



INDIRA GANDING NATIONAL OPEN  
UNIVERSITY SCHOOL OF SOCIAL WORK

**RISKY SEXUAL PRACTICES AND ASSOCIATED FACTORS  
OF ART ATTENDING HIV POSITIVE PEOPLE: THE CASE OF  
PUBLIC HEALTH FACILITIES IN ARBA MINCH TOWN,  
SOUTH ETHIOPIA**

**BY**

**TSIGEREDA BELAY**

**ADVISOR**

**MOSISA KEJELA**

Nov, 2017

ADDIS ABABA, ETHIOPIA

## **DECLARATION**

I hereby declare that the dissertation entitled **RISKY SEXUAL PRACTICES AND ASSOCIATED FACTORS AMONG HIV POSITIVE PEOPLE WHO ARE ON ART AT PUBLIC HEALTH FACILITIES IN ARBA MINCH TOWN, ETHIOPIA** submitted by me for the partial fulfillment of the MSW to Indira Gandhi National Open University, [ IGNOU ] New Delhi is my own original work and has not been submitted earlier, either to IGNOU or to any other institution for the fulfillment of the requirement for any other program of the study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

Place: Arbaminch, Gamo Gofa, Ethiopia

Signature:.....

Date: November, 2017

Enrolment No: id1114956

Name: TSIGEREDA BELAY

Address: Ethiopia

## CERTIFICATE

This is to certify that **Mrs. TSIGEREDA BELAY** student of MSW from Indira Gandhi National Open University, New Delhi was working under my supervision and guidance for her project work for the course MSWP-001, Hers project work entitled **RISKY SEXUAL PRACTICES AND ASSOCIATED FACTORS OF ART ATTENDING HIV POSITIVE PEOPLE: THE CASE OF PUBLIC HEALTH FACILITIES IN ARBA MINCH TOWN, SOUTH ETHIOPIA** which she is submitting, is his/her genuine and original work.

Place: Addis Ababa, Ethiopia Signature .....

Date: November /2017 Name.....

Address of the supervisor.....

.....

.....

Phone No.:.....

## **ACKNOWLEDGEMENT**

First of all, I am truly grateful to the Almighty God for granting me courage and ability to undertake and complete this study. Secondly, I would never have been able to finish my thesis without my advisor, Mr. Mosisa Kejela, am grateful for his excellent guidance, caring, patience, and providing me with an excellent atmosphere for doing research. I would like to thank St. Marry University and Indira Gandhi National Open University for granting me the opportunity to complete the course and master of social work with full competency.

I would also like to thank my beloved Dad Belay and encouraging mom, elder sister, and two elder brothers. They were always supporting me and encouraging me with their best wishes. Finally, Tesfaye Dereje, my husband I don't really want to miss this opportunity to thank for those sleepless nights you spent with me satisfying all my needs. He was always there cheering me up and stood by me through the good times and bad. Finally my heartfelt gratitude goes to all study participants, for their willingness to participate in the study and the time they spent.

## TABLE OF CONTENTS

DECLARATION .....	i
CERTIFICATE .....	ii
ACKNOWLEDGEMENT .....	iii
TABLE OF CONTENTS .....	iv
LIST OF TABLE .....	viii
LIST OF FIGURE.....	x
ACRONYMS .....	xi
<i>ABSTRACT</i> .....	xii
CHAPTER ONE.....	1
1. Introduction .....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem .....	3
1.3 Objectives of the Study .....	4
1.3.1 Major Objective .....	4
1.3.2 Specific Objectives .....	4
1.4 Research Questions of the Study.....	5
1.5 Significance of the Study .....	5
1.6 Scope of the Study.....	5
1.7 Limitation of the Study .....	6

1.8	Chapterization of the Study.....	6
CHAPTER TWO .....		8
2.	Literature Review.....	8
2.1	Magnitude of Risky Sexual Practices Among PLHIV.....	8
2.2	Factors Associated with Risky Sexual Practice .....	9
2.2.1	ART Use and Duration of HIV Status .....	9
2.2.2	Safer Sex Knowledge, Pleasure and Effectiveness.....	10
2.2.3	Age.....	10
2.2.4	Sex.....	11
2.2.5	Economic/Employment Status.....	11
2.2.6	Marital Status .....	12
2.2.7	Literacy Level .....	12
2.2.8	Area of Residence.....	13
2.2.9	Religion.....	13
2.2.10	Type of Partner .....	14
2.2.11	Partner`s HIV Status .....	14
2.2.12	HIV Status Disclosure.....	15
2.3	Behavioral Theories Explaining Risk Behavior.....	16
CHAPTER THREE .....		19
3.	Research Design and Methodology .....	19

3.1	Research Design.....	19
3.2	Description of the Study Area.....	19
3.3	Universe of the Study.....	19
3.4	Sampling, Sampling Size Determination & Procedure.....	20
3.4.1	Sampling.....	20
3.4.2	Sample Size Determination.....	20
3.4.3	Sampling Procedure.....	21
3.5	Tools for Data collection.....	23
3.5.1	Interview Schedule.....	23
3.5.2	Interview Guide.....	23
3.5.3	Document Analysis.....	23
3.6	Data Interpretation and Analysis.....	24
3.7	Ethical Consideration.....	24
CHAPTER FOUR.....		25
4.	Data Interpretation and Analysis.....	25
4.1	Data Processing and Analysis.....	25
4.2	Variables.....	26
4.2.1	Dependent Variable.....	26
4.2.2	Independent Variables.....	26
4.3	Operational Definition of Variables.....	27

4.4	Analysis of the Findings.....	27
4.4.1	Socio Demographic Characteristics .....	27
4.4.2	Sexual Practices of Respondents Before Tested Positive, Time of Tested and Duration of Start of ART.....	31
4.4.3	Current Sexual Practices of Respondents who are on ART .....	33
4.4.4	Knowledge, Behavioral and Psychosocial Related Variables of Respondents.....	35
4.4.5	Reasons Mentioned for not Using Condoms During Sexual Intercourse .....	38
4.5	Bivariate Analysis of Socio Demographic Characteristics and Risky Sexual Practice .	41
4.5.1	Bivariate Analysis of Sexual Practices Before Tested Positive, Time of Tested and Duration of Start of ART.....	45
4.5.2	Bivariate Analysis of Current Sexual Practices of Respondents After Start of ART With Inconsistent or Non-Condom Use .....	49
4.5.3	Bivariate Analysis of Knowledge, Behavioral and Psychosocial Related Variables of Respondents With Risky Sexual Practice .....	51
4.5.4	Multivariate Analysis of An Exploratory Variables of Risky Sexual Practice.....	54
4.6	Discussion .....	57
CHAPTER FIVE .....		62
5.	Conclusions and Recommendations .....	62
5.1	Conclusions .....	62
5.2	Recommendations .....	63
References	.....	65
ANNEX	.....	69



## LIST OF TABLE

<b>Table 4.1:</b> Socio demographic characteristics of respondents by sex in arba minch 2014/2015.	27
<b>Table 4.2:</b> Sexual practices of respondents by various characteristics in arba minch town health facilities, 2016/17 .....	31
<b>Table 4.3:</b> Current sexual practices of hiv patients who are on art in health facilities in arba minch town, 2016/17 .....	33
<b>Table 4.4:</b> Knowledge, behavioral and psychosocial related variables of hiv patients who are on art in health facilities in arba minch town, 2016/17 .....	35
<b>Table 4.5:</b> Bivariate analysis of socio demographic characteristics with risky sex of respondents who are on art in arba minch town, 2016/17 .....	38
<b>Table 4.6:</b> Bivariate analysis of risky sexual practice of respondents by various characteristics among art attendants in arba minch town, 2016/17.....	41
<b>Table 4.7:</b> Bivariate analysis of socio demographic characteristics with risky sex of respondents who are on art in arba minch town, 2014/2015.....	43
<b>Table 4.8:</b> Bivariate analysis of knowledge, behavioral and psychosocial related variables with risky sexual practices of respondents on art in arba minch town, 2016/17.....	45
<b>Table 4.9:</b> Bivariate analysis of risky sexual practice of respondents by various characteristics among art attendants in arba minch town, 2016/17.....	47
<b>Table 4.10:</b> Bivariate analysis of current sexual practices of respondents after start of art in arba minch town, 2016/17 .....	50

<b>Table 4.11:</b> Bivariate analysis of knowledge, behavioral and psychosocial related variables with risky sexual practices of respondents on art in arba minch town, 2016/17.....	52
<b>Table 4.12:</b> Multivariate analysis of exploratory variables of risky sexual practice among respondents on art in arba minch town, 2016/17.....	55

## LIST OF FIGURE

**FIGURE 4.1:** Reasons mentioned for not using condom by hiv patients who are on art in health facilities in arba minch town, 2016/17 ..... 40

## ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AOR	Adjusted Odds Ratio
ART	Anti Retroviral Therapy
CI	Confidence Interval
COR	Crude Odds Ratio
EDHS	Ethiopian Demographic and Health Survey
HAART	Highly Active Anti- Retroviral Therapy
HCT	HIV counseling and testing
HIV	Human Immune Virus
MDG	Millennium Development Goal
MSM	Men Sex with Men
PIHCT	Provider initiated HIV counseling and testing
PLHIV	People Living with HIV
PMTCT	Prevention of mother to child transmission
SPSS	Statistical Package for Social Sciences
VCT	Voluntary counseling and testing

## **ABSTRACT**

*Background: Though some HIV positive people avoid risky sexual practices after testing HIV sero-positive, but many continue to engage in risky sexual practices that may further transmit the virus, put them at risk of re-infection and contracting other STIs. With a majority of new infections occurring in Sub-Saharan Africa, there were approximately 35.3 [32.2–38.8] million people living with HIV in 2012 globally. Sixty nine per cent of all people living with HIV are living in this region. Objective: To determine the prevalence of risky sexual practices and associated factors among people living with HIV/AIDS who are on ART at public health facilities in Arba Minch town, South Ethiopia Methods: Institutional based cross-sectional quantitative study was undertaken among patients who are on ART from April to June 2017. Questionnaire-based face- to -face interviews were used to collect data. SPSS software was used to perform descriptive and logistic regression analysis. Results: Among 513 participants who were currently sexually active, 267 (52%) practiced risky sex in the previous 3 months prior to the study. The major reasons reported for not using condoms were: desire to have child, partner refusal to use them, lack of knowledge of super-infection and both partners being positive for HIV. Factors independently associated with risky sexual practices included: financial insecurity ( AOR= 4.0: 95% CI, 1.86, 8.58 and AOR= 3.26: 95% CI, 1.53, 6.95 ); marital status (AOR= 4.74: 95% CI, 1.39, 16.11) ; counseling and test method by the time they knew their sero-status (AOR= 1.82: 95% CI, 1.04, 3.2); knowledge of partner sero-status (AOR= 2.73: 95% CI, 1.49, 5.02) ; lack of discussion about condom use (AOR= 4.5: 95% CI, 2.81, 7.18) ; reduced concern of safe sex b/se of ART ( AOR= 4.54: 95% CI, 2.9, 7.11) ; lack sexual pleasure when using condoms ( AOR= 2.02: 95% CI, 1.1, 3.71) and non-disclosure of sero-status to sexual partner (AOR= 2.6: 95% CI, 1.24, 5.43 ). Conclusion and recommendation: individual and group focused behavioral change intervention through counseling and health education should be designed to these people, reaching them at ART appointments on follow up care and through PLHIV association.*

# CHAPTER ONE

## 1. Introduction

### 1.1 Background of the Study

HIV continues to be a major global public health issue, having claimed more than 25 million lives over the past three decades. With a majority of new infections occurring in Sub-Saharan Africa, there were approximately 35.3 [32.2–38.8] million people living with HIV in 2013 globally. Sixty nine percent of all people living with HIV are living in this region (UNAIDS, 2012).

The total number of people living with HIV in Ethiopia was estimated to be 789,900 with single point estimate of HIV prevalence of 4.2% in urban and 0.6% in rural for year 2010(Ethiopia, 2012). With regard to sexual activity in general, a Ugandan study revealed that, 45% of women on ART were sexually active one year prior to this study period (al A. e., 2009)

Study done in South Africa indicated that the more sexually active PLHIV on ART become, the higher the possibility of re-infection especially if safer sex is not practiced. With the improved rollout of antiretroviral therapy in many resource-limited settings, such as Ethiopia, and ARVs potential to prolong the lives of PLHIV, understanding the sexual behavior of PLHIV on antiretroviral therapy is essential to curbing secondary HIV transmission. The same study observed that among populations where ART is being introduced, such as in southern Africa, ARV use is associated with increased risky sexual behavior (al L. e., sexual behaviour and reproductive health among HIV infected patients in Urban and rural south Africa, 2008).

With an estimated of 789,900 (77% adult) people living with HIV in Ethiopia, little is known why, when and under what conditions PLHIV practice risky sexual practices. A number of studies were conducted in developing countries and the finding in the majority of these studies revealed that access to ART has not led to significant risky sexual practices.

But understanding the sexual practices of HIV patients who are on ART is critical in the transmission of the disease, because the longer the patient on treatment, the more likely to practice risky sexual practices.

Until recently, the focus of HIV prevention efforts worldwide was largely on people uninfected or with unknown status of HIV. However, many HIV infected patients, now live longer and healthier lives due to widespread availability of antiretroviral therapy (ART). Therefore understanding sexual behavior of groups at risk of transmitting the disease and; as the epidemic continues to evolve, identifying the factors and designing effective secondary HIV prevention interventions is a critical priority for stemming the spread of the virus and improving the long-term quality of life for PLHIV. Therefore, this study will give an implication for local government to design relevant behavioral change interventions based on the study finding with the view of reducing the incidence of new HIV infection in the community.

On top of this, the recommendation from this study is also be helpful for local health planners and stakeholders to consider during their planning for the success of their ongoing control of the pandemic. Besides it enables planners and stake holders to have baseline information and directions for further research activities.

## **1.2 Statement of the Problem**

The emergence of HIV epidemic is one of the biggest public health challenges the world has ever observed in recent history. Globally, 34.0 million (31.4 million–35.9 million) people were living with HIV at the end of 2011 and an estimated 0.8% of adults aged 15-49 years worldwide are living with HIV. HIV is one of the most serious public health and development challenges in sub-Saharan Africa. The region remains most severely affected, with nearly 1 in every 20 adults (4.9%) living with HIV and accounting for 69% of the people living with HIV worldwide. Ethiopia is among the most affected countries in sub Saharan Africa by the epidemic. In Ethiopia, 1.5 percent of adults age 15-49 are infected with HIV and heterosexual contact accounts for the great majority of HIV transmission.

As many as one in three people living with HIV/AIDS continues to practice HIV transmission risk behaviors after testing HIV positive. A study done in Addis Ababa public hospitals showed that almost 37 percent had used condom inconsistently or had never used at all(Agency, 2011).

Since the early days of the epidemic, with a combined effort of different governmental, non-governmental and community based organizations, there is high achievement in averting transmission and accessing HCT, care and treatment services. With the encouraging achievement, the problem still exist leaving nearly 789,900 people living with HIV, more orphaned and high rate of new infection (1.5%). Some researchers had pronounced the sexual behavior of PLHIV in different field of study.

This study is significant in the sense that the unsafe sex practice among ART attending people living with HIV/AIDS impacts in their healthy life realities.



Risky sexual behavior has been an interest of different researchers. Almost all researchers focus area as well as research issues understanding the magnitude and contributing factors for unprotected sexual practice of groups at risk of transmitting the disease .All of them did not pay attention to the magnitude of risky sexual practices and factors affecting sexual practice among HIV patients who are on ART. Therefore this study will show the gap of safer sexual practices in HIV patients who are on ART which are a potential source of HIV infection.

The aim of this study is to assess the magnitude of risky sexual practices and factors affecting sexual practice among HIV patients who are on ART. The study shown the gap of safer sexual practices in HIV patients who are on ART are a potential source of HIV infection. Therefore, the results of this study used to design appropriate intervention programs to address risky sexual practices among HIV patients who are on ART.

### **1.3 Objectives of the Study**

#### **1.3.1 Major Objective**

To assess the risky sexual practices and associated factors among people living with HIV who are attending ART-clinic at public health facilities in Arba Minch town

#### **1.3.2 Specific Objectives**

To examine risky sexual practice and associated factors of ART attending people living with HIV/AIDS in Arba Minch town health center and Arba Minch Hospital.

- To identify factors associated with unsafe sex.
- To provide means of reduction of unsafe sex practices among ART attending HIV Positive people of the study area.

## **1.4 Research Questions of the Study**

The following research questions answered in order to achieve the above objective:

- What are the risky sexual practices and associated factors of ART attending people living with HIV/AIDS in Arba Minch town health center and Arba Minch Hospital?
- How does unsafe sex practice among ART attending people living with HIV/AIDS affect their healthy life realities?
- What are the factors associated with unsafe sex and the means of reduction of unsafe sex practice?

## **1.5 Significance of the Study**

Using different approaches and epidemiological apparatuses and instruments in determining the cause-effect relationship of the disease and to come up with effective alternative and ways to control and prevent the proliferation of the disease yet there is no ample study on finding the risky sexual behavior of people living with HIV/AIDS who are on ART.

Some researchers had pronounced the sexual behavior of PLHIV in different field of study. This study is significant in the sense that the unsafe sex practice among ART attending people living with HIV/AIDS influence their healthy life realities. This study helped the health sector create more effective programs to prevent the rampant spread of the disease

## **1.6 Scope of the Study**

In order to limit the scope of this thesis to some degree, I have only be concerned with the risks connected to sexually transmitted HIV/AIDS, and how various factors contribute in determining whether certain sexual behavior is perceived as high risk for people. The study was conducted

among HIV positive people, who are on ART in public hospital and health center in Arba Minch Town, which is a capital city of Gamo Gofa Zone, 505 kms from Addis Ababa where there is only one public hospital and one health center which provide ART services for the town and surrounding peri-urban kebeles.

### **1.7 Limitation of the Study**

The findings of this study must be interpreted in light of its limitations. The study was conducted at only two sites in the town among the patients on ART; the findings may not be generalizable to other clinical settings. Furthermore, since the study conducted was cross-sectional, causal inferences cannot be made. Second, issues like alcohol use and sexual behavior are quite personal. Thus, any self-reported measures are subject to recall bias including deliberate concealment. Reporting condom use in the last 3 months may not always accurately characterize participants' overall condom use due to the long periods of measurement. This study did not consider the time element, CD4 cell count, calendar years or time on antiretroviral therapy, which may be factors that correlate with risky sexual behaviors. The period of observation was restricted to one survey round, which may not necessarily give accurate changes in exposure time measurements.

### **1.8 Chapterization of the Study**

The main body of the thesis is organized into the following chapters: The first chapter included introduction to the subject matter, in this chapter, an attempt made to describe HIV/AIDS as a global public health issue and risky behaviors of HIV positive people attending ART clinic. Also this chapter presents the key concepts used throughout the thesis, and the definitions that are relevant for the aim of this research. Second chapter contains literature review in order to

illustrate how different factors contribute to influence a sexual behavior that for some may be perceived as risky while the risk for others appears to be ignored. This chapter also takes a critical view of the associated factors as a determinant for this sexual behavior

Chapter three contains the methodological framework, including study design, choice of data and how these choices are justified in addition to my methodological considerations. Chapter four contains interpretation and the analysis of the study. Chapter five, a summary will be followed by a discussion of the limitations of the study and a highlight on some areas that appear crucial for a behavior change approach and finally some suggestions for further research into this topic.

