

ADDIS ABABA UNIVERSITY  
COLLEGE OF HEALTH SCIENCES  
SCHOOL OF PUBLIC HEALTH



ASSESSMENT OF CONSISTENT CONDOM USE AMONG COMMERCIAL  
SEX WORKERS IN ADDIS ABABA, A COMPARATIVE STUDY  
COMPARING COMMERCIAL SEX WORKERS ON AND OUT OF  
INTERVENTION

BY: - ABEBAW ABEBE (B.Sc)

A THESIS REPORT SUBMITTED TO THE SCHOOL OF GRADUATE  
STUDIES OF ADDIS ABABA UNIVERSITY FOR THE PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER  
OF PUBLIC HEALTH IN THE SCHOOL OF PUBLIC HEALTH, COLLEGE OF  
HEALTH SCIENCES OF ADDIS ABABA UNIVERSITY

NOVEMBER, 2016

ADDIS ABABA, ETHIOPIA

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School Of Public Health

This is to certify that the thesis prepared by *Abebaw Abebe Gebremichael*, entitled; **Assessment of Consistent Condom Use among Commercial Sex Workers In Addis Ababa, a comparative study comparing Commercial Sex Workers on and out of Intervention.** and submitted in fulfillment of the partial requirement of the Degree of Master of Public Health complies with the regulation of the university and meets the accepted standards with respect to originality and quality.

Approved by the Board of Examiners:

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_____ Chairperson, Department	_____ Date	_____ Signature

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## **ACRONYMS**

- AAU Addis Ababa University
- AIDS Acquired Immunodeficiency Syndrome
- CSW Commercial Sex Workers
- FSW Female Sex Worker
- FGD Focus- Group Discussions
- HIV Human Immunodeficiency Virus
- HAPCO HIV/AIDS Prevention and Control Office
- FMOH Federal Ministry of Health
- NGOs Non-governmental Organizations
- STDs Sexually Transmitted Diseases
- STIs Sexually Transmitted Infections
- WHO World Health Organizations
- UNAIDS Joint United Nations Program on HIV/AIDS
- EDHS Ethiopian Demography and Health Survey
- MARPs Most –At-Risk Populations
- HAPCO HIV/AIDS Prevention and Control Office
- BCC Behavior Change Communication
- HCT HIV Counseling and Testing
- NGO Non-Governmental Organizations
- CBO Community Based Organizations
- VCT Voluntary and Confidential HIV Counseling and Testing
- PMTCT Prevention of Mother To Child Transmission of HIV
- PSI/E Population Service International Ethiopia
- ISAPSO Integrated Services for AIDS Prevention and Support Organization
- PEPFAR Presidents Emergency Plan For AIDS Relief
- EPHI Ethiopian Public Health Institute
- CDC Center for Disease Control
- CUP Condom Use Program
- STD Sexually Transmitted Diseases

## **ABSTRACT**

**Background:** HIV prevalence among sex workers is higher than in any other group because of multiple sexual partners and inconsistent use of condoms. The rate of condom use in commercial sex workers is low as they do not always use condoms. Correct and consistent condom use is an effective method of preventing sex workers, their clients and the general population from HIV, Sexually Transmitted Illness and unwanted pregnancy. No attempt was done to assess the effect of intervention on consistent condom use among commercial sex workers.

**Objective:** To compare consistent condom use among commercial sex workers on and out of intervention, assess association of intervention utilization and consistent condom use and explore main reasons compromising consistent condom use in Addis Ababa, 2016

**Method:** A cross-sectional study triangulated with qualitative design was employed among 562 commercial sex workers in Addis Ababa from September, 2015 to June, 2016. Multi-stage sampling was used to select sex workers from randomly selected sub-cities. The quantitative data was cleaned, entered and analyzed through Epi-Info version 7 and SPSS version 20.0. First distribution of variables was presented by using tables and descriptive statistics to calculate some statistical data and then logistic regression model were used to measure magnitude of consistent condom use among intervention users and non-users. The qualitative method was conducted using in-depth interviews of small sample of key informants and the data were analyzed using the qualitative thematic analysis approach.

**Results:** The overall prevalence of consistent condom use was 305(54.3%) and the prevalence of consistent condom use among project users and non-users was 185(65.8%) and 120(42.7%) respectively (P-value=0.000). Utilization status of the intervention, having a boyfriends, substance use and access for free condoms were significantly associated with consistent condom use. Project beneficiaries were 2.1(95%CI(1.389,3.286))times more likely to use condoms consistently compared to project non-users. Sex workers who had no boyfriends were 5.1(95%CI(3.479,7.570))times more likely to engage in consistent condom use compared to those having boyfriends. Commercial sex workers who did not abuse substances were 2.0(95%CI(1.361,2.952)) times more likely to consistently use condoms compared to their counterparts and commercial sex works who got free condoms were 1.6(1.016,2.448)times more likely to use condoms consistently compared to counterparts. Higher payment from a client, client refusal, Substance use like alcohol, unavailability of condoms, pressure from working place, clients belief of condom reduces sexual pleasure were the main reasons for not using condoms consistently.

**Conclusion:** The magnitude of consistent condom use among commercial sex workers was low. Utilization status, having boyfriends, substance use and access for free condoms were significantly associated with consistent condom use. A significant number of sex workers ever had unprotected sex that might lead them to HIV and sexually transmitted infections. Non-users of the intervention were at a significantly lower rate of consistent condom use than users, thus non-users should also be given due emphasis.

# INTRODUCTION

## 1.1 Background

High risk populations are diverse in Ethiopia and have not been monitored over time or well defined. Sex workers, mobile workers, in school youth aged 15-24 years, uniformed services and prison inmates were the groups identified by the Federal HIV/AIDS Prevention and Control Office as MARPs in its HIV Prevention Packages(1).

Currently systematic monitoring efforts are focusing on female sex workers and long distance truck drivers. Sex workers have often been described as a ‘core group’, namely, a small group in which the infection is endemic and from whom it spreads to the population at large (2).

UNAIDS defines sex workers as: *“female, male and transgender adults and young people who receive money or goods in exchange for sexual services, either regularly or occasionally”*. Sex work is viewed as morally corrupt or criminal act in many places, and those involved are often neglected and marginalized by wider society. Commercial sex workers are vulnerable to HIV infection and sexually transmitted infections because of frequent unprotected sex acts with multiple partners (3).

Since the beginning of the HIV pandemic, sex workers have been highly exposed to the virus, particularly in African countries such as Kenya and the Ivory Coast, HIV prevalence among sex workers may reach 70% higher than in any other group in society because of multiple sexual partners and inconsistent use of condoms(4).-

According to the mapping and Female Sex Workers(FSWs) size estimation survey in Addis Ababa in 2011 by PSI/E, it was estimated that there were 11,632 Self Identified FSWs and 2659 Non-Self Identified FSWs, a total of 14,291 Female Sex Workers(5).

One of the program activities to meet the target of reducing sexual transmission by 50% by 2015 set by UNAIDS is to increase knowledge, access and utilization of condoms(5). Ethiopia in its strategic plan (2015-2020) set a goal to reach consistent condom use to 95% among commercial sex workers(9) Promoting consistent condom use has been one of the most commonly advocated preventive interventions for female sex workers in Ethiopia (1). As defined by PSI/E formal FSWs perform sexual acts in exchange for money as their primary source of income (5). In this study, formal FSWs are categorized into three major groups based on their place of work: Establishment based FSWs use hotels, bar& restaurants, night clubs, groceries to make contact with and solicit clients. Home based FSWs primarily make contact with and solicit clients at their places of residence. Street based sex workers make contact with and solicit clients on the street or in public places such as bus stands, market places or cinema halls and render sexual acts inside vehicles or at short term hotels or other premises near the point of solicitation

## **1.2 Statement of the Problem**

Worldwide, 36.9 million people are living with HIV. 2.0 million people became newly infected with HIV and 1.2 million people died from AIDS related illness in 2014. There were 25.8 million people living with HIV and 1.4 million new HIV infection in Sub-Saharan Africa in 2014. Women account for more than half of the total number of people living with HIV in Sub-Saharan Africa. Seventy percent of all people living with HIV in 2014 were living in Sub-Saharan Africa (6).

In West Africa, where the HIV epidemic is driven by heterosexual transmission female sex workers (FSWs) and their clients are disproportionately contributing to its spread to the general population at low risk (7).

According to the 2011 Ethiopia Demographic and Health Survey (EDHS), the HIV prevalence in the general population is 1.5%, with urban and rural prevalence of 4.2% and rural 0.6%, respectively. Gambella region (6.5%), and Addis Ababa (5.2%) have the highest prevalence(8).

A national MARPs survey done focusing on FSWs revealed that of the total FSWs tested for HIV, the overall HIV prevalence among the FSWs was 23% ranging from 15.4% to 33% in some sites(9).

According to the 2016 FMOH HIV related estimates and projections, Ethiopia has adult HIV prevalence of 1.1% with 0.7% for males and 1.4% for females and urban prevalence of 3.2%. The estimation also indicates a total HIV positive populations of 671,94(10).

According to a study conducted among FSWs in Lao PDR, consistent condom use 30 days prior to the survey was 60% with regular partners while a study done in Nigeria among 2578 sex workers revealed that only 55% reported consistent condom use(11,12).

A study done in Gondar town resulted in that the overall consistent condom utilization of the total FSWs who had sex in the past one month was 47.7% and the level of consistent condom use with new clients, regular clients and boyfriends was 84.2%,71.9%, and 32.8% respectively (13).

A study in Addis Ababa showed that only 40% respondents reported using condoms in more than 95% of sexual acts with clients (4).

Most reasons for inconsistent condom use were related to partners not wanting to use condoms because of reduced sexual pleasure, being physically abused and forced not to use condoms,(13).refusal by the client, higher payment from a client, brutality from a client and instructions given by the owner of the working place (4).

In Ethiopia, Sex workers have been one of the groups of most at risk of HIV infection due to their multiple sexual partners and spanning multiple sexual networks (2).

High rates of unsafe sexual practices increase the probability of HIV transmission in sex workers. As a result, HIV prevalence among female sex workers (FSWs) is often much higher than the general population (4).

According to the national MAPRs surveillance study conducted by the Ethiopian Public Health Institute (EPHI) and Centre for Disease Control (CDC) in all regional capitals between July 2013 and January 2014 revealed that the overall HIV prevalence among female sex workers was estimated at 23.8% and the study specific to Addis Ababa estimated to be 18% ,(1).

In 2013 a national MARPs survey, found HIV prevalence among CSWS in major urban cities as high as 25%. The Ethiopian government in its Strategic Plan II has a goal to target high risk areas and high risk population groups including CSWs. In Ethiopia, Condom use with regular, non paying partners remains low, posing a substantial risk of HIV infection to sex workers , their partners and the general population(15).

Condoms play a special role in combating the spread of HIV/AIDS because they are presently the only devices that protect against sexually transmitted HIV. Condoms are a critical component in a comprehensive and sustainable approach to the prevention of HIV and other sexually transmitted infections (STIs) and are effective for preventing unintended pregnancies (16).

Therefore, promoting and ensuring consistent and correct condom use among commercial sex workers would have strong relevance to targeted HIV prevention policies, programs, and strategies that would benefit FSWs, their clients and the general population.

### **1.3 Rationale of the Study**

Correct and consistent condom use is an effective method of preventing sex workers, their clients and the general population from HIV, STI and unwanted pregnancy. Thus CSWs are the primary targets of condom promotion activities due to their inconsistent condom use and multiple sexual partners (2).

If Female Sex Workers do not use condoms, they will place themselves, their clients and the general population at risk of contracting HIV and other STIs since they are core transmitters in STI transmission dynamics (17).

PSI/E has been running the five-year USAID funded MULU HIV Prevention Project, whose goal is to contribute to the national effort of reduction of new HIV infections in Ethiopia by 50%. To contribute to achieving this goal, the project focuses on intensifying HIV prevention among MARPs by addressing sex workers, drivers of the epidemic, through evidence-based interventions. The project has been providing a standardized and comprehensive package of combination prevention services to MARPPs like female sex workers (FSWs), non-paying partners/boyfriends of FSWs (*balukas*), paying clients of FSWs (regular and non-regular). Community-level implementation of the project has been conducted by 25 local NGO partners in 168 high risk towns of the country. Project activities are organized under three pillars: biomedical, behavioral, and structural. Free distribution of condoms, Group Peer Education, HIV Testing and Counseling, FP, STI, and TB Screening and treatment, saving groups support and the like are some of the major services the project provides to sex workers (18).

The main reason that differentiates this research is the fact that it is aimed to compare consistent condom use among CSWs with HIV Prevention intervention and without it.

Therefore, assessing the effectiveness of the intervention will provide appropriate clues to design another intervention strategy for policy makers as well as for program planners to strengthen and design appropriate interventions on condom utilization. It might also be used as a baseline for researchers for further study as there was no more study conducted before on the effect of the project on consistent condom use among CSWs.

## **2. LITERATURE REVIEW**

The three primary behaviors that can prevent sexual transmission of HIV are abstaining from sex, having sex with only one uninfected partner at a time and using condoms (19).

Condoms play a special role in combating the spread of HIV/AIDS because they are presently the only devices that protect against sexually transmitted HIV. Condoms are unique because they provide dual protection; that is, they simultaneously protect against both infection and pregnancy(20). While male condoms are generally accepted as a cornerstone of comprehensive HIV prevention, expanded access and use, much more needs to be done to increase the supply and use of female condoms (19).

Consistent condom use plays a vital role in preventing sexual transmission of HIV and has consequently become the primary focus of interventions targeting vulnerable groups such as Female Sex Workers (19).

Consistent and correct condom use is highly effective in preventing the sexual transmission of HIV both from men to women and women to men. It also reduces the risk of acquiring other STIs and associated conditions, including genital warts and cervical cancer. With a failure rate of about 2% when used consistently and correctly, condoms are very effective at preventing unintended pregnancy (16).

### **2.1 Magnitude of Consistent Condom Use**

In high risk women, such as commercial sex workers, the rate of condom use is low as sex workers and their clients do not always use condoms (17).

In some cases, sex workers have no access to condoms, or are not aware of their importance (17). In other cases, sex workers are simply powerless to negotiate safer sex. Clients may refuse to pay for sex if they have to use a condom, and use intimidation or violence to force unprotected sex. They may also offer more money for unprotected sex – a proposal that can be hard to refuse (17).

