

Factors contributing to staff's susceptibility to HIV in Oromia Agricultural Research Institute: a case study from Zeway Fisheries Resources Research Center

Professional Master Thesis

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
CBOs	Community Based Organizations
EDHS	Ethiopian Demographic Health Survey
НАРСО	HIV/AIDS Prevention and Control Office
HIV	Human Immunodeficiency Virus
MARPs	Most at risk Populations
MSPs	Multiple Sexual Partnerships
MTCT	Mother to Child Transmission
NGOs	Non-Governmental Organizations
OARI	Oromia Agricultural Research Institute
PLWHA	People Living With HIV/AIDS
RDA	Rural Development and HIV and AIDS
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
UNAIDS	United Nations Programme on HIV and AIDS
ZFRRC	Zeway Fisheries Resources Research Centre

Abstract

High prevalence of HIV/AIDS has been the most challenging problem in developing countries, especially in sub-Saharan countries. Ethiopia is classified in this region, where wide spread of HIV/AIDS is currently manifested. The situation of HIV/AIDS epidemic in Oromia regional state and some other regions (Amhara, SNNPR and Addis Ababa) is worse than the rest of the regions in Ethiopia.

Staffs' (Government organizations, NGOs and CBOs) susceptibility to HIV is not often studied in Ethiopia in general and Oromia Agricultural Research Institute in particular. In this regard, this study is intended to identify factors contributing to staffs' susceptibility to HIV: a case study on the staffs of Zeway fisheries resources research centre.

Both quantitative and qualitative data has been collected. Thirty respondents were contacted for the collection of data. One focus group and management team of the organization were contacted for discussions to get detailed information. Data was presented and analysed by the use of discussions, tables, pie charts and bar charts as well as by organizing responses according to their types, by comparing numbers and grouping different respondents.

The study indicated that general knowledge of staffs on transmission routes of HIV, prevention mechanism of HIV and relations between HIV and STIs is good though they are still in need to improve their knowledge. Therefore, the staffs are less susceptible to HIV with regard to knowledge on main transmission routes and prevention mechanism of HIV infection. The majority of staffs also have positive attitude toward HIV/AIDS and STIs. There is culture of silence in the organization among the staffs to discuss about sex and sexuality, HIV/AIDS and gender issues. This contributed to the staffs' susceptibility to HIV. The majority of field staffs especially young ages are more influenced by long absence from hove and risky behaviours for being susceptible to HIV infection. The management team of the organization has little knowledge about staffs' susceptibility to HIV infection and has no considerable attention about HIV/AIDS and related issues in the organization. it is concluded that there are no HIV/AIDS related strategies formulated and no responsibilities are being taken by the organization to encourage staffs to resist HIV infection though the organization has a plan to include HIV/AIDS activities in to its work activities.

Finally, the following point is recommended. In the short run, the organization needs to create awareness for the whole employees to increase their knowledge about HIV/AIDS. Organization need to encourage behavioural change or change from high risk to more responsible sexual behaviour. In the long run, the organization should formulate work place policies for proper prevention, care and support of its staffs infected and affected by HIV and AIDS.

CHAPTER ONE: INTRODUCTION

This study report has five chapters. Chapter one describes about the general background of the research, research problem including main and sub research questions and the conceptual frame work of the study. Chapter two deals with the review of literature presented about different concepts of the study. Chapter three describes about research methodologies followed by chapter four which deals with the results of the study and discussions about it. Finally, in chapter five conclusions and recommendations are presented.

1.1. General background information

Ethiopia is low income country and its economy is largely dependent on the agriculture. The first HIV infections in Ethiopia were identified in 1984, and the first AIDS cases were reported in 1986 (HAPCO and GAMET, 2008). High prevalence of HIV/AIDS has been the most challenging problem in developing countries, especially in sub-Saharan African countries since when the epidemic is recognized in the region. Ethiopia is classified in this region, where wide spread of HIV/AIDS currently manifested and hard hit by the epidemic. Ethiopia represents a low-level, generalized epidemic driven by most at risk populations (MARPs). National projections estimate approximately 1.1 million Ethiopians are living with HIV and prevalence increased slightly to 2.3 percent by 2009. Although the epidemic is currently stable, HIV/AIDS remains a major development challenge for Ethiopia (UNAIDS, 2010).

Ethiopia's HIV/AIDS epidemic pattern continues to be generalized and heterogeneous with marked regional variations. At the national level, the epidemiologic trend over the past eight years has been stable in the country. However, HIV prevalence appears to be declining in urban areas according to analysis of data from sites that collected data consistently for more than ten years. Pre urban and small market town residents, young females are the most at risk individuals and affected segments of the population by the epidemic.

Ethiopia exhibits variation in prevalence rates between urban and rural populations. In this regard, the prevalence in urban and rural population is 7.8 percent and 0.9 percent respectively according to the Ethiopia Single Point Estimates for 2010. The HIV/AIDS epidemic in the country is classified as generalized among the adult population with significant heterogeneity among different regions and population groups. The rural epidemic appears to be relatively widespread but heterogeneous, with most rural areas having relatively low prevalence of HIV. The epidemic continues to impact every sector with huge regional, urban-rural and sex differentials.

HIV in Ethiopia is predominantly spread through unprotected heterosexual intercourse, which accounts for approximately 88% of all HIV infections. Mother, or parent, to child transmission (MTCT) accounts for 8-10% and 2-5% of HIV infections can be attributed to blood and contaminated materials like un-sterilized needles. Behavioural factors such as, multiple sexual partnering, socio-cultural attitudes and about sex, alcohol and substance abuse, and the lack of awareness about HIV and high levels of untreated Sexually Transmitted Diseases (STDs), all drive the epidemic. HIV can be both a cause and a symptom of poverty in the country. Given the high rates of unemployment and poverty at household level, increasing numbers of women turn to selling sex for survival.

Adult HIV prevalence in 2009 is currently estimated to be between 1.4% and 2.8%. According to the data from 2007 single point estimate, there were an estimated 1,116,216 people living with HIV in 2009, of which 336,160 were eligible for ART. There were an estimated 131.145 new HIV infection (57% Female) and 44,751 AIDS related deaths (57 Female) (EDHS, 2011).

The behavioural surveillance survey in 2005 revealed that comprehensive knowledge of HIV/AIDS is minimal and misconceptions are high among at risk population groups which includes in and out of school youth, female commercial sex worker (FSWs), truckers and intercity bus drivers, uniformed government employees, and pregnant women (FMOH, 2006). These people are commonly referred as most at risk of contracting HIV.

The situation of HIV/AIDS epidemic in Oromia and some other regions (Amhara, SNNPR, and Addis Ababa) is worse than the rest of the regions in Ethiopia. Together, they accounted for 86.6% of all PLWHA (people living with HIV/AIDS), 85.3% of new infections, 87.9% of new AIDS cases, and 88.2% of AIDS deaths. In Oromia regional state, an estimated 248,229 people live with HIV. According to the Single Point HIV Prevalence Estimate, the HIV prevalence in Oromia was estimated at 1.5% (1.8% females and 1.2% in males) in 2009. The prevalence among the urban populations was estimated at 6.1% (7.3% in females and 4.9% in males). The corresponding estimate among rural population was 0.6% (0.7% in females and 0.5% in males) (UNAIDS, 2010).

Oromia region is located in the central part of the country. It is Ethiopia's geographically largest (366,910 square kilometres) region, and, with 27 million residents (2007), it is most populous. The region is subdivided administratively into 17 zones, nine town administrations, 284 *woredas*, and 7,000 peasant associations and urban dwellers associations (or *kebeles*) (Oromia RHB, 2007).

Zeway fisheries resources research center is government organization in Oromia regional state working on fisheries and related researches. ZFRRC is one the research centres under Oromia Agricultural Research Institute. The organization currently has 50 regular staffs. The center is found in Batu town which is located about 160km south of Addis Ababa. The centre is conducting its research in the whole Oromia Regional State and hence it is the centre's mandate to work on fisheries in the region. Field staffs of the organization are working in these mandate areas by being away from their home during the months of the year. ZFRRC have four work processes. These work processes are namely fishery technology generation work process, human resource management work process, finance and purchase work process and planning, monitoring, evaluation and follow up work process. Fisher technology generation work process is said to be the core process of the centre and the other three are support processes for the core process. This core process (fishery technology generation work process) has different research disciplines. These are the research focusing on fish Biology, Limnology, fishing gear, fish post harvest technology, aquaculture technology, socioeconomic and fishery technology extension. These all are being conducted in the whole Oromia regional state. The researcher is currently working in fishery technology extension team. His main responsibilities are technology verification, promotion and training the beneficiaries of the technologies.

Based on the information above, this research focuses on identifying factors contributing to staff's susceptibility to HIV infection during their work away from home and at office level. The main focus of this research is socio-cultural factors, risky situations, risky behaviours, attitudes and knowledge's of staffs toward HIV/AIDS and finally organizational strategies are assessed in order to increase the resistance of staffs to HIV infection.

1.2. Problem statement and Justification

With the above specified background, this study tries to identify factors contributing to the susceptibility of staffs of Zeway fisheries resources research centre to HIV.

Truck drivers, seasonal workers, civil servants and others who spend a good portion of their time away from home are all populations whose vocations increase their Susceptibility to contracting HIV virus (HAPCO and GAMET, 2008). Due to the nature of work in Oromia regional state that involves staffs mobility, ZFRRC staffs are at risk of HIV infection. That means field staffs of Zeway Fisheries Resources Research Centre are frequently going away to a distant area to conduct research activities. Although these staffs are among the great number of people who are at risk of HIV infection, little is known about the factors contributing to the susceptibility of field staffs to HIV infection.

Although employees are the most important resource for every organization, little is known about the factors contributing to the susceptibility of all staff members to HIV infection in the organization in general and ZFRRC in particular. Little is done by organizations in general in Ethiopia and ZFRRC in particular to reduce staff's susceptibility to HIV infection. Therefore, this research focuses on identifying factors contributing to staff's susceptibilities to reduce staff's susceptibility to HIV infection. Therefore, this research focuses organizational strategies and responsibilities to reduce staff's susceptibility to HIV infection. The research is therefore intended to contribute toward the resistance of staff's to HIV infection and finally recommends on the strategies of the organization to be used to reduce HIV infection among staff members.

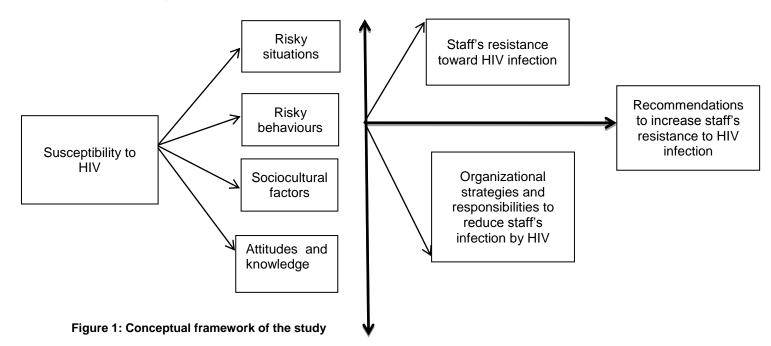
1.3. Objective of the research

The overall objective of this study is to contribute toward the resistance of staff's to the HIV infection and the way their organisation need to manage to reduce staff's susceptibility to HIV.

