. Before there used to be a plan, and there used to be borders and now there are none”.

Various practices have been identified as the key cultural values among pastoralist community that are now recognized as HIV risk factors. Several practices were reviewed and will be described under here.

2.6.1 Premarital sex

In many societies, sexual behaviour and practices are controlled by cultural norms and values. Condemnation of premarital sex, pre-marital pregnancy and the value of virginity are some of the positive cultural values that are positive in the prevention of the spread of HIV/AIDS. Early sexual debut increases the vulnerability of girls to HIV due to their biological immaturity that allows tearing and bleeding more easily as well as lack of skills to negotiate for safer sexual intercourse. In pastoral communities particularly the Maasai it has been reported that Maasai prepubescent

girls undergo fertility construction. The process includes the gradual sexual initiation of a pre-pubescent girl by one or more *moran* of her choosing. The Maasai have a widely held belief that semen helps a girl to develop physically (Coast, 2006; Mbugua, 2004). It is important for a Maasai girl not to be a virgin by the time of her marriage, for reasons neatly summarised by Talle (1994); “*a virgin bride is looked upon as an awkward phenomenon and somehow brings embarrassment on her family. She is considered to be a child. The Maasai say that she does not have a “door”*”. Therefore this culture is against the preventive measure which needs an individual to abstain from sex till married.

2.6.2 Early marriage

Early betrothal and bride capture marriage increase vulnerability to HIV (Kirungi *et al.*, 2006; Kyaddondo *et al.*, 2005; and Clack, 2004). The arrangement includes a bride price paid by the groom to the girl’s family, which may occur when a girl is very young and long before the actual marriage (Mbugua, 2004). The practice undermines the girl’s capacity to determine her own partner and limits her access to education, thus excluding her from the empowerment that education can facilitate, and also make them lack exposure to important HIV prevention messages (Blystad, 2005). It has been observed that pastoralist prefer to admit boys more than girls to school. They send the girls to the husband in exchange for dowry. Therefore in most cases a husband is often twice or even triple the age of his wife, leaving her in a weak position to demand or suggest safe sex, and further contributing to the biological vulnerability of her age because the physiological immaturity of their reproductive systems provides less of a barrier to HIV transmission (Mbugua, 2004).

Generally, women lack complete control over their lives and are taught from early childhood to be obedient and submissive to males, particularly males who command power such as a father, uncle, husband, elder brother, or guardian (POLICY Project, 2001). Generally, the practice of early marriage process is characterised by the absence of test for HIV status between brides. Thus this practice needs to be addresses so that HIV test should be done before marriage so as to reduce the risk of HIV/AIDS spread among the community.

2.6.3 Marriage

Marriage is a deeply held value and a universally valued tradition in all-Tanzanian societies. In Tanzania, by the age of 30 -34, above three quarter 80% of women and the men have ever been married (THIS, 2005). Marriage in Barabaig pastoral community mainly take forms of a customary, where a contract is made and the marriage are performed in form of payment of the bride wealth (Lane, 1996; Klima, 1970). Irrespective of the form it takes, marriage carries with it obligations and responsibilities such as core support to the family, child bearing and economic cooperation and sexual rights among others. While the institution of marriage has its strengths, it may also expose some people to HIV/AIDS vulnerability. For example, there is a legal minimum age of 18 for marriage but customary marriages may be arranged for much young adolescents especially girls, which exposes them to the risk of HIV/AIDS infection (Bukuluki and Kyaddondo, 2006).

This highly valued institution of marriage has also been cited as an increasingly risk factor to HIV/AIDS infection due to perceived sexual rights within marriage, difficulties in negotiating safer sex (use of condom), extended partner, absence and

domestic violence. For example, within marriage regular sex is expected for both partners, and is obligatory for women. Condom use is lowest among the married. Possible socio-cultural explanations are those married people do not consider condoms to be meant for them, and some studies have shown that there is a common belief that condoms are for use with prostitutes or people perceived to be more promiscuous Olowo-Freers and Barton, (1992). Blystad (2005) reported that the notion of sexual intercourse without the linked notion of potential conception is highly alien among Barabaig pastoral community. The relevance of the condom can be comprehended with regards to the highly controversial sexual relations with outside girls who sell sex in district centres where conception obviously is not the aim. The findings of the HIV/AIDS Sero-Behavioural Survey (2004/05) also reported that 9 out of 10 respondents who did not use a condom at last sex reported that their last sexual partner was a spouse or a cohabiting partner (Bukuluki and Kyaddondo, 2006).

Furthermore, some local values of marriage deprive women from independent decisions about their own lives. Marriage gives husband exclusive sexual rights to his wife. On the contrary, marriage does not give a woman exclusive sexual rights to her husband. And some studies have shown that a number of women continue to accept that it is by nature men have special privileges in marriage including having multiple sexual partners. Olubuloye, *et al.*, (2000), note that some women explain their men extramarital sexual behaviour as fundamental nature.

2.6.4 Polygamy

Barabaigs pastoral community was among many societies in Tanzania approve polygamous marriages for multiple reasons. A rich Barabaig man will aim at marrying more than one wife, the number ranged from 2 – 16 wives (Mbugua, 2004; Blystad, 2005). Reasons given for polygamy are many; fundamentally, it appears that it is generally accepted that men are inherently polygamous and it is normal for them to have more than one wife (Uganda Country Report: 41); For men, polygamy is a symbol of social prestige and many women provide more children for agricultural and livestock labour; in some cases, when a wife is unable to bear children, marrying another woman to guarantee children is culturally and socially acceptable; and in order to prevent infidelity therefore, society has allowed men to bring more than one woman into their household (Bukali de Graça, 2002).

However, polygamous practice has reported being associated with increased risk of HIV among women in polygamous when compared with those in monogamous union (Kapinga, 2005). The risk is determined not only by the sexual behaviour of the husband, but of his co-wives, who may also have multiple partner, creating a complex network of potential risk of HIV infection. The polygamous structure facilitates competition among co-wives over limited resources. The practice of polygamy coupled with poverty and low education levels of many women (who seek affluent men) encourages multiple sex partner arrangements. As the husband is solely responsible for distributing resources, he may often have “favoured wives,” leaving the others struggling to meet their needs and those of their children (Coast, 2002; May, 2003; Mbugua, 2004; ITDG, 2005). Human Rights Watch (2005) has

also observed that women face a high risk of HIV in marriage as a result of polygamy and infidelity among their husbands.

This combined with other human rights abuses such as marital rape and wife inheritance predispose other women to a higher risk of contracting HIV. Studies carried out in Sub-Saharan Africa also show that majority of the newly HIV positive women are contracting the virus from their husbands. Therefore this practice has the potential of exposing a large number of people to HIV/AIDS infection. Thus there is a need to establish prevalence of these risk traditional practices among the target population so as to assess their awareness and level of knowledge on the risks posed by these traditional practices in relation to HIV/AIDS.

2.6.5 Multiple sexual partners and sexual network

Practices such as polygamous, extramarital sexual relationships expose a person to multiple sexual partners. In general the number of sexual partners has been observed positively correlated with HIV/AIDS infection in both the United States and Africa (Landesman *et al.*, 1985; Clumeck, 1985; Kapinga *et al.*, 1996; Lamptey *et al.*, 2006). Although generalizations are difficult, most traditional African societies are promiscuous by Western standards. Promiscuity occurs both premaritally and postmaritally. For instance, in Barabaig pastoral community marriage is ideally polygyneous, in addition to that culturally a Barabaig woman in principle marries into her husband's clan, which implies that sexual and procreative relationships with a husbands' clan 'brothers' (*rata*), are deemed good and

acceptable. There is specific institution which related to such extended sexual rights of in-laws (*rata*) is the *orjetedameyda*, which also facilitates sexual relations between individuals who have established a fictive kinship relation. This intricate system of potential sexual exchanges also ideally implies elaborate transfer of domestic animals which links families, patrilineages and fictive kin together in large procreative and co-operative networks, networks which are located at the heart of Barabaig social organisation (Blystad, 2005).

IRIN and Coast (2003b; 2006) also reported that the premarital and extramarital sexual relationship is socially sanctioned among the Maasai pastoralist. This is also observed to the Lese of Zaire, where the period following puberty and before marriage when sexual relations between young men and a number of eligible women are virtually sanctioned by society (Hyrd, 2006). Multiple sexual partnerships are among the factors that contribute to the heterosexual spread of HIV; this is especially true when these partnerships are concurrent. Therefore the held traditional cultural practices may contribute to the spread of HIV due to the fact that it involves the practice of multiple sexual partnerships or sexual network. Therefore there is a need to establish its prevalence so far and awareness and knowledge of the population in target in regard to the exiting risks of HIV/AIDS infection that associated with this practice.

2.6.6 Gender and sex

In as much as cultural values and practices may be protective, they may as well expose some sections of the population to vulnerability, in particular women. It is

almost universal in many Sub Sahara African countries that cultural values and traditional gender roles are very confining for women and limit their access to vital information and ability to take independent decisions including those concerning their own bodies. Women are expected to be obedient to men, especially in marriage. And because she has been paid for with the bride wealth, a woman is seen as a possession for the man (Whyte, 1997). As a result, women often have no say in all matters concerning their lives including sex. Women are taught to never refuse having sex with their husbands, regardless of the number of partners he may have or his unwillingness to use condoms, even if he is suspected of having HIV or another STD (Erickson, J. R. (1990); POLICY Project, 2001).

In sexual relations, a woman is expected to please her male partner, even at the expense of her own pleasure and well being. For example, in parts of west, central and southern Africa, many women insert external agents into vaginal to tighten their vagina passages, which is believed to enhance male is pleasure during intercourse. These agents include herbs and roots as well as scouring powders which may cause inflammation lacerations and abrasions that could significantly increase the efficiency of HIV/AIDS transmission (Karim *et al.*, 1995; Runganga, 1992).

Dominance of male interests and lack of self-assertiveness on the part of women puts them at risk. For example, Mbugua (2004) reported that in Maasai tradition when a male visits a married age-mate (circumcised on the same day), the host is expected to leave his house and provide total access to the visitor, leaving his wife to provide food, drink and a place to sleep. Many young married Maasai girls

believe that they are obliged to have sex with husband's age-mate visitors or would be cursed if they refused.

2.6.7 The value of children

The value of children is one of the issues deeply embedded in all cultures among Barabaig pastoralist. One of the principle goals of marriage is children. Both men and women need children to achieve adult status, and they gain prestige and influence with the birth of every additional child. Population control among the married Barabaig pastoralist is a foreign concept as fertility in human and animal populations is the only customary source of wealth. Men or women who die without a son and a daughter, may never be given the honour of an 'official' Barabaig funeral (*bung'ed*), an ultimate goal among Barabaigs pastoral community.

This value for children and the pressure exerted by society that tended to influence adults to have children it thus may be a significant factor in driving the epidemic, especially with the low condom use among married couple. Blystad (2005) note that in Barabaig pastoral community culture, the sexual intercourse between married people is meant for procreation, thus the whole idea of preventing procreative fluids from passing between procreative bodies (within the recognised categories) is a contradiction in terms. The notion of sexual intercourse without the linked notion of potential conception is highly alien. Thus the relevance of the condom can be comprehended with regards to the highly controversial sexual relations with outside girls who sell sex in district centres where conception obviously is not the aim.

2.6.8 Death rites

The most common death rites are those of ritual sex and widow inheritance. Ritual sex is a practice where by a man or woman has to have sexual intercourse with somebody else to “cleanse” herself/himself upon her husband/wife’s death. Widow inheritance is a practice whereby a widow is inherited, usually by the brother of the deceased husband so that the deceased’s family can safeguard their property (including the woman). These practices have been reported to be common among a number of pastoral communities (Blystad, 2005). Since the causes of death are often unknown or simply accepted as an ‘Act of God’, this practice exposes man to HIV/AIDS infection should the widow be infected. Obviously, if the man is already married his other wife/wives are also at risk.

2.6.9 Circumcision

Traditionally, pastoralist community female and male circumcisions are normally practiced in the traditional way, using the same knife. Female circumcision is remotely related to the practice of male circumcision and is not usually an initiation rite per se (Van de Perre *et al.*, 1984). It is a common practice among pastoralist communities and is regarded as an important aspect of cultural identity and essential for facilitating girls’ social and spiritual transition into womanhood. For example, it was reported that a pastoralist girl “won’t be regarded as a woman until she is circumcised.” This practice creates a clear risk of HIV due to cross- transmission during the cutting ceremonies where the same knife or razor blade is used to circumcise different girls. Since this initiation defines a girl as an “adult,” it also contributes to early marriage (Mbugua, 2004).

Other studies also report that the female circumcision has been postulated to increase the likelihood of AIDS transmission via increased exposure to blood in the vaginal canal. The presumed explanation is that the small introitus, the presence of scar tissue (which may cause tissue friability), and the abnormal anatomy of a mutilated vagina would be predisposed to numerous small (or large) tears in the mucosa during intercourse (Hrdy, 2006). Male circumcision is mandatory (for religious and social reasons). Female genital mutilation (FGM) is optional but desirable. For instance a survey conducted by the Tanzania HIV indicator Survey in Tanzania in 2003/2004 found that 73% of females in Northern region of Tanzania had undergone FGM. The worst side of the practice is that it is done under unsterile environment.

2.7 Socio-economic factors

2.7.1 Mobility and / or Migration

Livestock is very important to the socio-economic organization among pastoralist community, with over 98% of all households owning livestock, and 99% of adults describing themselves either as pastoralist or agropastoralists (Coast, 2000). Mobility is not an inherent characteristic of a livestock-dependent livelihood, but in the areas of low and highly variable rainfall what today's pastoralists generally inhabit it is close to being one (Morton, 2003; Lane, 1996). So deep is the association that "pastoralism" itself has only recently gained currency over the older term "nomadism". Despite many pressures to sedentarize, the majority of the world's pastoralists exhibit some degree of mobility. So far the mobility experienced are a) "Traditional" whole-household pastoral migration (with the main

aim of securing grazing and water for livestock); b) Pastoral migration carried out by men, often younger men, on their own, while the rest of the family follow a less mobile lifestyle; c) Journeys undertaken to market livestock or livestock products, or buy cereal foods and consumer goods.

These trips are often long-distance, as marketing centres may be far from grazing lands, and generally undertaken by men alone or in groups; d) Labour migration to non-pastoral employment, generally by men, though occasionally by women, and to a limited but increasing extent by whole households. As a gross generalisation across pastoralist groups, mobility of type (b) is increasing relative to type (a), for reasons which include increased cultivation and the desire to access services or food aid. Type (c) is probably increasing as pastoralism becomes increasingly commercialised, and (d) is also increasing. Labour migration for pastoralists is largely driven by poverty or specific shocks such as drought and former often find themselves at the lower end of the labour market as night watchmen in most African urban centres.

Migration by men alone, particularly to population centres types (c) and (d) can definitely be regarded as a factor increasing susceptibility to HIV infection. This may be the case where sexual morals within the pastoralist community are strict. May (2003), in a very interesting discussion of Maasai labour migration to Tanzanian towns, presents equivocal evidence on the extent to which Maasai migrants interact sexually with non-Maasai women, but concludes that urban migration is a factor increasing susceptibility to HIV among Maasai generally. Talle

(1999) reported that a minority (perhaps a growing minority) of the Maasai men who make marketing and purchasing trips to a small town have sex with non-Maasai prostitutes. In some pastoralist groups, women also migrate to towns and end up as prostitutes or heavily involved in transactional sex. She further notes an increase in prostitution among Maasai women in Kenya and Tanzania as a response to recurrent drought. Even in Muslim pastoralist societies this may occur. Getachew (2001) suggests that Ethiopian Afar women become prostitutes in Djibouti, and there is some prostitution by Beja women in Port Sudan.

2.7.2 Inadequate health and education facilities

Marginalization has been reported to be a common practice among the traditional people like pastoralist. Across the world there is still a major problem of pastoralist exclusion from health services. This stems largely from the fact that pastoralists live in remote areas, which are also sparsely populated (leading to high per capita costs) and that many are highly mobile. It is also, stems from their marginality: political marginality which does not allow them to lobby effectively for better services, and for many groups cultural-linguistic marginality which means that health services are not delivered in an appropriate form (Morton, 2003). These problems apply equally to health education services, which are necessary to effect changes in sexual behaviour and reduce susceptibility to HIV. Coast (2002) reported the inadequacy and inappropriateness of HIV education in Tanzanian pastoral areas for example in Maasailand. May (2003) show that even when Maasai move to towns as labour migrants they remain seriously excluded from public information on HIV/AIDS. Therefore combinations of new forms of male (and perhaps female) mobility,

polygyny and toleration of extra-marital sex, and exclusion from public information about HIV and AIDS, are make some pastoralist communities highly susceptible to the spread of HIV.

2.8. Summary

This chapter had made review on the general overview of HIV/AIDS situation globally, regional wise, countrywide and narrowing down to the study areas have been reviewed from this chapter. The region specific HIV prevalence in Tanzania mainland, has also reviewed showing the most affected regions and least affected regions. General issues on transmission and preventions of HIV/AIDS as well as misconception on HIV/AIDS transmission have also been reviewed. Socio-cultural and socioeconomic factors which expose the pastoralist community to the risk of HIV/AIDS spread were also reviewed.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Overview

This chapter presents background of the study area and the method used for analysis of data on knowledge, attitude and practice towards HIV/AIDS among the Barabaig pastoralists. The chapter is divided into five sections. Section one presents the study location and justification of its selection. Section two presents research design and the sampling procedures deployed. Section three describes data collection procedures, and section four is on data processing and analysis. The last section presents the limitations of the study.

3.2 Study area and justification for its selection

The study was carried in two districts, namely Babati and Hanang of Manyara region which are located in Northern zone of Tanzania mainland (Fig.2). Hanang is one of the five districts forming the new region of Manyara in the United Republic of Tanzania. It lies in the north-eastern part of Tanzania. It shares common borders with Mbulu and Babati districts in the north, Kondoa and Singida districts to the south and Iramba district to the west. The district covers an area of 3 639 square kilometres. According to the 2002 population census Hanang district had a population of 204 640 people, composed of 104 185 males and 100 455 females, with an average growth rate of about 4.2% per year. The current population 2008 is estimated at 251 379 people composed of 127 984 males and 123 385 females. Administratively, the district is divided into five divisions, 22 wards and 61 villages. Katesh, which is the district's headquarters', is located about 70 km away from Babati district the region headquarter's (Hanang District Council, 2008).

Babati District Council is one among the six councils and also the regional headquarters of Manyara. It shares common borders with Monduli in the north, Karatu in the north-west, Mbulu in the west Hanang in south west Kondoia in the south and Simanjiro in the east. Babati district council has an area of 5 609 square kilometres which is equal to 92% of the total area of Babati district. According to the population and housing census of August 2002, it had a population of 237 601 with an annual growth rate of 2.7%. Currently (2008), the population of Babati is estimated to be around 297 519 of which 152 403 males and 145 116 females. Administratively Babati District Council has four divisions, 18 wards and 82 villages (Babati District Council, 2008).

As pointed earlier, this study was conducted in Manyara region specifically in Hanang and Babati districts. The study population was made up of Barabaig pastoral communities both males and females. The Barabaigs are widespread in many parts of Tanzania; however the greater majority still reside in their origin home, Hanang district, and a good number are also in Babati district (Lane, 1996).

These study areas were selected due to widespread population of a targeted group.

Furthermore, Manyara region is a new region thus the influx of new residents (foreigners) is expected to get high very fast. So due to the risk of cultural practices which might expose the original inhabitants at risk of HIV/AIDS due to interaction with foreigners, this study found it appropriate to select this area to assess the KAP towards HIV/AIDS pandemic among Barabaig pastoral community who are thought to lag behind because of their strict adherence to the traditional lifestyle although they are being engaged in travelling far away to business centre to sell or buy the livestock and domestic commodities. While they are there on these journeys they can interact sexually with other population at risk of HIV/AIDS.

