



ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF PUBLIC HEALTH

**KNOWLEDGE AND SCREENING PRACTICE ON CERVICAL
CANCER AND ASSOCIATED FACTORS AMONG HIV
POSITIVE WOMEN IN ADAMA, ETHIOPIA**

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Knowledge and Screening Practice on Cervical Cancer and Associated Factors among Hiv Positive Women in Adama, Ethiopia

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ACRONYMS AND ABBREVIATIONS

AIDS	-----	Acquired Immune Deficiency Virus
ART	-----	Anti-Retroviral Therapy
CDC	-----	Center for Diseases Control and prevention
CI	-----	Confidence interval
DNA	-----	Deoxyribonucleic Acid
FGA	-----	Family guidance association
H/C	-----	Health Center
HIV	-----	Human Immuno-Deficiency Virus
HPV	-----	Human Papilloma Virus
MPH	-----	Master of Public Health
OR	-----	Odds ratio
STD	-----	Sexually Transmitted Diseases
VIA	-----	Visual Inspection of cervix with Acetic acid
WHO	-----	World Health Organization

ABSTRACT

Background; -.Cervical cancer ranks as 2nd most common female cancer worldwide. Women from developing countries account about 85% of both in its morbidity and mortality. Women living with human immunodeficiency virus (HIV) infection have a much higher risk of human papillomavirus infection and cervical cancer than HIV-uninfected women. In Ethiopia many women seek treatment only at a very late stage when their cancer has significantly advanced and facing a higher probability of mortality though it is a preventable and curable disease if identified at an early stage. Knowledge of cervical cancer helps to have a clear understanding of the need for early detection and increase up take of screening.**Objective:** - To assess Knowledge, Screening Practices on cervical cancer and associated factors among HIV positive women attending ART clinics in governmental health facilities of Adama, Ethiopia.**Methods:** -A cross-sectional study design was conducted among women attending ART clinics in government health facilities in Adama. The study used structured questionnaire. Data was entered using Epi-data version 3.1 software and was exported to SPSS version 21 for analysis. Univariate and Bivariate analysis were performed then Multivariable analysis was conducted to control the potential confounders and to determine independent predictors of the main outcome variable. Confidence Interval that do not contain unity was used to determine statistical significance between dependent and the explanatory variables.**Results:** Out of 318 women participated in the study, majority of them 246 (77%) were heard about cervical cancer, and only 13.2% of them were knowledgeable and 16% of them had cervical cancer screening practices. The odds of having knowledge about cervical cancer and its screening practices was higher among participants with education up to secondary level (AOR=16.7; 95% CI= 7.5, 159.5) and up to tertiary level (AOR=16.2; 95% CI= 1.18, 223.1) and family history (AOR=36.8; 95% CI= 12.2, 111.2). The odds of cervical cancer screening were higher among women who had been using ART for more than 8 years (AOR=4.2; 95% CI =1.2-15.01) and who have good knowledge on cervical cancer (AOR=5; 95% CI=1.6-15.8).**Conclusion and recommendation:** The study revealed very low level of knowledge on cervical cancer and screening practice among HIV positive women. There is a need to design and implement awareness creation program on cervical cancer and screening.

Key words: knowledge, screening practices, cervical cancer, HIV.

1. INTRODUCTION

1.1. Background

Cervical cancer is a cancer arising on one of the women's reproductive systems from the tissues of cervix. It ranks the 2nd most common female cancer in women aged 15 to 44 years worldwide, with an estimated 527,624 new cases and 265,672 deaths in 2012. The normal cells of the cervix gradually develop pre-cancerous changes that turn into cancer. These changes may not have symptoms but can be detected by the Pap (Papanicolaou) test. There are 2 main types of cervical cancer: squamous cell carcinoma and adenocarcinoma. About 80% to 90% of cervical cancers are squamous cell carcinomas (1, 2).

There are risk factors known to increase the incidence of cervical cancer identified from different evidences. Some of them are Human Papilloma Virus, HIV infection, early marriage (child marriage) and sexual practice, delivery of the first baby before the age of 20, too many or too frequent childbirths, multiple sexual partners, poor practice of personal hygiene, low socio economic status, Herpes Simplex Virus type II, use of long term oral contraceptive pill, smoking (1).

Cervical cancer is mainly caused by sexually-acquired infection with Human papillomavirus (HPV) where most people are infected with HPV shortly after onset of sexual activity. Vaccination against HPV in girls 9 to 13 years old combined with regular screening in women over age 30 for precancerous lesions followed by adequate treatment are key tools to prevent the new cervical cancer cases diagnosed every year (3, 4).

There are several methods of cervical cancer screening tests; Cervical cytology, Liquid-based cytology (LBC), new screening methods which include HPV DNA test and Visual test (VIA). VIA test is the simplest and affordable screening test in lowest middle income countries (LMICs) including Ethiopia (5).

According to CDC 2014 data cervical cancer is on the decline in the United States. Death due to cervical cancer has been decreased by 90% after the introduction of the Pap smear in the United States (6). However, the burden in many developing countries remains high, mostly due to different reasons where lack of screening and treatment services is one of

them. In Sub-Saharan Africa, about 35 cervical cancer cases are diagnosed for every 100,000 women, compared with only about 7 new cases for every 100,000 women in North America. About 23 women per 100,000 die in Sub-Saharan Africa due to cervical cancer, compared to about 3 per 100,000 in North America (7, 4).

Records showed that nearly 22 million Ethiopian women over the age of 15, approximately 7,600 are diagnosed with cervical cancer and roughly 6,000 women die of the disease each year. The 534,000 women over age 15 living with HIV in Ethiopia are among the most vulnerable to cervical cancer (5).

According to UNAIDS global report 2015 in Ethiopia urban HIV prevalence was 13.7% while HIV prevalence in rural areas is relatively low 3.7%. In the same report HIV Prevalence for Addis Ababa was estimated to be 5.6% and female account the highest prevalence of HIV infection (8).