According to the 4-week condom diary study done in Indonesia, which involved 204 female sex workers, and a recording of 5,603 sexual intercourses or around 8 intercourses per sex worker per week, Although a small majority (2,952/5,603;53%) of sexual contacts between sex workers and their clients were protected, there were only 12 sex workers (5.9%) who consistently used condoms in the 2 week period of observation, and only three (1.5%) in the 4 week period. Condom use with boyfriends (34%;95%CI=25-42%) was significantly less common than condom use with clients(53%;95%CI=51-54%)(14).

According to a study conducted in Mexico among 924 FSWs, 43% of the respondents reported consistent condom use (21).

According to a study conducted among FSWs in Lao PDR, Consistent condom use 30 days prior to the survey was 60% with regular partners. Most reasons for inconsistent condom use were related to partners not wanting to use condoms because of reduced sexual pleasure. Some FSWs reported that they were physically abused and forced not to use condoms. Shorter time in sex work, higher education and FSW not having regular partners were significantly associated with consistent condom use (11).

A study done among a nationally representative sample of 2578 sex workers in Nigeria revealed that only 55% reported consistent condom use in the last 5 sex acts (22).

According to a follow-up survey conducted in Uganda from May 2004 to Sept 2005, consistent condom use remained low at 55% in the follow-up compared to 60% in the baseline(23).

A study in Addis Ababa, by Mathias Akliluet'al showed that only 40% respondents reported using condoms in more than 95% of sexual acts with clients. Reasons for occasionally not using condoms were: refusal by the client (72.8%); brutality from a client (42.7%); higher payment from a client (33.2%) and instructions given by the owner of the working place (7.0%) (4).

The study done in Gondar town by Masresha et' al, Of the total FSWs who had sex in the past one month, 411(84.2%), 351(71.9%), and 160(32.8%) utilized condom with their non-regular partners, regular partners, and boyfriends/husbands respectively. The overall consistent condom utilization among FSWs was 233(47.7%).Trust of client, client objection, seeking better satisfaction and substance use were amongst the major reasons acknowledged by FSWs for their non-consistent condom use. This finding depicted that female sex workers condom utilization was low with any type of client whether non regular, regular or boyfriend/husband, which places not only FSW but also the general population at high risk of HIV/AIDS and STIs (13).

## **2.2 Factors associated with Consistent Condom Use**

Many factors discourage sex workers from using condoms, including: The need to earn enough money to support dependents (the sex workers lose money by rejecting clients who refuse to use condoms); Myths and misconceptions about how to prevent HIV/STIs and about condoms; Inadequate negotiation skills; Peer pressure in the form of ridicule, belittling comments, and

competition among sex workers; and a habit of not using protection when having sex with boyfriends (20)

Environmental Factors affect condom use. Before the transaction, both clients and female sex workers usually drink beer. Another factor is the availability of condoms, not all women have enough condoms on hand, and late in the evening when they need them most, Not many brothels provide condoms, so if the clients do not bring them, the sex workers must buy them themselves from the stalls located outside the brothel (14).

Barriers to condom use that specifically affect FSWs that should also be taken into account are economic pressures, fear of violence by clients, lack of condom negotiation skills, and fatalistic attitudes may discourage sex workers from using condom with clients. Poor condom negotiation skills; higher pay for unprotected sex; lack of knowledge about HIV; and negative attitudes toward condom use may also significantly hinder FSWs' adoption of safer sex practices, trusting relationships discourages FSWs from using condoms with boyfriends and regular clients (20,21).

Lack of access to condoms has become a significant barrier to safer sexual practices, particularly in developing countries. Limited access leads to high-risk behavior. Individuals who both purchase condoms and can obtain them free of charge may report more consistent condom use than those who rely on purchase alone (19).

Availability of condoms among sex workers has increased over the past years. Despite such improvements in condom access and distribution, lack of availability of free condoms is sometimes cited by sex workers as a reason for unprotected sex (24).

In developing countries, low availability of condoms has been associated with unprotected sexual practice(19).Refusal by clients is the most commonly cited reason for non-use of condoms(23,24)

In a study from Ghana, women cited client refusal (73%), receiving a higher payment (33%) and client brutality (43%) as reasons for not using condoms (24).

Reasons for not using condoms mentioned by FSWs as Clients' View from perspectives of FSWs and Sex Workers' View are:-

*Clients' View:* Clients claim that they cannot enjoy the sexual intercourse having perceived less sexual pleasure due to the condom. They think they do not need protection as they are acquainted with the women; Arguments frequently given by regular clients are: ~~W~~Why should I use a condom? You are just like my wife" or ~~I~~am your regular client; why should I use a condom?" Clients usually consider them

selves as healthy persons who are free of diseases. If a sex worker insists on using a condom, some clients wonder if she herself has a disease. Clients refuse to use condoms, saying that the sexual inter course will not last long. Some clients refuse the condoms provided for free by prevention programs, because these are considered uncomfortable.

*Sex Workers' View:* they are acquaintances: boyfriends, close friends, or regular clients. Some FSWs do not offer condoms if the client's body looks clean or if he looks healthy(14).

The main reasons of female sex workers for not using condoms were the beliefs that boyfriends and healthy-looking clients cannot spread STDs (14).

Female sex workers also do not like to use condoms if they make love with their boyfriends because they believe that condoms reduce sexual pleasure. FSWs do not offer condoms to their clients due to other reasons, such as pain during inter course, condoms being slippery, and the idea that condoms would make the sexual intercourse last longer which in turn would produce pain and a waste of their time. Another reason for not suggesting condom use was the fear that the client would walk away and go to another sex worker, because competition among sex workers is high. Some FSWs stated that they do not use condoms because their clients do not ask for them (14).

The regular partners' most common reason for not wanting to use condoms was related to reduced sexual pleasure when using condoms. Some of the partners' reasons were also directly related to difficulties when using condoms: allergic reactions to condoms, difficulties with ejaculation and sustaining erection, and the condom being too small to fit the penis. Inconsistent condom use was also alcohol related with two respondents saying that drunken partners did not want to use condoms. FSWs also reported that their regular partners did not want to use condoms due to the intimacy of their relationship as mutual love and/or trust as shown in the following two quotes from partners; "If you love me, we should not use condoms" and "We should trust each other"(11).

Partner's not wanting to use condom due to reduced sexual pleasure is one of the reasons non-regular clients (11).

### **2.3 Condom Programming Interventions**

The goal of condom programming is to ensure that sexually active persons at risk of HIV/STIs are motivated to use condoms, have easy access to quality condoms, and can use them consistently and correctly. However, high costs to users, limited availability and accessibility, and negative perceptions of condoms have created a gap between the number of condoms distributed and the amount needed for populations to protect themselves from HIV/STIs (20).

Experts recommend that campaigns to prevent HIV amongst sex workers should initially focus on achieving main outcomes of consistent and correct condom use and safer sex. Provision of condoms,

educating sex workers and their clients about HIV; encouraging peer education (where sex workers inform one another about HIV) are some of the means to achieve the outcomes (25).

Condoms, when used consistently and correctly, are highly effective and the only form of protection that can help stop the transmission of sexually transmitted diseases (STDs) and prevent pregnancy . Scientific evidence showed that male condom has 80% or greater protective effect against STIs including HIV (15-17).

Condoms have played a decisive role in HIV, STI and pregnancy prevention efforts in many countries. Distribution of condoms has been shown to reduce rates of HIV and other STIs in sex workers. In India and Thailand increased condom distribution to sex workers and their clients in combination with other prevention interventions were associated with reductions of transmission of both HIV and other STIs (16).

In response to increasing HIV and STI prevalence among female sex workers in Thailand, the government initiated 100% Condom Use Program in Ratchaburi province in 1989. The intension of the program is to empower sex workers to practice the policy of "NO CONDOM-NO SEX" in all commercial acts. The 100% Condom Use Program (CUP) was scaled up to the nationwide and has been credited with averting five million HIV infections (19).

Zimbabwe and South Africa are two high-prevalence countries where increased condom use was found to contribute to reductions in HIV incidence (16).

The Ethiopian government developed HIV/AIDS prevention, care and treatment Strategic Plan for 2015-2020 with the vision of ending AIDS by 2030. Implementing high impact and targeted prevention program is one of the objectives focusing on intensifying behavior change communications targeting FSWs and ensuring sustainable and equitable distribution and access to quality condoms and promoting correct and consistent use of condom for prevention of HIV/STI. The strategic plan has also a target to raise consistent condom use to 95% among FSWs and distribute 150-200 million pieces of male condoms (9).

In Ethiopia, some of the priority intervention areas in relation to HIV/AIDS are Information, Education and Communication/Behavioral Change Communication (IEC/BCC), condom promotion and distribution, voluntary counseling and testing (VCT), management of sexually transmitted illnesses, prevention of mother to child transmission of HIV (PMTCT) and there have been remarkable achievements in these intervention areas attributed to the strong leadership and

coordination, availability of funds and strong technical support received from partner organizations(31).

Among FSW who used condoms with clients, HIV incidence was 15 times lower than among FSW who did not. In sensitivity analyses decreases in condom use were associated with increased HIV incidence (25).

Effective condom promotion should be tailored for people at increased risk of HIV and other STIs and/or unintended pregnancy, including sex workers and their clients (16).

Condom programming is an integral component of effective HIV prevention. Interventions targeting FSWs have typically focused on increasing their condom use since the contribution of commercial sex to HIV epidemics is believed to be high in many settings. Condom promotion activities are necessary, particularly for those at higher risk of infection because of their sexual behavior (26).

## 2.4 Study Framework

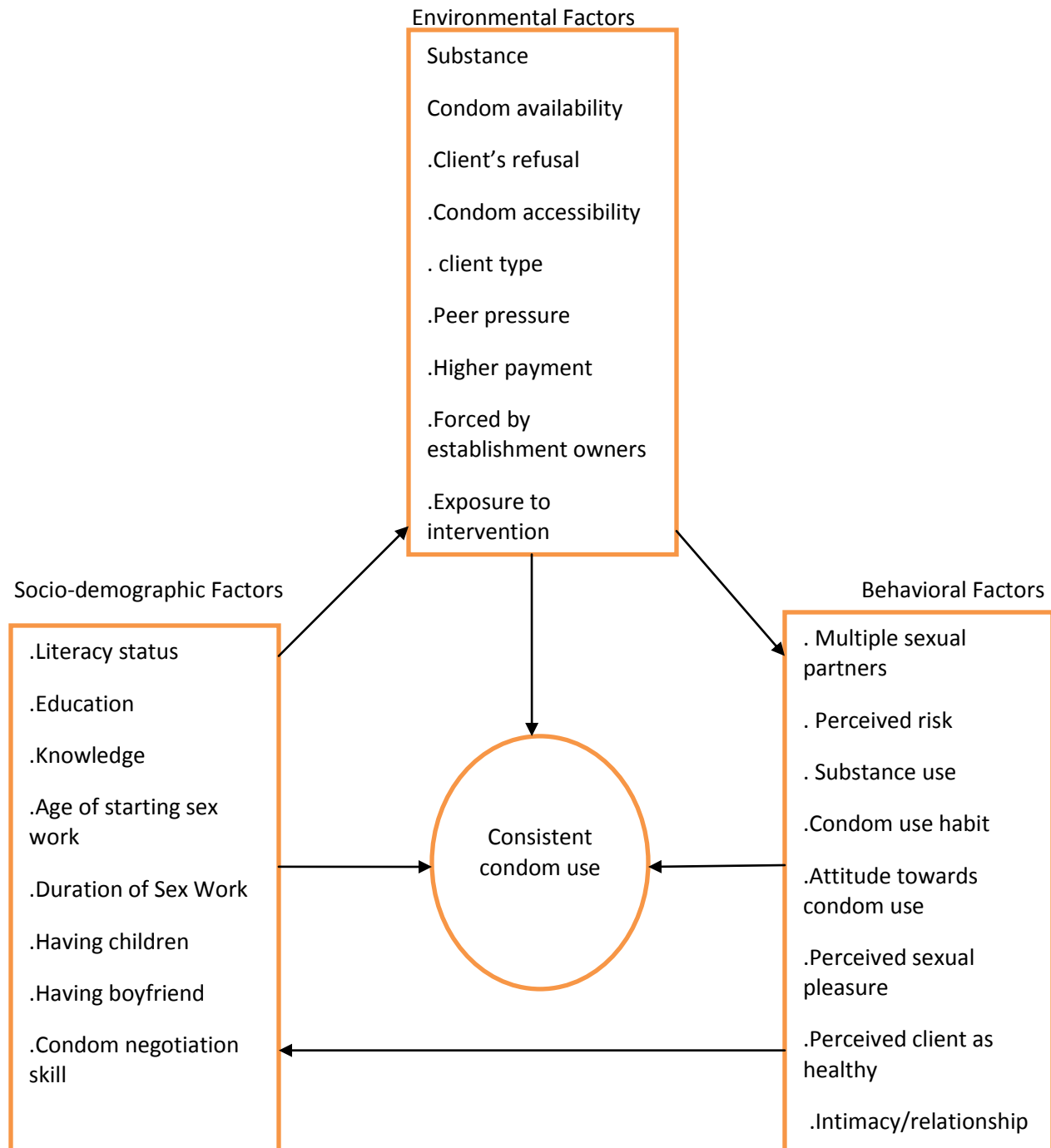


Figure1: Conceptual framework indicating factors influencing utilization of Condom By FSWs of Addis Ababa, 2016

### **3. OBJECTIVES OF THE STUDY**

#### **3.1 General Objective**

The general aim of this study is to compare consistent condom use among commercial sex workers on and out of intervention, assess association of intervention utilization and consistent condom use and explore reasons compromising consistent condom use in Addis Ababa, 2016

#### **3.2 Specific Objectives**

- ❖ To compare consistent condom use among users and non- users of HIV prevention intervention targeting sex workers in Addis Ababa, 2016
- ❖ To measure the association of utilization of HIV prevention packages and other variables with consistent condom use among Commercial Sex Workers in Addis Ababa, 2016.
- ❖ To explore the main reasons for not using condoms consistently and correctly among commercial sexual workers in Addis Ababa, 2016

## **4. METHODS**

### **4.1 Study Area**

The study was conducted in Addis Ababa, the capital city of Ethiopia. Addis Ababa is administratively divided into 10 sub-cities and 116 Woredas. The projected total population on July, 2015 by Central Statistics Agency of Ethiopia for Addis Ababa was 3,273,000 (27).