## **CHAPTER TWO**

### **2. Literature Review**

#### **2.1 Magnitude of Risky Sexual Practices Among PLHIV**

Research indicates that, up to one third of individuals diagnosed with HIV infection continue to have unprotected sex, at times without informing their sexual partners, who may be of negative or unknown sero-status (Dan c, 2013). In qualitative study conducted by Garko, in Nigeria, majorities of female PLHIV were not well informed about the issue of safe sex and planned pregnancy. The major problem among these women was their inability to decide on when to have sex, a role which appears to be exclusively preserved for men (Garko, 2007) ] .A study done in Nepal almost 50% did not practice safer sex every time they have sex with sero-concordant partners (al k. C., 2011). Another study done in Nepal also indicated that 46% of participants who had sex did not always use condoms with sero-concordant, sero-discordant, or with sero-unknown partners. A study done in Cameroon indicated that , 35.3% of sexually active PLHIV reported inconsistent condom use with steady partners of either HIV negative or unknown HIV status, 3 months prior to the study (al D. e., 2010). In a South African study, 5.6% PLHIV reported having more than 1 sexual partner (al k. e., 2006). A study done in AA public hospitals on high risk sexual behaviors of HIV patients who are on ART shows that significant number of HIV patients who are taking ART practiced either inconsistent condom use or not used at all with their regular sexual partners. In the same study 10% reported having multiple sexual partners (al., 2011).

## **2.2 Factors Associated with Risky Sexual Practice**

### **2.2.1 ART Use and Duration of HIV Status**

Studies from other sub-Saharan countries (South Africa, Uganda and Kenya) have identified HIV treatment as a factor associated with safer sex (al k. e., 2006). In a recent meta-analysis of cross-sectional and longitudinal studies conducted in SSA, it was found that individuals on ART were significantly less likely to have unprotected sex or to have multiple sexual partners compared with when they were ART-naïve (Berhan A, 2012). But a study done in South Africa indicated that ART increased the fertility desire in couples over time (Myer L M. C., 2007), and similarly a pan African study from seven countries showed that the pregnancy rate of HIV-positive women on ART was significantly higher compared to those not on ART (Myer L e. a., 2010). Risky sexual behavior among PLHIV on ART was further observed in a Ugandan study conducted by Bukenya, 55.6% of PLHIV reported consistent condom use before starting ART compared to 37.5% after starting ART (Bukenya, 2008). Also in the study done in Cameron, a multivariate analysis revealed that the use of ARVs had an independent significant positive association with inconsistent condom use (OR, 2.28; 95%CI, 1.64 – 3.18) (al D. e., 2010).

With regard to the duration of HIV status, the time since diagnosis of HIV among PLHIV had a significant positive association with practicing unsafe sex, and this was the case for shorter time from diagnosis of HIV (Bouhnic, 2007). However, in the study conducted in Cameron, it was observed in a multivariate analysis that the time since HIV diagnosis had no significant association with inconsistent condom use among PLWHA (al D. e., 2010).

### **2.2.2 Safer Sex Knowledge, Pleasure and Effectiveness**

Despite the awareness of harmful health effects of unsafe sex, a significant number of people living with HIV continue to engage in unsafe sex (crepaz N, 2002). Study done in San Francisco MSM positive people on attitudes and beliefs on super-infection indicated that 85% of men had heard about super infection and these men expressed moderate concern about the risks associated with super infection (colfax GN, 2004;36/4/). And significant number of unprotected sexual practice among PLHIV was associated with negative attitudes regarding the pleasure and negotiation in the use of condoms or other protection methods (FHAPCO, July 2011- June 2012).

### **2.2.3 Age**

Sexual activity and consistent condom use was positively significantly associated with being of younger age less than 45 years for HIV positive males and females compared to those above 45 years of age (al L. e., sexual behaviour and reproductive health among HIV infected patients in Urban and rural south Africa, 2008). But a South African study found that practicing risky sexual behavior had no association with the age of the PLHIV (al k. e., 2006). Similarly, in the study conducted in Cameroon, a bivariate analysis revealed that age of PLHIV had no significant association with inconsistent condom use (al D. e., 2010). But study done in a Cote D'Ivoire revealed that younger age (40 years and below) had a positive association with practicing unprotected sex (OR, 1.40; 95%CI, 1.17- 1.67) (al D. e., 2008).

### **2.2.4 Sex**

Gender-based violence against women is not only a potential risk factor for women with regard to HIV transmission, but also increases the likelihood of high-risk behaviors such as non-condom use, coerced sexual intercourse and multiple partners, which increase the transmission of HIV. It is also argued that the complex link between gender-power relations, intimate (especially female) violence and cultural notions about condoms, limit the use of condoms especially in Sub-Saharan Africa (al c. e., 2010). In a South African study conducted, among PLHIV, 25% of men and 45% of women had unprotected sex with either a regular or casual sexual partner (al F. e., 2008). But, another South African study showed that practicing risky sexual behavior had no association with the gender of the PLHIV (al k. e., 2006).

### **2.2.5 Economic/Employment Status**

A higher household income had a significant positive association with consistent condom use for both male and female PLHIV, and having a current sexual partner especially for women (al L. e., sexual behaviour and reproductive health among HIV-infected patients in urban and rural south africa, 2008) [4]. In another study for HIV positive men, practicing unsafe sex had a significant positive association with being in a difficult financial situation (AOR, 1.3; 95%CI, 0.7 – 2.5) (Bouhnic, 2007). Similarly in the same study, for HIV positive women, practicing unsafe sex was independently positively associated with being in a difficult financial situation (AOR, 2.9; 95%CI, and 1.6 – 5.5). However, in a study conducted in Cameroon, a bivariate analysis revealed that income level or economic status of PLHIV had no significant relationship with inconsistent condom use (al D. e., 2010). Similarly, a South African study observed that



practicing risky sexual behavior had no association with the socio-economic and employment status of the PLHIV (al k. e., 2006).

### **2.2.6 Marital Status**

Study done in Uganda, condom use was less likely among married HIV positive persons compared to unmarried HIV positive persons (AOR, 0.1; 95% CI, 0.0-0.2). Considering the most recent sexual act, in the same study, the majority (83%) of PLHIV reported engaging in unprotected sex and of these, 84% were with married or cohabiting sexual partners, 13% with steady sexual partners, and 3% with casual sexual partners (al B. e., 2008). However, in a study done in South African, no significant association was observed between condom use and marital status of PLHIV (al L. e., sexual behaviour and reproductive health among HIV infected patients in Urban and rural south Africa, 2008).

### **2.2.7 Literacy Level**

Higher rates of condom use were observed with regular partners among people with higher education levels (grade 8 and above), in rural South African study (OR, 1.39; 95%CI, 1.1-1.8) (al L. e., sexual behaviour and reproductive health among HIV-infected patients in urban and rural south africa, 2008) . Study conducted in Cameroon indicated that, lower education level had a significant positive association with inconsistent condom use among PLHIV (OR, 1.58; 95%CI, 1.16 – 2.14) (al D. e., 2010). However a South African study revealed, practicing risky sexual behavior had no significant association with the education level of the PLHIV (al k. e., 2006).

### **2.2.8 Area of Residence**

In a South African study, consistent condom use was observed among HIV positive persons in an urban area (81% of men) and (78% of women) compared to 52% of men and 48% of women in a rural area (al L. e., sexual behaviour and reproductive health among HIV-infected patients in urban and rural south africa, 2008).

In another study conducted in Cameroon, a significant positive association was observed between PLHIV residence (rural) and inconsistent condom use (OR, 1.58; 95%CI, 1.06 -3.32) (al D. e., 2010). Also in the Ugandan study, PLHIV who lived in urban areas were twice more likely to report condom use than the PLHIV who lived in rural areas (AOR, 2.0; 95%CI, 1.3 – 3.0) (al B. e., 2008). From the findings, it could be assumed that due to the variety of preventive and safer sex information sources and services available in most urban settings as opposed to the rural settings, HIV positive persons who live in urban areas would be more likely to practice safer sex than their counterparts in the rural areas. However, a South African study revealed that there was no significant difference with regard to sexual practices among urban and rural HIV positive women (al G. e., 2006).

### **2.2.9 Religion**

In a Nigerian study conducted by Iwuagwu, some HIV positive women reported that cultural/religious beliefs expect them (women) to respond to their husband's sexual demands. One HIV positive women reported in this study, "...the matron told me I should not deny him sex, he is my husband, that if I do (deny him sex), it is a sin rather I should put it into prayer, take it to God" (SC, 2009). This statement reflects the intimate influence religious beliefs may

have on sexual practices and the implications for HIV transmission among PLHIV, especially if safer sex is not practiced.

### **2.2.10 Type of Partner**

Indian study observed that besides having a steady sexual partner, being in shorter term relationships were associated with engaging in casual sexual practices among PLHIV as opposed to being in longer relationships (Taraphdar, 2007). In the Ugandan study, unprotected sex was more frequent with spouses (84%) and 13% with other steady sexual partners (al B. e., 2008). In yet another study conducted in Cameroon PLHIV in a couple (steady) relationship had a significant positive association with inconsistent condom use (OR, 1.75; 95%CI, 1.20 – 2.56) (al D. e., 2010). The findings indicate that PLHIV may be more likely to practice unsafe (risky) sex with steady (regular) sexual partners than with casual sexual partners. However, in the South African study, consistent condom use was associated positively with having steady or regular sexual partners as opposed to being in casual sexual relationships (al L. e., sexual behaviour and reproductive health among HIV-infected patients in urban and rural south africa, 2008). Similarly, in another South African study, having a casual sexual partner had a significant positive association with practicing unprotected sexual intercourse (al k. e., 2006).

### **2.2.11 Partner`s HIV Status**

Regarding sexual practices and knowledge of the HIV status of sexual partners among PLHIV, a Ugandan study indicated that condom use was positively associated with PLHIV's knowledge of their HIV status and that of their sexual partners. And the odds of condom use among PLHIV who knew their sexual partners' HIV status was 2.3 times higher than among those who did not know their partners' HIV status (AOR, 2.3; 95%CI, 1.2 – 4.3) (al B. e., 2008). The study

findings seem to suggest that PLHIV may be more likely to use condoms when they know the HIV status of their sexual partner. However, in the French study, the lack of knowledge of a sexual partner's HIV status for male PLHIV had no association with practicing unsafe sexual intercourse, while the lack of knowledge of a sexual partner's HIV status for female PLHIV had a significant positive association with practicing unsafe sexual intercourse (Bouhnic, 2007).

### **2.2.12 HIV Status Disclosure**

The fear of being stigmatized and/or known to be HIV positive has a number of negative effects, especially regarding lifestyle choices for PLHIV. Most PLHIV are reluctant to disclose their HIV-positive status to their sexual partners' family members or friends. As a result of this fear, many may continue to engage in risky sexual behaviors (Strebel, 2009)]. A South African study observed that practicing high risk sexual behavior was associated with non-disclosure to sex partners, and people who had not disclosed their HIV status were 28 times more likely to have sex partners whose HIV status was unknown. In this same study, 42% of PLHIV had sex with partners they had not disclosed to, and those who did not disclose to sex partners were more likely to be married and to have many sex partners.

In a Uganda study conducted at TASO-Jinja, HIV sero-status disclosure among PLHIV was positively associated with increased condom use and knowledge of partner's HIV sero-status (king, 2008). In yet another South African study, PLHIV who disclosed their HIV status were more likely to make positive sexual behavioral changes compared to those who did not disclose their HIV status (Wong, 2009). The findings in the studies suggest that PLHIV who disclosed their HIV status to their sexual partners may be more likely to practice safer sex compared to those who have not disclosed their HIV status to sexual partners. However in a South African

study, practicing risky sexual practices on the overall was observed to have no association with the disclosure of HIV status to sexual partners among PLHIV (al k. e., 2006).

To summarize the literatures reviewed and the observed findings, there is no similar magnitude of risky sexual practices and factors which similarly affect the sexual behavior of people living with HIV in different countries at different time. It is also observed that there is very limited researches done in SSA in general and Ethiopia in particular. Therefore, this study tries to address the magnitude and factors which affect the sexual practices of people living with HIV in Ethiopia and in the context of study area.

### **2.3 Behavioral Theories Explaining Risk Behavior**

Michael Bloor (1995a) discusses the theoretical approaches that most frequently have been used for understanding risk perception and risk management; he argues that three theories stand out in the literature; the health belief model (HBM) which is one of several psychological models that explain risk behavior. The next two are sociological theories; the situated rationality approach, which Bloor describes as: “The decision-making in terms of the 18 subject’s own definition of the situation (Bloor M. , 1955a). The other one is the cultural theory explained as: “...risk behavior as a culturally variable product”(Bloor M. , 1955b).

The psychological theories have received more attention in the design of HIV/AIDS prevention programs than the social ones. HBM, and the other psychological models explain variations in risk behavior according to differences in individuals’ perceptions of risk. In the case of HIV-related behavior it would be the beliefs about HIV/AIDS, rather than epidemiologic knowledge about the virus and its transmission routes (Bloor 1995b). According to Bloor the model views health behavior as various interlinked perceptions. First the individual must perceive him or

herself as vulnerable or at risk to become infected by HIV (or other health threats) and secondly the individual must perceive this health threat to have serious consequences. Thirdly the potentially available protective action to prevent HIV infection must be perceived efficient and last the protective action must be perceived to have benefits that outweigh the perceived costs (Bloor M. , 1955b)). Another well-known psychological theory that should be mentioned because of its contribution to the behavior change approach is Ajzen's and Fishbein's (1980) the Theory of Reasoned Action. In their own words, the theory is based on: "The assumption that human beings are usually quite rational and make systematic use of the information available to them" (Ajzen and Fishbein' 1980, 5). They continue to explain how behavior is not controlled by unconscious motives: "We argue that people consider the implications of their actions before they decide to engage or not engage in a given behavior" (Ajzen and Fishbein' 1980, 5). This model have some interesting qualities that appears useful in explaining HIV-related behavior, such as the authors acknowledgement of the role of context in understanding behavior, as Ajzen and Fishbein (1980) argue: "Although we may often be interested in the performance of an action with respect to a given target, we usually have little interest in a specific context or a specific point in time" (Ajezen, 1980).

Parker (2001) however argues that these types of psychological theories are very difficult to apply to cross-cultural issues as sexual expressions and practices vary immensely (Parker).

The main problem with the psychological approaches for the purpose of HIV- related behavior is that they seem to presuppose individual and voluntary acts. As sexual behavior is not an individual activity, rather a social one as it involves at least two people (Parker, 2001). its usefulness 19 appears therefore rather limited especially as sexual activity in addition may be less of a free choice, as empirical studies will show later in this thesis. The situated rationality

approach has been used within sociology for a long time, and Bloor quotes an old motto describing it in the following way; “If men define situations as real, then they are real in their consequences”(Bloor M. , 1955b). What is important is the subject’s own definition of the situation and Bloor argues that the approach has been an: “Invaluable counterweight to the pathological view of risk-taking which sees risk behavior as merely irrational”(Bloor M. , 1955b). People may well be aware of the risks of getting infected by HIV but ignore it, for instance if they are trying to become pregnant. In chapter 4.2.3 the importance of children and fertility will be discussed in relation to risk priorities. Another example is to have intimate penetrative sex with the HIV positive partner as a gesture of trust (Parker, 2001).

## **CHAPTER THREE**

### **3. Research Design and Methodology**

#### **3.1 Research Design**

Explain the research approaches you employed such as qualitative and quantitative, research methods used in the study.

#### **3.2 Description of the Study Area**

The study was conducted among HIV patients who are on ART in public hospital and health center in Arba Minch Town, which is a capital city of Gamo Gofa Zone 505 kms from Addis Ababa the capital city of Ethiopia where there is only one public hospital and one health center which provide ART services for the town and surrounding peri-urban kebeles.

#### **3.3 Universe of the Study**

Study population was those patients who are taking ART and had at least two visits of ART and sexually active 3 months prior to the study period. The source of population of this study was those adult people living with HIV/AIDS who are on ART in the targeted health facilities. The inclusion criteria include HIV patients whose age 18 years and above, HIV patients who had been on ART for at least 3 months and above and who at least had 2 visits of ART, Residents in the facility catchment area and Patients who are willing to participate. The exclusion criteria also comprise of Patients who were seriously ill and unable to respond and Patients who refused to participate.



### 3.4 Sampling, Sampling Size Determination & Procedure

#### 3.4.1 Sampling

Systematic random sampling is used to select the study subjects. This sampling was selected this sampling method because this method requires selecting samples based on a system of intervals in a numbered population.

#### 3.4.2 Sample Size Determination

To calculate sample size, single population proportion formula was used considering the following assumptions:

P = Prevalence of inconsistent or condom-unprotected sex among PLHIV = 37% (which is taken from a study done in Addis Ababa Public Hospitals on prevalence of unprotected sex among PLHIV who are on ART) [ 8 ]

d = margin of error of 0.04 with 95% confidence interval.

$\alpha = 0.05$  (level of significance)

None response rate = 10%

$$n = \frac{(Z_{\alpha/2})^2 p (1-p)}{d^2} = 560$$

d<sup>2</sup>

The final sample size was calculated using the finite population correction formula since the total population was less than 10,000.

$$n_f = \frac{n}{1 + n/N} = 466$$

$$1 + n/N$$

Sample size for the second object was calculated with the following assumptions:

<b>Factors</b>	<b>CI</b>	<b>power</b>	<b>Exposed/ Non Exposed</b>	<b>Prevalence in unexposed</b>	<b>OR</b>	<b>Required sample size</b>	<b>Sample size including 10% non-response rate</b>
Status disclosure [ 8 ]	95%	80%	1:1	42.8%	2	288	317
Discussion with partner about safe sex [ 8 ]	95%	80%	1:1	75%	2	466	513
Multiple partnership [ 8 ]	95%	80%	1:1	34.7%	2	294	323
Safer sex knowledge[ 8 ]	95%	80%	1:1	52.9%	2	302	332

The final total sample size used for the study was 513 including 10% non -response rate.

### **3.4.3 Sampling Procedure**

Two health facilities (one Hospital & one health center) providing ART service were involved in the survey. The sample from hospital and health Centre allocated proportionally to the number of clients attending ART clinic at each health facility. Sampling interval for each facility determined by dividing the total PLHIV patients in that facility by the allocated sample size. Clients' registration book for ART is also used as sampling frame.