Lack of knowledge of cervical cancer screening was a significant factor that affects the participation of women in screening programs in China as showed by the study (9). Screening practice is very poor in many sub Saharan African countries due to lack of screening service as well as poor knowledge of cervical cancer and screening methods. Women with HIV were 2-12 times more likely to develop cervical cancer compared to those not infected with HIV where Only 20% of HIV-positive women are screened for cervical cancer (10).

A study done in Addis Ababa showed that knowledge about cervical cancer was generally low among HIV infected women in particular for health care seeking behavior and treatment of cervical cancer and had less knowledgeable of cervical cancer 56.2% (11).

According to FMOH comprehensive cervical cancer prevention and control guideline every sexually active woman between the aged of 30-49 should undergo cervical cancer screening but for women and girls who are HIV positive they should be screened regardless of their age (12).

1.2. Statement of the Problem

Cervical cancer is the second most common cancers in the world and responsible for almost 275,000 deaths annually (13), More than 85% of deaths occur in low and middle income countries (4). In developed countries, studies showed that practice of cervical cancer screening was on average 63% and in Ethiopia it is less than 1% (14).

Recent data from Tikur Anbessa specialized hospital oncology center showed that 80% of reported cases of cervical cancer are diagnosed at advanced stages, this is largely due to the low awareness regarding the signs and symptoms of the problem, insufficient screening facilities, early detection and treatment services (15).

Even though most of HIV positive women visit ART clinics, little emphasis is given to the screening and prevention programs against cervical cancer. Recent data showed only 25.1% was found to be knowledgeable (16).

Screening of Cervical Cancer reduces Cervical Cancer deaths by early identification and protection (1). Knowledge for early screening and detection can solve the problem, Lack of knowledge about cervical cancer affects the participation of women for screening (17). Some studies conducted in Ethiopia showed knowledge regarding cervical cancer and preventive measures is very low (18, 16).

However, knowledge about the cervical cancer is very important prerequisite for practicing of screening for cervical cancer (17). In north west Ethiopia women who have knowledge about cervical cancer screening showed low practice for screening with only 14.7 % of knowledgeable women undergoing screening (18). This implies that there is a gap between knowledge and practice of screening in Ethiopia. In addition to knowledge there must be other factors negatively affecting screening practices. This is particularly prominent among HIV positive women. Hence this study aimed to assess the knowledge about cervical cancer and screening practices and associated factors among HIV positive women in Adama city, Ethiopia.

1.3. Rationale and Significant of the Study

Cervical cancer can be treated if it is detected in early stages and it can be prevented if every woman had knowledge of the potential risk factors. Studies showed that screening of the disease in early stages among HIVpositive women is low in Ethiopia because of different reasons. Lack of knowledge and accessibility of screening facilities are some of the factors hindering its practice.

So this study aimed to explore the knowledge and screening practices for early detection and factors associated among women attending ART clinic in governmental health facilities of Adama city.

Findings from this study will provide updated information to authorities about the gaps on the targeted population and will help to address strategic plan need for cervical cancer prevention program to reduce the morbidity and mortality of HIV positive women furthermore it can be used as a baseline data for further studies.

2. LITERATURE REVIEW

2.1. Burden of Cervical Cancer

Cervical cancer occurs worldwide but the highest incidence and mortality rates of cervical cancer are in Eastern, Western, and Southern Africa, as well as South-Central Asia and South America. Rates are lowest in Western Asia and Australia. In sub-Saharan Africa cervical cancer accounts for 22.2% of all cancers in women and it is also the most common cause of cancer death among women (19).

In the developed countries, the incidence of cervical cancer and associated mortality rates has declined by 1.4% and 2.9% per year respectively since 1998 (20). As World Health Organization (WHO) specify, while a woman in the United States has a 70% chance of surviving cervical cancer, that chance is condensed to 58% in Thailand, to 42% in India, and to only 21% in sub-Saharan Africa (21).

In sub-Saharan Africa, among women those develop cervical cancer around 60–75% are from rural areas (22) and also when around 23 women per 100,000 die due to cervical cancer in Sub-Saharan Africa, only 3 per 100,000 die in North America (23).

A Study done in Ethiopia, at TikurAnbessa specialized hospital shows cervical cancer is a major public health problem and is also the mostly occurring cancer among Ethiopian women and the second leading type of cancer in Ethiopia. A total of 198 participants were recruited in this study and various socio-economic and cultural vulnerabilities that expose women to cervical cancer and the challenges encountered by cervical cancer patients after their diagnosis. (24).

2.2. Risk Factors of Cervical Cancer

The most important sexually transmitted risk factor for cervical cancer is HPV. The prevalence of HPV infection is higher in young women under 30 and less in older women over 30 Years. HPV type 16 and type 18 cause approximately 70% of incidences of cervical cancer worldwide. The transmission of HPV through sexual intercourse including vaginal intercourse, anal intercourse, and oral sex. (25)

A comparative cross-sectional study done in Cape Town, South Africa, conducted showed HPV prevalence was higher among HIV-positive women (52.4%) than among HIV-negative women (20.8%) (26).

Another study which was conducted in Kenya to assess the prevalence and risk factors associated with precancerous cervical cancer lesions among HIV-infected women in resource-limited settings showed The prevalence of precancerous lesions was 26.7%. However non-ART HIV infected were 2.21 times more likely to have precancerous lesions than ART patients (27).

A cross-sectional study was conducted at Jimmamodel clinic of Family Guidance Association of Ethiopia, among 334 screened clients using VIA had 12.9% positive result. Based on the finding of this study initiation of sexual intercourse earlier than 16 years was found to be an independent predictor compared to clients who started at the age of 16 or more years (28).

2.3. Knowledge of Cervical Cancer

A cross-sectional case-control survey was conducted in three provinces of Lao PDR, Vientiane, Luang Prabang and Savannakhet. Which includes 640 HIV positive and 320 controls 3.9% had benefited from at least one Pap smear screening (5.6% cases and 2.2% controls). Despite having a lower education level and economic status, the women living with HIV had a better knowledge about cervical cancer and were more aware than the controls of the risk of developing such a cancer (35.9% vs. 8.4%) (29).