In Ethiopia, according to PSI/E findings, total estimated FSW population has grown at a rate of 2.7% per year, which is nearly 3 times higher than the population growth rate in Addis Ababa. According to mapping and FSW size estimation survey of PSI in 2012, it was estimated that there is a total of 14,291 Female Sex Workers, of which 11,632 Self Identified and 2,659 Non-Self Identified Female Sex Workers in Addis Ababa (28).

Through PEPFAR supported partners (Save the Generation and PSI) mapping to estimate the size of FSW population in 45 towns including Addis Ababa was conducted and identified over fifty thousand (9). The overall size of FSWs in the country in 2014 is estimated to be 120,000 to 160,000 and HIV prevalence of 23% (29).

Population Service International Ethiopia (PSI/E), a non-governmental organization, has been implementing a project called MULU/MARPs HIV Prevention project targeting FSWs and focusing on promotion of condom use and reduction of risky sexual behavior. It has been implementing activities like peer education and free condom distribution and promotion for commercial sex workers through its co-partners in selected high risk towns including the ten sub-cities of Addis Ababa since 2012 (18).

### **4.2 Study Design and Period**

Quantitative comparative cross-sectional study design complemented with a qualitative in-depth interview approach was conducted from September, 2015 to June 30, 2016. The comparative groups are MULU/MARPs HIV Prevention intervention users and non-user Commercial Sex Workers who were living in other districts than the project area. And the ratio of the comparative group was considered to be 1:1.

The qualitative study was designed to complement the quantitative study to address factors that could not be assessed using the cross-sectional study design and culturally considered to be sensitive.

Key informant in-depth interviews were conducted to gain insight into the context in which CSWs participate in and identify suggestions for feasible intervention to address them.

### **4.3 Source Population**

The source populations were all Commercial Sex Workers who are residents of Addis Ababa. It incorporated the types of Establishment-based FSWs who make contacts with clients at hotels, bars and restaurants, groceries and night clubs; Home-based FSWs who primarily make contacts with clients at their places of residence and Street-based FSWs on the street or in public places such as bus stands, market places or cinema halls.

#### **4.3.1 Study Population**

The study populations were all CSWs in the three randomly selected sub-cities that were users and non-users of HIV Prevention intervention Program. The study populations are the female commercial sex workers by directly asking themselves. On the other hand FSWs working as Peer Educators, health workers working as Counselors and service providers working as project staffs were also included in the qualitative in depth interview.

#### **4.3.2 Inclusion and Exclusion Criteria**

- Inclusion criteria used for females who were working in bars, hotels, night clubs, local drinking houses, streets and venues who are involved in commercial sex work in the study by direct interviewing themselves.
- Exclusion criteria identify female CSWs who were working in the bars, hotels, night clubs, local drinking house, streets and venues but sick or away during the study.

### **4.4 Study Variables**

#### **4.4.1 Independent Variables**

- Demographic and socio-economic variables  
Age, Religion, Literacy status, Age of starting sex work, Type of CSWs, Duration of sex work, Previous Occupation, educational level, working place,
- Reproductive Health Related  
Marital status before starting sex work, having children, having boyfriends, Number of children, Number of sexual partners,
- Knowledge on HIV/STI and Condom  
Knowledge on transmission and prevention of HIV/STI, knowledge on signs and symptoms of STI, Knowledge on benefits of Condom use,
- Practice on use of condom  
Practice on condom use with new, regular clients & boyfriends,
- Sexual behavior of Commercial sex workers  
Number of clients, type of sexual acts, sex while drunk,

#### 4.4.2 Dependent Variable

- Consistent and correct condom use

### 4.5 Sample Size and Sampling Procedure

#### 4.5.1 Sample Size Determination

The sample size required for the quantitative study was calculated using EPI-Info version 7.0 statistical software program for two population proportion formula.

$$n_1 = n_2 = \frac{(Z_{/2} * \sqrt{2\bar{P} * (1 - \bar{P})} + Z_{\beta} * \sqrt{p_1 * q_1 + p_2 * q_2})^2}{(P_1 - P_2)^2}$$

Where,  $\bar{P} = (P_1 + rP_2) / (1+r)$

$n_1 = n_2$  = minimum sample size required from each group

$n_1$  = sample size of FSWs with the intervention. (Users of HIV Prevention Project)

$n_2$  = sample size of FSWs without the intervention. (Non-Users of HIV Prevention Project)

$r$  = the population allocation ratio between  $n_1$  and  $n_2$ :1:1

$Z_{/2}$  = 1.96 for the standard scale of 95% level of confidence,

$Z_{\beta}$  = standard scale of 0.84 corresponding to an 80% for power to detect a difference of  $(P_1 - P_2)$  15%

$P_1$  = Proportion for FSWs without intervention (Non-Users of HIV Prevention intervention program), 47.7% (12).

$P_2$  = Proportion of FSWs with intervention, 62.7% were taken for intervention user FSWs arbitrarily for lack of study on intervention users.

$n_1 = 173 = n_2$

The sample size was 346 (173 for each group).

Considering a design effect of 1.5 for the variation due to clustering and non-response rate of 15%, The total calculated sample size was 598 Female Sex Workers.

Sample size for the qualitative study design was determined and data collection was conducted until saturation was reached using semi-structured in-depth interview guide.

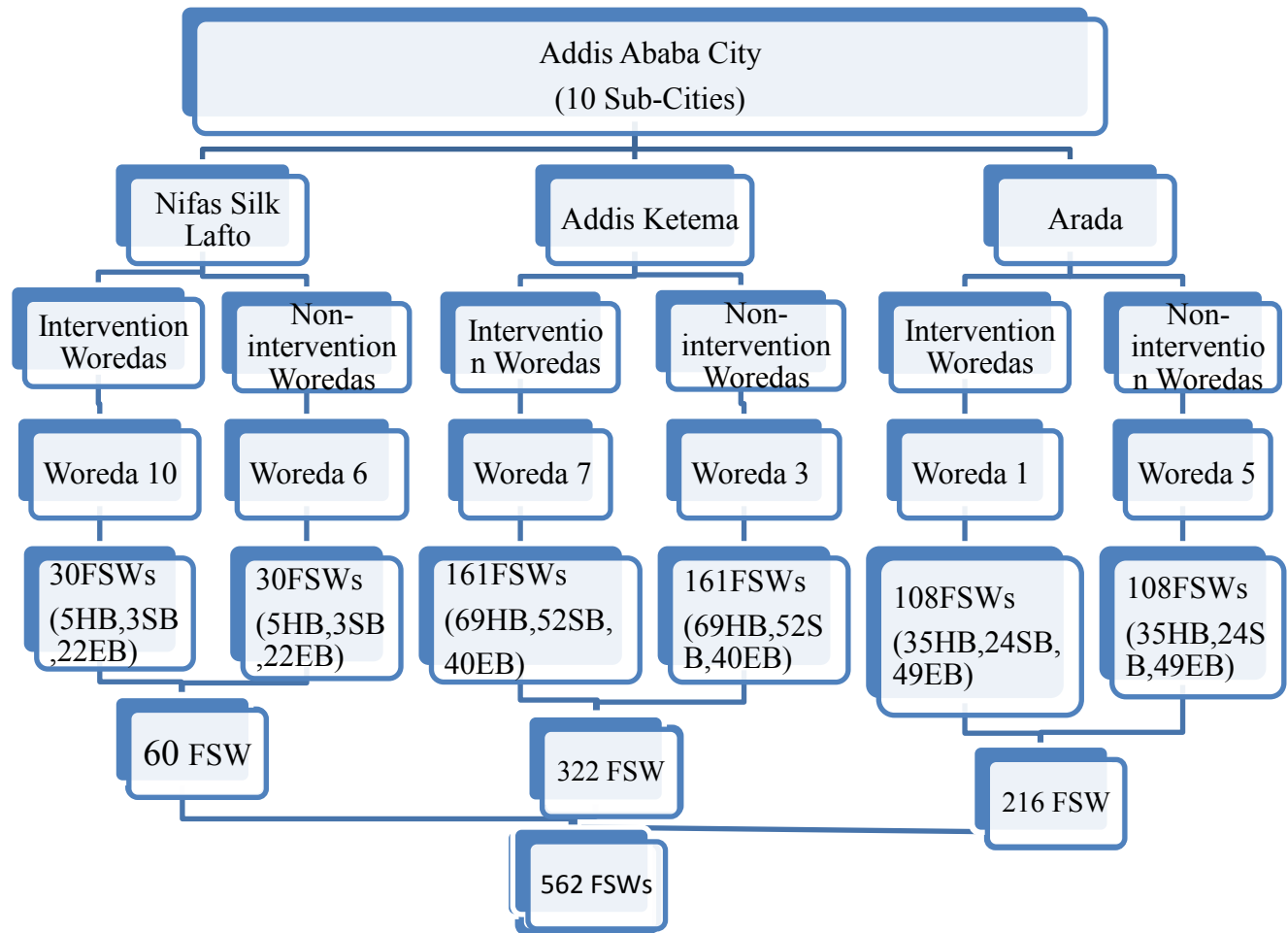
#### **4.5.2 Sampling Procedures**

Multistage sampling technique was employed. First, among the ten sub-cities of Addis Ababa city, three sub-cities namely Nifas Silk Lafto, Addis Ketema, and Arada were selected randomly. Four Woredas(1,2,10,11)from Nifas Silk Lafto, Six Woredas(1,2,6,7,8,9)from Addis Ketema and Five Woredas (1,3,4,6,8,) from Arada were intervention Weredas for MULU/MARPS ISAPSO project as they are Weredas with many CSWs harboring HIV transmission. Secondly, One woreda from intervention woredas mentioned above in each sub-city was selected using simple random sampling method. Then intervention user study participants were selected from sampling frame of service registration book from each sub-city Coordination Office/Drop-In-Center by systematic sampling method. On the other hand, non-intervention weredas were randomly selected from each sub-city among those was the MULU/MARPS project has never been put in place. Then, census of non-user CSWs were first done to randomly select CSWs from each non-intervention woreda. Selection of non-user CSWs were specifically done according to the following criteria for each type of CSW. For the establishment-based FSWs, a survey to identify existing establishments was assuming three FSWs in each establishment and study participants were selected randomly, Home-based and street-based FSWs were selected using simple random sampling method after having a survey to enumerate CSWs in the selected non-intervention woreda.

According to the survey done by PSI/E in 2011, the estimated number of CSWs in Nifas Silk Lafto were 505 (363 Establishment-Based, 90Home-Based and 52Street- Based). In Addis Ketema were 2,890 (722 Establishment-Based, 1,243 Home-Based and 925 Street- Based). And in Arada were 1,904 (1,314 Establishment-Based, 381 Home-Based and 209 Street- Based)(29).

And finally, 60 CSWs (10Home Based, 44Establishment Based and 6Street Based FSWs) from Nifas Silk Lafto, 322CSWs (138Home Based, 80 Establishment Based and 104Street Based FSWs) from Addis Ketema, and 216CSWs (70Home Based, 98Establishment Based and 48Street Based FSWs) from Arada were selected using proportional allocation to size formula.

On the other hand, For the qualitative part, CSWs will be selected using a “snow ball ” methods for in depth interviewing. These sex workers will be selected from the CSWs that have been working for long periods in the locality and not included in the study using a convenience methods. In addition, key informants such as peer educators, service providers and programmers will also be interviewed until saturation of data is achieved.



FSWs= Female Sex Workers

HB= Home Based FSWs

SB= Street Based FSWs

EB= Establishment FSWs

Figure 2: Sampling procedure to select Female Sex Workers, Addis Ababa, 2016

#### **4.6 Data Collection**

Pre-tested and structured questionnaire which addressed all important variables were administered to collect the quantitative data through interviewing Female Sex Workers. The questionnaire was designed after reviewing up to date literatures. Concerning structure of questionnaire close ended for quantitative and open ended for qualitative study design was used. The questionnaire was first prepared in English and then translated to Amharic (local language). The Amharic version was used during the actual data collection.

#### **4.7 Data Collection Procedures**

The quantitative data were collected using structured questionnaire and the administration of the questionnaire were facilitated by three degree graduate supervisors and filled by six diploma graduate data collectors with experience in previous similar studies. Face to face interviews were used and the interviewers were females in order to decrease embarrassment and especially as some of the questions are about sensitive personal sexual lifestyle issues.

For the qualitative part, data were collected through in-depth interviews using open ended semi-structured interview guide. The principal investigator moderated the interview in the local language using the interview guide. The information was audio taped in addition to taking notes during the interviews. The in-depth interviews were conducted among female sex workers who stayed long time in sex work life, peer educators and service providers were conducted until saturation was reached. The interviews were conducted in both intervention and non-intervention places where there were no interruptions.

#### **4.8 Data Quality Assurance**

To ensure the quality of the data first training of the data collectors and their supervisors were undertaken for one day by the principal investigator on the objectives, relevance of the study, methods interviewing, confidentiality of information and informed consent. Interviewers were instructed to make the highest possible care during interview session to record response correctly and completely. Properly designed data collection instrument was developed. The data collection tool was prepared in English, translated in to Amharic, and then back to English to check its consistency. Pretest was done before the actual data collection work to see for the accuracy of responses. The collected data were checked for completeness and relevance on daily basis by field supervisors. Any problem encountered during the data collection was reported to the supervisors and principal investigator for immediate action.

#### **4.9 Data Analysis**

The collected quantitative data were checked for completeness and consistency, then entered and cleaned using EPI Info version 7.0 statistical software and exported to SPSS 20.0 for analysis. Data were presented using frequency tables, and charts. Consistent condom use was analyzed for the preceding one month prior to the study period. Comparative magnitude of consistent use was analyzed and the difference was tested for statistical significance with a chi-square test.

Binary Logistic regression model was employed to determine the association between dependent variable and independent variables. First the association between each independent variable with the outcome variable was determined thorough use of binary logistic regression. Odds ratio along with the 95% confidence interval was used to ascertain association. Moreover, multiple logistic regression was applied to control the effect of confounders with 95% confidence interval and adjusted odds ratios were used to measure the strength of association. Statistical significance was set at a  $P < 0.05$ .

For the qualitative part, data collected through in-depth interviews were recorded and transcribed and coded using open code software version 3.4. Analysis was done using the thematic content analysis method. All transcriptions were done word for word to reduce errors. The transcripts were reviewed exhaustively and coded to identify major themes. In order to maintain objectivity and truthfulness of the data collected, all the study participants were asked to endeavor to respond to the questions as sincerely as possible. The transcripts and formal summary reports of field notes were then translated into English and coded line-by-line, then comparative analysis was conducted across the themes to explore issues related to relevant themes.