$N$  = total number of people living with HIV who are taking ART in the health center and hospital

$N_1$  = total number of people living with HIV who are taking ART in the hospital

$N_2$  = total number of people living with HIV who are taking ART in the health center

$n$  = total sample size needed for the study

$n_1$  = sample size which was taken from the hospital

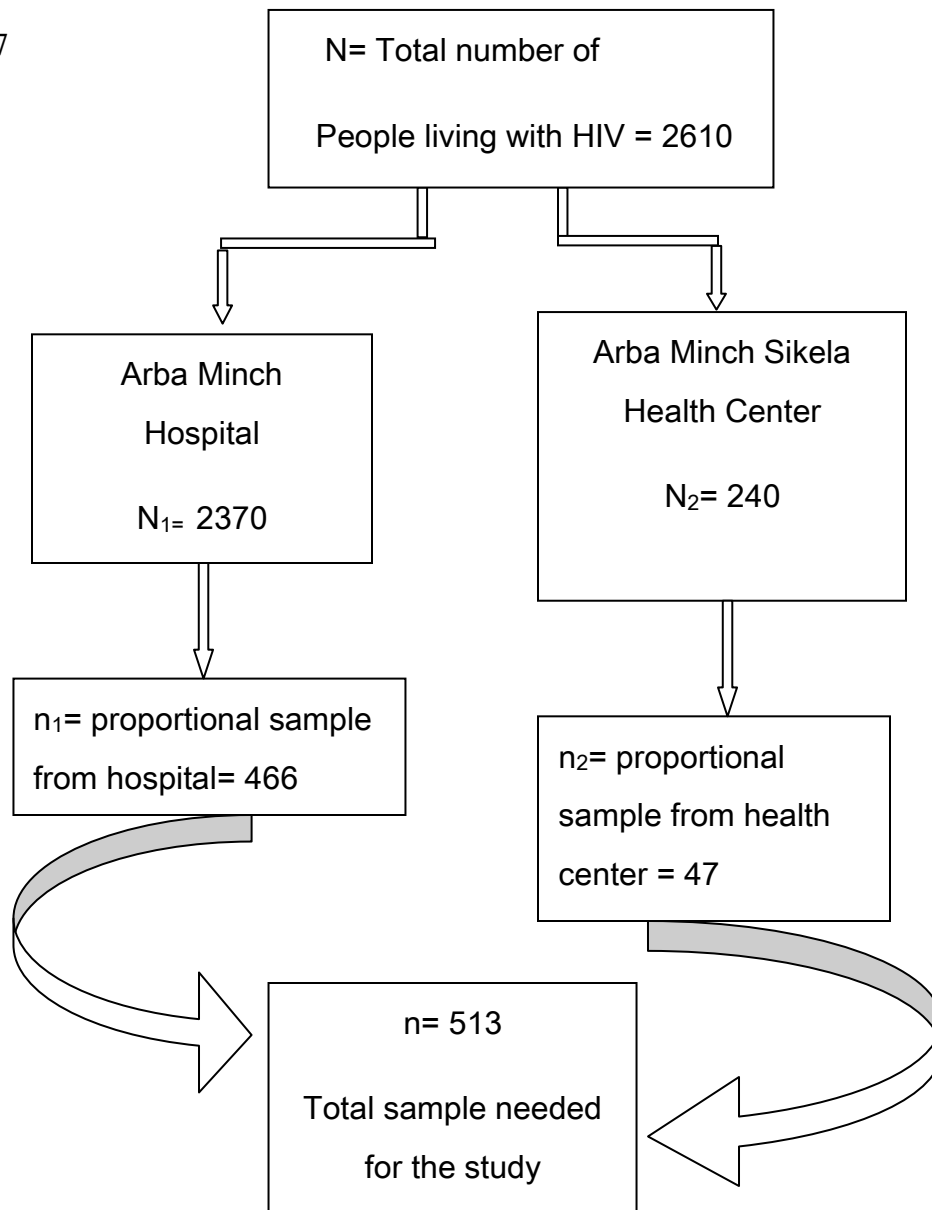
$n_2$  = sample size which was taken from the health center

$$N = N_1 + N_2 = 240 + 2370 = 2610$$

$$n = n_1 + n_2 = 513$$

$$n_1 = N_1 n / N = 466$$

$$n_2 = N_2 n / N = 47$$



Therefore the final sample size for the study is 513.

### **3.5 Tools for Data collection**

A structured questionnaire containing different components derived from different relevant studies was used for collecting the data. First, the questionnaire was prepared in English and then translated into Amharic. Again from Amharic translated back to English to check for consistency; and phrasing of difficult concepts was undertaken.

#### **3.5.1 Interview Schedule**

This method of data collection was used to collect data from the peoples living with HIV/AIDS who are on ART. The interview schedules contain mostly close ended questions, though some open ended questions included. The questions in the interview schedule were formulated keeping in mind the objectives.

#### **3.5.2 Interview Guide**

This method was conducted for additional information from key informant like nurses in ART clinic, case managers and other stake holders. These include questions providing information on total number of PLHIV on ART in the health facilities.

#### **3.5.3 Document Analysis**

This should be committed to written documents in the hospitals,(Record books, leaflets, brochures, posters, reports and research documents.

### **3.6 Data Interpretation and Analysis**

Descriptive statistics was used to present frequency and percentage distributions. Bivariate analysis was employed to identify factors associated with risky sexual practices. Multiple logistic regression analysis performed for those factors which have statistically significant association in bivariate analysis and investigate independent predictors by controlling for possible confounder. SPSS employed to make easy the outcome of the effects.

### **3.7 Ethical Consideration**

Ethical approval was obtained from Indira Gandhi National Open University Coordination Office of St. Mary's University. Before commencing a research process at the facility, permission was obtained from Arba Minch Town health office and authorized persons of health facility. Respondents were informed of the purposes, procedures, risks and benefits, and the private and confidential nature of the study. And they were informed that participation in the study is fully on voluntary basis; those who were unwilling to participate in the study were excluded. Participants were fully informed that refusal to participate would not bring any adverse consequences in terms of service provision at the ART clinic or other sources. Verbal informed consent was obtained from each respondent before starting an interview and ART nurses were used for data collection from respective facilities to maintain confidentiality. All interviews were made in a safe & ventilated, private and quiet room to respect the study participants' anonymity and to increase their confidence on the study.

## **CHAPTER FOUR**

### **4. Data Interpretation and Analysis**

#### **4.1 Data Processing and Analysis**

The collected data were cleaned, coded, and entered to Epi info and exported to SPSS for analysis. Scaled-item questions with response option from 1(strongly agree) to 5 (strongly disagree) and 3 (don't know), which was adapted from a study done in Addis Ababa public hospitals on PLHIV`s risky sexual practices [8] was used to assess safer sex knowledge, pleasure and effectiveness. Safer sex knowledge was assessed using four- item scale ( assessing knowledge related to re-infection with other strains of virus and STI) , safer sex pleasure was assessed using three-item scale ( focusing on how condoms change sexual pleasure) and safer sex effectiveness was assessed using three item-scale ( on how effective condoms were in preventing HIV and STIs).As safer sex knowledge and safer sex effectiveness scales showed skewed distribution, the median was taken for both scales and values above the median score were taken as lack of safer sex knowledge and lack of safer sex effectiveness. For safer sex pleasure scale, scores above the mean were taken as negative safer sex pleasure. Descriptive statistics was used to present frequency distributions. Bivariate analysis was employed to identify factors associated with risky sexual practices and multivariate logistic regression model was performed for those factors which had statistically significant association in bivariate analysis to control for possible confounders and to identify variables which are independently associated with risky sexual practices.

## **4.2 Variables**

### **4.2.1 Dependent Variable**

The dependent (response) variable in this study was inconsistent or non-condom use with either single or multiple HIV-negative, positive or unknown sero-status partners three months prior to the study period

### **4.2.2 Independent Variables**

The exposure (independent) variables of the study were:-

- Socio-demographic characteristics like age, sex, ethnicity, education, religion, marital status, occupation, income and area of residence.
- Sexual relationship factors like number of sexual partner, type of sexual partner, partner's HIV sero-status and their disclosure status
- Behavioral and psychosocial factors like discussion about condom use, social support by families and friends or membership to support associations, active substance and alcohol use
- Medical and knowledge related factors : safer sex belief related with ART, duration of HIV diagnosis and duration of start of ART, safer sex knowledge, pleasure and effectiveness

### 4.3 Operational Definition of Variables

Risky sexual practice: inconsistent or non-condom use with either single or multiple HIV-negative, positive or unknown sero-status partners three months prior to the study period.

Steady partner: one with whom the respondent had a regular sexual relationship and who is perceived by the respondent to be the spouse or regular boy/girlfriend for more than three months

Casual partner: one other than the regular partner with whom the respondent had sexual intercourse with or without payment during three months prior to the study period.

### 4.4 Analysis of the Findings

#### 4.4.1 Socio Demographic Characteristics

**Table 4.1:** Socio demographic characteristics of respondents by sex in arba minch 2014/2015

Variable	Male Freq. (%)	Female Freq. (%)	Total Freq. (%)
Age in year			
18-24	15(9.2)	97(27.7)	112(21.8)
25-34	49(30.1)	189(54.0)	238(46.4)
35-44	85(52.1)	58(16.6)	143(27.9)
>44	14(8.6)	6(1.7)	20(3.9)
Educational status			
Illiterate			



Primary			
Secondary and above	48(29.5)	123(35.2)	171(33.3)
Current marital status	98(60.1)	172(49.1)	270(52.6)
Married	17(10.4)	55(15.7)	72(14.1)
Unmarried			
Divorced			
Widowed	118(72.4)	225(64.3)	243(66.9)
Religion	34(20.9)	84(24.0)	118(23.0)
Orthodox	10(6.1)	29(8.3)	39(7.6)
Protestant	1(0.6)	12(3.4)	13(2.5)
Muslim			
Others	112(68.7)	242(69.1)	354(69.0)
Ethnicity	39(23.9)	91(26.0)	130(25.3)
	10(6.2)	10(2.9)	20(3.9)
Gamo	2(1.2)	7(2.0)	9(1.8)
Wolayta			
Gofa			
Amhara	109(66.9)	2209(62.9)	329(64.1)
Tigray	23(14.1)	48(13.7)	71(13.8)
Oromo	19(11.7)	28(8.0)	47(9.2)
Area of residence	6(3.7)	29(8.3)	35(6.8)
Urban	4(2.4)	13(3.7)	17(3.3)
	2(1.2)	12(3.4)	14(2.7)

Peri urban			
Average monthly income			
Have no income	143(87.7)	316(90.3)	459(89.5)
Do not know	20(12.3)	34(9.7)	54(10.5)
<500 birr			
≥ 500 birr	2(1.2)	151(43.1)	153(29.8)
Current occupation	28(17.2)	98(28.0)	126(24.6)
Daily laborer	87(53.4)	89(25.4)	176(34.3)
House wife	46(28.2)	12(3.4)	58(11.3)
CSW			
Merchant	91(55.8)	94(26.8)	185(36.1)
Private employee	0(0.0)	145(41.4)	145(28.3)
Gov` t employee	0(0.0)	51(14.6)	51(9.9)
Student	20(12.3)	15(4.3)	35(6.8)
Others	29(17.8)	6(1.7)	35(6.8)
	19(11.6)	12(3.4)	31(6.0)
	4(2.5)	17(4.9)	21(4.1)
	0(0.0)	10(2.9)	10(2)

**Source:** Arba Minch Town health facilities ,Survey 2016/17

The above table 4.1 Shows that all (513) of the study units who fulfilled the inclusion criteria were participated in the study. Majority 350 (68.2%) of the respondents were female and 163 (31.8 %) were male respondents. The mean age was  $32.7 \pm 8$ (SD) and 238 (46.4%) were in the

age group of 25-34 years. Regarding educational status, more than half 270 (52.6%) had attended primary education, 171 (33.3%) were unable to read and write and the rest had attended secondary and above. Vis-à-vis their current marital status, majority 243(66.9%) were married, 118 (23%) were single, 39 (7.6 %) were divorced and the rest were widowed. Most of them 354 (69%) were orthodox followed by 130 (25.3%), 20 (3.9%), 9 (1.8%) which were Protestant, Muslim and Catholic respectively. In their ethnicity, the majority 329 (64.1%) were Gamo, 71 (13.8 %) were Wolayta, 47 (9.2%) were Gofa, 35(6.8 %) were Amhara, 17 (3.3%) were Tigray and the rest (number & %) were Oromo. Majority 459 (89.5%) of the respondents were urban dwellers and the remainder were peri-urban residents. With more than half 279 ( 54.4%) either have no income or do not know their income, a significant number 176 (34.3%) had had an average monthly income of less than 500 birr and the remainders had had an average monthly income of 500 birr and more . With regard to their current occupation, 185 (36.1%) were daily laborers, 145 (28.3%) were house wives, 51 (9.9%) were commercial sex workers, 35 (6.8 %) were private employs, 35 (6.8%) were merchants, 31 (6%) government employs, 21 (4.1%) were students and the rest 10 ( 2 %) were petty traders.

#### 4.4.2 Sexual Practices of Respondents Before Tested Positive, Time of Tested and Duration of Start of ART

**TABLE 4.2:** Sexual practices of respondents by various characteristics in arba minch town health facilities, 2016/17

Characteristics	Frequency	Percentage (%)
Type of HIV counseling method they used to be tested		
PIHCT	234	45.6
VCT	179	34.9
PMTCT	100	19.5
Total	513	100.0
The duration since tested positive ( in year)		
<1	18	3.5
1-2	31	6.0
>2	464	90.4
Total	513	100.0
Marital status by the time they knew their HIV status		
Married	304	59.2
Single	165	32.2
Divorced	20	3.9
Widowed	24	4.7
Total	513	100.0
History of condom use before tested positive		
Yes	4	0.8
Inconsistent/not used at all	509	99.2
Total	513	100.0
Number of sexual partners before tested positive		

Single	290	56.5
Multiple	223	43.5
Total	513	100.0
Duration of since started ART( in year)		
<1	54	10.5
1-2	66	12.9
>2	393	76.6
Total	513	100.0

**Source:** Own Survey, 2017

Table 4.2 shows the sexual behavior of respondents before they were tested for HI. Regarding the counseling and test method they used, 234 (45.6%) were tested through PIHCT; 179 (34.9%) were through VCT and the rest were through PMTCT. The proportion of respondents who were tested and survived for less than 1 year, between 1 and 2 year and above 2 year was 18 (3.5%), 31 (6%), and 464 (90.4%) respectively. When the respondents knew their HIV status, 304 (59.2%) of them were married and the rest were single, widowed and divorced which were 165 (32.2%), 24 (4.7%) and 20 (3.9%) respectively.

Very insignificant number of the respondents 4 (0.8%) had used condom consistently before they were tested for HIV. Of all the respondents, 223(43.5%) had history of multiple sexual partnership before tested positive. Regarding the duration of since started ART, majority 393(76.6%) of them were above 2 years and the rest were between 1 and 2 and less than 1 year, which were 66 (12.9%) and 54 (10.5%) respectively.

### 4.4.3 Current Sexual Practices of Respondents who are on ART

**TABLE 4.3:** Current sexual practices of hiv patients who are on art in health facilities in arba minch town, 2016/17

Characteristics	Frequency	Percentage (%)
Condom use in the last 3 months		
Consistently used	246	48.0
Inconsistent/ Not used at all	267	52.0
Total	513	100.0
Number of sexual partner in the last 3 months	360	70.2
Single	153	29.8
Multiple	513	100.0
Total		
Type of sexual partners for Multiple		
Steady	2	1.3
Casual	78	51.0
Mixed	73	47.7
Total	153	100.0
Type of partner with whom the respondents had sex in the last three months	354	69.0
Steady	86	16.8
Casual	73	14.2
Mixed	513	100.0
Total		
History of condom use in the last sex		
Yes	338	65.9
No	175	34.1
Total	513	100.0

Partner Sero-status with whom the respondents had sex in the last three months		
Positive	327	63.7
Negative	62	12.1
Unknown	124	24.2
Total	513	100.0
Disclosure of sero-status to sexual partner	368	71.7
Yes	145	28.3
No / partly	513	100.0
Total		
Discussion about using condom and safe sex		
Discussed	183	35.7
Not discussed / discussed partly	330	64.3
Total	513	100.0

**Source:** Own Survey, 2017

As depicted in Table 4.3; more than half 267 (52%) of the respondents had used condom inconsistently or not used at all in the last 3 months whereas the remaining 246 (48%) had used consistently. Considering the number of partners they had had in the last 3 months, 360 (70.2%) of them had single partner and 153 (29.8%) of them had multiple sexual partners. Among those who reported single partnership, majority 352 (97.8%) of them were with steady type of partner and the rest 8 (2.2%) were with casual type of partner. From those who reported multiple partnership, only 2 (1.3%) were with steady partners and the rest 78 (51%) and 73 (47.7%) were with casual and mixed partners respectively.

When considering their last recent sex act, majority 338 (65.9%) of the respondents had used condoms and the remaining 175 (34.1%) did not use them. Regarding partner sero-status with whom the respondents had sex in the last 3 months; 135 (50.6%), 31 (11.6%), and 101 (37.8%) had sex with positive, negative and unknown partners respectively. Concerning their discussion about making safer sex, 183 (35.7%) had discussed and the rest 330 (64.3%) did not or had discussed partly about using condom and making safer sex with their sexual partner.

#### 4.4.4 Knowledge, Behavioral and Psychosocial Related Variables of Respondents

**TABLE 4.4:** Knowledge, behavioral and psychosocial related variables of hiv patients who are on art in health facilities in arba minch town, 2016/17

Characteristics	Frequency	Percentage (%)
Reduced concern to practice safe sex b/c of ART		
Yes	246	48.0
No	267	52.0
Total	513	100.0
Negative safer sex knowledge		
No	427	83.2
Yes	86	16.8
Total	513	100.0
Negative safer sex pleasure		
No	431	84.0
Yes	82	16.0
Total	513	100.0
Negative safer sex effectiveness		
No	489	95.3
Yes	24	4.7



Total	153	100.0
Membership to social support association	269	52.4
Yes	244	47.6
No	513	100.0
Total		
Alcohol use in the last 3 months	209	40.7
Yes	304	59.3
No	513	100.0
Total		
		22.0
Number of alcohol use per week		78.0
	113	100.0
≤ 3	400	
> 3	513	
Total		
		26.3
Substance addiction		73.7
Yes	135	100.0
No	378	
Total	513	
Type of substances they are addicted with		
Chat	111	82.2
Cigarette	18	13.3
Hashish	6	4.4
Total	135	100

**Source:** Own Survey, 2017

Table 4 shows the knowledge, behavioral and psychosocial related assessments of respondents. Among the respondents, 246 (48%) of them had reduced concern to safe sex and condom use because of they were taking ART and the rest 267 (52%) had no difference. When assessing their knowledge related to safe sex, majority 427 (83.2%) of them were knowledgeable and the

remaining 86 (16.8%) were unknowledgeable about negative health effects of unsafe sex. The respondents were asked about safer sex pleasure and 313 (61%) of them reported that condoms could reduce or change sexual pleasure and the rest 200 (39%) did not agree with this. They were also assessed on knowledge regarding safe sex effectiveness, and majority 489 (95.3%) were knowledgeable and the remaining 24 (4.7%) were unknowledgeable about the effectiveness of condoms in preventing re-infection and STIs. Regarding membership to social support association, more than half 269 (52.4%) were member to social support association and the rest 244 (47.6%) were not.

Concerning alcohol use 3 months prior to the study period, 209 (40.7%) had used alcohol and the rest 304 (59.3%) did not. From those who consumed alcohol, majority 400 (78%) consumed more than three times a week and the remaining 113 (22%) used three or less times a week. When considering substance use, nearly three-fourth 378 (73.7%) were substance addicted and the remaining 135 (26.3%) were not. Among those who are addicted, majority 111 (82.2%) were addicted with Chat and the rest 18 (13.3%) and 6 (4.4%) were addicted with cigarette and Shisha respectively.