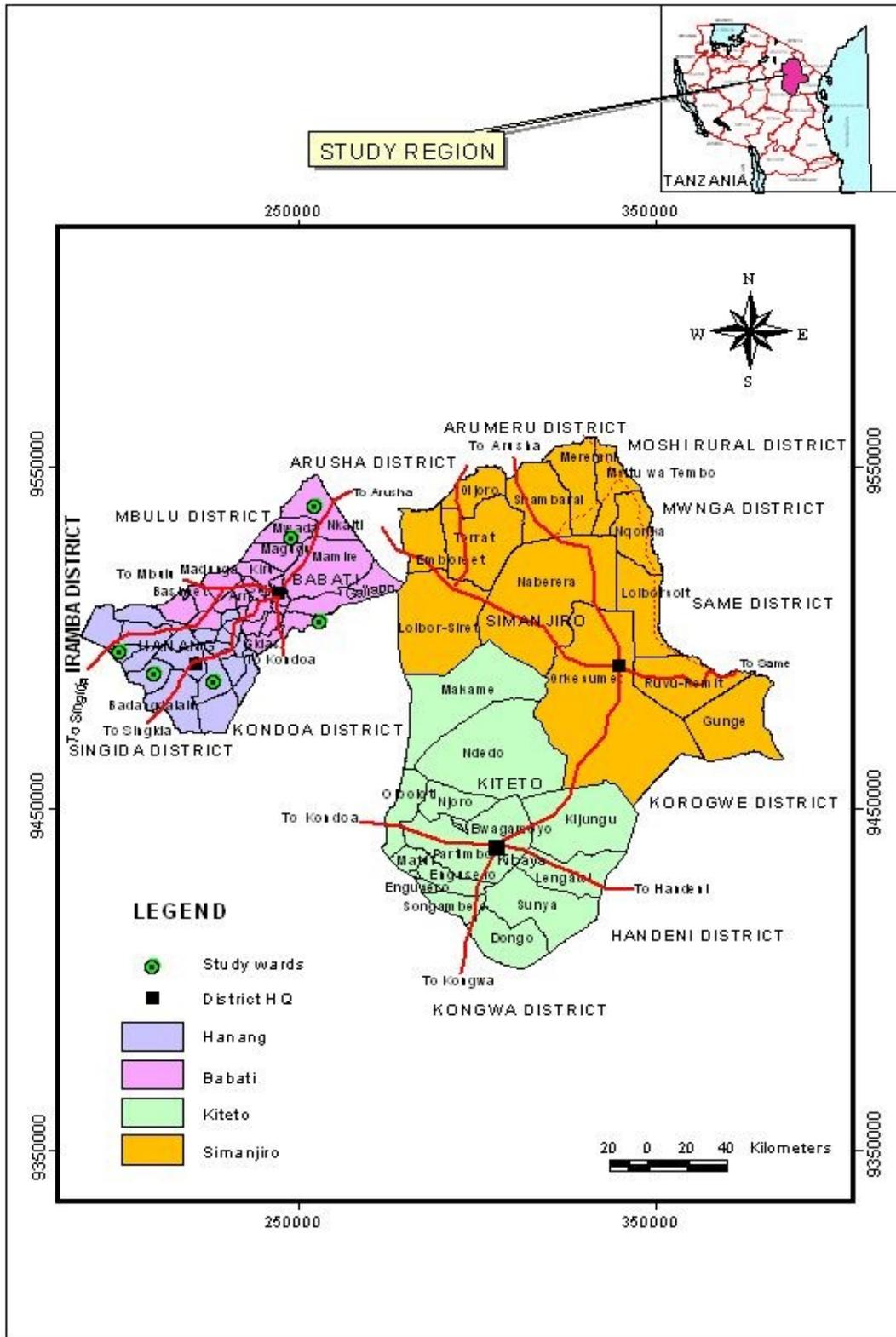


Figure 2: Map of Manyara Region showing study area

3.3 Research Design

A cross sectional research design was used in this study. The cross sectional research design was adopted because of limitation of resources and time available for data collection. The design allows data to be collected at a single point in time and used in descriptive study for determination of relationship of variables (Bailey, 1995; Babbie, 1990).

3.4 Sampling Procedure

The population from which the sample for this study was drawn involved adult male and female Barabaigs pastoralists aged between 15 to 60 years. The total populations of people in these districts were 237 601 and 204 640 in Babati and Hanang respectively (Tanzania National Population Census, 2002).

3.5 Sample size

The study involved 100 respondents; the figure was far above that of 30 sample size suggested by Bailey (1995) which is considered to be the minimum for statistical analysis. In this study the sample size of 100 respondents was selected from five villages focusing on 20 respondents in each village. Questionnaires were prepared and 100 household were visited in the selected villages. However the responses received were 92% of which males were the majority (59.8%) and females (40.2%) participated in the face to face interview during the survey. Furthermore, a total of 16 FGD which were formed by 8 to 12 participants in each group were conducted in four villages based on gender (men, women, girls and boys) that were randomly selected to validate the information obtained from individual interview and clarify the required information in the study.

3.6 Sampling method

Non probability and probability sampling technique was adopted. Non probability method allows the selection of sample in which the probability of unit selection is unknown; rather the selection of units is based on the judgment of the researcher instead of randomness. While the probability method is used whereby, every item in the population has a calculable or known chance of being included in the sample (Tripathi, 1999; Rwegoshora, 2006). In this study, non probability sampling particularly purposive sampling was used to obtain villages, while probability sampling involving simple random sampling was used to obtain respondents in each village.

Purposive sample is also called a judgement sample. These terms indicate selection by design- by choice, not by chance. Purposive sampling therefore allows a sample which is thought to be typical of the universe with regard to the characteristics under the investigation to be chosen (Tripathi, 1999; Rwegoshora, 2006). A total of five villages (three from Hanang and two from Babati districts) which was estimated to have widespread population of the Barabaig pastoralist were chosen through purposive sampling with help of respective district council's officials.

Simple random sampling is one in which each possible sample of ' n ' different units has an equal chance of being selected, which also imply that every member of the population has an equal chance of being selected into the sample (Tripathi, 1999; Kothari, 2004; Rwegoshora, 2006). A list of all Barabaig pastoralist household by names in each village was obtained from village household records in the village government office. Names of these household heads were written on the pieces of

paper which were thereafter folded. The number of households to be involved from each village was determined and the papers were randomly selected to get 20 household from each village. In each particular village, a similar procedure was repeated to get the total number of households which were required for this study.

3.7 Data collection procedures

3.7.1 Primary data

Primary data involved both qualitative and quantitative data. Quantitative data was collected through structured questionnaires composed of both close-ended and open-ended questions. The questionnaires were administered to the selected respondents. This was achieved through face-to-face interview with respondents by the researcher; three well trained Barabaigs language translator enumerators were also available for the main researcher for translation from *Kiswahili* into *Kibarabaig- kiswahili*. Face to face interview and use of translator were used due to high illiteracy level among this pastoralist community and paucity of Kiswahili speakers in the Barabaig community which made it impossible for respondents to fill the questionnaire on their own. The questions used in this study adopted a standard questionnaire developed by Joint United Nation on HIV/AIDS (UNAIDS) and THIS, 2003/04 (Appendix 1). However, after pre-testing, which was done to test the clarity, sequence of questions and the information obtained the questionnaire was modified to address the objectives of the study correctly. Furthermore, focus group discussions were carried in four villages using a checklist for qualitative data in order to validate the information obtained from respondents and further clarify the required information in the study.

3.7.2 Secondary data

Secondary data was obtained from previous research studies; reports from the district council's HIV/AIDS coordinator, NGOs working in the study area on issue concerned with HIV/AIDS, Sokoine National Agriculture Library (SNAL) and the internet. Secondary data have been used to improve the primary data sources.

3.8 Data processing and analysis

Both quantitative and qualitative methods of data analysis were deployed. The data collected was edited, coded, summarized, entered and analyzed using the Statistical Package for Social Science (SPSS) *version 11.5* computer software in conformity with the objective of the study (Kothari, 2004). Descriptive statistics particularly frequencies, cross tabulation and percentages, mean, median and mode were used in the analysis. Index scale was constructed to measure the level of knowledge and attitude towards HIV/AIDS.

3.9 Limitations of the study

(a)The language barrier; majority of respondents even those who claimed or considered themselves that they knew the *Kiswahili* language was a problem since the respondents were not able to explain issues properly. Even their understanding of questions was not good due to paucity of *kiswahili*. This forced the researcher to recruit research assistants of the same vernacular language with respondents and also to hire translator who was actually not sure whether she/he was translating the questions correctly to the respondents. This possibly had been contributed to missing information.

(b) The Barabaig pastoralists reside in remote areas where travelling with a vehicle were difficult due to lack of sound roads, and the household are sparsely located from one household to another. This made the survey work tedious.

(c) Males were a little bit dominant during the interview. In some cases the women avoided being interviewed even with husband's permission. In some households women were away fetching water and fire wood.

(d) The focus group discussion which had elders (older person), they were observed dominated discussions while the rest of members kept quite due to traditional and customs of respecting the elderly when they are talking even when their responses were wrong.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Overview

This chapter presents results and discussion of the study on Knowledge, Attitude and Practice (KAP) towards HIV/AIDS among the Barabaig pastoral community, in Hanang and Babati Districts in Manyara region. The chapter is divided into six sections. Section one describes the demographic characteristics of the respondents, while section two describes socio- economic characteristics of the respondents, section three describe the awareness and knowledge about HIV/AIDS and STIs of the Barabaig pastoral community. Section four describes the attitude of Barabaigs towards HIV/AIDS. Section five describes the Barabaigs' socio-cultural practice in relation to the risks of HIV/AIDS spread among the Barabaig pastoral community and section six describes source of information on HIV/AIDS to the Barabaig community, as well as the HIV/AIDS programme or intervention available for disseminating Information Education and Communication (IEC) on HIV/AIDS to the Barabaig pastoral community.

Reference of related studies done on Barabaigs will be cited, as well as the study findings will also be compared to those findings of the studies done to other pastoralist community such as Maasai pastoral community. The Maasai are going to be used due to the reason that their culture resembles that of Barabaig pastoralist in many aspects (Morton, 2003).

4.2 Demographic characteristics of respondents

This section provides a brief description of some demographic characteristics of the sampled respondents. The parameters for demographic variables used in this study are presented in Table 1. These include age, sex, marital status, educational level attained and religion affiliation. These were examined in order to provide the features of respondents in study.

Table 1: Distribution of respondents by demographic characteristics (N= 92)

Category	Sex (%)		Total
	Male n= 55	Female n= 37	
Age (years)			
15 – 24	25.5	13.5	20.7
25 – 34	32.7	18.9	27.2
35 – 44	10.9	43.2	23.9
45 – 54	18.2	21.6	19.6
55 – 64	12.7	2.7	8.7
Sex	59.8	40.2	100.0
Marital status			
Single	38.2	8.1	26.1
Married	61.8	64.9	63.0
Widower	0.00	24.3	9.8
Divorced	0.00	2.7	1.1
Religious affiliation			
Christian	29.1	27.0	28.3
Traditional	70.9	73.0	71.7
Education level attained			
No education	65.5	89.2	75.0
Adult education	3.6	0.0	2.2
Incomplete, primary education	16.4	10.8	14.1
Complete primary education	10.9	0.0	6.5
Secondary school education	3.6	0.0	2.2

4.2.1 Age and Sex

The age groups, 15 to 65 years old had been purposely selected in order to target the sexually active age group in this traditional (Barabaigs) community. Study findings show that in the sampled population, most respondents covered were those of age group 25 – 34 (27%) and 35 – 44 (23%). And the least (8.7%) were those of age

group 55 – 64 years (Table 1). It can be observed that the majority of respondents covered fall into the sexually active group of 15 to 49 years (THIS, 2005). Findings from this study are useful for making appropriate recommendation to the various actors, pertaining to the KAP regarding risks of HIV/AIDS among the Barabaigs and other pastoral community in Tanzania at large. Majority (59.8%) of the respondents covered were males and 40.2% females. There were few females; they were sometimes away from home carrying out other domestic chores such as fetching firewood and water for domestic use and for young livestock when the interviewer visited their houses (Table 1).

4.2.2 Marital status

Marriage is one of the factors which expose male and female to sexual intercourse which is the leading mechanism to HIV infection in Tanzania (TDHS, 1996). Respondents in this study were asked if they were married, single, cohabiting, separated, divorced or widows/widowers. The study revealed that 63.0% of the respondents were married, while 26.1% were single. Furthermore, it was revealed that females were more likely to be married than males. The widowers were 9.8%, which were all females. The least mentioned marital status was divorce and these were also females only. There were no cases of cohabiting or separation in this study. It can therefore be stated that the majority of the respondents are already engaged in heterosexual relations evidenced by their stated marital status of 'married' and living 'married'. Also all (9.8%) widows were inherited and continued to engage in heterosexual relationship like in married relationship. Furthermore, the majority (73.9%) of the respondents who are married fall in the

group of 25 to 54 years old. These results compares well with Tanzania HIV/AIDS indicator survey (THIS, 2005) which noted that at the age of 30 – 34years the proportional of males and females who are married were as high as (80%) with more females than males indicating that females get married earlier than males (Table 1).

4.2.3 Education level

Education plays an important role in communicating various messages to the public or community through print media such as magazine, brochure, leaflets bill boards etc, raising community awareness on particular issues in question (Wedgwood, 2005). Studies on KAP focusing on HIV/AIDS proved that high level of education signalled high practice of condom use, awareness on the source of condom as well as knowledge pertaining to transmission and prevention of HIV/AIDS (THIS, 2005).

The level of education ranged from non-formal education to ordinary level secondary school education in this study. There was high level of illiteracy; three quarters (75.0%) of the respondents of which the majority (89.2%) were females and 65.5% males have never attained any formal education. The highest education level attained was ordinary level secondary school by only 2.2% of the respondents; while those who had completed primary school education were 6.5% are males, and those with incomplete primary education were 14.1% of which majority (16.4%) were males and 10.8% females (Table 1).

Overall, the study observed that there was high level of illiteracy among Barabaig pastoral community compared to other communities. Females were less likely to have attended primary school education compared to males. Similarly Jenkins (2005) in his study on 'the Datoga of Tanzania' found the literacy rates among Barabaig pastoralist was only 1%. Therefore the respective community could be at HIV/AIDS risk due limited HIV/AIDS knowledge as a result of the literacy barrier which makes them unable to utilize other sources of information found in print media.

4.2.4 Religion affiliation

Religion is an important cultural variable. In some cases the type of religion of an individual has been found to relate to sexual behaviour. The study findings show that the majority (71.7%) of the respondents belong to traditional religion, followed by Christian of unspecified denomination (23.8%) and there were no Moslems. This reveals that if religion was the source of information about HIV/AIDS among the Barabaigs it would have no impact since most of the Barabaigs do not belong to modern religious group. It also revealed that the traditional institution could play an important role in imparting HIV/AIDS knowledge. This would make issue of HIV/AIDS to be addressed properly. Therefore there is a need to equip traditional leaders of Barabaig with HIV/AIDS knowledge which they can easily transmit to their community (Table 1).

4.3 Socio-economic characteristics of respondents

4.3.1 Occupation and source of income

Respondents in this study were grouped in three main occupations; livestock keepers, farmers and both livestock keepers and farmers. These groups were drawn based on the main activity the household use to generate source of income and subsistence. Livestock keepers accounted 46.7%, of the respondents, farmers were 34.8% and 16.0% were both farmers and livestock keepers (Table 2). This shows that pastoralist involves in other productive activities like farming, implying that their economy no longer depends solely on livestock keeping. The findings are similar to those reported by ITDG (2005) in Kenya where pastoralist are also shifting from nomadic to semi nomadic because a considerable number have been reported to be engaged in crop farming due to land scarcity and so called environmental degradation as well as lack of policy which support pastoralist mode of lifestyle. However, livestock remain very important in the socio-economic organization, with over 98% of all households owning livestock, and 99% of adults describing themselves either as pastoralists or agro-pastoralists (Coast 2000; 2002b).

In respect to sources of income, nearly a half (46.7%) of the respondents reported that livestock selling was a major source of household income, followed by selling of crop surplus of agriculture (34.8%), only few (16.3%) reported selling both livestock and crops as the major sources of household income, and informal/ petty trade mainly selling of charcoals was reported by 2.2% of the respondents as a major source of income (Table 2). This reveals that the majority of pastoralists

depend mainly on livestock as the driving forces in the economy for sustainability of a household economy despite the harsh environmental challenges associated with the sustainability of large herds of cattle.

Table 2: Distribution of respondents by Socio-economic characteristics
(N = 92)

Category	Male (%) n= 55	Female(%) n= 37	Total (%) N= 92
Occupation			
Livestock keeper	54.5	35.1	46.7
Farmers	23.6	51.4	34.8
Livestock/farmers	20.0	10.8	16.3
Businessman	1.8	2.7	2.2
Source of income			
Livestock selling	54.5	35.1	46.7
Crop selling	23.6	51.4	34.8
Livestock and crop selling	20.0	10.8	16.3
Business income	1.8	2.7	2.2
Home distance to business centre			
1km to 5km	41		44.6
6km to 10km	43		46.7
11km to 15km	8		8.7
Conversant language			
<i>Kibarabaig</i>	40.0	89.2	59.8
<i>Kibarabaig,kiswahili</i>	58.2	10.8	39.1
Market Location			
Village market	61.8	64.9	63.0
Town market	21.8	24.3	22.8
Town and village market	16.4	10.8	14.1
Market distance			
Within village market	36.5	34.6	35.5
Adjacent village market	36.0	36.5	36.2
District town market	24.7	25.0	24.8
Adjacent district market	3.4	3.8	3.5

4.3.2 Language

Language is the main communication bridge among communities. Each community has its own language. For example *Swahili* is the language of instruction in Tanzanian primary schools. This is in line with the country's policy of using *Swahili* to build up unity and cooperation among Tanzanians (Wedgwood, 2007).

Language can also act as a barrier in understanding of message, particularly if a person is not conversant with the language of the person communicating the message. For example, a study done among tribal people in India found that information, education and communication (IEC) materials were not available in local languages, which acts as a constraint in disseminating knowledge about HIV/AIDS to the targeted audience (Chawla *et al.*, 2007). Respondents in this study were asked to identify the appropriate language in order to assess the proper language which could be used to them during dissemination of IEC. The majority (59.8%) of the respondents of which 89.2% females were only conversant in Barabaig language, about 39.1% of which the majority (58.2 %) were males knew *kiBarabaig* and a little *KiSwahili*. This revealed that in Barabaig Pastoral community, Swahili language which is the national language could also act as a barrier for a clear understanding of IEC about HIV/AIDS since most of the Barabaigs were not conversant with *KiSwahili*.

4.3.3 Place of residence

It was declared through NACP that in every congregation the HIV/AIDS agenda should be included in order to create massive awareness to the community about HIV/AIDS. Respondents were asked the distance from their home to the centre of the village. It was observed that nearly a half (46.7%) of the respondents live at a distance of 6km to 10km, while few (8.7%) live at a distance of 11km to 15km from the centre of the village. Therefore it revealed that nearly a half (46.7%) of the respondents walked between 12km to 20 km to and fro village meetings; solicit of commodities and other entertainment. Such long distance may affect attendance in village meetings where the IEC about HIV/AIDS is compulsory to be addressed and

discussed. Thus the majority might be missing the information. Location also could influence the knowledge of people due to simplicity of obtaining information. For example, it has been reported by THIS (2005) that, the knowledge of source of condoms for young urban women and men was higher compared to young women and men in rural areas.

4.3.4 Market and market location

Market is the centre where people of various characteristics, culture and behaviour meet to either sell or buy commodities, or for socialization purposes. It is at this point where the people can influence each other in one way or another on sexual issues and establish temporary friendship which could end up in single or multiple sexual relationships. There are monthly markets which are called *nadi* by the Barabaigs in Babati and Hanang districts. They are either located near or at a distance from the Barabaigs settlements. These markets have cattle auction operated by the Tanzania Livestock Marketing Corporation (TLMC) (Lane, 1996). The respondents are mainly served by auctions where also selling and buying of commodities like livestock and cereals as well as other domestic commodities is done. The study findings show that 36.2% of the respondents sold and bought their commodities from the adjacent village market, 35.5% of the respondents used the market within their village, while 24.8% and 3.5% used the district town market and adjacent district market respectively (Table 2). It was also revealed that the inter-village and inter-district trade was an important means of earning income as well as the exchange of goods among the communities.

It was reported during FGDs, that some of the Barabaigs travelled from one *nadi* to another to buy and sell livestock to earn more profit. It was said that the price of cattle differ from one *nadi* to another therefore they have to visit almost all the *nadi* in the area to buy cattle at cheaper price and sell for profitable.

“We are sometimes obliged to travel from one nadi to another for the sake of getting good price per cattle value/grade. Because sometimes we may get unsatisfactory price compared to the grade of the cattle and sellers expectation in just one or two nadi”.

The findings are similar to those reported by Lane (1996) in which when the cattle price seemed to be unsatisfactory to the seller, he very often withdraws his animal from the sale ring. Furthermore, it was also reported by Morton (2003) that the majority of the world pastoralist exhibits some degree of mobility and among the types of mobility is journeys undertaken to market the livestock or livestock products or buy cereals, food and consumer goods. In the context of HIV/AIDS the study revealed that while these males are away to market their livestock, they get drunk and may involve in sexual relation with non Barabaig women in trade centres. Given this information, it can be hypothesized that the mobility of Barabigs male to fetch good market for their livestock places the Barabaigs community at risk of HIV/AIDS infection.

4.4 Awareness and Knowledge about HIV/AIDS

4.4.1 Awareness about HIV/AIDS

In order to assess the general awareness of Barabaigs pastoral community on HIV/AIDS issues, the respondents were asked two separate questions: whether they have heard a kind of illness called HIV/AIDS; if they have seen a person who has

been infected with HIV/AIDS. And in FGDs respondents were asked to explain if the community knew about HIV/AIDS and its symptoms of HIV/AIDS. The study findings show that there was a reasonably high level of general awareness of HIV/AIDS among the Barabaigs pastoral community. Majority (98.9%) of the respondents had heard about the illness called HIV/AIDS. There was no significant sex difference in awareness. These results are similar to those reported by THIS (2005) that over 99% of Tanzania Mainlanders aged 15 – 49 have heard of HIV/AIDS and that the level of awareness about HIV/AIDS for both males and females has increased slightly between 1999 to 2003.

