SEXUAL COERCION, HIV RISK BEHAVIOR AND SEXUAL HEALTH AMONG FEMALE WAITRESSES IN JIMMA TOWN, SOUTH WEST ETHIOPIA

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A RESEARCH THESIS SUBMITTED TO INSTITUTE OF HEALTH, DEPARTMENT OF POPULATION AND FAMILY HEALTH, JIMMA UNIVERSITY IN PARTIAL FULFILLMENT FOR THE REQUIREMENT FOR MASTERS OF PUBLIC HEALTH IN REPRODUCTIVE HEALTH (MPH/RH)

JIMMA UNIVERSITY, INSTITUTE OF HEALTH, DEPARTMENT OF POPULATION AND FAMILY HEALTH

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Abstract

Background: - *Globally at least one in three women has been sexually coerced in her lifetime. Sexual coercion has been shown to be associated with a number of risky behaviors that in turn may also have adverse health consequences. Sexual behaviors are the primarily mode of HIV transmission. There is little sero-prevalence signifying risk of waitresses for HIV/AIDS and the link between sexual coercion and HIV risk behavior has not been documented in numerous studies across the region in Ethiopia. Thus, this study aimed to assess the association between Experience of Sexual coercion, HIV risk behavior and sexual health among female waitresses in Jimma town, southwest Ethiopia.*

Methods:-*A cross-sectional study design was employed from April 1, to 30, 2018 on 422 female waitresses of age 15-49 working in the licensed food and drinking establishments in Jimma town. A sampling frame containing the list of all licensed food and drinking establishments in Jimma town was used and 30% of the total establishment was selected by using lottery method. Structured interviewer administered questionnaire was used for data collection. Data was entered to EPI data version 3.1 and then exported to SPSS version 21 for analysis. Bivariate analysis was made and those Variables with P-value (<0.25) were subjected to multivariate analysis. Interpretation of the association was made in-terms of adjusted odds ratio with 95% confidence interval.*

Result: - *The life time experience of sexual coercion among female waitresses was 71.4% and about 71.6% of females reported to have HIV risk behavior. Female waitresses who were working in bar were 4.6 times more likely to engage in HIV risk behavior (AOR 4.64, 95% CI: 2.15-10.0), females who were ever used substance were three times more likely to engage in HIV risk behavior (AOR 3.37, 95% CI: 1.7-6.7) than non substance users. Those who experienced sexual coercion in the last 12month have 3.6 times more likely to have HIV risk behavior (AOR 3.6, 95% CI: 2.02-6.74) than those not experienced sexual coercion in the last 12months. The experiences of sexual coercion have a stronger association with HIV risk behavior (AOR 7.6, 95% CI: 3.8-15.3) than those not experienced sexual coercion after adjusting for the potential confounders (workplace, age and substance use) in multi-logistic regression analysis.*

Conclusion: - *A significant number of female waitresses were engaged in HIV risk behaviors notably high engagement in multiple sexual partner, concurrent sex, alcohol or substance use*

before sex and low consistency of condom use and were prone to unwanted pregnancy, abortion and STD. workplace, age, substance use and sexual coercion were the major predictors of HIV risk behavior. Therefore, establishments, Town health office and other stakeholders should be involved in protecting the female waitresses from the burden of sexual coercion, HIV risk behavior and sexual ill-health.

Key words: *sexual coercion, HIV risk behavior, female waitresses, southwest Ethiopia*

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Acronyms and abbreviations

AIDS- Acquired Immunodeficiency Syndrome.

CI- Confidence Interval

CSW-Commercial sex workers

DHS- Demographic and Health Survey

EPHA- Ethiopian Public Health Association

FDEs- Food and Drinking Establishments

HAPCO- HIV/AIDS Prevention and Control Office

HIV- Human Immunodeficiency Virus

IOM- International Organization for Migration

MARPS- Most At Risk population segment

MOH- Ministry of Health

OR- Odds Ratio

PLWHA- People Living With HIV/AIDS

SRS- Simple Random Sampling

STD- Sexually Transmitted Disease

STI- Sexually Transmitted Infection

SPSS- Statistical Package for Social Science

SV- Sexual violence

VAW- Violence Against Women

WHO- World Health Organization

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CHAPTER ONE

INTRODUCTION

1.1 Background

According to the World Health Organization, violence against women is a universal phenomenon that persists in all countries of the world, and the perpetrators are often well known to the victims/survivors(1). Violence against women can be defined as "any act of gender based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life"(2).

Violence can occur in different forms and settings including workplace, school, community and home 'domestic violence'. The most common type of violence against women is intimate partner violence (IPV), which refers to any behavior within an intimate relationship that includes physical, sexual, or psychological aggression or coercion and is a pattern of behavior employed by one person in a relationship to control the other. Gender-based violence, including intimate partner violence–physical violence perpetrated by men against their female partners - and sexual violence (SV) are worldwide public health problems associated with a wide range of negative physical, psychological, social and economic consequences for abused women themselves and their children (3).

Sexual violence is a common problem globally and it comprises of a range of sexual abuse including sexual coercion (4). Sexual coercion refers to any unwanted sexual activity or forceful sexual contact which could interferes with one's life. It is an interaction in which someone is forced to engage in sexual act against his or her will. It could be regarded as an act of compelling a person to involuntarily engage in sexual acts by the use of threats, violence, intimidation, deception, alcohol, drugs or some other forms of pressure or force, which may typically involve the infliction of physical and psychological harm. This act may lie on the continuum of sexual aggressiveness and harmful behavior, ranging from unwanted touch, verbal intimidation, harassment, attempted rape, to forceful sex, referred to as rape. Sexual coercion has been defined

by different researchers as sexual activities with one or more persons, with greater power due to age, physique, status, position or knowledge without the other party's mutual consent (5).

This implies that age, physique, status, position, wealth can be used a times as a driving force for sexual coercion and usually fear, weakness, lack of understanding and helplessness may be involved in such situations. Sexual coercive activities are unwanted sexual touch such as slapping the buttocks of the opposite sex, touching the breast, scratching or parting an opposite sex's back, grabbing of their waists. Sexual coercive activities also include being tricked into having sex, attempted rape, and actual rape, fondling of opposite sex's partners sexual organs, unwanted sexual jokes, comments, talks and gestures. Also included are noncontact abuse and other sexual acts such as molestation, harassment, forced viewing of pornography, repeated request for dates, threatening text messages, arousal gesture, indecent exposure. Other forms are intimidation and verbal pressure. Sexual coercion can be categorized into different ways that by reference to the situation in which it occurs by the identity or characteristics of the perpetrators. These categories are referred to as types of sexual coercion such as date acquaintance sexual coercion, marital or spousal sexual coercion, gang sexual coercion, sexual coercion of children, statutory sexual coercion, prison sexual coercion, war and transactional sexual coercion (6).

Sexual coercion of females is not a recent development, some of the evidences were revealed. A foremost expression of this was the biblical account of sexual coercion as recorded in Genesis 34 verse 1-2, the account of Dinah who was raped by Shechem and was highly depressed due to the loss of her virginity (7). A similar case was reported by West (2001) about the rape of a noble woman, Lucrecta, who lost her virginity and thus affected her bride price, and finally committed suicide. Forum for African Women Educationist (FAWE) revealed that 13.5% University students reported one or more acts of sexual coercion in the previous 12 months (8).

Sexual coercion is considered to cause psychosomatic trauma, fear, powerlessness, depression, negative sexual and reproductive health outcomes. Even the children born from those women are exposed to infection transmission and nutritional problems. Alcohol intake behavior, families living condition, sexual experience, socio-economic and cultural factors are considered as factors influencing the experience of sexual coercion (9).

Sexual coercion also has been shown to be associated with a number of risky behaviors that in turn may also have adverse health consequences. For example, such coercion is significantly associated with early sexual debut, having multiple sexual partners, and inconsistent condom use (10).

Risky sexual behavior is any sexual activity that leads to unintended pregnancy, STD, HIV, bodily physical injury and psychological trauma. It includes a number of sexual activities such as unprotected sexual intercourse, having intercourse under the influence of alcohols and drugs, having intercourse with multiple partners (4).

The proposed mechanisms linking sexual coercion to the engagement of HIV risk behaviors include heightened sexual behavior, easy arousal, and/or psychopathology (e.g. depression, posttraumatic stress disorder, and low self-esteem) leading to the inability to negotiate safe sexual behaviors. In addition, women who experience sexual coercion are more likely to abuse alcohol and/or drugs as a coping mechanism (10).

Sexual behaviors are the primarily mode of HIV transmission (11). It is well recognized that vulnerability for HIV is substantially higher in some specific population groups than in the general population and such population groups are identified as most at risk populations for HIV. Available data indicate that serodiscordant couples, Commercial Sex Workers (CSWs), men in uniformed services, long-distance truckers, mobile workers and cross border populations are among most-at-risk populations. Other emerging at-risk groups include young women often engaged in informal transactional sex including domestic workers, daily laborers and waitresses (12).

Despite the significance of the intersecting epidemics of sexual coercion and HIV as public health problems, knowledge of this association has largely been limited and the link between sexual coercion and HIV risk has not been documented in numerous studies across the region in Ethiopia. This study examines history of sexual coercion, HIV risk behaviors and sexual health among female waitresses in Jimma town.

1.2 Statement of the problem

Female youths bear disproportionately heavy social, economic and psychological burdens, specifically in developing countries due to poor emphasis given to their education and prevailing violence against them. This can be exacerbated in rural areas, where there is extremely less chance of getting an education, there are impoverished living conditions, and services and infrastructure are limited or absent. In these circumstances, a lack of awareness about STI risks, the inaccessibility of condoms, a lack of skills to address pressures from peers and men, unfair treatment from family (not sending to school, assigning all home duties to young girls, not providing emotional support, etc.), and sexual abuse of women may be common, facilitating risky behavior.(13)

Rates of sexual coercion remain high among adolescents and young adults (26% to 34%) despite decades of research, public health interventions, and growing public and professional awareness. Few experiences of sexual coercion are reported to anyone, including health care providers. Those who experience sexual coercion express fear, embarrassment, guilt, and privacy concerns as reasons for not using available health care resources. Both male and female survivors report high levels of anxiety, depression, suicidal thoughts, sleep disturbances, chronic diseases, and other medical problems (15).

Young women in Africa may also have sex with various people, including their marital and causal partners, and friends for various reasons, including curiosity, resource or financial transactions, pressure and violence. When female youths do not know how to protect themselves, and when they are not empowered and are forced to have sex against their will, the sex will be riskier. Research reports showed 3.4% and 1.4% HIV prevalence rates among women and men, respectively in sub-Saharan Africa in 2009 (14). The prevalence of HIV in Ethiopia was 1.18% and a total of 718,500 people were living with HIV, 60% of which are females (19). Having multiple sexual partners was highest among women aged 15–29 years, and that 49.7% of women who had multiple sexual partners in the past 12 months did not use condom (20).

Young people comprise a heterogeneous group of individuals whose sexual behaviors and vulnerability to HIV infection vary widely. There exists strong evidence showing that they engage in behavioral patterns that increase their risk of HIV infection (16).

There is little sero-prevalence signifying risk of waitresses in Ethiopia for HIV/AIDS. However, the baseline survey provides behavioral data suggesting vulnerability of waitresses in the country. Waitresses are among emerging at-risk groups included as they often engaged in informal transactional sex. Additional anecdotal evidence suggests that waitresses working in cafes/pastry shops/bars/hotels are exposed to the risk of HIV due to the nature of their work that involves frequent interactions with new customers who are often seeking sexual relationships (12).

Earlier studies conducted on sexual coercion in Ethiopia only tended to report the prevalence and associated factors among women, or else showed a considerably higher prevalence of sexual coercion among women compared with men and focused on students or commercial sex workers (17). Other studies only focused risky sexual behaviors. In view of this, there appears to be a strong need for increasing the knowledge of the relationship between sexual coercion and HIV risk behaviors among young people, especially relevant in communities where the disease continues at epidemic proportions. Thus, this study aims to identify the linkages between sexual coercion, HIV risk behavior and sexual health among female waitresses working in food and drinking establishments in Jimma town.

CHAPTER TWO

2. 1 Literature review

Violence against women and girls is one of the most systematic and widespread human rights violations. It is rooted in gendered social structures rather than individual and random acts; it cuts across age, socio-economic, educational and geographic boundaries; affects all societies; and is a major obstacle to ending gender inequality and discrimination globally (18).

Some women might not even realize that they are victims/survivors of violence and may not consider certain behaviors as violent. Yet just because an abused woman accepts a violent behavior as normal, society in general would not agree. Until recently, most governments and policy-makers viewed violence against women as a relatively minor social problem affecting a limited number of women. The general view was that cases of violence could be appropriately addressed through the social welfare and justice systems. During the past decade, however, the combined efforts of grass-roots and international women's organizations, international experts, and committed governments have resulted in a profound transformation in public awareness regarding this issue. Violence against women is usually targeted at women and girls due to their unequal treatment nature in society. It can takes place in the home, on the streets, in schools, in the workplace, in farm areas, refugee camps which is perpetrated by persons in positions of power (1).