1.4. Main and sub-research questions

- 1. What are factors contributing to the susceptibility of staff's to HIV in Zeway fisheries resources research centre?
 - a. What are the risky situations and risky behaviours that are contributing to staff susceptible to HIV infection?
 - b. What are Socio-cultural factors that are contributing to the susceptibility of staff's to HIV infection?
 - c. What are the attitudes and knowledge of the staff toward the HIV/AIDS?
- d. How do staff members recognise and manage these factors in their way of working?
- e. What are the organizational strategies to reduce staff's susceptibility to HIV infection?
- f. What are the responsibilities the organization needs to take to reduce staff's susceptibility to HIV infection?

1.5. Conceptual framework



1.6. Definition of concepts

Susceptibility: relates to the likelihoods of an individual becoming infected by HIV. It has two components: (1) the likelihood of being exposed to the virus, which in turn relates to the risk environment and specific situations of risk that the person confronts and the riskiness of her/his behaviours (both of which may be related); and (2) the likelihood of being infected with the virus once exposed (IFPRI, 2003).

Risky situations: is an uncertainty that matters, and as a result two aspects of every risky situations we need to judge, namely the chance of the uncertain event occurring, and the consequence if it did (ICPM, 2008).

Risky behaviours: It is a behaviour that put somebody at risk for a bad consequence. It refers to individual behaviour aspect (which is related to multiple sexual partners, no use of condom, regular heavy drinking, drug use).

Socio-cultural factors: Refers to factors in the society that put people at risk of HIV infection. Gender inequality, religious practices and beliefs in the society are taken in to account in this study.

Attitudes and knowledge: refers to the level of understanding or perception about HIV by the staffs regarding its main transmission routes, prevention mechanisms and relation with sexually transmitted infections (STIs).

Staff's resistance of HIV infection: In this research refers to the way in which the staffs recognize and manage HIV infection during their work.

Organizational strategies and responsibilities: In this research refers to empowering staffs to understand and develop the necessary skills to protect themselves and others from HIV infection and/or to meet their own treatment, care and support needs (UNAIDS, 2007).

CHAPTER TWO: LITRATURE REVIEW

This chapter deals with the review of relevant literature. It mainly focuses on and describes the concepts of Susceptibility to HIV, basic knowledge about HIV/AIDS, risky situations and behaviours for HIV infection, socio-cultural factors contributing to the susceptibility of staffs to HIV, staffs' resistance to HIV infection and organizational strategies to reduce staffs' susceptibility to HIV.

2.1. Susceptibility to HIV

Susceptibility to HIV is defined by different authors. According to Loevinsohn and Gollespie (2003, p7) defined susceptibility to HIV as the chance of an individual becoming infected by HIV which relates to the risk environment and specific situations of risk that the person confronts and the riskiness of his/her behaviours or it is the chance of being infected with the virus once exposed. Barnett and Whiteside (2006) in another way defined susceptibility to HIV as any set of factors determining the rate at which the epidemic is propagated. Factors that contribute to increased or decreased susceptibility to HIV may at first seem to have little to do with disease. However, many of them have considerable importance for the environment within which an infection disease is transmitted.

2.2. Knowledge and attitudes about HIV/AIDS

According to Adegbola, et al (1995) knowledge essentially is the recall recognition of specific and universal elements in a subject area. In the context of HIV/AIDS, having knowledge implies ability to recall facts concerning causes, transmission, prevention, concerning HIV/AIDS. Islam MT et al (2002) stated that prevention of HIV infection through continuing education is a key strategy for the control of the HIV/AIDS epidemic.

It is expected that when one has the knowledge of HIV/AIDS, the accompanying behaviour would be logical. That is having the knowledge of prevention, transmission and other facts would motivate logical safe sex behaviour (Adgbola et al., 1995). Adegbola, et al (1995) further explain that in relation to HIV/AIDS; the possibility that the possession of adequate and correct knowledge is highly correlated to preventive efforts is a strong motivating factor in most educational projects since it is assumed that knowledge will help to overcome fear, denial and also contribute to behaviour modification. The spread of HIV in any community is in part determined by the knowledge and attitude towards sexuality of its members and by their actual sexual practices (Shiferaw et al, 2011).

HIV/AIDS is often written and referred to as one work with one meaning. But HIV and AIDS have two different meanings. The term HIV stands for Human Immunodeficiency Virus. This is the virus that can cause AIDS. If you have been infected with HIV you are said to be HIV positive. At the moment, there is no cure for HIV and the virus will always remain in your blood. However, it is important to remember that many people who are HIV positive look and feel healthy. AIDS stands for Acquired Immune Deficiency Syndrome. AIDS is rarely one disease but rather a group or combination of illnesses that develop because the body can no longer fight disease as it normally would. Treatment now available cannot cure HIV but may delay the development of AIDS for many years.

In Ethiopia in response to the HIV/AIDS epidemic, different actors have implemented various programs geared towards behavioural change interventions using a variety of communication channels and approaches. However, many of such interventions have not yielded the intended outcomes (HAPCO, 2002).

Available surveys on HIV/AIDS knowledge, attitudes and practices conducted in Ethiopia, show that unlike a high level of awareness about HIV/AIDS, many people lack adequate know-how about HIV preventions and transmission as well as have misconceptions. Besides, the studies make it clear that the disparity between knowledge and practice is also considerable. If we try to look at the situation at a national level, the recent Ethiopian Demographic Health Survey (EDHS) report discloses a high level of awareness among both sexes aged 15-49 (90% for women and 97% for men). However, relatively lower percentages of both sexes believe that there is a way to avoid HIV/AIDS (81% for women and 93% for men), and only 37% of women and 57% of men are aware that using condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of getting the AIDS virus (Central Statistics Authority (CSA), 2005).

The preliminary findings of the round two Behavioural Surveillance Survey (BSS) reveals that despite the high level of awareness about HIV/AIDS (more than 98%), only about 55% knew all the three methods of HIV prevention (abstinence, faithfulness, and use of condoms) (HAPCO & MOA, 2005).

2.3. Risky situations and risky behaviours

Risk is defined as the probability or likelihood that a person may become infected with HIV. Certain behaviours create, increase and perpetuate risk. Examples include unprotected sex with a partner whose HIV status is unknown, multiple sexual partnerships involving unprotected sex and injecting drug use with contaminated needles and syringes (IHAA, 2010). According to FDRE (2010) alcohol use substantially and significantly increase the likelihood of having multiple sexual partnerships (MSPs).

Individuals who are sexually active with a number of partners in a short period of time, with or without a main partner, are the greatest risk of HIV infection (Debie and Yoder, 2008). Debie and Yoder (2008) further explain that concurrent sexual partnering and greater sexual behaviour are enhanced by individuals who are sexually active without a main sexual partner because they have a number of partners in a short period of time. People who are addicted to alcohol are concerned about the effects of alcohol on their bodies and the risk of contracting HIV (Debie and Yeder, 2008).

According to MoARD (2004) social practices such as alcohol consumption often closely related to casual sex. A study conducted by Dereje (2008) on ten Oromia Regional state towns revealed that substance abuse, especially of alcohol and shisha, is responsible for increased exposure to unplanned and unprotected casual sex which fuels HIV transmission. According to WHO (2005) alcohol use and sexual behaviour and beliefs actively supported one another with alcohol use and beliefs acting as both precursors and outcomes of sexual behaviour.

According to Buseh et al. (2004), risk behaviours exposing the youth to HIV infection are directly related to sex and include: high level of sexual activity, having sex with multiple partners, and inconsistent or failure to use of condom. So et al. (2005), conducting a study in Swaziland have a more detailed understanding of risk behaviours which include behaviours that are directly or indirectly related to sex such as: unprotected sex, intercourse without condom, sex with prostitutes, sex with prostitutes without condom, anal sex without condom, sex for money or drug, alcohol immediately before sex, and drug immediately before sex.

On the other hand, the study by UNAIDS (1999) view risky behaviours in relation to environmental problems/contextual factors (not as individual problems). It argues factors that influence young people's sexuality include: peer norms and pressures, negative and unsupportive adult attitude towards youth sexuality, limited availability of condom, economic and gender constraints.

Current data revealed that while risky behaviour has levelled off or decreased slightly in current years in Ethiopia, there is still a significant proportion of the adult population that is engaged in risky sexual behaviour, which indicates that condom usage and age of sexual initiation (at least for men) is increasing (HAPCO and GAMET, 2008).

2.4. Socio-cultural factors

2.4.1. Gender inequality

Personal risk of contracting HIV is determined by numerous social and cultural factors that shape gender and sexuality perceptions, attitudes and behaviour. Gender norms are deeply rooted in socio-cultural context of each society and enforced by that society's institutions and practices notions of masculinity and femininity which in turn create unequal power relations between men and women (Kemboi et al, 2011). It was reported that all social and cultural ceremonies gather many people in a celebrative atmosphere and with the drinking, dancing and the resultant excitement; the risk for casual sex becomes high (Asiimwe, 2003). According to Richard (2007), gender inequality in marital relations, especially in sexual decision making increases susceptibility to HIV. Trends from current available data on new HIV infections suggest that the incidence of HIV is rising among married women and girls worldwide with unsafe and unprotected heterosexual intercourse being the single most important factor in the transmission of HIV among women.

Throughout the world, the unequal social status of women places them at a higher risk for contracting HIV. Women are at a disadvantage with respect to access to information about HIV prevention, the ability to negotiate safe sexual encounters and access to treatment for HIV once infected (UNAIDS, 2007). Jackson (1999) in another way stated that because of their different socio-economic, political, legal and cultural status, as well as biology, women and girls are affected by HIV and AIDS differently from men. They have less control over their own risk of infection.

2.4.2. Religious practices or beliefs

Religion has played a role in how HIV and AIDS are fought and viewed within respective social contexts since very early in the pandemic (Harold and Koening, 2004). If people are respecting their religion which teaches about being faithful to the life partner they become less susceptible to HIV.

The role of religion in the fight against HIV and AIDS is frequently talked about. It is often argued that religion discourages risky behaviour and therefore serves as a barrier to HIV infection. In particular, it is said that religious people are less likely to have multiple or causal sexual partners (Abate, 2001). Religious organizations can also make an important contribution to raising public awareness of HIV and AIDS by using their institutional channels and mechanisms. In poor areas, where secular institutions are relatively weak and ineffective, the role of religious organizations, with their social mobilization potential and networks of committed activists, can be especially important (Abate, 2001).

2.5. Staff's resistance to HIV infection

According to Gillespie and Drime (2009) described resistance to HIV infection as the ability of an individual to avoid infection by HIV either by escaping exposure or if exposed by escaping infection. Indicators of an individual's resistance will reflect why some people living in a high risk environment (with regards to the likelihood of exposure to HIV) are more resistant to infection than others in the same risk environment. Factors associated with resistance include awareness and understanding of HIV/AIDS, behavioural patterns such as abstinence, and number of partners, age at first sexual encounter, availability and use of health services such as voluntary counselling and testing and condoms and treatment of sexually transmitted infections (STIs) (Sambrook, 2003).