Furthermore, about a half (53.8%) of the respondents had seen a person who was infected by HIV/AIDS (Table 3). Despite of reporting affirmative responses on the issues, it was however reported that these cases were not from their villages but in town and they were not sure whether those cases were medically diagnosed as HIV/AIDS cases. About (46.2%) also expressed their concern that they had not witnessed AIDS cases face to face; but saw AIDS victims through video and televisions (TV). Some said they heard that the victim were in the neighbouring village or sub village, but not in their areas of residence.

Table 3: Distribution of respondents by awareness on HIV/AIDS (N=92)

Statement	Yes (%)			No (%)		
	Male	Female	Total (%)	Male	Female	Total (%)
Ever heard of an illness called HIV/AIDS?	98.2	100.0	98.9	1.8	0.0	1.1
Ever seen a HIV/AIDS infected person?	55.6	51.4	53.8	44.4	48.8	46.2

Furthermore, during FGD they explained that the HIV/AIDS has been known as a disease which has no treatment and is dangerous. One FGD member (male) said that

“if it happens to strike our community all of us will perish because we have heard that the disease has no cure”.

The findings are similar to those reported by May (2002; 2003b) who noted that the Maasai pastoral community have also reported to have heard about the disease, and were afraid because the disease had no cure. It was also revealed that most women in all four FGDs said that they have never seen an AIDS patient face to face. They saw them in the TV/video. The FGD discussants said that they have not nicknamed the disease in their own language as opposed to Maasai who have called it *biita: i.e shrinking* (Coast, 2006). Female respondents reported that, they were not sure of the symptoms of AIDS, since they had not experienced or seen an AIDS patient closely. However from what they have heard through radio and other sources of information such as trainings and hear says; they were able to mention diarrhoea, loss of body weight, rashes/blisters which later on coalesce to form large sores all over the body, dry mouth, coughing, loss of hair, and vomiting.

4.4.2 Knowledge of HIV/AIDS transmission

Knowledge of HIV/AIDS among the Barabaig pastoral community was assessed in several ways. The first assessment was; general knowledge of HIV/AIDS which was done through administering a series of close ended (prompted) questions and open ended (unprompted) questions on modes of HIV/AIDS transmission and ways of reducing risks of HIV/AIDS. Furthermore, in order to determine the level of knowledge of HIV/AIDS among the Barabaig pastoral community an index of 11

items on modes of HIV/AIDS transmission was constructed and administered to the respondents.

Table 4: Distribution of respondents by knowledge on modes of HIV transmission (unprompted) (N= 91)

Routes of transmission	Counts	Males (%) n= 54	Females (%) n=37	Total (%)
Sexual intercourse	87	50.5	49.3	50.0
Share needles or piercing utensils	50	29.7	27.4	28.7
Blood transmission/contact	17	9.9	9.6	9.8
Mother to child	2	1.0	1.4	1.1
Share clothes	5	2.0	4.1	2.9
Shake hand with HIV/AIDS patient	2	1.0	1.4	1.1
Share food with HIV/AIDS patient	3	1.0	2.7	1.7
Tongue kiss	2	1.0	1.4	1.1
Mosquito bite	2	1.0	1.4	1.1
Don't know	4	3.0	1.4	2.3
Total	174			100.0

The study revealed that the best known route of HIV/AIDS transmission was sexual transmission mentioned by a half (50%) of the respondents and 28.7% mentioned sharing of body piercing instruments. Knowledge on the other modes of transmission was considerably lower. Lagging far behind was knowledge of mother to child transmission (MCT), mentioned by 1.1% of the respondents (Table 4). This may be construed to indicate that the post and antenatal services are not available in pastoral areas or are not effective in creating awareness of these transmission channels. Based on this, it is plausible to conclude that there is limited services on awareness on Prevention of Mother to Child Transmission (PMCT) measures, which can be expected to lead to more risks in HIV cases to under five years as new born get infected. The awareness levels of the channel of MCT are detailed further in Table 7. Furthermore, misconceptions regarding HIV/AIDS transmission routes

were also observed. These include sharing clothes, sharing food, and mosquitoes bite. About 2.3 % of the respondents had no idea of any mode of HIV/AIDS transmission (Table 4). There was slight difference between males and females in identifying routes of HIV transmission although males had better knowledge compared females.

Though responses to open-ended questions are considered a more robust way of capturing information, responses to direct question also are important since they give an indication that people have information, even if they are unable to recall it spontaneously. Therefore to ascertain whether people had heard information on the modes of HIV/AIDS transmission and prevention, a couple of close ended questions were also asked to the respondents.

Response to close ended statements (Table 5) show that, respondents were able to recall the correct modes of HIV/AIDS transmission, with unprotected sexual intercourse being the most known and MCT being the least known. Results also revealed that females had better knowledge in this route compared to males. However, the results do not differ much from those accessed through open-ended questions. The majority (95.6%) of the respondents reported that they knew sexual intercourse to be a mode of HIV/AIDS transmission, followed by (86.8%) of respondents who were aware of contact/ transfusion with infected blood and use of un sterilized sharp instruments while MCT was the least (75.8%) known mode of HIV/AIDS transmission (Table 5).

**Table 5: Distribution of respondents by modes of HIV transmission
(prompted) (N= 91)**

Statement	Yes (%)		Total (%)	No (%)		Total (%)
	Male n=54	Female n=37		Male n=54	Female n=37	
Through witchcraft	42.6	45.8	44.0	57.4	54.1	56.0
Heath looking person	74.1	48.6	63.7	25.9	51.3	36.3
Unprotected sexual intercourse	94.4	97.	95.6	5.6	2.7	4.4
Mosquito bites	63.0	67.5	64.9	37.0	32.4	35.2
Unclean blood contact/ transfusion	87.0	86.5	86.8	13.0	13.5	13.2
Vertical route (mother to child)	68.5	86.3	75.8	31.5	13.5	24.2
Uses of unsterilized sharp equipment	85.2	89.2	86.8	14.8	10.9	13.2
Coughing and sneezing	66.6	78.3	71.5	33.3	21.6	28.6
Hand shake with an AIDS person	38.9	54.0	45.1	61.1	45.9	54.9
Share food with AIDS person	55.5	70.2	61.6	44.4	29.7	38.5

On the other hand incorrect routes were also mentioned by 71.4% of the respondents who believed that one could contract HIV through coughing and sneezing (Table 5). Furthermore 64.9% of the respondents believed that they might get infected through mosquito bites. Other incorrect routes were sharing food with AIDS patient, hand shaking and witchcraft (Table 5). Generally, the findings show that females have low level of knowledge compared to males. Education efforts should be made to dispel this misinformation. Better understanding on how HIV could be transmitted is an important factor to prevent or reduce risk of HIV spread (Babakian et al., 2004; Boyer and Tschann, 1999).

The FGD revealed the same results on the mode of HIV/AIDS transmission, as the least mentioned route was HIV transmission through mother to child. However, the

following correct and incorrect routes of HIV/AIDS transmission were mentioned by the respondents in FGD. The correct ones were through sharing of razors, sexual intercourse, and traditional birth attendants (TBAs) who do not use gloves – contact infected blood, while the incorrect were to sit on previously used chair by AIDS patient, kiss, sharing food and clothes with AIDS patients. One woman said that,

“We fear this disease very much because we have no enough knowledge on its transmission, prevention and other necessary things to understand about the disease, for example me, the only way I heard is that the transmission is usually through sexual intercourse.” another one added that, “I heard that it can be transmitted through sharing of unsterilized sharp instruments/ needles/ razors and through sexual intercourse”.

These results are similar to those of May (2003) who reported that Maasai respondents did not know exactly how AIDS is transmitted. May gives an example of a Maasai elder who reported hearing on the radio that it was through sex while a warrior was reported to have said that he did not know anything about HIV/AIDS but only heard about it on the radio. This indicates that knowledge on HIV/AIDS transmission is not well known among the pastoral community. Thus there is a need of imparting the correct and sound knowledge on HIV/AIDS to reduce risk and spread of HIV/AIDS in pastoral community.

4.4.2.1 Misconception about modes of HIV/AIDS transmission

Misconception on modes of HIV transmission was found to be wide spread in Barabaig pastoral community, with significant differences between sexes. Females

had a high level of misconception compared to male respondents. In close ended responses the observed misconception on HIV transmission were through coughing and sneezing which was mentioned mostly by 78.3% females and 66.6% males; followed by mosquito bite by 67.5 % females versus 63.0% males and sharing food by 70.2% female versus 55.5% males. Other misconceptions identified were witchcraft by 46.6% males versus 45.8% females and hand shaking by 38.9% males versus 54.0% females (Table 5). In open ended question; the incorrect listed modes of HIV transmission include sharing of clothes, shaking hands, sharing food and mosquitoes bite (Table 4). This study revealed that women have high level of misconceptions despite their key roles in the family, particularly taking care of the sick including AIDS patients and raising the young ones. Their high level of misconception could be contributed by their low level of knowledge on HIV/AIDS as revealed in this study.

Similar results were also reported by Bishop-Sambrook (2004) that farmers and pastoralist in Ethiopia who were least well informed about HIV/AIDS transmission and preventive methods, had the highest level of misconceptions about how it could be transmitted (many thought HIV could be transmitted through breathing, casual/close contact with an infected person, eating raw meat and eggs, and through mosquito bites) and nearly all farmers and pastoralist had at least one stigmatizing attitude towards people living with HIV/AIDS (PLWHA) (e.g. they would not buy food from infected shopkeeper; would not let PLWHA attend community meeting) due to their limited knowledge on HIV/AIDS. Education efforts should be made to dispel these misconceptions, as better understanding of how HIV could be

transmitted was an important factor to prevent stigma against individuals with HIV/AIDS (Lentine, 2005).

4.4.3 Knowledge on methods of HIV prevention

To ascertain knowledge on methods of HIV prevention among Barabaig pastoral community respondents were asked open ended question, “how a person can reduce the risk of being infected by HIV/AIDS”. The study results show that, most of the respondents were at least able to mention one way of avoiding HIV/AIDS spontaneously.

The respondents’ responses indicate some knowledge of all aspects of the ABC modes of HIV/AIDS prevention. However, there were differences in levels of knowledge about each mode, with being faithful mentioned more often than either condom use or sexual abstinence. Some considerable differences between men and women were also observed (Table 6).

The study findings show that being faithful to one partner is the most known mode of HIV/AIDS prevention mentioned by (28.9%) of the respondents of which majority (36.0%) were male compared to only 17.5% females. Abstinence was mentioned by 17.6% of the respondents of which most of them were females (Table 6). Only few 14.1% of the respondents of which the majority were males mentioned condom use as a preventive measure. In addition, 18.9% of the respondents acknowledged the importance of ensuring that sharp instruments like razors or needles are sterile or not shared, while 4.9% mentioned avoiding unclean blood transfusion/contact (Table 6).

However, the respondents revealed gap in their knowledge on the methods of HIV/AIDS prevention. This was evident through mentioning of incorrect modes such as avoiding sharing of clothes and avoiding alcoholism. Furthermore, 7.0% of the respondents said, that “there is no way one can do to avoid HIV/AIDS transmission” except through the power of Gods. In addition 6.3% indicated to have no idea or knowledge of any method of HIV/AIDS prevention (Table 6).

Table 6: Distribution of respondents by prevention methods of HIV (unprompted) (N= 91)

Responses on ways of prevention	Counts	Sex %		Total
		Male n =54	Female n= 37	
Faithful to one partner	41	36.0	17.5	28.9
Avoid sharing of piercing utensils	27	16.3	22.8	18.9
Abstinence	25	11.6	26.3	17.6
Condom use	20	17.4	8.8	14.0
There is no way can be done to protect oneself	10	8.1	5.3	7.0
Avoid unclean blood transfusion/contact	7	3.5	7.0	4.9
Don't know	9	3.5	10.5	6.3
Avoid sharing clothes	3	2.3	1.8	2.1
Avoid alcoholism	1	1.2	0.0	0.7
Total	143	60.1	39.9	100

These results are similar with those reported by Coast and Kulzer (2003; 2001) for Maasai pastoralist, on the methods of HIV/AIDS prevention in which there were correct and incorrect answers. The correct ones were: avoiding sex (93%); use of condom (15%); avoiding knives used to pierce skin (22%); and unclean blood transfusions (8%); while incorrect routes were; avoiding sharing latrines (4%); pray to God (12%) and avoiding touching clothes of HIV/AIDS person (4%). In addition, similar findings were also reported by May (2003) in the case of the Maasai pastoralists in which most of the respondents reported not knowing exactly how HIV/AIDS is prevented. Several Maasai informants in Dar es Salaam made similar

references. They believed God would keep them safe while they were in the city, and allow them “to go home the same way as they had come” that is, without HIV/AIDS. In spite of the fact that a considerable number of pastoralists were able to tell at least one method on how HIV/AIDS risk can be reduced, it was observed that some have rejected the ABC approach for prevention of HIV/AIDS claiming that there is no way someone can do to prevent HIV/AIDS transmission except through God’s will; they believe that it is not easy for a person to be faithful as at some point a person will be tempted to have a relationship with another partner, thus impossible to attain fidelity and “it is quite impossible to a physically fit person to keep away from sexual intercourse due to ‘nature’ which drive the body to desire sex”.

Furthermore, there are still some people among the Barabaig pastoral community who have completely no idea on how someone can avoid HIV/AIDS. This kind of misinformation and lack of proper knowledge about HIV prevention can contribute to high risks towards HIV/AIDS spread among this particular community. May (2003) has argued that such responses suggest that some pastoralist thought of HIV/AIDS as something metaphysical and it is beyond their control. Such narratives indicate that knowledge about how HIV/AIDS is contracted or prevented was not accurate or widespread among the respondents, but rather a mingling of hearsay, apprehension, and fatalism. On the other hand for example use of condom can also be avoided among the Barabaigs, because for them sex means to bear children. Thus the condom could not be a viable option for HIV/AIDS prevention (Blystad, 2005). A similar observation has also been reported by Mbugua (2004) in respect to the Maasai.

With close ended statements on methods of HIV/AIDS prevention, findings revealed that there was good awareness about methods of HIV prevention compared to responses from open ended questions. This implies that knowledge is not yet sufficiently known by the people to enable them recall those methods without being prompted. For example, on being asked whether condoms can be used to protect against HIV/AIDS, 44% of respondents said yes, thrice the percent of those who mentioned condoms spontaneously. When prompted, all respondents (male and female), showed considerable awareness about abstinence, and be faithful, as well as avoiding unsterilized piercing instruments as the methods of prevention than using a condom (Table 7).

Pertaining to condom use, they said that they do not trust the condom because the condoms are infected with micro-organism which probably has effect to users. Based on respondents' views, it can be noted that misinformation could make pastoralist reluctant to practice safe sex hence contribute to spread HIV/AIDS. The observations are similar to Coast (2003) who found the low levels of condom knowledge, among Maasai pastoralist. For example Maasai show scepticism about the practicalities of condoms by saying that condom will not prevent this deadly disease because it is too thin and break easily; that the liquid will escape; that condoms in Dar Es Salaam were thrown away because condoms were full of disease; that they can tighten and cause an injury to man.

Notwithstanding the fact that most Barabaig are aware on how HIV/AIDS can be avoided, some (20.9%) of the respondents admit to seek traditional healers to protect them against HIV/AIDS (Table 7). This kind of believe about HIV

prevention may contribute to negative attitude towards use of suggested modes of HIV/AIDS prevention hence expose the Barabaigs to risks of contracting HIV/AIDS spread.

Table 7: Distribution of respondents by methods of HIV prevention (prompted) (N=91)

Statements	Yes (%)		Total (%)	No (%)		Total (%)
	Male n=54	Female n=37		Male n=54	Female n=37	
Abstinence	79.6	100.0	87.9	20.4	0.0	12.1
Consistent & correct use of condom	48.1	37.8	44.0	51.9	62.1	56.1
Have only one faithful sex partner	79.6	89.2	83.5	20.4	10.8	16.5
Traditional healer protection	16.7	27.0	20.9	83.3	73.0	79.1
Avoiding un sterilized equipment/tools	92.6	78.4	86.8	7.4	19.6	13.2
Avoid sharing food with AIDS person	66.7	67.5	67.1	33.3	32.4	33.0
Not shake hand with AIDS person	59.3	56.7	58.3	40.7	43.2	41.8

4.4.4 Level of knowledge concerning HIV/AIDS

This section establishes the prevailing level of knowledge on HIV/AIDS among Barabaigs pastoral community using eleven items (Appendix 2). It is important to determine the level of knowledge because correct knowledge regarding possible modes of HIV/AIDS transmission is not only critical for decreasing infection rate, but it is also important to dispel persistent myths, and partial knowledge which can further perpetuate the risk of infection (Babakian et al., 2004; Boyer and Tschann 1999). Lack of accurate knowledge about HIV/AIDS is a key factor in the lack of proper HIV prevention practices.

To determine the respondents' level of knowledge regarding HIV/AIDS, an index scale was developed using lists of correct and incorrect statements on modes of HIV transmission. Eleven variables were used to form this index and for each item, respondents were asked to give either a yes or no response. They were also given the option to give a "don't know" response. For each variable, every "Yes" response against a correct fact was given a value of 1, while every "Yes" response on wrong fact was given a value of 0. Similarly, every "No" response against wrong fact was given a value of 1, and every "No" response on correct fact was given a value of 0. Zero was also awarded to "don't know" response (Appendix 2).

The total scores of each respondent (N=91) were computed. The highest total level of knowledge score was 11 and the lowest score was 0. The scores of respondents were categorized into: high level of knowledge (8 – 11 correct answers), moderate (5 - 7 correct answers) and low (0 - 4 correct answers) as summarised in Table 8.

Table 8: Distribution of the respondent by level of knowledge in categories (N= 91)

Level of knowledge	Sex (%)		Total
	Male (n=54)	(Female n= 37)	
Low	23.6	32.4	27.2
Moderate	38.2	40.5	39.1
High	38.2	27.0	33.7

Study findings show that more than a third (39.1 %) of the respondents had moderate scores, and 27.2% had low scores. The mean and median scores were 6.04 and 6.0 respectively. The findings show that 39.1% of pastoralist had moderate level of knowledge on modes of HIV/AIDS transmission, with slight differences by sex for which it was observed that 40.5% of the females had lower levels of

knowledge compared to males (38.2%). Similarly, more (38.2%) males were in the high level of knowledge category compared to 27.0% of females. In addition, the least category of low level of knowledge accounted for 27.2% of the respondents, in which the majority (32.4%) were females compared to 23.6% of males (Table 8). These results imply that the level of knowledge of females was low compared to that of males. These results are similar to those reported by May (2003) in which women in Maasai pastoral community had low level of knowledge on HIV/AIDS compared to males and some females have never heard about HIV/AIDS. Furthermore, they did not know how one gets it, how is it treated, nor had they ever witnessed any victims. Similar findings have also been reported by Bishop-Sambrook (2004) in his study that farmers and pastoralist women in Ethiopia were least informed on preventive methods as only 2% of women were able to mention the correct ways of HIV prevention.

Inaccessibility to information could be the main cause of the low level of knowledge to pastoralist women because this study revealed that the main source of information on HIV/AIDS reported by respondents were radio, NGO- through village meetings and *Waswahili* at *Kijiweni* where many Barabaig pastoral women have limited contact due to their domestic responsibilities, less mobility compared to men and perhaps the language used to communicate the message was not clear to them as majority (89.2 %) of women reported to be conversant with Barabaig language only. These findings also show that the pattern of knowledge level concerned HIV/AIDS in Barabaig pastoral community resembles that of other communities in Tanzania, in which level of knowledge for women were reported to be low compared to that of men, especially in rural areas (Kapinga, 2005).

Furthermore, these results imply that level of knowledge of HIV/AIDS among the Barabaig pastoral community is unsatisfactory, as majority are aware of sexual mode of HIV transmission but they are not aware on condom and its uses as the main preventive measure against HIV/AIDS transmission through sexual intercourse. In addition, even the little information about HIV/AIDS accessed seems to emphasize more on HIV/AIDS transmission mode through sharing of piercing instruments at the expense of other modes of transmission while it contributes very little on the HIV/AIDS spread among the community (Hrdy, 2006).

This revealed through responses of Barabaigs in individual questionnaire and even in FGDs. their risk practices such as sexual behaviour among clan brothers and age-mates wife sharing, ritual cleansing, widow inheritance and polygamous type of marriage do not feature in their understanding. These practices are highly responsible for HIV/AIDS spread as they expose them to potential modes of HIV/AIDS transmission. Without appropriate knowledge on how to prevent it e.g. use of condoms. It can be concluded that Barabaig pastoral community is at risk of being infected with HIV/AIDS unless effort are made to educate them on common modes of HIV/AIDS transmission and its prevention in particular emphasis on the use of condom.