Global magnitude of sexual coercion

Sexual violence is a common problem globally and it comprises of a range of sexual abuse including sexual coercion. Sexual coercion is both a public health problem and a violation of human rights. Globally at least one in three women has been sexually coerced in her lifetime. Young women are predominantly vulnerable to forced sex. In Virginia, USA, 30 % of young women aged 18–24 suffered from rape in 2009. In Sub Saharan Africa, evidence suggests that between 15- 68 % of young people encountered at least one experience of sexual coercion and Uganda particularly experienced up to 67 % (15).

A recent national survey in Uganda revealed that up to 36 % of females aged between 15–24 years had ever experienced sexual coercion. Among young women in Uganda, sexual coercion

manifests mainly as nonviolent coercive sex, unwanted non penetrative touching, verbal harassment, transactional sex and forced sex (14).

According to the study conducted on Sexual Coercion and Associated Factors among Female Private University Students in Bishoftu Town, 171(43.3%) of the respondents experienced sexual coercion. Being a social science student [AOR=2.167; 95% CI=1.139,4.122], respondents father's educational status [AOR=0.406; 95% CI=0.200, 0.820], Mothers' educational status [AOR=0.377; 95% CI=0.191,0.744], respondents source of support [AOR=2.511; 95% CI=1.225, 5.147] and drinking alcohol [AOR=0.358; 95% CI=0.177, 0.723] were found to be the predictors of the sexual coercion among the students (9).

Sexual behaviors and HIV risk of waitresses

Since the advent of HIV/AIDS, the number of studies in this field has grown, with focus on identifying, explaining, and changing sexual practices relevant to HIV transmission. Some studies have shown the impact of financial and education levels of the household, and the influence of urban or rural settings upon sexual behaviors. Other factors that have been shown to influence sexual behaviors include living arrangements, alcohol consumption, substance abuse, lack of parental control, peer pressure. Religion was found to be a protective factor in sexual abstinence among young people in Zimbabwe and Cote d'Ivoire. By contrast, an investigation of university students in Nigeria did not show any association between religion and sexual behavior. The importance of these factors on HIV-risky sexual behaviors varies thereby between settings. In Cameroon, the mean HIV prevalence is 4.5 %, with respectively 1.8 and 1.0 % of young females and males aged 15–24 being infected. The youths aged 15–24 years represent an important part of the national population and the majority of university students belong to this age group. University students are often regarded as being at a higher risk of acquiring HIV infection; hence they are categorized under the most at risk population segments (MARPS) owing to their inclination to be engaged in risky sexual behaviors and to their sense of non vulnerability (22).

According to study conducted on students in Jimma zone preparatory schools, 21.6% of female students had two or more sexual partners in the last six months. 43.5% female students were sexually at risk in the last six months. 8.6% of the female students used condom consistently in the last six months. Female students living away from their parents were 3 times more likely to

be at risk than students living with their parents (OR 95%CI 3.0(1.48-6.34)). Female students who consumed alcohol were 7 times more likely to be at risk than those who did not consume alcohol (OR 95%CI 7.27(3.36-15.7)). Living arrangement, educational status of parents, family connectedness, alcohol consumption and khat-chewing were the major predictors of risky sexual behavior (23).

A MARP is defined as a group within a community with an elevated risk for HIV, often because group members engage in some form of high-risk behaviors; in some cases the behaviors or HIV sero-status of their sex partner may place them at risk. Available data indicate that serodiscordant couples, CSWs, men in uniformed services, long-distance truckers, mobile workers and cross border populations are among most-at-risk populations. Other emerging at-risk groups include young women often engaged in informal transactional sex including domestic workers, daily laborers and waitresses. While the factors for vulnerability and the degree may differ, these groups share a higher risk of HIV infection that differs from the general population. While some of these groups could be categorized as mobile populations, others fall into economically deprived or vulnerable groups who are likely to engage in high risk unprotected sexual practices (12).

According to baseline survey conducted on most at-risk population for HIV/AIDS, 72% reported to have had sex in the previous 12 months. Two or more sex partners in the previous 12 months were reported by 17% of the waitresses. About 6% of the waitresses reported to have had sex with 2 or more sexual partners in the previous one month, which can be considered as having concurrent sexual relationships. Among those who had a non-regular partner last year, 24.5% said their partner was more than 20 years older. A little bit over a tenth reported a partner was 10-20 years older than them. Another 15% said they had sex partner who was 5-10 years older. Transactional sex with a non-regular sex partner in the previous year, 74.2% reported to have received money/gift from such a partner (24).

Waitresses' condom use with either a live-in or non-regular partner found to be notably low. Only 31% reported using condom with a live-in partner in the previous year. Consistent condom use (i.e. every time) with all live-in partners is even lower at 18.8%. Half of the waitresses reported being tested for HIV in the previous 6 months. The proportion who heard of STDs can be considered low at 54%. The knowledge of the different STD symptoms is even lower with

only 35.3% of the waitress were able to report at least one symptom spontaneously. The few who reported knowing STD symptoms mentioned genital ulcer (17.8%), itching in genital area (17.8%), pain/burning during urination (15.8%), genital discharge (15%), foul smelling discharge (8.8%), swelling in groin (7.3%) and genital rash (7%). Other symptoms were rarely reported by the waitresses. Waitresses were also asked if they had any STD symptom in the previous 6 months. The questions were asked directly and separately for each of the eight24 major STD symptoms. As shown in this study, 11% of the waitresses had at least one STD symptoms in the previous 6 months. Pain/burning during urination appeared the most common symptom as reported by 6% of the waitresses. This was followed by genital discharge (3.8%), genital rash (3.5%), itching in genital area (3.3%), foul smelling discharge (2.5%), among few others (24).

The relationship between sexual coercion and HIV risk behaviors

Several studies have suggested that the experience of sexual coercion leads to a greater likelihood of risky sexual behavior, such as early sexual debut, many sexual partners, and inconsistent condom use (17).

In many parts of the world, sexual coercion has been linked to risky sexual behavior, implying that there may be common causal pathways in the psychological reaction to serious violations of an individual's integrity: A population-based study of young people in Kenya showed that the risk of having multiple partners was doubled among those who had experienced sexual coercion. A similar finding was reported in a study from Ethiopia among women between the ages of 10 and 24. Those who had experienced sexual coercion were three times more likely to have had more than one sexual partner during the year prior to the study, in comparison with other women (25).

Another study from the Caribbean reported a seven-fold increased risk of early sexual debut among high school girls who had experienced sexual coercion, compared with those who had not had such an experience. Several studies have reported an association between experience of sexual coercion and higher rates of sexually transmitted diseases (STDs), implying ensuing consequences as a result of risky sexual behavior, including inconsistent condom use (26).

A recent Canadian study of adolescent females in difficult social circumstances showed a link between the experience of sexual coercion and a diminished ability to communicate about sexuality and contraception. Estimates of the prevalence of sexual coercion point to highs in settings with an elevated prevalence of HIV/ AIDS, as in South or East Africa, although this prevalence varies considerably between different settings (27). This observation has further highlighted a possible causal link, which could provide new insights for intervention. Since the impact of sexual coercion on subsequent sexual behavior is probably modified by socio-demographic, religious, and cultural factors, it would be useful to better understand these mechanisms, in order to improve policy formulation, reliable strategies and interventions to combat HIV/AIDS. A multicountry study of women ages 12 to 19 in four sub-Saharan countries that investigated coercion on the occasion of first sexual encounter showed that 23% of those in the Ugandan sample have experienced such coercion. This was corroborated by another study of adult Ugandan women from the Rakai district, where 22% of the women surveyed reported such coercion. Another study of women ages 15 to 19 from the same district found an association between the experience of coercion, on the one hand, and both inconsistent condom use and an increased level of STDs, on the other (14).

As study conducted in Uganda, among those who had experienced sexual coercion, a 50% higher likelihood of having debuted sexually was noted (OR 1.5, 95% CI: 1.1-2.1), along with a more than doubled risk of having done so at an early age (OR 2.3, 95% CI: 1.6-3.5). Moreover, individuals who had experienced sexual coercion also reported a higher number of sexual partners (OR 1.6, 95% CI: 1.1-2.5). However, their experience seemed unrelated to inconsistent condom use (OR 1.1, 95% CI: 0.6-1.8). The experience of sexual coercion seemed to have a stronger association with a high number of sexual partners among males than females (17).

Consequences of sexual coercion

Young women are more vulnerable to the negative reproductive health outcomes of sexual coercion like; unwanted pregnancy, abortion, HIV/AIDS and sexually transmitted diseases. Sexual coercion is associated with unwanted pregnancy. Every year, 14 million unintended (unwanted and mistimed) pregnancies occur in Sub-Saharan Africa. The 2011 Uganda Demographic and Health Survey reported the prevalence of unwanted pregnancy at 40 % and it was put at 80 % in a study at the abortion clinic in Mulago, Kampala (14).

A study conducted on Experience of violence and adverse reproductive health outcomes, HIV risks among mobile female sex workers in India indicate that FSWs who had experienced any violence (physical or sexual) were significantly more likely to be vulnerable to both reproductive health and HIV risks. For example, FSWs who experienced violence were more likely than those who did not experience violence to have experienced a higher number of pregnancies (adjusted odds ratio [OR] = 1.2, 95% confidence interval [CI] = 1.0-1.6), ever experienced pregnancy loss (adjusted OR = 1.4, 95% CI = 1.2-1.6), ever experienced forced termination of pregnancy (adjusted OR = 2.4, 95% CI = 2.0-2.7), experienced multiple forced termination of pregnancies (adjusted OR = 2.2, 95% CI = 1.7-2.8), and practice inconsistent condom use currently (adjusted OR = 1.97, 95% CI: 1.4-2.0). Among FSWs who experienced violence, those who experienced sexual violence were more likely than those who had experienced physical violence to report inconsistent condom use (adjusted OR = 1.8, 95% CI: 1.4-2.3), and experience STI symptoms (adjusted OR = 1.3, 95% CI: 1.1-1.7) (28).

2.2 Significance of the study

In Ethiopia, the HIV/AIDS epidemic has remained a major public health problem, mainly affecting people in the productive and reproductive age ranges. Recent epidemiological synthesis concluded as epidemic is more heterogeneous and concentrated in key populations and some geographical areas (corridors). Based on behavioral surveillance waitresses has been included recently among MARPs for HIV/AIDS but the impact that sexual coercion has on a variety of HIV risk behaviors generally under studied.

The findings of this study will strengthen the understanding of the intersections between HIV risk behavior and sexual coercion helps to design appropriate intervention plan and for legal protection of females from the burden of sexual coercion and its consequences. Moreover, it helps plan appropriate methods against HIV risk behaviors and prevents HIV transmission among this segment of population.

Conceptual frame work of the study

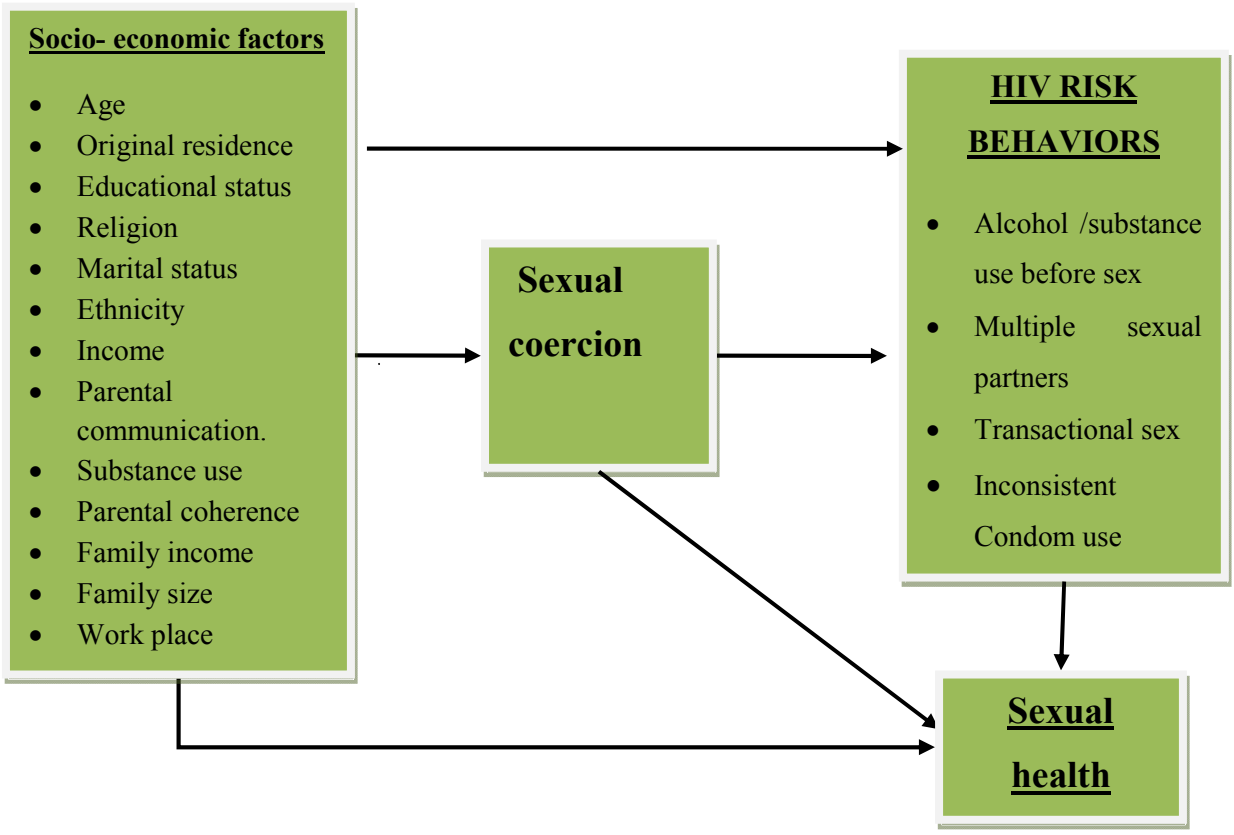

Figure 1-conceptual framework of sexual coercion, HIV risk behavior and sexual health developed after reviewing literatures (2, 12, 17)

CHAPTER THREE

OBJECTIVES

3.1 General Objectives

- To assess the association between Experience of Sexual coercion, HIV risk behavior and sexual health among female waitresses in Jimma town, Ethiopia, 2018.