2.6. Organizational strategies to reduce staff's susceptibility to HIV

Support for resistance to HIV can reinforce individual efforts, making it possible for people to act on what they know concerning infection and its consequences (Loevinsohn and Gollespie, 2003).Loevinsohn and Gollespie (2003) further explain that there are strong similarities between how prevention, care, treatment, and mitigation of HIV and AIDS can be supported by agricultural sector organizations. This research mainly focuses on the strategies and responsibilities of the organization to reduce staff's susceptibility to HIV. According to Elsey and Kutengule (2003) minimizing staff susceptibility to HIV infection and providing a good environment for those already infected is the first step in motivating staff are uncomfortable and in denial about HIV/AIDS they are unlikely to be prepared to look at HIV/AIDS in relation to their own status and have safer sex, and for the organization by allowing staff to become comfortable with the issues around HIV/AIDS and hence address them in relation to their own work.

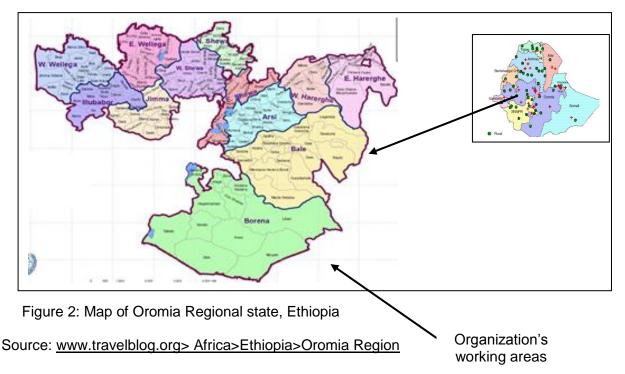
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

This chapter deals with the area where the study was conducted. It also describes the criteria of the selection of the area. The research methodology is also described under this chapter. This chapter also includes the respondents and the criteria used in selecting them for the study. The limitations of the study are also illustrated under this chapter which explains any possible drawbacks the researcher encountered and their implication for the results. Methods of data processing and analysing are also described under this chapter. The study was carried out between the month June 2012 and September 2012.

3.1. Selection of Study area

The research was carried out in Zeway town. Zeway is a town and separate district in central Ethiopia. It is located on the road connecting Addis Ababa to Nairobi in the East Shewa Zone of the Oromia Region of Ethiopia. In this town, all the government sector bureaus, private organizations, and non-governmental organizations and other community based organizations are found. Zeway Fisheries Resources Research Centre (ZFRRC) and its staffs, where this study focused are found in this town. However, the staffs of ZFRRC most of the time are working in the whole Oromia regional state (refer to map below) travelling to the distant working areas. Zeway fisheries resources research centre is under Oromia Agricultural Research Institute (OARI). OARI is a regional research institute and has 18 research centres. From these eighteen research centres, ZFRRC is the only centre working on fisheries in the whole Oromia regional state. This is one of the reasons why ZFRRC was selected for the purpose of this study because of their working situations and hence the staffs are widely moving for research proposes and the factors contributing to their susceptibility to HIV during their field work need to be identified. The whole staffs of the organization were also considered for the purpose of this study. This is because little is known about staffs' susceptibility to HIV infection and the organization need to know the factors that are contributing to staffs susceptibility to HIV infection at work place.

Oromia region is located in the central part of the country. It is Ethiopia's geographically largest (366,910 square kilometers) region, and, with 27 million residents (2007), it is most populous. The region is subdivided administratively into 17 zones, nine town administrations, 284 *woredas*, and 7,000 peasant associations and urban dwellers associations (or *kebeles*)



3.2. Data collection

3.2.1. Secondary data collection

Secondary data was collected through reviewing different literatures. These literatures were obtained from internet search, books, articles, journals and proceedings of different workshops. These secondary data assisted in coming up with the concepts and guided the research activities. With these concepts from the literature, the researcher went to the home country to collect the primary data.

3.2.2. Primary data collection

Management team of the organization

The management team of the organization was selected for discussion to collect data with regard to the organizational strategies and responsibilities being used to reduce staffs' susceptibility to HIV. The management team comprises of the manager of the organization and team leaders of different teams (technology generation work process, human resource work process, finance and purchase work process and planning, monitoring, evaluation and follow up work process).

Focus group

One focus group having four members was purposively selected. This is to get in depth information on knowledge and attitude of staffs about HIV/AIDS, field work and risk of HIV infection, organizational working environment and risk of HIV infection and the way staffs manage risk of HIV infection during their work. The representativeness of the group is three from field staffs and one from support staffs. This is to triangulate the information from the respondents. Three members of the field staffs were selected due to the fact that they can give information in the organization also.

Respondents

Thirty respondents were identified. These respondents were from the same organization (ZFRRC). 19 field staffs and 11 support staffs were identified for the purpose of this study. All respondents from field staffs were purposively identified because they have more exposures to field works in the whole Oromia regional state. However, the other support staffs were selected randomly to get additional information about factors contributing to staff's susceptibility to HIV at work place. 9 female and 21 male respondents were contacted. The numbers of female respondents were less than male respondents because their number is limited in the organization.

	Sample	e size	Total samp	ole size		
Field staffs Support staffs						
Male	Female	Male	Female	Male	Female	Total
18 1 3 8				21	9	30

Table 1: Respondents' category

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

NB. Support staffs refer to the staffs not frequently working on field work. These include human resource work process, finance and purchase work process and planning, monitoring, evaluation and follow up work process. Field staffs refer to staffs who are frequently working on field activities away from home. This team is known as technology generation work process. Both field staffs and support staffs comprises four teams of the organization. The

two drivers in the organization were also taken as field staffs for this study because they are always working on the field during the months of the year.

3.3. Data analysis and interpretation

Because of the nature of the study, qualitative analysis has been widely used. Data has been presented and analysed by use of the following: Discussions, tables, pie charts and bar charts. Responses were organized together according to their types. The analysis was also done by comparing numbers and grouping different respondents.

3.4. Limitation of the study

The first limitation of this study was unavailability of the current literature on organizations which studies about factors contributing to staffs' susceptibility to HIV in Ethiopia in general and Oromia regional state in particular. Studies conducted on the organizations are limited in Ethiopia in general and Oromia regional research Institute in particular. In this regard, lack of related references and absence of adequate similar studies on government as well as non-government organizations on factors contributing to the susceptibility of staffs to HIV has limited comparison between the researcher's findings and others.

The other limitation of the study was respondents' limited openness to freely give the information regarding factors contributing to their susceptibility to HIV infection. The researcher tried to convince the respondents about the confidentiality of their information. However, some of them were not open to discuss freely on the issues like sexual behaviours and sexual partnerships.

3.5. Scope of the study

The scope of the study limited to the staffs of Zeway fisheries resources research centre. It was focused on the staff of the organization which includes both field staffs and support staffs to see factors that contributes to the susceptibility of staffs to HIV during their field work as well as at work place in the organization.

CHAPTER FOUR: RESULT AND DISCUSION

Introduction

This chapter deals with results and discussions of the study. The researcher has contacted thirty respondents interviewed about factors contributing to staff's susceptibility to HIV. The researcher also contacted one focus group (four members) to discuss about factors contributing to staff's susceptibility to HIV to get further information. The management team of the organization (five members) also contacted to discuss about organizational strategies and responsibilities to reduce staff's susceptibility to HIV. The checklist for interview focused mainly on risky situations, risky behaviours, socio-cultural factors and the way staff's manage susceptibility to HIV during their work (refer to annex 1 for interview checklists). Each factor is analysed differently as follows in different topics.

4.1. Staff members' knowledge and perceptions related to HIV and AIDS

Under this topic knowledge of staffs toward HIV is analysed based on transmission route of HIV, prevention mechanism to HIV infection and relation of HIV with STIs. The ideas of focus group discussions also included at the end of this topic. This is therefore useful to know the knowledge of staffs regarding HIV whether they are susceptible due to insufficient knowledge or not.

4.1.1. Knowledge on HIV transmission

This sub-topic mainly focuses on knowledge of staffs on main routes of HIV transmission. The respondents' level of understanding about the main transmission routes of HIV is discussed. Finally it concludes whether the staffs are susceptible to HIV or not due to insufficient knowledge on transmission routes of HIV.

The result indicated that (table 3) all respondents (30) have replied to unprotected sexual intercourse with infected person, sharing infected needles and infected blood transfusion as the major transmission routes of HIV while mother to child transmission is the least (11/30) replied. The whole male respondents (21/21) responded unprotected sexual intercourse with infected person, sharing infected needles and infected blood transfusion as major transmission routes of HIV as also all female (9/9) respondents respondent the same. Female respondents (4/9) responded better as compared to male respondent (7/21) on transmission ways of HIV through mother to child. Young age (9/24) responded better than old age (2/6).

The susceptibility of staffs to HIV with regard to knowledge of HIV transmission is determined by the extent of knowledge of the respondents on the possible ways of HIV transmission. As susceptibility was defined as the likelihood of being infected by HIV (chapter 2), respondent's insufficient knowledge about main routes of HIV transmission increases their susceptibility to HIV. However, the result indicates that the majority of the staffs have better knowledge about main routes of HIV transmission. In relation to the results of this study, the ideas from various literatures are discussed below with regard to knowledge of respondents about main transmission routes of HIV.

Table 2. Decreandante	' knowladga an transm	viccion of UIV by cov	, age and staff's category
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Indicators (Transmission			Age		Staff's category			
routes of HIV)	М	F	Young	Old (36	FS		SS	
	N =	N = 9	(19-35)	& above)	Μ	F	М	F
	21		N = 24	N = 6	N=18	N=1	N=3	N=8
Unprotected sexual	21	9	24	6	18	1	3	8
intercourse with infected								
person								
Sharing infected needles	21	9	24	6	18	1	3	8
Infected blood	21	9	24	6	18	1	3	8
transfusion								
Mother to child	7	4	9	2	6		1	4
transmission								

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

NB: M= Male, F= Female, FS= Field staffs, SS= Support staffs

There is no significance difference between male and female as well as young and old respondents with regard to the knowledge of HIV transmission. There is also no significance difference between field staffs and support staffs with regard to knowledge of HIV transmission. This is because all respondents are aware of the main transmission routes of HIV. According to the results from the interview held with the respondents they have got these awareness and knowledge from mass Medias (national television and radio programs that convey the messages through dramas and films on HIV/AIDS issues). Female responded better than male respondents. This might be because female are better informed than male about mother to child transmission. According to Mabrizi (2006) the possibility of mother to child transmission during delivery was widely known (85% of women and 88% of men) while only just more than half of the interviewees knew about mother to child transmission during pregnancy (56% of women and 55% of men). The study by Zanera and Miteka (2004) also revealed that knowledge of MTCT transmission is lower among men than among women (29 percent compared with 37 percent).

In line with this study, the study conducted by SAN (2009) on staffs of different organization in Ethiopia revealed that staffs are well aware of the ways by which HIV is transmitted as well as the traditional practices that have helped its spread in Ethiopia. Nearly all know of its transmission through unprotected sexual intercourse (98%) and utilization of used needles and blades (96%), while 74% mentioned transmission by transfusion with contaminated blood.

Zinabu (2003) also stated that from the total respondents (1163) 94.8% of them responded using contaminated skin piercing instruments, 88.3% sex with multiple partner, 55.8% not using condom during sex, 64.4% sex with prostitutes and 13.6% sharing appliances with PLWHA as the routes of HIV transmission. This is in line with this study that the majority of the respondents have knowledge on the main transmission routes of HIV. In line with this study Hurtado et al (2011) also reported that most respondents knew the mechanisms of transmission of HIV.