4.4.5 Knowledge concerning HIV/AIDS transmission from mother to child

To ascertaining the awareness and knowledge of respondents on mother to child mode of HIV/AIDS transmission; respondents were asked whether, a mother who is infected with HIV/AIDS can transmit it to her child. The majority (72.5%) of males

and females said that transmission is possible. Most of the respondents seem to be guessing because when asked this question their response was yes; but they went on giving out reasons by noting that “because the baby is sharing blood with the mother; the baby is suckling the infected mother’s milk so it is obvious that the baby can be infected by her mother”.

However, after being asked ‘the route in which the mother to child transmission occur’, a half (51.9%) of the respondents mentioned, during pregnancy, followed by (31.6 %) breast feeding and the least (13.9%) was during delivery. In regard to what should a mother do to prevent transmission, more than a quarter (34.8%) of the respondents said that they do not know what should be done to prevent it, followed by (28.8%) of the respondents who said that a mother can do nothing to avoid transmission since she shares her blood with her baby. While correct measures like stopping breast feeding was mentioned only by (10.6%) of males; taking antiretroviral (ARVs) by (7.6%) of both male and female respondents and seeking doctor advice (18.2%) of which (28.2%) were males and (3.7%) females (Table 9).

On other hand knowledge of ARVs drugs for pregnant women is also far less wide spread because only 14.5% of males and 2.7% females knew that there are special drugs that a doctor or nurse can give to an infected HIV/AIDS pregnant mother to reduce the risk of transmitting the virus to the baby (Table 9) . Similar results have been reported by (THIS, 2005) in which it was found that knowledge of ARVs drugs for both males and females was far less widespread and that few males and females knew that there were special drugs that a doctor or nurse can give to a

pregnant women infected with the AIDS virus to reduce the risk of transmitting to the baby.

Table 9: Distribution of respondents by knowledge on mode of HIV/AIDS transmission through mother to child (N=91)

Statement	Male (%)	Female (%)	Total
If yes how?			
During pregnancy	53.2	50.0	51.9
At delivery	14.9	12.5	13.9
Via breast feeding	29.8	34.4	31.6
Don't know	2.1	3.1	2.5
What can a mother do to reduce transmission to her baby?			
Stop breastfeeding	17.9	0.0	10.6
Take special drug(ARVs)	10.3	3.7	7.6
Get advise from Doctor	28.2	3.7	18.2
Nothing she can do to avoid it	20.5	40.7	28.8
Have no idea of what she can do to avoid it	23.1	51.9	34.8

4.4.6 Knowledge on Sexually Transmitted Infections (STIs)

A key aspect in limiting the spread of HIV/AIDS is controlling sexually transmitted infections, since having STIs can increase a person's risk of HIV infection (Over and Piot, 1991). The study therefore contained a number of questions relating to STIs like whether respondents heard about sexually transmitted disease, which STIs were known, whether a person with STDs can easily contract HIV during sexual intercourse and what an infected person with STIs should do. The study results revealed that almost all (98.9%) of the respondents were aware or have heard about the STIs. The majority of the respondents were able to mention the sexual route as one of the mode of HIV/AIDS transmission, but they did not mention HIV/AIDS as one of STIs which could also be transmitted through sexual intercourse.

Table 10: Distribution of respondents by knowledge on sexually transmitted infections (N= 92)

Statements	Male % (n= 55)	Female % (n= 36)	Total
Whether heard about STDs	100.0	97.3	98.9
Known STI's			
Gonorrhoea	40.0	58.3	47.3
Syphilis	0.0	5.6	2.2
Gonorrhoea and syphilis	58.2	36.1	49.5
Syphilis and HIV/AIDS	1.8	0.0	1.1

According to the study results, slightly more than a half (54.4%) of the respondents thought that a person infected with STIs during sexual intercourse could easily contract HIV/AIDS infection. However, there was disparity between male and female respondents, with 61.1% of males agreeing that a person with STIs could easily contract HIV compared to 44.4% of female respondents. The most identified STIs were gonorrhoea and syphilis, mentioned by 49.5% of the respondents but disparity between sexes showed that 58.2% males were able to list these diseases compared with 36.1% of female respondents. However, female respondents seemed to be more familiar with gonorrhoea, since they were able to identify the disease compared to male respondents (Table 10). The majority (92.7%) of male and (82.1%) female respondents reported that they would go to the hospital for treatment if they suspected they had STIs. However, few (6.6%) of the respondents said they would go to traditional healers and others did not know what to do if they suspect to have STIs.

4.4.7 Voluntary HIV Counselling and Testing (VCT)

Voluntary counselling and testing for HIV is important approach towards knowing one's own status and how to either live positively with a HIV infected person or to

avoid infection for those not infected (THIS, 2005). Study respondents were asked a number of questions to establish awareness, knowledge, attitude and practice about HIV testing.

The results indicate that less than a half (46.2%) of the respondents knew testing was available and that a blood test can determine a person's HIV status. The percentages differ between male and females (Table 11). Majority (87.9%) of the respondents (90.7% males and 83.8% females) indicated their willingness to get their blood tested for HIV. However, there was no any of the respondents who actually reported to be tested for a HIV status. Regarding the places for VCT services, more than a half (52.2%) of the respondents of different sex (61.1% males and 38.9% females) mentioned mission/ district hospitals as a place they could get their blood tested. However, it has been realised that these places were mentioned due to experience rather than a proper knowledge of VCT centres since there was no respondent who mention even a single name of the existing VCT in their area.

Table 11: Distribution of respondents by awareness on availability of VCT (N= 91)

Statement (yes response)	Yes (%)		Total	No (%)		Total
	Male	Female		Male	Female	
Ever heard about VCT	55.6	32.4	46.2	44.4%	67.6%	53.8%
respondents views on whether would like to test for HIV/AIDS	90.7	83.8	87.9	9.3%	16.2%	12.1%
Whether know a place where could test for HIV/AIDS	61.1	38.9	52.2	38.9%	61.1%	47.8%

4.5 Attitude toward HIV/AIDS

4.5.1 Knowledge, attitude and practice towards condoms

The male condom offers a safe and effective means for both prevention of sexual transmission of HIV and STIs, as well as conception (WHO, 2006). People who

expose themselves to the risk of sexual transmission of HIV, or who cannot abstain from sex, should have consistent access to higher quality condom (NACP, 1999; Kegeles *et al.*, 1988). AIDS programs implement activities to increase knowledge availability and access to condoms. However, even if condoms are widely available, this does not mean that individuals can use or access condom since the use of condom can be influenced by the individuals knowledge on condom and its use, individual's attitude towards HIV/AIDS and condom use and gender issues related to the negotiation on safer sex practice (WHO, 2006).

In order to explore the knowledge, attitude and practice on condom use towards HIV prevention; a series of questions were put to the respondents. The study revealed that males had more knowledge on condoms than females. The majority (92.3%) of the respondents claimed to have heard about condom by the time of study. However, almost a half (49.5%), of the respondents of which (66.7% males and 24.3% females) respectively claimed to have seen a condom. Furthermore, though the respondents were not asked how/where they had seen a condom, most of them said that they saw it in its packet in the shop and packets in the guest houses. These results are similar to those reported by Coast (2006) whose respondents (Maasai Pastoral community) also claimed that they had not actually seen the condom, rather they had seen the condom packet on sale in shops, and had little idea about what it contained. The same results were also presented by May (2003) that the migrant Maasai pastoralist warriors said that they had heard about the condom it is a rubber, one puts on his penis; that they have seen them in the shops;

that they have seen it with their eyes, but they have never put it on their male organs; that they have only peeped through the window of the shop and saw them.

Responses on the issue of how many times one condom can be used revealed knowledge disparity among sexes. Out of 45.2% who said one condom can be used only once the majority (59.6%) were males and few (21.9%) were females, while out of 53.6% of the respondents who said they did not know how many times one condom can be used 78.1% were females and 38.5% were males. Only few (1.9%) of the male respondents said a condom can be used more than once. Those who have heard and seen a condom were asked further about its functions. The most stated function was prevention of HIV/AIDS by 45.3% of the respondents with a considerable sex difference of which 48.6% were males and 38.2% were females; the next stated function was prevention of STIs by 25.5% with little variation between male and female respondents. While out of 18.9% of the respondents who said have no idea at all about the functions of condom, 29.4% were females and 13.9% were males; and the least mentioned function was birth control by (10.4%) of the respondents (Table 12).

**Table 12: Distribution of respondents by knowledge on functions of condom
(N= 91)**

Uses/functions of condom	Males %	Females %	Total N = 91
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prevents HIV/AIDS	48.6	38.2	45.3
Prevents STIs	26.4	23.5	25.5
Birth control	11.1	8.8	10.4
Don't know	13.9	29.4	18.9

In assessing their attitude towards condom, the majority (72.6%) of the respondent (81.3% females and 67.3 males) said they dislike using condoms. Whether a woman has the right to ask a man to use a condom, the majority (85.7%) of the respondents said that a woman has no right to ask a man to use condom. These results are similar to those reported by SIDA (2007) in Ethiopia, where it was found that in recognition the importance of condom use was only indicated by 33.5% of female and 60.0% of male respondents respectively.

Furthermore, the low levels of condom knowledge reported in the individual questionnaires were reiterated in the focus group discussions. During FGDs the vivid low level of knowledge about condom were revealed due to negative beliefs about condoms which were expressed by respondents. The questions asked in FGD were on awareness on condom: “What do they know about condom, “how do they use condom, and other things related to condom usage. During the discussions most of the respondents said that they have never seen a condom, but have heard about it. One woman said,

“I have heard about it that it is used by men, but I do not know how it used. I’m sure that I’m not alone, because most of us here have heard about the condom but have never seen it and touched it”.

Men in one of the study village said that,

“This is a very new and strange instrument to Barabaigs, and we are not familiar with it and do not know how to use it, probably if we had learnt about it we would have used it”. “

About where could one get condoms: the respondents said that they don't know where condoms can be obtained. However, some of them said that they can obtain it in guest houses and shops. One man said that

“condom is not our culture; since I grew up I never saw my grandfather or my father use these things. Why should I bother to use it? I have not touched it or even seen it with my eyes when it is out of the packet; I just saw it in packets in the shop”.

Regarding uses of condom; they reported that they have heard *waSwahili* at 'kijiweni' saying that condoms are used to prevent people from getting HIV/AIDS. But how do condoms prevent HIV this kind of knowledge is lacking.

4.5.1.1 Negative belief about condom

Despite most of them having not seen the condom or seen it in its packet, a lot of negative beliefs (myths and rumours) were evident due to little knowledge of condoms in Barabaigs community. For example, they believe that condoms have microbes, which can be seen when it is exposed to sunlight for some time, thus virus will be seen moving around the condom. One female (a widow aged 35 – 44years, a village council member) said that,

“Yes, I have personally seen it when my boyfriend and I exposed it to the sun light and after a short time we saw the virus moving around. Because

we wanted to have sexual intercourse and I wanted to have safe sex, we decided to use the small black plastic bag (Rambo) instead of condom”.

Other few women also reported that they also heard that condoms contain microbes which cause disease to users.

Another (female, 25 - 34 years, married, a primary school drop out) also emphasised

“I have heard about them, but never used them. I am afraid to use something like that because it can be left inside the woman thing (vagina), and might cause disease. I’m saying this because I know it’s risky. I witnessed a case in nearby village where one woman whom a condom happened to remain inside her vagina during sexual intercourse and she was sent to the hospital to get it removed surgically. Therefore I won’t dare use it. And if I decide to use it, then, tell me who is going to restrain it from being removed from penis while we are having sexual intercourse?, It’s better not to do sex for the rest of my life rather than using condom”

Words like “we don’t believe the strangers’ things; we doubt that they have poured some microbes to spread the disease to us too” were common during the FGDs. Another uneducated, married male respondents aged between 35- 44 years) also said,

“I don’t believe that they work- they can easily burst since you use a lot of energy and you are also out of control during sexual intercourse”

When asked why they dislike using condom; they said they are not sure about the safety of the condom, because they have microbes which you can see them moving when the condom is exposed to the sunlight as they will move to escape the high

temperature. The findings are similar to those established by May (2003) and Coast (2006) who reported the same myths and negative attitude to the use of condom among Maasai pastoral community. For example, Coast (2006) reported that the Maasai pastoral community had myths concerning condom as most claimed that they do not believe condom will work because it is too thin and it will easily break during sexual intercourse; that condoms in Dar es Salaam were thrown away because condoms were full of disease; that condom tightens and causes a disease to a man, that where is the proof that condoms can work, if so, why are so many people dying in the towns? They further expressed that condoms are everywhere, they are big business you see them everywhere in the towns. A study by May (2003) also reported that Maasai pastoralist think that using condom is not right, since the sexual satisfaction is a result of men ejaculating inside a women. From these results one can then easily conclude that pastoralist communities are at high risk of HIV infection unless appropriate measures are put in place to correct those myths and misconception about condoms in the Barabaig community.

4.5.1. 2 Perceived effect of condom on fertility

Married adults have sex (although not necessarily with each other), primarily for reasons of procreation (Blystad, 2005). Large families are still an ideal for many pastoral communities, and mature adulthood is achieved through the production of children (Coast, 2006). Results from FGDs revealed that condom distorted real meaning of sexual intercourse between adult men and women in Barabaig pastoral community. For example, a woman (married, 44 – 55years) in FGDs said,

“Ok, you are telling us to use condoms, then how these young mothers / woman are going to get babies if they use condoms?”, Because the main reason which makes a woman to sleep with man is to bear children!” One man said (“I do not need condoms because I do not have sex with waSwahili women” I mean I do not have sex outside of my tribe. Moreover I have sex with my wives or sister in laws for the purpose of making our clan more extensive; I mean to have many children so as to ensure respect and continuation of our clan generation”.

This indicates that in Barabaig community sexual intercourse is for making children and some of them seem to have knowledge that using condoms would prevent a woman from becoming pregnant.

Discussants in FGDs continued to observe that they do not believe that condoms are safe because HIV/AIDS is in town or urban centres. Therefore HIV/AIDS is caused by promiscuous behaviour which is rampant/ or a common behaviour in town. So they do not see the point of them using condoms in rural areas with their women because there is no prostitution, even if they share women (brothers' wives) among them. They further reported that they believe that they are safe. In addition they need large families (many children). They asked how they would get many children if one uses condoms. They pointed out that sex is for procreation, and then if they use condoms how will their women get children. These findings are tandem with those of Blystad (2005) whose report revealed that in the Barabaig pastoral community, sexual intercourse between married people is meant for procreation, thus the whole idea of preventing procreative fluids from passing between

procreative bodies (within the recognised categories) is a contradiction in terms. The notion of sexual intercourse without the linked notion of potential conception is highly alien. Thus the relevance of the condom can be comprehended with regard to the highly controversial sexual relations with outside girls who sell sex in district centres where conception obviously is not the aim. These findings are also tandem with those of Talle (1999) in her reports revealed that the Maasai pastoral community value their semen, which are going to be poured into the female sex organ possibly because its final result is procreation hence use of condom seems not to be right for them. The point to note here is that Barabaig pastoral community also equate the use of condoms and the impairments of the final result of sexual intercourse. Therefore the Barabaig men and women were also concerned with the loss of semen if condoms have to be used.

Similar findings are also reported by IRIN (2003b) in which the Maasai pastoral community voiced the idea that condoms help prevent the spread of HIV/AIDS, but for many women in Maasai community, condoms are also a problem. For them, sexual satisfaction is a result of men ejaculating inside them. Therefore the uses of condoms are not right for this case. The value of larger family size among pastoralist culture is also responsible for the spread of HIV/AIDS. In pastoral community having a large number of children is a prestige within a community and is the only customary source of wealth (Blystad, 2005). Therefore apart from both men and women's reluctance to wear condoms in the context of marriage, culturally the value of women is dependent on their ability to reproduce. They are thus compelled to have unprotected sex, placing themselves and their babies at risk of contracting HIV/AIDS (IRIN, 2003a; Blystad, 2005).

Results from this study also revealed that Barabaigs value large family size (many children) regardless of who is the biological father of the child. Similar findings were also reported by Blystad (2005) that large number of married Barabaigs women and men has potential sexual rights in each other through the *rata* (acceptable sexual and procreative relationships with husbands' clan 'brothers') and *orjetedameyda* (institution that facilitate sexual relationship of established fictive kinship), all potential marital sexual partners are also potential and acceptable procreative partners, and may be the genitors of each other's children.

Therefore this involves multiple sexual partnerships though it is limited within a clan but it is risky due to limitation in the use of preventive measure in particular condom. Thus this can retard the effort of HIV/AIDS preventive campaign through condom use since to the Barabaig the sexual act means more than pleasure rather it is for procreation - large family composed of many children. In addition to this the Barabaig pastoral community is at risk of HIV/AIDS spread due to their culture of allowing multiple sexual relationships without use of HIV/AIDS preventive measures. Hence the emphasise on preventive measures programs against HIV/AIDS spread through sexual intercourse aiming the pastoral communities should be continued in order to reduce risks of HIV/AIDS spread.

4.5.2 Attitude towards HIV/AIDS

The second objective of the study was to determine attitudes of pastoralist towards HIV/AIDS. In this study attitude of respondents towards HIV/AIDS was sought using a single statements (on risk perception, care and support to PLWHA, condom use) as well as a series of statements for Likert attitudinal scale.

4.5.2.1 Risk perception towards HIV/AIDS

The Barabaigs risk perception towards HIV/AIDS was assessed based on their responses to two statements and the results are shown in Table 13. The personal assessment of perceived HIV/AIDS risk among the pastoralist community reveals four scenarios: none, moderate, great and uncertain. About (37.4%) of the respondents felt personally at great risk of becoming infected. A quarter (26.4%) of the respondents of which the majority were females felt moderate risk of contracting HIV; only few (17.6%) of respondents of which the majority were males said they could not say what their risk of contracting HIV was, because they were uncertain. Likewise, the same percentages (18.9%) of males and females reported not feeling the risk of contracting HIV (Table 13). When asked about their views on who was responsible for the HIV/AIDS problem the majority (90.1%) of the respondents reported the concern that HIV/AIDS was everyone's problem notwithstanding their belief that they are not mixing with town residents whom they believed to have HIV/AIDS. However, FGDs revealed negative perception by saying that HIV/AIDS is for people in urban/ towns where there is promiscuous behaviour.

The existing negative perception toward HIV/AIDS risks therefore calls for an attention to the policy makers to ensure implementation of programmes which will impart knowledge among pastoralist community concerning HIV/AIDS risks. Risk of HIV/AIDS is upon everyone who exposed to risk practices, be it in rural or urban areas. Since pastoralist have been inevitably involve in trade, seeking job in town and interact with non Barabaig community they therefore no longer at safety net environment. It has been reported that when pastoralist men go to town to sell

livestock, once they earn money they indulge in drinking and this changes their behaviour which leads them to interact sexually as a result they contract sexually transmitted infections (IRIN, 2003a). They therefore are obviously at risk of HIV/AIDS.

Table 13: Distribution of respondents on perceived HIV/AIDS risk (N= 91)

Response	Male% n= 54	Female % n =37	Total %
Possibility that you will get HIV/AIDS			
None	18.2	18.9	18.7
Moderate	18.2	37.8	26.4
Great	38.2	35.1	37.4
Not sure/don't know	23.6	8.1	17.6
Whose HIV/AIDS problem belong			
Other people problem	9.1	0.0	5.5
All people problem	89.1	89.2	90.1
Not sure whose problem	0.0	4.3	4.4

4.5.2.2 Care and Support of People Living With HIV/AIDS (PLWHA)

Since care and support for people living with HIV/AIDS is affected by stigma and discrimination the study examined the attitude of respondents towards people living with HIV/AIDS. A few statements were presented to respondents to assess their attitude towards issues related with stigma and use of condoms. The findings indicate existence of stigma and discrimination. HIV related stigma is still an issue since most of the respondents had a negative attitude. Almost three quarters (74.7%) of the respondents said that they are not willing to buy fresh milk from a vendor who had tested HIV/AIDS positive. Furthermore, when asked whether they would shake hands with an infected member of their community, over a half (56.1%) of

the respondents said that they would not shake hands with HIV/AIDS infected person. Most (62.2%) of the female respondents seem to have negative attitude compared to (51.9%) of the male respondents (Table 14). The females' negative attitude towards PLWHA probably was influenced by their low level of knowledge concerning modes of HIV/AIDS transmission. Literature shows that low level of knowledge on modes of HIV/AIDS transmission can influence negative attitude towards people living with HIV/AIDS (Lentine, 2005; THIS, 2005). Furthermore, the only positive attitude among the respondents was that they showed concern on a member of the family who was infected with HIV. This showed a change in attitude towards such patients probably because blood is thicker than water. In this case, results showed that about two third (67.6%) of the respondents indicated positive attitudes towards the care and support of PLWHA (Table 14).