3.2 Specific Objectives

- ✓ To determine the prevalence of sexual coercion among female waitresses.
- ✓ To identify HIV risk behavior among female waitresses.
- ✓ To determine the association of sexual coercion and HIV risk behavior among female waitresses.
- ✓ To identify sexual health status of female waitresses in Jimma town.

CHAPTER FOUR

METHODS AND MATERIALS

4.1 Study area and period

This study was conducted in Jimma town from April 1 to 30, 2018. Jimma town is located at 354 Km Southwest of Addis Ababa. The geographical coordinates are approximately 7o40'N latitude and 36o 50'E longitude. The town has a temperature that ranges from 20-30 o C with average annual rainfall of 800-2500mm3 and an altitude of 1750-2000m above sea level. According to Jimma town Health Office report, the projected total population of the town for 2017/18 FY is 199,575 from which 100,347 males and 99,229 females(out of which 43916 are in the reproductive age group women). The town has a total of 41,575 households. There are 25 medium clinics, 7 primary clinics, 3 NGO clinics, 8 governmental clinics, 4 diagnostic laboratories, 21 pharmacies and 31 drug stores. The town has two governmental hospitals (1 specialized university hospital & 1 general hospital), 1 primary private hospital & 4 health centers. There are 65 hotels, 44 cafeterias, 119 restaurants, 24 bars/groceries and 25 pensions in the town (32).

4.2 Study design

Cross-sectional study design was employed.

4.3 Population

4.3.1 Source population

The source population was all female waitresses in the age 15-49 years working in the licensed food and drinking establishments in Jimma town.

4.3.2 Study population

The study population was all selected female waitresses in the age 15-49 years working in the licensed food and drinking establishments in Jimma town and fulfilling the inclusion and exclusion criteria listed below.

4.4 Inclusion and Exclusion criteria

4.4.1 Inclusion criteria

- ✓ All female waitresses in the age group of 15-49 years residing in Jimma town for at least 6 months and
- ✓ Available at the time of data collection were included.

4.4.2 Exclusion criteria

- ✓ Female waitresses who were working in the bars and hotels during the night time for the purpose of sex work were excluded.

4.5 Sample size and sampling techniques

4.4.1 Sample size determination

The sample size was estimated using single population proportion formula with the following assumptions:

$$n = \frac{(Z\ \alpha/2)2\ P\ (1-P)}{d^2}$$

Assumptions in the formula

- n is minimum sample size
- P is estimate of the prevalence rate for the population*
- d is the margin of sampling error tolerated=0.05
- $Z_{1-\alpha/2}$ is the standard normal variable at (1-α)% confidence level where =1.96
- α at 5%=0.05

*To determine sample size for each specific objective, estimated prevalence of the most important item to be measured was used (24, 30, 31) and then the estimated prevalence of the item that gives the maximum sample size was taken as follows (table 1)

The non response rate of 10% (refusal to participate in the study) was considered and was added on the calculated sample size.

384 x 10% = 422

Total sample size = **422 of individuals were included in the sample of the study.**

Table 1-Estimated prevalence of the most important variable and sample size calculated, 2018

Objective	Source of the study(study area and period, design and sample size used)	Variable	Prevalence used	Calculated sample size
Objective-1	No similar study	Sexual coercion	P=50%	384*
Objective-2	Ethiopia 2014,cross-sectional, n=400	Multiple sexual partner	P=17%	217
		Cross-generational sex	P=35.4%	351
		Transactional sex	P=74.2%	180
		Sex concurrency	P=6%	170
		Consistent Condom use	P=18.8%	235
Objective-4	Ethiopia 2014,cross-sectional, n=400	HCT in 6month	P=50%	384*
		Partner tested	P=66.4%	343
		Self reported STD	P=11%	151

4.5.2 Sampling Technique

The sampling method employed to select study participants for this cross sectional study was simple random sampling technique, which helps to specify the sampling unit (the licensed food and drinking establishments). A sampling frame was used containing the list of all licensed food and drinking establishments in Jimma town.

WHO recommendation for the minimum sample size was used to select 30% of the total establishments by using lottery method. In order to obtain the total sample size of 422 female waitresses from the selected establishments' preliminary census was conducted two weeks prior data collection. A total of 327 female waitresses were enumerated by the census from the selected establishments. An additional establishment was proportionally allocated and selected

by simple random sampling technique again in order to recruit an additional 95 female waitresses to the intended study sample. The schematic presentation of this procedure was depicted on figure 2 as follows,

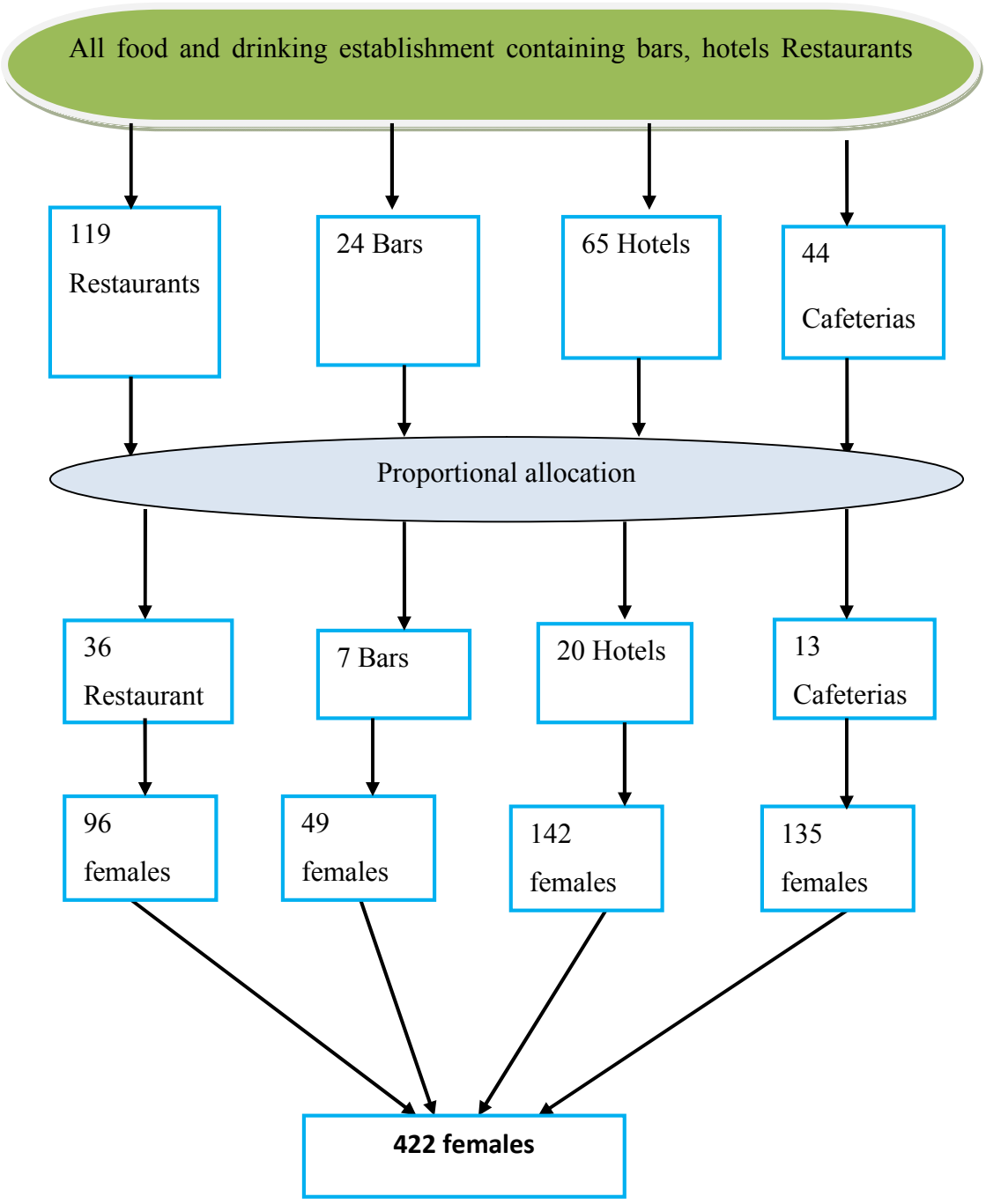

Figure 2-schematic presentation of the sampling procedure for selection of study participants from selected establishments, 2018.

4.6 Variables

4.6.1 Dependent

- **HIV risk behavior**
- **Sexual health**

4.6.2 Independent

Socio-demographic characteristics

- ✓ Age
- ✓ Marital status
- ✓ Religion
- ✓ Educational status
- ✓ Income
- ✓ Ethnicity
- ✓ Original residence
- ✓ Parental communication.
- ✓ Substance use
- ✓ Parental coherence
- ✓ Family income
- ✓ Family size

Sexual coercion

4.7 Data Collection

4.7.1 Data collection methods

- ✓ Structured interviewer administered questionnaires was used

4.7.2 Data Collection procedure and Instruments

4.7.2.1 Data Collection Instrument

The questionnaire was adopted from coercion experience survey and 2017 National Youth Risk Behavior Survey with modification to local area after reviewing different literatures (29). The

questionnaire was prepared in English and was translated to local language (Afan Oromo) and back to English by a third person who can speak both languages very well to ensure consistency. The data collection instrument consists of four parts that include Socio-economic characteristics of the respondents, experience of Sexual coercion, HIV risk behavior, and sexual health.

4.7.2.2 Data collection procedures

Data was collected using a face to face interviewer administered structured questionnaire that included both closed ended and open ended questions for individual survey.

Data was collected from selected study subjects by five diploma nurses after two days training on the data collection tools and methods of data collection. Criteria for selection of data collectors were: Female data collectors (urban health extension workers) with previous experience, who knows the local language Afan Oromo, known to be honest and diligent, willing to face difficulties that may arise during the process of interviewing, know the study area very well.

Two Supervisors with BSc nurse were assigned for data collectors and collect questionnaires on daily basis and checks for inconsistencies and omissions.

4.8 Data Quality control and assurance

4.8.1 Data quality control

To achieve a good data quality: Quality of data was controlled at different levels; first by data collectors during and at the end of each day, then by supervisors every day, then by the investigator, and finally during data entry. The inconsistent and missed questionnaire was excluded from analysis. Another data clerk was used in addition to the investigator for making double entry. These two sets of data were compared, rechecked and inconsistency was corrected.

Pre-test was done on 5% of the total sample not included in the study area. During the pre-testing, the questionnaire was assessed for its consistency, clarity, understandability, completeness, reliability, how much it was answered the objectives and the sensitivity of the subject matter was assessed. Interview was conducted face to face after obtaining informed consent.

4.9 Operational Definitions

Sexual Coercion – is the act of forcing a female waitress to involuntarily engage in sexual acts by physical body harm, violent threats, intimidation, deception, alcohol, drugs, or economic circumstance against her will. The act ranges from unwanted touch, verbal intimidation, harassment, attempted rape, to forceful sex, referred to as rape. Sexual coercion was measured by 5 yes/no item questions.

1. Unwanted kissing by force

2. Unwanted touching private part (breast, vagina) by force

3. Unwanted Sexual intercourse by force

4. Unwanted Sexual intercourse after taking money/gifts/alcohol

5. Unwanted sexual intercourse by intimidation/shame

- Score of yes to one of the above items was taken as sexually coerced.

HIV risk behavior- behavior of an individual or partner that increase the likely of acquiring HIV/AIDs. It is measured by yes/no to the following items.

1. Early sexual initiation(age <18years)
2. Alcohol drinking/substance use before last sex
3. Multiple sexual partners(2 or more partners in the last 12month)
4. Concurrent sex(2 or more sex partners in one month)
5. Transactional sex(ever received money/gift for sexual intercourse in the last 12month)
6. Intergenerational sex(sex with >10years partner in last sex)
7. Inconsistent condom use with non regular partner in the last 12month

A score of yes to one of the four items i.e multiple sexual partners, transactional sex, inconsistent condom use & alcohol drinking before sex in the last 12month was considered as having HIV risk behavior.

Sexual health- safe sexual practice that is free of coercion & discrimination/violence.