Shiferaw et al (2011) in another way stated that all respondents heard about AIDS before the interview. Only half of the respondents knew that at present, AIDS is incurable and that HIV infection can be acquired through sexual contact with a familiar person. Accordingly, this study result indicates that the majority of the respondents heard about AIDS. According to the study conducted by Islam et al (2002) regarding the knowledge on HIV/AIDS among staffs of an international organization in Bangladish, the respondents were aware that unprotected sexual intercourse (92%), transfusion of blood and blood components (93.8%),

sharing unsterile needles for injections (94.1%), and delivery of babies by infected mothers (82.7%) could transmit HIV. The majority of the respondents are aware and know about the main transmission routes of HIV. Respondents who knew that HIV could spread by contact with infected blood or by sharing injection needles or razor blades were less likely to be infected than those who did not know about these risks (Svenson et al., 1992).

However, only 11/30 respondents knew the HIV transmission from mother to child (MTCT). This is because the majority of the respondents only know HIV transmission from mother to child occurs only if there is blood contact between infected mother and child during birth. They are not aware of HIV transmission from mother to child during pregnancy and breast feeding. Female respondents (4/9) responded better as compared to male respondent (7/21) on transmission ways of HIV through mother to child.

The study conducted by SAN (2009) revealed that only 45% of the staffs knew about transmission from mother to child (MTCT). This report is in line with the findings of this study that transmission from mother to child is the least responded (37%).

Therefore, in all respondents (both female and male), less susceptibility of the staffs to HIV is recognized by the researcher regarding the knowledge of the major transmission routes of HIV.

4.1.2. Knowledge on methods of HIV prevention

This sub-topic mainly focuses on knowledge of staffs on prevention mechanism of HIV transmission. Finally it concludes whether the staffs are susceptible to HIV or not due lack of knowledge on prevention mechanism of HIV.

In order to know their knowledge of HIV prevention and the way they took measures to protect themselves, the respondents were also asked (with possibility for number of multiple responses) to list the ways and means by which they protect themselves from HIV infection. In this regard, they identified ways of HIV prevention that are listed in table 3 below.

Indicators	Sex		Age		Staff's category			
	М	F	Young	Old (36	FS		SS	
HIV Prevention	N =	N =	(19-35)	& above)	Μ	F	М	F
mechanism (N = 30)	21	9	N = 24	N = 6	N=18	N=1	N=3	N=8
Taking care of infected needles	21	9	24	6	18	1	3	8
Abstinence and faithful to partner	21	9	24	6	18	1	3	8
Use of condom	10		10		9	-	1	-
Know self-status through HIV test	1	3	3	1	1	-	-	3

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

NB: M= Male, F= Female, FS= Field staffs, SS= Support staffs

There is no significance difference between male and female, young age and old age, field staffs and support staffs with regard to prevention of HIV infection through taking care of infected needles and abstinence and faithful to partner. This is because all respondents are aware of these prevention mechanisms of HIV though some of them still need more awareness about correct and consistent use of condom as a HIV prevention mechanism.

According to the results from the interview held with the respondents they have got these awareness and knowledge from mass Medias (national television and radio programs that convey the messages through dramas and films on HIV/AIDS issues).

All male and females respondents from both field staffs and support staffs are aware of taking care of infected needles and abstinence and faithful to partner as a prevention mechanism of HIV infection. However, among male respondents only 10 of them know the correct use of condom. From the rest (11/21) of the respondents, some did not know the correct use of condom and the other did not want to talk about condoms. This is because there was no awareness given for them on how to use condom properly. All the female staffs focused on other HIV prevention methods (taking care of infected needles and abstinence and faithful to partner) and do not want to talk about use of condom. This is might be because use of condom sometimes seen as lack of trust between sexual partners. The study conducted by Rachel (2010) revealed that using or not using a condom is not simply a question of safer sexual behaviour: it is the outcome of a negotiation between partners.

The study finding shows that abstinence and faithful to partner is the most responded as prevention mechanism to HIV infection while use of condom is the least (10/30) responded from the three HIV prevention mechanisms. This is because the majority of the respondents have the awareness about prevention mechanisms HIV infection though some of them do not know the correct use of condom. This indicates that the staffs have knowledge on the major prevention mechanism of HIV infection. HAPCO (2005) also stated that condoms, abstinence, and limiting the numbers of partners are the most frequently named methods of preventing HIV.

Garbus (2003) revealed that most respondents (52.6 percent of women and 69.6 percent of men) replied that having sex with only one partner was the single most effective way to avoid contracting HIV infection. Garbus (2003) further stated that more men than women spontaneously responded that abstaining from sex (17.1 vs. 10.8 percent) can help prevent the risk of acquiring HIV. Abstaining from sex, using condoms and limiting the number of sexual partners have been identified as programmatically important ways to avoid the spread of HIV infection.

According to EDHS (2011) report 65% of women and 74 percent of men know that limiting sexual intercourse to one faithful and uninfected partner can reduce the chance of contracting HIV. SAN (2009) a study report on staffs of different organization in Ethiopia also reports that staffs were well aware of ways of HIV prevention.

This study result is telling that while the majority of the respondents have better knowledge on prevention mechanism of HIV infection there is still a gap on correct and consistent use of condom.

Generally, the findings of this study revealed that all respondents have better knowledge on prevention mechanism of HIV infection though they still need awareness on the correct and consistent use of condom. In this regard, they are less susceptibility of staffs' to HIV is recognized with regard to knowledge on main prevention mechanisms of HIV infection.

4.1.3. Relation of HIV with STIs

This section deals with the knowledge of the staffs on the relations between HIV and STIs. This helps to know whether the staffs are susceptible to HIV or not due to lack of knowledge on the relation between other sexually transmitted infection and HIV.

Sexually transmitted infections (e.g. Gonorrhea and Syphilis) are disease passed from one person to another through unprotected sex (sex without condom). HIV is also categorized

under sexually transmitted infections. Acquiring other STIs increases the chance of HIV infection following unsafe sex. In this regard, a person can have STIs if he/she had unprotected sex (sex without condom).

According to data presented on table 4 there is no significance difference in between men (19/21) and female (8/9) on the idea that HIV and STIs have relationships. In general, the majority of the respondents (27/30) believed that there is a strong relationship between HIV and STIs while only few (3/30) respondents responded as there is no relationship between HIV and STIs.

Table 4: Respondents' knowledge about relations between HIV and STIs by sex, age and marital status

Indicators	Sex		Age		Marital status		
	Male	Female	Young	Old (36 and	Married	Not	
Relation between HIV and STIs (N = 30)	N = 21	N = 9	(19-35) N = 24	above) N = 6	N = 20	married N = 10	
Have relationship	19	8	22	5	19	8	
Have no relationship	2	1	2	1	1	2	

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

During the interview with the respondents, they revealed that a person with STIs has greater risk of contracting HIV than a person who has no STIs. Focus group discussion also elaborated this idea that a person with STIs increases the chance of contracting HIV if having unprotected sex.

According to the study report from EDHS (2011) the majority of the respondents had heard and aware about the relations between STIs and HIV. The findings of this study also revealed that the majority of the respondents have knowledge about relations between HIV and STIs.

Individuals who are infected with STIs are at least two to five times more likely than uninfected individuals to acquire HIV infection if they are exposed to the virus through sexual contact. In addition, if an HIV infected individual is also infected with another STIs, that person is more likely to transmit HIV through sexual contact than other HIV infected persons (Wasserheit, 1992). Shiferaw et al (2011) also stated that acquisition of other STIs increases the chance of HIV infection following unsafe sex. Wasserheit (1992) stated that "there is substantial biological evidence demonstrating that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV". This idea is in line with this study result because almost all respondents (27/30) revealed that there is a strong relationship between HIV and STIs.

One respondent from the staff stated that "people with STIs are more susceptible to HIV than people without STIs". This indicates that the respondent has better knowledge about the relations between HIV and STIs. Generally, both female and male respondents have a substantial knowledge on the strong relationship between HIV and STIs. This implies that they all are less susceptible to HIV due to better knowledge about relations between HIV and STIs.

Summary on knowledge of staffs on HIV

Knowledge of staffs regarding the main transmission routes and prevention mechanisms of HIV as well as its relations with other STIs has a negative correlation with susceptibility of staffs to HIV. That means the less the knowledge of the staffs on these issues the more susceptible they are to HIV. The study revealed that the majority of the respondents have better knowledge and hence they are less likely susceptible to HIV.

4.2. Staffs attitudes toward HIV

Under this topic the staff's attitude toward HIV/AIDS and other STIs is indicated. It is aimed to know whether the staffs are susceptible to HIV or not due to their attitudes toward HIV/AIDS and other STIs.

The majority of the respondents (19/30) favoured screening of HIV and STIs. Male (14/21) responded better than female (5/9) for screening of HIV and other STIs. Old age (5/6) responded better than young age (16/24) and married (15/20) responded better than not married (4/10) respondents for the same idea.

Attitudes (N=30)	Appropriate response	Response indicating desirable attitude according to						
		Sex		Age		Marital status		
		Male N =21	Female N = 9	Young (19-35) N = 24	Old (36 and above) N = 6	Married N = 20	Not married N = 10	
Only those people who lead immoral lives will get HIV	Disagree	21	9	24	6	20	10	
Screening for HIV and other STIs is good	Favouring	14	5	14	5	15	4	
HIV is sever and more affects young	Agree	18	9	22	5	18	9	

Table 5: Staffs' attitudes towards HIV/AIDS

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

The study indicated that while the majority (19/30) favoured screening for HIV and other STIs, the rest 11 respondents were not favouring screening of HIV and other sexually transmitted infections. This may be because they fear stigma and discrimination after their HIV status is disclosed. According to Mohammed and Demeke (2000), the existence of favourable social atmosphere for social testing determines the attitude of people toward testing for HIV and other STIs.

The majority of the respondents (27/30) agree on the idea that says HIV is sever and more affects young. The rest 3 respondents did not agree because they have the perception that everybody can be infected if he/she is not taking care of the infections.

Respondents who supported knowing self-status for STIs are less susceptible to HIV than those who do not support. This is because if they know their status about STIs it is easy for them to get treated and hence HIV and STIs have strong relationship (analysed under section 4.1.3. above). For example if someone supported the idea that screening for other STIs, he/she can easily be treated for these infections and decreases the chance of contracting HIV if he/she does unprotected sex (i.e. without condom).

The study conducted by Shiferaw et al. (2011) revealed that about 34% of the respondents had negative attitude towards HIV/AIDS and other STDs. This is in line with this study because less than half (36%) of the respondents had negative attitude towards HIV/AIDS and other STDs.

The attitude of staffs toward HIV is differing because of their different perceptions about it. For instance, not all staffs are favouring screening for HIV and other sexually transmitted infections. According to Islam et al (2002) attitude is a knowledge that describes what people think.

Generally, the majority of staffs had positive attitude toward HIV/AIDS and other STDs and hence they are less susceptible to HIV infection.

4.3. Socio-cultural factors

This topic deals with susceptibility of staffs to HIV in relation to gender inequality and religious practices or beliefs.

4.3.1. Gender inequality

Under this sub-topic, this study tried to indicate which staffs are influenced more to be susceptible to HIV due to their sex differences (being female or male) while they are at field work. In addition to this, the study also tried to indicate whether inconvenient situations are existed or not in the organization that makes them susceptible to HIV.