A facility based cross sectional study in Indian among 442 women of reproductive age showed that two-third (65.5 %) of them heard cervical cancer. At least one symptom 35.3 % and one risk factor 39.8 were known by participants respectively (30).

A cross-sectional survey conducted in Democratic republic of Korea showed that from a total of 200 women the result showed that there was no statistically significant difference in their knowledge of cervical cancer in rural and urban groups. According to this study 62% had heard of cervical cancer. Their main source of information was health care providers

(69%). 42% of the participants knew that cervical cancer is the most common cancer of the female reproductive tract. Only 3% knew that cervical cancer is predominantly the result of a sexually transmitted infection. 64% of respondents did not know that cervical cancer can be prevented. The main reasons for not screening were lack of awareness of cytology testing (48%), dislike of pelvic examinations (47%) and absence of symptoms (17% rural, 31% urban,). 63% of rural and 60% of urban participants had heard of cervical cancer, 55% knew that all women are at risk, but only 36% were aware of cervical cancer's preventability (31).

A survey conducted in Johannesburg, South Africa among women who treated for HIV/AIDS at a specific healthcare Centre showed 78.7% of them had heard of cervical cancer and 62.9% knew about the Pap smear, nurses and doctors being the primary source of information. the main reason not screening being fear of the procedure. This study provided evidence that women attending the specific HIV clinic were more knowledgeable about cervical cancer and screening than those of unknown HIV status (32).

A cross sectional study conducted on HIV infected women in the OI clinic of Musiso mission hospital, in Zimbabwe shows that 77.4% felt at risk of cervical cancer. HIV-infected women have inadequate knowledge and a positive attitude towards cervical cancer screening and very few are ever screened for the cervical cancer(33).

A qualitative study done in two northern Ugandan hospitals Eighteen women aged 35–56 years, recently diagnosed with cervical cancer were interviewed. Their first symptoms included abnormal vaginal bleeding, offensive vaginal discharge and lower abdominal pain. Most participants did not perceive themselves to be at risk for cervical cancer (64%) and persistent vaginal discharge that smells unpleasant (62%). Only 39% recognized all three of the key symptoms (34).

The knowledge regarding cervical cancer among 524 women, of participants living in the democratic republic of Congo was low, 43% women have sufficient knowledge about cervical cancer(35).

A community based cross-sectional survey conducted in Gondar town, Northwest Ethiopia showed that 78.7% of the respondents had heard about cervical cancer. Television/radio

was the predominant source 60.8% followed by health professionals 34.9% and friends/relatives 21.6%. Sexually transmitted infection and early onset of sexual activity were specific risk factors mentioned by 13241.9% and 32.7% of the respondents respectively. In this study, 40% of the respondents were able to identify more than one risk factors for cervical cancer. About eighty-one percent (81.2%) of the respondents knew that cervical cancer can be prevented. Regular medical checkup (screening) was mentioned by majority of the respondents (85.7%) as a helpful prevention measure. Eighty-four percent (84%) of the respondents also knew that cervical cancer can be treated and 80% agreed that cervical cancer can be cured if detected early (36).

2.4. Practice of Cervical Cancer Screening

Among women participated in the study conducted in India only 9.5% actually underwent screening test (30). In the same way study done in South Africa, of the women who knew about the Pap smear, less than one-third had had a smear test for cervical cancer, among the reason mentioned by the respondents the main reason for not being screened was fear of the procedure (32). As the study in Zimbabwe shows about nine percent (9%) of the participants had screened for cervical cancer and 96.2% respondents reported would like to screen for cervical cancer in the future (33). The study done in Congo among 16.8% had ever heard about cervical screening only 8.6% respondents had ever screened for cervical cancer (35).

2.5. Factors Associated with Cervical Cancer and Screening

According to the study conducted in India, Practice of cervical screening was depending on age, income, and marital status (30). A survey done in Wufeng china showed women with higher education and income levels were willing to undergo screenings, women with positive family histories of cancer were more likely to have higher levels of knowledge about cervical cancer (9).

A review of coverage of cervical cancer screening in 57 countries using data from 2002 found that Screening prevalence in developing countries is on average 19%, compared to 63% in developed countries, and ranges from 1% in Bangladesh, Ethiopia, and Myanmar to 73% in Brazil (14).

Most of the participants involved in the study conducted Wufenga China recognized that cervical cancer was curable if detected early (80.8%), and most knew that it could be prevented by having fewer sexual partners (80.7%), maintaining sexual hygiene (90.3%), and eating more fruits and vegetables (78.0%)(9).

3. CONCEPTUAL FRAME WORK

The two outcome variables; knowledge and screening practice of cervical cancer and associated factors was assed based on variables in the schematic presented below these variables are socio demographic, individual and healthfacilities factors. This conceptual framework is developed using information from different literature.