#### **4.10 Ethical Consideration**

The study did not involve any experiment on human population subjects. However, this study obtained ethical clearance from Addis Ababa University Research Ethics Committee, Health Offices/ HIV/AIDS Prevention and Control Offices of the three sub-cities and before enrolling any of the eligible study participants, the purpose and the benefit of the study was discussed with each commercial sex workers.

Informed consent of the respondent was obtained first. The right of the respondents to refuse to answers for few or all questions was respected. The interviews were conducted in a way that it did not compromise their privacy and confidentiality of information, thus, name and address of the interviewee was not recorded in the questionnaire.

#### 4.11 Definitions of basic terms

1. Commercial Sex Worker-----A woman/female who is paid money in exchange for sex.
2. Consistent condom use----Use of condom during every act of sexual inter-course during the last one month prior to the data collection period.
3. Unprotected sex---- Sexual-intercourse without using condom.
4. Client— A male who goes to a female sex worker to have sex with payment.
5. New Client---- A male who contacts and solicits with a FSW for the first time.
6. Regular Client--- A male client who contacts and solicits with a FSW regularly, more than one time.
7. Peer Educator--- A female sex worker who provides education and information about HIV/STI to other Female Sex Workers
8. Establishment-based FSWs----CSWs who use hotels, bar& restaurants, night clubs, groceries to make contact with and solicit clients.
9. Home-based FSWs---CSWs who primarily make contacts with and solicit clients at their places of residence,
10. Street-based FSWs---- CSWs who make contact with and solicit clients on the street or in public places such as bus stands, market places or cinema halls and render sexual acts inside vehicles or at short term hotels or other premises near the point of solicitation.
11. Female Sex Workers (FSWs)---Commercial Sex Workers (CSWs)
12. Safe sexual behavior—Limiting number of sexual Partners, avoid having sex while drunk, Consistent and correct condom use. Practicing vaginal sex,
13. Sexual risk behavior---any sexual behavior that does not fulfill the above statement.
14. Risk factor- condition and behaviors which make it more likely that a person will become infected with HIV.

## **5. RESULT**

### **Socio-demographic and related characteristics of the respondents**

Out of the 598 commercial sex workers, a total of 562 CSWs participated in the study making the response rate 94%. More than three-fourth 428(76.2%) of the respondents were between the age ranges of 20 to 29 years. The mean age was 23.6 ( $\pm 3.94$ ) years with minimum and maximum of 14 and 37 years respectively. More than half 329(58.5%) of the respondents were Orthodox religion followers. One-fourth 143(25.4%) of the respondents could not read and write in any language they speak. Of the total respondents, 65(11.6%) of them started sex work under 18years of age and about two-third 377(67.1%) of them had been involved in sex work for two or less years. Concerning previous occupations of respondents before they involved in sex work, 153(27.2%) and 145(25.8%) were housemaids and waitresses respectively. Among the 154(27.4%) study participants who had child/children, 41(26.6%) of them had two and more children. More than half 343 (61.0%) of the respondents revealed that they had a boyfriend/husband whom they call “Baluka”. The mean number of clients that the respondents had sex with per day was 3.01.

Table 1: The distribution of socio demographic and related characteristics of study participants by their intervention status in Addis Ababa, Ethiopia, 2016

Characteristics	Category	Number (Percentage)		Total
		Project users (n=281)	Project Non-Users (n=281)	
Age	14-19	53 (9.4%)	38 (6.8%)	91(16.2%)
	20-29	198(35.2%)	230(40.9%)	428(76.2%)
	30-39	30 (5.3%)	13(2.3%)	43(7.7%)
Religion	Orthodox	179(31.9%)	150(26.7%)	329(58.5%)
	Protestant	45(8.0%)	82 (14.6%)	127(22.6%)
	Muslim	57(10.1%)	49(8.7%)	106(18.9%)
Ethnicity	Amhara	99(17.6%)	73 (13.0%)	172(30.6%)
	Oromo	72(12.8%)	84(14.9%)	156(27.8%)
	Wolayita	38(6.8%)	42(7.5%)	80(14.2%)
	Guragie	28(5.0%)	32(5.7%)	60(10.7%)
	Tigrie	24(4.3%)	32(5.7%)	56(10.0%)
	Silte	12(2.1%)	10(1.8%)	22(3.9%)
	Other <sup>x</sup>	8(1.4%)	8(1.4%)	16(2.8%)
Marital status before starting sex work	Single	148(26.3%)	177(31.5%)	325(57.8%)
	divorced	73(13.0%)	39(6.9%)	112(19.9%)
	Married	45(8.0%)	44(7.8%)	89(15.8%)
	Widowed	15(2.7%)	21(3.7%)	36(6.4%)
can read & write in any language	Yes	214(38.1%)	205(36.5%)	419(74.6%)
	No	67(11.9%)	76(13.5%)	143(25.4%)
Educational status	Primary(1-8)	175(42.4%)	168(40.7%)	343(83.1%)
	Secondary(9-10)	31(7.5%)	29(7.0%)	60(14.5%)
	Preparatory(11-12)	2(0.5%)	4(1.0%)	6(1.5%)
	Above 12 <sup>th</sup>	3(0.7%)	1(0.2%)	4(0.9%)
Age of starting sex work	Under 18	41(7.3%)	24(4.3%)	65(11.6%)
	Above18+	240(42.7%)	257(45.7%)	497(88.4%)

Table 1: continued

Characteristics	Category	Number (Percentage)		Total
		Project users (n=281)	Project Non-Users (n=281)	
Working place	Hotel	85(15.1%)	64(11.4%)	149(26.5%)
	Bar and restaurant	16(2.8%)	21(3.7%)	37(5.6%)
	Night club	7(1.2%)	15(2.7%)	22(3.9%)
	Red light	86(15.3%)	63(11.2%)	149(26.5%)
	Local drinking	8(1.4%)	39(6.9%)	47(8.4%)
	house	79(14.1%)	75(13.3%)	154(27.4%)
	Streets	0(0.0%)	4(0.7%)	4(0.7%)
Previous occupation	Waitress	85(15.1%)	60(10.7%)	145(25.8%)
	Housemaid	87(15.5%)	66(11.7%)	153(27.2%)
	Student	48(8.5%)	37(6.6%)	85(15.1%)
	Jobless	20(3.6%)	36(6.4%)	56(10.0%)
	Merchant	13(2.3%)	7(1.2%)	20(3.6%)
	House wife	35(6.2%)	34(6.0%)	69(12.3%)
	Other <sup>xx</sup>	18(3.2%)	16(2.8%)	34(6.0%)
Do you have any child?	Yes	94(33.5%)	60(21.4%)	154(27.4%)
	No	187(66.5%)	221(78.6%)	408(72.6%)
How many children you have? (n=154)	One	71(46.1%)	42(27.3%)	113(73.4%)
	Two and above	23(14.9%)	18(11.7%)	41(26.6%)
Do you have any child after starting the sex work? (n=154)	Yes	26(9.3%)	16(5.7%)	42(7.5%)
	No	65(23.1%)	47(16.7%)	112(19.9%)
Currently have boyfriend/husband	Yes	180(32.0%)	163(29.0%)	343(61.0%)
	No	101(18.0%)	118(21.0%)	219(39.0%)

Other<sup>x</sup>=Hadiya, Agew other<sup>xx</sup> =Daily laborer, street dweller

## **Knowledge of Commercial Sex Workers about HIV, STI and Condom**

Among the total respondents 531 (94.5%) of sex workers knew about HIV transmission mechanisms and 521(92.7%) of them reported unprotected sex as the major transmission mechanism. Five hundred thirty five (95.2%) of the participants knew about modes of prevention of HIV/AIDS and 524(93.2%) of the respondents revealed that the main prevention mode of HIV was using condom during sexual intercourse. And nearly one- fourth 132(23.5%) of the respondents thought that HIV is curable. Majority351(62.5%) of the respondents knew STI transmission mechanisms and 338(60.1%) of them responded that having unprotected sex with infected person was a major transmission mode of STI.15(2.7%) of the respondents had a misconception that sitting on a hot stone was a transmission mode of STI. 361(64.2%) of the respondents knew major sign and symptom of STI. Of these, 243(43.2%) and 210(37.4%) respondents revealed that the main sign and symptom of having STIs were uncommon vaginal discharge and burning sensation during urination respectively.

Majority 544 (96.8%), more than half 292 (52.0%) and 200(35.6%) of the respondents knew that condom use benefits for prevention of HIV, unwanted pregnancy and STIs respectively. 247(44.0%) of the respondents thought that they were at risk of getting HIV/STI infection.

Table 2: The distribution of knowledge of study participants by their intervention status in Addis Ababa, Ethiopia, 2016.

Characteristics	Category	Number (Percentage)		P- Value
		Project users (n=281)	Project Non-Users (n=281)	
Know a transmission mode of HIV/AIDS(n=562)	Yes	271(96.4%)	260(92.5%)	0.042
	No	10(3.6%)	21(7.5%)	
Knowledge of modes of transmission of HIV/AIDS (n=531)	Unprotected sex	266(94.7%)	255(90.7%)	0.074
	Sharing sharp objects	151(53.7%)	100(35.6%)	<b>0.000</b>
	Mother to child	48(17.1%)	41(14.6%)	0.419
	Blood contact	22(7.8%)	27(9.6%)	0.455
	Insect bite	0(0.0%)	3(1.1%)	0.082
	kissing	8(2.8%)	19(6.8%)	0.030
	Sleeping together	1(0.4%)	4(1.4%)	0.178
	Sharing utensils	1(0.4%)	2(0.7%)	0.563
Other	3(1.1%)	7(2.5%)	0.202	
Know a prevention method of HIV/AIDS(n=562)	Yes	276(98.2%)	259(92.2%)	<b>0.001</b>
	No	5(1.8%)	22(7.8%)	
Knowledge of methods of prevention of HIV/AIDS (n=535)	Condom use	271(95.4%)	253(90.0%)	<b>0.002</b>
	Abstinence	43(15.3%)	31(11.0%)	0.134
	Be faithful	35(12.5%)	30(10.7%)	0.510
	Avoid sharing sharp materials	75(26.7%)	59(21.0%)	0.113
	Other	10(3.6%)	3(1.1%)	0.050
Is HIV/AIDS curable(n=562)	Yes	46(16.4%)	86(30.6%)	<b>0.000</b>
	No	235(83.6%)	195(69.4%)	
Know transmission mode of STI(n=562)	Yes	194(69.0%)	157(55.8%)	<b>0.001</b>
	No	87(31.0%)	124(44.1%)	

Percent in some case is above 100% because of multiple answers by participants.

Table2: continued

Characteristics	Category	Number (Percentage)		P- Value
		Project users (n=281)	Project Non-Users (n=281)	
Knowledge of modes of STI transmission (n=351)	Unprotected sex	186(66.2%)	152(54.1%)	<b>0.003</b>
	Sharing of sharp objects	17(6.0%)	24(8.5%)	0.256
	Blood contact	52(18.5%)	51(18.1%)	0.913
	Sitting on a hot stone	2(0.7%)	13(4.6%)	<b>0.004</b>
	Insect bite	0(0.0%)	1(0.4%)	0.317
Know any major sign and symptom of STI (n=562)	Yes	196(69.8%)	165(58.7%)	<b>0.006</b>
	No	85(30.2%)	116(41.3%)	
Knowledge of major signs and symptoms of STI (n=361)	Uncommon vaginal discharge	137(48.8%)	106(37.7%)	<b>0.008</b>
	Genital ulcer	56(19.9%)	51(18.1%)	0.591
	Itching & swelling around genital area	56(19.9%)	37(13.2%)	<b>0.031</b>
	Burning sensation during urinating	123(43.8%)	87(31.0%)	<b>0.002</b>
	Foal smell	19(6.8%)	25(8.9%)	0.346
	Discomfort during sex	5(1.8%)	4(1.4%)	0.737
	Other	5(1.8%)	0(0.0%)	0.025
Knows any benefits of using condom (n=562)	Yes	279(99.3%)	278(98.9%)	0.653
	No	2(0.7%)	3(1.1%)	
Knowledge of benefits of using condom (n=547)	HIV Prevention	276(98.2%)	268(95.4%)	<b>0.053</b>
	STI Prevention	127(45.2%)	73(26.0%)	<b>0.000</b>
	To avoid unwanted pregnancy	173(61.6%)	119(42.0%)	<b>0.000</b>
	Other	3(1.1%)	0(0.0%)	0.133
Do you think that you are at risk for HIV/STI? (562)	Yes	125(44.5%)	122(43.4%)	0.799
	No	156(55.5%)	159(56.6%)	

## **Consistent Condom Use by Commercial Sex Workers in Addis Ababa**

Among the total respondents, 233(41.5%) of the respondents revealed that they get condoms for free. More than three fourth of the respondents 447(79.5%) reported that clients ask them for sex without condom. Almost half 275(48.9%) of the respondents reported that their clients ask them for sex without condom due to the belief of clients of condom reducing sexual pleasure or satisfaction.

92(16.4%) of the respondents reported that they did not use condom in their last sexual intercourse, of which 28(10.0%) and 64(22.8%) were intervention users and non-users respectively. About 58(10.3%) of the respondents reported that they ever had a sexual intercourse without condom with their new clients, of them 14(5.0%) were project users and 44(15.7%) were project non-users. About 72(12.8%) of the respondents reported that they ever had a sexual intercourse without condom with their regular clients, of them 18(6.4%) were project users and 54(19.2%) were project non users. 158(28.1%) of the respondents reported that they ever had a sexual intercourse without condom with their boyfriend/husband. And of them, 77(27.4%) and 81(28.6%) were users and non-users of the project respectively.

The overall prevalence of consistent condom use was 305(54.3%) and the prevalence of consistent condom use among project users was 185(65.8%) and among non-users was 120(42.7%). The difference is statistically strongly significant at 95% confidence level with (P-value = 0.000).

The prevalence of consistent condom use with new clients was 504(89.7%) while it was 489(87.0%) with regular clients. Among those who had boyfriend or husband, the prevalence of consistent condom use with their boyfriend/husband was 122(21.7%). Consistent Condom use with boyfriends was not significantly different with intervention users and non-users.

Although 247(44.0%) of sex workers thought of being at risk of HIV and STI, only 305(54.3%) reported consistent condom use in the last one month prior to the data collection period.