The staffs of Zeway Fisheries Resources Research Centre (ZFRRC) have different cultural background though they were recruited from the same region (Oromia Regional State, Ethiopia). However, they share the same organizational culture.

A. The situation at field work (Field staffs)

Community approach

This is necessary to see the level of female and male staffs' exposure to HIV infection while they are at field work. The field staffs are expected to collect data from fishermen and different lakes of the Oromia regional state. In addition they are conducting training for fishermen at their working places. Field work has two categories; the work which mostly focused on capture fisheries (collecting limnology and biological data from natural and artificial lakes, collecting stock assessment data from fishermen) and the work which focused on aquaculture (pond preparation, fish fingerling stocking, training fish farmers on fish management, farm management and marketing of fish). Capture fisheries in Ethiopia is dominated by men and women are hardly found on fish capturing and that is why they are called fishermen. These fishermen are selling their product to the traders and different hotels available in the areas. However, aquaculture farming is commonly handled by both women and men and currently the demand from the farmer is increasing. This is because the farmers can easily manage fish and fish farms around their residence. In this regard, field staffs have more contact with fish farmers in promoting aquaculture technology than fishermen in capture fisheries. In the context HIV/AIDS, the study revealed that there is no fishing community approach which can expose field staffs to the risk of HIV infection. There is no studies conducted on the approach between field staffs and fishing communities that can expose field staffs to the risk of HIV infection.

In another way, there is only one female respondent in field staff (as explained under chapter 3 above). The finding from this study also indicated that all the field staffs respect each other and no gender based differences are reported during their field work. However, men field staffs are involved in drinking of alcohols and participating in night dances than female respondent. This situation might impose them to go for unprotected sex with available ladies.

The female respondent did not report such a situation during field work. This is because it is seen as shame for female field staff to participate in night clubs. Therefore, in such a situation, men have more exposure to HIV than women to be infected by HIV.

B. The situation at organizational level

Decision making

This refers to the situation in the organization which consider how much the organization ensure that HIV and AIDS and gender equality issues are seriously taken into consideration in decision making on organizational matters.

In this regard, the study revealed that there are no female staffs in decision making currently in the organization. This can be a factor for the susceptibility to HIV infection. This is because Male domination affect gender responsiveness of policies and increase the gender related barriers that deny women from participating in decision making structures and processes related to issues of HIV and AIDS.

According to Maksuda (2010), women's active participation in decision making is not only important for ensuring equality, but also for establishing their right addressing their problem and challenges they faced in their workplace as well as social life. Maksuda (2010) further revealed that differences between men and women will also be reduced if organization exercises the participatory decision making process, develop gender policy and initiate appropriate dissemination process of policy and norms through their governance system. At the same time, the commitment of employee, especially those at the top, to gender equality and to adopting and implementing existing and future reforms is also critical for ensuring women's participation in decision making.

According to WHO (2003) gender plays an integral role in determining and individual's susceptibility to infection, his or her ability to access care, support or treatment and ability to cope when infected or affected. Kimboi et al (2011) stated that "gender disparities are considered to be one of the important socio-cultural factors for HIV transmission". The four work process team leaders are currently male in the organization. In this regard, the study revealed that male and female were not given equal status in participating in decision making in the organization. This may be because female staffs in the organization have less managerial competences than male staffs in the organization.

Culture of silence on HIV/AIDS and related issues

The organization has a kind of process culture. The employees are following the process and procedures of the organization. Feedback and reviews of the activities are held quarterly in the organization. In such a situation, staffs are discussing and openly sharing their views about work activities in the organization and at field work. However, the study revealed that staffs are silent to discuss about HIV/AIDS, sex and gender equality. This may be because they are not familiar with internal mainstreaming of HIV/AIDS. That means they were not conscious about HIV/AIDS aspects as a concern besides their research activities due to insufficient awareness about it.

In addition to the respondents' idea, information obtained during focus group discussion revealed that there is a culture of silence in the organization to talk about HIV/AIDS, Sex and gender equality. The researcher is a member of the organization's staff. However, all respondents replied that there is no gender based violence at the organizational level. All staffs are respecting each other and it was also observed that there is no violence of human rights and all staffs are seen equal regardless of their specific qualification and working positions.

In this relation, report from PREM (2003) revealed that some socio-cultural norms prevent both women and men from obtaining critical information about HIV/AIDS. For example, there is culture of silence around sexual matters. In line with this report, the findings from focus group discussion and respondents revealed that there is culture of silence in the organization to talk about sexual matters. However, both women and men are important players in preventing HIV and all people benefit from responsible, respectful, consensual and mutually satisfying sexual relationships (UNAIDS, 2010).

In general, the susceptibility of both men and women is higher than being at home during fieldwork. However, factors for the increased susceptibility are different for men and women even though women field staff is not many.

Generally, the findings of this study shows that almost all respondents are susceptible to HIV due to culture of silence to talk about sexual matters and HIV issues in the organization. With regard to gender inequality, there is no gender inequality that exposes male or female respondents to the risk of HIV infection. This does not mean that all staffs are silent for other aspects also. They are very cooperative and working together openly by discussing freely on work related issues.

4.3.2. Religious practices and beliefs

Under this sub-topic this study tried to show how much staffs are unsusceptible to HIV due to their religious practice or beliefs.

The study revealed that the majority of respondents responded as religious practices or beliefs encourages in reducing the risk of HIV infection. For their justification to their response some of the Christian respondents repeatedly talked about the bible verse which supports their idea:

"You have heard that it was said to those of old 'you shall not commit adultery.' But I say to you that whoever looks at a woman to lust for her has already committed adultery with her in his heart'. Matthew 5: 27-28"

According to the respondents those who have high respect to their religious rules and principles, their intention regarding the above words of the bible is that a man should be faithful to his partner. As a result staffs susceptibility to HIV infection likely to be decreased.

Information and findings from field work indicated that 73% percent of the respondents are Christian. However, they differ in specific types of Christianity such as Orthodox and protestant Christians. The rest 27% of the respondents are Muslim. This indicates that all respondents are believers (both Christian and Muslim). However, from the respondent's view the researcher understood that there was less attention paid by some of the staffs to be strictly ruled by their religious principles although all of them are believers (both Christian and Muslim).

The findings of this study indicated that the majority of the respondents supported religious practices or beliefs encourages in reducing HIV infection for the above stated reasons even though some of them are not stick to their religious rules.

Harold and Koenig (2004) stated that religious beliefs or practices are associated with high faithfulness to partner, higher social support and greater marital satisfaction and stability. It can be argued that the deviation from this ideal can in many cases lead to HIV infection.

Generally, as the more the staffs are respecting their religion the less likely they are susceptible t to the HIV. This is because the religious practices encourages faithfulness to partner which is one the most HIV prevention mechanisms.

4.4. Risky situations

This topic deals with risky situations for the susceptibility of the staffs to HIV and mainly focuses on the effect of long absence from home and influence of field environment on staffs for the likelihood of being infected by HIV.

A. Field staffs

4.4.1. Long absence from home (staffs' mobility)

Twenty four out of 50 staffs in the organization are field staffs (refer to annex 3 for the profile of the organization). However, 19/24 respondents are selected for the purpose of this study. In this regard, almost all field staffs are moving for field work departing from their family for 10-20 days.

According to the data presented on table 7 below the majority (14/19) of field staffs replied that long absence from home has a great risk of HIV infection. Young ages (11/13) are more influenced than old ages (3/6) and non-married (4/5) are more influenced than married respondents (10/14).

The following ideas (box 1 below) are from the respondents with regard to the risk of long absence from home for the likelihood of becoming infected by HIV during field work.

Box 1: Responses of the staffs on long absence from home and risk of HIV infection

"Being far from home will give the chance to create disagreement with partner. Sometimes when you are far from home somebody will be at your home which creates double chance to get infected by HIV". (Married field staff)

"When I went to my fieldwork it is known that I consume food from different hotels and cafeteria which is occupied by many ladies which may attract me towards them". (One of the field staff)

"Being far from home made me the chance to drink alcohol which increases the chance to have unprotected sex with others". (One of young field staffs)

"Long absence from home can expose us to have sex with bar ladies (sex desire + availability of bar ladies + no safety tool= exposure to HIV infection)". (One of the young field staffs)

The above box1 explains how far the respondents understand the risk of HIV infection during their field work away from their home. Especially the young respondents' response has an indication that being away from home has a great risk for HIV infection.

Indicators	Sex		Age		Marital status	
	Male	Female	Young	Old (36 and	Married	Not married
Long absence from home (N=19)	N = 18	N = 1	(19-35) N = 13	above) N = 6	N = 14	N = 5
Has risky situations	14		11	3	10	4
No risky situations	4	1	4	1	2	3

Table 6: Field staffs' response on susceptibility to HIV due to long absence from home

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

According to the results from the study (table 7 above), young ages are more influenced by long absence from home than old ages. This is because they are more influenced by risky behaviours (e.g. taking stimulants during the night at their field work) than old ages. For the same reason non-married respondents are more influenced by being away from home than married respondents.

The rest of the respondents (5/19) responded as there is no risky situations that lead them to the risk of HIV infection during their field work. This is due to according to them there is no difference between being at home and away from home because they are abstaining themselves from any factors of HIV infections. However, the rest are at least influenced by taking stimulant drugs during their field work which in turn may initiate them to have unprotected sex.

The researcher's finding is more agreed with the study according to HAPCO and GAMET (2008), mobile workers such as civil servants, truck drivers, seasonal workers and others who spend a portion of their time away from residence become more susceptible to be contracted with HIV. This view of literature indicates that how the effect of mobility becomes difficult to the rest of the staffs family. In contrast to this study, the study conducted by Sambrook (2003) stated that married men are the highest risk group because of the fact that they have more opportunities for casual sexual relationships due to their mobility, tendency to migrate seasonally, access to disposable money and if they have extramarital affairs they are likely to have several different partners.

In general, the greater stay at field work (10-20 days per month) has more influence on the staffs to be susceptible to HIV as compared to a staff with less frequently moving to field work (once for few days in a month). Especially young age group of the field staffs are more susceptible due to their ways of enjoyment in the field (analysed under section 4.4.2).

4.4.2. Influence of field environment

Use of field allowance

Under this topic the study indicated the use of field allowance by field staffs in context of different field environment in order to see the effects on the staff with regard to risk of HIV infection.

In this regard, all respondents from field staffs revealed that they spend their allowances for food and rent for bed room. However, they also revealed that there is a difference of field environment where they can use their field allowance and for what purpose. In this regard, most of the respondents indicated rift valley areas of the Oromia Regional state as the place where the staffs most of the time spend part of their allowance for drinking alcohols. The majority of the respondents from young age are more enjoying during the night after their field work through drinking alcohols. The respondent themselves confirmed that the more they take stimulant alcohols the more they stimulate themselves to have sex with others and high chance not to use condoms. This can increase their susceptibility to HIV infection.

The majority of the respondents recognized the influence of field environment for the risk of HIV infection. The respondent replied that 'the more you stayed in town the more you are engaged in risky situation in that there is the chance of taking stimulant alcohols which in turn initiates you to have unprotected sex that increases the likelihood of being infected by HIV'. The ideas from focus group discussion also support the respondents' views that the field environment has an effect on the staffs' use of their field allowances for different purposes (especially alcohol consumption).