Safe sexual practice- sexual intercourse that do not pose to unwanted pregnancy and STDs

Sexual health- was assessed in terms of Safe sexual practice by 5 yes/no items.

1. Ever had unwanted pregnancy
2. Ever terminated a pregnancy
3. Had any STI or genital tract infection in their lifetime, past year and in the last 6months.
4. Ever received any HIV risk reduction counseling
5. Ever undergone HIV testing in the last 6months

Risk group: - These are people with high risk of acquiring and spreading HIV and other STDs among the general populations

Multiple sexual partners: more than two sexual partners

Food and drinking establishments:- An establishment where food and/or drink are served for clients. To meet the needs of differing clients, it may range from small low cost establishments to large buildings with high cost.

Concurrent sex partners: having sex with two or more people in a period of one month.

Cross generational sex: relationships between older men and younger women. Sexual intercourse with ten or more years older male partner compared with young women whose partner is less than ten years older.

Regular partner: cohabiting (live-in) sexual partner but never married.

Non-regular partner: sexual partner who did not live together

4.10Data Analysis

After data collection, each questionnaire was checked visually for completeness and consistency. After this, the data was coded, recoded and entered into EPI data version 3.1 by principal investigator and double entry checking was used during this procedure. The data was then

exported to SPSS (statistical package for social science) version 21 for data cleaning and analysis. Frequencies and summary statistics (mean, standard deviation, and percentage) were used to describe the study population in relation to relevant variables. The degree of association between independent and dependent variables was assessed using odds ratio with 95% confidence interval. Bivariate analysis was made and those Variables with P-value (<0.25) was subjected to multivariate analysis. Model fitness was checked by Hosmeler-Lemeshow goodness of fit. Interpretation of the association was made in-terms of adjusted odds ratio. Statistical significance was declared at p-value <0.05.

4.11 Ethical considerations

The study protocol was approved by the Institutional review board of Institute of Health, Jimma University. A permission letter was obtained from population & family health department and an official letter of co-operation was written to the respective FDEs by Jimma town health office. All the study participants were informed about the purpose of the study and verbal consent was obtained before interviews. Respondents were allowed to refuse or discontinue participation at any time they want. Information was recorded anonymously and confidentiality was protected by excluding their name and the name of the establishment they are working was not recorded anywhere in the questionnaire.

4.12 Plan for dissemination of the findings

The final paper was submitted to Jimma University Institute of Health, School Of Post-Graduate Studies. The recommendation was made for all stakeholders concerned. Findings of the study will be presented on different workshops and an attempt will be made to publish the findings on peer reviewed national or international journal.

CHAPTER FIVE

RESULT

5.1 SOCIO-DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

Four hundred twenty two female waitresses were planned to be included in this study, 392 were interviewed making the response rate of the study 92.9%. The minimum age of the respondent was 17 years and maximum age of 29years. The mean age of the respondents was 23.32 with SD of 2.83 years.

Most of the respondents 189(48.2%) are orthodox in religion, followed by Muslim 98(25%) and protestant 91(23.2%). Respondents were asked how important religion in their life and responded very important 294(92%), important 91(23.2%). 49(12.5%) ever married, 21(5.4%) currently married and 371(94.6%) not married and most of them (85.7%) ever attended formal education and 56(14.2%) have no formal education.

Most of the respondents were Oromo in ethnicity 126(32.1%), followed by kefa 70(17.9%), dawro 63(16.1%) and yem 56(14.3%) and 203(51.8%) original residence was urban and 189(48.2%) were rural dwellers. About 252 (64.3%) of study participants reported ever use of substance. More than half of the respondents (64.3%) have an average monthly income below 1000ETB.

From the 392 respondents only 63(16.1%) of participants ever discussed sex related matters with their parents while 329(85.9%) did not discussed. 203(51.8%) of the respondent's father and mother live together and 189(48.2%) have parental incoherence. 147(37.5%) of the respondents' family have 3-5 family, 147(37.5%) have 5-7 family and 98(25%) have greater than 7 family size. (Table 2)

Table 2 Socio-demographic characteristics of the female waitresses in Jimma town, south west Ethiopia, 2018.

Variable	Category	Frequency	Percent (%)
Type of establishment	Bar	42	10.7%
	Hotels	133	33.9%
	Restaurants	91	23.2%
	Cafeterias	126	32.1%
Age category	15-19	42	10.7%
	20-24	202	51.5%
	25-29	148	37.8%
Religion	Orthodox	147	37.5%
	Catholic	31	7.9%
	Protestant	109	27.8%
	Muslim	98	25.0%
	No affiliation	7	1.8%
Educational status	No education	56	14.3%
	Primary	112	28.6%
	Secondary and above	224	57.1%
Ethnicity	Oromo	126	32.1%
	Amhara	28	7.1%
	Gurage	30	7.7%
	Kefa	70	17.9%
	Dawro	63	16.1%
	Yem	56	14.3%
	Others*	19	4.8%
Original residence	urban	203	51.8%
	rural	189	48.2%
Ever substance use	yes	252	64.3%
	No	140	35.7%
Income in month	greater than 1500ETB	49	12.5%
	1000-1500ETB	91	23.2%
	less than 1000ETB	252	64.3%
Family size	3- 5	147	37.5%
	5-7	147	37.5%
	greater than 7	98	25.0%

*Others:-Tigre, Woliata and Hadiya.

5.2 Experience of Sexual coercion

About 182(46.4%) of the study participant ever been forced to have sexual intercourse and 154(39.3%) have been forced by the dating partner in the last 12months.

The perpetuator of forced sex was 92(50.5%) by stranger, 37(20.3%) by boyfriend, 14(7.7%) by teachers, 14(7.7%) by relatives, 9(4.9%) by brothers friend, 8(4.4%) by neighbor and 7(3.8%) by others. The perception they have toward forced sexual intercourse was worst for 175(44.6%), bad for 133(33.9%), neutral for 56(14.3%), good for 14(3.6%) and very good for 14(3.6%).

The life time experience of sexual coercion(including things such as unwanted kissing, touching, intimidation or being physically forced to have sexual intercourse after taking drug/money/gift/alcohol) among a female waitress was 280(71.4%) and 133(33.9%) coerced at first sex. The Last 12month experience of sexual Coercion was 242(61.7%) (figure 4).

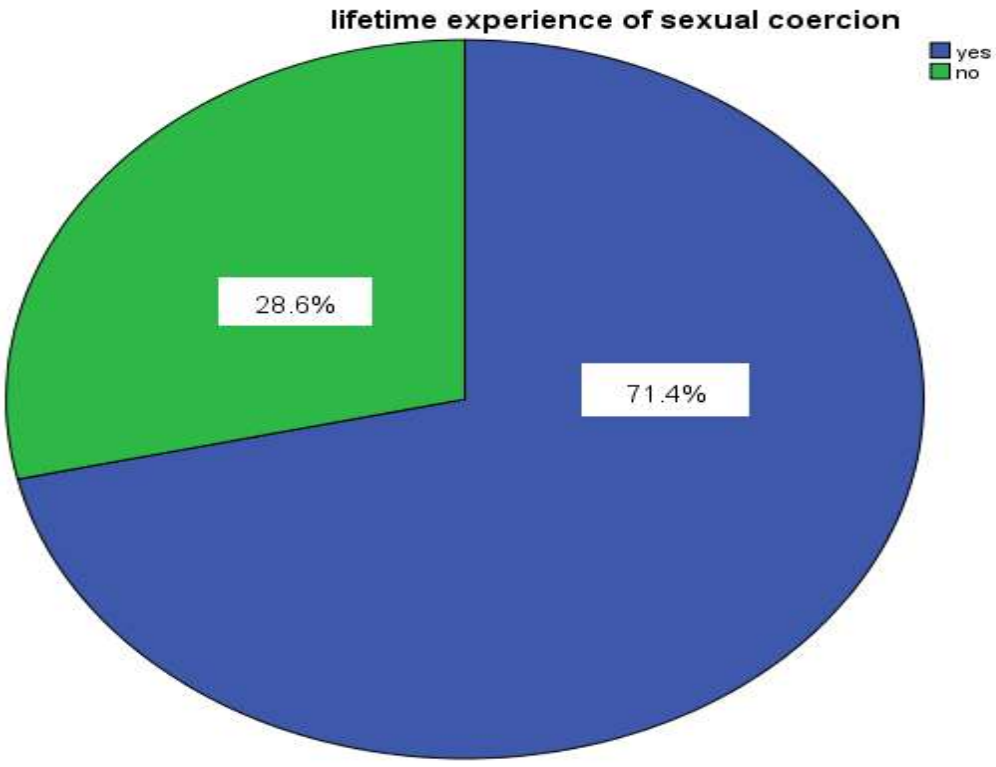

Figure 3 prevalence of lifetime sexual coercion among female waitresses in Jimma town, 2018

The types of sexual coercion experienced in their life time was unwanted sexual act (67.9%), unwelcome touch (58.9%0, forced sex (33.9%), sex after taking money or gift (33.9%) and forced sex by intimidation (25%).

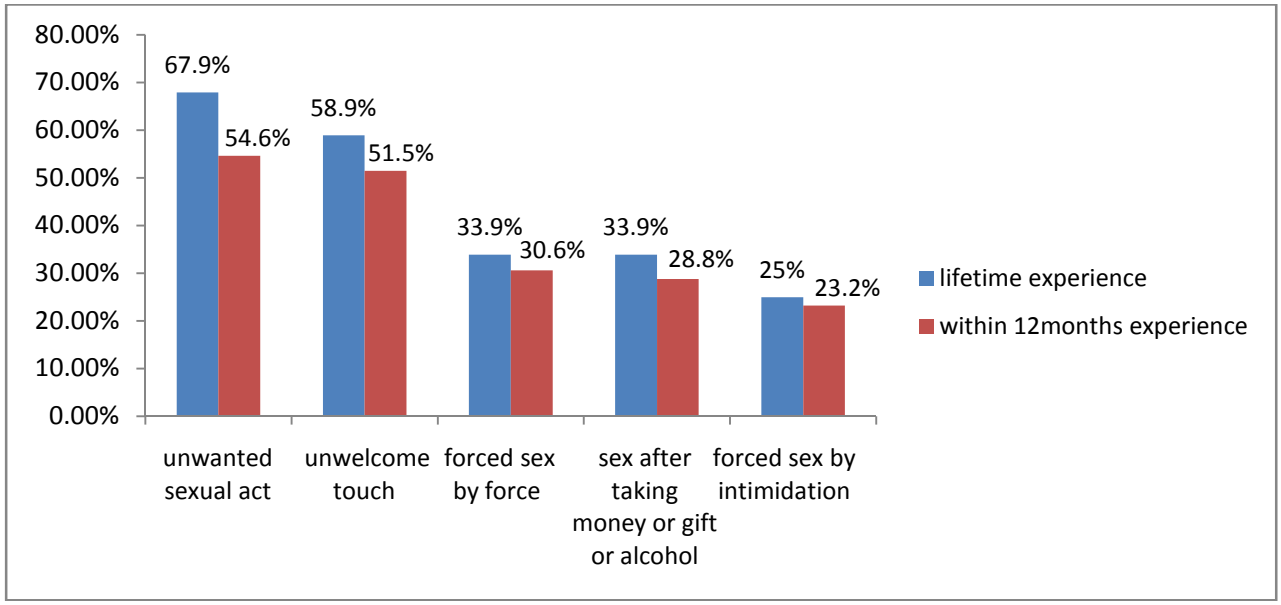

Figure 4 Type of sexual coercion experienced by female waitresses in Jimma town, 2018

5.3 HIV risk behaviors

From 392 study participants 161(41.1%) have reported to have regular (cohabiting) boy friend currently/presently and 301(76.8%) have ever had sexual intercourse. The reasons for sexual initiation were by peer pressure 98(25%), by promising from partner 56(14.3%), by personal desire 42(10.7%), by force 28(7.1%) and marriage 35(8.9%).

For more than one third of the respondents (35.7%) the age of sexual initiation was >18years. The prevalence of early sexual initiation among a female waitress was 41.1%.

During the last 12month, 99(25.3%) of the study participant had one sexual partner, 118(30.1%) had sexual intercourse with 2 people and 84(21.4%) reported 3 or more sexual partner in their lifetime. Multiple sexual partners was practiced by 196(51.8%) study participants (figure 6).

During the past 1 months, about 139(35.5%) had sexual intercourse with 1 person, 91(23.2%) with 2 people and 56(14.3%) of the participant had sexual intercourse with 3 or more people. The sex concurrency among the study participant was 37.5%. Intergenerational sex was assessed

by identifying the age of sexual partner in the most recent intercourse and 112(37.2%) of female waitresses who initiated sexual intercourse reported to have sexual intercourse with partners who were older than 10years.

Regarding substance use before last sexual intercourse 91(30.2%) of who initiated sexual intercourse reported to have substance use in the last sex while 210(69.8%) did not used. More than a two third (67.4%) of the respondents have used condom in the last sexual intercourse and 98(32.6%) did not used condom.

The frequency of condom use with all non regular partner in the last sex was every time for 112(37.2%), almost every time for 105(34.9%), some times for 63(20.9%) and never use for 21(7.0%). The consistency of condom use among sexual initiated female waitress in general was 112(37.2%).