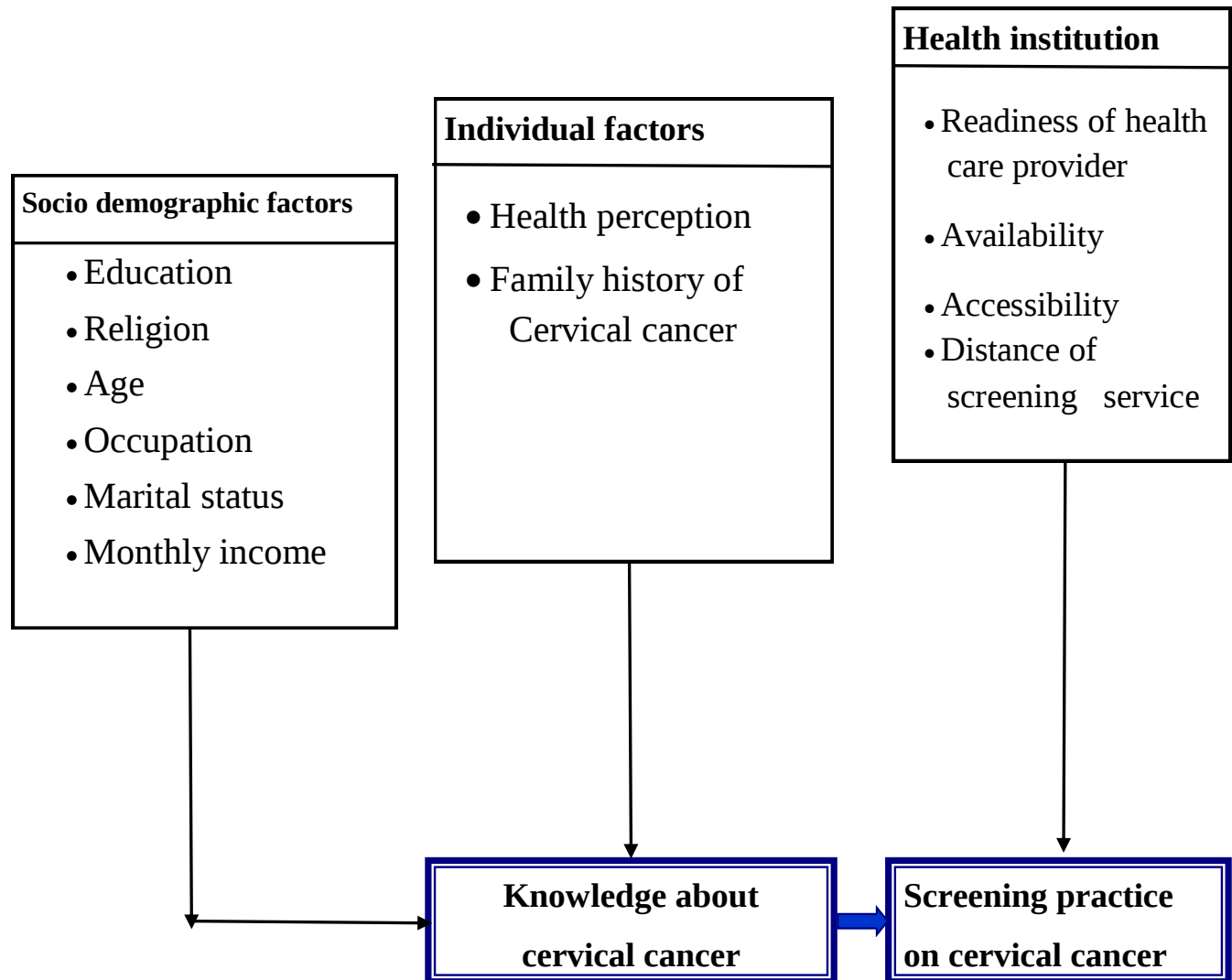


Figure.1 Schematic representation of conceptual frame work.

4. OBJECTIVE

4.1. General Objective

- To assess Knowledge, Screening Practices on cervical cancer and associated factors among HIV positive women attending ART clinics in Adama, Ethiopia.

4.2. Specific Objective

- To assess the knowledge about cervical cancer among HIV positive women attending ART clinics in Adama, Ethiopia, 2017.
- To assess the screening practices on cervical cancer among HIV positive women attending ART clinics in Adama, Ethiopia, 2017.
- To identify associated factors of cervical cancer knowledge and screening practices among HIV positive women attending ART clinics in Adama, Ethiopia, 2017.
- To identify associated factors to cervical cancer screening among HIV positive women attending ART clinics in Adama, Ethiopia, 2017.

5. METHODOLOGY

5.1. Study Area

The study was conducted in Adamatown, which considered as a Special Zone of Oromia. It located at 99 km southeast of Addis Ababa. Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia (CSA), the city has a total population of 220,212, of whom 108,872 are men and 111,340 women. Amharic is spoken by 59.25%, and only 26.25% of the population speaks Oromiffa though it is an official language. The majority of the inhabitants practiced Ethiopian Orthodox Christianity (63.62%). The city is administratively divided into 16 kebeles and with annual HIV prevalence rate of 4.8% and a total of 1 hospital and 7 governmental health centers, and also a total of 8 ART sites out of this only 3 are governmental and the other 5 are private and NGO (non-governmental health facilities). There exist only three cervical cancer screening service facilities in the city of Adama.(37).

5.2. Study Period

Study was conducted from March 24 to April 10, 2017 in Adama, Ethiopia.

5.3. Study Design

Facility based quantitative cross sectional study was conducted among women attending ART clinics in Adama, Ethiopia.

5.4. Study Population

All HIV positive women who registered at ART clinics in governmental health facilities of Adama city at the period of data collection who fulfill inclusion criteria are study population.

5.5. Inclusion and Exclusion Criteria

5.5.1. Inclusion criteria

- All women living with HIV/AIDS and who are on HIV care (Pre ART and on ART follow up) on dates of data collection were included.
- Women living with HIV/AIDS age between 21 and 65

5.5.2. Exclusion Criteria

- Women living with HIV/AIDS who are on HIV care but had not able to interview because of sever health problems like mental problems, critically sick, having hearing defect at the dates of data collection

5.6. Variables

5.6.1. Dependent Variable

- knowledge of cervical cancer
- Screening practice on cervical cancer

5.6.2. Independent Variable

Socio-demographic status (age, marital status, religion, educational status, job, income)
Perception (susceptibility, severity, Benefit) towards cervical cancer screening practices.

Reproductive health characteristics (age at first sex, number of sexual partners, methods of contraceptive use, duration of oral contraceptive use, exposed for STI, smoking, number of children.

5.7. Sample Size Determination

The sample size was determined via single population proportion formula considering 95 % confidence interval ($\alpha = 0.05$), 5 % margin of error (d) and the proportion (p) of cervical cancer good knowledge of women living with HIV/AIDS from prior studie, which was 25.1 % (16).

For the second objective assuming the proportion good screening practice is 19.8% which was reported from study conducted among age eligible women in Mekelle zone (13). The level of significance (α) equals to 0.05 and marginal error of 5%. Using single population proportion formula.