More than one fourth 145(25.8%) and 64(11.4%) of the respondents ever faced incidence of condom breakage and slippage respectively during sexual intercourse.

Table 3: Condom use of Commercial sex workers in Addis Ababa, 2016

Characteristics	Category	Number (Percentage)		P -Value
		Project users (n=281)	Project Non- Users (n=281)	
Get condoms for free(n=562)	Yes	187(66.5%)	46(16.4%)	<b>0.000</b>
	No	94(33.5%)	235(83.6%)	
Source of free condoms(n=233)	HAPCO	28(10.0%)	9(3.2%)	<b>0.000</b>
	Health Facility	43(15.3%)	7(2.5%)	
	NGO	112(39.9%)	30(10.7%)	
	Other	4(1.40%)	0(0.0%)	
Do your clients ask you to have sex without condom?(n=562)	Yes	241(85.8%)	206(73.3%)	<b>0.000</b>
	No	40(14.2%)	75(26.7%)	
Did you use condom in your last sexual act(n=562)	Yes	253(90.0%)	217(77.2%)	<b>0.000</b>
	No	28(10.0%)	64(22.8%)	
Ever faced Incidence of condom breakage(n=562)	Yes	68(24.2%)	77(27.4%)	0.386
	No	213(75.8%)	204(72.6%)	
Ever faced Incidence of condom slippage(n=562)	Yes	31(11.0%)	33(11.7%)	0.791
	No	250(89.0%)	248(88.3%)	
Did you consistently use condom with your new clients in the past one month? (n=562)	Yes	267(95.0%)	237(84.3%)	<b>0.000</b>
	No	14(5.0%)	44(15.7%)	
Did you consistently use condom with your regular clients in the past one month? (n=562)	Yes	262(93.2%)	227(80.8%)	<b>0.000</b>
	No	19(6.8%)	54(19.2%)	
Did you consistently use condom with your boyfriend in the past one month (n=280)	Yes	57(20.3%)	65(23.1%)	<b>0.567</b>
	No	77(27.4%)	81(28.8%)	
Did you consistently and correctly use condom in the past one month? (n=562)	Yes	185(65.8%)	120(42.7%)	<b>0.000</b>
	No	96(34.2%)	161(57.3%)	

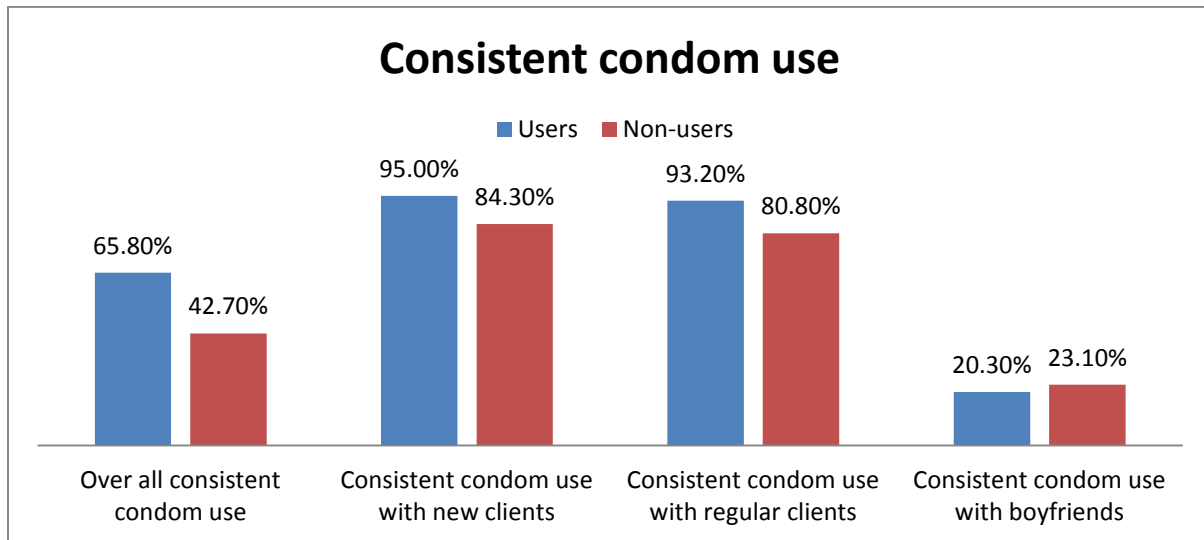


Figure 2: Prevalence of consistent condom use among study participants by their intervention status across different type of clients of sex workers in Addis Ababa, Ethiopia 2016

### Reasons for compromising consistent condom use

301(53.6%) of the respondents reported that higher payment from a client was the major reason for not using condoms consistently. The rest factors were refusal by a client 203(36.1%), alcohol use by clients 127(22.6%), unavailability of condoms in time of needs 113(20.1%), alcohol use by sex workers themselves 42(7.5%), pressure from owners of working venues 23(4.1%) and others 94(16.7%), (clients dislike condom, clients belief of condom reducing sexual pleasure, client's love for FSW, client need to marry FSW, condom reduce pleasure, client's difficulty to make love with condom)

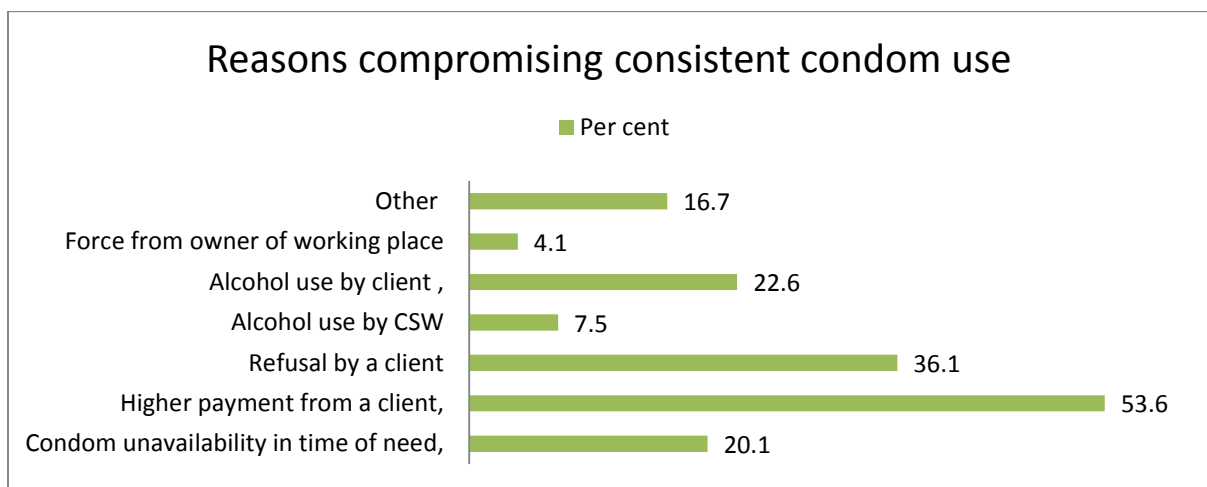


Figure 3: Reasons compromising consistent condom use in CSWs in Addis Ababa, 2016

## **Reasons of clients of commercial sex workers for asking sex without condom**

Among all the respondents, 449(79.5%) of them reported that their clients ask them for sex without condom. Nearly half 225(48.9%) of the respondents reported that the major reason of their clients of asking for sex without condom was due to belief of condom reducing sexual pleasure, difficulty to have sex with condom 115(20.5%), unavailability of condoms in time of need 25(4.4%) and other reasons 147(26.2%) such as dislike of condoms, foaling in love with sex worker, to infect us deliberately, want to get married ...etc

## **Sexual behavior of commercial sex workers in Addis Ababa**

The mean number of clients that the respondents had sex with on average per day was 3.01 with minimum of 0 and maximum of 10. Among the 72(12.8%) respondents who ever had sexual intercourse while drunk in the last one month, only 41(7.3%) of them used condom during the sexual act they had. Among the total respondents, 257(45.7%) ever had unprotected sex. Of them 96(34.2%) and 161(57.3%) were intervention users and non-users respectively. Regarding the type of sex that the respondents had in the last one month prior to the data collection period, 557(99.1%) and 19(3.4%) of the respondents had had vaginal and anal sex respectively. Majority 337(60.0%) of the respondents revealed that they take alcohol, smoking or any other substances for one or more reasons.

Table 4: Sexual behavior of Commercial sex workers in Addis Ababa, 2016

Characteristics	Category	Number (Percentage)		P- value
		Project users (n=281)	Project Non-Users (n=281)	
Did you have sex with your client while you were drunk in the last one month? (n=562)	Yes	31(11.0%)	41(14.6%)	0.207
	No	250(89.0%)	240(85.4%)	
Did you use condoms during the sex while drunk (n=72)	Yes	18(6.4%)	23(8.2%)	0.456
	No	14(5.0%)	19(6.8%)	
Type of sexual act that respondents had(n=562)	Vaginal sex	280(99.6%)	277(98.6%)	0.178
	Anal sex	7(2.5%)	12(4.3%)	0.243
	Oral sex	4(1.4%)	3(1.1%)	0.704
	Other <sup>2</sup>	7(2.5%)	1(0.4%)	0.033
Type of substance use (n=337)	Alcohol	118(42.0%)	132(47.0%)	0.235
	Smoking	51(18.1%)	87(31.0%)	0.000
	Chat	116(41.3%)	117(41.6%)	0.932
	Other <sup>3</sup>	30(10.7%)	44(15.7%)	0.081

### Reasons of CSWs for using Alcohol, drugs or any other substances

Majority 337(60.0%) of the respondents used substances, The reasons for taking substances were to avoid sleeping 167(29.7%), to entertain themselves 166(29.5%), Forced by establishment owners to drink much 64(11.4%) ,for resistance of night cold 73(13%) , Peer pressure 58(10.3%) and to comfort the client in sexual act 21(3.7%) and others (15.7%) such as to forget my job, when I feel worried, because I'm addicted, because I'm invited to drink,)

## **Health Service Need and Utilization of Commercial Sex Workers in Addis Ababa**

Majority 346(61.6%) of the respondents reported that they had tested for HIV in the last six months. Of them, 204(72.6%) were among project users while 142(50.5%) were among non-users of the project. The major reason for undergoing HIV test was to know their HIV status 244(43.4%). One fifth 113(20.1%) of the respondents revealed that they ever had STI in the last six months, and of these, 43(7.7%) and 70(12.5%) were users and non-users of the project respectively. More than half 300(53.4%) of the respondents reported that they had a need for uncovered health services. Among the respondents who reported as having a need for uncovered health services, (21.9%) and (20.8%) of the respondents revealed that they had need for free condom supply and free treatment during illness respectively. Among the respondents, more than half 300(53.4%) revealed that they had a need for uncovered health services. More than one-fifth of them mentioned condom supply for free 123(21.9%), free treatment during illness 117(20.8%), low cost treatment for STI 62(11.0%), more information about HIV/AIDS 59(10.5%), Family planning service 29(5.2%) and services to increase health knowledge 29(5.2%) and other services 45(8.0%) such as to exit sex work life, financial support and legal protection from violence.

Table 5: Health Service Need and Utilization of CSWs in Addis Ababa, 2016

Characteristics	Category	Number (Percentage)		P- value
		Project users (n=281)	Project Non- Users (n=281)	
Ever tested for HIV in the past six months (n=562)	Yes	204(72.6%)	142(50.5%)	0.000
	No	77(27.4%)	139(49.5%)	
Reasons for testing (n=346)	To know HIV status	154(54.8%)	90(32.0%)	0.000
	Due to Illness	28(10.0%)	39(13.9%)	
	Due to pregnancy	3(1.1%)	0(0.0%)	
	Encourages me to use condoms	2(0.7%)	9(3.2%)	
	Other	16(5.7%)	4(1.4%)	
Ever had a STI in the past six month (n=562)	Yes	43(15.3%)	70(24.9%)	0.004
	No	238(84.7%)	211(75.1%)	
Had uncovered need for health service (n=562)	Yes	170(60.5%)	130(46.3%)	0.001
	No	111(39.5%)	151(53.7%)	

### Factors associated with consistent condom use among commercial sex workers in Addis Ababa.

This study indicated that utilization status of HIV prevention intervention packages by commercial sex works statistically significantly influenced their consistent condom usage. The odds of consistent condom usage was 2.1 times higher [**2.136 (1.389, 3.286)**] among intervention user commercial sex workers compared to their counterparts after selected variables are controlled. On the other hand commercial sex workers who did not have boyfriend were 5.1 times more likely to use condoms consistently compared to their counter parts [**5.132(3.479,7.570)**]. Besides commercial sex workers who got condoms free of charge were 1.6 times more likely to consistently use condom compared to their counterparts[**1.577(1.016,2.448)**]. Commercial sex workers who did not abuse substances were more than 2 times more likely to consistently use condoms compared to their counterparts [**2.004(1.361,2.952)**] as shown by the following table.

Table6 : Association of utilization status of CSWs, Socio-demographic characteristics and knowledge of the respondents with consistent condom use in Addis Ababa, 2016.

Variables	Consistent condom use		COR (95%CI)	AOR (95%CI)
	Yes	No		
<b>Utilization status</b>				
User	185 (65.8%)	96 (34.2%)	<b>2.586 (1.837,3.638)<sup>x</sup></b>	<b>2.136 (1.389,3.286)<sup>xx</sup></b>
Non-User	120 (42.7%)	161(57.3%)	<b>1.00</b>	<b>1.00</b>
<b>Having a child</b>				
No	93(60.4%)	61(39.6%)	<b>1.410 (0.667,2.055)<sup>x</sup></b>	1.195(0.782,1.828)
Yes	212(52.0%)	196(48.0%)	<b>1.00</b>	1.00
<b>Having a boyfriend</b>				
Yes	67(30.6%)	152(69.4%)	<b>1.00</b>	<b>1.00</b>
No	238(69.4%)	105(30.6%)	<b>5.142 (3560,7.429)<sup>x</sup></b>	<b>5.132(3.479,7.570)<sup>xx</sup></b>
<b>Know any benefits of using condoms</b>				
Yes	253(45.4%)	304(54.6%)	<b>4.806(0.534,43.275)<sup>x</sup></b>	2.994(0.303,29.567)
No	4(80.0%)	1(20.0%)	<b>1.00</b>	1.00
<b>Gets condoms for free</b>				
Yes	152(65.2%)	81(34.8%)	<b>2.159 (1.527,3.051)<sup>x</sup></b>	<b>1.577(1.016,2.448)<sup>xx</sup></b>
No	153(46.5%)	176(53.5%)	<b>1.00</b>	<b>1.00</b>
<b>Uses any substances</b>				
Yes	178(52.8%)	157(47.2%)	<b>1.00</b>	<b>1.00</b>
No	79(35.1%)	146(64.9%)	<b>2.069 (1.462,2.928)<sup>x</sup></b>	<b>2.004(1.361,2.952)<sup>xx</sup></b>

NB <sup>x</sup>Significant for Crude OR & <sup>xx</sup>Significant for Adjusted OR.