#### 4.4.5 Reasons Mentioned for not Using Condoms During Sexual Intercourse

**TABLE 4.5:** Bivariate analysis of socio demographic characteristics with risky sex of respondents who are on art in arba minch town, 2016/17

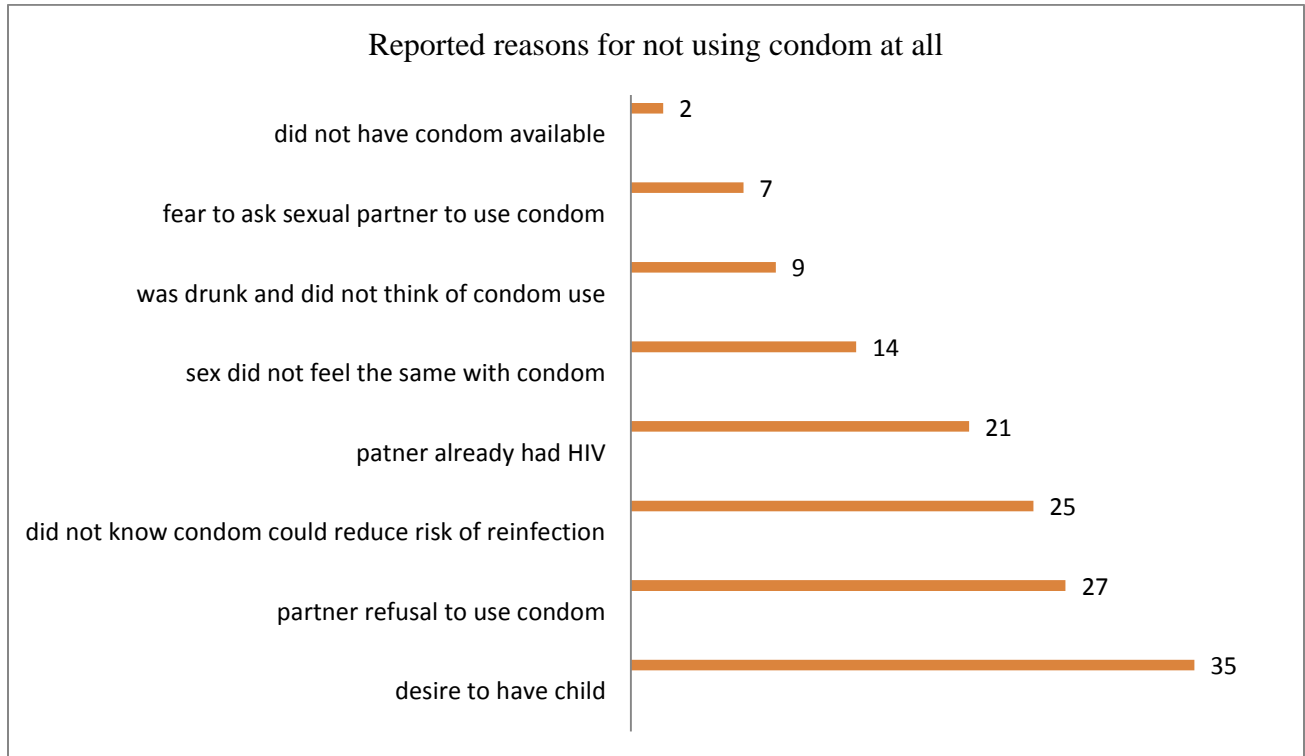
Characteristics	Consistently used N (%)	Inconsistent/ Non-condom use. N ( % )	COR  (95% CI)	P-Value
Age				
18-24	42(17.1)	70 ( 26.2 )	3.89(1.39,10.89)*	0.010
25-34	118(48.0)	120 ( 44.9 )	2.37(0.88,6.38)	0.087
35-44	72(29.3)	71 ( 26.6 )	2.3(0.84,6.32)	0.106
>44	14(5.7)	6 ( 2.2 )	ref.	
Current marital status				
Married	195(79.3)	148( 55.4 )	ref.	
Unmarried	38(15.4)	80( 30.0 )	2.77(1.78,4.31)*	0.000
Divorced	8(3.3)	31( 11.6 )	5.11(2.28,11.43)*	0.000
Widowed	5(2.0)	8( 3.0 )	2.11(0.68,6.58)	0.199
Average monthly income				
Have no/not specified	117(47.6)	162(60.7)	3.08(1.68,5.63)*	0.000
<500birr	89(36.2)	87(32.6)	2.17(1.16,4.08)*	0.016

>=500birr	40(16.3)	18(6.7)	ref.	
Current occupation				
Daily laborer	88(35.8)	97( 36.3 )	ref.	
House wife	72(29.3)	73( 27.3 )	0.92(0.59,1.42)	0.706
CSW	16(6.5)	35( 13.1 )	1.98(1.03,3.83)*	0.041
Merchant	21(8.5)	14( 5.2 )	0.61(0.29,1.26)	0.180
Priv` t employ	20(8.1)	15( 5.6 )	0.68(0.33,1.41)	0.301
Gov` t employ	19(7.7)	12( 4.5 )	0.57(0.26,1.25)	0.161
Student	10(4.1)	11( 4.1 )	0.99(0.40,2.46)	0.996

**Source:** Own Survey, 2017

As shown in Table 4. 5, with possible multiple responses, the respondents were asked for the reasons for not using condom at all. The reported reasons were, 35 (25%) desire to have child; 27 (19.3%) my partner did not want to use condom; 25 (17.9%) did not know condom could reduce risk of re-infection; 21 (15%) my partner already had HIV; 14 (10%) sex did not feel the same with condom; 9(6.4%) was drunk and did not think of condom use; 7 (5%) I fear to ask my partner to use condom; 2 (1.4%) did not have condom available.

**FIGURE 4.1:** Reasons mentioned for not using condom by hiv patients who are on art in health facilities in arba minch town, 2016/17



**Source:** Sikela Health Center, 2016/17

Where is the figure 4.1 analysis?

## 4.5 Bivariate Analysis of Socio Demographic Characteristics and Risky Sexual Practice

**TABLE 4.6:** Bivariate analysis of risky sexual practice of respondents by various characteristics among art attendants in arba minch town, 2016/17

Characteristics	Consistently used. N (%)	Inconsistent/ Non-condom use. N ( % )	COR (95% CI)	P-Value
Counseling method used				
PIHCT	127(51.6)	107 ( 40.1 )	ref.	
VCT	82(33.3)	97 ( 36.3 )	1.40(0.95,2.08)	0.089
PMTCT	37(15.0)	63 ( 23.6 )	2.02(1.25,3.27)*	0.004
Duration of tested positive				
< 1 year	4(1.6)	14 ( 5.2 )	3.35(1.09,10.34)*	0.035
1-2 year	15(6.1)	16 ( 6.0 )	1.02(0.49,2.12)	0.954
> 2 year	227(92.3)	237 ( 88.8 )	ref.	
Marital status before test positive				
Married	169(68.7)	135( 50.6 )	ref.	
Unmarried	68(27.6)	97( 36.3 )	1.79(1.22,2.62)*	0.003
Divorced	1(0.4)	19( 7.1 )	23.78(3.14,179.94)	0.002
Widowed	8(3.3)	16( 6.0 )	2.50(1.04,6.03)*	0.041

No of partner before tested positive			.	
Single	160(65.0)	130( 48.7 )	ref.	
Multiple	86(35.0)	137( 51.3 )	1.96(1.37,2.79)*	0.000
Duration of start of ART				
< 1 year	8(3.3)	46( 17.2 )	6.02(2.77,13.08)*	0.000
1-2 year	37(15.0)	29( 10.9 )	0.82(0.48,1.39)	0.460
>2 year	201(81.7)	192( 71.9 )	Ref.	

**Source:** Own Survey 2017

\*statistically significant at p value  $\leq 0.05$

Table above 4.6 indicates bivariate analysis of socio demographic characteristics with inconsistent or non-condom use (risky sexual practice).70 (26.2 %) of the respondents who are in the age group of 18-24 were nearly 4 times more likely to practice risky sex ( COR= 3.89, 95% CI: 1.38 to 10.89) than those who are in the age of beyond 44 years. By their current marital status, 80 (30%) of unmarried and 31 (11.6 %) of divorced respondents were nearly 3 and 5 times more likely to practice risky sex (COR= 2.77, 95% CI: 1.78 to 4.31 and COR= 5.11, 95% CI: 2.28 to 11.43) than married respondents respectively. With regard to average monthly income, 162 (60.7%) of those who had no or unspecified income and 87 (32.6%) of those who had an income of less than 500 birr were 3 and 2 times more likely to be engaged in risky sexual practice (COR= 3.08, 95% CI: 1.68 to 5.63 and COR= 2.17, 95% CI: 1.16 to 4.08) than those

who had an income of 500 and more birr respectively. Concerning their current occupation, 35 (13.1%) of commercial sex workers were more likely to be engaged in risky sexual practice (COR= 1.98, 95% CI: 1.03 to 3.83) than daily laborers.

**TABLE 4.7:** Bivariate analysis of socio demographic characteristics with risky sex of respondents who are on art in arba minch town, 2014/2015

Characteristics	Consistently used N (%)	Inconsistent/ Non-condom use. N ( % )	COR (95% CI)	P-Value
Age				
18-24	42(17.1)	70 ( 26.2 )	3.89(1.39,10.89)*	0.010
25-34	118(48.0)	120 ( 44.9 )	2.37(0.88,6.38)	0.087
35-44	72(29.3)	71 ( 26.6 )	2.3(0.84,6.32)	0.106
>44	14(5.7)	6 ( 2.2 )	ref.	
Current marital status				
Married				
Unmarried	195(79.3)	148( 55.4 )	ref.	
Divorced	38(15.4)	80( 30.0 )	2.77(1.78,4.31)*	0.000
Widowed	8(3.3)	31( 11.6 )	5.11(2.28,11.43)*	0.000
	5(2.0)	8( 3.0 )	2.11(0.68,6.58)	0.199
Average monthly income				
	117(47.6)	162(60.7)	3.08(1.68,5.63)*	0.000
Have no/not specified	89(36.2)	87(32.6)	2.17(1.16,4.08)*	0.016
<500birr	40(16.3)	18(6.7)	ref.	



>=500birr				
Current				
occupation	88(35.8)	97( 36.3 )	ref.	
	72(29.3)	73( 27.3 )	0.92(0.59,1.42)	0.706
Daily laborer	16(6.5)	35( 13.1 )	1.98(1.03,3.83)*	0.041
House wife	21(8.5)	14( 5.2 )	0.61(0.29,1.26)	0.180
CSW	20(8.1)	15( 5.6 )	0.68(0.33,1.41)	0.301
Merchant	19(7.7)	12( 4.5 )	0.57(0.26,1.25)	0.161
Privet employ	10(4.1)	11( 4.1 )	0.99(0.40,2.46)	0.996
Gov` t employ				
Student				

**Source:** Own Survey 2017

CSW- commercial sex worker, Priv`t- private, Gov`t-government, COR-crude odds ratio, Ref. – reference category

\* Statistically significant at (  $p < 0.05$  )

#### 4.5.1 Bivariate Analysis of Sexual Practices Before Tested Positive, Time of Tested and Duration of Start of ART

**TABLE 4.8:** Bivariate analysis of knowledge, behavioral and psychosocial related variables with risky sexual practices of respondents on art in arba minch town, 2016/17

Characteristics	Consistently used. N (%)	Inconsistent/ Non-condom use. N (%)	COR (95% CI)	P-Value
Reduced concern of safe sex b/c of ART				
Yes				
No	64(26.0)	182 ( 68.2 )	6.09(4.15,8.94)*	0.000
	182(74.0)	85 ( 31.8 )	ref.	
Negative safer sex knowledge				
No	162(65.9)	145 ( 54.3 )	ref.	
Yes	84(34.1)	122 ( 45.7 )	1.62(1.14,2.32)*	0.008
Negative safer sex pleasure				
No	220(89.4)	211 ( 79.0 )	ref.	

Yes	26(10.6)	56 ( 21.0 )	2.25(1.36,3.71)*	0.002
Negative safer sex effectiveness				
No				
Yes	211(85.8)	183 ( 68.5 )	ref.	
	35(14.2)	84 ( 31.5 )	2.77(1.78, 4.3)*	0.000
Membership to social support association				
Yes	144(58.5)	125 ( 46.8 )	ref.	
No	102(41.5)	142 ( 53.2 )	1.60(1.13,2.28)*	0.008
Alcohol use in the last 3 months				
Yes				
No	88(35.8)	121( 45.3)	1.49(1.04,2.12)*	0.028
	158(64.2)	146 (54.7)	Ref.	

**Source:** Own Survey 2017

As depicted in table 4.8 , considering counseling and test method they used by the time they knew their HIV status, 63 ( 23.6%) who knew their status by PMTCT were 2 times more likely to be engaged in risky sexual practice ( COR= 2.02, 95% CI: 1.25 to 3.27 ) than those who knew their status by PIHCT. Those who survived for less than 1 year with HIV during study period 14( 5.2%) were nearly 3 times more likely to practice risky sex ( COR= 3.35, 95% CI: 1.09 to 10.34) than those who had survived for more than two years. Regarding their marital status before tested

positive, 97 (36.3%) unmarried and 16 (6 %) widowed were nearly 2 times and 2.5 times more likely to be engaged in risky sexual practice (COR= 1.79, 95% CI: 1.22 to 2.62 and COR= 2.5, 95% CI: 1.04 to 6.03) than those who were married respectively. Nearly half 137 (51.3%) of those who had multiple partners were 2 times more likely to be engaged in risky sexual practice (COR= 1.96, 95% CI: 1.37 to 2.79) than their counter parts. Those who stayed for less than 1 year on ART during study period 46 ( 17.2 %) were 6 times more likely to practice risky sex (COR= 6.02, 95% CI: 2.77 to 13.08) than those who stayed for more than 2 years.

**TABLE 4.9:** Bivariate analysis of risky sexual practice of respondents by various characteristics among art attendants in arba minch town, 2016/17

<b>Characteristics</b>	<b>Consistently used. N (%)</b>	<b>Inconsistent/ Non-condom use. N ( % )</b>	<b>COR (95% CI)</b>	<b>P-Value</b>
Counseling method used	127(51.6)	107 ( 40.1 )	ref.	
PIHCT	82(33.3)	97 ( 36.3 )	1.40(0.95,2.08)	0.089
VCT	37(15.0)	63 ( 23.6 )	2.02(1.25,3.27)*	0.004
PMTCT				

Duration of tested positive				
< 1 year	4(1.6)	14 ( 5.2 )	3.35(1.09,10.34)*	0.035
1-2 year	15(6.1)	16 ( 6.0 )	1.02(0.49,2.12)	0.954
> 2 year	227(92.3)	237 ( 88.8 )	ref.	
Marital status before test positive				
Married	169(68.7)	135( 50.6 )	ref.	
Unmarried	68(27.6)	97( 36.3 )	1.79(1.22,2.62)*	0.003
Divorced	1(0.4)	19( 7.1 )	23.78(3.14,179.94)	0.002
Widowed	8(3.3)	16( 6.0 )	2.50(1.04,6.03)*	0.041
No of partner before tested positive			.	
Single	160(65.0)	130( 48.7 )	ref.	
Multiple	86(35.0)	137( 51.3 )	1.96(1.37,2.79)*	0.000

Duration of start of ART				
< 1 year	8(3.3)	46( 17.2 )	6.02(2.77,13.08)*	0.000
1-2 year	37(15.0)	29( 10.9 )	0.82(0.48,1.39)	0.460
>2 year	201(81.7)	192( 71.9 )	ref.	

**Source:** Own Survey 2017

\*statistically significant at p value  $\leq 0.05$

#### **4.5.2 Bivariate Analysis of Current Sexual Practices of Respondents After Start of ART With Inconsistent or Non-Condom Use**

As illustrated in table 8, considering number of current sexual partners three months prior to the study period, 101 ( 37.8%) who had multiple partners were nearly 2 times more likely to practice risky sex (COR= 2.27, 95% CI: 1.53 to 3.36) than their counter parts. Regarding type of partners the respondents had sex three months prior to the study period, 53 (19.9%) with casual and 55 (20.6%) with mixed partners were nearly 2 and 4 times more likely to be engaged in risky sexual practice (COR= 1.97, 95% CI: 1.22 to 3.19 and COR= 3.75, 95% CI: 2.12 to 6.64) than those who had steady type of partner respectively. Of the respondents, 101 (37.8%) who had unknown sero-status sexual partner were 6 times more likely to be engaged in risky sexual practice (COR=6.25, 95% CI: 3.77 to 10.33) than those who had positive sexual partners. Those respondents who had never or partly disclosed their status 107 (40.1%) were nearly 3.5 times more likely to practice risky sex (COR= 3.66, 95% CI: 2.39 to 5.59) than their counter parts. And the respondents who had never or partly discussed about safe sex and condom use with their

sexual partner were nearly 8 times more likely to be engaged in risky sexual practice ( COR= 7.88, 95% CI: 5.17 to 12.0) than their counter parts.

**TABLE 4.10:** Bivariate analysis of current sexual practices of respondents after start of art in arba minch town, 2016/17

<b>Characteristics</b>	<b>Consistently used. N (%)</b>	<b>Inconsistent/ Non-condom use. N (%)</b>	<b>COR (95% CI)</b>	<b>P-Value</b>
No of sexual partner in the last 3 months				
Single	194(78.9)	166 ( 62.2 )	ref.	
Multiple	52(21.1)	101 ( 37.8 )	2.27(1.53,3.36)*	0.000
Type of partner the respondents had sex in the last 3 months				
Steady	195(79.3)	159 ( 59.6 )	ref.	
Casual	33(13.4)	53 ( 19.9 )	1.97(1.22,3.19)*	0.006
Mixed	18(7.3)	55 ( 20.6 )	3.75(2.12,6.64)*	0.000
Disclosure of sero-status to sex partner				
Yes	208(84.6)	160 ( 59.9 )	ref.	
No/partly	38(15.4)	107 ( 40.1 )	3.66(2.4,5.59)*	0.000

Discussion about condom use and safe sex				
Yes	143(58.1)	40 ( 15.0 )	ref.	
No/partly	103(41.9)	227 ( 85.0 )	7.88(5.17,12.0)*	0.000
Partner sero-status with whom they had sex in the last 3 months				
Positive	192(78.0)	135 ( 50.6)	ref.	
Negative	31(12.6)	31 ( 11.6)	1.42(0.83,2.45)	0.205
Unknown	23(9.3)	101 ( 37.8)	6.25(3.77,10.33)*	0.000

**Source:** Own Survey 2017

#### **4.5.3 Bivariate Analysis of Knowledge, Behavioral and Psychosocial Related Variables of Respondents With Risky Sexual Practice**

As shown in table 4.11, 182 ( 68.2%) of those who had reduced concern of safe sex because of ART were 6 times more likely to practice risky sex ( COR= 6.09, 95% CI: 4.15 to 8.94 ) than their counter parts. Considering the respondents knowledge on negative health effects of risky sex, 122 (45.7%) of those who are unknowledgeable were 1.6 times more likely to be engaged in risky sexual practice (COR= 1.62, 95% CI: 1.14 to 2.32) than their counter parts. In relation to



their safer sex pleasure, 56 (21%) of those who are displeased of safer sex were 2.3 times more likely to practice risky sex (COR= 2.25, 95% CI: 1.15 to 4.34) than their counter parts. Also in relation to their knowledge on safer sex effectiveness, 84 (31.5%) of those who are unknowledgeable about safer sex effectiveness were nearly 3 times more likely to be engaged in risky sex (COR= 2.77, 95% CI: 1.78 to 4.3) than their counter parts. In respect to their membership to social support association, more than half ( 53.2%) who did not belong to social support association were 1.6 times more likely to practice risky sex ( COR= 1.6, 95% CI: 1.13 to 2.27) than their counter parts. Regarding alcohol use 3 months prior to the study period, 121 (45.3%) of who consumed alcohol were 1.5 times more likely to be engaged in risky sexual practice (COR= 1.49, 95% CI: 1.04 to 2.12) than those who did not consume alcohol.