Table1. Sample size determination for the study of knowledge, screening practices and associated factors of cervical cancer among HIV positive women in Abama city, Ethiopia, 2017.

Variables	Proportion	Sample size determination	Sample size
Knowledge	P =25.1%	$N= (Z \alpha/2) p (1-P)$	318
	Assuming 5% variation	d2 95% CI, P=25.1%, 10% non-response rate, 5% margin of error	
Screening practice	P=19.8%	$N= (Z \alpha/2) p (1-P)$	268
	Assuming 5% variation	d2 95% CI, P=19.8 %, 10% non-response rate, 5% margin of error	

The final largest sample size 318 was taken to fulfill all specific objectives.

5.8. Sampling Procedure

There were a total of three public health facilities, i.e., one hospital and two health centers that are offering ART service in the city of Adama and these health facilities were selected purposely. Then the calculated sample size was distributed to the selected health facilities proportion size based on their patient load. From each facility the study participants were selected using systematic random sampling.

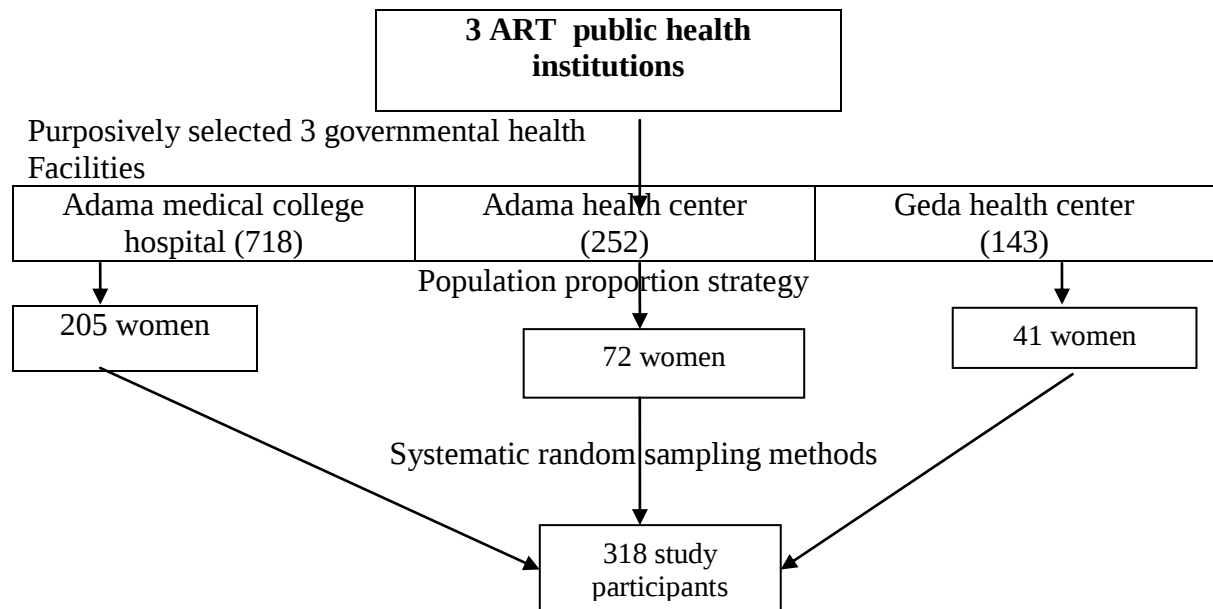


Figure.2. Schematic presentation of the sampling procedure used in the study in Adama, Ethiopia, 2017.

5.9. Data Collection Procedure

Data was collected from governmental ART clinics from March 24 to April 10 by using a structured questionnaire adopted from similar previously done studies. The questionnaire was first prepared in English and later translated to the local languages (afann oromoo) and Amharic. Face to face interview was held after privately after verbal consent was obtained from each participant to collect variables like socio-demographic characteristics and knowledge on risk factors of cervical cancer.

5.10. Data Quality Management

Pre-testing of the questionnaire was carried out in Adama health center two weeks before the study done. The findings of the pretest latter were not included in the original study. Two supervisors and three data collectors were recruited and training was provided for data collectors. Onsite supervision was done by the principal investigators. Rechecking and re-interview was done by the principal investigator in order to assess the quality of data collection and to ensure data quality. Data collectors were selected based on their educational background and experience in data collection. The trained data collectors were elaborated on purpose of the study to the participants. Daily and regular discussion and checkup of data completeness was made with data collectors and supervisors.

5.11. Data Analysis Procedures

The data collection instruments were coded, data was checked and entered using Epi-data version 3.1 software. It was cleaned, edited and exported to SPSS version 21. Before analysis the data were checked for missing values. First the uni-variate analysis was used to describe frequency distribution, proportion and measures of central tendency. Then bivariate and multivariate analysis were made to measure the association between the dependent variable and independent variables using Odds ratio and 95% confidence interval (CI).

5.12. Operational Definition

Knowledge assessment: - The knowledge of the cervical cancer and screening was assessed using 11 points knowledge score. Points are about risk factor, symptoms of carcinoma of the cervix, preventive measures, treatment option, screening method, eligibility for screening and frequency of screening. Each correct response was given a score of 1 and wrong responses a score of 0. Total points to be scored were 11 and the minimum was 0.

Knowledgeable: - Those respondents who scored mean and above the mean considered as knowledgeable.

Not knowledgeable: - Those respondents who scored below the mean considered as not knowledgeable.

Practice: - Those respondents who screened for cervical cancer at least once in life time and those who never screened were regarded as having no screening practice.

5.13. Ethical Consideration

Ethical clearance was obtained from Research Ethics Committee (REC) of School of Public Health at College of Health Sciences of Addis Ababa University. Permission and letter of support for selected health facilities was obtained from Oromia health bureau. Verbal consent was obtained from each participant. Each questionnaire was coded

and no name or any other unique identifier was cited on the questionnaire in-order to maintain data confidentiality.