One hundred fifty four respondents (39.3%) have ever experienced money or gifts in exchange for sexual intercourse and 147(37.5%) ever received money/gift from the most recent non-regular partners. Among those who practiced transactional sex 133(90.5%) did used condom and 14(9.5%) did not used condom (Table 3).

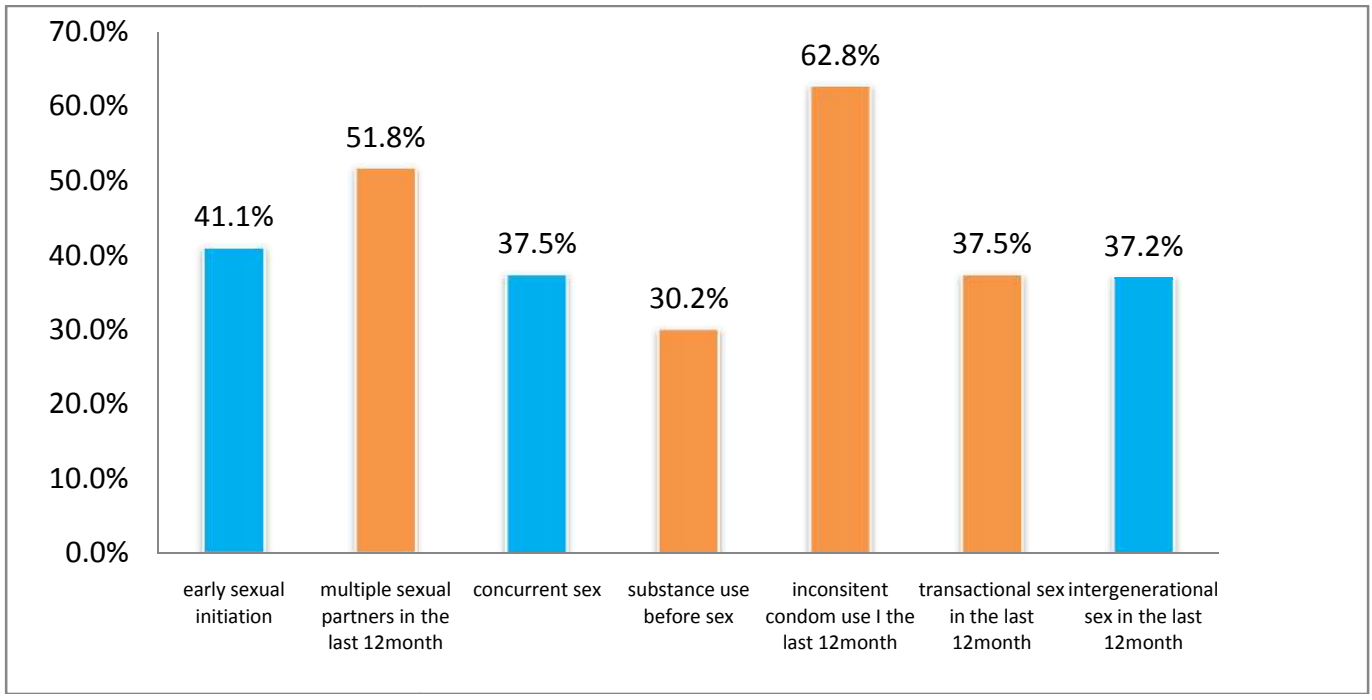

Figure 5 HIV risk behaviors among female waitresses in Jimma town, 2018

Table 3 sexual and HIV risk behaviors of a female waitresses of Jimma town, south west Ethiopia, 2018

Variable		Frequency	Percent
Have a regular boyfriend presently/currently	yes	161	41.1%
	no	231	58.9%
Early sexual initiation	yes	161	41.1%
	no	231	58.9%
Multiple sexual partner (last year)	yes	203	51.8%
	no	189	48.2%
Concurrent sex	yes	147	37.5%
	no	245	62.5%
have HIV risk behavior(last year)	yes	281	71.7%
	no	111	28.3%
Intergenerational sex	yes	112	37.2%
	no	189	62.8%
Substance use before sex	yes	91	30.2%
	no	210	69.8%
Condom use in last sex	yes	203	67.4%
	no	98	32.6%
Frequency of condom use with all non-regular partners (last year)	Every time	112	37.2%
	Almost every time	105	34.9%
	Sometimes	63	20.9%
	Never	21	7.0%
Experienced money or gifts in exchange for sexual intercourse.	yes	154	39.3%
	no	238	60.7%
Transactional sex(last year)	yes	147	37.5%
	no	245	62.5%
Condom use after transactional sex	yes	133	90.5%
	no	14	9.5%

5.4 The association between sexual coercion and HIV risk behavior

In the bivariate analysis of sexual coercion and HIV risk behavior both life time sexual coercion and the last 12month sexual coercion were significantly associated with HIV risk behavior. Lifetime sexual coercion was associated with multiple sexual partners in the last 12month, Inconsistent condom use in the last 12month and Transactional sex in the last 12month. Last 12month sexual coercion was also associated with multiple sexual partners in the last 12month, Substance use before last sex and Transactional sex in the last 12month (table 5)

Table 4 binary analysis of the association (Odds Ratios, 95% Confidence Intervals) between experience of sexual coercion and HIV risk behavior in the last 12month among female waitresses in Jimma town, 2018

Variable	Category	Multiple sexual partner in the last 12month	Inconsistent condom use in the last 12month	Substance use before last sex	Transactional sex in the last 12month	HIV risk behavior in the last 12month
Life time sexual coercion	Yes	5.0(3.1-8.2)	0.5(0.3-0.9)	Not sig(p-value=0.35)	6.3(3.5-11.6)	5.8(3.6-9.4)
	No	1.00	1.00		1.00	1.00
Last 12 month sexual coercion	Yes	2.4(1.5-3.5)	Not sig(p-value=0.59)	2.3(1.3-4.3)	4.4(2.7-7.2)	4.2(2.6-6.8)
	No	1.00		1.00	1.00	1.00

Association of HIV risk behavior and socio-economic factors

The bivariate regression analysis result showed that workplace, original residence, age, father educational status, parental communication, living with mother and father, parental coherence, , family income, substance use and sexual coercion are all significantly associated with HIV risk behavior and hence the candidate for multi-logistic regression. However, in the bivariate analysis of socio-demographic factors and HIV risk behaviors, religion, religious service attendance, ethnicity, marital status, school attendance, age started working for pay, working hour, alive mother, alive father, family size and monthly income were not associated with HIV risk behavior among female waitresses in Jimma town.

Independent predictors of HIV risk behavior

After controlling for possible confounding variables in multivariate logistic model workplace, age, substance use, residence and sexual coercion were significantly associated with HIV risk behavior ($p<0.05$).

Among those who had experienced sexual coercion, 8.9 times higher likelihood of having early debuted sexually was noted (AOR 8.9, 95% CI: 5.4-14.4), along with a more than quadripled risk of having forced sex at first sex (AOR 4.1, 95% CI: 2.6-6.3). Moreover, individuals who had experienced sexual coercion also reported a higher number of sexual partners (AOR 12.2, 95% CI: 3.9-25.4) and about seventeen times more likely to involve in transactional sex (AOR 17.2, 95% CI: 7.8-37.9). However, their experience related to consistent condom use was 50% less likely (AOR 0.5, 95% CI: 0.2-0.9).

Female waitresses who were working in bar were 4.6 times more likely to engage in HIV risk behavior (AOR 4.64, 95% CI: 2.15-10.0), females who were ever used substance were three times more likely to engage in HIV risk behavior (AOR 3.37, 95% CI: 1.7-6.7) than non substance users. Those who experienced sexual coercion in the last 12month have 3.6 times more likely to have HIV risk behavior (AOR 3.6, 95% CI: 2.02-6.74) than those not experienced sexual coercion in the last 12months. The experiences of sexual coercion have a stronger association with HIV risk behavior (AOR 7.6, 95% CI: 3.8-15.3) than those not experienced sexual coercion after adjusting for the potential confounders (workplace, age, residence and substance use) in multi-logistic regression analysis (table 6)

Table 5 Multivariate analysis of the association (Odds Ratios, 95% Confidence Intervals) between socio-demographic factors, experience of sexual coercion and HIV risk behavior among female waitresses in Jimma town, 2018

Variable	Category	Have HIV risk behavior		COR (95% C.I.)	AOR (95% C.I.)
		Yes(At high risk) No (%)	No(At low risk) No (%)		
workplace	Cafeteria	36(39.6%)	55(60.4%)	**1.00**	**1.00**
	Bar(1)	40(95.2%)	2(4.8%)	**5.6(3.0-10.1)**	**4.64 (2.15-10.0)**
	Hotel(2)	106(79.7%)	27(20.3%)	**0.93(.51-1.7)**	**1.2 (.56-2.70)**
	Restaurant(3)	99(78.6%)	27(21.4%)	**0.18(.042-0.8)**	**0.13 (.016-1.13)**
Original residence	Urban	119(58.6%)	84(41.4%)	1.00	1.00
	Rural	162(85.7%)	27(14.3%)	4.2(2.58-6.94)	1.7 (0.91-3.45)*
Age	15-19	7(16.7%)	35(83.3%)	1.00	**1.00**
	20-24(1)	139(68.8%)	63(31.2%)	0.09(.038-.215)	**0.17(.067-.456)**
	25-29(2)	135(91.2%)	13(8.8%)	0.019(.007-.05)	**0.029(.009-.09)**
Parental communication	Yes	28(57.1%)	21(42.9%)	1.00	
	No	253(73.8%)	90(26.2%)	2.1(1.14-3.89)	0.000(0.000)*
Parental coherence	Yes	134(66.0%)	69(34.0%)	0.55(0.35-0.87)	0.93(.46-1.87)*
	No	147(77.8%)	42(22.2%)	1.00	1.00
Family income	greater than 1500ETB	141(74.6%)	48(25.4%)	2.04(1.06-3.92)	0.07(0.02-0.3)*
	1000-1500 ETB	56(53.3%)	49(46.7%)	5.25(2.65-10.39)	2.12(0.74-6.02)
	less than 1000ETB	84(85.7%)	14(14.3%)	1.00	1.00
Substance use	yes	204(72.6%)	48(43.2%)	3.47(2.2-5.5)	**3.378(1.7-6.7)**
	no	77(27.4%)	63(56.8%)	1.00	**1.00**
Father educational status	illiterate	134(47.7%)	27(24.3%	0.23(0.13-0.42)	0.59(0.24-1.43)*
	elementary	98(34.9%)	42(37.8%	0.5(0.29-0.86)	1.41(0.64-3.11)
	High school + above	49(17.5%)	42(37.8%	1.00	
Lifetime Sexual coercion	Yes	231(82.5%)	49(17.5%)	5.8(3.59-9.354)	**7.6(3.8-15.3)**
	No	50(44.6%)	62(55.4%)	1.00	1.00
Live with mother	Yes	56(57.1%)	42(42.9%)	0.4(0.25-0.66)	1.37(.49-3.83)*
	No	225(76.5%)	69(23.5%)	1.00	1.00
Live with father	Yes	49(53.8%)	42(46.2%)	0.34(0.21-0.56)	0.9(.326-2.58)*
	No	232(77.1%)	69(22.9%)	1.00	1.00

*p-value >0.05

5.5. Sexual health

More than half of the respondent (60.7%) ever been tested for HIV, while 154(39.3%) did not know their HIV status. 217(55.4%) Ever undergo risk reduction counseling for HIV. Only 112(28.6%) of female have been tested in the last 6month. 63(16.1%) of the respondent female have ever had unwanted pregnancy and 56(14.3%) ever terminated a pregnancy at least one time. Other sexually transmitted disease was assessed and 322(82.1%) respondents have heard of STDs and can report at-least one STD symptom. The STD symptoms they mentioned include; vaginal discharge (41.1%), foul smelling discharge (21.4%), genital ulcer (26.8%), itching in genital area (17.9%), pain/burning during urination (23.3%), lower abdominal pain (10.7%), genital rash (14.3%) and swelling in groin (1.8%).

The prevalence of STD symptom reported by female waitresses was 56(14.3%) in the past year.

The Incidence of STD symptom reported in the last 6month was, 106(26.6%) reported to have at least one STD symptom. Pain/burning during urination appeared the most common symptom as reported by 16.1% of the waitresses. This was followed by genital discharge (12.5%) and foul smelling discharge (10.7%).