**TABLE 4.11:** Bivariate analysis of knowledge, behavioral and psychosocial related variables with risky sexual practices of respondents on art in arba minch town, 2016/17

<b>Characteristics</b>	<b>Consistently used. N (%)</b>	<b>Inconsistent/ Non-condom use. N (%)</b>	<b>COR (95% CI)</b>	<b>P-Value</b>
Reduced concern of safe sex b/c of ART				
Yes	64(26.0)	182 ( 68.2 )	6.09(4.15,8.94)*	0.000
No	182(74.0)	85 ( 31.8 )	ref.	
Negative safer				

sex knowledge				
No	162(65.9)	145 ( 54.3 )	ref.	
Yes	84(34.1)	122 ( 45.7 )	1.62(1.14,2.32)*	0.008
Negative safer sex pleasure				
No	220(89.4)	211 ( 79.0)	ref.	
Yes	26(10.6)	56 ( 21.0 )	2.25(1.36,3.71)*	0.002
Negative safer sex effectiveness				
No	211(85.8)	183 ( 68.5 )	ref.	
Yes	35(14.2)	84 ( 31.5 )	2.77(1.78, 4.3)*	0.000
Membership to social support association				
Yes	144(58.5)	125 ( 46.8 )	ref.	
No	102(41.5)	142 ( 53.2 )	1.60(1.13,2.28)*	0.008
Alcohol use in the last 3 months				
Yes	88(35.8)	121( 45.3)	1.49(1.04,2.12)*	0.028
No	158(64.2)	146 (54.7)	Ref.	

**Source:** Own Survey 2017

#### **4.5.4 Multivariate Analysis of An Exploratory Variables of Risky Sexual Practice**

As depicted in Table 4.13, factors those independently associated with risky sexual practice were explored using multivariate analysis. Those variables that showed significant association with risky sexual practice at ( $p \leq 0.05$ ) in bivariate analysis were included in multivariate analysis.

Average monthly income of respondents ( AOR= 4.0; 95% CI: 1.86, 8.58 and AOR = 3.26; 95% CI: 1.53, 6.95 ) ; current marital status of the respondents ( AOR= 4.74; 95% CI: 1.39, 16.11 ) ; counseling method the respondents had used to be tested (AOR= 1.82; 95% CI: 1.04, 3.2); partner sero-status the respondents had had sex ( AOR= 2.73; 95% CI: 1.49, 5.02 ) ; discussion about safe sex and condom use ( AOR= 4.5; 95% CI: 2.81, 7.18 ) ; reduced concern of safe sex because of ART (AOR= 4.54; 95% CI: 2.9, 7.11 ) ; negative safer sex pleasure (AOR= 2.02; 95% CI: 1.1, 3.71) and non-disclosure of sero-status to sexual partner ( AOR= 2.6; 95% CI: 1.24, 5.43 ) were factors independently associated with risky sexual practice in multivariate analysis.

**TABLE 4.12:** Multivariate analysis of exploratory variables of risky sexual practice among respondents on art in arba minch town, 2016/17

Characteristics	Inconsistent/ non-condom use. N (%)	COR (95%CI)	P- value	AOR (95% CI)	P- value
Monthly Income					
No income/ not specified		3.08(1.68,5.63)*	0.000	4.0(1.86,8.58)*	0.000
<500 birr		2.17(1.16,4.08)*	0.016	3.26(1.53,6.95)*	0.002
>= 500 birr		ref.		ref.	
Current marital status					
Married	148 ( 55.4 )	ref.			
Unmarried	80 ( 30.0 )	2.77(1.78,4.31)*	0.000	ref.	0.219
Divorced	31 ( 11.6 )	5.11(2.28,11.43)*	0.000	1.76(0.72,4.31)	0.013
Widowed	8 ( 3.0 )	2.11(0.68,6.58)	0.199	4.74(1.39,16.11)*	0.182
Counseling method they had used					
PIHCT	107(40.1)	ref		0.31(0.06,1.73)	0.112
VCT	97(36.3)	1.4(0.95,2.08)	0.089	1.44(0.92,2.27)	0.038
PMTCT	63(23.6)	2.02(1.25,3.27)*	0.004	1.82(1.04,3.2)*	
Partner sero- status with whom they had sex in the last 3 months					

Positive	135 ( 50.6)	ref.			
Negative	31 ( 11.6)	1.42(0.83,2.45)	0.205	1.56(0.82,2.95)	0.174
Unknown	101 ( 37.8)	6.25(3.77,10.33)*	0.000	2.73(1.49,5.02)	0.001
Discussion about condom use and safe sex					
Yes					
No/partly	40 ( 15.0 )	ref.	0.000	ref.	
	227 ( 85.0 )	7.88(5.17,12.0)*	0.000	4.5(2.81,7.18)*	0.000
Reduced concern of safe sex b/c of ART					
Yes					
No	182 ( 68.2 )	6.09(4.15,8.94)*	0.002	4.54(2.9,7.11)*	0.000
	85 ( 31.8 )	ref.		ref.	0.024
Negative safer sex pleasure					
No					
Yes	211 ( 79.0)	ref.		ref	
	56 ( 21.0 )	2.25(1.36,3.71)*		2.02(1.1, 3.71)*	0.011
Disclosure of sero-status to sex partner					
Yes					
No /partly	160 ( 59.9 )	ref.		ref.	
	107 ( 40.1 )	3.66(2.4, 5.59)*	0.000	2.6(1.24,5.43)*	

**Source:** Own Survey 2017

## 4.6 Discussion

Most people who know they are HIV positive change their sexual behavior to reduce their risk of transmitting the virus to others. Among those who maintain their sexual activity, many complain of having difficulty in using condom consistently and there are still PLHIV who experience difficulty in maintaining safer sex though the rates differ according to the specific group, the period under observation and the definition of safe sex (al., 2011).

The prevalence of inconsistent or non-condom use( defined as risky sexual practice ) in this study was 52% ( 95% CI: 48%, 56%) which is markedly higher than the study reports of Addis Ababa and North Shewa, Ethiopia, where the prevalence was (36.9%) and (38%) respectively[ (al., 2011). The variation could be due to difference in socio cultural status of respondents; study setting and high reported intention to have a child and the fact that majority of respondents in this study were in marital relationship.

Unlike study done in Addis Ababa, Ethiopia, Cameron, South Africa and North Shewa, Ethiopia, where age of PLHIV had no association with risky sexual practice (al., 2011), in this study being younger age below 45 years had positive association with practicing risky sex (COR=3.89, 95% CI: 1.38 to 10.89), which was similar to other study findings (al D. e., 2008).

Similar to the study done in France, where there was independent positive association of being in financial insecurity with risky sexual practice, the current study also revealed that those who had no or unspecified income were independently positively associated with risky sex (AOR= 12.44; 95% CI: 3.45, 44.83) than those who had relatively better income (al B. e., 2008)

Proportion of respondents who are in marital relationship in this study were ( 66.9%), which is higher than the study done in Addis Ababa public hospitals ( 63.9%) but those who had regular partners were (69%) which was lower than the former ( 82%) (al., 2011)

In this research, those who are divorced were independently associated with risky sexual practice, in line with the study finding from Mombasa, Kenya . But contrasts with a study finding from Uganda, where married PLHIV were more likely to practice risky sex than those who were unmarried (al B. e., 2008). The difference with latter study could be related to the respondents` knowledge variation on risk of re-infection and risk of transmitting the virus to others.

Very significant number of new HIV infection may arise from condom-unprotected sex encounter with commercial sex workers and/or having multiple partnerships. In line with this fact, very interesting finding in this research is that significant number of respondents (13.1%) were commercial sex workers and the odds of inconsistent or non-condom use among this group was nearly 2 times higher( COR= 1.98, 95% CI: 1.03 to 3.83).

And the current study also identified that the respondents who had history of multiple partnership before they were test positive were found to be more likely to currently practice risky sex than their counter parts ( COR=1.96, 95% CI: 1.37 , 2.79 ).

In this study, counseling and test method through which the respondents knew their HIV status had independently positively associated with unprotected sex. In this regard, respondent who knew their HIV status through PMTCT were 1.8 times more likely to be engaged in risky sex (AOR=1.82, 95% CI: 1.04 , 3.2 ) than those who were tested through PIHCT .

In this study, those who survived for less than 1 year with the virus during study period were nearly 3 times more likely to practice risky sex. This indicates that recent HIV infection had positive association with practicing risk sexual behavior, which is similar to the finding from Mombasa, Kenya (luchters S, August 29,2007).

The current study revealed ( 29.8%) multiple partnership among those who had sexual intercourse three months prior to the study period, which was markedly higher than the study report of Addis Ababa, where it was (10% ) and lower than a study report of North Showa, where it was ( 42.7% ) (al., 2011). The difference from two studies might be related to socio demographic and cultural variability of respondents.

In line with a finding from Addis Ababa, where multiple partnership was independently positively associated with risky sex, those who had multiple partnership in this study were 2 times more likely to be engaged in risky sexual practice (COR= 2.27, 95% CI: 1.53- 3.36) though it did not reach level of significance after control for possible confounders.

According to the observed finding, among those who were engaged in risky sex(inconsistent or non-condom use), 59.6 % , 19.9% and 20.6% were with steady, casual and mixed partners respectively, which was found to be similar with other studies (al., 2011).

The study also revealed that being in casual or mixed partnership had high likelihood of practicing unsafe sex, which is in line with other study findings (al., 2011).

Proportion of respondents who disclosed their sero-status to sexual partner was found to be (71.7%), which is markedly higher than a findings reported in similar study done in North Shewa, Ethiopia which was (49.6%) [35]. The variation might be related to the fact that more than half (52.4%) of respondents in this study were members to social support association, where



status disclosure is highly promoted. In this regard, respondents who did not disclose their HIV sero-status to sexual partner were more likely to practice risky sex (AOR= 2.6, 95%CI: 1.24, 5.43) than their counter parts. This is in line with the study findings reported from Ethiopia and Mombasa, Kenya .

Rather than merely disclosing HIV status to sexual partner, particularly discussing about safer sex behaviors are important in reducing risk regardless of disclosure of HIV status [32]. With regard to this fact, the proportion of those who reported about discussing condom use (safe sex) with their sexual partners was (35.7%), which is similar to the study finding reported from North Shewa, Ethiopia (35.9%) [35]. The odds of practicing risky sex among those who never or partly discussed with their sexual partners about safe sex were higher than their counter parts (AOR= 4.5; 95% CI: 2.81, 7.18). This is in line with a study finding reported from Addis Ababa, Ethiopia (al., 2011).

Similar to the study findings from North Shewa, Ethiopia and Jimma, Ethiopia, where risky sexual practice was more likely to occur among unknown sero-status partners, respondents who had sex with unknown sero-status partners (37.8%) in current study were 2.7 times more likely to be engaged in risky sex (AOR= 2.73; 95% CI: 1.49, 5.02) than those who had positive partners . This contrasts with findings reported from study done in Addis Ababa, Ethiopia and the Dominican Republic, where the likelihood of risky sex was found to be higher among respondents who had positive partners (al., 2011).

The research outcome shows that one-fourth of the respondents reported desire to have child, and about one-fifth as partner refused to use condom. About eighteen percent of respondents reported the reason as they do not know that condom could reduce risk of re-infection.

With increased coverage of antiretroviral treatment, concerns raise about the potential for unprotected sex if sexual activity increases with well-being, resulting in continued HIV spread. And beliefs about reduced risk for HIV transmission with ART may also influence sexual behavior (Iuchters S, August 29,2007). In this regard, the current study revealed that those who had reduced concern of safer sex because of ART were 5 times more likely to practice risky sex than their counter parts ( AOR= 4.54, 95% CI: 2.9 , 7.11 ).

The issue of condom effectiveness and the issue of condom takes away sexual pleasure were illustrated in this study. Those with an attitude of negative safer sex pleasure were significantly independently associated with risky sexual practice (AOR= 2.02; 95% CI: 1.1, 3.71), which is in line with a finding from Addis Ababa (al., 2011)

Proportion of respondents who consumed alcohol and used substances three months prior to the study period was (40.7%) and (26.3) respectively, which was markedly higher than a study finding reported from Addis Ababa, Ethiopia which was (20%) and (7.2%).The identified variation could be because of lack of knowledge of negative effects of alcohol and substances on their medication which might be attributable to rural and urban study setting.

Similar to the findings reported from Addis Ababa, South Africa, France and Cote d`Vioire(al., 2011), where there was positive association between alcohol consumption and practicing risky sex, in the current study, those who consumed alcohol were 1.5 times more likely to practice risky sex than their counter parts.

## **CHAPTER FIVE**

### **5. Conclusions and Recommendations**

#### **5.1 Conclusions**

Prevalence of risky sexual practice was found to be very high among people who are currently taking ART.

Factors independently associated with risky sexual practice were; economic insecurity, marital status, counseling and test method they used by the time they knew their sero-status; knowledge of partner sero-status, reduced concern of safe sex because of ART, lack of discussion about safe sex with sexual partner, lack of pleasure of sexual act with condom and non-disclosure of sero-status to sexual partner.

Significant number of PLHIV who are on ART reported desire to have child and partner refusal as a reason for not using condom.

Considerable number of PLHIV were found to be commercial sex workers who did not use condom during sexual act which could aggravate HIV new infection

Significant number of clients had consumed alcohol, which might have negative effect on their medication

## **5.2 Recommendations**

The findings of the study have implication for intervention with people living with HIV who are on ART in the study area.

High rates of risky sexual practice with unknown sero-status sexual partners suggests the need for immediate commencement of facility-based behavioral change interventions to reduce risk of re-infection with different viral strain or other STIs and risk of transmitting the virus to others.

Together with behavioral change intervention, there should be economic strengthening for clients who are at low socioeconomic status to reduce their risk.

Since considerable number of respondents wish to have child, these individuals should be educated or counseled at ART clinic about the best possible ways of becoming pregnant with the least possible risk of becoming infected or of spreading the virus to others.

Marital status and partner characteristics play role in these participant`s decision to practice safe sex and they remain concern as potential sources of new infection. Therefore, individual and peer-based counseling and health education should be promoted at health facility to develop their negotiation skill in order to decide to have safer sex

Both community and facility based specific intervention should be designed focusing on high-risk groups ( commercial sex workers) to be effective in averting the spread of the virus

Patients should be counseled on the risks and negative effects of alcohol with their medication during their treatment follow up

Generally, prevention intervention focusing on positives should be promoted to be efficient and effective in averting the spread of the virus.

Future follow up study should be done on this population group to know causal relationship of factors with their sexual behavior after start of ART

## REFERENCES

- Ajezen, I. M. (1980). understanding attitudes and predicting social behaviour. Englewood Cliffs,N.J:Prentice-Hall.
- al, A. e. (2009). Highly active antiretroviral therapy and increased use of contraceptives among HIV positive women during expanding access to antiretroviral therapy. *The American Journal of Public Health*99(2) , 340-347.
- al, B. e. (2008). HIV transmission risk behaviour among HIV-infected adults in Uganda:results of a national representative survey. *AIDS Journal* 22 , 617-624.
- al, C. e. (2010). challenges faced by people living with HIV/AIDS in Cape Town ,South Africa:issues for group risk reduction interventions ,2010:.
- al, D. e. (2010). prevalence of unsafe sex with one's steady partner HIV negative or of unknown HIV status and associated determinants in Cameroon. *Journal of Sexually Transmitted Infections* , 86:148-154.
- al, D. e. (2008). short term increase in unsafe sexual behavior after initiation of HAART in Cote d'Ivoire. *The AIDS Journal* 22/1/ , 154-156.
- al, F. e. (2008). Decreased sexual risk behaviour after the diagnosis of HIV and initiation of antiretroviral treatment - a study of patients in Johannesburg. *The Southern African Journal of HIV Medicine* .December issue , 12-15.
- al, G. e. (2006). social support and health behaviour in women living with HIV in Kwa-Zulu-Natal,. *Journal of Social Aspects of HIV/AIDS*3(1) , 362-368.

- al, k. C. (2011). knowing the consequences of unprotected sex with sero-concordant partner is associated with increased safer sex intentions among HIV-positive men in kathmandu,Nepal. 29{3}:191-199.
- al, k. e. (2006). sexual risk behavior among HIV positive individuals in clinical care in urban KwaZulu-Natal,south Africa,. AIDS journal , 20{13}:1781-1784.
- al, L. e. (2008). sexual behaviour and reproductive health among HIV infected patients in Urban and rural south Africa. The journal of Acquired Immune deficiency syndrome,47/4/ , 484-493.
- al, L. e. (2008). sexual behaviour and reproductive health among HIV-infected patients in urban and rural south africa. The journal of Acquired Immune deficiency syndrom,47{4} , 484-493.
- al., D. e. (2011). Risky sexual practice and factors related among people living with HIV/AIDS attending their ART in Addis Ababa public Hospitals . 11:422.
- Berhan A, B. Y. (2012). Is the sexual Behaviour of HIV patients on Antiretroviral therapy safe or risky in Sub-Saharan Africa? Meta-Analysis and Meta -regression . AIDS Res Ther , 9{1}:14.}
- Bloor, M. (1955b). The sociology of HIV transmission. In sociological Approches (pp. 19-30). London: Blackwell publishers.
- Bloor, M. (1955a). The sociology of HIV transmission . In sociological approches (pp. 19-30). London: Blackwel publishers.

- Bouhnic, A. e. (2007). unsafe sex in regular partnerships among hetero-sexual persons living with HIV:evidence from a large representative sample of individuals attending out-patient services in france. *AIDS Journal* 21 , 557-62.
- Bukenya, Y. (2008). impact of antiretroviral therapy on sexual behaviour among Villa-Maria hospital clients,Masaka district,Uganda. Ma{ philosophy } dissertation.university of Bergen ,Norway .
- colfax GN, G. R. (2004;36/4). Beliefs about HIV reinfection / super infection / and sexual behaviour among a diverse sample of HIV-positive men who have sex with men . *J Acquir Immune Defic syndr.* , 990-992.
- crepaz N, M. G. (2002). Towards an understanding of sexual risk behaviour in people living with HIV: a review of social ,psychological ,and medical findings. *AIDS*.2002 , 135-149.
- Dan c, R. R. (2013). DISCLOSURE OF HIV STATUS TO SEXUAL PARETNERS AMONG RANDOM SAMPLE OF AMERICAN SEROPOSTIVE. 1.
- Ethiopia, F. D. (2012). country progress report on HIV/AIDS. Addis Abeba.
- FHAPCO. (July 2011- June 2012). Multi-sectoral HIV/AIDS Response Monitoring and Evaluation report.
- Garko, S. (2007). sexual and family planning practices and needs of people living with HIV/AIDS in nigeria. a rapid ethinographic assessment,2007:*Annals of African medicine* , 6{3}:124-127.
- king, R. a. (2008). process and outcomes of HIV sero-status disclosure to sexual partners among people living with HIV in uganda. *AIDS Behaviour journal* 12 , 232-243.



luchters S, S. A. (August 29,2007). sexual risk behavior of persons ART .