5.14. Dissemination of Results

After completion of research, the results of the study will be presented during thesis defense and the final result was submitted to Addis Ababa University, School of Public Health. In addition to this the findings of the study will be presented to Oromiahealth bureau and other responsible bodies. And also attempt was made to publish of the research findings on reputable Journal.

6. RESULTS

6.1. Socio Demographic Characteristics of the Study Population

A total of 311 study participants were included with a response rate 97.8%. About half of the participants in the study were aged between 31 to 40 years with mean age of 36.05(SD±7.97) years. Nearly three fourth(75.2%) of the women follow orthodox Christianity. Illiterate and unemployed made up of largest proportion of 99 (31.8%) and 103(33.1%) respectively. The majority of participants (47%) were married and only 6(1.9%) of the women on pre ART follow up (Table 2).

Table.2. Socio-demographic characteristics of HIV positive women, Adama, Ethiopia, 2017(N=318).

Variables	Frequency	Percentage
Age		
21-30	92	29.6
31-40	151	48.6
>40	68	21.8
Religion		
Orthodox	234	75.2
Protestant	43	13.8
Muslim	34	10.9
Education		
No formal education	175	56.2
Primary school	60	19.3
Secondary school	49	15.8
College	16	5.1
Tertiary	11	3.5
Occupation		
Merchant	32	10.3
Governmental	37	11.7
House wife	76	24.4
Day laborer	44	14.1
Unemployed	122	39.2
Marital statues		
Single	10	3.2
Married	147	47.3
Divorced	108	34.7
Widowed	44	14.1
Separated	2	0.6
Monthly Income		
<1000	189	60.8
1000-2000	83	26.7
>2000	39	12.5
ART duration		
<4years	68	21.9
4-8years	132	42.4
>8 years	111	35.7
ART statues		
On ART	305	98.1
Pre ART	6	1.9

6.2. Source of Information of Cervical Cancer among HIV Positive Women

Out of 318 study participants 246 (79%) of the women had ever heard of cervical cancer. Media takes the lead as the commonest source to hear of the problem for the first time. (Fig.2).

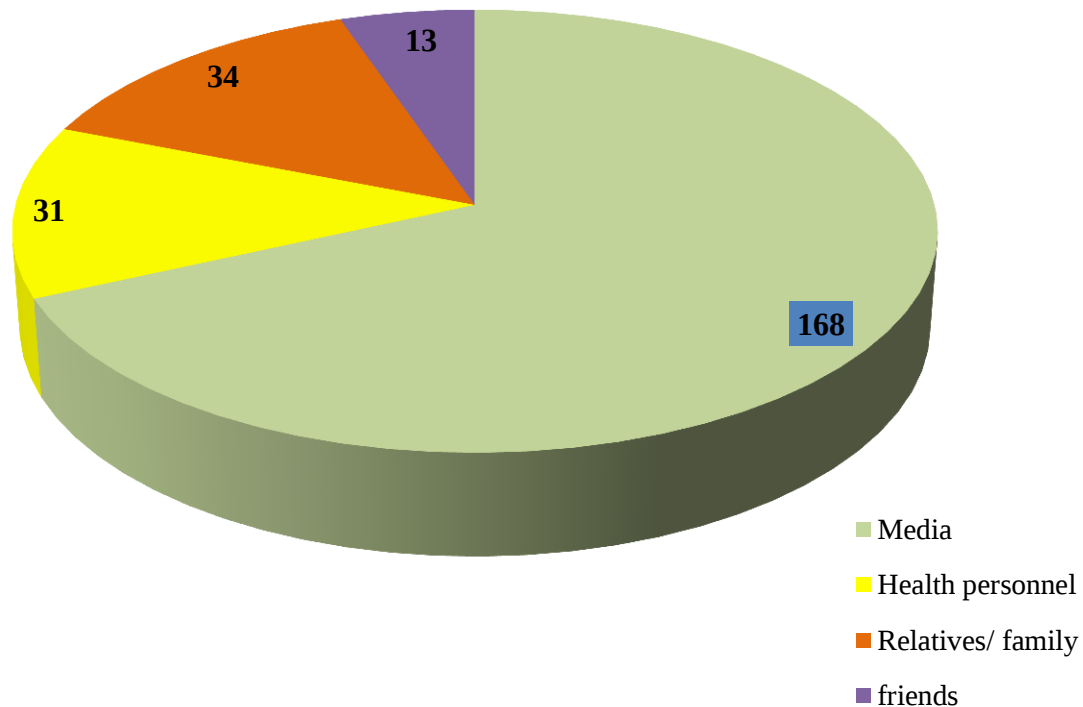


Figure .2 Source of information of HIV positive women about cervical cancer in Adama, Ethiopia 2017.

6.3. RiskFactors Affecting the Development of Cervical Cancer

About 170 (54%) of women in this study had sex initiated at or below the age of 16 years and 55% of participants had 2 or more histories of giving births. Ninety-one (29%) of women have reported history of Sexually Transmitted infections (STI), of whom one out of 2 had contracted (STI) twice. Less than a percent of mothers in this study disclosed that they

had ever smoked. A significant proportion 216(68%) of sampled population had used modern contraceptive methods where inject able and oral pills accounted respectively 50% and 28% of the contraception (Table 3).

Table.3. Description of risk factors influencing development of cervical cancer in HIV Positive women, Adama, Ethiopia, 2017.

Variables	Frequency	Percentage
Age at first sexual intercourse		
<16	166	53.5
>16	144	46.5
Number of births		
Null parity	35	11.3
prim parity	104	33.5
Multiparty	275	55.2
Number of sexual partners		
One sexual partner	105	33.8
Multiple sexual partner	206	65.2
History of smoking		
Yes	3	1
No	308	99
Use of modern contraceptive		
Yes	211	67.8
No	100	32.2
Use of OCP		
YES	59	27.5
N0	152	72.7
Duration of OCP		
<5years	39	66.1
>5 years	20	33.9
Family history of cervical cancer		
Yes	59	19
No	122	39.2
Don't known	130	41.8

6.4. Knowledge about Risk Factors and Symptoms of Cervical Cancer

Study participants reported various factors that put a woman at increased risk of the acquisition of cervical cancer. Having multiple sexual partner has been reported most repeatedly by (62%). Study participants followed by early initiation of sex and cigarette smoking by 36% and 34%. Vaginal bleeding was reported to be the most commonly known symptoms (75%) by the participants while about half of the women in the study reported that woman with cervical cancer develop smelly vaginal discharge. Thirty percent (30.9%) participants had not mentioned any signs and or symptoms which befall to woman with cervical cancer. The vast majority of study participants (77%) knew that all sexually active women are at risk of acquiring cervical cancer.