Situation in towns during field works

According to the information from the respondents the field staffs were relaxing in small towns of the districts during the night after they undertaken extensive field work. In this regard, Hotels and restaurants are the non-optional places to enjoy. Thus some of the male respondents were using hotels as a recreation centres to pass the night by drinking alcohols. This may stimulate them to have unprotected sex (i.e without condom). In this case they are more susceptible to HIV infection.

As a summary, long absence from home and influence of field work had high risk for field staffs for the likelihood of becoming infected by HIV. Especially the young ages are more susceptible due to long absence from home and influence of field environment. The more the field staffs stayed in field work the more their susceptibility to HIV increased due to the influence of being absent from home for long time and the influence of field environment. In this regard, almost all field staffs are highly susceptible to HIV for their long absence from their home even though young ages are more susceptible than others due to their ways of enjoyment during their field work.

B. Support staffs

With regard to support staffs, the study revealed that there is no risky situation identified in the organization that exposes the staffs to the risk of HIV infection. However, some of the respondents from the support staffs are also moving far from home for trainings and workshops even though it is not in a regularly manner. Studies have shown that mobility of staffs for field works as well as for training and workshops considered as one of the major factors for their susceptibility to HIV infection (Rathavuth et al, 2008).

4.5. Risky behaviours

Under this topic the study mainly focused on the susceptibility of staffs to HIV due to their own risky behaviours such as use of stimulant drugs and having multiple sexual partners.

4.5.1.Use of stimulant drugs

Use of stimulant drug in this study refers to drinking alcohols and sometimes smoking shisha. In this regard, respondents were asked whether this stimulant drugs influenced their behaviour to have unprotected sex.

The findings of this study revealed that (table 8 below) no female staffs are using stimulant drugs. The majority (10/19) of the staffs are not using stimulant drugs. However, some male (9/18) respondents are using at least one type of stimulant drugs. Among these respondents young age (7/13) are more involved in using stimulants (drinking alcohols) as compared to old age (2/6). However, young age and old age differ in taking type of stimulants. Female staffs are none users of stimulants. Non-married (5/5/) are also more involved in using stimulants than married (4/14) respondents.

Box 2: Responses of the staffs on use of stimulant drugs and risk of HIV infection

"The more you take stimulant drugs the more you stimulate yourself to have sex with others and high chance not to use condoms" (one of male field staffs)

"The more you take stimulant the more you lose your mentality, so you are easily attracted by any opposite sex" (one of male field staffs)

"Stimulant drugs like alcohols initiate people to do what they feel internally including sexual drives" (one of male field staffs)

The above box 2 shows the extent to which respondents recognized the effect of stimulant drugs in initiating someone to sexual desires and leads to unprotected sex.

Table 7: Staffs' susceptibility to HIV due to their risky behaviours by sex, age and marital status				
Indicators	Sex	Age	Marital status	

Indicators	Sex		Age		Marital status	
Risky behaviours (N = 30)	Male N = 18	Female N = 1	Young (19-35) N = 13	Old (36 and above) N = 6	Married N = 14	Not married N = 5
Use of at least one type of stimulant drugs	9		7	2	4	5

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

Young ages are more involved in using stimulants during their field work as compared to old age. This may be because young ages are more attracted to enjoyments and stimulants than old ages. This makes them more susceptible to HIV infection than old ages. For the same reason, not married respondents are also more involved in using stimulants than married respondents.

According to Njue (2009) alcohol and drug use facilitated and reinforced sexual risky behaviours. The link between alcohol abuse and sexually transmitted infections (including HIV infection) has been the subject of discussion in many studies (e.g. Kalichman et al., 2009 in South Africa, Mmbaga et al., 2007 in Tanzania and Kalichman et al., 2007). What this study has in common is that alcohol use predisposes individuals to greater risk of HIV infection. In this study, respondents' perceptions reflect this general understanding.

According to Johnson and Budlender (2002) certain forms of sexual intercourse are associated with higher risks of HIV transmission. Sex without a condom is the most common form of high risk sexual intercourse. Failure to use condom is most common at older ages and among less educated individuals.

Judging from informants' comments, when people are drunk, casual sex is far more likely. A few people said they did not know if they have had a one-night stand because they were too drunk to remember, let alone remember if they used a condom (Debie and Yeder, 2008).

Beseh (2004) stated that a high risk sexual behaviour is being associated with the use of alcohol during sexual intercourse. It is because it encourages undertaking extramarital sex and sex with commercial sex workers, which in turn, increase the risk of HIV infection. From this literature view it is clear that the staffs of the organization (mainly male) can be influenced by such risky situations as far as they chose drinking alcohol as a means of recreation.

Fisher et al (2007) also indicated that "alcohol use demonstrates a crude dose response relationship with HIV infection such that the heaviest and symptomatic drinkers are at greater risk to be HIV positive as compared to moderate drinkers and those who do not experience problems as a result of drinking"

Therefore, stimulant drugs have high influencing power to increase sexual feelings of few staffs to have casual sex with available ladies and then to be susceptible to HIV infection if they are not using condom during sexual intercourse.

In general, male staffs especially young ages are more susceptible due to stimulant drugs while females are totally not susceptible.

4.5.2. Multiple sexual partnerships

Multiple sexual partnerships in this study refer to having more than one wife. The following points are the analysis of both field staffs and support staffs with regard to multiple sexual partnerships. In this regard, underneath the study indicated that how far the staffs are susceptible to HIV due to relations with having more than one sexual partnership.

In this regard, the findings from this study revealed that among total respondents only 2/30 respondents reported as having more than one wife. These two respondents are from support staffs and are both male and married. Both young age (1) and old age (1).

The prevalence of HIV infection was strongly and positively associated with the number of lifetime sexual partners among both women and men. HIV prevalence among women increased from 1.4 percent for those who had only one lifetime sexual partner, to 4.7 percent among those with two lifetime partners, and 5.6 percent among those with three or more lifetime partners (Rathavuth et al, 2008).

Different studies have shown that having both multiple sexual partners and casual sexual partners increases the risk of getting infected by HIV and other STIs (Wilson, 2004; Shelton et al., 2004; and Chen et al., 2007).

Generally, almost all respondents are not susceptible to HIV infection due to multiple sexual partnerships.

4.6. Staffs resistance to HIV infection

Under this topic the study tried to identify the way staff members recognize and manage the risk of HIV infection.

The study revealed that some of the respondents tried to manage the risks of HIV infection during their work through use of condoms, abstinence, and limiting the number of sexual partners. However, the majority of the respondents were unable to manage the risks. This is because of the influence of the factors such as limited knowledge on the correct use of condom, influence of field environment (some of which is non optional place for them to enjoy through drinking alcohols), use of stimulant drugs that initiates them to have unprotected sex.

According the information from focus group discussion every staffs has different kind of understandings toward HIV/AIDS and related issues. It is therefore depends on their knowledge and understandings to manage risk of HIV infection during their work whether it is fieldwork or office work. In this regard, the following ideas are raised by respondents during the interview regarding their resistance to the risk of HIV infection.

"I tried to manage risk of HIV infection during my work through: taking care of infected needles during work, using condom during sexual intercourse, limiting alcohol consumption".

According to Sambrook (2003) factors associated with resistance include awareness and understanding of HIV/AIDS, behavioural patterns such as abstinence, and number of partners, age at first sexual encounter, availability and use of health services such as voluntary counselling and testing and condoms and treatment of sexually transmitted infections (STIs).

In general, the more the staffs recognize the risk of HIV infection the more they are able to resist the likelihood of becoming infected by HIV.

4.7. Organizational strategies and responsibilities

Under this topic the study tried to show organization strategies being used to motivate staffs to resist the risk of HIV infection. It also tried to identify what organization responsibilities taken to resist the staffs from risk of contracting HIV infection.

Management team of the organization

According to the information obtained from the discussion held with the management team of the organization there was the plan to increase staffs awareness on HIV/AIDS and related issues though it is not implemented yet. The researcher as a member of the organization observed that gender mainstreaming in agricultural research is being implemented in the organization. However, the organization is still not aware and focuses on the mainstreaming of HIV/AIDS whether it is internal mainstreaming or external mainstreaming. Internal mainstreaming of HIV/AIDS focuses on the staffs of the organization and it includes work place policies regarding HIV/AIDS and related issues. It also includes the awareness training and workshops to help staffs in order to get know how about HIV/AIDS.

However, the discussion held with the management team of the organization revealed that there are no strategies developed and ready to be implemented in the organization regarding HIV/AIDS. Even some of the team member of the management of the organization does not know whether HIV/AIDS is the concern for the organization or not. They thought it was only the responsibility of health sectors assuming that the issue of HIV/AIDS is only health issue not development issue. In contrast to this, the majority of the team members of the management of the organization revealed that the organization has a plan for the coming budget year (2012/13 or 2005 Ethiopian calendar/when this research was conducted it was 2004 Ethiopian calendar) to design and implement HIV/AIDS and related issues in the organization. The team further revealed that 2% of the total field budget is allocated to implement HIV/AIDS and related issues in the coming budget year. According to them, the purpose of this budget is for training, workshops and awareness creation for the staffs of the organization.

SAN (2009) indicated that an increase in HIV/AIDS knowledge, competence and awareness levels within the organization is done if organizations support internal mainstreaming of HIV/AIDS.

Generally, the organization had no strategies and did not take any responsibilities still now to motivate its staffs to resist the risk of HIV infection though it has a plan to take responsibility to give awareness for staffs for the coming years.

Issues	Organization response
Knowledge about staffs	-the management of the organization has little
susceptibility to HIV infection	knowledge about staffs' susceptibility to HIV
	infection. This is because they did not pay attention
	to the risk of HIV infection on staffs in the short run
	and its impact on the organization in the long run.
Concern about HIV /AIDS	-organization has no considerable attention about
	HIV/AIDS and related issues. This might be because
	HIV/AIDS impact is not manifested in the
	organization
Strategies and responsibilities	-no HIV/AIDS related strategies formulated and no
	responsibilities are being taken to encourage staffs
	to resist HIV infection. However, the organization
	has a plan to include HIV/AIDS activities in to its
	work activities though it has no strategies yet.
Budgeting to address HIV/AIDS/ and	-only has plan for the next budget year (2012/13).
related issues	They planned 2% of the allocated budget for
Source: field interview on ZERBC staf	HIV/AIDS related activities

Table 8: Summary of organizational strategies and responsibilities with regard to HIV/AIDS

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the main findings and recommendations to respected bodies.

5.1. CONCLUSION

5.1.1. Knowledge on HIV/AIDS

Knowledge of staffs on transmission routes of HIV, prevention mechanism of HIV and relations between HIV and STIs is good according the result of the study though some of the respondents have limited knowledge regarding correct use of condom. In this regard, there is less susceptibility of staffs concerning their knowledge on HIV/AIDS.

5.1.2. Attitudes toward HIV/AIDS

The majority of staffs had positive attitude toward HIV/AIDS and other STDs and hence they are less susceptible to HIV infection.

5.1.3. Socio-cultural factors

The study revealed that there are no female staffs in decision making currently in the organization. This can be a factor for the susceptibility to HIV infection. This is because Male domination affect gender responsiveness of policies and increase the gender related barriers that deny women from participating in decision making structures and processes related to issues of HIV and AIDS. There is culture of silence among the staffs around sexual matters, HIV/AIDS and related issues.