Myer L, e. a. (2010). Impact of antiretroviral therapy on incidence of pregnancy among HIV-infected women in sub-saharan Africa. A cohort study.PLoS Med , , 7{2} .

Myer L, M. C. (2007). prevalence and determinants of fertility intentions of HIV-infected women and men receiving antiretroviral therapy in south Africa. AIDS pat care STDs , 21{4}:278-285.

Parker, R. (2001). sexuality and culture ,and power in HIV/AIDS Research. In Annual Review Anthropology 30 (pp. 163-79).

SC, I. (2009). sexual and reproductive decisions and experiences of women living with HIV/AIDS in Abuja,Nigeria.

Strebel, A. C. (2009). sexual aspects of HIV/AIDS and health /SAHA/:four-country report on formative research into the development of HIV behavioural risk reduction intervention for PLWHA,Botswana,Lesotho,south Africa and swaziland. Human sciences Research Council / HSRC/.

Taraphdar, e. a. (2007). Disclosure among people living with HIV/AIDS. Indian journal of community Medicine 32(4) , 280-282.

Wong, L. a. (2009). correlates and consequences of testing and disclosure of HIV status in south Africa. Journal of Acquired immune deficiency syndome 50(2) , 215-222.

# **ANNEX**

## **TOOLS OF DATA COLLECTION**

### **Annex I: Information Sheet and Consent Form**

This Information Sheet and Consent Form are prepared for HIV/AIDS patients who are on ART and eligible to participate in this Research Project in Arba Minch town, Gamo Gofa Zone.

#### **Information sheet**

Title of the study: Risky sexual practices and associated factors among HIV positive people attending ART clinic at public health facilities in Arba Minch town, Gamo Gofa Zone

Name of Principal Investigator: Tsigereda Belay

**Name of the Organization:** INDIRA GANDY NATIONAL OPEN UNIVERSITY

#### **Introduction**

This information sheet is prepared with the aim of assessing the risky sexual practices and associated factors among people living with HIV who are attending ART-clinic at public health facilities in A/Minch town, Gamo Gofa Zone.

#### **Purpose of the Research Project**

The aim of this study is to assess the magnitude of risky sexual practices and factors affecting sexual practice among HIV patients who are on ART.

The study shows the gap of safer sexual practices in HIV patients who are on ART which are a potential source of HIV infection. Therefore, the results of this study will be used to design

appropriate intervention programs to address risky sexual practices among HIV patients who are on ART.

### **Procedure**

The health facilities providing ART services to HIV patients and you are one of the service customers. Therefore, you are randomly selected to be one of the study participants if you are willing to take part in this study and we kindly invite you to take part in the study. If you are willing to participate, we are so happy and we need you to clearly understand the aim of this study and to sign the consent form. Finally you are kindly requested to give your genuine response during the interview.

### **Benefits, Risk and /or Discomfort**

By participating in this research project you may feel some discomfort in wasting your time (a maximum of 20 minutes). However, your participation is definitely important to identify the factors associated with risky sexual practices among HIV patients who are on ART so as to design appropriate prevention strategy of HIV/AIDS in those who are already living with the virus and taking ART. There is no risk or direct benefit in participating in this research project

### **Incentives/Payments for Participating**

You will not be provided with any incentives or payments to take part in this project.

### **Confidentiality**

The information collected from you will be kept confidential and stored in a file, without your name by assigning a code number to it. And hence no report of the study ever identifies you.

**Right to Refusal or Withdraw**

You have the full right to refuse from participating in this research. You have also the full right to withdraw from this study at any time you wish.

**Person to contact**

If you have any question regarding research project you can contact below mentioned individual and you may ask at any time you want.

Name: Tsigereda Belay

Email: belaytsigereda1979@gmail.com

Tel. +2510468810824

Mobile - 0911561701

## Questionnaire: English Version

### Part I. Socio-demographic characteristics

NUMBER	QUESTIONS	RESPONSE
101	Sex	1. Male 2. Female
102	Age in complete years	_____
103	Educational status	1. Uneducated/illiterate 2. primary ( 1-8) 3. secondary Level 4. Diploma 5. Bachelor and above
104	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other (specify)_____
105	Ethnicity	1. Gamo 2. Gofa 3. Wolayta 4. Oromo 5. Amhara 6. Tigre 6. Others _____
106	Your residence	Urban 2. Peri urban
107	Your current occupation	1. Government employee 2. Private employee 3. House wife 4. Daily laborer 5. Housemaid/servant 6. Merchant 7. Commercial sex worker 8. Others(specify)_____
108	Your average monthly income	1. _____ Eth. Birr 2. No income 3. Don't know 4. Other(specify)_____

**Part II: Sexual behavior before tested positive, time of tested and of started for ART**

NUMBER	QUESTIONS	RESPONSE
201	Where were you tested when you first discovered you were HIV positive?	In this health facility Out-reach Others(specify)_____
202	By which HIV counseling and testing approach was you tested?	1. VCT 2. PIHCT 3. PMTCT 4. Other(specify)_____
203	How long is it since you tested positive for HIV/AIDS?	_____months, _____years
204	How long is it since you have started ART?	_____months, _____ Years
205	What was your marital status by the time you knew your HIV status?	1. Married 2. Single 3. Divorced 4. Widowed
206	How many sexual partner/s did you have before you tested positive for HIV?	1. One sexual partner 2. Two sexual partner 3. Three or more sexual partner
207	Did you use condom before you Know your HIV status?	1. Yes 2. No
208	If your answer is yes for Q 207, how frequently did you use condom?	1. Always            2. Almost always 3. About half of the time 4. Not very often 5. Almost never

**Part III: Questions assessing sexual practices of HIV patients currently on ART**

<b>NUMBER</b>	<b>QUESTIONS</b>	<b>RESPONSE/CODING CATEGORY</b>	
301	What is your current marital status?	1. Single 2. Married	3. Widowed 4. Divorced
302	With how many partners did you have sex in the last three months?	1. One 2. Two 3. Three	4. Four 5. Five 6. More than five
303	If your answer is 1 for Q 302, identify the kind of partner you have had	1. Primary/steady partner 2. Causal partner	
304	If your answer is 2 or more for Q 302, identify the kind of partners whom they are?	1. Steady partner/s 2. Causal partner/s	3. Mixed ( steady with casual)
305	How long have you stayed with your current regular partner?(for those who have steady partner)	_____months_____ years	
306	What has your sexual desire seems after you started ART?	1. Desired is improved compared to before 2. Desire is normal as before 3. Desire is decreased as compared to before	
307	Did you use condom in the last three months?	1. Yes 2. No	If 2, SKIP to Q 309

308	If yes to Q 307, how often you used condom?	<ol style="list-style-type: none"> <li>1. Always</li> <li>2. Almost always(more than half)</li> <li>3. Sometimes(half)</li> <li>4. Almost never/never</li> </ol>	If 1, SKIP to Q 311
309	If your answer is 2 for Q 307 and either of 2,3 or 4 for Q308 ; with whom you didn't use condom?(more than one answer is possible)	<ol style="list-style-type: none"> <li>1. Causal partner</li> <li>2. Steady partner</li> <li>3. In both types of partner</li> </ol>	
310	If your answer is 2 for Q 307 and either of 2, 3, or 4 for Q 308; what were the reasons for not using condom always? (multiple response is possible)	<ol style="list-style-type: none"> <li>1. My partner/s did not want to use a condom</li> <li>2. My partner/s already had HIV</li> <li>3. Sex doesn't feel the same with a condom</li> <li>4. Didn't have a condom available</li> <li>5. I fear to ask my partner to use condom</li> <li>6. Thought my partner didn't have STI</li> <li>7. Was drunk and didn't think of condom use</li> <li>8. Wanted to have a child</li> <li>9. Did not know condoms could reduce the risk of re-infection</li> <li>10. Condom is against my religion</li> <li>11. I didn't use because I am infected</li> </ol>	



		12. Other(specify)_____		
311	Have you used a condom at your last sexual encounter?	1. Yes 2. No		
312	Did you discuss about using condoms and safe sex with your partner?	1. Yes    2. No    3. Partly		
313	What is/are the HIV sero-status of the person/s with whom you had sex in the last 3 months? (interviewer will check for the Q 303 response)	For one partner	For more than one partner	
		1. Negative 2. Positive 3. Don't know (more than one answer is possible)	With condom	Without condom
			1.Negative/s 2.Positive 3.Don't known (More than 1 Answer is possible)	1. Negative/s 2. Positive 3. Don't known More than 1 answer is possible)
314	Have you disclosed your sero-status to your partner?	1. Yes    2. No    3. Partly		

**Part IV: knowledge, behavioral and psychosocial related questions**

NUMBER	QUESTIONS	RESPONSE/CODING CATEGORY
401	Is there reduced concern to practice safe sex because of ART?	1. Yes 2. No
402	Currently are you member of PLHIV association?	Yes 2. No
403	During the last 3 months have you ever drunk alcohol?	1. Yes 2. No
404	If your answer for Q 403 is yes; how many times per week have you consumed in the last week	1. Once per week 2. Twice per week 3. 3 times per week 4. 4 times per week 5. 5 times per week 6. 6 times per week 7. 7 times per week 8. Above 7 times per week
405	Do you have any substance addiction?	1. Yes 2. No
406	If your answer is yes for Q 405; with which of the following substances you are	1= once or less per week

	addicted or using (multiple answer is possible).	2= twice per week 3= 3 times per week 4= 4 times per week 5= above 4 times per week				
	Chat	1	2	3	4	5
	Smoking	1	2	3	4	5
	Hashish	1	2	3	4	5
	Others (specify)-----	1	2	3	4	5
407	Knowledge regarding the harmful health effects of high risk sexual practices; safer sex pleasure and effectiveness	1= strongly agree 2= agree 3= don`t know 4= disagree 5= strongly disagree				
407.1	Getting infected with another strain of HIV would cause little additional harm to my health	1	2	3	4	5
407.2	It would be more difficult to treat my HIV disease if I got another strain of HIV	1	2	3	4	5
407.3	If my viral load is very low, I do not need to be concerned about infecting a person I have sex with, even if we have sex without using a condom	1	2	3	4	5

407.4	Getting infected with a sexually transmitted disease would cause little additional harm to my health	1	2	3	4	5
407.5	The use of condoms makes sex more stimulating	1	2	3	4	5
407.6	Condoms ruin the sex act	1	2	3	4	5
407.7	Condoms are uncomfortable for both partners	1	2	3	4	5
407.8	Condoms are an effective method for preventing the spread of HIV and other sexually transmitted diseases	1	2	3	4	5
407.9	I think condoms are an excellent means of protection from HIV infection	1	2	3	4	5
407.10	Condoms are unreliable	1	2	3	4	5

Thank you very much for your participation in the study!

**የመረጃ እና ስምምነት ውል ቅጽ(Amharic version)**

በጋሞ ጎፋ ዞን በአርባ ምንጭ ከተማ ቫይረሱ በደማቸው ያለባቸውና የፀረ-ኤች አይ ቪ ቫይረስ መድሀኒት በአርባ ምንጭ ሆስፒታል እና በስቀላ ጤና አጠባበቅ ጣቢያ በመከታተል ላይ ያሉትን ሰዎች የወሲብ ህይወትና ተያያዥ ጉዳዮች መዳሰስ በሚለው የምርምር ፕሮጀክት ተሳታፊ ለሚሆኑት የተዘጋጀ የመረጃ እና የስምምነት ውል ቅጽ ነው።

የምርምሩ ርዕስ : በጋሞ ጎፋ ዞን በአርባ ምንጭ ከተማ ቫይረሱ በደማቸው ያለባቸውና የፀረ-ኤች አይ ቪ ቫይረስ መድሀኒት በጤና ተቋማት በመከታተል ላይ ያሉትን ሰዎች የወሲብ ህይወትና ተያያዥ ጉዳዮች ይመለከታል።

የዋና ተማራማሪው ስም: ጽጌረዳ በላይ

የድርጅቱ ስም: ኢግኑ

ይህ የመረጃ እና የስምምነት ውል ቅጽ የተዘጋጀው በጋሞ ጎፋ ዞን በአርባ ምንጭ ከተማ ቫይረሱ በደማቸው ያለባቸውና ፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት በመከታተል ላይ ባሉ ህመምተኞች የወሲብ ህይወት እና ተያያዥ ጉዳዮችን በሚመለከት የሚደረግ ጥናት እርስዎ ተሳታፊ እንዲሆኑ ስለተጋበዙበት የእርስዎን ፈቃደኝነት ለማወቅ ነው።

**ጥናቱ የሚካሄድበት ምክንያት**

የጥናቱ አላማ በአብዛኛው ቫይረሱ በደማቸው ያለባቸውና ፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት በመከታተል ላይ ያሉ ህመምተኞች ጥንቃቄ የጎደለው ወሲብ እየፈጸሙ በመሆናቸው ተያያዥ ጉዳዮችን ለማወቅና ከጥናቱ ግኝት በመነሳት ትክክለኛ የሆነ የመፍትሄ አቅጣጫ እንዲነደፍ ለማድረግ ነው።

**አተገባበር**

ይህ ጥናት ፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት የሚወስዱ ህመምተኞችን የሚያካትት ሲሆን እናንተ የተመረጣችሁት በእጣ በመሆኑና በጥናቱ ላይ ይተባበሩና ልብለን ስላመንን ነው። እርስዎ በዚህ ጥናት ለመሳተፍ ፈቃደኛ የሚሆኑ ከሆነ ተሳታፊ በመሆንዎ በጣም ደስተኞች ስንሆን እርስዎ የጥናቱን ዓላማ በግልጽ እንዲረዱ እና የስምምነት ውሉን እንዲፈርሙልን እንፈልጋለን። በዚህም መሠረት የሚሰጠዎትን መጠይቅ በመሙላት እንዲተባበሩን በአክብሮት እንጠይቃለን።

**ጥቅም/ጉዳት/ አለመመቻት**

እርስዎ በጥናቱ ተሳታፊ በመሆንዎ ጊዜዎን ሊያባክኑ ይችላሉ። መጠይቁን ለመሙላት ቢበዛ 20 ደቂቃ ይወስድብዎታል። ቢሆንም እንኳ ፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት በመከታተል ላይ ያሉ ህመምተኞች በወሲብ ህይወታቸው ዙርያ ራሳቸውን ለመጠበቅ የሚያደርጉት ጥንቃቄ ምን ደረጃ ላይ እንዳለ ማጥናት አስፈላጊ በመሆኑና የምትሰጡትም መልስ ወደ ፊት ለሚደረጉ ምርምሮችና የመከላከል ስልት ለመንደፍ ትልቅ አስተዋጽኦ ስለሚያደርግ ጊዜዎን ሰጥተው ትክክልና ተገቢውን መልስ እንድሰጡ እንጠይቃለን።

**ጥቅሞች**

እርስዎ በዚህ ጥናት ተሳታፊ በመሆን በቀጥታ ሊያገኙት የምችሉት ጥቅም ባይኖርም የእርስዎ ተሳትፎ ፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት የሚወስዱ ህመምተኞች ኮንደም አጠቃቀም እና የወሲብ ባህሪ ምን እንደሚመስል ለመለየት ይጠቅማል።

**ጥቅማ ጥቅም**

በዚህ ጥናት ተሳታፊ በመሆንዎ ምንም ዓይነት ማበረታቻ ወይም ክፍያ አይሰጥዎትም

**ምስጥራዊነት**

ለዚህ የጥናት ፕሮጀክት የሚሰበሰበው መረጃ የግል ጉዳያችሁን ያካተተ በመሆኑ ማንምን መልስ እንደሰጠ/ች ምስጥር እንዲሆን ጥንቃቄ ተደርጎበታል። ለዚህም ሲባል በመጠይቁ ላይ ስምም ሆነ የመታወቂያ ቁጥር አይጻፍም።

**በጥናቱ ያለመሳተፍ ወይም የማቋረጥ መብት**

በዚህ ጥናት ያለመሳተፍ መብትዎ ሙሉ በሙሉ የተጠበቀ ነው። ለጥያቄዎቹ በሙሉም ሆነ በከፊል መልስ አለመስጠት ይችላሉ። እንዲሁም በማንኛውም በፈለጉት ሰዓት ማንኛውንም የአገልግሎት መብትዎን ሳያጡ የማቋረጥ ሙሉ መብት አለዎት።

**ማግኘት የሚችሏቸው ሰዎች**

በጥናቱ ዙሪያ ምንም ዓይነት ጥያቄ ካለዎት ከዚህ ቀጥሎ የተጠቀሰውን ግለሰብ ማግኘትና በማንኛውም ጊዜ መጠየቅ ይችላሉ።

ስም- ጽጌረዳ በላይ

ሞባይል - 0911561701

ስልክ - 0468810824

ኢ-ሜል - [belaytsigereda1979@gmail.com](mailto:belaytsigereda1979@gmail.com)

**የስምምነት ውል ቅጽ**

እንደምን አደራችሁ/ዋላችሁ እኔ ጽጌረዳ በላይ በአ/ምንጭ በቅድስት ማርያም ዩኒቨርሲቲ ኮሌጅ በኢግኖ የርቀት ትምህርት ክፍል የሶሻል ወርክ የማስተርስ ድግሪ የመጨረሻ ዓመት ተማሪ ስሆን ይህ ምርምር/ ጥናት ቫይረሱ በደማቸው ያለባቸውና ፀረ-ኤች አይ ቪ ቫይረስ መድኃኒት በጤና ተቋማት በመከታተል ላይ ያሉህ መምተኞች ጥንቃቄ የጎደለው የወሲብ ህይወት እና ተያያዥ ጉዳዮች በሚመለከት መዳሰስ ይሆናል። የጥናቱ አስፈላጊነትም በአሁኑ ሰዓት የቫይረሱ ስርጭት ያልተገታ በመሆኑና ለዚህም ቫይረሱ በደማቸው ያለባቸው ህመምተኞች የወሲብ ህይወት ማወቅ መንግስት ለሚያቅዳቸው የጤና ተግባራት በቂ መረጃ ስለሚሰጥና ህመምተኞች ተፈላጊውን የጤና አገልግሎት ማግኘት እንድችሉ አስተዋጽኦ ስለሚያደርግ ነው።

በአጠቃላይ እናንተ የተመረጣችሁት በእጣ ሲሆን መጠይቁ ቢበዛ 20 ደቂቃ ይፈጃል። የምትመልሱት መጠይቅ የግል ጉዳዮችሁን ያካተተ በመሆኑ ማንምን መልስ እንደሰጠ/ች ምስጥር እንዲሆን ጥንቃቄ ተደርጎበታል። ለዚህም ሲባል በመጠይቁ ላይ ስምም ሆነ የመታወቂያ ቁጥር አይጻፍም። በጥናቱ መሳተፍና ለሁሉም መጠይቆች መልስ መስጠት ለውጤቱ መስመር እጅግ አስፈላጊ ቢሆንም መመለስ የማይፈልጉት ጥያቄ ካለ ወይም በከፊልም ሆነ ሙሉ በሙሉ በጥናቱ ያለመሳተፍ ከፈለጉ ሙሉ መብትዎ የተጠበቀ ነው።

ምንም እንኳ አንዳንድ ጥያቄዎች የግል ህይወትዎንና ምስጥርዎን የሚነኩ ቢሆንም ለጥናቱ ስኬት ሲባል ትክክልና እውነተኛ መልስ እንዲሰጡ እንጠይቃለን።

ጥያቄ አለዎት?