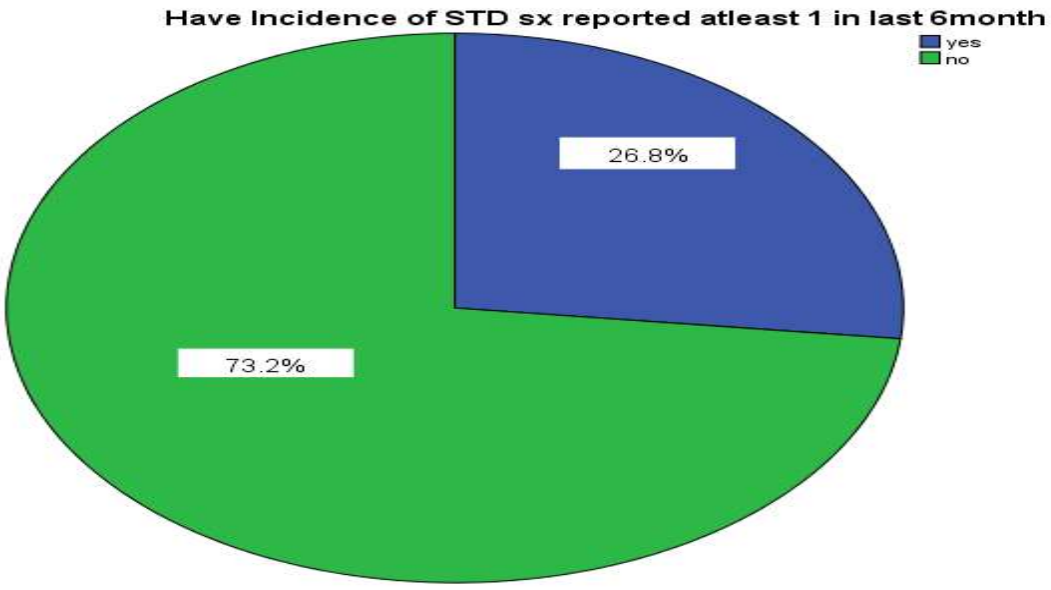

Figure 6 Pie chart of STD incidence reported in the last 6mont of female waitress in Jimma town, 2018

Independent predictors of STD in the last 6month

Bivariate and multivariable logistic regression models examining correlates of STD or genital tract infection in the last 6month. The bivariate logistic regressions showed that STI or genital tract infection in the last 6month was associated with workplace, education attendance, original residence, income, ever discussed sex related matters with mother, parental coherence, sexual coercion, multiple sexual partners, transactional sex and substance use in the last sex.

In the multivariable logistic regression model STD or genital tract infection in the last 6month was associated with not education attendance (AOR = 3.87, CI = 1.4-10.49), being urban (AOR = 3.9, CI = 2.03-7.5), parental coherence (AOR = 0.18, CI = 0.92-0.38), being sexually coerced (AOR 3.2, 95% CI: 1.4-7.2), having multiples sexual partner(AOR 3.8, 95% CI: 1.7-8.6), substance use before sex(AOR 9.5, 95% CI: 4.2-21.35) and income >1500ETB (AOR = 5.02, CI = 2.1-11.6).

Independent predictors of unwanted pregnancy

Bivariate and multivariable logistic regression models examined correlates of unwanted pregnancy. The bivariate logistic regressions showed that unwanted pregnancy was associated with workplace, age, religion, current marital status, education status, original residence, family income, transactional sex, consistency of condom use and substance use before sex.

In the multivariable logistic regression model unwanted pregnancy was associated with family income<1000ETB (AOR = 2.48, CI = 1.21-5.24), alcohol/substance use before sex (AOR = 3.6, CI = 1.93-6.50), transactional sex (AOR = 17.18, CI = 7.92-40.38) and inconsistent condom use (AOR 4.8, 95% CI: 2.8-7.6).

CHAPTER SIX

DISCUSSION

Violence against women and girls is one of the most systematic and widespread human rights violations. It is rooted in gendered social structures rather than individual and random acts; and is a major obstacle to ending gender inequality and discrimination globally. Some women might not even realize that they are victims/survivors of violence and may not consider certain behaviors as violent. Yet just because an abused woman accepts a violent behavior as normal, society in general would not agree. Thus, Rates of sexual coercion remain high among adolescents and young adults despite decades of research, public health interventions, and growing public and professional awareness.

The results of this study showed that the life time and last 12month experience of sexual coercion, how it was associated with HIV risk behavior among female in the sample. The life time experience of sexual coercion of a female waitress in this study was 71.4% and the Last 12month experience of sexual Coercion was 61.7% where as 33.9% coerced at first sex. The prevalence of sexual coercion was very high when compared with the study conducted in other parts of Ethiopia (21) and higher than the existing literatures on sexual coercion (15), study conducted in Uganda (14). This may be due to the nature of the work place that make them more vulnerable to sexual violence including sexual coercion. Age, substance use, family coherence, family income and religion were also significantly associated with sexual coercion of the female waitress.

Young people comprise a heterogeneous group of individuals whose sexual behaviors and vulnerability to HIV infection vary widely. There exists evidence showing that waitresses engage in behavioral patterns that increase their risk of HIV infection (16).

From this study, 41.1% study participants have reported to have regular boy friend currently/presently and 76.8% have ever had sexual intercourse. The prevalence of early sexual initiation among a female waitress in this study was 41.1% and that of multiple sexual partners in the last 12month was 51.8% of the study participants and this finding was very high when compared to the study conducted in Jimma zone (23), in some towns in Ethiopia (24) and Canada (20). This difference might be the result of cultural differences, availability of risk

factors (frequent interactions with new customers who are often seeking sexual relationships), community norms and the difference in study population.

The prevalence of sex concurrency among this study was 37.5%. Intergenerational sex was assessed by identifying the age of sexual partner in the most recent intercourse and 37.2% of female those initiated sexual intercourse reported to have sexual intercourse with greater than 10years age of sexual partner. This finding was higher than the baseline study conducted among female waitresses in Ethiopia (24) and this may be due to the study period cultural differences and increasing sexual risk behavior.

The consistency of condom (every time) use among sexual initiated female waitress was 37.2%. This is higher than the study conducted in Jimma zone (23) and among female waitresses in Ethiopia (24), this might be due to the difference in risk perception and interaction with new customer.

From this study, 37.5% of female ever received money/gift from the most recent non-regular partners. This finding is lower than the previous study conducted in female waitresses in Ethiopia (24) and this can be attributed to the study of inclusion and exclusion method of excluding those working at night times for the purpose sex work.

Several studies have suggested that the experience of sexual coercion leads to a greater likelihood of HIV risky behavior, such as early sexual debut, many sexual partners, and inconsistent condom use. This study also revealed that those who had experienced sexual coercion have 8.9 times higher likelihood of having early debuted sexually was noted (AOR 8.9, 95% CI: 5.4-14.4), along with a more than quadripled risk of having forced sex at first sex (AOR 4.1, 95% CI: 2.6-6.3). Moreover, individuals who had experienced sexual coercion also reported a higher number of sexual partners (AOR 12.2, 95% CI: 3.9-25.4) and about seventeen times more likely to involve in transactional sex (AOR 17.2, 95% CI: 7.8-37.9). However, their experience related to consistent condom use was 50% less likely (AOR 0.5, 95% CI: 0.2-0.9).

Female waitresses who were working in bar were 4.6 times more likely to engage in HIV risk behavior (AOR 4.64, 95% CI: 2.15-10.0) than female working in cafeteria,

Females who were ever used substance were three times more likely to engage in HIV risk behavior (AOR 3.37, 95% CI: 1.7-6.7) than non substance users. This finding was in-line with the study conducted in Jimma zone (OR 95%CI 7.27(3.36-15.7)(23) and Uganda (17).

The experiences of sexual coercion have a stronger association with HIV risk behavior (AOR 7.6, 95% CI: 3.8-15.3) than those not experienced sexual coercion after adjusting for the potential confounders (workplace, age and substance use) in multi-logistic regression analysis. This finding is in line with a population-based study on young people in Kenya (25), Uganda (17) and similar finding was reported in a study from Ethiopia and Caribbean (26).

Regarding sexual health of the female waitresses assessed, 60.7% of the total female ever been tested for HIV, while 39.3% did not know their HIV status. 55.4% ever undergo risk reduction counseling for HIV. 16.1% have ever had pregnancy and 14.3% ever terminated a pregnancy at least one time. 82.1% ever heard of STDs and can report at-least one STD symptom. The Incidence of STD symptom reported in the last 6month was, 26.6% reported to have at least one STD symptom. Pain/burning during urination appeared the most common symptom as reported by 16.1% of the waitresses. This was followed by genital discharge (12.5%) and foul smelling discharge (10.7%). Half of the waitresses reported being tested for HIV in the previous 6 months. The proportion who heard of STDs was 54%. The STD symptoms mentioned was genital ulcer (17.8%), itching in genital area (17.8%), pain/burning during urination (15.8%), genital discharge (15%), foul smelling discharge (8.8%), swelling in groin (7.3%) and genital rash (7%). As shown in this study, 11% of the waitresses had at least one STD symptoms in the previous 6 months. Pain/burning during urination appeared the most common symptom as reported by 6% of the waitresses. This was followed by genital discharge (3.8%), genital rash (3.5%), itching in genital area (3.3%), foul smelling discharge (2.5%), among few others (24). These findings are comparable but higher knowledge of STD symptom report was noted in this study because of the difference in educational status and study period that may increase the exposure to information source in recent times.

Education attendance , original residence, parental coherence, sexual coercion, having multiples sexual partner, substance use before sex and income were significantly associated with STD or genital tract infection in the last 6month.

LIMITATION OF THE STUDY

Due to the sensitive nature of the study topic, participants might have underreported risk behaviors as a result of a social desirability bias in face to face interview. There was a possibility of recall biases during determination of some sexual behavior.

Secondly, this cross-sectional study was COMPARED with the study conducted in 2010 on MARPs in Ethiopia due to the limitation of the available study conducted on this population.

Information on HIV/AIDS-related knowledge, condom use knowledge and condom use self-efficacy was not collected in the current study. Biological confirmation of STI status would be useful to verify self-reported sexual health data.

Cross sectional nature of the study is another limitation. The design does not allow one to judge the direction of causation between the main exposure, experience of sexual coercion, and HIV risk behaviors.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATION

7.1 Conclusion

The study showed that the prevalence of life time and the Last 12month experience of sexual coercion among female waitresses was high and considerable number were forced or coerced at first sex. Workplace, original residence, Age, substance use, family coherence, family income and religion were significantly associated with sexual coercion of the female waitress.

This study also revealed high prevalence of HIV risk behavior notably high engagement in multiple sexual partner (51.8%), concurrent sex (37.5%), intergenerational sex (37.2%), transactional sex (37.5%), alcohol or substance use before sex (30.2%) and low consistency of condom use (37.2%) which may put them at increased risk of acquiring HIV and this is over burdened with sexual coercion. The association between sexual coercion and HIV risk behavior persisted (AOR 7.6, 95% CI: 3.8-15.3) even after adjusting for the potential confounders (workplace, age and substance use) in multi-logistic regression analysis.

Sexual ill-health of the female waitresses also critical as considerable number of females did not know their HIV sero-status and interacting with new partner with unknown behaviors or sero-status that may place them at risk.

A significant number of female waitresses were prone to unwanted pregnancy (16.1%), abortion (14.3%) and its complication. The Incidence of STD symptom reported in the last 6month was high (26.6%). Education attendance, original residence, parental coherence, sexually coercion, having multiples sexual partner, substance use before sex and income were significantly associated with STD or genital tract infection in the last 6month.

7.2. Recommendation

Based on these findings it is recommended that:

MOH and its partners: - Governmental offices and NGO should collaborate to/in

Establish widely available friendly services that address waitresses reproductive health needs in extended hours so that this populations will be able to obtain service they need with respect and non-judgmental manner.

Jimma town health office:-should coordinate and collaborate with stake holders working in the area and provide behavioral change intervention including condom provisions for establishments in the town. Contraceptives should be provided through its community based HEP. Community based voluntary HIV counseling and testing should also be extended.

Establishments: - Should have rules and regulation so that waitresses will be protected from sexual coercion and non-sexual risk behaviors such as Khat chewing and alcohol intake at work place.

Policy makers: - should implement the existing legal punishment that protects women from gender based violence by raising the awareness of the policy about the prevalence and consequence of sexual coercion.

Researchers: - should further investigate the vulnerability of female waitress, the association of sexual coercion and HIV risk behavior using different study design as case control studies.

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ANNEX – I – Questionnaires

Questionnaire to be used in a study, to determine the association between Experience of Sexual coercion, and HIV risk behavior and sexual health among female waitresses in Jimma town, Ethiopia.

INTRODUCTION

Hello, I am---------- I am here to enroll and interview eligible study participants, and fill in questionnaires forms. I am glad to inform you that you are one of the eligible study participants, and you are chosen to take part in this study. I am also delighted to tell you that I am really value your participation, as your individual contribution to the study output and private, your honest and genuine response will highly be appreciated and credited, as it will help to make realistic analysis and to propose very practical suggestions. However, it is up to you to decide whether to participate in this study or not. I will definitely admire and respect what so ever your decision will be. I would also like to inform you that your name and the name of the establishment you work at will not be written anywhere in this paper. All information you are giving will not be divulged to anyone.