5.1.4. Risky situation

Long absence from home and influence of field work had high risk for field staffs for the likelihood of becoming infected by HIV. The more the field staffs stayed in field work the more their susceptibility to HIV increased due to the influence of being absent from home for long time and the influence of field environment. In this regard, almost all field staffs are highly susceptible to HIV for their long absence from their home even though young ages are more susceptible than others due to their ways of enjoyment during their field work. Field environment has an effect on the staffs' use of their field allowances for different purposes (especially alcohol consumption) which increase their susceptibility to HIV infection.

5.1.5. Risky behaviours

Stimulant drugs have high influencing power to increase sexual feelings of few staffs to have casual sex with available ladies and then to be susceptible to HIV infection if they are not using condom during sexual intercourse. In this regard, male staffs especially young ages are more susceptible due to stimulant drugs while females are totally not susceptible.

5.1.6. Staffs resistance to HIV infection

The studies revealed that majority of the respondents were unable to manage the risks. This is because of the influence of the factors such as limited knowledge on the correct use of condom, influence of field environment (some of which is non optional place for them to enjoy through drinking alcohols), use of stimulant drugs that initiates them to have unprotected sex. In general, the more the staffs recognize the risk of HIV infection the more they are able to resist the likelihood of becoming infected by HIV.

5.1.7. Organizational strategies and responsibilities

The management of the organization has little knowledge about staffs' susceptibility to HIV infection. This is because they did not pay attention to the risk of HIV infection on staffs in the short run and its impact on the organization in the long run. Organization has no considerable attention about HIV/AIDS and related issues. This might be because HIV/AIDS impact is not manifested in the organization. Generally, it is concluded that there are no HIV/AIDS related strategies formulated and no responsibilities are being taken by the organization to encourage staffs to resist HIV infection though the organization has a plan to include HIV/AIDS activities in to its work activities.

5.2. **RECOMMENDATIONS**

Based on the findings and conclusions of this study, both short-term and long-term recommendations have been given for Zeway Fisheries Resources Research Centre.

Short-term Recommendations

The organization need to create awareness for the whole employees to increase their knowledge about HIV/AIDS. One way of doing this is through awareness programs with emphasis on the factual aspects of the HIV/AIDS (basic concepts of HIV/AIDS), and issues of gender, sex and sexuality and their links to HIV, social cultural background, work environment, leadership. This awareness program can be done through trainings, workshops, coaching and preparing and distributing leaflets about basic concepts of HIV/AIDS. Human resource work process of the organization needs to facilitate such training and hence the team is concerned about training of staffs. Training trainers should be conducted for the trainers before he/she is going to give training for the whole staffs. The technique need to be used during the training for the staffs could be by inviting HIV/AIDS experts that can help training experts of the organization. Inviting a person living with HIV is also better to share his/her experience of positive living. This can facilitate the staffs to share their views about HIV/AIDS without any difficulties. This also helps the staffs to disclose their HIV status without any feelings. The training should also include about the correct and consistent use of condom. Brochures, pamphlets and posters may be used to enhance an HIV/AIDS training interventions.

After conducting the training in the organization, **the organization needs to distribute condoms in the toilet** or convenient place for the staffs. This can help staffs to get it without feeling shame and hence for some of them it seems shame to ask and talk about condom and the way to use it.

Organization need to encourage behavioural change or change from high risk to more responsible sexual behaviour. Due to having disposable field allowances and absence of better recreation centres during field work, men staffs tend to show high susceptibility by spending part of their allowances to drink alcohols. However, no way to reduce their field allowances. Therefore, organization should deal with those identified as a high susceptibility group of men to bring behavioural change. One way of dealing with this is through providing managerial level consultation.

The organization should encourage women in decision making. This is will reduce differences between men and women if organization exercise participatory decision making process, develop gender policy and initiate appropriate dissemination process. This is because male domination affects gender responsiveness of policies and increase the gender related barriers that limit women from participating in decision making structures and process related to issues of HIV and AIDS. One way of doing this is by empowerment of women through training on leadership and management aspects.

Assign HIV/AIDS focal person in the organization in order to facilitate HIV/AIDS and related activities in the organization. This can be done through training staff member of the organization who has related professional background with HIV/AIDS.

Long term recommendations

The following recommendations are recommended for the organization to be conducted in the long run.

The organization should create supportive working environment where staffs can talk freely about sex, gender and HIV/AIDS and disclose their HIV status. One way of doing this is through respecting individual's right to privacy and working towards creating a work environment in which staff will feel able to disclose their status in the knowledge that they will not be discriminated against and will be supported by co-workers and the organization. Any staff wishing to declare their HIV status can do through a member of staff of their choice. In this regard, the organization needs to facilitate a kind of trust person in the organization whom any person who wants to disclose his/her HIV status can communicate easily.

The organization should formulate the strategies to include gender responsive HIV/AIDS work place policies in the organization. This in the long run helps the staffs infected or affected by HIV and AIDS in the prevention, care and support. This can be done through participatory methods of all members of the organization during strategy formulation. The first procedure to do this will be the management team of the organization should realize issues like staffs' susceptibility to HIV infection, impact of HIV/AIDS on staffs and the organization, HIV/AIDS as development issue. Then the work place policies need to be formulated after this. The HIV/AIDS focal person should have HIV/AIDS knowledge and competencies in helping the organization to formulate HIV/AIDS workplace policies and its implementation. The work place policies should include issues like:

Confidentiality: Persons with HIV or AIDS should have the legal right to confidentiality and privacy concerning their HIV status. Under no circumstances will employees be obliged to disclose their HIV status.

Testing: No total staff member shall be required to undergo HIV testing, unless undertaken with the informed consent of the employee and with objective being to assist the employee in obtaining the appropriate support and care (counselling). HIV testing will not form part of the recruitment and selection process.

Non-discrimination: HIV/AIDS is a disease that shows no racial, gender or class boundaries. A person with the HIV or AIDS must be treated on a similar basis to any other employee suffering from a life threatening disease. As such, employees who are HIV positive or those with AIDS will not be subjected to any form of victimisation or discrimination.

REFERENCES

Abate E. 2001. Human sexuality and AIDS: An Ethiopian church perspective. Work and World. 21(2). 152-159

Adegbola.O., Babalola and J. Oni, 1995.Sexual networking in Freetown the background of AIDS epidemics. Health Transition Review.

Asiimwe, D., 2003. Focus Group Discussion on social cultural factors impacting on HIV/AIDS in UGANDA.

Barnet, T. & Whiteside, A., 2006. AIDS in the twentieth century: disease and globalization. 2nd ed. New York. Palgrave Macmillan

Buseh, A., 2004. Patterns of sexual behaviour among secondary school students in Swaziland, southern Africa. Culture, Health & Sexuality, 6(4), 355-367.

Central Statistical Agency [Ethiopia] and ICF International. 2012. Ethiopian Demographic and Health Survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ICF International.

Chen, L., Jha, P., Stirling B., Sgaier S.K., Daid, T., and Kaul, R., 2007. Sexual Risk Factors for HIV Infection in Early and Advanced HIV Epidemics in Sub-Saharan Africa: Systematic Overview of 68 Epidemiological Studies. PLoS ONE, 2, e1001.

Clare Bishop- Sambrook, 2003. HIV/AIDS Susceptibility and Vulnerability Pathway: A tool for Identifying Indicators, Role Models and Innovation. Rome: Sustainable Development Department, FAO.

Donald E. Messer, 2009. The role of religion in encouraging and discouraging HIV and AIDS prevention. 9th international congress on AIDS in Asia and the Pacific, Bali, Indonesia.

EDHS, 2011.Ethiopia Demographic and Health Survey. Preliminary report .Central Statistical Agency Addis Ababa, Ethiopia.

Ethiopia single point estimate, 2007. HIV/AIDS Health Profile for Ethiopia.

Elsey, H. and Kutengule, P. (2003). HIV/AIDS mainstreaming: A definition, Some Experiences and Strategies.

FDRE, 2010.Report on progress towards implementation of the UN Declaration of Commitment on HIV/AIDS. Federal Democratic Republic of Ethiopia.

FMOH (Federal Ministry of Health). 2006. HIV/AIDS Behavioural Surveillance Survey Ethiopia 2005. Addis Ababa, Ethiopia.

Fisher, J.C., Bang, H., and Kapiga, S.H., 2007. The Association between HIV Infection and Alcohol Use: A Systematic Review and Meta-Analysis of African Studies. Sexually Transmitted Diseases, November 2007, vol. 34, No. 11, p. 856-863. Florida: Sanibel.

Habte, Dereje, 2008. Assessment of the distribution of At-risk populations and HIV/AIDS referral services in Ethiopia. Baseline Assessment for Mobile HIV Counselling and Testing Program in Oromia region, Bethesda, MD: Private sector program-Ethiopia, Abt Associates Inc.

HAPCO and GAMET, 2008. HIV / AIDS in Ethiopia. An Epidemiological Synthesis. HIV/AIDS Prevention and Control Office. Global AIDS Monitoring and Evaluation Team.

Harold G. Koenig, MD, 2004. Religion, Spirituality, and Medicine: Research Findings and Implications for Clinical Practice.

ICPM, 2008.Risk and Opportunities Management for Programmes and Projects. International Center for Programme Cranfield School of Management.

IFPRI, 2003. HIV/AIDS, food security, and rural livelihoods: understanding and responding.

IHAA, 2010. Who are vulnerable and most at risk populations? Campaign Policy briefing. [Online]. Available at <<u>www.aidsalliance.org/includes/.../Campaign-Policy-Briefing-1.pdf</u> > (Accessed on 07-09-2012).

Islam MT et al, 2002. Knowledge on and Attitude toward HIV/AIDS among staff of an international organization in Bangladish.

Jackson H (1999). AIDS in Africa: A Continent in Crisis. New York: United Nations.

Jewkes, R. 2010. Gender inequalities must be addressed in HIV prevention. Science: vol:329 iss: 5988 145-47.

Johnson, L and Budlender, D. 2002. HIV Risk Factors: A Review of the Demographic, Socioeconomic, Biomedical and Behavioural Determinants of HIV Prevalence in South Africa. Center for Actuarial Research Monograph No. 8. University of Cape Town.

Kalichman Sc, Leickness C. Simbayi LC and Cain D (2009). HIV transmission risk behaviours among HIV seropositive sexually transmitted infection clinic patients in Cape Town, South Africa. European Journal of public Health, Vol. 20(2):202-206.

Kalichman Sc, Simbayi LC, Kaufman M, Cain D and Jooste S (2007) Alcohol Use and Sexual Risks for HIV/AIDS in Sub-Saharan Africa: Systematic Review of Empirical Findings. Prevention Science Vol. 8(2): 141-152.

Kemboi et al, 2011. Socio-cultural factors that perpetuate the spread of HIV among women and girls in Keiyo District, Kenya.

Khan, Alia. 2011. Gender based violence and HIV: A program guide for integrating Gender based Violence Prevention and Response in PEPFAR Programs. Arlington, VA: USAID's AIDS support and Technical Assistance Resources, AIDSSTAR-One, Task Order 1.

LeBeau, Debie and P. Stanley Yoder. 2008. *Alcohol Consumption, Sexual Partners, and HIV Transmission in Namibia*. Calverton, Maryland, USA: ICF Macro.

Leigh J. and Debbie B., 2002. HIV Risk Factors: A review of the demographic, socioeconomic, biomedical and behavioural determinants of HIV prevalence in South Africa.