መጠይቁን መጀመር እንችላለን? 1. አው 2. አይደለም

እናመሰግናለን።



**ክፍል አንድ፡ አጠቃላይ መረጃ**

ተ.ቁ	መጠይቅ	አማራጭ
101	የተጠያቂው ጾታ	1. ወንድ      2. ሴት
102	እድሜህ/ሽ ስንት ነው?	\ _____ \
103	የት/ት ደረጃዎ ስንት ነው?	1. ማንበብ እና መጻፍ እማልችል/ያልተማረ 2. የመጀመሪያ ደረጃ (1-8) 3. ሁለተኛ ደረጃና ከዚያ በላይ
104	የምትከተለው ሃይማኖት ምንድን ነው?	1. ኦርቶዶክስ 2. እስላም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌሎች (ጥቀስ) _____
105	ብሄርህ/ሽ ምንድን ነው?	1. ጋሞ   2. ጎፋ   3. ወላይታ   4. ኦሮሞ 5. አማራ   6. ትግሬ   6. ሌሎች _____
106	የመኖሪያ አካባቢህ/ሽ የትኑው?	ከተማ      2. ከተማ ዙሪያ
107	ሥራህ/ሽ ምንድን ነው?	1. የመንግስት ሠራተኛ 2. የግል ድርጅት ሠራተኛ 3. የቤት እመበት 4. የቀን ሥራ 5. የቤት ሠራተኛ 6. ነጋዴ 7. ሴተኛ አዳሪ 8. ሌሎች(ጥቀስ) _____
108	የወር ገቢህ ስንት ነው?	1. _____ ኢ.ት. ብር 2. ገቢ የለኝም 3. አላቀውም 4. ሌሎች (ጥቀስ) _____

**ክፍል ሁለት**

የፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት ተጠቃሚዎች ቫይረሱ በደማቸው ከመገኘቱ በፊት ወሲባዊ ህይወታቸው ምን እንደሚመስልና የፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት አጀማመርና የቆይታ ጊዜን በተመለከተ፤

ተ.ቁ	መጠይቅ	አማራጭ	
201	ለመጀመሪያ ጊዜ ኤች አይ ቪ ደመዎት ውስጥ ሲገኝ የት ተመረመሩ?	1. በጤና ተቋም 2. ሌላ (ይጠቀስ) _____	
202	በየትኛው የምክክርና ምርመራ አገልግሎት ተመረመሩ?	1. VCT 2. PIHCT/OPD 3. PMTCT 4. ሌላ (ይጠቀስ) _____	
203	ኤች አይ ቪ በደመዎት ውስጥ እንዳለ ካወቁ ስንት ጊዜ ሆነዎት?	_____ ወር፣ _____ ዓመት	
204	ፀረ-ኤች አይ ቪ መድሀኒት ከጀመሩ ስንት ጊዜ ሆነዎት?	_____ ወር፣ _____ ዓመት	
205	ኤች አይ ቪ ፖዌቲቭ መሆንዎን ሲያውቁ የጋብቻ ሁኔታዎ እንዴት ነበር?	1. ያገባ/ች 2. ያላገባ/ች 3. የፈታ/ች 4. ሚስቱ/ባሏ የሞተችበት/ የሞተባት	
206	ኤች አይ ቪ ፖዌቲቭ መሆንዎን ሳያውቁ በፊት ስንት የወሲብ ጓደኛ ነበረዎት?	1. አንድ 2. ሁለት 3. ሶስት እና ከዚያ በላይ	
207	ኤች አይ ቪ ፖዌቲቭ መሆንዎን ሳያውቁ በፊት ኮንደም ይጠቀሙ ነበር?	1. አዎ 2. አልጠቀምም	2፣ ከሆነ ወደ ጥያቄ ቁ 301
208	ለጥያቄ ቁ. 207 መልስዎ አዎ ከሆነ ምን ያህል ይጠቀሙ ነበር?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ ( ከግማሽ በላይ) 3. አልፎ አልፎ ( ግማሽ) 4. ጥቂት ጊዜ 5. በጣም ጥቂት ጊዜ	

**ክፍል ሶስት**

በመጠይቁ ወቅት ፀረ-ኤች አይ ቪ መድሀኒት ክትትል የሚያደርጉት የወሲብ ህይወታቸውን

የሚዳስሱ መጠይቆች፣

ተ.ቁ	መጠይቅ	አማራጭ
301	በአሁኑ ጊዜ የጋብቻ ሁኔታ/ሽ ምንድን ነው?	1. ያላገባ            3. የፈታ/ች 2. ያገባ             4. የሞተበት/ባት
302	ባለፉት 3 ወራት ውስጥ ከምን ያህል ሰዎች ጋር የግብረሰጋ ግንኙነት ፈጽመዋል?	1. አንድ            4. አራት 2. ሁለት          5. አምስት 3. ሦስት          6. ከ 5 በላይ
303	ለጥያቄ ቁ. 302 መልስዎ 1 ከሆነ ከምን አይነት ጓደኛ ጋር ነው? መደበኛ፡- ባል፣ ሚስት፣ አብሮ የቆየ የሴት/የወንድ ጓደኛ አጋጣሚ፡- ከመደበኛ ጓደኛ ውጭ የተፈጸመ ወሲባዊ ግንኙነት	1. መደበኛ ጓደኛ 2. መደበኛ ያለሆነ ጓደኛ
304	ለጥያቄ ቁ. 302 መልስዎ 2 እና ከዚያ በላይ ከሆነ የጓደኞች ዓይነታቸውን ይግለጹ	1. መደበኛ የወሲብ ጓደኞች 2. ድንገተኛ የወሲብ ጓደኞች 3. ቅልቅል (መደበኛና ድንገተኛ)
305	ካሁኑ መደበኛ የወሲብ ጓደኛዎ ጋር ምን ያህል ጊዜ ቆይተዋል?	_____ ወር፣ _____ ዓመት
306	ፀረ- ኤች አይ ቪ ቫይረስ መድሀኒት መጠቀም ከጀመሩ ወዲህ የወሲብ ፍላጎትዎ እንዴት ነው?	1. የወሲብ ፍላጎት ከበፊቱ ጨምሯል 2. የወሲብ ፍላጎት ከበፊቱ ጋር አንድ ነው 3. የወሲብ ፍላጎት ከበፊቱ ቀንሷል
307	ባለፉት 3 ወራት በነበረዎት የግብረ ሥጋ ግንኙነት ወቅት ኮንደም ይጠቀሙ ነበር?	1. አዎ 2. አይደለም
308	ለጥያቄ ቁ. 307 መልስዎ አዎ ከሆነ አጠቃቀመዎት እንዴት ነበር?	1. ሁል ጊዜ 2. አብዛኛውን ጊዜ (ከግማሽ በላይ) 3. አልፎ አልፎ (ግማሽ) 4. ጥቂት ጊዜ 5. በጣም ጥቂት ጊዜ
309	ለጥያቄ ቁ. 308 መልስዎ 2 እና ከዛ በላይ ከሆነ ከየትኛው የወሲብ ጓደኛዎ ጋር ኮንደም ያልተጠቀሙት?	1. መደበኛ የወሲብ ጓደኛ ጋር 2. ድንገተኛ የወሲብ ጓደኛ ጋር 3. ሁለቱም ጋር

310	ኮንደም ያልተጠቀሙበት ምክንያት ምንድን ነው ?	1. ጓደኛዬ ኮንደም መጠቀም ስላልፈለገ/ች 2. ጓደኛዬ ፖዬቲቭ ስለሆነ/ች 3. ኮንደም መጠቀም የወሲብ ስሜት ስለሚቀይር 4. ኮንደም ስላላገኘን 5. ጓደኛዬን ኮንደም እንድንጠቀም ለመጠየቅ በመፍራት 6. ጓደኛዬ የአባላዘር በሽታ የለውም ብዬ ስላሰብኩ 7. ጠጥተን ስለነበረ ኮንደም መጠቀም አላሰብንም 8. ልጅ መውለድ ስለፈለግን 9. ከዚህ በኋላ ኮንደም ኤች አይ ቪን በይበልጥ እንደሚከላከል ስለማላውቅ 10. ኮንደም በሀይማኖት ተቀባይነት ስለሌለው 11. አንዴ ስለተያዘኩኝ ኮንደም አልጠቀምም 12. ሌላ (ይጠቀስ)_____		
311	በመጨረሻ የወሲብ ግንኙነት ጊዜ ኮንደም ተጠቅመው ነበር?	1. አዎን 2. አልተጠቀምኩም		
312	ስለኮንደምና ጥንቃቄ ስለተሞላበት የወሲብ ግንኙነት ከወሲብ ጓደኛዎ ጋር ይወያያሉ ወይ?	1. አዎ 2. አንወያይም 3. አንዳንዴ እንወያያለን		
313	ባለፉት ሶስት ወራት ውስጥ የወሲብ ግንኙነት አብረው የፈጸሙት ሰው ኤች አይ ቪ ሁኔታ ምንድን ነው? ( ለጥያቄ ቁጥር 303 የተሰጠው መልስ ጋር ያስተያዩ)	አንድ የወሲብ ጓደኛ ላላቸው  1. ነገቲቭ 2. ፖዬቲቭ 3. አላውቅም	ከአንድ በላይ የወሲብ ጓደኛ ላላቸው  በኮንደም 1. ነገቲቭ 2. ፖዬቲቭ 3. አላውቅም (ከሁለት በላይ መልስ ይቻላል)	ያለኮንደም 1. ነገቲቭ 2. ፖዬቲቭ 3. አላውቅም (ከሁለት በላይ)
314	ቫይረሱ በደመዎት ውስጥ መኖሩን ለወሲብ ጓደኛዎ ገልጸው ነበር?	1. አዎን 2. አይደለም 3. በክፊል		

**ክፍል አራት**

ህመማን ጥንቃቄ የተሞላበት ወሲባዊ ግንኙነት ላይ ያላቸው አመለካከት፣ ባህሪ እና የጤና ሁኔታን የተመለከተ መጠይቅ

ተ.ቁ	መጠይቅ	አማራጭ
401	የፀረ-ቫይረስ መድሃኒት መውሰድ በመጀምርዎ ምክንያት ጥንቃቄ የተሞላበት ወሲብ ቀንሷል ?	1. አዎን ቀንሷል 2. አልቀነሰም
402	በአሁኑ ሰዓት የፖዬቲቮች ማህበር አባልነት/ሽ?	1. አዎ 2. አይደለሁም
403	ላለፉት 3 ወራት ጠጥተህ ታውቃለህ ወይ?	1. አዎ 2. አልጠጣሁም
404	ለጥያቄ ቁ. 403 መልስዎ አዎ ከሆነ በባለፈው ሳምንት ምን ያህል ጊዜ ጠጣህ/ሽ?	1. 1 ጊዜ በሳምንት 2. 2 ጊዜ በሳምንት 3. 3 ጊዜ በሳምንት 4. 4 ጊዜ በሳምንት 5. 5 ጊዜ በሳምንት 6. 6 ጊዜ በሳምንት 7. 7 ጊዜ በሳምንት 8. ከ 7 ጊዜ በላይ በሳምንት
405	ሌላ ሱስ አለዎት ወይ?	1. አዎ 2. የለኝም
406	ለጥያቄ ቁ. 405 መልስዎ አዎ ከሆነ የትኛው ሱስ ነው ያለበዎት?	1= አንድ ወይም ከዚያ በታች በሳምንት 2= 2 ጊዜ በሳምንት 3= 3 ጊዜ በሳምንት 4= 4 ጊዜ በሳምንት 5= ከ 4 ጊዜ በላይ በሳምንት

406.1	ጫት	1	2	3	4	5
406.2	ሲጋራ	1	2	3	4	5
406.3	ሃሺሽ	1	2	3	4	5
406.4	ሌላ (ይጠቀስ)-----	1	2	3	4	5
407	ስለ ጥንቃቄ የጎደለው ወሲብ መዘዞች ያላቸው ግንዛቤ፣ ጥንቃቄ የተሞላው ወሲብ ስለሚሰጣቸው ደስታ እና ስለኮንደም አስተማማኝነት ያላቸውን ግንዛቤ በተመለከተ	1= በጣም እስማማለሁ 2= እስማማለሁ 3= አላውቅም 4= አልስማማም 5= በጣም አልስማማም				
407.1	በደሜ ውስጥ ካለው ቫይረስ ሌላ የቫይረስ ዝርያ ብጠቃለ ጤናዬ ምንም ተጨማሪ ጉዳት የለውም	1	2	3	4	5
407.2	በደሜ ውስጥ ካለው ቫይረስ ሌላ የቫይረስ ዝርያ ቢጠቃ የፀረ-ቫይረስ መድሃኒት ህክምና አስቸጋሪ ይሆናል	1	2	3	4	5
407.3	በደሜ ውስጥ ያለው ቫይረስ መጠን ዝቅተኛ ከሆነ ያለ ኮንደም ወሲብ ብንፈጸም እንኳን ቫይረሱ ወደ ጓደኛዬ ይተላለፋል ብዬ አላስብም	1	2	3	4	5
407.4	በአባላዎ ዘር በሽታ ቢጠቃለ ጤናዬ ምንም ተጨማሪ ጉዳት የለውም	1	2	3	4	5
407.5	በወሲብ ቅት ኮንደም መጠቀም የወሲብ ስሜትን የበለጠ ይጨምራል	1	2	3	4	5
407.6	ኮንደም ወሲብን ያበላሻል	1	2	3	4	5
407.7	ኮንደም ለሁለቱም የወሲብ ጓደኞች ምቹ አይደለም	1	2	3	4	5
407.8	ኮንደም መጠቀም ኤች አይ ቪንና አባላዎ በሽታን ለመከላከል አስተማማኝ መንገድ ነው	1	2	3	4	5
407.9	ኮንደም መጠቀም ኤች አይ ቪን ለመከላከል ዋና መንገድ ነው ብዬ አስባለሁ	1	2	3	4	5
407.10	ኮንደም አስተማማኝ አይደለም	1	2	3	4	5

አመሰግናለሁ!

**PROFORMA FOR SUBMISSION OF MSW PROJECT PROPOSAL FOR  
APPROVAL FROM ACADEMIC COUNCELLOR AT STUDY CENTRE**

**Enrollment No:** ID1114956

**Date of submission:** March 2016

**Name of the study center:** St. Mary's University (8105)

**Name of the guide:** Mosisa Kejela

Title of the project: RISKY SEXUAL PRACTICES AND ASSOCIATED FACTORS OF ART  
ATTENDING HIV POSITIVE PEOPLE: THE CASE OF PUBLIC HEALTH FACILITIES IN  
ARBA MINCH TOWN, SOUTH ETHIOPIA

Signature of the student: .....

Approved / not approved

Signature -----Name and Address of the student:

Name and address of the guide -----Tsigereda Belay Dibu-----Date: April 2016

## Contents

1. Introduction.....	2
2. Statement of the problem .....	4
3. Objectives.....	3
4. Research questions.....	5
5. Significance of the study.....	5
6. Universe of the study.....	6
7. Sample.....	6
8. Tools for data collection.....	8
9. Data Analysis.....	8
10. Chapter plan.....	8
11. References.....	9



## **Introduction**

HIV continues to be a major global public health issue, having claimed more than 25 million lives over the past three decades. With a majority of new infections occurring in Sub-Saharan Africa, there were approximately 35.3 [32.2–38.8] million people living with HIV in 2013 globally. Sixty nine percent of all people living with HIV are living in this region(UNAIDS, 2012).

The total number of people living with HIV in Ethiopia was estimated to be 789,900 with single point estimate of HIV prevalence of 4.2% in urban and 0.6% in rural for year 2010. With regard to sexual activity in general, a Ugandan study revealed that, 45% of women on ART were sexually active one year prior to this study period(et:al, 2009).

Study done in South Africa indicated that the more sexually active PLHIV on ART become, the higher the possibility of re-infection especially if safer sex is not practiced. With the improved rollout of antiretroviral therapy in many resource-limited settings, such as Ethiopia, and ARVs potential to prolong the lives of PLHIV, understanding the sexual behavior of PLHIV on antiretroviral therapy is essential to curbing secondary HIV transmission. The same study observed that among populations where ART is being introduced, such as in southern Africa, ARV use is associated with increased risky sexual behavior(etal, 2008).

With an estimated of 789,900 (77% adult) people living with HIV in Ethiopia, little is known why, when and under what conditions PLHIV practice risky sexual practices. A number of studies were conducted in developing countries and the finding in the majority of these studies revealed that access to ART has not led to significant risky sexual practices.

But understanding the sexual practices of HIV patients who are on ART is critical in the transmission of the disease, because the longer the patient on treatment, the more likely to practice risky sexual practices.

Until recently, the focus of HIV prevention efforts worldwide was largely on people uninfected or with unknown status of HIV. However, many HIV infected patients, now live longer and healthier lives due to widespread availability of antiretroviral therapy (ART). Therefore understanding sexual behavior of groups at risk of transmitting the disease and; as the epidemic continues to evolve, identifying the factors and designing effective secondary HIV prevention interventions is a critical priority for stemming the spread of the virus and improving the long-term quality of life for PLHIV. Therefore, this study will give an implication for local government to design relevant behavioral change interventions based on the study finding with the view of reducing the incidence of new HIV infection in the community.

On top of this, the recommendations from this study will also be helpful for local health planners and stakeholders to consider during their planning for the success of their ongoing control of the pandemic. Besides it enables planners and stake holders to have baseline information and directions for further research activities.

### **Statement of the Problem**

The emergence of HIV epidemic is one of the biggest public health challenges the world has ever observed in recent history. Globally, 34.0 million (31.4 million–35.9 million) people were living with HIV at the end of 2011 and an estimated 0.8% of adults aged 15-49 years worldwide are living with HIV. HIV is one of the most serious public health and development challenges in sub-Saharan Africa. The region remains most severely affected, with nearly 1 in every 20 adults

(4.9%) living with HIV and accounting for 69% of the people living with HIV worldwide. Ethiopia is among the most affected countries in sub Saharan Africa by the epidemic. In Ethiopia, 1.5 percent of adults age 15-49 are infected with HIV and heterosexual contact accounts for the great majority of HIV transmission.

As many as one in three people living with HIV/AIDS continues to practice HIV transmission risk behaviors after testing HIV positive. A study done in Addis Ababa public hospitals showed that almost 37 percent had used condom inconsistently or had never used at all(Agency, 2011).