## **In-depth Interview Summary Results**

A total of ten participants were involved in the in depth interview. They were sampled purposively among the Commercial Sex Workers, Peer Educators and Service providers. The interviews were moderated by the principal investigator and moderator. We tried to assess the factors that influence consistent condom use by CSWs, condom negotiation skills with their clients and sexual partners, service related barriers regarding condom utilization.

### **❖ Factors affecting correct condom use**

Most of the interviewees reported that the main factors that affect correct condom use by CSWs were taking substances like alcohol and chat both by the CSWs themselves and by their clients ,higher payment from their clients, negligence of CSWs, clients trial of tearing condoms, lack of awareness and skills about correct condom wearing and removing skills, pressure and enforced by clients, majority of the respondents reported that CSWs do not even use condoms with their sexual partners they call them *ballukas*”.

A nurse counselor said that: *“CSWs will not use condoms correctly firstly if they are newcomers of the business and have lower self-confidence to negotiate for condom use. Secondly when CSWs drink alcohol, they may get drunk and thus may not give time to think of condom use, the other is do they really know how to use condoms is the main thing, If they do not know about proper condom wearing and removing techniques and procedures, it is difficult to say that they use condoms correctly.”*

Another nurse counselor claimed that: *“....The main reason for CSWs for not using condoms is their negligence. They think that it is up to their client to properly wear and use condoms correctly....”*

### **❖ Factors influencing consistent condom use of commercial sex workers.**

The participants in the in depth interview were asked about the reasons that affect consistent condom use by CSWs. They pointed out the main reasons, the dominant reason that almost all the respondents mention was higher payment from clients of CSWs. They also mention the rest as refusal from clients, type of client and intimacy with him, shortage of condoms, lack of access to condoms 24 hours, substance use like alcohol.

A nurse counselor said that *–As the CSWs themselves say, they do not use condoms with their sexual partners they call boyfriends or ballukas. If you ask them why they do so, they will answer you that because they love them, because they are their husbands though not married officially.”*

Similarly another nurse counselor described that *“We distribute condoms to CSWs for free. But they mostly do not use condoms consistently when they are with their partners they call boyfriends or “ballukas”. This is the challenge I often face. Because they say they trust the guy as he is their boyfriend/husband. The CSWs do not use condoms with their boyfriends/ballukas.”*

Some CSWs did not use condoms consistently due to their personal reasons. An outreach worker described that *“... If a CSW had faced condom breakage during sexual act with her client, she thinks that she is infected and will no more use condoms with any of her clients”*

### **❖ Condom negotiation skills of CSWs with clients**

Regarding CSWs negotiation skills for condom use with their clients who ask for sex without condoms, most of the CSWs responded that they will try their best to convince their clients to use condoms by using different convincing reasons. One of the interviewee CSWs replied that she did not think that she had the negotiation skills. She also added that *“...Some CSWs do not want to tell or convince clients to use condoms as they prioritize to have the money they obtain from their clients and they even do not want to talk about condom use.”*

A nurse counselor said that *“CSWs who often come to me, tell me that they will have unprotected sex if they are paid higher payment from their client...”*

The respondents replied that if CSWs are educated, they will have better knowledge about condom and better negotiation skills of condom use.

### **❖ Condom negotiation skills of CSWs with their sexual partners**

Most of the respondents reported that CSWs do not use condoms with their sexual partners/boyfriends they call ballukas. They also described that it is not easy to convince ballukas to insist on condom use.

An outreach worker explained that *“The reasons why CSWs do not use condoms with their boyfriends is the fear that they may leave them if they refuse to have sex with out condoms. Reasons of CSWs for having ballukas are to use them as their security guards, to enjoy with them (chew, drink and smoke together) and to have something good from them. Thus, they will start having unprotected sex with them and continue doing so as they want to keep the guys with them.”*

Another key informant from Nifas Silk said that *—My girl- friend is a CSW. If she asks me to use condoms, I suspect her of cheating over me and I may hit her as we have been having sex without condoms so far. So it is difficult to start using condom as I have not did it before.*”

### ❖ **Service related barriers influencing correct & consistent use condom?**

The respondents replied that lack of access for condoms in time of need especially during the night was one of the barriers, while some added shortage of condoms in their areas. Some of service providers of the project reported that some hotels sold condoms that were given to them to pass them to CSWs for free.

*—As I said earlier unavailability of condoms in time of need, may be not opening of shops for 24 hours of the day, and sometimes there is shortage of condom supply, the other thing is some hotels sell condoms to the CSWs that we distribute them for free although we often take measure when we came across with such issues.*”

(Nurse counselor)

### ❖ **Why do people have unprotected sex?**

Most of the respondents of the in depth interviews described higher payment from clients to CSWs was the major reason for not using condoms. Majority of them also mentioned the belief of condom reducing sexual pleasure as a reason why people make sex without condoms.

*—Most people have attitude of using condom reduces sexual satisfaction. Most guys want to have sex without condom as they believe that using condom results in no sexual pleasure. I think most people have such kind of attitude towards condom use.*”(Outreach worker)

Low economic status of CSWs induced them to have unprotected sex with their client when offer higher payments.

A 20 year old CSW said that “... *the main reason for becoming sex worker is lack of money and poverty. Thus they will have unprotected sex in order to get money if the client asks for it and pays higher payment.*”

Some HIV positive client also wants to have sex without condoms with CSWs as they want to infect or revenge them. Some respondents also said that people will have unprotected sex when they have intimate relationships.

A guy whose sexual partner is a CSW said that *—I. used to use condoms with my partner, but we gradually stopped using them due to our intimacy...*”

## 6. DISCUSSION

Consistent condom use within thirty days prior of the study among commercial sex workers was 54.3% (65.8% and 42.7% among project users and non-users, respectively) (p-value = 0.000). Multivariate analysis has also showed that project users were 2.1 times more likely to use condoms consistently compared with their non-users. Moreover, Commercial sex workers who did not have a boyfriend, got condoms free of charge and did not abuse substances were 5.1, 1.6 and 2 times more likely to use condoms consistently compared to their counterparts, respectively. Higher payment from clients, refusal of clients and substance use were the major reasons compromising consistent condom use.

The 54.3% consistent condom use in this study was comparable to a follow up study conducted in Uganda from May 2004 to Sept 2005 in which consistent condom use remained low at 55% (23) and a study done among 2578 sex workers in Nigeria which reported 55% consistent condom use(12).The level of consistent condom use in this study was lower than a study conducted in Gambia in 2011 among the 248 FSW in which consistent condom use prior to six month of the study was 63.8% (33). However, the overall prevalence of consistent condom use in this study was higher than the findings of a study conducted among female sex workers in Gondar town which was 47.7% (13) and a study conducted in Mexico among 924 FSWs which was 43% (21). The difference might be due to geographical/environmental variation and exposure status to HIV prevention interventions.

Although the number of condoms distributed and FSWs reached with peer education interventions increased significantly from 2013 to recent years, The magnitude of consistent condom use was still much lower than the national target of 95% put for the period of 2015-2010(1,9).The target of raising consistent condom use to 95% among FSWs set by the Ethiopian government in its strategic plan from 2015-2020 seems far to achieve since the magnitude is much lower in this study (9).

The magnitudes of consistent condom use among users and non-users of the intervention were statistically significantly different with 65.8%and 42.7% respectively. The CSWs who utilized the intervention were more likely to engage in consistent condom use compared with their non-user counterparts and there was a significant difference between users and non-users. The Ethiopian government also developed HIV/AIDS prevention, care and treatment Strategic Plan for 2015-2020 with the vision of ending AIDS by 2030. Implementing high impact and targeted prevention program is one of the objectives focusing on ensuring sustainable and equitable distribution and access to quality condoms and promoting correct and consistent use of condom. The strategic plan has also a target to raise consistent condom use to 95% among FSWs and distribute 150-200 million pieces of male condoms (9).Although the multivariate analysis has also revealed that project user commercial

sex workers were 2.1 times more likely to use condoms consistently compared to the project non-user commercial sex workers, the intended increase in the consistent use of condom by CSWs of 95% is far to reach (9).

In this study, 82.9% of the respondents disclosed that they used condom in the last sexual intercourse they had during the last one month prior to the interview where as a study done in Uganda among 1225 CSWs revealed that 85% CSWs reported using a condom at last sex with a client (23). Of the total respondent who ever had unprotected sex, 44.5% and 38.5% were project users and non-users respectively. Among the respondents who ever had unprotected sex with their new client, 2.3% and 7.8% were project users and non-users respectively. 3.2% of project users and 9.6% project non-users reported that they ever had unprotected sex with their regular clients. Among the respondents who had a boyfriend/husband, 13.7% users and 14.4% non-users revealed that they ever had unprotected sex with their boyfriend/husband. The level of consistent condom use of the CSWs with their new and regular clients was 89.7% and 87.0% respectively while a study in Gondar revealed it as 84.2% and 71.9% (13). This might be due to the difference in time laps, awareness level and exposure status of CSWs to the HIV prevention interventions. Consistent condom use with their new clients in this study (89.7%) is comparable to a study done in Gambia in 2011 which was 90.1% (33). However, Of the total Commercial Sex Workers who had boyfriends, consistent condom use with their boyfriends in this study was 21.7%; which was lower than a study conducted in Gondar town (32.8%), in Gambia (31.9%) and in Indonesia (34.0%)(13,14,33).This might be due to the difference in time laps, the awareness level of the sex workers and utilization status of the intervention.

Moreover, commercial sex workers who did not have boyfriend were 5.1 times more likely to use condoms consistently compared to their counter parts.

Besides commercial sex workers who did not abuse substances were 2 times more likely to consistently use condoms compared to those who abused substances. The magnitude of consistent condom use among CSWs who abused and did not abuse substances was 47.2% and 64.9% respectively (p-value=0.000). The CSWs who used substances were less likely to engage in consistent condom use when compared with their counter parts who abused substances. And consistent condom use was significantly associated with substance use.

Besides commercial sex workers who got condoms free of charge were 1.6 times more likely to consistently use condoms compared to their counterparts. Substantial evidences showed that In an intervention among sex workers which provided free condoms and STI services in Kinshasa, Zaire, condom use increased and HIV and STI prevalence decreased(37).This study also showed that the level of consistent condom use among CSWs with any type of sexual partners was lower and consistent condom use

with their boyfriends was less common compared with their new and regular clients which makes FSWs and the general population at high risk of HIV/AIDS and STIs. As recommended by experts, campaigns to prevent HIV amongst sex workers should focus on achieving consistent and correct condom use and safer sex. Provision of condoms, is one of the means to achieve the outcomes (30). The effort of the Ethiopian government to targeted promotion and distribution of condoms directed to sex workers and 100% condom use programming is one of the recommended interventions targeting sex workers. The recommendation claims that HIV prevention programs targeting sex workers should pay attention to condom provision and targeted distribution to sex workers (2).

This study indicated that utilization status of CSWs of the project, having boyfriends, access for free condoms and substance use were significantly associated with consistent condom use. There was a positive association between utilization of the HIV prevention project and consistent condom use. Project user commercial sex workers were 2.1 times more likely to use condoms consistently compared to project non-user commercial sex workers.

Higher payment from a client was mentioned as a main reason for compromising consistent condom use in this study. Higher payment from a client was the most dominant reason for not using condoms consistently accounting for 53.6% while another study reported it consisting of 33.2%. Similar reasons of compromising consistent condom use by CSWs were also documented by other studies done elsewhere (3,24). A study in Kinshasa, Democratic Republic of Congo reported that about a quarter of sex workers had unprotected sex for extra money, charging their clients up to 3.5 times more for unprotected sex(34).

Other reasons for inconsistent condom use among CSWs were: client refusal/objection, substance abuse like use of alcohol by both sex workers and their clients, unavailability of condoms in time of needs, pressure from peers and owners of working venues, forced by client after entering the room, trust of permanent client due to longer relationships and clients' seeking better satisfaction, lack of awareness and skills on proper wearing and removal of condoms, having sex with boyfriends, client type and intimacy, thinking of being infected due to previous experience of condom breakage, being a new sex worker, reluctance and negligence of sex workers, clients trial to tear condoms during intercourse, were the major reasons acknowledged by CSWs and in-depth interviewees for not using condom correctly and consistently. While a study in Lao PDR deprived most reasons for inconsistent condom use as partners not wanting to use condoms because of reduced sexual pleasure, being physically abused and forced not to use condoms and shorter time in sex work (11) trust of client, shorter time in sex work and brutality from a client were mentioned as reasons for inconsistent condom use in

similar studies (3,11,24).Other similar studies reported partner's reluctance to use condoms and education level of sex workers and clients as reasons for not using condoms consistently. (35, 36)

Though one of the objectives of the project's condom programming intervention and as revealed in the condom Standard Operating Protocol of the project document was to increase availability and accessibility of condom to CSWs and risk group and to ensure timely and continuous demand-based supply of free condoms distribution (18). All of the barriers for consistent and correct condom use need to be addressed before reaching the anticipated target.

MULU/MARPS HIV Prevention project was designed to provide MARPs friendly integrated HIV prevention services including free condom distribution to CSWs with the goal to contribute to the national effort of reducing new HIV infections by 50%(18).

Therefore, addressing the needs of CSWs with quality, need and evidence based services focusing on condom programming is essential to contribute to the effort of achieving the intended 95% correct and consistent use of condom by commercial sex workers.

## **7. Strengths and Limitations**

### **7.1 Strengths of the study**

This study could be considered as a baseline study to compare correct and consistent condom use among sex workers with HIV prevention intervention and without it.

### **7.2 Limitations of the study**

- The study topic by itself assesses sensitive issues related to sexuality which might have reason for underreporting of some behaviors.
- Sexual behaviors such as age of starting sex work and number of sexual partners may be affected due to recall bias.