Table 14: Distribution of respondents by attitude towards care and support of PLWHA (N= 91)

Statements	Yes (%)		Total %	No (%)		Total %
	Male	Female		Male	Female	
If a member of your family got infected with the virus that causes AIDS, would you be willing to care for her/him in your own house?	67.0	66.7	67.6	33.3	32.4	33.0
If you knew that a shopkeeper or a vendor had the AIDS virus, would you buy fresh milk from the person?	33.3	15.5	25.3	66.7	86.5	74.7
Would you shake hands with someone who is infected with the virus that cause AIDS?	48.1	37.8	44.0	51.9	62.2	56.1
Respondents views on whether a woman can ask man to use a condom (Negotiate safe sex)	15.4	12.5	14.3	78.8	71.9	76.2

4.5.2.3 Negotiation for safe sex

Since the correct and consistent use of condoms is one of the most significant methods of reducing the risk of HIV/AIDS infections; pastoralist were asked a questions relating to their attitude and practices on whether traditionally females were free to a man or her husband to use a condom during sexual intercourse. Study findings indicate that more than three quarters (76.2%) of the respondents of which 78.8% were males and 71.9% were females felt that a wife/ woman has no right to ask or compel her husband to use condoms even if she does not trust him regardless of the fact that the man/ husband is infected with STIs including HIV/AIDS.

The reason given as to why women have no right to request their husband or men to use condoms was a result of the fact that the use of condoms did not feature in their culture and traditional mentioned by 31.1% of the respondents, more than a quarter (28.1%) of the respondents reported that they had little knowledge of condoms and their uses and 15.6% of the respondents reported that they did not know how to use condom. In addition, 9.4% of female respondents reported that they cannot say no to the sexual demands of their husbands with or without a condom because their husbands would suspect them of being untrustworthy and probably think that they were infected by HIV/AIDS. Furthermore, 1.6% of the respondents claimed that HIV/AIDS was unknown to Barabigs. Because of these results it is possible for one to conclude that the Barabaig pastoral community is at risk of HIV/AIDS infection due to negative attitude towards the right of a woman to ask her partner to use condom.

However, the negative attitude that was observed might be a consequence of limited knowledge on condom and its use among Barabaigs community. Therefore efforts should be done to impart knowledge on HIV/AIDS which would hopefully lead to the reduction in the risks of HIV/AIDS infection among Barabaig pastoral community.

4.5.3 Attitude and belief towards HIV/AIDS

Attitudes and beliefs of the respondents towards HIV/AIDS were sought using Likert attitudinal scale. The Likert attitudinal scale that was constructed had ten statements which carried positive and negative statements about HIV/AIDS. Respondents were requested to indicate whether they strongly agree; agree; uncertain/undecided; disagree and strongly disagree against each statement. Information on attitude of respondents towards HIV/AIDS was analyzed first by using a summated scale approach where positive and negative scores was obtained and compared (Table 15). An index scale of attitude towards HIV/AIDS was then constructed in order to facilitate the identification of existing attitude towards HIV/AIDS among Barabaig pastoralist community in order to ascertain the risk of HIV/AIDS spread among this community.

The study findings show that most of the respondents scored a higher percentage on negative aspects statements of the attitudes, and relatively low percentage on positive statement attitudes (Table 15). This implies that the respondents have negative attitude towards HIV/AIDS. This is contrary to findings which have been reported by THIS (2005) in which adults Tanzanians have positive attitude towards HIV/AIDS. It is possible that negative attitude prevailing among the Barabaig

pastoral community towards HIV/AIDS may act as one of the obstacles for community to take appropriate measures against HIV/AIDS hence increase risks of HIV/AIDS infection among the Barabaig pastoral community. Also the low level of knowledge on HIV/AIDS among Barabaigs can be the source of their negative attitude towards HIV/AIDS. Therefore there is a long way to go about in order to equip the Barabaig with HIV/AIDS knowledge hence protect them from the risk of HIV/AIDS infection.

Table 15: Distribution of respondents by attitude and belief towards HIV/AIDS (N= 91)

	Statement	Attitude (%)		
		Disagree	Undecided	Agree
1	AIDS is a disease syndrome for which you can protect yourself	8.8	22.0	69.2
2	HIV/AIDS is the problem of other people and not for Barabaig.	90.1	4.4	5.5
3	Condom are useful and effective tool for preventing against HIV/AIDS	18.5	43.5	37.0
4	I consider condom use is like exercising a western culture	22.7	43.2	34.1
5	Traditional healers medics are more effective enough to keep me safe from getting HIV infection	79.3	12.0	7.6
6	Its alright for women to suggest to a man to use condom	76.5	9.4	14.1
7	I feel uncomfortable to use condom	28.2	2.4	69.4
8	If your relative is sick with AIDS, it is alright for you to care for a relative in your household	13.2	18.7	68.1
9	It is not right to shake hand with people sick with AIDS	45.1	7.7	47.3
10	It is alright to buy milk from a business man who is sick with HIV/AIDS	62.6	11.0	26.4

4.5.4 Index of attitude towards HIV/AIDS

A summary measure of index scale of attitude towards HIV/AIDS was developed. Responses were grouped into three categories namely; agree, uncertain and disagree. In all positive statement every “Agree” response was given a score of 3

while a 2 score for “uncertain” and “disagree” was given a score of 1. For all negative statements every “Agree” response was given a score of 1 while “uncertain” was given a score of 2 and a score of 3 for “disagree”. The list of these variables and their values are presented in (Table 16).

Table 16: Variables used in the index of respondent’s attitude towards HIV/AIDS

Statement	Scores per response		
	Disagree	Uncertain	Agree
1 AIDS is a disease syndrome for which you can protect yourself	1	2	3
2 HIV/AIDS is the problem of other people and not for Barabaig.	3	2	1
3 Condom are useful and effective tool for preventing against HIV/AIDS	1	2	3
4 Condom use is like exercising a western culture rather than conventional way of HIV/AIDS prevention or HIV intervention	3	2	1
5 traditional healer medics are more effective enough to keep me safe from getting HIV infection	3	2	1
6 Its alright for women to suggest to a man to use condom	1	2	3
7 I feel uncomfortable to use condom	3	2	1
8 If your relative is sick with AIDS, it is alright for you to care for a relative in your household	1	2	3
9 It is not right to shake hand with people living with HIV/AIDS	3	2	1
10 It is alright to buy milk from a business man who is living with HIV/AIDS	1	2	3

An index ranging from 10 to 30 was constructed as the measure of attitude towards HIV/AIDS. The index had a mean of 21.4. The scores on the index scale were further categorized into negative and positive attitudes. Scores below the index

mean were categorized as negative attitude whereas scores above the index mean were categorized as positive attitude towards HIV/AIDS. Study findings show that more than half (54.8%) of respondents had negative attitude towards HIV/AIDS. However, more (62.5%) female respondents compared to (50.0%) male respondents had negative attitude towards HIV/AIDS. In addition, there was no difference in percentages of male respondents who had a negative and positive attitude towards HIV/AIDS (Table 17). These findings are similar to THIS (2005) in which women were slightly less likely to express positive attitude towards HIV/AIDS compared to men.

Table 17: Distribution of respondents by attitude scores and category toward HIV/AIDS (N= 84)

Scores	Males %	Female %	Total %
15	3.8	0.0	2.4
16	1.9	3.1	2.4
17	9.6	0.0	6.0
18	5.8	6.3	6.0
19	3.8	21.9	10.7
20	9.6	18.8	13.1
21	15.4	12.5	14.3
22	7.7	15.6	10.7
23	5.8	9.4	7.1
24	15.4	6.3	11.9
25	3.8	0.0	2.4
26	11.5	3.1	8.3
27	0.0	3.1	1.2
28	3.8	0.0	2.4
30	1.9	0.0	1.2
Attitude category towards HIV/AIDS			
Negative attitude	50.0	62.5	54.8
Positive attitude	50.0	37.5	45.2

4.6 Traditional and/ cultural practices contributing to the risks of HIV/AIDS infection

The third objective of this study was to determine prevalent traditional and cultural risk practices towards HIV/AIDS spread. In most countries the HIV pandemic is

driven by behaviour (e.g. multiple sexual partners, injecting drugs sharing one needle, use of unsterilized sharp/piercing instrument, practicing unprotected casual sex, starting sexual activity at an early age and having sex with high risk partners, etc). These expose individuals to the risk of infection. Information on knowledge, level and intensity of risk of traditional/ cultural practices and behaviour related to HIV/AIDS is essential in identifying the category of population which is at most risk of HIV infection and lead to a better understanding of the dynamic of the pandemic. It is also critical in assessing changes overtime as a result of prevention efforts. Results of this study revealed a number of risks associated with traditional/ cultural practice of which are discussed underneath.

4.6.1 Marriage and marital status

Marriage is the personal union between individuals. Marital expose women and men to heterosexual relationship which is the leading mode of HIV transmission in Tanzania and some other parts of the sub-Saharan Africa (TDHS, 1996). Results from this study showed that 63.0% of the respondents were married, and 26.1% of the respondents were single (Table 1). In context of HIV/AIDS marriage has been cited as an increasingly risk factor to HIV/AIDS infection due to perceived rights within the marriage, difficulties in negotiating safer sex, extended partners and domestic violence. Studies carried out in Sub Saharan Africa shows that majority of the newly HIV positive women are contracting the viruses from their husbands (Bukuluki and Kyaddondo, 2006).

4.6.2 Early marriage

Early marriage is still relatively common in Africa despite many countries enacting a marriageable age of 16 – 18, but the wide spread customary marriage (particularly in Africa) may be arranged for much younger adolescent especially girls which exposes them to the risk of HIV/AIDS infection (Kyaddondo *et al.*, 2005). Results from this study revealed that the early marriage practice is prevalent in Barabaig's pastoral community. Women were married at younger age compared to men. The youngest age at which a Barabaig female get married ranged between 11 – 15 years of as reported by 20.6% of the respondents and that of male was 15 – 19 years of as reported by 25.6% of the respondents.

Furthermore, majority (67.6%) of females married at age of 16 – 20 years compared to 37.1% of males who married at age of 20 – 24 years (Table 18). Similarly, Mbugua (2004) in his study of traditional practices among Maasai pastoral community revealed that early marriage were also common in Maasai pastoral community. Marriage arrangements including bride price paid by the groom to the girl's father may occur when a girl is very young and long before the actual marriage. Similar findings were also reported in the studies done in Africa, which revealed that women are married younger than men, for instance the average age of brides is 15 years in Niger and Chad as about 70% of girls are married before age 18, 16.5 years in Cameroon, 17.5 years in Burkina Faso. In parts of Mali 39% of girls are married before age of 15 years, while in Kenya it is up to seven years (Kishor and Neitzel, 1996).

Table 18: Distribution of respondents by age at first marriage and marriage process N= (92)

Category		Males %	Females%	Total %
Age at first marriage				
Male	Female			
15 - 19	11 - 15	25.7	20.6	
20 - 24	16 - 20	37.1	67.6	
25 - 29	21 - 25	25.7	4.3	
30 - 34		11.4		
Marriage process				
Normal				
Forced		44.1	20.6	32.4
Normal and forced		14.7	47.1	30.9
Inherited unwilling		35.3	5.9	20.6
Inherited willing		0.0	20.6	10.3
		5.9	5.9	5.9

In the context of HIV/AIDS regarding early marriage, young women married to older men often have less power in decision making around safer sexual intercourse (use of condom), childbearing, and birth control, and are less able to protect themselves from STIs, exploitation, or abuse (Noble *et al.*, 1996; Kishor and Neitzel, 1996). Furthermore, the younger the bride the larger the gap with the spouse. Older males are more likely to be sexually experienced and may thus have an elevated risk of being HIV infected (Clark, 2004; Kyaddondo *et al.*, 2005). The problem of young girls including the Barabaig Pastoral community's girls who are engaged in early marriage coupled with inability of them to negotiate safer sex, it place them in a risk of HIV including other member of community. However other studies commended that since the marriage in rural areas occur at a young age; this can also decrease the magnitude of sexual practice before marriage in such settings and hence reduce risk of HIV to adolescent since the chance of having premarital multiple sexual partners decreases (Molla *et al.*, 2008). In the case of Barabaig

pastoral community where cultural practices such as wife sharing prevail, probabilities of exposing the married girls to the multiple sexual partners are much higher thus a higher risk of HIV/AIDS spread among the community. Furthermore literature has documented that marriage for many girls is the beginning of frequent and unprotected sexual activity (Chikore, 2000). The younger the bride the more likely she is a virgin. Frequency of sexual intercourse among married young girls is far higher than among unmarried sexually active girls (Blanc and Way, 1998).

4.6.3 Marriage process

The prevailed marriage processes also differ among societies. Due to the existing situation of HIV/AIDS infection, couples are supposed to undergo HIV blood test before their union. Despite the prevailing situation of HIV/AIDS pandemic, the marriage processes found during this study were pathetic as people get into marriage without blood screening. In this study five types of marriage processes were observed. The most prominent type of marriage was marriage by negotiation mentioned by 32.4% of the respondents in which the arrangement of marriage involve the groom, bride, as well as parents of both sides (groom's parents and bride's parents), followed by 30.9% who mentioned forced marriage (a bride is captured wherever she is found without prior negotiation with bride; (20.6%) mentioned both negotiation and forced marriage. In the latter marriage process, the agreement is between parents of groom and brides as well as groom himself while bride is uninformed; also sometimes a groom has no information (Table 18). The groom and bride who have no prior information are ordered to marry the man/girl in question. Other forms are remarriages involved deceased wife/wives who got inherited by the deceased brothers. In this marriage process 10.3% of the inherited

wives were unwillingly, that is they got remarried with their husband's brother without their consent; and 5.9% of the inherited wives got in the situation willingly (remarried to the deceased brother with consent (Table 18).

These study results are similar to those reported by (Chawla *et al.*, 2007) that among tribal people in India, the marriages were also performed by negotiations, capture, love, and even elopement, that is there were no prior blood test for HIV/AIDS. The study findings are also inline with the ADRA (2005) (an NGO working with community at Hanang district – study area) which reported that, in most cases parents decide and settle the marriage on behalf of their daughters without consulting them. In Maasai pastoral community arranged marriages were also common as arrangements including bride price paid by the groom to the girl's father may occur while a girl is very young and long before the actual marriage take place (Mbugua, 2004). These implies that the national effort of discouraging marriage without blood status test (National HIV policy, 2001) has not achieved in Barabaig pastoral community, as they are still practicing the risk marriages (without blood status testing) thus they are predisposed to the risks of HIV/AIDS infection.

4.6.4 Types of Marriage

Many cultural practices on marriage may expose couples to the risk of HIV infection. Among the cultural practices which could expose couples to the risk of HIV/AIDS are polygamy type of marriage and multiple sexual partners. Type of marriages in the study area were assessed in order to validate the prevalence of polygamy which has been reported in the literature to be a risk traditional practices leading to spread of HIV/AIDS infection (Jackson, 1998).

The study findings showed that more than a half (52.9%) of the respondents was in a polygamous type of marriage with males having two to five wives. The maximum number of wives married to one husband was five. This indicates that the practice of polygamous marriage is still common among the Barabaig pastoral community. These results compares well with Mbugua (2004) who reported that polygamous was also common among the Maasai pastoral community and the number of wives per Maasai man ranged from 2 to 16. The same findings also reported by THIS (2005) noted that one out of ten men reported having more than one wife and that polygamous is prevalent in rural areas. Barabaig pastoral community observe their rules of polygamous traditional marriage practices. They are therefore predisposed to STIs including HIV (Jackson, 1998). This practice put them to the group category that is at high risk of HIV/AIDS infection because of the complex sex network established in the community, since the network does not involve men only but also women married in co-wives who may also have multiple sex partners (Mbugua, 2004).

The reasons behind polygamous marriage differ from one society to another. For example Bukali de Graça (2002) reported that some men take more than one wife because it gives them prestige in the community; others look at the women and children as source of labour. In the case of Barabaigs pastoral community, several reasons were given to explain this phenomenon. The most frequently mentioned reason was need for family expansion (to have many children hence large family size) stated by majority (42.2%) of the respondents, followed by source of labour force mentioned by 24.1% of the respondents. Others were traditional and customs stated by 13.1 % and prestige was stated by 12.0% of the respondents (Table 19).

This indicates that, marrying many wives is not for sexual desire but is to have large family and also to ensure the supply of required labour force in a respective household as well as to attain a particular desired social status in a respective society.

Table 19: Distribution of respondents by reasons for polygamy (N= 92)

Reasons	counts	Percentage
Family expansion	81	42.4
Labour force	46	24.1
Traditional and customer	25	13.1
Prestige	23	12.0
Sexual desire	9	4.7
To have inherences	7	3.7
Total responses	191	100.0

Furthermore, the reasons why many women are involved in polygamous marriage were also mentioned. The frequent mentioned reason was attraction to the wealth by 48.0% of the respondents, followed by pressure from parents mentioned by 15.4% of the respondents. Others were family expansion by 13.8% and Barabaig women are not jealous by 10.6% of the respondents (Table 20). There were sex differences in the reasons which made a male and female polygamous. In the case of female, the outstanding reason is poverty while for male prestige and exploitation of women as labour force was paramount.

Table 20: Distribution of respondents by reasons why females involved in polygamous marriage (N= 92)

Reasons	Counts	Percentage
Attraction to wealth	59	48.0
Pressure from parents	19	15.4
Family expansion	17	13.8
Traditional and customary	15	12.2
They are not jealous	13	10.6
Total responses	123	100.

The practice of polygamy coupled with poverty and the illiterates of many Barabaigs women who sought for affluent men, to enhance their social status and security within society encourage polygamous and multiple sex partner arrangement. Thus this practice has potential of exposing large number of people in the community to risks of HIV/AIDS infection because the risk is not only determined by the sexual behaviour of the husband, but also of his wives, who may also have multiple partners creating a complex sex network and hence a potential risk of HIV infection (Mbugua, 2004).

This is to say that men who are economically strong are at liberty to marry several wives as pointed out during this study. Additional information from FGDs revealed that most Barabaigs men who marry more than one woman are well-off and have herds of 100 cattle and above. Thus the need for enough labour force to look after cattle led to large number of children who will also save to ensure future clan generation and social status, that is the man is expected to be buried with *Bung'ed* because for an elderly man who has many wives and children and has lived humbly with his community deserve a *bung'ed* burial ceremony. Similar findings were also reported by Blystad (2005) that Barabaig marriage is ideally polygyneous which implies that rich Barabaig men will aim at marrying more than one wife. Both men and women need children to achieve adult status, and they gain prestige and influence with the birth of every additional child. Men or women who die without a son and a daughter, may never be given the honour of an 'official' Barabaig funeral (*bung'ed*), an ultimate goal among Barabaigs.

4.6.5 Sexual behaviour

The most common mode of HIV transmission in Tanzania is through heterosexual contact (TDHS, 1996; THIS, 2005). Men and women with multiple sexual partners are the group at highest risk of sexual transmission diseases (Lampthey *et al.*, 2006). Information on practices regarding sexual behaviour is important in designing and monitoring intervention programs to control the spread of the STIs (TDHS, 1996; THIS, 2005). This study examined practice related to sexual behaviour in Barabaig pastoral community basing on traditional and customs as well as according to individual behaviour on issues related to sexuality. In order to obtain relevant information, sexual behaviour was assessed using the items: whether respondent has casual sex partner, where did they first meet, whether had sex with casual partner in previous 12 months and other issues related to safe sexual intercourse.

4.6 5.1 Sexual partners

The study revealed that more than a half (52.2%) of the respondents had a girlfriend/ boyfriend, with significant sex difference (56.4% male versus 45.9% female) (Table 21). Of these (66.7% male versus 100.0% female) were single, while (50.0% males versus 34.6% females) were married. Males were more likely to engage in casual sexual relationship than females. Furthermore, single individuals were also more likely to engage in casual sexual relationship than married people. Likewise, the age between 24 and 54 was more likely to engage in casual sexual relationship than the age below 24 and the age above 54years old. Majority (64.3%) of males said they met their girlfriend at traditional events, while majority (70.6%) of the female respondents said they met with their boyfriend at home (Table 21).

Similar findings were also reported by Talle (1995) in survey on sexual practice for pastoralist in northern Tanzania, and concluded that Maasai of both sexes, married and unmarried, were involved in sexual relationships with several partners simultaneously, having two or three permanent lovers (*esindani*) in addition to their spouses and that they also may have temporary or occasional love relationships (*engare engeene*). Furthermore, unmarried or divorced women had between 10 and 20 partners at any one point in time. This leads to the conclusion that polygamy enhances HIV/AIDS transmission between spouses and co-wives, and therefore should be a matter for consideration in any HIV/AIDS control/ prevention intervention programs. Beyond the intra-marriage potential for HIV transmission, the increased likelihood of extra-marital sex by a young woman married to a much older husband is another contributory factor. The casual sexual relationship among pastoral community is prevalent, thus one can easily conclude that the Barabaig pastoral community is also at risk of HIV/AIDS infection.