Lisa Garbus, 2003.HIV/AIDS in Ethiopia. Country AIDS Policy Analysis Project. AIDS Policy Research Center, University of California San Francisco.

Loevinsohn M and Gillespie S 2003. HIV/AIDS, Food Security and Rural Livelihoods: Understanding and Responding, RENEWAL Working paper No 2

Mabirizi J., 2006. Scaling up PMTCT service delivery: Using parental knowledge to reinforce prevention of mother to child transmission strategies. XVI International Conference on AIDS Toronto, Canada 13-18 August 2006.

Maksuda A. 2010, Effect of organizational governance on women's participation in decision making. North South University, Bangladesh

Mmbaga EJ, Hussain A, Leyna Gh, Mnyika KS, Sam NE and Klepp K. (2007). Prevalence and risk factors for HIV-1 infection in rural Kilimanjaro region of Tanzania: implication for prevention and treatment. BMC Public Health 2007.

MoARD (2004) A study on impact of HIV/AIDS on agricultural production and productivity in *Ethiopia*, Terms of Reference, Addis Ababa: MoARD.

Mohammed F. Demeke B, Ismail S. 2000. Determinants of voluntary HIV counselling and testing among 15-19 years urban communities of Ethiopia. Ethiopian Medical Association 37th Annual Medical conference (Abstract).

National HIV/AIDS Prevention and Control Office (2005). HIV/AIDS behavioural surveillance survey (BSS) Ethiopia 2005, round two. HIV/AIDS Prevention and Control Office. Addis Ababa. (Preliminary Report).

Njue C., Voeten HACM, Remes P. Disco funerals: a risk situation for HIV infection among youth in Kisumu, Kenya. AIDS 2009; 23(4):505-509.

Oromia RHB, 2007. Oromiya Region second baseline assessment for mobile HIV counselling and testing program.

PREM, 2003. HIV/AIDS and Gender Equality. Gender and Development Briefing Notes. Partnership for Research and Education in Materials.

Rachel M, 2010. 'Why don't you just use a condom?' : Understanding the motivational tensions in the minds of South African women.

Richard L. 2007. Gender, Sexuality, Rights and HIV. An overview for community sector organizations.

Rathavuth Hong, Vinod Mishra, and Pav Govindasamy. 2008. Factors Associated with Prevalent HIV Infections among Ethiopian Adults: Further Analysis of the 2005 Ethiopia Demographic and Health Survey. Calverton, Maryland, USA: Macro International Inc.

SAN, 2009. Managing HIV and AIDS in the work place, in Ethiopia. STOP AIDS NOW Project. Fact sheet applied research phase one.

Shelton, J.D., Halperin, D.T., Nantulya, V., Potts, M., Gayle, H.D., Holmes, K.K., 2004 Partner reduction is crucial for balanced "ABC" approach to HIV prevention. BMJ. Apr 10; 328 (7444):891-3

Shiferaw et al, 2011. Assessment of knowledge, attitude and risk behaviours towards HIV/AIDS and other sexual transmitted infection among preparatory students of Gondar town, North West Ethiopia.

SO, D., Frank, Y., Wong, F., & Deleon, M. (2005). Sex, HIV risks and substance use among Asian American college students. AIDS Education and Prevention, 17 (5), 457-468.

Svenson, L.W., Varnhagen, C. K., Godin, A. M. and Salmon, T. L. (1992) Rural high school students' knowledge, attitudes and behaviours related to sexually transmitted diseases. Canadian Journal of Public Health, 83, 260-263. Ethiopia Demographic and Health Survey 2011.

UNAIDS, 1999. Sex and Youth: Contextual Factors Affecting Risk for HIV/AIDS: A comparative Analysis of Multi-site Studies in Developing Nations. Geneva: UNAIDS.

UNAIDS, 2007. Ethiopia - World Health Organization.

UNAIDS, 2007. Policy briefs. The greater involvement of people living with HIV (GIPA).

UNAIDS (2007), Practical Guidelines for Intensifying Prevention, UNAIDS Information Centre, Switzerland.

UNAIDS, 2010. Gender equality is a key to workplace responses to HIV and AIDS.

Wasserheit JN. 1992. Epidemiologic synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases.

WHO, 2003. Integrating Gender into HIV/AIDS programmes

WHO, 2005. Alcohol Use and Sexual Risk Behaviour: A Cross Cultural Study in Eight Countries.

Wilson D., 2004. Partner reduction and the prevention of HIV/AIDS. BMJ. 328(7444):848-9.

Zanera D. and Miteka I., 2004. HIV/AIDS and other sexually transmitted infections

Zinabu A: knowledge, attitude and behaviour on HIV/AIDS/STD among workers in the informal sectors in Addis Ababa. Ethiop J Health Dev 2003.

Zou et al 2009. Religion and HIV in Tanzania: influence of religious beliefs on HIV stigma, disclosure, and treatment attitudes.

ANNEXES

Annex 1: Interview Checklist

A. For field staffs

1. Age, sex and marital status

Sex		Marital status		Age		
Male Female		Married	Not married	d Young (year 19-35) Old (Year 36 and		

2. Risky situations

- 2.1. How do you relate your long absence from home with risk of HIV infection?
- 2.2. Are there influences of field environment for risk of HIV infection during your field work?
 - If yes, what kind of field environments are risks for HIV infection?
 - -eg. Place of field work, use of field allowance,
- 2.3. What risky situations you faced during your field work with regard to HIV?

3. Risky behaviours

- 3.1. How do relate use of stimulant drugs with risk of getting infected by HIV virus?
- 3.2. Are you using stimulant drugs during your field work?
 - If yes, what kind of stimulants?
 - If yes, how do you relate your own ways of enjoyment with risk of HIV infection?

4. Socio-cultural factors

- 4.1. Are there cultural factors that exposed you to have unprotected sex?
- 4.2. Are there cultural factors you think are risks for HIV infections during your field work?
- 4.3. What kind of culture can expose somebody to risk of HIV infection?
 - In work place
 - In field work
- 4.4. Having multiple sexual partners has risk for HIV infection?

Agree -----

Not agree -----

If you agree what are the risks?

4.5. What kind of approaches you considered from the communities you are working with?

Do you think that these approaches are risks for HIV infections?

4.6. Who has a power to decide to use condom during sexual intercourse? Male ------ Female ------

Why? -----

- 4.7. What are the religious practices in the society that
 - Increases your risk of HIV infection?
 - Decreases your risk of HIV infection?
- 5. The way staffs manage susceptibility to HIV during their work
 - 5.1. Did you recognize risk of HIV infection during your work in the organization and field work?

If yes, what are the risks?

How did you manage these risks?

5.2. What is your ways of recreation during field work?

B. For director and management members of the organization

1. How the organization realizes the risk of HIV infection among its staffs?

Statement	Agree	Not agree
HIV/AIDS is only health issue not development issue		
Reducing HIV infection among staff members needs		
organizational responsibility		
It is allowed to discuss gender and HIV/AIDS issues in		
the organization		
Others		

- 2. Could our staff be unintentionally placed at risk of becoming infected with HIV?
- 3. What strategies are being used to reduce staff's susceptibility to HIV?
- 4. What are the responsibilities of the organization to contribute to the resistance of staff's susceptibility to HIV?
- 5. Are the following issues considered to deal with HIV/AIDS and related issues in the organization?
 - HIV/AIDS work place policy
 - Allocating budgets for HIV/AIDS and related issues

C. For staffs not frequently working on fieldwork

1. Age, sex and marital status

Sex		Marital status		Age		
Male Female		Married	Not married	Young (year 19-35) Old (Year 36 and abov		

2. Risky situations

- 2.1. What situations do you think are risks for HIV infection in the organization?
 - Gender inequality
 - Working situations, explain
 - Others (mention)

3. Risky behaviours

- 3.1. How do you use your working free hours?
- 3.2. How many sexual partners do you think a person should have?
- 3.3. How do you relate use of stimulant drugs with risk of getting infected by HIV virus?
- 3.4. What kind of stimulant drugs are you using currently?

4. Socio-cultural factors

- 4.1. What kind of culture can expose somebody to risk of HIV infection in work place?
 - Organizational culture
 - Others
- 4.2. Having multiple sexual partners has risk for HIV infection?

Agree -----

Not agree -----

If you agree what are the risks?

4.3. Who has a power to decide to use condom during sexual intercourse? Male ------ Female ------

Why? -----

- 4.4. What are the religious practices in the society that
 - Increases your risk of HIV infection?
 - Decreases risk your of HIV infection?

5. The way staffs manage susceptibility to HIV during their work

5.1. Did you recognize risk of HIV infection during your work in the organization? If yes, what are the risks? How did you manage these risks?

D. For focus group discussions

Topic 1: How can staff's knowledge and attitude about HIV/AIDS contribute to risk of HIV infection?

Topic 2: How do you relate field work with risk of HIV infection?

Topic 3: Is organization working environment risk for staffs with regard to HIV infection? Topic 4: How do you see risk of HIV infection and the way staffs manage it during their field work and office work?

Annexe 2: Questionnaire for data collection

Age ------Sex ------Marital status: Single ------ Married ------ Widowed ------ divorced ------

What is/are your role in your organization?

Role	Tick (you can tick more than one if applicable)
Researcher	
Field assistant (FA)	
Technical assistant (TA)	
Driver	
Team leader	
Support staff	
Other (mention if any)	

1. Questionnaire for assessment of HIV/AIDS knowledge among staffs' of ZFRRC

Is there any difference between HIV and AIDS? A) Yes B.) No C) I don't know If yes, What is HIV?

What is AIDS?

How can someone get infected by HIV virus? (tick one)					
Statement	Correct	Wrong			
Through sexual intercourse with infected	t l				
person					
Sharing infected needle					
Sharing toothbrush					
Infected blood transfusion					
Others (if any)					

Can HIV transmitted through the following ways? (tick your answer/s)	Yes	No
Kissing for greetings of HIV infected person		
Shaking hands with HIV infected person		
Sexual intercourse with infected person		
Eating and drinking with HIV infected person		
Sharing eating utensils with HIV infected person		

How can HIV be transmitted from infected mother to a baby?

- a. During pregnancy
- b. During breast feeding
- c. Both
- d. I don't know

How can HIV transmission be prevented?

- a. Taking care of infected needles
- b. Abstinence and faithful to partner
- c. Use of condom
- d. Know self-status through HIV test
- e. Others (if any)

How do you see the relationship between HIV and STIs?

- a. Have relationship
- b. No relationship

If there is a relationship between HIV and STIs, what is/are the relations?

2. Questionnaire for assessment staff's attitude toward HIV/AIDS

Statement	Agree	Disagree
Only those people who lead immoral lives will get HIV		
Go to clinic for sexually transmitted diseases		
Screening for HIV and other STDs is good		
HIV is sever and more affects youth		

It was nice talking to you. I would like to thank you for giving your time to answer these questions. I would like to assure you that all information will be dealt with confidentially. Thank you once again.

Annex 3: Profile of ZFRRC staffs

Staff category		Professi	Profession		Sex		Total
Field staffs	Support staffs	Bsc Above	and	Below Bsc	Male	Female	
24	26	16		34	41	9	50

Source: field interview on ZFRRC staffs, Ethiopia. August, 2012

The coverage of sample size out of the total staffs is 30/50 = 60%



Annex 4: Sample picture during data collection