Table.4. Predisposing factors and symptoms of cervical cancer reported by Participants, Adama, Ethiopia, 2017 (N=246).

Variables	Frequency	Percent
Risk factors of cervical cancer		
Having multiple sexual partners	152	61.8
Early initiation of sexual intercourse	88	35.8
Family history of cervical cancer	46	18.7
Infected by HPV virus	33	13.4
Cigarette smoking	83	37.7
Low immunity due to HIV/AIDS	27	11
Do not know	76	30.9
Set on hot area	3	1.2
Symptoms of cervical cancer		
Vaginal bleeding	185	75.2
Foul smelling vaginal discharge	118	48
Pelvic or back pain	72	29.3
Post coital bleeding	8	3.3
I don't know	59	24
Others	2	0.8

6.5. Knowledge on Cervical Cancer Prevention and Screening Method

From the total of HIV positive women who heard about cervical cancer 155(63%)women had reported that cervical cancer is preventable. Just less a quarter of them65(20.9%) knew the existence of certain procedures to detect cervical cancer and nearly two third of the women had mentioned media as the commonest source of information.Among those who knew cervical cancer screening method 34 (61.5%) mentioned VIA and noone knows HPV DNA test. The largest number of the respondents reported that a woman should receive screening services if she is at or above 30 years of age. One in every five participants claimed that a woman should receive screening service every three years, and half of them reported that cervical cancer can be treated if detected early enough. Sixty percent of the participants knew that radiotherapy is the treatment modality for cervical cancer.

Table.5. Knowledge on cervical cancer prevention and screening method among HIV positive women inAdama, Ethiopia 2017.

Variables	Frequency(N=246)	Percentage
Is cervical cancer is preventable		
Yes	155	63
No	12	4.9
Do not know	79	32.1
How to prevent		
Avoid multiple sexual Partners	159	64.9
Avoid early initiation of sexual intercourse	73	29.7
Avoid multi Parity	38	15.4
Avoid taking OCP for long duration	20	8.1
Avoid Cigarette smoking	66	26.8
Through vaccine	28	11.4
Do not know	73	29.7
Other	1	0.4
Do you any screening method		
Yes	65	20.9
No	181	79.9

The overall knowledge of HIV positive women about cervical cancer

To calculate knowledge, score the points was given for each knowledge questions. The responses were summed up and a total score obtained for each respondent. The mean was calculated and those scored mean and above mean were considered as knowledgeable and those scored below mean were considered not knowledgeable.

Among women who took part in the study, only 13.2% of them correctly responded above the mean of the questions the reaming 87%was not knowledgeable of cervical cancer.

6.6. Practice of Cervical Cancer Screening

Out of the total 318 women participated in the study, 16% had ever been screened. The highest percentage of study participants had been screened in hospital setting whilst 38% had got screening services in Marie's stops and Family Guidance Association (FGA). For the majority of the women 31 (62%), health care providers were initiating the screening service. Almost all of the women 48(96%) had ever been screened only once and out of whom ever screened 46(92%) participants had been screened within the last three years.

Table .6.Practice of cervical cancer screening among HIVpositive women in Adama, Ethiopia, 2017.

Variable	Frequency	Percentage
Ever heardscreening Practice		
Yes	175	56.3
No	136	43.7
Ever screened	50	16.1
Place of screening service		
Hospital	31	62
Other	19	38
Initiation of screening		
Self-initiated	18	36
Offered by healthcare providers	31	62
Relatives	1	2
Frequency of screening		
Once	48	96
Above once	2	4
Time of last screen		
Within the past three years	46	92
More than three years ago	4	8

6.7. Reasons Motioned forCervical Cancer notScreened among HIVPositive Women

From participants those heard cervical cancer screening and not ever screened were asked additional question to mention their reason of not undergone screening. Feeling sense of healthy (22.2 %) by the woman was the most frequently reported rationale for not getting screening services, followed by notknow where the service is carried out (14.1 %). (Fig.2)