4.6.5.2 Sex in previous 12 months

The study gathered information on whether respondents have had sex with casual sex partners in the previous twelve months. It was found that more than a half (55.4%) of the respondents (unmarried and married) admitted to have had sexual intercourse with casual sex partners. Males were more likely to report to have had sex in the past 12 months preceding the study compared to females (58.2% versus 51.4% respectively) (Table 21). These findings are similar to those reported by Coast (2003) for the Maasai pastoral community where extra-marital sex between married rural-urban migrants and rural residents was common with approximately

one third of currently married men reporting extra-marital sex in the preceding 12 months. These results indicate that premarital and extramarital sexual relationship was common among the Barabaig pastoral community both males and females despite of the fact that premarital sexual intercourse for non marital Barabaig girl is strictly prohibited. Extensive sexual networks are a major risk factor in HIV spread leading researcher to conclude that pastoralist who involved themselves in the extra marital and premarital sex can be regarded to be at high risk of HIV/AIDS infection.

Table 21: Distribution of respondents by sexual behaviour (N= 92)

Statement	Yes (%)		Total %	No (%)		Total %
	Male	Female		Male	Female	
Whether a respondent has a girl/boyfriend	56.4	45.9	52.2	43.6	54.1	47.8
Whether had sexual intercourse with girl/boyfriend in previous 12 months	58.2	51.4	55.4	41.8	48.6	44.6
Whether the respondents used condom during the sexual intercourse in previous 12 months (M: n= 32, F: n=19)	6.3	0.0	3.9	93.8	100.0	96.1
Whether sexual partners were drunk the first time they had sex (M: n= 32, F: n= 19)	15.6	10.5	13.7	84.4	89.5	86.3

4.6.5.3 Condom use during casual sex

The rate of condom use during casual sexual intercourse was negligible because few (3.9%) of the respondents all of whom were males reported to have used condom,

and majority (93.8%) of the respondents reported condom failure during their encounters (Table 21). The low use of condoms among Barabaig pastoral community is based on the deep rooted belief which considers uninteraction with non Barabaig community as a protection against HIV (Blystad, 2005). Reasons put forward to explain this was that majority (44.9%) of the respondents were not aware of condom and their importance during sexual intercourse, whereas 16.3% had limited knowledge on condom use and 12.2% did not think that it was important to use a condom. Other reasons were trust each other by (12.0%) and culture does not allow use of condom by (10.2%) of the respondents.

Furthermore, during FGDs it also revealed that Barabaigs have limited knowledge on condoms and had negative attitude and believe towards condom use in general. The limited knowledge about the correct use of condoms coupled with negative believes towards condoms among Barabaig pastoral community and their risky sexual behaviour suggest that this group is at high risk towards HIV/AIDS infection. Therefore this suggests that more strategies are required to impart knowledge to the Barabaig pastoral community on condom use and other related information on HIV/AIDS. The findings are similar to those reported by (Schensul *et al.*, 1994; George and Jaswal, 1995; Wyatt *et al.*, 1995) where some women reported that they did not like condoms because they feared that if the condom fell off the penis and remain in the vagina it could get lost or travel to the throat, or that the woman's reproductive organs would come out when the condom was removed. Furthermore, during sexual intercourse with casual sexual partner, only few (13.7%) of the respondents reported being drunk. This is discouraging behaviour

because a drunken person has higher likelihood of getting involved in sexual intercourse without condoms or failed to wear condom on the male organ properly. These would expose the partners into risk of HIV/AIDS infection.

4.6.5.4 Age at first sexual debut

Respondents were asked their age at first sexual intercourse since 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 intercourse is of particular interest given the fact that in Africa, Tanzania inclusive, HIV is mainly transmitted through heterosexual contact. The study revealed that the earliest self reported age at sex debut was 11 years for both male (34.5%) and female (25.0%) featuring a large proportion of males. The age that they got engaged into sexual intercourse ranged from 11 years to 25 years old, but with the majority (58.2%) at the age of 16 to 20 years of which 61.1% females were involved compared to 56.4% males (Table 22). This indicates that early sexual debut is prevalent among the Barabaig pastoral community and that males are more likely to engage into sexual intercourse earlier than females.

Results are similar to that reported by Coast (2003); Mbugua (2004) who found that in Maasai pastoral community sexual debut was socially sanctioned for both girls (*entito* -Maasai girl aged from 8 – puberty onset) and boys (*murrar*- Maasai boy circumcised aged from late teens to mid twenties). The young girls are socialized to become sexually active at a young age, beginning from about 10 years old. The Maasai have a widely held belief that semen helps a girl to develop physically and

murrans are considered the epitome of healthiness, therefore their sperm is best for pre-pubescent girl. Furthermore, similar findings were also reported by Mba (2003) that more than 50 percent of all mothers in sub-Saharan Africa are in the age group 15-19 years, and in some settings, the youth are initiated into sexual activity as early as age 12 (girls) and 13 (boys).

Table 22: Distribution of respondents by age at sexual debut (N= 92)

Age at sex debut	Male (%)	Female (%)	Total %
11 to 15	34.5	25.0	30.8
16 to 20	56.4	61.1	58.2
21 to 25	7.3	11.1	8.8
Don't remember	1.8	2.8	2.2

Given the young age at sexual debut for these pastoral girls and boys, it is reasonable to hypothesize that the average age at HIV infection for pastoral girls and boys will be substantially lower than in other ethnic groups even though young women aged 15-24 have the highest rate of HIV infection in sub-Saharan Africa. Furthermore, early sexual initiation increase the vulnerability of girls to HIV/AIDS due to their biological immaturity that allows tearing and bleeding which has higher possibility of occurring during sexual intercourse at this age. Boys also are vulnerable to HIV/AIDS because though are unmarried they are usually engaged themselves to the sexual relationship with married women whom are in polygamous marriage/ and involve in multiple sexual partners (*rata*). Therefore the Government should play a leading role in putting the reality of youth sexuality into public consciousness and political agenda so that to minimize risks associated with early sexual debut.

4.6.5.5 Wife sharing

Sexual behaviour is one kind of human behaviour that demands an understanding of the socio-cultural context in which it takes place (Coast, 2006). Sexual behaviour was investigated among the Barabaig pastoral community basing on their socio-cultural context. The respondents were asked “whether extramarital sexual relationship were socially sanctioned among couple in their community according to their traditional/cultural and customs?” All (100.0%) of the respondents agreed that extramarital affairs were prevalent in the traditional community and were socially sanctioned. This was further clarified during focus group discussion as it has also revealed that social institutions within traditional pastoralist community that promote multiple sexual partners are prevalent. For example sexual network (having two or more sexual partners concurrently or serially) (Orubuloye et al., 1991; Havanon et al., 1993) were very common among the Barabaig pastoral community particularly among the couples (both husband and wife) have extramarital sexual relationship. It is also not uncommon for unmarried males to have premarital sexual relationship. But in unmarried females especially at adolescent age are strictly prohibited to engage in premarital sex, and premarital pregnancy is a taboo.

Study findings show that the socially sanctioned extramarital sexual relationships (wife sharing) were restricted within the clan among in-laws, though in some cases the relations may also involve the non-clan members such as husbands’ age-mate friends. According to the respondents there were two types of wife sharing; wife sharing among males of the patrilineage and among the age-mate male friends.

Patrilineage wife sharing involve multiple sexual partnerships among clan in-laws i.e. a brother is free to access his brother's wife/wives at any time he would wish, and this is to say the wife is socially sanctioned to sleep with her husband's brothers. The practice is known as *rata*. A brother could be married or unmarried. This sexual network is socially sanctioned so they don't resist as there are rules which apply to this sexual network more generally, and are very strictly observed, with large punishments and fines for individuals that do not observe rules.

Furthermore, another sexual network was that involving wife sharing practice among age-mate. This type of wife sharing involves sexual access of age-mates friends to each other's wives. According to respondents usually the wife receives order from husband that she should take care of his friend who visited them, and the wife's usually is obedience and gives in to the friend.

Similar findings were also reported by Blystad (2005) that in Barabaig pastoral community a woman in principle marries into her husband's clan, which implies that sexual and procreative relationships with a husband's clan 'brothers' (*rata*), are deemed good and acceptable. An institution related to such extended sexual rights of in-laws (*rata*) is the *orjetedameyda*, which facilitates sexual relations between individuals who have established a fictive kinship relation. Mbugua (2004), Also reported that in Maasai traditions, males and females circumcised on the same day are age-mates, therefore when a male visits a married age-mate, the host is expected to leave his house and provide total access of his wife to the visitor, leaving the wife to take care of guest in all aspects. Also similar findings are

reported by Coast (2003) that among the Maasai pastoral community the sexual access of age-mates to each other's wives has been noted, "A husband may urge a wife to be impregnated by a certain age-mate of his, whom he admires either for his oratory skills, bravery or certain physical qualities".

Similar findings were also reported by IRIN (2003b) who reported that, Maasai pastoralist men claimed that "Sharing is a major way of life. We share everything, whether it is food from the same bowl, milk from the same calabash or even our wives whom we share and have children with," they said. "The youth are given a lot of freedom and they have an open field for practicing sex. You are encouraged to use your youthful energy and then by the time you are an elder, you settle down."

Respondents were further asked a question on whether the extramarital sexual relation rewarded by gift; the study shows that sex is rewarded with gifts. The respondents elaborated that; the brother who sleeps with his sister in-law (woman married to his brother) usually rewards that sexual contact with gift. The gifts rewarded are socially prescribed i.e. every member of society knows what should be offered as a reward to such sexual relationship. For a married brother he gives a gift of a cattle /and shoats while unmarried brother give a gift of a bracelets, jewellery and necklace made up of either copper metals or beads. This exchange ideally implies elaborate transfer of domestic animals which links families, patrilineages and fictive kin together in large procreative and co-operative networks, networks located at the heart of Barabaig social organisation (Blystad, 2005).

Furthermore, they were asked how many sex partners someone has; majority (70.7%) of the respondents said many, “depends on the number of in-laws in your clan”; others (16.3%) said, many but depend on ones' behaviour and decision, only few (12.0%) said more than one. This indicates that the multiple sexual partners practice is very common in the Barabaig Pastoral community. Lamptey *et al*, (2006) reported that people who are engaged in multiple sexual partners are at high risk of sexually transmitted infections.

These results therefore suggest that immediate action towards educating pastoralist on the danger of the traditional practices should be taken so as to protect them from risks of HIV infection. Respondents were asked to give out the reason for having extramarital sexual relationship. It was observed that majority (53.8%) of the respondents said that they establish relationship because it is their traditional and customary since past generation it is alright to have such practices; followed by 34.3% respondents said for sexual desire satisfaction and then there were 11.9% respondents who said that they had extramarital sexual relationship for gift exchange after sex.

4.6.6 Traditional events and rituals

Barabaigs are distinguished from other Nilotic pastoral groups by unique and important cultural features. The most important cultural feature is burying esteemed elders with a *bung'ed* (an 'official' Barabaig funeral), *Bung'ed* is a name given to both the burial mound and the funeral ceremony associated with it (Lane, 1996; Blystad, 2005). Very few elders qualify to be buried in this way. Together with

Bung'ed the Barabaig pastoral community has other traditions/ cultural activities which gather them for several days (Lane, 1996). These cultural activities thought to be of greater importance in the risk of HIV spread among the Barabaig community because they gather larger group of people for several days, which spend night and day there. These gatherings are also associated with alcohol drinking and local dances hence facilitate free interaction including sexual relationship among the participants.

In this study, the respondents were asked to identify the traditional/cultural activities which gather the community together, which in-turn may foster the promiscuity behaviour (involvement in casual sexual relationships). The respondents were able to give a list of traditional events such as burial ceremonies (*Bung'ed*) mentioned by 25.1% of the respondents; followed by circumcision ceremonies for males (*lughmajek dibika*) mentioned by 23.7%, of the respondents; special worship and sacrificial offering ceremony (*lughmajek*) by 17.1% of the respondents youth meeting (*seyu or Dangas*) by 13.7% of the respondents. Other events identified were wedding ceremonies (*Nyangid*), Women special worship (*Ghadoweda*), traditional dancing (*dumnda*) and clan meeting (*hulanda*) (Table 23). In such gatherings people interact freely and there is a lot of eating meat, drinking alcohol, dancing and exchange ideas. However casual sexual relationship, dating for future wives who got marriage after the departure from *Bung'ed* ceremony are also some of things occurring during the ceremony. In the context of HIV/AIDS, gathering, of this manner leads to sexual interactions with people of unknown sexual behaviour and without knowing their HIV status, thus puts the Barabaig

community at a risk of HIV infection. In addition, this gathering gives chance for clan people and other neighbours to meet. Since Barabaig pastoral community share wives within clan brothers and among the age-mates so these gathering also facilitate in-laws as well as age-mates friend to meet and thus increase the exposure of the participants to casual sexual relationships. The similar finding has been reported by (PINGO'S forum, 2006) that in the Barabaig pastoral community when gathered during *Bung'ed* ceremony, sex is part and parcel of the celebration, and it is not limited to married couples.

Table 23: List of traditional events and rituals that expose Barabaig at risk of HIV spread (N=92)

Traditional/ cultural activities	Counts	Responses (%)
<i>Bung'ed</i> (Burial ceremony)	88	25.1
<i>Lughmajek</i> (males circumcision)	83	23.7
<i>Lughmajek</i> (worship and sacrifice)	60	17.1
<i>Dangas</i> (youth meeting)	48	13.7
<i>Ghadoweda</i> (women special prayers)	32	9.1
<i>Nyangidi</i> (marriage ceremony)	21	6.0
<i>Dumnda</i> (traditional dancing)	12	3.4
<i>Hulandosht</i> (clan meeting-males)	5	1.4
Total responses	349	100.0
Rituals		
<i>Bung'end</i>	89	24.0
<i>Lughmajek dibika</i> (males circumcision)	77	20.7
Female circumcision	72	19.4
<i>Lughmajek</i> (worships and sacrifice)	59	15.9
Widow inheritance	32	8.6
Tattooing	18	4.9
Wife sharing	12	3.2
Funeral hair cuts	12	3.2
Total responses	371	100.0

lughmajek dibika (circumcision ceremonies for males). This is the ceremony for preparation of the circumcision day for a group of boys. The preparation ceremony involves slaughter of cattle, and the brewing of vast quantities of honey local beer. In context of HIV/AIDS drunkenness and gathering with such celebrates provoke

engagement of the participants in casual sexual relationship. Therefore this cultural activity can act as a fuel to speed up risk sexual behaviour which identified to put those engaged at risk of HIV/AIDS infection.

lughmajek and *Ghadoweda* (special worship and sacrifice offerings); the ceremony involves gathering and drunkenness from the vast honey local brew. People drink and get drunk. The involvement of these people into casual sexual relationship also occur as most of the clan people (in-laws are their) are present in the functions so this facilitates the wife sharing in sexual relations. *Hulandosht* (clan meeting). It involves the adult male member of the clan or sometimes it can expand to include members from other locations as determined by size and importance of the matter in question. Having the culture of wife sharing those who come from far get chance to access their hosts' wives whom they may have sexual intercourse with them. Similar findings reported by Mbugua (2004).

Nyangidi (marriage ceremony): The marriage ceremony at bride's home (send-off party). The celebration involves adult women who dance and sing sexy songs which praise their lovers, each woman try to be the champion in having best lovers. The message sang in these songs encourage promiscuity among women and also influence the young women to engage in multiple sexual partners to experience what have been sung by their elders.

Dangas (youth meeting): is a meeting which gather youth of an age from pubescent (un married girls, married and unmarried male youth) so as to discuss various issues patterning their responsibility within the community. They learn about 'dos' and

'don't' of their community. The sexual play is allowed during this meeting. They have their leaders who allocate each girl to a male. These pairs (female and male) discuss various issues where the male ask girl questions to answer, if a girl fail to answer the question well, she is fined by a boy. And the fine is to offer romance to her man until the man ejaculate to her thigh. However misbehaved pair sometimes do sex by intromission instead of ejaculating onto thigh during romance. However one male said that,

“this depend on the stability of the girl herself, if she is unstable then a man can do intercourse with her”. During FGD the women said that, *“our today girls are not faithful and seem unable to resist the temptation of sexual arousal during romance as we were able to resist. Because in the past when you go back home our mother should check our ‘under-parts’ whether you did sex or not. But our today girls do resist to be checked by their mothers”*.

The similar results have been reported by (Blystad, 2005; PINGO'S forum, 2006) that when Barabaigs male and female youth in the youth meeting (*Dangas*) they engage in real lovemaking and not sex play alone as pregnancies encounters have been experienced in unmarried girls who used to attend the youth meeting. This indicates the degradation of traditional values, and early sexual debut as well as multiple premarital sexual relationships among young individuals in a community.

Dumnda (traditional dancing): From respondents explanations they said that *Dumda* is a traditional dance, which in most cases youth are main dancers. It is performed during various traditional events such as *Bung'ed*, *Nyangid*, and *lughumajek gidika* to entertain the visitors, and also as a symbol of togetherness in

the community during pleasure and sorrow. The youth who attend the dance are coming from different locations such as nearby villages, districts and region. Youth became interested to attend the dance so that they can date girls whom they will later marry. Boys and girls also engage in casual sexual relationship. Respondents said that the problem of this dance is that the youth dance up to the night and become tempted and engage in sexual intercourse. One male youth (unmarried) from *Vilimavitatu* village Babati district said that,

“I do go to Dumda to get sexual pleasures with new girls and look for a future wife if it happens to spot one of my interests”.

4.6.7 Other traditional practices

Rituals (series of actions habitually and invariably followed by someone) are still practiced in Barabaig pastoral community. The most common rites identified are those of burial ceremony (*Bung'ed*) which was mentioned by 24.0% of the respondents, circumcision of males (*Lughmajek dibika*) mentioned by 20.7% of the respondents; female circumcision or female genital mutilation by 19.4% of the respondents; special worship and sacrifices (*lughmajek*) identified by (15.9%) of the respondents and widow inheritance identified by only few (8.6%) of the respondents Furthermore tattooing, wife sharing and funeral hair cuts were the least rituals identified during this study (Table 23). Probably this is due to their deep thinking that the HIV/AIDS are mainly transmitted through sexual intercourse with non Barabaig (prostitutes in town) as revealed during this study and therefore among them there is no problem. Also despite of them being mentioned sharing of piercing instrument is one of the routes of HIV transmission but the practice

associated with use of such equipment were not mentioned probably is due to little HIV/AIDS knowledge they have hence being unable to integrate risk practices with routes of HIV/AIDS infection

4.6.7.1 Circumcisions: (Males and Female)

The tradition of circumcising males and females puts those who are circumcised at a risk of being infected with HIV due to the fact that circumcision is being practiced in non-sterile environment (THIS, 2005). It has been also proposed that heterosexual transmission of HIV (male to female) is somehow enhanced in Africa because of the widespread practice of female circumcision (Hrdy, 2006).

Study findings shows that circumcision is among the prevailing rituals in Barabaig pastoral community. About (20.7%) of the respondents mentioned male circumcision and 19.4% of the respondents mentioned female circumcision as a prevailing ritual in their tribe. In context of HIV/AIDS these rituals were identified due to the reason that most of these operations are done traditionally at unsterilised environment to a group of participants. Respondents adds more by saying that, currently, for male circumcision, few people who had little knowledge on HIV/AIDS, and also are residing close to the village health centre facilities sometimes involve medical experts in carrying out the operation. However in other hand the medical experts are involved because sometimes village government officials oblige Barabaigs to use medical expert to carry the operation. For the case of females the respondents said that “In females, the circumcision has been done in very secrecy way as the Barabaigs fear to get sued by the Government officials if

they got known as the practice had been prohibited by the Government. Since in our tradition, uncircumcised girl won't get marriage, because that unremoved 'thing' (clitoris) bring bad luck in the household, the husband that marry uncircumcised girl will die, also will cause difficult in giving birth; more over the girl won't be regarded as a woman.

“So having this being mandatory to our community we do extra effort to make sure the girls have to be circumcised, so they are taken to more remote areas to other relatives so as to hide the exercise from the Government and public”.

Alternatively, currently they also circumcise female infancy soon after birth with an intention of avoiding Government and public to know that they are still circumcising their girls. Similar findings have been reported by (Mbugua, 2004) that in Maasai pastoral community in Kenya and Tanzania, more than 95.5% of ever married Maasai women in a sample (n=134) were circumcised and 80% of those interviewed confirmed that female circumcision is common practice that is regarded as an important aspect of cultural identity and essential to facilitating girls' social and spiritual transition into womanhood i.e. she is now ready for marriage and childbearing.

4.6.7.2 Body tattooing and piercing

These practices involve scarification on the various parts of the body. Scarification is carried out during multiple procedures at different ages throughout childhood, with puberty being especially important. The marks vary from clan to clan and can include both facial markings and body markings as earlobe stretching.