Would you like to participate in this research? 1. Yes 2. No 3. Reason ----------

(----------)
(Signature of interviewer for certifying informed consent verbally)

Date of Interview----------

Respondent ID number----------

Interviewers code No. ----------

N.B-Please fill on each answer sheet as follows

Time of start of interview---------- Interview may take around 30 minutes

Part I-Socioeconomic and family characteristics

No.	Question and filter	Alternative Choices for Responses	code
Q101	Type of establishment	1. Bar 2. Hotels 3. Restaurants 4.Cafeterias	
Q102	How old are you?	Years old_____	
Q103	What is your religion?	1. Orthodox 2. Catholic 3. Protestant 4. Muslim 5. No affiliation 6. Other (specify)----------	
Q104	How often do you usually attend religious services?	1. Every day 2.At least once a week 3. At least once a month 4. At least one a year 5. Less than once a year 6. Never	
Q105	How important is religion in your life?	1. Very important 2. Important 3. Not important	
Q106	Have you ever married? If your answer no go to no,108	1. Yes 2. No	
Q107	Are you currently married?	1. Yes 2. No	
Q108	Have you ever-attended school?	1. Yes 2. No	
Q109	What is the highest level of schooling you completed? (CIRCLE HIGHEST SCHOOL LEVEL)	1. No education 2. Primary 3. Secondary 4.Technical 5. Preparatory 6. Teacher Training College (TTC) 7. University	
Q110	What is your ethnicity?	1. Oromo 2. Amhara 3. Gurage 4. Kefa 5. Dawro 6. Yem 7. Others (specify)_____	
Q111	Where is your original of residence?	1. Urban 2. Rural	
Q112	Have you ever used substance like? If yes how often?	Usually Sometimes 1. Alcohol 1.Yes 2. No 1. Yes 2. No 2. Chat 1.Yes 2. No 1.Yes 2. No 3. Cannabis 1.Yes 2.No 1.Yes 2. No 4. Cigarettes 1.Yes 2.No 1. Yes 2. No 5. Other (specify) ---------- ----------	
Q113	How much do (did) you earn in a month?	Monthly wage (Enter Unit)……..	
Q114	How old were you when you started working for pay?	Age in years_____	
Q115	About how many hours a week do you	Hours_____	

	work?		
Q116	What type of work do (did) you do?	PROBE_____	
Q117	Now I have some **questions about your family**. Is your father alive?	1. Yes 2. No	
Q118	What is your father's educational status?	1. Illiterate 2. Read and write 3. Elementary 4. High school 5. Certificate 6. Diploma 7. Degree	
Q119	Does he live in the same household as you?	1. Yes 2. No	
Q120	Have you ever discussed sex-related matters with your father? If YES Often or occasionally?	1. Often 2. Occasionally 3. Never	
Q121	Is your mother alive?	1. Yes 2. No	
Q122	Does she live in the same household as you?	1. Yes 2. No	
Q123	Have you ever discussed sex-related matters with your mother? If YES Often or occasionally?	1. Often 2. Occasionally 3. Never	
Q124	What is your family size with you?	1. Brothers |_____| 2. Sisters |_____| 3. Parents |_____|	
Q125	What is your birth order in the family?	|_____|	
Q126	Do you have any older brothers?	1. Yes 2. No	
Q127	Do any live in the same household?	1. Yes 2. No	
Q128	Do you have any older sisters?	1. Yes 2. No	
Q129	Do any live in the household?	1. Yes 2. No	
Q130	Do your father and mother live together?	1. Yes 2. Divorced 3. One of them alive a, father b, mother 4. Both of them not alive	
Q131	How was your family income supported?	1. Supported by your father only 2. Supported by your mother only 3. Supported by both your mother and father 4. Supported by your other relatives	

		5. Other specify ----------	
Q132	Generally how much is your family monthly income in Birr?	|_____|	

Part II - Experience of Sexual coercion

No.	Question and filter	Alternative Choices for Responses	code
Q201	Have you ever been forced to have sexual intercourse when you did not want to? If your answer **is no. Skip to Q210**	1. Yes 2. No	
Q202	During the past 12 months, how many times did **anyone** force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)	1. 0 times 2. 1 time 3. 2 or 3 times 4. 4 or 5 times 5. 6 or more times	
Q203	During the past 12 months, how many times did **someone you were dating or going out with** force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)	1. 0 times 2. 1 time 3. 2 or 3 times 4. 4 or 5 times 5. 6 or more times	
Q204	The following acts may happen to many women, did some one ever made to you?	<u>Lifetime</u> 1. Un wanted sexual act such as -- Verbal jokes /asked to have sex/kiss 2. Face unwelcome touching on your genital or breast etc. 3. Face forced sex by force 4. Faced forced sex after taking money/gifts/alcohol/drugs	

		5. Faced forced sex by intimidation/shame Last 12 months 1. Un wanted sexual act such as -- Verbal jokes /asked to have sex/kiss 2. Face unwelcome touching on your genital or breast etc. 3. Face forced sex by force 4. Faced forced sex after taking money/gifts/alcohol/drugs 5. Faced forced sex by intimidation/shame	
Q205	Do you know of other girls who are raped?	1. Yes 2. No	
Q206	How do you perceive such acts as kissing, touching, or being physically forced to have sexual intercourse that you did not want to do?	1. Very good 2. Good 3. Neutral 4. Bad 5. Worst	
Q207	Did you report the event to the legal body after the event?	1. Yes 2. No	
Q208	If your answer is yes to whom did you report?	1. To police 2. To kebele 3. To court 4. Other legal bodies_____	
Q209	Is there any action taken to the perpetuator?	1. Sentenced 2. Financial penalty 3. Forced to marry 4. Other /Specify/--------	
Q210	If, for question no.214 is not reported to any body, why you kept the secret?	1.Do not know What to do 2. Afraid of parents 3. Afraid the public Reaction 4. Afraid of the Perpetuator 5. The legal body is not helpful 6. Others / Specify/ ----------	
Q211	Which of the following did you experience after forced sex in your lifetime?	1. Often have head aches 2. Poor appetite 3. Lack of sleep 4. Easily frightened	

		5. Blame yourself for what happened 6. Hate others for What has happened on you 7. Feel unhappy 8. Feel that you are a worthless person 9. Thought of ending of your life 10. Thought better to die 11. Other specify ----------	

Part III- HIV risk behaviors

No.	Question and filter	Alternative Choices for Responses	code
Q301	Do you have a regular boyfriend presently/currently?	1. Yes 2. No	
Q302	Have you ever had sexual intercourse? If no, skip to Q210	1. Yes 2. No	
Q303	If response to Q302 is yes how did you start sexual intercourse? (reasons for sexual initiation)	1. In a marriage 2. Personal desire 3. Peer pressure 4. Promising word from Partner 5. For financial purpose 6. For passing examination 7. By force against Your consent 8. Others Specify ----------	
Q304	How old were you when you had sexual intercourse for the first time?	Age in years_____	
Q305	In the last 12months, with how many people have you had sexual intercourse?	1. I have never had sexual intercourse 2. 1 person 3. 2 people 3. 3 or more people	
Q306	During the past 1 months, with how many people did you have sexual intercourse?	1. I have never had sexual intercourse during the past 1 months	

		2. 1 person 3. 2 people 4. 3 people or more people	
Q307	Age of sexual partner in last sex?	Age in years_____	
Q308	Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?	1. Yes 2. No	
Q308	The **last time** you had sexual intercourse; did you or your partner use a condom?	1. Yes 2. No	
Q309	Frequency of condom use with all non-regular partners (last 12month)	1. Every time 2. Almost every time 3. Sometimes 4. Never	
Q310	Some young people pay money or gifts in exchange for sexual intercourse. Has this ever happened to you?	1. Yes 2. No	
Q311	Have you ever received money/gift from the non-regular partners in the last 12months?	1. Yes 2. No	
Q312	If the answer for Q211 is yes did you used condom?	1. Yes 2. No	
Q313	How many men have you had sex with for money or gifts in the last 12months?	_____	

Part Iv- sexual health

Q401	Have you ever been tested for HIV, the virus that causes AIDS? (Ever undergone HIV testing)	1. Yes 2. No	
Q402	Have you tested in the last 6months?	1. Yes 2. No	
Q403	Have you ever received any HIV risk reduction counseling?	1. Yes 2. No	
Q404	Did your partner tested for HIV?	1. Yes 2. No	
Q405	Have you ever had pregnancy that you didn't want?	1. Yes 2. No	

Q406	Have you ever terminated a pregnancy?	1. Yes 2. No	
Q407	If yes, Total number of pregnancy terminations?	_____	
Q408	Have you Ever heard of STDs?	1. Yes 2. No	
Q409	If yes, Which of the following STD symptoms do you know/report?	1. Vaginal discharge 2. Lower abdominal pain 3. Foul smelling discharge 4. Genital ulcer 5. Genital rash 6. Pain/burning during urination 7. Swelling in groin/genital area 8. Itching in genital area	
Q410	Have you Had any STI or genital tract infection in your lifetime?	1. Yes 2. No	
Q411	Have you Had any STI or genital tract infection in the past year?	1. Yes 2. No	
Q412	Incidence of STD Symptoms reported (last 6 months)	1. Vaginal discharge 2. Lower abdominal pain 3. Foul smelling discharge 4. Genital ulcer 5. Genital rash 6. Pain/burning during urination 7. Swelling in groin/genital area 8. Itching in genital area	

THANK YOU FOR YOUR COOPERATION!

Yunivarsiitii jimmaatti, instiituutii fayyaa fi kutaa barnoota digirii lammaffaa fayyaa hawaasaa fi maatii guutuuf, gaaffiiwwan qorannoo walitti dhufeenya walqunnamtii saalaa fedhiin alaan walqabateen amaloota balaa HIV 'f dubartoota saaxilan fi fayyaa qaama saalaa irratti odeeffannoo funaanuuf qophaa'e.

Seensa

Hello,ani _____jedhama. Namoota qorannoo kana irratti hirmaataniif gaaffii fi deebii gochuuf asitti argame. Namoota carraan qorannoo kana irratti hirmaachuuf filataman keessaa tokko ta'uu keetiif/keessaniif gammachuu natti dhaga'ame yeroon isiniif ibsu hirmaannaan keessanii fi deebiin isin kennitan kan kabajamuufi bu'aa qorannoo kana booda murtee kennamu irratti gatii guddaa waan qabuuf deebii amanamaa fi sirrii ta'e akka kennitan kabajaan isin gaafadha. Haa ta'u malee, qorannoo kana irratti hirmaachuun/hirmaachuu dhabuun fedhii keessan irratti kan hundaa'ee fi yaadni murtee keessanii kan kabajamu ta'a. dabalatanis, maqaan keessanii fi maqaan mana hojii keessanii qorannoo kana keessatti kan hingallee fi odeeffannoon isin kennitan bu'aa qorannoo kanaatiin ala qaama biraaf dabarsamee kan hin kennamnee fi iccitiin kan eegamu ta'uu isiniif mirkaneessina.

Qorannoo kana irratti hirmaachuuf fedhii qabduu? 1. Eeyyee 2. Lakki (sababii)_____

(----------)
(mallattoo nama gaaffii fi deebii geggeessuuf eyyama afaaniin mirkaneesse)

Guyyaa----------

Lakkoofsa koodii nama qorannoo irratti hirmaatuu----------

Lakkoofsa koodii nama ragaa funaanuu----------

Sa'aatii gaaffii fi deebiin itti geggeefame---------- (tilmaamaan daqiiqaa 30-40 fudhachuu danda'a)

Kutaa I-odeeffannoo waliigalaa

Lakk.	Gaaffii fi calaltuu	Filannoo deebii	koodii
Q101	Gosa dhaabbatichaa	1. mana dhugaatii 2. Hoteela 3. Mana nyaataa 4.mana ciree	
Q102	Umuriin kee meeqa?	waggaa_____	
Q103	Amantiin kee hoo?	1. Ortodoksii 2. katolikii 3. Protestantii 4. Musiliima 5. amantii hinqabu 6. Kan biroo (ibsi)----------	
Q104	Tajaajila amantii hammam hordofta?	1. guyyaa hunda 2.yoo xiqqaate torbanitti al tokko 3. Ji'atti al tokko 4. Yoo xiqqaate waggaatti al tokko 5. Waggaatti yeroo tokkoo gadi 6. gonkumaa	
Q105	Jireenya kee keessatti amantin hammam barbaachisaadha?	1. baay'ee barbaachisaa 2. barbaachisaa 3. Barbaachisaa miti	
Q106	Heerumtee beektaa?	1. eeyyee 2. lakki	
Q107	Hamma heerumtee jirtaa?	1. eeyyee 2. lakki	
Q108	Barnoota hordoftee jirtaa?	1. eeyyee 2. lakki	
Q109	Sadarkaa olaanaan barumsa kee meeqa? (sadarkaa barumsa olaanaatti marsi)	1. hinbaranne 2. Sadarkaa 1ffaa 3. Sadarkaa 2ffaa 4. Teeknika 5. Qophaa'ina 6. Kolleejjii 7. yunivarsiitii	
Q110	Sabummaan kee maali?	1. Oromoo 2. Amhaara 3. Guraagee 4. Kafaa 5. Dawuroo 6. Yeem 7. Kan biroo(ibsa)_____	
Q111	Iddoon dhaloota kee eessa?	1. magaalaa 2. baadiyyaa	
Q112	Wantoota armaan gadii fayyadamtee beektaa?	<u>Yeroo hunda</u> <u>yeroo tokko tokko</u> 1. Alkoholii 1.eeyyee 2. lakki 1.eeyyee 2. lakki 2. Caatii 1.eeyyee 2. lakki 1.eeyyee 2. lakki 3. hashiishii 1.eeyyee 2. lakki 1.eeyyee 2. lakki 4. sigaaraa 1.eeyyee 2. lakki 1.eeyyee 2. lakki 5. kanbiraa (ibsi) ---------- ----------	