## **8. Conclusion and recommendations**

### **8.1 Conclusion**

This study revealed that magnitude of consistent condom use among commercial sex workers was low in Addis Ababa. However, the study showed that the bio-medical package intervention significantly increased consistent and correct condom use among commercial sex workers. The magnitude of consistent condom use was statistically significantly higher among project users than non-users. Utilization status, having boyfriends, substance use and access for free condoms were significantly associated with consistent condom use. The respondents mentioned higher payment from a client, client refusal, substance use like alcohol, unavailability of condoms in time of needs, pressure from peers and owners of working venues, forced by client after entering the room, trust of client and clients' seeking better satisfaction as the major reasons compromising consistent condom use.

## **8.2 Recommendation**

### **8.2.1 For general population**

- The wider public including clients and boyfriends of sex workers and sex workers themselves should consistently use condoms.

### **8.2.2 For HIV Prevention Service Providers**

- Interventions should aim to improve availability of free condoms by creating a system to consistently supply high quality condoms to commercial sex workers, their clients and boyfriends.
- Services targeting on promotion of consistent condom use among sex workers, their clients and boyfriends should be given due emphasis.
- Services should be launched to enable sex workers to use “no condom no sex” approach all the time they make sex with their clients and boyfriends.

### **8.2.3 For programmers/policy makers**

- As consistent condom use was significantly lower among CSWs in non-intervention areas, more condom programming efforts should be applied to address all CSWs in all areas.
- Behavior change communication interventions focusing on reduction of substance use of commercial sex workers should be strengthened.
- Programs targeted to address boyfriends of sex workers should be designed to promote the level of consistent condom use among CSWs and their boyfriends.
- 100% condom use programs should be designed to promote consistent condom use among Commercial Sex Workers.

### **8.2.4 For researchers**

- Further large scale study needs to be conducted to assess prevalence of consistent condom use among sex workers at national level and to assess factors influencing consistent condom use among Commercial sex workers.

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## 10. Annexes

### i. English Version Questionnaire

ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

English Version Questionnaire

#### i. Study Information Sheet

Addis Ababa University, College of Health Sciences, School of Public Health Study on assessment of consistent condom use among commercial sex workers of Addis Ababa city.

Hello. My name is .....I am going to conduct an interview with you on behalf of Ato Abebaw Abebe, a post graduate public health student at Addis Ababa University. He is now conducting research consistent condom use and associated factors among commercial sex workers in Addis Ababa, Ethiopia.

The objective of this study is to assess consistent condom use and associated factors among commercial sex workers in Addis Ababa city. I have received permission letter from AAU, Addis Ababa HAPCO and Health Bureau to conduct this study. (Show a letter of approval). I would very much appreciate your participation in this survey. Your cooperation and willingness is greatly helpful in identifying factors related to consistent condom use. I would like to ask you some questions and the interview will just take a few minutes. Your answers will remain confidential, and i will not be taking down your name or address, so your answers will be anonymous. Participation in this survey is voluntary and there is no benefit, payment or possible risk associated with participating in this study except the time spent for responding to the questionnaire. You can choose not to answer any individual question or all of the questions. However, i hope that you will participate in this survey since your views are very important.

ii. Consent Form

I have understood the verbal explanation of the information sheet concerning this study and I understand what will be required of me and what will happen to me if I take part in it. I also understand that any time I may withdraw from this study without giving a reason and being affected for my refusal.

If you have questions regarding this study or would like to be informed of the results after its completion, you can comfortably contact the principal investigator.

Address of the principal investigator:

Abebaw Abebe

Phone Number: 0912 98 24 47

E-mail: abebawabebe\_2006@yahoo.com

At this time, do you want to ask me anything about the survey?

Are you willing to participate in this study?

1. Yes..... Continue to the next page

2. No..... Skip to the next participant

Signature of interviewer-----

Date of data collection-----/-----/-----

(Signature of interviewer certifying that informed consent has been given verbally by respondent)

**English version questionnaire**

Questionnaire to assess consistent condom use among commercial sex workers of Addis Ababa. School of Public Health, College of Health Sciences, Addis Ababa University,2016

Name of Sub-City:----- Woreda-----

Questionnaire number:-----

Category of FSW----- 1. Intervention User 2. Intervention Non-user

Name of interviewer:----- Name of Supervisor-----



Annex English Questionnaire

S.No	Question	Answer	Skip to
<b>Part 1: Socio demographic and related characteristics of CSWs</b>			
101	What is your age in completed full years?	-----	
102	What is your religion?	1.Orthodox 2.Muslim 3.Protestant 4.Catholic 5.Others	
103	To which ethnic group do you belong?	1. Oromo 2. Amhara 3.Tigrie 4. Guragie 5. Wolayita 6. Silte 7. Other (specify)-----	

104	What is your marital status? (before being sex worker)	1. Married 2. Unmarried 3. Widowed 4. Divorced	
105	Can you read & write in any language?	1. Yes 2. No →	107
106	If you say "Yes" to Q#105, what is the maximum grade you attained?	1. Grade----- 2. Informal	
107	What is the type of working establishment you are currently attached?	1. Hotel 2. Bar and restaurant 3. Night club 4. Red light 5. Local drinking house 6. Streets 7. Grocery 8. Other (specify)	
108	How old were you when you started working as a Commercial sex worker (in completed full years)?	-----	
109	How long have you been working as a Commercial Sex Worker?	-----	
110	What was your previous occupation before being a Commercial Sex Worker?	1. Waitress 2. Housemaid 3. Student 4. Jobless 5. Merchant 6. House wife 7. Other(specify)	

111	Do you have any children?	1. Yes 2. No $\longrightarrow$	113
112A	If you say $\rightarrow$ Yes” to Q#111 , how many children do you have? -----		
112B	Do you have any child after starting the Commercial sex work?	1. Yes 2. No	
112C	If you say $\rightarrow$ Yes” to Q#112B , Was the child planned?	1. Yes 2. No	
113	Do you currently have a boyfriend/husband?	1. Yes 2. No	
114	How many total paying regular clients do you have? -----		
<b>Part 2: Knowledge about HIV/STI and Condom</b>			
201	Do you know any method on how HIV can be transmitted from infected person to uninfected one?	1. Yes 2. No $\longrightarrow$	203
202	If you say $\rightarrow$ ” to Q#201, what are the transmission methods? (Multiple Answers Are Possible)	1. Unprotected sex 2. Sharing of sharp objects 3. Mother to child 4. Blood contact 5. Insect bite 6. kissing 7. Hand shaking 9. sharing of utensils 10. Other(specify)	
203	Do you know any prevention methods of HIV infection?	1. Yes 2. No $\longrightarrow$	205
204	If you say $\rightarrow$ Yes” to Q#203, which prevention methods do you know? (Multiple Answers Are Possible)	1. condom use 2. abstinence from sexual intercourse 3. staying with a single sexual	

		partner 4. Avoiding using sharp objects in common 5. Other(specify)	
205	Is HIV/AIDS curable?	1. Yes 2. No	
206	Do you know how STI can be transmitted?	1. Yes 2. No	
207	If you say –Yes” to Q#206, What is the transmission method? (Multiple Answers Are Possible)	1. Unprotected sex 2. Sharing of sharp objects 3. Blood contact 4. sitting on a hot stone 5. urinating to the East 6. Insect bite 7. kissing 8. Hand shaking 9. Other(specify)	
208	Do you know any major signs and symptoms of sexually transmitted infections?	1. Yes 2. No →	210
209	If you say –+” to Q#208, What are the major signs and symptoms?	1. Uncommon vaginal discharge 2. Soar around genital organ 3. Itching and swelling 4. Burning sensation when urinating 5. Foal smell 6. Uncomfortable sex 7. Other (specify)	
210	Do you know any benefits of using condom during sexual intercourse?	1. Yes 2. No →	212
211	If you say –Yes” to Q#210, What is benefit of using condom? (Multiple Answers Are Possible)	1. HIV prevention 2. STI prevention 3. To avoid unwanted pregnancy	

		4.Other(specify)	
212	Do you think that you are at risk for HIV/STI?	1. Yes 2. No	
<b>Part 3: Condom Utilization</b>			
301	Do you get condoms for free?	1. Yes 2. No 	305
302	If you say "Yes" to Q#303, where do you get from ?	1. HAPCO 2. Health facility 3. NGO workers 4. Other	
303	Do your clients ask you to have sex without condom?	1. Yes 2. No 	303
304	If you say "Yes" to Q#1, what are their reasons for asking to have sex without condom? (Multiple Answers Are Possible)	1. Condom reduces sexual pleasure 2. Difficulty to perform with condoms 3. Unavailability of condoms 4. Other (specify)	
305	Did you use condom in your last sexual intercourse?	1. Yes 2. No	
306	Have you ever had sex without condom with your new client during the past one month?	1. Yes 2. No	
307	Have you ever had sex without condom with your regular client during the past one month?	1. Yes 2. No	
308	Have you ever had sex without condom with your boyfriend/husband during the past one month?	1. Yes 2. No 3. I don't have boyfriend/husband	
309	What are the factors that hinder you from consistent condom use? (Multiple Answers Are Possible)	1. Condom unavailability in time of need, 2. Higher payment from a client, 3. Refusal by a client 4. Alcohol use by you 5. Alcohol use by client ,	

		6. Force from owner of working place 7. Other/specify	
310	Have you ever faced incidence of condom breakage during sex in the last one month?	1. Yes 2. No	
311	Have you ever faced incidence of condom slippage during sex in the last one month?	1. Yes 2. No	
<b>Part 4: Sexual Behavior of CSWs</b>			
401	How many clients do you have on an average per day?	-----	
402	Have you ever had sex while you were drunk in the past one month?	1. Yes 2. No $\longrightarrow$	404
403	If you say "Yes" for Q#402, Did you use condoms?	1. Yes 2. No 3. I don't remember	
404	Have you ever had sex without condom in the last one month?	1. Yes 2. No $\longrightarrow$	406
405	What type of sex do you practice? (Multiple Answers Are Possible)	1. Vaginal sex 2. Anal sex 3. Oral sex 4. Other/specify-----	
406	Do you currently use alcohol, drugs or any substances?	1. Yes 2. No $\longrightarrow$	501
407	If you say "Yes" for Q#408, What type of drugs do you use? (Multiple Answers Are Possible)	1. Alcohol 2. Smoking 3. Chat 4. Other(specify)	
408	Reasons for using substances (Multiple Answers Are Possible)	1. to avoid sleeping 2. to comfort client in sexual act 3. forced by establishment owners to drink much	

		4. For resistance of night cold 5. to entertain my self 6. Peer pressure 7.other(specify)-----	
<b>Part 5: Health Service Need and Utilization of CSWs</b>			
501	Have you been tested for HIV in the last six months?	1. Yes 2. No $\longrightarrow$	503
502	If you say "Yes" to Q#501, what was your main reason for undergoing HIV test?	1.To know my status 2.Due to Illness 3.For pregnancy 4. It encourages me to use condoms 5. Other/specify-----	
503	Have you ever had a sexually transmitted infection in the last six months?	1. Yes 2. No	
504	Do you currently have unmet need for health services?	1. Yes 2. No	
505	If you say "Yes" to Q#504, which type of health service do you need?	1.Free condom distribution 2. Information about HIV/AIDS 3.low cost STI diagnosis and treatment 4 Family Planning 5.Services to increase health knowledge 6. Free health service during illness 7. Other (specify)-----	

**iii. In-depth Interview Guide**

Hello! My name is ----- I am a Master of Public Health student at Addis Ababa University. Today I am here to have an interview with you about condom use and to collect data on issues related to condom use by female sex workers. The relevance of collecting such information is to identify the factors that hinder consistent and correct condom use and design interventions so as to protect FSWs from HIV/STI and unwanted pregnancy. Please note that the information collected from you is confidential. There is no correct or wrong answer. You can definitely express your ideas and attitudes freely. You are also expected to be honest while giving your ideas. Do you want to ask me anything about the interview? Can I begin the interview now?

1. What are the factors that affect correct use of condom by commercial sex workers?-----  
-----  
-----
2. What are the factors that facilitate inconsistent condom use by commercial sex workers?----  
-----  
-----
3. How difficult is it for you to insist on condom use with a client if he offers you more money not to use a condom?(for CSWs only) -----  
-----
4. How difficult is it for you to insist on condom use with your boyfriend with whom you haven't always used condoms in the past? (for CSWs only)-----  
-----
5. What are service related barriers not to correctly & consistently use condom?-----  
-----  
-----
6. In your opinion, why do people have sex without condom? From your perspective and from client's perspective?-----  
-----

Thank You



ክፍል ከተማ:----- ወረዳ----- የመጠይቅ ቁጥር-----  
 የሴተኛ አዳሪ ምድብ----- 1.ፕሮጀክት ተጠቃሚ 2.ፕሮጀክት የማትጠቀም  
 የቃለ-መጠየቅ አድራጊ ስም: ----- የሱፐርቫይዘር ስም: -----

ክፍል አንድ አጠቃላይ መረጃ

	መጠይቅ	ምላሽ	ዝላል
<b>ክፍል 1: መሰረታዊ መረጃዎች</b>			
101	እድሜሽ በሙሉ ዓመት ስንት ነዉ?	-----	
102	የምን ሀይማኖት ተከታይ ነሽ?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ/ይገለፅ.....	
103	የምን ብሔር ተወላጅ ነሽ?	1. ኦሮሞ 2. አማራ 3. ትግሬ 4. ጉራጌ 5. ወላይታ 6. ስልጤ 5. ሌላ/ይገለፅ .....	
104	የጋብቻ ሁኔታሽ ምንድን ነዉ? (ይህን ስራ ከመጀመርሽ በፊት)	1. ያላገባች 2. ያገባች 3. ባል የሞተባት 4. የተፋታች	
105	በምትናገረዉ ማንኛዉም አይነት ቋንቋ ማንበብና መጻፍ ትችያለሽ?	1. አዎ 2. አልችልም →	107
106	ያጠናቀቅሽዉ ክፍተኛ የትምህርት ደረጃ ስንት ነዉ?	1. ክፍል----- 2. መደበኛ ያልሆነ <input type="text"/>	
107	የስራ ቦታሽ የት ነዉ?	1.ሆቴል 2.ባርና ሬስቶራንት 3.ናይት ክለብ 4. በኪራይ ቤት/ቁምልኝ 5.አረቁ/ጠላ/ጠጅ ቤት 6. አስፋልት/መንገድ 7. ሌላ(ይገለፅ)-----	