During FGD respondents revealed that scarification is the commonest of all practices involving shared equipment among the Barabaig pastoral community. This scarification cuts are made for beautification as well as ritual purposes. For example the beautification scarification are made around both eyes where circle like structures are made through cuts and then the fine black charcoal powder are rubbed onto the cuts. So, the keloid formation which is often a desired result, it gives black appearances, which in person with brown skin look much attractive. Value of this beauty scarification especially in female said to increase the bridal price of a girl to be married due to extra beauty she has added in herself. The value or ritual explanation is that these scars enforce group affiliation and promote tribal integration. The scarification cuts are done using specific instruments. For example linear scars are produced by deep cuts with a sharp instrument. These instruments are shared during the practice while its sterility is not assured. Similar findings are reported by Hrdy (2006) that scarification practices involving shared instrument were also found among some ethnic groups in west, central and east Africa (e.g. Nuba, Dinka, and Tiv).

4.6.7.3 Minor surgery by traditional medicine

Pastoralist men and women are well versed in traditional cures and therapies for animal and human diseases. The wide understanding of disease, use of traditional and modern medicine is a resource that are used to counter ailments among patients at home, thereby reducing costs for the household. During focus group discussion it was revealed that the practice of bloodletting for medicinal purposes was found to be common among Barabaig pastoral community. The respondents said that

Barabaig undergo the traditional medications which involves a practitioner's using an instrument such as a razor blade or knife to make cuts deep enough to allow blood to flow freely. For example the cuts are made over the affected organ such as the forehead for headache, the abdomen for stomach pains, and the joints for arthritis, lateral side of eyes for eyes or headache. The fine ground ash like material of local medication usually made up of blend of various species of shrubs leaves, roots and stem that they believe have medicinal efficacy on them, are rubbed into the cuts, by the practitioner. A practitioner having done all those procedure particularly of rubbing the medication into the wound, it found that she/he is potentially exposing her/himself to the patient's blood; likewise the piercing instrument might be used by several people without undergoing proper cleaning and sterilization thus the patient also exposed at risks of contamination from previous patient's blood. Generally in this study it has revealed that both patient and practitioner are potentially exposed to the risk of HIV/AIDS infection if protective precaution such as wearing of gloves and thorough cleaning and sterilization of equipment are not observed. Similar findings also reported by Hrды (2006) who found that in eastern Zaire the cuts are made over the affected organ, also most people among the *Lese* have bloodletting *chanja* (cuts) performed at least five times per year from infancy onward. Many people have more than 100 *chanjas* performed yearly.

4.6.7.4 Hair shaving

In rural areas razor blades are often difficult to come by, thus they are frequently used by more than one individual for a number of functions, such as shaving body hair. According to respondents, in their community hair shaving could be for ritual

purpose or for beautification. Examples during mourning period shortly after funeral, the deceased's close relatives are obliged to have rite hair cut as part of mourning. In most cases these relatives share the same razor blades. Furthermore, Barabaigs women and men also used to shave fore hair in their heads to increase the facial size for the purpose of beautification. They also share the shaving instruments that, its sterility are not assured. Similar results also have been reported by Hrdy (2006) that the shaving of body hair has been noted to occur in Rwanda and other parts of Central and North Africa for purposes of beautification. Again, HIV/AIDS infection may be possible, and thus this community is at risks if the precaution will not be taken during the practices.

4.6.7.5 Death Rites

The death rites identified in this study among Barabaig pastoralist community were those of sex and widow inheritance. The death rituals aimed at exalting the status of the deceased husband, and often incorporate the most humiliating, degrading and life threatening practices which effectively punish the widow for her husband's death and also bring irreversible damage in the family/ clan in case of HIV positive status of person in question.

Ritual sex is a practice where by a man or woman has to have sexual intercourse with somebody else to 'cleanses' herself upon her husband's death. In Barabaigs pastoral community after deceased funeral, before the widow get inherited, she should undergo the cleansing process where the widow is obliged to sex with the elder brother of a deceased in the respective deceased family. Thereafter, the widow is free to choose one of deceased's brother to inherit her. These findings are also

similar to those reported by World Bank (WB) (2007) report, that in Nigeria a widow has to undergo ritual cleansing following death of her husband.

Widow may be forced to have sex with her husband's brother, the first stranger she meets on the roads or some other designated males. In the context of AIDS this ritual cleansing is exposing the participants in the risk since the cause of death is unknown and also the participants HIV status also is unknown. Since the practice is very common among the Barabaig pastoralist then they can be regarded as a group at high risks of HIV/AIDS spread. Widow inheritance is referred to as a practice where by a widow is inherited, usually by the brother of the deceased husband, so that the deceased's family can safeguard their property including the woman (Bukali de Graça, 2002).

Among the traditional and custom which threatened to fuel the spread of HIV is the issue of levirate that still found among communities in Tanzania including pastoral community such as Maasai and Barabaigs (verbal communication). Widow inheritance is a common practice prevalent in the Barabaigs community as observed during this study. Among the risk traditional practices which mentioned was the widow inheritance by (32.4%) of the respondents, and during focus group discussion. The respondents said that in Barabaigs pastoral community, the inherited woman will bear children if she is still capable of and get other treatment as wife of a descendant. Furthermore, the respondents elaborated that the woman has a freedom to select whether to be inherited or not. However, it was revealed that the freedom which is given to a woman is limited because if she decides not to be

inherited then she will leave the house alone without any property including children. Automatically this condition of not given the properties and children in most cases oblige the Barabaig women to be inherited.

Therefore women are denied the right to choose what they want for their life after husband's death, rather they are obliged to live according to men's decision. The findings are similar to Chikore, (2000) that traditional community in other parts of southern Africa the custom requires a widow to select, often against her will and better judgment, a man from among her late husband's brother or cousin usually become her new husband. Furthermore it has found that some cultural traditions dictate that when a woman's husband dies she automatically becomes her brother in law's wife. If the husband died of AIDS, this practice places the brother and his other wife or wives at high risk of contracting HIV (IRIN, 2003a).

This indicates that Barabaigs pastoral community has limited awareness on the risks towards HIV/AIDS associated with their practices such as death rites; widow inheritance and ritual cleansing. These are threatening practice to the respective community since the causes of death are often unknown or simply accepted as an act of God, this practice expose the man to HIV/AIDS should the widow have been infected.

4.7 Source of information

The fourth objective was to assess respondents' appropriate source of information. This section presents findings regarding the respondents' sources of information on

the knowledge about HIV/AIDS. To ascertain this information the respondents were asked to list all sources they could remember having heard about HIV/AIDS from, regardless what the content of that information was. Whether they had received HIV/AIDS IEC and from which source and whether that source were appropriate for IEC among them.

4.7.1 Prevalent source of information

Results shows that information about HIV/AIDS among Barabaig pastoral community was received from different sources: radio, village meeting, health people -hospitals, religious places, informal gatherings, TV, traditional gatherings, reading materials and schools. However, radio, village meeting, informal gatherings and health people proved to be main source of communication among the pastoralist community. The main sources of information were radio mentioned by 24.7% of the respondents; village meeting by almost the same percentage 24.2% of the respondents; followed by health people/hospitals by 13.1% of the respondents and the least (1.5%) mentioned source of information was school (Table 24).

From these results it was observed that radio is ranked first as source of information among males, while village meeting was ranked first as source of information among females. School was the least source of information and serve only males and non for females, this is also true for reading materials. This is probably due to high illiteracy level among Barabaig pastoralist especially for female. However the respondents admitted that, they heard from the radios while they were in towns. This indicates that pastoralist have superficial knowledge concerned HIV/AIDS due to type of source of information which is not reliable especially in rural areas. This

can further be reflected from results obtained from transmission and prevention knowledge gathered from pastoralist where limited levels of knowledge were observed on means of HIV/AIDS transmission, prevention, and use of condom. During FGD it has reported that awareness programmes on HIV/AIDS are very occasional and sporadic, with limited reach.

**Table 24: Distribution of respondents by sources of HIV/AIDS information
(N= 91)**

Source	Count	Male (n= 54)	Female (n= 37)	Total %
Radio	49	25.4	23.7	24.7
V/meeting with NGOs	48	21.0	32.2	24.2
Health people	26	11.6	16.9	13.1
Religious places	11	6.5	3.4	5.6
Informal gatherings(<i>kijiweni</i>)	32	15.9	16.9	16
TV	9	5.1	3.4	4.5
Traditional gatherings	10	5.8	3.4	5.1
Reading materials	9	6.5	0.0	4.6
school	3	2.2	0.0	1.5
Total	197			100

4.7.2 Respondent's sources of information

The study results showed that, the sources of HIV/AIDS information were diverse. About (24.7%) of the respondents reported mass media (radio) and (24.2%) of the respondents mentioned public gatherings (village meet) as their major sources of getting information about HIV/AIDS, followed by informal gatherings (through word of mouth - *kijiweni*) and health people (16.0% and 13.1% respectively). Some pastoralist received their information from religious places, (5.6%) or from others sources (5.1%. traditional gatherings, for instance). Information from TV, reading materials and schools are least mentioned sources among pastoralist. Schools has little impact as source of information, this implies that most pastoralist still not attending primary school education and it also indicates that majority are illiterates

as also proved in background variables as majority reported to have not attained any formal education. This could prove that the reading materials and schools are not helpful as source of information among pastoralist. Other ways of disseminating IEC have to be introduced for instance IEC given through peer group, traditional leaders, storytelling and drama.

Furthermore, the respondents were asked whether they had received training/ education on HIV/AIDS. Slightly less than a half (44.6%) of the respondents had received education on HIV/AIDS from various trainers. Majority (58.5%) received education from NGO via village meeting, followed by 22.0% of the respondents from hospital and the small number of respondents 7.3% and 2.4% received the training through religious and maternal clinic respectively (Table 25). It was indicated that the main venue/ media of HIV/AIDS training is through village meeting and hospitals.

The trainings are organized through use of village council officials as hosts in their respective villages. It had experienced that majority of villagers has no culture of attending village meeting, therefore the probability is only meeting attendee are the ones who will access HIV/AIDS education. In this case the knowledge will be limited to small group while majority will keep on lacking information. The trainer should devise the appropriate means of capture and mobilize many people as much as possible to participate in HIV/AIDS trainings, rather than using village meeting which not attended by majority.

Table 25: Respondents who received education on HIV/AIDS and respective provider (N= 91)

IEC training provider	Frequency	Male: n= 54	Female: n=37	Total
NGO via village meeting	24	57.7	60.0	58.5
Hospital	9	23.1	20.0	22.0
Maternal clinics	1		6.7	2.4
Village meeting	4	11.5	6.7	9.8
Religious places	3	7.7	6.7	7.3
Total	41	100.0	100.0	100.0

4.7.3 Community access to and preferred media with information

The respondents were further asked to mention types of intervention of HIV/AIDS present in their villages, and which one was preferred most. Only in one village -Dirma (Hanang district) by some member revealed that there is youth trainers group which trained by ADRA- NGO so as to train other villagers. But that youth group has reported to be dormant, had never disseminated the knowledge as expected. None of the intervention exists in rest of the four villages. Those received education were asked whether the training were accepted by participants. The respondents said that training were interesting but the problem were; lack of freedom to ask pertinent issues for further clarification during training because the participants were not placed in groups according to gender (e.g. age and sex). Therefore participants felt uneasy to ask things related to sex while were put together with their children and in-laws; furthermore, the time scheduled for training were too short for the facilitator to elaborate things clearly to the participants who had never came across with issues like those which were discussed, the respondents said that the facilitators were giving out speech hence make participants difficult to perceive the exact message given to them.

Respondents were asked to give their opinion on how they would like IEC to be facilitated. Respondents said that “our suggestion is that we need trainers who will stay with us for several days”. Train our native people first who knows Kiswahili, gone to school and capable of articulating things fast. These newly trained colleagues in turn train us using our local language while we are placed into gender groups so as to be able to interact freely with our facilitator and among us. We also suggest that video prepared regarding the whole issues of HIV/AIDS should relate with our traditional practices so that the traditional (Barabaig) community could integrate with their practices so as to clearly understand the effects of the prevailing traditional / cultural risk practices among them” hence being able to take precaution in any involved risk during practice.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter presents the summary of the study findings, conclusion, recommendations (for policy maker, community and household) and finally suggestions for further research.

5.2 Summary of the major findings

5.2.1 General characteristics of respondents

Most of the respondents covered in this study were those of age group 25 — 44 which is sexually active group. Majority of the respondents were married. There was high level of illiteracy among the respondents of which majority were females. Majority of respondents belong to traditional animist belief. Main occupation were Livestock keeping, followed by farmers and then both farmers and livestock keepers. This shows that pastoralist involve themselves in other productive activities like farming, implying that their economy no longer depend solely on livestock keeping. They were selling and buying their commodities from the adjacent village market and within their village market and some were using the district town market and adjacent district market. Most of the Barabaig pastoral community are conversant with their vernacular language while few of them knew a little *KiSwahili*. Majority are residing at peripheral from the village centre.

5.2.2 Awareness of respondents on HIV/AIDS

Majority of respondents have heard about the illness called HIV/AIDS. But there was a significant gender differences in awareness, as the majority of males were

aware compared to females. About half of respondents had seen a person who was infected with HIV/AIDS, however some reported to just saw AIDS victims through video/TV.

5.2.3 Knowledge level of respondents on HIV/AIDS

The study shows that majority of pastoralist had low to moderate level of knowledge concerning modes of HIV/AIDS transmission, with sex differences. In these results, it was observed that the level of knowledge of females was low compared to that of males. These results implicate that there is unsatisfactory level of knowledge on HIV/AIDS among the Barabaig pastoral community, as majority were aware of sexual intercourse as a mode of HIV transmission but they were not aware on condom and its uses as the main preventive measure against HIV/AIDS transmission through sexual intercourse.

The most known routes of HIV/AIDS transmission was sexual transmission, while lagging far behind was knowledge of MCT. Being faithful to one partner is the most known way of preventing HIV/AIDS, followed by abstinence which mentioned by most females, and few respondents claimed that they have no idea or don't know any modes of HIV/AIDS prevention. The incorrect listed modes of HIV transmission were sharing clothes, shaking hands, sharing food and mosquito bite.

The observed misconceptions on HIV transmission were through coughing and sneezing followed by mosquito bites and sharing food. Other misconceptions identified were; witchcraft and hand shaking. The study findings show that female respondents have more misconception compared to male respondents. Therefore this high level of misconception among female respondents it also reflects the low

knowledge level of HIV/AIDS among the females. More male respondents knew testing of blood for HIV status is available, compared with female respondents, but there was no awareness on the availability of VCT centre since none of respondents mentioned even a single name of the existing VCT in their area.

5.2.4 Attitude towards HIV/AIDS and condom

The respondents' attitude towards HIV/AIDS in this study shows that more than half of the respondents had negative attitude towards HIV/AIDS. However more females had negative attitude towards HIV/AIDS compared to males. The personal assessment of perceived HIV/AIDS risk among the pastoralist community reveals four scenarios: none, moderate, great and uncertain. HIV/AIDS was viewed as all peoples' problem including the Barabaigs, however during FGD they show negative perception by saying that the HIV/AIDS is for those people in urban/ town where there is promiscuous behaviour. Stigma and discrimination are prevalent, most of respondents held a negative attitude toward PLWHA that they are not willing to buy fresh milk from vendor they knew that he or she is HIV/AIDS positive, and they don't shake hands with an infected male or infected female member of the community. Most females have negative attitude compared to male towards PLWHA. Males had more knowledge on condoms than females. Majority of the respondents claimed to have heard about condom but less than a half has seen a condom. Majority of the respondent said they dislike using condom and women have no right to ask men to use condom. Majority of respondents have negative believe towards condom claiming that they are contaminated with microbes which have effects to users and condom prevent pregnancies.

5.2.5 Traditional/ cultural practices contributing to the risks of HIV infection

Women are married at younger age than men (11 – 15 years versus 15 – 19 years respectively). The dominant marriage type is polygamous and majority of males have two to five wives. Prominent reasons for polygamous were need for large family, followed by source of labour force and attraction to wealth of a husband. Marriage arrangement observed was by negotiation including elopement and forced marriage including inheriting of widows.

Multiple sexual relationships was common, more than half of respondents have girlfriend/ boyfriend, with more male respondents reported to have such relation. Premarital and extramarital sexual relationships were common among the community both in male and female. Males were more likely to report to have had sex in the past 12 months preceding the study. Negligible number of respondents particularly males reported to have been used condom, during their sexual encounters. Knowledge on the condom and its uses almost none exists. The earliest self reported age at sex debut was 11 years for both male and female but majority were male respondents. The age at sexual debut was ranging from 11 to 25 years. Males are more likely to engage into sexual intercourse earlier than females. Extramarital affairs were prevalent according to the traditional and custom and were socially sanctioned. It involves wife sharing practice among clan brothers with in-laws as well as among age-mate (sexual access of age-mates friends to each other's wives). The death rite found (widow cleansing and widow inheritance), and circumcision.

Traditional/cultural events and rituals which involve gatherings thus foster sexual relationships were *Bung'ed* (elderly burial ceremonies); *lughmajek dibika* (circumcision ceremonies for males); *lughmajek* (special worship and sacrificial offering); *seyu or Dangas* (youth meeting). Other are *Nyangid* (wedding ceremonies), *Ghadoweda* (Women special worship), *dumnda* (traditional dancing) and *hulanda* (clan meeting). The traditional practices which involve use of sharp or piercing objects are circumcision of males, female circumcision or female genital mutilation, body tattooing and scarification, funeral hair cuts, beautification hair cuts and treatments by traditional healers through deep cuts.

5.2.6 Source of information

Information about HIV/AIDS among Barabaig pastoral community was received from different sources: radio, village meeting, and health people/ hospitals, religious places, informal gatherings, TV, traditional gatherings, reading materials and schools. However, radio and village meeting were the main source of Barabaig pastoralist community to receive information about HIV/AIDS. From these results, it observed that radio is ranked first as source of information among males, while village meeting was of ranked first as source of information among females. School and reading materials was the least source of information. This is probably due to high illiteracy level among Barabaig pastoralist especially in female. Generally there are no intervention operating in the study area except in one village -Dirma (Hanang district) revealed by some village members that there is youth trainers group which trained by ADRA- NGO so as to train other villagers. But that youth group has reported to be dormant, had never disseminated the knowledge as expected. None of the intervention exists in rest of the four villages.

Those who received the education training said trainings were accepted by the community and that training were interesting but the problem were; lack of freedom to ask pertinent issues for further clarification during training because the participants were not placed in groups according to gender (e.g. age and sex). Therefore participants felt unease to ask things related to sex while gathered with their children and in-laws. Furthermore, the time scheduled for training were also said too short for the facilitator to elaborate things clearly to the participants who had never come across with issues like those which were discussed.

For better understanding of the knowledge on HIV/AIDS issues respondents suggested that they need trainers who will stay with them for several days. Train their native people who will then train the rest of community using local language while they are placed into gender groups so that they can be able to interact freely with facilitators. “We also suggest that video prepared regarding the whole issues of HIV/AIDS should relate with our traditional practices so that the traditional (Barabaig) community could integrate with their risk practices so as to clearly understand the effects of the existing traditional / cultural risk practices among them”.

5.3 Conclusions

The following conclusions are made following the findings of this study:

- a) Pastoralists are no longer depending solely on livestock production rather they are involved in other productive activities like farming. They are using internal and external local markets to sell and purchase livestock and other commodities.

- b) Level of illiteracy is high particularly in females. Majority have never attained any formal education. Religion wise, majority maintaining adherence to traditional animist belief and practice. In terms of language, only few can speak Swahili and majority are conversant with their language. This further accentuates their isolation.
- c) Majority of Barabaigs pastoral community have heard about HIV/AIDS, but few saw the HIV/AIDS cases. They know symptoms of AIDS through hearsays.
- d) Level of knowledge of the respondents on the modes of HIV/AIDS transmission and prevention generally is low, with female being majority compared to males.
- e) The study observed that, generally, the Barabaigs pastoral community have not yet received sound and correct information on HIV/AIDS transmission and prevention. This is evidenced by their lack of awareness on use of condom as way of reducing risk of HIV/AIDS transmission. Knowledge of mother to child transmission is far lacking among this community. The VCT services availability is not known as well as availability of ARVs.
- f) Misconceptions about routes of HIV/AIDS transmission are widespread among the Barabaig pastoral community. These mainly relate to HIV/AIDS transmission through mosquito bites, shaking hands and sharing of food with those infected with HIV/AIDS.
- g) Use of preventive measure against HIV/AIDS transmission does not exist among Barabaig pastoral community, as the rate of sexual misconduct is on the higher side, including continuation of risk behaviour such as *rata* (wife

sharing among clan brothers) and age mates male friends with out use of preventive measures. More than three third reported condom fail during sexual intercourse with their casual partners in previous 12 months. Extramarital sexual relationships are very common.