Q113	Ji'atti qarshii meeqa argatta?	Mindaa ji'aa (safartuu galchi)……..	
Q114	Hojii kaffaltiif yeroo jalqabdu umuriin kee meeqa?	Umurii waggaan_____	
Q115	Torbanitti sa'aatii meeqa hojjetta?	Sa'aatii_____	
Q116	Hojii gosa kam hojjetta/hojjettee beekta?	Ibsi _____	
Q117	Hamma gaaffilee maatii wajjin walqabaten qaba. Abbaan kee jiraa?	1.eeyyee 2. lakki	
Q118	Sadarkaan barumsa abbaa keetii kami?	1. kan hin baranne 2. Barreessuu fi dubbisuu danda'a 3. Sadarkaa 1ffaa 4. sadarkaa 2ffaa 5. sartikeetii 6. Dippiloomaa 7. Digirii	
Q119	Isa waliin mana tokko jiraattuu?	1.eeyyee 2. lakki	
Q120	Abbaa kee waliin dhimma saal qunnamtii irrratti mari'attanii beektuu? Eeyyee yoo ta'e hammam?	1. Yeroo hunda 2. Darbee darbee 3. Gonkumaa	
Q121	Haati kee jirtii?	1.eeyyee 2. lakki	
Q122	Akkuma kee mana tokko keessa jirtuu?	1.eeyyee 2. lakki	
Q123	Haadha kee waliin dhimma saal qunnamtii irrratti mari'attanii beektuu? Eeyyee yoo ta'e hammam?	1. Yeroo hunda 2. Darbee darbee 3. Gonkumaa	
Q124	Baay'inn maatii kee meeqa?	1. obbolaa dhiira |_____| 2. dubara |_____| 3. abbaa fi haadha |_____|	
Q125	Tartiibni dhaloota kee kami?	|_____|	
Q126	Obbolaa dhiira hangafa qabdaa?	1.eeyyee 2. lakki	
Q127	Mana tokko keessa kan walin jirtan jiraa?	1.eeyyee 2. lakki	
Q128	Obbolaa dubaraa hangafa qabdaa?	1.eeyyee 2. lakki	
Q129	Mana tokko keessa kan waliin jirtan	1.eeyyee 2. lakki	

	jirtii?		
Q130	Abbaa fi haati kee waliin jiraatuu?	1.eeyyee 2. Wal hiikanii jiru 3. Lamaanuu lubbuun hin jirani	
Q131	Galiin maatii kee akkamiin utubamee jira?	1 Deeggarsa abbaa qofaan 2 Deeggarsa haadhaa qofaan 3 Deeggarsa haadhaa fi abbaa 4 Deeggarsa firaatiin 5 Kan biraa ----------	
Q132	Waliigalaan galiin ji'aa maatii kee meeqa ta'a?	|_____|	

Kutaa II – walqunnamtii saalaa fedhiin alaa

Lakk	Gaaffii fi calaltuu	Filannoo fi deebii	koodii
Q201	Fedhii keen ala dirqiin walquunnamtii saalaa raawwattee beektaa? Lakki yoo ta'e gara gaaffii **210** darbi.	1. Eeyyee 2. lakki	
Q202	Ji'a 12 darbe keessatti yeroo meeqa namni fedhii kee malee wantoota walqunnamtii saalaaf taasifamaniin dirqisiifamte? (wantoota akka dhungoo,xuxuqaa ykn humnaan walqunnamtii saalaaf yoo dirqisiifamte lakkaa'i)	1. yeroo 0 2. yeroo 1 3. yeroo 2 ykn 3 4. Yeroo 4 ykn 5 5. Yeroo 6 fi isaa ol	
Q203	Ji'a 12 darbe keessatti yeroo meeqa hiriyaan wajjin deemte fedhii kee malee wantoota walqunnamtii saalaaf dirqisiifamte? (wantoota akka dhungoo,xuxuqaa ykn humnaan walqunnamtii saalaaf yoo dirqisiifamte lakkaa'i)	1. yeroo 0 2. yeroo 1 3. yeroo 2 ykn 3 4. Yeroo 4 ykn 5 5. Yeroo 6 fi isaa ol	
Q204	Wantootni/gochaaleen armaan gadii kun dubartoota baay'ee irratti ni raawwata waan ta'eef, namni sirratti raawwate jiraa?	<u>Umurii kee keessatti</u> 1. Gocha walqunnamtii saalaa hinbarbaachifne akka—tapha afaaniin /walqunnamtii saalaaf	

		gaaffii/dhungoo 2. tuttuqaa hinbaraachifne qaama saalaa/harma kkf 3. Humnaan walqunnamtii saalaaf 4. Walqunnamtii saalaa humnaan erga qarshii/kennaa/alkohoolii/qoricha fudhattee 5. Walqunnamtii saalaa fedhii alaa qaanii/sodaachisuun <u>Ji'a 12 darbe keessatti</u> 1. Gocha walqunnamtii saalaa hinbarbaachifne akka—tapha afaaniin /walqunnamtii saalaaf gaaffii/dhungoo 6. tuttuqaa hinbaraachifne qaama saalaa/harma kkf 7. Humnaan walqunnamtii saalaaf 8. Walqunnamtii saalaa humnaan erga qarshii/kennaa/alkohoolii/qoricha fudhattee 9. Walqunnamtii saalaa fedhii alaa qaanii/sodaachisuun	
Q205	Dubartoota biroo yeroo dirqiin gudeedaman argitee beektaa)	1. Eeyyee 2. Lakki	
Q206	Wantoota/gochaalee akka dhungoo, tuxxuqaa, ykn humnaan walqunnamtii saalaa fedhiin alaaf dirqisiifamuu akkamitti ilaalta?	1. Baay'ee gaarii 2. Gaarii 3. Homaa 4. Badaa 5. baay'ee badaa	
Q207	Erga sirratti raawwatee booda qaama seeraatti gabaastee?	1. eeyyee 2. lakki	
Q208	Deebiin eeyyee yoo ta'e eenyutti gabaaste?	1. polisii 2. gandatti 3. Mana murtiitti 4. qaama seera biro/ibsi_____	
Q209	Nama sirratti raawwate irratti tarkaanfii fudhatame?	1. hidhaa 2. Adabbii qarshii 3. akka fuudhu dirqisiifame 4. kanbiroo/--------	
Q210	Yoo filannoon gaaffii 212 qaama kamittuu	1.waan godhamu waan hinbeekneef	

	hingabaasne ta'e maaliif dhoksite?	2. maatii waanan sodhadheef 3. hawaasni maal nan jedhaa sodaadhee 4. Nama narratti raawwate sodaadhee 5. qaamni seeraa waan nama hingargaarreef 6. kanbiroo / ibsi/ ----------	
Q211	Erga walqunnamtii saalaa dirqiin sirratti raawwatee booda rakkoolee armaan gadii keessaa kamtu sirratti mul'ate?	1. ulfa hinbarbaachifne 2. ulfa narraa bahe 3. madaa qaama saalaa 4. dhangala'uu dhiigaa yeroo malee 5. dhukubbii yeroo laguu/xurii 6. dhangala'aa qaama saalaa hinbaramne 7. rakkoo walquunamii saalaa 8. dhukkubbii garaa gara gadii 9. kanbiroo ----------	

Kutaa III- Amaloota balaa HIV'f saaxilan

Lakk	Gaaffii fi calaltuu	Filannoo fi deebii	Koodii
Q301	Hiriyaa dhaabbataa ni qabdaa/hamma?	1. Eeyyee 2. lakki	
Q302	Walqunnamtii saalaa raawwattee beektaa? Lakki yoo ta'e gara gaaffii Q210 darbi	1. Eeyyee 2. lakki	
Q303	Deebiin gaaffii 302 eeyyee yoo ta'e haala kamiin walqunnamtii saalaa jalqabde?(sababa walqunnamtii saalaa jalqabde)	1. heerumee 2. fedhii dhuunfaa koo 3. dhiibbaa hiriyaatiin 4. hiriyaan koo waadaa waan na galeef 5. qarshii argachuuf 6. qormaata darbuuf 7. Humnaan fedhii koon ala 8. kanbiroo ----------	
Q304	Yeroo jalqaba walqunnamtii saalaa jalqabdu umuriin kee meeqa?	Umurii waggaan_____	
Q305	Ji'oota 12n darbe keessatti nama meeqa	1. Gonkuma walqunnamtii saalaa	

	waliin walqunnamtii saalaa raawwatte?	hinraawwanne 2. nama 1 waliin 3. Nama 2 3. Nama 3 ykn isaa ol	
Q306	Ji'a tokko darbe keessatti nama meeqa waliin walqunnamtii saalaa raawwatte?	1. Gonkuma walqunnamtii saalaa hinraawwanne 2. nama 1 waliin 3. Nama 2 3. Nama 3 ykn isaa ol	
Q307	Umurii hiriyaa walqunnamtii saalaa waliin raawwatte/isa dhiyoo?	Umurii waggaan_____	
Q308	Walqunnamtii saalaa isa dhumaa osoo hin raawwatiin dura alkoolii ykn qoricha fudhattee jirtaa?	1. Eeyyee 2. lakki	
Q308	Isa dhuma walqunnamtii saalaa raawwatte irratti ati ykn hiriyaan kee kondomii fayyadamee jiraa?	1. Eeyyee 2. lakki	
Q309	Yeroo akkamii hiriyaa dhaabataa hintaane waliin kondomii fayyadamta(ji'oota 12n darbe keessa)?	1. Yeroo hunda 2. Yeroo baay'ee 3.Darbee darbee 4. Gonkumaa	
Q310	Namootni tokko tokko walqunnamtii saalaa qarshiin ykn kennaan waljijjiiru barbaadu. Kun si qunnamee beekaa?	1. Eeyyee 2. lakki	
Q311	Qarshii ykn kennaa hiriyaa dhaabbataa hintaane irraa fudhattee walqunnamtii saalaa raawwwatteettaa(ji'a 12n darbetti)?	1. Eeyyee 2. lakki	
Q312	Eeyyee yoo ta'e kondomii fayyadamtee?	1. Eeyyee 2. lakki	
Q313	Walumaa galatti walqunnamtii saalaaf qarshii/kennaa fudhattee dhiira meeqa waliin raawwatte(ji'a 12n darbetti)?	_____	

Kutaa Iv- fayyaa saalaa

Lakk	Gaaffii fi calaltuu	Filannoo fi deebii	Koodii
Q401	Vayirasii HIV, kan Dhukkuba AIDS fiduuf qoratamtee beektaa?	1. Eeyyee 2. lakki	
Q402	Ji'a ja'a darbe keessa qoratamtee jirtaa?	1. Eeyyee 2. lakki	
Q403	Gorsaa fi qorannoo HIV fedhii irratti hundaa'e fudhattee beektaa?	1. Eeyyee 2. lakki	
Q404	Hiriyaan kee HIV 'f qoratamee jiraa?	1. Eeyyee 2. lakki	
Q405	Ulfa osoo hinbarbaadne ulfooftee beektaa?	1. Eeyyee 2. lakki	
Q406	Ulfa ofirraa baaftee beektaa?	1. Eeyyee 2. lakki	
Q407	Eeyyee yoo ta'e,waligalatti ulfa meeqa ofirraa baafte?	_____	
Q408	Dhukkuboota saal qunnamtii dhageessee beektaa?	1. Eeyyee 2. lakki	
Q409	Eeyyee yoo ta'e, mallattoolee dhukkuba saal-qunnamtii armaan gadii keessaa kam beekta/gabaasuu dandeessa?	1. Dhangala'aa karaa qaama saala dubaraa 2. Dhukkubbii garaa gara gadii 3. Dhangala'aa foolii qabu 4. Madaa qaama saalaa irratti mul'atu 5. Shiffee qaama saalaa irratti mul'atu 6. Yeroo boolii/fincaanii dhukkubuu/gubuu 7. Mudaammuddii/naannoo qaama saalaa dhiita'uu 8. naannoo qaama saalaa hooksisuu	
Q410	Dhukkubni qaama saalaa sirratti mul'atee beekaa?	1. Eeyyee 2. lakki	
Q411	Dhukkubni qaama saalaa waggaa darbe keessa sirratti mul'atee jiraa?	1. Eeyyee 2. lakki	

Q412	Ji'a ja'a darbe keessa mallattoolee dhukkuba saal-qunnamtii kamtu sirratti mul'ate?	1. Dhangala'aa karaa qaama saala dubaraa 2. Dhukkubbii garaa gara gadii 3. Dhangala'aa foolii qabu 4. Madaa qaama saalaa irratti mul'atu 5. Shiffee qaama saalaa irratti mul'atu 6. Yeroo boolii/fincaanii dhukkubuu/gubuu 7. Mudaammuddii/naannoo qaama saalaa dhiita'uu 8. naannoo qaama saalaa hooksisuu	

WAAN NU WALIIN TAATANIIF GALANNI KEENYA GUDDAADHA!

Declaration

I, the undersigned, declare that this Thesis is my original work and has not been presented for a Degree in this or any other University, and all source of materials used for this Thesis have been Fully Acknowledged.

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This Thesis has been submitted with my approval as the University Advisor.

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