108	ይህን ስራ ስትጀምረ አድሜሽን ስንት ነበር (በሙሉ ዓመት)?	-----	
109	ለምን ያህል ጊዜ በዚህ ስራ ላይ ቆየሽ?	-----	
110	ይህን ስራ ከመጀመርሽ በፊት ስራሽ ምን ነበር?	<ol style="list-style-type: none"> <li>1. አስናጋጅ</li> <li>2. የቤት ሰራተኛ</li> <li>3. ተማሪ</li> <li>4. ስራ የሌለው</li> <li>5. ነጋዴ</li> <li>6. የቤት እመቤት</li> <li>7. ሌላ(ይገለፅ)</li> </ol>	
111	በህይወት ያለ ልጅ አለሽ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. የለኝም → 113</li> </ol>	
112ሀ	ስንት ልጅ አለሽ?	-----	
112ለ	ይህን ስራ ከጀመርሽ በኋላ ልጅ ወልደሻል?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. የለኝም</li> </ol>	
112ሐ	አቅደሽ ነበር የወለድሽው?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. የለም</li> </ol>	
113	በአሁኑ ሰዓት ፍቅር ንደኛ/ባል አለሽ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. የለም</li> </ol>	
114	ስንት የዘወትር የክፍያ ደንበኛ አለሽ?	-----	
<b>ክፍል 2: ስለ ኤች.አይ.ቪ/ኤድስ፣ የአባላዘር በሽታና ኮንዶም እውቀት</b>			
201	የኤች.አይ.ቪ. መተላለፊያ መንገዶችን ታወቁያለሽ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. አላወቅም → 203</li> </ol>	
202	መተላለፊያ መንገዶች የትኞቹ ናቸው?  (ከአንድ በላይ መልስ ይቻላል)	<ol style="list-style-type: none"> <li>1. ጥንቃቄ የጎደለው ወሰብ</li> <li>2. ስለታማ ነገሮችን በጋራ መጠቀም</li> <li>3. ከእናት ወደ ልጅ</li> <li>4. በደም ንክኪ</li> <li>5. በትንኝ ንክሻ</li> <li>6. በመሳሳም</li> <li>7. በመጨባበጥ</li> <li>8. አብሮ በመተኛት</li> <li>9. የወጥ ቤት እቃ በጋራ መጠቀም</li> <li>10. ሌላ (ይገለፅ)</li> </ol>	

203	የኤች አይ ቪ መከላከያ መንገዶችን ታወቂያለሽ?	1. አዎ 2. አላወቅም →	205
204	መከላከያ መንገዶች የትኞቹ ናቸው?  (ከአንድ በላይ መልስ ይቻላል)	1. ኮንዶም መጠቀም 2. መታቀብ 3. ከአንድ የወሲብ ጓደኛ ጋር ብቻ መወሰን 4. ስለታማ ነገሮችን በጋራ አለመጠቀም 5. ሌላ (ይገለፅ)	
205	ኤች አይ ቪ/ኤድስ ፈጣሪ አለው ብለሽ ታስቢያለሽ?	1. አዎ 2. የለውም	
206	የአባላዘር በሽታ መተላለፊያ መንገዶችን ታወቂያለሽ?	1. አዎ 2. አላወቅም →	208
207	መተላለፊያ መንገዶች የትኞቹ ናቸው?  (ከአንድ በላይ መልስ ይቻላል)	1. ጥንቃቄ የጎደለው ወሲብ 2. ስለታማ ነገሮችን በጋራ መጠቀም 3. በደም ንክኪ 4. የሞቀ ድንጋይ ላይ መቀመጥ 5. ወደ ምስራቅ ዙሪያ በመሸናት 6. በትንኝ ንክሻ 7. በመሳሳም 8. በመጨባበጥ 9. ሌላ (ይገለፅ)	
208	የአባላዘር በሽታ ዋና ዋና ምልክቶችን ታወቂያለሽ?	1. አዎ 2. አላወቅም →	210
209	የአባላዘር በሽታ ምልክቶች እነማን ናቸው?	1. ከብልት የሚወጣ ያልተለመደ ፈሳሽ 2. ብልት አካባቢ ቁስል 3. የብልት አካባቢ ማሳከክና እብጠት 4. ሽንት ሲሸኑ ማቃጠል 5. ከብልት የሚወጣ ሽታ መኖር 6. በወሲብ ጊዜ ምችት አለመኖር 7. ሌላ (ይገለፅ)	
210	ኮንዶም መጠቀም የሚሰጠው ጥቅም አለ ብለሽ ታስቢያለሽ?	1. አዎ 2. የለም →	212
211	ኮንዶም መጠቀም ለምን ይጠቅማል?	1. ኤች አይ ቪ ለመከላከል 2. የአባላዘር በሽታ ለመከላከል	

	(ከአንድ በላይ መልስ ይቻላል)	3.ያልተፈለገ እርግጠና ለመከላከል 4. ሌላ(ይገለፅ)	
212	ለኤች አይ ቪ/የአባላዘር በሽታ ተጋላጭ ነኝ ብለሽ ታስቢያለሽ?	1. አዎ 2. የለም	
<b>ክፍል3 : የሴተኛ አዳሪዎች የኮንዶም አጠቃቀም በተመለከተ</b>			
301	ኮንዶም በነፃ ታገኛለሽ?	1. አዎ 2. አላገኝም →	303
302	ነፃ ኮንዶም ከየት ታገኛለሽ? (ከአንድ በላይ መልስ ይቻላል)	1.ኤች አይ ቪ መከላከል ቢሮ 2. ጤና ድርጅት 3. መንግስታዊ ያልሆነ ድርጅት 4. ሌላ/ይገለፅ	
303	ደንበኞች ያለ ኮንዶም ወሲብ ይጠይቁሻል?	1. አዎ 2. አይጠይቁኝም →	305
304	ደንበኞች ያለ ኮንዶም ወሲብ የሚጠይቁበት ምክንያት? (ከአንድ በላይ መልስ ይቻላል)	1. ኮንዶም ወሲባዊ እርካታ ይቀንሳል 2. በኮንዶም ወሲብ ማድረግ እቸገራለሁ 3.ኮንዶም አለመኖር 4. ሌላ/ይገለፅ ----- -	
305	ለመጨረሻ ጊዜ ባደረግሽዉ ወሲብ ኮንዶም ተጠቅመሽ ነበር?	1. አዎ 2. አልተጠቀምኩም	
306	ባለፈዉ አንድ ወር ከአዲስ ደንበኛሽ ጋር ያለኮንዶም ወሲብ ፈፅመሻል?	1. አዎ 2. አልፈጸምኩም	
307	ባለፈዉ አንድ ወር ከቋሚ/ዘወትር ደንበኛሽ ጋር ያለኮንዶም ወሲብ ፈፅመሻል?	1. አዎ 2.. አልፈጸምኩም	
308	ባለፈዉ አንድ ወር ከወንድ ጓደኛሽ/ባልሽ ጋር ያለኮንዶም ወሲብ ፈፅመሻል?	1. አዎ 2. አልፈጸምኩም 3. የወንድ ጓደኛ/ባል የለኝም	
309	ኮንዶምን ሁልጊዜ እንዳትጠቀሚ እክል የሚፈጥሩ ነገሮች ምንድን ናቸዉ? (ከአንድ በላይ መልስ ይቻላል)	1.ኮንዶም በሚፈለግበት ጊዜ አለመኖር 2.ከደንበኛ የተሻለ ክፍያ መኖር 3.የደንበኛ አለመፈለግ 4.አልኮል መወሰዴ 5.የደንበኛ ብዙ አልኮል መጠጣት 6.ከስራ ቦታ ሃላፊዎች ግፊት መኖር 7. ሌላ/ይገለፅ-----	

310	ባለፈው አንድ ወር በወሲብ ወቅት የኮንዶም መቀደድ አጋጥሞኛል?	1. አዎ 2. አላገጠመኝም	
311	ባለፈው አንድ ወር በወሲብ ወቅት ኮንዶም መንሸራተት አጋጥሞኛል?	1. አዎ 2. አላጋጠመኝም	
<b>ክፍል 4: የሴተኛ አዳሪዎች ወሲባዊ ባህርያት በተመለከተ</b>			
401	በቀን በአማካይ ከስንት ደንበኞች ጋር ትወጫለሽ?	-----	
402	ባለፈው አንድ ወር ሰክረሽ ወሲብ ፈፅመሽ ታወቁያለሽ?	1.አዎ 2. አላወቅም →	404
403	ኮንዶም ተጠቅመሽ ነበር?	1. አዎ 2.አልተጠቀምኩም	
404	ባለፈው አንድ ወር ያለኮንዶም ወሲብ ፈፅመሽ ነበር?	1. አዎ 2.አልፈፀምኩም →	406
405	የትኛውን የወሲብ አይነት ትፈፅሟልሽ? (ከአንድ በላይ መልስ ይቻላል)	1. የብልት ወሲብ 2. የፊንጢጣ ወሲብ 3. የአፍ ወሲብ 4. ሌላ/ይገለፅ-----	
406	በአሁኑ ጊዜ አልኮል፣ ጫት ወይም ሌላ አደንዛኝ እፅ ተጠቃሚ ነሽ?	1.አዎ 2. የለም →	501
407	ምን አይነት እፅ ትጠቀሟልሽ? (ከአንድ በላይ መልስ ይቻላል)	1. አልኮል 2.ሲጋራ 3. ጫት 4. ሌላ/ይገለፅ-----	
408	እፅ የምትጠቀሟበት ምክንያት ምንድን ነው? (ከአንድ በላይ መልስ ይቻላል)	1. እንቅልፍ ለመከላከል 2. ደንበኞችን በወሲብ ለመመቸት 3. የሰራ ቦታ ባለቤቶች ብዙ እንድንጠጣ ያስገድዳሉ 4. ብርዱን ለመቋቋም 5. ራሴን ለማዘናናት 6. የአቻ/ንደኛ ግፊት 7. ሌላ/ይገለፅ-----	
<b>ክፍል 5: የሴተኛ አዳሪዎች የጤና አገልግሎት ፍላጎትና አጠቃቀም በተመለከተ</b>			
501	ባለፉት ስድስት ወራት የኤች አይ ቪ ምርመራ አድርገኛል?	1. አዎ 2. አላደረሱም →	503
502	የተመረመርሽበት ዋና ምክንያት?	1.ራሴን ለማወቅ 2.ስላመመኝ 3.በእርግዝና ምክንያት 4. ኮንዶምን በዘላቂነት ለመጠቀም	

		5. ሌላ/ይገለፅ-----	
503	ባለፉት ስድስት ወራት የአባላዘር በሽታ ይዞሽ ነበር?	1. አዎ 2. የለም	
504	በአሁኑ ጊዜ ድጋፍ የማታገኝበት የጤና አገልግሎት አለሽ?	1. አዎ 2. የለም →	506
505	ምን አይነት የጤና አገልግሎት ድጋፍ ትፈልጊያለሽ?	1.ነፃ የኮንዶም አቅርቦት 2. ስለ ኤች አይ ቪ/ኤድስ መረጃ 3. በዝቅተኛ ዋጋ የአባላዘር በሽታ ምርመራና ህክምና 4. የቤተሰብ ምጣኔ አገልግሎት 5. ስለ ጤና ያለኝን እጠቀስ ለማሳደግ 6.ስታመም በነፃ መታከም 7. ሌላ/ይገለፅ-----	

በጣም አመሰግናለሁ!

1. ጥለቅ ያለ የግለሰብ ቃለ-መጠየቅ

ጤና ይስጥልኝ! ----- እባላለሁ:: በአዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ የህብረተሰብ ጤና የማስተርስ ዲግሪ ተማሪ ነኝ:: ዛሬ እዚህ የተገኘሁት ሴተኛ አዳሪዎች የኮንዶም አጠቃቀም ሁኔታ በሚመለከት ከእርስዎ ጋር ስለ ጉዳዩ ወይይት ለማድረግና መረጃ ለመወሰድ ነዉ:: ይህን መረጃ መሰብሰብ ያስፈለገዉ ሴተኛ አዳሪዎች ኮንዶምን ሁልጊዜና በትክክል እንዳይጠቀሙ ተፅዕኖ የሚፈጥሩ ነገሮችን በመለየት ሴተኛ አዳሪዎችን ከኤችአይቪ/ኤድስ፣ከአባላዘር በሽታና ከአልተፈለገ እርግዝናለመከላከል የሚያስችሉ ፕሮግራሞችን ለማጠናከርና ለመቅረጽ ነዉ:: ከእርስዉ የሚሰበሰበዉ መረጃ ሚስጥራዊነቱ የተጠበቀ ነዉ:: በምናደርገዉ ቃለ-መጠየቅ ትክክለኛ ወይም የተሳሳተ መልስ የለም:: የእርስዉን ሀሳብ፣አስተያየትና አመለካከት በነፃነት መግለፅ ይችላሉ:: አስተያየትዎን ሲሰጡ በታማኝነትና የኮንዶም አጠቃቀምን በተመለከተ የሚያጋጥሙ ችግሮችን ለመፍታት በሚያስችል መልኩ ሊሆን ይገባል:: ስለቃለ-መጠየቁ የሚጠይቁኝ ማንኛዉም አይነት ጥያቄ አለ? ቃለ-መጠይቁን መጀመር እችላለሁ?

1. ሴተኛ አዳሪዎች ኮንዶምን በትክክል መጠቀም እንዳይችሉ የሚያደርጋቸዉ ነገሮች ምን ምን ናቸዉ?-----  
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2. ሴተኛ አዳሪዎች ኮንዶምን ሁልጊዜ መጠቀም እንዳይችሉ የሚያደርጋቸዉ ነገሮች ምን ምን ናቸዉ?-----  
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3. የዘወትር ደንበኛሽ የሆነ ግለሰብ ከጠየቅሽዉ የገንዘብ መጠን በላይ እከፍላለሁ ያለ ኮንዶም እንወጣ ቢልሽ ኮንዶም እንዲጠቀም እንዴት ማሳመን ትችያለሽ?-----  
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4. ከዚህ በፊት ብዙ ጊዜ ኮንዶም ከማትጠቀሚዉ የወንድ ጓደኛሽ/ባልሽ ጋር ኮንዶም መጠቀም ለመጀመር ምን ያህል አስቸጋሪ ይሆንብኛል? -----  
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5. በአንች አስተያየት ሰዎች ያለኮንዶም ወሲብ ለምን ይፈፅማሉ? ከአንች ሃሳብ አንፃር? ከደንበኞችሽ ሃሳብ አንፃር? -----  
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በጣም አመሰግናለሁ!