- h) There is a considerable gap of knowledge about sexually transmitted infections. Most of the Barabaigs are not aware of connection between STIs and HIV/AIDS transmission.
- i) Barabaigs are still uninformed properly about condoms, particularly their use, and knowledge knows how. Majority are not sure as how and how many times one condom can be used. There are negative connotations associated with condoms that, condom have been injected with microbes which have effects on users and that those microbes can be visible when condom is exposed on the sunlight.
- j) Stigma and discrimination are widespread among Barabaig pastoral community towards those infected (PLWHA). Though majority are showing willingness to look after those infected with HIV within their families, but about three quarter of respondents admitted that they would not like an infected person to sell goods to them and also to shake hand with infected person.
- k) Risky sexual behaviours are prevalent as majority of the respondents said that extramarital sexual relationship both in males and females is socially sanctioned. Sexual play among youth also is allowed.
- l) Traditional risk practices such as polygamous marriage, marriage at young age, arranged/ forced marriage, sex network among patrilineage and age

mate friends male and female circumcision, body tattooing/scarification, death rites (widow cleansing and inheritance) and traditional ceremonies which involves gatherings and alcoholism are prevalent despite of their danger in facilitating and creating risk environment for HIV/AIDS spread.

- m) There is limited source of information as radio and village meeting are revealed as the main sources of receiving information on HIV/AIDS among Barabaig pastoral community. There is no intervention on HIV/AIDS in their villages rather there are village HIV/AIDS committees which also are not active and are not known by the respondents.
- n) The HIV/AIDS education received was given by NGOs (ADRA and FARM Africa) through village meeting for few hours. All people were grouped regardless gender consideration; there were no freedom for interaction due to time limit and group set.

5.4 Recommendations

5.4.1 Recommendation to Policy/ programmes

- a) Pastoralist communities, due to its mobility nature, need to be included in all national and local public awareness raising initiatives on HIV/AIDS by the Government of Tanzania. Such programmes as TACAIDS and other civil society agencies on HIV and AIDS events should give priority to pastoralists community. Appropriate mechanism to enable pastoralist communities to access information must be developed and supported. This may take into consideration of peer education programme, traditional social institutions meeting, traditional healers, traditional leaders and influential people in the respective community.

- b) It would be relevant that The Ministry of Health and Social Welfare to programme its activities in such a way that the health policy focuses and targeting the disadvantaged group such as pastoralist communities.
- c) Various HIV/AIDS implementing agency need to raise awareness on the availability of VCT services in other centres than hospital is required since most of the Barabaig thought that HIV is only tested at District or mission hospital. Information on voluntary testing and counselling services should be made available in pastoralist community to encourage pastoralist visit centres for voluntarily test for HIV/AIDS especially before marriage.
- d) Since most of the Barabaig pastoralist do not speak Swahili, and also very few are literate, for any development agency which would like to promote HIV/AIDS education to pastoralist, communication of the IEC on HIV/AIDS must be in their own language, using traditional media of story – telling and songs, as media in imparting knowledge on HIV/AIDS.
- e) HIV/AIDS educators should emphasize on account of the link between STI and transmission of HIV. Messaging about STIs need to be increased so that the Barabaigs could know the importance of using prevention measures (condom) to curb the spread of STIs and HIV/AIDS, as well as to treat STIs so as to reduce easy transmission of HIV.

5.4.2 Recommendations to the pastoralist community

- a) Traditional values and norms that expose the community at risks of HIV/AIDS infection should be stopped and eliminated through replacement with alternative practice which are safe to reduce the risk of HIV/AIDS spread among the member of community who shares these values.

- b) The message on HIV/AIDS prevention should be anchored at family/individual level. Each family member should insist his or her family member on behaviour changes. For practice safe sex, and changing risky behaviour.
- c) The Barabaig should change their negative attitude towards use of preventive measures such as condom and take appropriate measures to protect themselves from contracting HIV/AIDS.
- d) Based on the study findings, that Barabaig pastoral community are involved in risky practices such as multiple sexual relationships (wife sharing, polygamous, extramarital sexual relationships) use of shared sharp equipments, death rites (widow cleansing and inheritance), early age marriage, unsafe sexual intercourse which are leading mechanism for HIV/AIDS transmission and perceive low risk of acquiring HIV/AIDS . Barabaig pastoral community should change this deceptive attitude, change their behaviours and take measures to protect themselves from contracting HIV/AIDS.
- e) The clan leaders should be sensitised on the effects of promoting wife sharing practice due to danger of spreading HIV/AIDS among the community.

5.5 Areas for future research

- a) Research needed to explore on pastoralists socio-cultural norms and gender roles which influence individual and societal risks on HIV/AIDS.
- b) Research on sexual behaviour of men (husbands) while are away from their home trading livestock and other commodities, need to be done so as to measure the level of exposure to the risk of HIV/AIDS spread among the Barabaig pastoral community regarding their traditional and custom on sexual relationships.

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APPENDICES

Appendix 1: Questionnaire: for respondents

INFORMED CONSENT

Introduction

Good/ morning/ afternoon/evening. My name is **Hamis, M.M.** a postgraduate student pursuing Master of Art in Rural Development at Sokoine University of Agriculture Morogoro. I'am conducting a research on knowledge, attitude and practices towards HIV/AIDS among the Barabaig pastoralist community. I kindly ask you to participate in my research by responding to the questions.

Confidentiality and Consent

I'm going to ask you some personal questions that some people might find difficult to answer. Let me assure you that the information/answers you give will be confidential. Your name will not be recorded in this form, and will never be used in connection with any of the information you tell me. You are kindly asked to answer all questions completely and to the best of your knowledge. Your honest answers to these questions will help us better understand knowledge, attitude and practices towards HIV/AIDS among the Barabaig pastoralist community hence assist policy maker to design better techniques to combat the risks of HIV/AIDS spread in pastoral communities and understand how best we could join to prevent the disease. The interview will not take long time. May I please ask you a few question about the information needed.

SECTION 1: QUESTIONNAIRE IDENTIFICATION

Questionnaire number.....Name of interviewer.....

Date of interview..... Name of District

Name of Ward.....Name of Village.....

SECTION 2: BACKGROUND INFORMATION/ CHARACTERISTICS.

In this section I would like to know your background information. I therefore ask you to respond to these simple questions about you.

1) What is you Sex **(tick the answer)**

1=Male []

2=Female []

2) What is your age.....years

1= 15- 25 []

2= 26 - 35 []

3= 36 - 45 []

4= 46 - 55 []

5= 56 - 65 []

3) Have you been to school?

1=Yes []

2=No []

4) Education level attained

- 1= No formal education []
- 2= Adult education []years
- 3= Primary education drop out []years
- 4= Complete primary education []years
- 4= Secondary education [] years
- 5 = Post secondary education []years
- 6= Higher learning []years
- 7= Others (specify).....years

5) Marital status

- 1= Single []
- 2= Married []
- 3= Divorced []
- 4= Widowed []
- 5= Separates []
- 6= Living together (cohabiting) []
- 7= Other (specify)

6) What is your religion?

- 1= Christian []
- 2= Islamic []
- 3= Traditional []
- 4= Others (specify)

7) How many kilometers is your home from the village business center?

1= 1km – 5km []

2= 6km – 10km []

3= 11km – 15 km

4= 16 and above []

5= Others (specify)

8) What is your occupation/ kind of work do you mainly do?

1= Livestock keeping []

2= Farmers []

3= Livestock and farming []

4= Business []

5= Employee

6= Others (specify)

9) What is your main source of income

1= Livestock selling []

2= Crop selling []

3= Livestock and crops []

4= Business income []

5= Salary

6= Others (specify).....

10) Where do you sell your produce (livestock/ crops)?

1= Village market (mnada) []

2= Town market []

3= Both town and Village market []

4= Others (specify) []

11) How far are these markets located from the village?

1= Neighboring district

2= Adjacent Regions

3= District town market

4= Here in the village

5= Adjacent village

6= Others (specify)

12) Which language are you conversant with

1= Barabaig []

2= Swahili []

3= English []

4= Barabaig and Swahili []

5= Barabaig, Swahili and English []

6= Others (specify).....

**SECTION 3: AWARENESS AND KNOWLEDGE ABOUT HIV/AIDS, VCTs
& STIs.**

Let us discuss about your awareness and knowledge on HIV/AIDS. What is it, how is it transmitted, how can it be prevented, relation of STIs to HIV/AIDS and VCT services.

13) Have you ever heard of an illness called UKIMWI, AIDS or HIV?

1= Yes []

2= No []

14) According to you which one of the following have been the source of information on HIV/AIDS

1= Radio []

2= Village Meeting []

3= Hospital []

4= Religious places []

5= Informal gathering []

6= TV []

7= Traditional gathering []

8= Reading materials []

9= School []

10 = Others []

15) How can HIV/AIDS be transmitted from one person to another? (Verbatim)

- 1)
- 2)
- 3)
- 4)

16) Can people get HIV/AIDS because of witchcraft?

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

17) Is it possible for healthy looking person to have HIV/AIDS?

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

18) Here are the lists of statement about HIV/AIDS transmission. For each statement please tell me whether you think it is true or not. 1= Yes 2= No 3= don't know

- a) HIV transmitted through unprotected sexual intercourse []
- b) Through Mosquito bites []
- c) Through transfusion with HIV/AIDS infected blood []
- d) Through vertical transmission (infected mother to child) []
- e) Through use of unsterilised needles []

- f) Through sharing of unsterilised piercing instruments []
- g) Through cough/ sneezing []
- h) Through hand shake with an AIDS patient []
- i) Through touched and kissed by AIDS person []
- j) Through playing together with an AIDS person []
- k) Through sharing food with an AIDS person []

19) Is there anything a person can do to avoid getting UKIMWI or HIV/AIDS?

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

20) What can a person do to prevent getting HIV/AIDS? (Verbatim)

- 1)
- 2)
- 3)
- 4)

21) Here are the lists of statement about prevention method that a person can do to avoid getting HIV/AIDS. For each statement please tell me whether you think it is true or not. 1= Yes 2= No 3= don't know

- a) Abstain from sex []
- b) Use condoms every time you have sex []
- c) Limit sex to one partner/ faithful to one partner []

- d) Seek protection from traditional healers []
- e) Avoid using used razor/ blades []
- f) Avoid unclean blood transfusion []
- g) Avoid sharing food with people who have HIV/AIDS []
- h) Avoid touching person who has AIDS []
- i) Avoid sharing and use of unsafe skin utensils []

22) (a) Can HIV/AIDS be transmitted from mother to child?

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

(b) If yes how

- 1= During pregnancy []
- 2= During delivery []
- 3= By breast feeding []
- 4= others (specify)..... []

(c)What can a mother who is infected with the HIV/AIDS do to reduce the chances of passing the HIV/AIDS to her child in her breast milk?

- 1= Stop breast feeding []
- 2= Take special drugs ARVs []
- 3= Get counselling []
- 4= Others (specify).....

(d) Are there any special drugs that a doctor or nurse can give to a pregnant women infected with HIV/AIDS in order to reduce the risk of transmitting the HIV/AIDS to a baby

1= Yes []

2= No []

3= Don't know []

23) Have you heard about voluntary counselling and testing for HIV/AIDS?

1= Yes []

2= No []

24) Would you like to be tested for HIV/AIDS?

1= Yes []

2= No []

25) Do you know a place where you could go to get an HIV test?

1= Yes []

2= No []

26) Mention one place where you could go to get an HIV test.....

27) Have you heard about diseases that can be transmitted through sex?

1= Yes []

2= No []

28) Which disease do you know

- 1= Gonorrhoea []
- 2= Syphilis []
- 3= Genital ulcers []
- 4= Discharge of blood []
- 5= Discharge of pus []
- 6= Don't know []
- 7= Others (specify).....

29) Do you think a person having STIs can easily contract HIV/AIDS?

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

30) What should a person do if infected with STIs?

- 1= Seek advice []
- 2= Get hospital treatment []
- 3= Self treatment []
- 4= Get traditional healers treatment []
- 5= Others (specify).....

SECTION 4: ATTITUDE AND BELIEF TOWARDS HIV/AIDS

Let us discuss on your perception, belief and attitude towards condom, HIV/AIDS and PLWA

31) a) Have you ever heard of a condom?

1= Yes []

2= No []

b) Have you ever seen it?

1= Yes []

2= No []

c) What are the uses of a condom?

1= Birth control []

2 =Prevention of STIs []

3= Prevention of HIV/AIDS []

4= Don't know []

5= Others (specify).....

(Multiple response possible) (List not to be read out)

d) How many times can one condom be used during sexual intercourse?

1= Once []

2= More than once []

3= Until it breaks []

4= Don't know []

5= Others (specify)

e) Do you know where you can get a condom?

1= Yes []

2= No []

32) Do you like to use a condom?

1= Yes []

2= No []

(a) If yes give reason

(b) If no give reason.....

33) Do you think that it is acceptable for a woman to ask a man to use a condom?

1= Yes []

2= No []

3= Don't know []

34) What are chances that you might acquire HIV/AIDS?

1= No chance []

2= Moderate chance []

3= high chance []

4= Don't know []

5= Already infected []

35) Have you discussed the risks of AIDS with your partners?

1= Yes []

2= No []

36) What do you think HIV/AIDS problem is it for?

1= Other people problem []

2= All people problem []

3= Not sure whose problem []

37) Have you ever seen a HIV/AIDS person?

1= Yes []

2= No []

Attitude and belief towards HIV/AIDS, Say whether you strongly agree (SA), agree (A), uncertain (U), disagree (D) and strongly disagree (SD) on each statement.

Statement	Scores per response				
	SA	A	U	D	SD
1 AIDS is a disease syndrome for which you can protect yourself	1	2	3	4	5
2 HIV/AIDS is the problem of other people and not for Barabaig.					
3 Condom are useful and effective tool for preventing against HIV/AIDS					
4 Condom use is like exercising a western culture rather than conventional way of HIV/AIDS prevention.					
5 Traditional healer medics are more effective enough to keep me safe from getting HIV infection					
6 Its alright for women to suggest to a man to use condom					
7 I feel uncomfortable to use condom					
8 If your relative is sick with AIDS, it is alright for you to care for a relative in your household					
9 It is not right to shake hand with people living with HIV/AIDS					
1 It is alright to buy milk from a business man who is living with HIV/AIDS					
0 HIV/AIDS					

SECTION 5: BEHAVIOUR AND PRACTICES

Let us discuss on behaviour and practices that can foster risk of HIV/AIDS spread.

38) How many wives/co wives do you have?

1= Monogamy

[]

- 2= Two []
- 3= Three []
- 4= Four []
- 5= five and above []

39) What was the process of your marriage

- 1= Normal (mutual consent) []
- 2= Forced []
- 3= Inherited unwillingly []
- 4= Inherited willingly []
- 5= exchange with assets []
- 6= others (specify)

40) What are the reasons of having more than one wife?.....

b) What are the reasons of having more than one husband?.....

41) How old were you when you get married to your first wife/ husband?

- (a)Male
- (b) Female

42) According to Barabaig customs and traditional believes can a spouse have an extramarital sexual relationship?

- 1= Yes []
- 2= No []
- 3= Don't know/not sure, depends []

43) How many extramarital sexual partners could one have

44) What are the reasons for the spouse to have an extramarital sexual relationship?

1= Barabaig traditional and customary []

2= To get satisfaction for sexual desire []

3= Prostitution []

4= Exchange with gifts []

5= Others (specify).....

45) Are there any specific traditional events which gather people together for sometimes, where a man or woman can temporarily date girlfriend/boyfriend?

1= Yes []

2= No []

3= Don't know []

b) If the answer is yes, list them.....

46) Are there any ritual activities in your community which expose you in the risk of contracting HIV/AIDS?

1= Yes []

2= No []

3= Don't know []

b) If the answer is yes, list them.....

47) For the above listed traditional event how often do they occur?

1= Occasionally (once per year) []

2= frequently (twice per year) []

3= Others (specify)

48) Do you have a girl or boy friend?

1= Yes []

2= No []

49) Which places or event did you first talk to or get to know this lover?

1= Village local market []

2= traditional gathering []

3= church/ []

4= mosque []

5= bar []

6= can't remember []

7= others (specify).....

50) Have you had sexual intercourse with your girlfriend/boyfriend?

in previous 12 months ago?

1= Yes []

2= No []

51) For the sexual intercourse was the condom used?

1= Yes []

2= No []

52) If not why you and your partner didn't use a condom?

1= Condom were not available []

2= Condom are too expensive []

3= Partner objected []

4= Don't like to use them []

5= Used other contraceptives []

6= Didn't think it was needed []

7= Too impatient to use condom []

8= Indifferent []

9= Skin reaction []

10= Don't know []

11= Trust each other []

12= Others (specify).....

53) The first time you had sex did you or your partner drunk?

1= Yes []

2= No []

Is having sex rewarded by gift by a partner?

1= Yes []

2= No []

3= Don't know []

b) If yes what type of gift.....

54) Recall, how old were you when you first had sexual intercourse?.....age
years

SECTION 6: SOURCE OF INFORMATION ON HIV/AIDS

**Lets us discuss about HIV/AIDS information, education and
communication as well as on HIV/AIDS interventions in your area.**

55) Had you received training on HIV/AIDS?

1= Yes []

2= No []

b) Where did you have this education.....

56) Is there any HIV/AIDS intervention at you community/ village?

1= Yes []

2= No []

3= Don't know []

57) Which programme/ internversion does the village has on HIV/AIDS

- 1= Ant HIV/AIDS group []
- 2= Trainings on HIV/AIDS []
- 3= Role play group on HIV/AIDS []
- 4= Others (specify).....

58) Which HIV/AIDS intervention/ programme do you prefer?.....

b) Give reason for the above.....

59) What is your community reaction about HIV/AIDS intervention?

- 1= Accepted []
- 2= Rejected []
- 3= Don't know []

60) Do you have access to educative sessions on HIV/AIDS from the health practitioners?

- 1= Never []
- 2= Often []
- 3= Sometimes []
- 5= Always []

61) Give me suggestion which method you and your community would like to get information on HIV/AIDS

Thank you very much for your response

Appendix 2: Variables used in the index of level of knowledge on HIV/AIDS of respondents

	Variables	Description
1	Whether HIV/AIDS can be transmitted through witchcraft	Yes =0 No =1
2	Whether health looking person can be HIV/AIDS positive	Yes = 1 No = 0
3	Whether HIV can be transmitted through unprotected sexual intercourse	Yes = 1 No = 0
4	Whether HIV/AIDS can be transmitted through mosquito bites	Yes = 0 No = 1
5	Whether HIV/AIDS can be transmitted through transfusion with infected blood	Yes = 1 No = 0

- 6 Whether HIV/AIDS can be transmitted through vertical route Yes = 1 No = 0
(mother to child)
- 7 Whether HIV/AIDS can be transmitted through sharing of Yes = 1 No = 0
unsterilised piercing instrument
- 8 HIV/AIDS can be transmitted through coughing and sneezing Yes = 0 No = 1
- 9 HIV/AIDS can be transmitted through hand shake with an Yes = 0 No = 1
AIDS patient
- 10 HIV/AIDS can be transmitted through sharing food with an Yes = 0 No = 1
AIDS person
- 11 HIV/AIDS can be transmitted through touch and kiss by AIDS Yes = 0 No = 1
person
-

Appendix 3: Operational Definition of Variables Indicator

Variable	Operation definition
Background variable	
Age	Net years since one born
Sex	A state of being male or female in a biological sense
Level of education	Number of years of schooling
Location	Distance from ones' residence to the village heart /business centre
Marital status	The status of marriage of respondents at the time of interview
Occupation	Activities of the respondents do at the interview time
Religion	Ones' belief in God
Language	The language known by respondents and can be used to communicate the message clearly to other member of community.
Dependent Variable	
HIV/AIDS spread	Exposure of respondent's to risks responsible for HIV/AIDS spreads.
Independent Variable	
HIV/AIDS awareness	The respondent awareness of the existence of disease

	known as HIV/AIDS.
Knowledge of HIV/AIDS	Their responses to questions asked on knowledge of HIV/AIDS transmission and prevention, measured by number of questions correctly answered to be scaled as high, medium, and low level of knowledge
Mode of HIV transmission	Ways on which HIV/AIDS, and how it can be transmitted.
Misconception about HIV/AIDS transmission	Respondent's knowledge on ways on which HIV/AIDS cannot be transmitted.
Relation of HIV/AIDS and STI	The respondents awareness of sexual transmitted infection and its relationship with HIV/AIDS
VCT awareness	Awareness of respondents to availability VCT services
Source of information	Where respondent obtain the HIV/AIDS information and communication
Type of media	Ways through which the information are given to the public
Attitude towards HIV/AIDS and condom use	Respondent's responses to questions formulated to assess their attitudes towards HIV/AIDS and condom used measured by their fear towards HIV/AIDS and % using condom and those not using condom.
Attitude towards PLWHA	Opinion of respondents towards PLWHA assessed through number of questions.
Risk behaviour practices	Involvement of respondents to the cultural/ traditional practices and behaviour, which leads to spread of HIV/AIDS.
Traditional risk practices	Traditional /cultural practices which influence respondents HIV/AIDS prevention (expose the respondents to the risk of contracting or spread the HIV/AIDS.