Since the early days of the epidemic, with a combined effort of different governmental, non-governmental and community based organizations, there is high achievement in averting transmission and accessing HCT, care and treatment services. With the encouraging achievement, the problem still exist leaving nearly 789,900 people living with HIV, more orphaned and high rate of new infection (1.5%). Some researchers had pronounced the sexual behavior of PLHIV in different field of study.

This study is significant in the sense that the unsafe sex practice among ART attending people living with HIV/AIDS impacts in their healthy life realities.

Risky sexual behavior has been an interest of different researchers. Almost all researchers focus area as well as research issues understanding the magnitude and contributing factors for unprotected sexual practice of groups at risk of transmitting the disease .All of them did not pay attention to the magnitude of risky sexual practices and factors affecting sexual practice among HIV patients who are on ART. Therefore this study will show the gap of safer sexual practices in HIV patients who are on ART which are a potential source of HIV infection.

The aim of this study is to assess the magnitude of risky sexual practices and factors affecting sexual practice among HIV patients who are on ART. The study will show the gap of safer sexual practices in HIV patients who are on ART are a potential source of HIV infection. Therefore, the results of this study will be used to design appropriate intervention programs to address risky sexual practices among HIV patients who are on ART.

## **Objectives of the Study**

### **Major Objective**

To assess the risky sexual practices and associated factors among people living with HIV who are attending ART-clinic at public health facilities in Arba Minch town

### **Specific objectives**

- To examine risky sexual practice and associated factors of ART attending people living with HIV/AIDS in Arba Minch town health center and Arba Minch Hospital.
- To identify factors associated with unsafe sex.
- To examine how unsafe sex practice among ART attending people living with HIV/AIDS affect their healthy life realities.
- To provide means of reduction of unsafe sex practices among ART attending HIV Positive people of the study area.

### **Research Questions**

The following research questions will be answered in order to achieve the above objective:

- What are the risky sexual practices and associated factors of ART attending people living with HIV/AIDS in Arba Minch town health center and Arba Minch Hospital?

- How does unsafe sex practice among ART attending people living with HIV/AIDS affect their healthy life realities?
- What are the factors associated with unsafe sex?
- What are the means of reduction of unsafe sex practice?

### **Significance of the study**

Using different approaches and epidemiological apparatuses and instruments in determining the cause-effect relationship of the disease and to come up with effective alternative and ways to control and prevent the proliferation of the disease yet there is no ample study on finding the risky sexual behavior of people living with HIV/AIDS who are on ART.

Some researchers had pronounced the sexual behavior of PLHIV in different field of study. This study is significant in the sense that the unsafe sex practice among ART attending people living with HIV/AIDS influence their healthy life realities. This will help the health sector create more effective programs to prevent the rampant spread of the disease.

### **Universe of the study**

The study will be conducted among HIV patients attending ART clinics in Arba Minch Town, which is a capital city of Gamo Gofa Zone, 505 kms from Addis Ababa. Currently, there is one public hospital and one health center which provide ART services for the town and surrounding districts. The numbers of HIV positive people attending ART in Arbaminch hospital are 2,370 and sikela health center 240, there are a total of 2,610 people on ART.

## Sample size and Sampling procedure

Systematic random sampling will be used to select the study subjects. I have selected this sampling method because this method requires selecting samples based on a system of intervals in a numbered population. For example, I can give a survey to every fourth people that come in to the ART clinic. The fact that I'm giving the survey to every fourth people is what makes the sampling systematic because there is an interval system. Likewise, this is a random sample because I cannot control what number of people comes through the ART clinic per aday.

Two health facilities (one Hospital & one health center) providing ART service will be included in the survey. The sample from hospital and health Centre will be allocated proportionally to the number of clients attending ART clinic at each health facility. Sampling interval for each facility will be determined by dividing the total PLHIV patients in that facility by the allocated sample size. Clients' registration book for ART will be used as sampling frame.

$N$  = total number of people living with HIV who are taking ART in the health center and hospital

$N_1$  = total number of people living with HIV who are taking ART in the hospital

$N_2$  = total number of people living with HIV who are taking ART in the health center

$n$  = total sample size needed for the study

$n_1$  = sample size which will be taken from the hospital

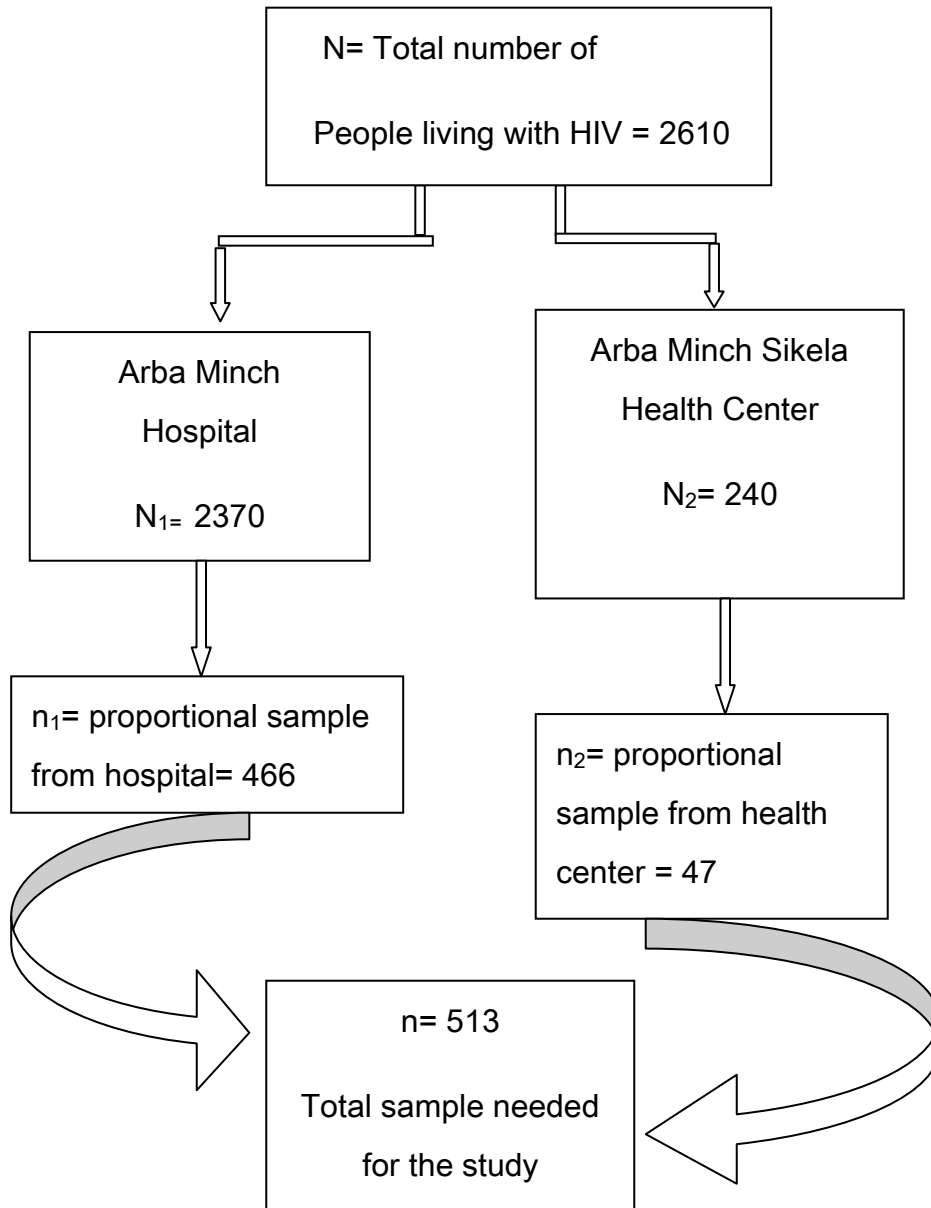
$n_2$  = sample size which will be taken from the health center

$N = N_1 + N_2 = 240 + 2370 = 2610$

$n = n_1 + n_2 = 513$

$$n_1 = N_1n/N = 466$$

$$n_2 = N_2n/N = 47$$



Therefore the final sample size for the study will be 513.

### **Tools for Data collection**

A structured questionnaire containing different components derived from different relevant studies will be used. First, the questionnaire will be prepared in English and then it will be translated into Amharic. The translated back to English to check for consistency; and phrasing of difficult concepts will be undertaken.

**Questionnaire / Interview Schedule:** This method of data collection shall be used to collect data from the peoples living with HIV/AIDS who are on ART. The interview schedules shall contain mostly close ended questions, though some open ended questions shall also be included. The questions in the interview schedule are formulated keeping in mind the objectives.

**Interview Guide:** will be conducted for additional information from nurses in ART clinic, case managers and other stake holders. This may include questions providing information on total number of PLHIV on ART in the health facilities.

**Document Analysis:** The collected data will be cleaned, coded, and entered to Epi info and exported to SPSS for analysis.

### **Data Analysis**

Descriptive statistics will be used to present frequency distributions. Bivariate analysis will be employed to identify factors associated with risky sexual practices. Multiple logistic regression analysis will be performed for those factors which have statistically significant association in bivariate analysis and investigate independent predictors by controlling for possible confounders.



## **Chapter plan**

The first chapter shall be an introduction to the subject matter, in this chapter, an attempt shall be made to describe HIV/AIDS as a global public health issue and risky behaviors of HIV positive people attending ART clinic.

The second chapter shall deal with related literature review. The third chapter shall focus on research design and methodology. The fourth chapter shall deals with analysis and interpretation of the study. The fifth chapter shall give the major findings of the study and conclusions and suggestion.

## References

- Agency, C. S. (2011). *Ethiopia Demographic and Health Survey*. Calverton, Maryland, USA: ICF International.
- et:al, A. (2009). Highly Active Antiretroviral therapy and increased use of Contraceptives among HIV positive women during expanding access to Antiretroviral Therapy. *The American Journal of Public Health*, 99 (2), 340 -347.
- etal, L. (2008). Sexual Behaviour and Reproductive Health Among HIV infected Patients . 58-79.
- UNAIDS, J. U. (2012). *UNAIDS Report on Global AIDS Epidemic* . Geneva: WHO Library Cataloguing-in-Publication Data.

## **CURRICULUM VITAE**

**of**

**MOSISA KEJELA MEGERSA**

**CONTACT:** Mob: +251 911 24 3883 or +251 933707782, E- mail: [mkmegersa@yahoo.com](mailto:mkmegersa@yahoo.com)

### **EDUCATIONAL BACKGROUND:**

- MSW Degree in Social Work, Indira Gandhi National Open University(IGNOU), Maidan Garhi , New Delhi -110068, India , June, 2013.
- BA Degree in Management, Alpha University College, Addis Ababa, Ethiopia, Dec, 2011.
- Diploma in Management, Alpha University College, Addis Ababa, Ethiopia, Dec, 2002.
- BA Degree in Theatre Arts, Addis Ababa University, Addis Ababa, Ethiopia, Jul, 1986.

### **TRAINING:**

- Certificate in Computer Literacy, Ethiopian Science and Technology Commission Training Centre, Addis Ababa, Ethiopia, Feb, 2000.
- Certificate in Gender Project Formulation, Austrian Embassy Development Cooperation (AEDC), Aug, 2000.
- Certificate in the Prevention, Sexual Harassment and Abuse of Authority in the workplace, Online Course, UNDP Certified, Mar 2009.
- Certificate in Ethics Training in Assessment, OnlineCourse, and UNDP Certified, February, 2009.
- Certificate in Gender Journey, Onlinecourse, UNDP Certified, March 2009.
- Certificate in Democratic Governance, Online Course, and UNDP Certified, March 2009.

## **RESEARCH:**

- Assessing Supervision of Social Work Practicum: the case of master of social work of SMU –IGNOU Program Sep., 2017.
- Assessing the Advising of International Programs of St. Mary's University and Indira Gandhi National Open University Masters Programs Sep, 2016.
- The Role of Social Workers in Improving Quality Health Care Services: The Case of ALERT Public Hospital , Sep, 2015.
- MSW Dissertation on Assessment of Women Saving and Credit Cooperative Services in Zuway Dugda District, South East of Ethiopia, May 2013 ,Addis Abba ,Ethiopia.
- Produced community mobilization works on the UN Convention on the Rights of the Child, HIV /AIDS Prevention, Girl Child Education, EPI / ORT, Child Labor and young girl prostitutes.
- Women saving and credit Services: the Case of Zuway Dugda District Published on JBAS Journal of St. May's University, Sep, 2015.

## **WORK EXPERIENCES:**

### **ASST. DEAN, FACULTY OF INTERNATIONAL PROGRAMS ST. MARY'S UNIVERSITY (SMU), ADDIS ABABA, ETHIOPIA, AND APRIL 2014-TO- DATE**

- Responsible to manage the international programmers' conducting of needs assessment , expansion of new programs ,execution of approved programs and coordination of programmes with partners , communication with partner institutions , provision of professional guide to students , establishment of smooth operational of the programmes;

- Provided technical support to social work students on social work field practicum practicing of methods such as casework ,group work ,community organization and community development , social welfare administration , social action and social research ;
- Supervised , mentored and coach the field work practicum placement in healthcare ,education , service and development agencies settings ;
- Advised the students on project proposal preparation , research paper writing, report writing ,communication ,coordination and time management skills ;
- Mentored social work skills of students in dealing with individual, group, and community, and family, home visit that comprise youth, women, community elders and leaders as well as other stakeholders.
- Coordinated academic counseling , tutor marked assignment awarding ,placement of the students in agencies , problem solving with partner agencies , facilitation of teaching and learning process;
- Provided individual and group counseling on the development of students' knowledge, skills, attitude and professional self - development.
- Advised the students on case management, case conferencing and investigation and intervention theories and practices.

**TEAM LEADER/ OPERATIONS OFFICER, UNITED NATIONS MISSION IN SUDAN (UNMIS). OCT 2010-MAR 2011**

- Responsible for two counties to identify and develop strategic partnerships with government, corporate sector, civil society and donors, volunteer placements, support of volunteers and building networks;

- Responsible to prepare operational plan , implementation , monitoring , evaluation , and reporting of the referendum programmes activities ;
- Coordinate technical support provision to governmental and non- governmental organizations , volunteers and other partner organizations in implementation of referendum project;
- Ensure the smooth –functioning of placement development and volunteer management systems and process ,within the county and the state programme office ;
- Ensure smooth implementation of field operations effectively by addressing policy guidance, logistics, and other project needs as per SOP;
- Facilitate the training of different community members such as youth and women ,community leaders and elders to actively involve them in development programmes through empowerment;
- Plan, organize and coordinate, implement ,monitor ,evaluate and report capacity building training with the objective of attaining high slandered of performance in accordance with policies and guidance of the UN Mission in Sudan ;
- Supervise teams in the County and provide overall team leadership and guidance for the team activities and delegation as per SOP;
- Administer UN personnel and the project office without dedicated administration officer and performed daily administrative matters like sustaining UN living and working standards;
- Serve as security focal person and participate in security management meeting (SMT),delegate the UN Mission in the county and reporting of the project implantation.

**PROVINCIAL PUBLIC OUTREACH AND TRAINING ADVISOR, UNDP PROJECT -  
AFGHANISTAN, FEB 2009 – JAN 2010**

- Responsible for production of Information , Education and Communication productions of face- to- face , community mobilization events , on –the- spots programmes through public outreach and training activities ;
- Advised provincial office in designing locally relevant outreach strategies to involve the community in democratization process;
- Advised the provincial office on training of women , youth ,elders , community leaders and other sectors participation in the democratization process of the country;
- Advised on the promotion of women participation in local self-government to make-decision in their affairs through empowerment ;
- Assisted on coordination of GOs, NGOs, CBOs engagement in effective mobilizing of resources and efficient utilization of the same;
- Advised the provincial office on involving socially disadvantaged groups such as displaced and disabled people, women and youth as well as other marginalized groups participation in democratization processes;

**PROVINCIAL PUBLIC OUTREACH OFFICER, UNITED NATIONS ASSISTANCE  
MISSION IN AFGHANISTAN / UNAMA/ MARCH 2004-DEC 2005**

- Responsible for public outreach planning ,organizing ,staffing ,directing ,coordinating, reporting , budgeting ,communication ,monitoring ,evaluation and utilization ((POSDCORB\_COMU);

- Organized capacity building training for National Public Outreach Trainers , Public Information Officer and Small Grant Officer and Panther NGO Trainers on public outreach programmes;
- Coordinated partner GOs, NGOs , UN Agencies , CSOs and media groups involvement in mobilization of target groups participation in democratization process;
- Represented UNAMA at provincial level in Networking, Security Management Meeting and other coordination meetings;
- Prepared and submitted reports as per the requirements in a timely manner?.

**HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT ADVISOR, OROMIA  
CAPACITY BUILDING SUPREME OFFICE (OCBSO) - GO, MAY 2002 – MAR 2004**

- Responsible to advice the OCBSO on human resource development and management in establishing working systems;
- Designed and formulated project proposals on trainings of Good Governance ,Decentralization, Participatory Planning ,Organizational Conflict Prevention and Management, Strategic Planning and Management that have been fund by DFID- Ethiopia , Pact-Ethiopia, and World Bank –Resident Mission;
- Developed and maintain appropriate working relations with Regional, Zonal and Districts and higher educational and training institutions of the national regional State;
- Served as a key liaison for communication and coordination ,assessment and reporting of activities specific to the projects among OCBSO, Donors , Line Government Offices;
- Prepared projects comprehensive narrative and financial reports for OCBSO and Donors.



**HEAD PROGRAM AND COMMUNICATION, ETHIO –SWEDISH CHILDREN AND YOUTH REHABILITATION AND PREVENTION PROJECT (ESCYRPP), DEC 1997 – MAY 2001**

- Responsible for the organization programmes , projects preparation , execution ,networking , training of marketable skills training;
- Developed realistic programmes plans and budgets ,ensuring compliance with donor requirements that won funding for implementation ;
- Formulated income generation project proposals and submit to donors as well as implement the approved projects ;
- Produced awareness building Artistic works on UN Convention on the Rights of Child (UNCRC) , HIV /AIDS social ,economic ,health and psychological impact on children ,Girl ‘ Education to empowerment to realize their capabilities and entitlements , EPI / ORT the six killers of children , Child Labor’ family tradition ,lack of education, poverty, illiteracy ,adult unemployment and urbanization and prevention of young girl prostitutes ;
- Promoted the awareness of the community members on contributing factors for street children such as socio-structural ,economic, school dropout, natural climates ,cruelty and abuse ,neglect ,broken family, peer group and media influence;
- Advised the children and youth on personal values, family values ,cultural values social values and work values ;
- Prepared and submitted the projects implementation narrative and financial reports to Line Bureau and Donor Agencies.

**GENERAL MANAGER, CHILDREN AND YOUTH THEATRE / CYT/ JULY 1992 –  
JULY 1997**

- Established management systems of Children and Youth Theatre personnel, financial and property effectively and efficiently.
- Formulated, implemented, monitored, evaluated, reported and coordinated Japan Embassy , UNICEF and Norway Save the children projects of artistic production and professional equipment ,
- Produced awareness building Artistic works on UN Convention of Child Rights , HIV /AIDS Prevention ,Girl Child Education , EPI / ORT , Child Labor and young girl prostitutes ,
- Established good working relations with media such as TV , Radio and News Agency
- Prepared reports and submitted to HQ on a regular basis.