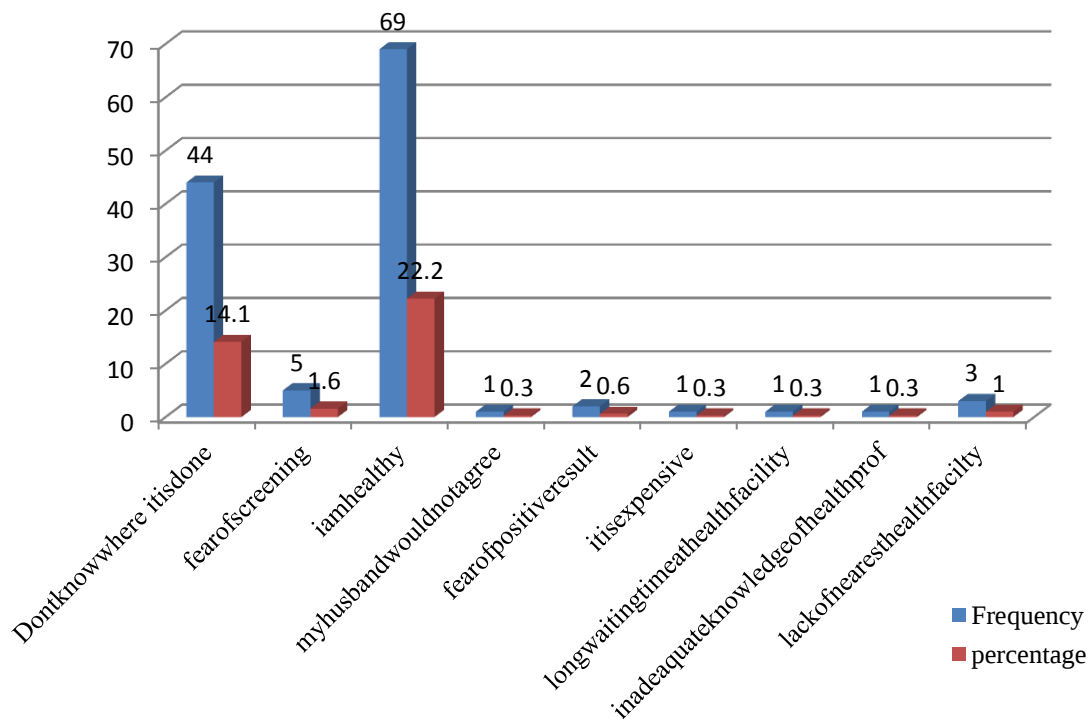


Fig. 2.Reasons for under taking cervical cancer screening in Adama, Ethiopia, 2017.

6.8. Factors Associated with Knowledge of Cervical Cancer

Binary Logistic regression was used to assess the association of each independent variable with knowledge of cervical cancer screening. The binary logistic regression analysis indicates that level of education, occupation and income has association with knowledge of cervical cancer. The associated factors which showed a p-value < 0.05 and less were added to multivariate regression model for analysis.

Women with HIV positive those have secondary and tertiary level of education were 16.7 and 16.2 times (AOR=16.7; 95% CI 1.75-159.5) and (AOR=16.2; 95% CI =1.18-223.1) more likely to have knowledge of cervical cancer and screening compared to women with HIV positive those have no formal education (illiterate, read and write).

Having history of cervical cancer in the family was significantly associated with knowledge of cervical cancer. Women who have family history of cervical cancer were 36 times (AOR=36.8; 95% CI =12.2-111.2) more likely to have knowledge of cervical cancer compared to women with HIV positive who have no family history of cervical cancer (Table 7).

Table.7. Association cervical cancer knowledgeamong HIV positive women in Adama, Ethiopia, 2017.

Variable	Knowledge of cervical cancer and screening		COR, 95% CI	AOR, 95%CI
	Yes	No		
Age				
21-30	13(14.1)	79(85.9)	1	1
31-40	20(13.2)	131(86.8)	0.928[0.44-1.97]	0.741(0.19-2.84)
>41	8(11.8)	60(88.2)	0.810[0.32-2.08]	0.71(0.13-3.84)
Educational				
No formal education	6(3.4)	169(96.6)	1	1
Primary school	11(18.3)	49(81.7)	6.3 [2.22-17.97]	3.2[0.74-14.14]
Secondary school	8(16.3)	41(83.7)	5.5[1.8-16.7]	4.1[0.79-22]
College	10(62.5)	6(37.5)	46.9[12.8-172]*	16.7[1.76-159.5]*
Tertiary	6(54.5)	5(45.5)	33.8 [8.0-142.1]*	16.2[1.89-223.1]*
Occupation				
Merchant	9(28.1)	23(71.9)	1	1
Governmental	12(32.4)	25(67.6)	1.22[0.44-3.45]	1.21(0.17-8.92)
House wife	10(13.2)	66(86.8)	0.387[1.4-1.07]	1.7(.26- 11.39)
Day laborer	3(6.8)	41(93.2)	0.187[0.046-0.460]	0.6(0.06-6.29)
No work	7(5.7)	111(94.3)	0.156[0.05-0.46]	0.66(0.090-4.86)
Marital statutes				
Currently Married	27(18.4)	120(81.6)	2.41[1.21-121.3]	1.52(0.47-4.97)
Currently un Married	14(8.5%)	150(91.5%)	1	1
Income				
<1000	13(14.1)	79(85.9)	0.214[0.86-0.53]*	1.40(0.27-7.21)
1000-2000	20(13.2)	131(86.8)	0.803[0.33-1.95]	1.15(0.26-5.11)
>2000	8(11.8)	60(88.2)	1	1
ART duration				
<4years	6(8.8)	62(91.2)	1	1
4-8years	20(15.2)	112(84.8)	1.845[0.71-4.84]	2.51(0.54-11.73)
>8 years	15(13.2)	96(86.5)	1.615[0.566-4.39]	4.02(0.77-20.91)
Number of birth				
Null parity	4(11.4)	31(88.6)	1	1
Prima parity	189(17.3)	86(82.7)	1.62[0.51-5.16]	0.625(0.12-3.39)
Multi parity	19(11)	153(89)	0.96[0.306-3.03]	0.29(0.05-1.63)
Number of Sexually Partner				
One sexual partner	10(9.5)	95(90.5)	1	1
Multi sexual partner	31(15)	175(85)	0.99[0.515-121.3]	1.72(0.49-5.94)
Family history				
Yes	32(69.6)	14(30.4)	48.5[19.3-4.8]*	36.8[12.3-111]*
No	9(4.5)	191(95.5)	1	1

*Variables that showed associated with knowledge of cervical cancer

6.9. Factors Association with Cervical Cancer Screening Practices

Accordingly, in bivariate analysis regression educational statues, marital statues and duration of ART taken were significantly associated with screening practice of cervical cancer.

In multivariate analysis ART duration and having knowledge of cervical cancer were associated with practice of cervical screening.

Women with HIV positive those taken ART for more than 8 years were 4.2 times (AOR=4.2; 95% CI 1.2-15.01) more likely to undergo cervical cancer screening practice compared to women with HIV positive those had taken ART for less than 4 years (Table 8).

Those women with HIV who have good knowledge of cervical cancer were 5 times (AOR=5; 95%CI 1.6-15.8) more likely to undergo cervical cancer screening practice compared to women with HIV who have no good knowledge (Table 8).

Table.8. Factors associated with practice of cervical Cancer among HIV positive women in Adama, Ethiopia, 2017.

Variable	Practice		COR, 95% CI	AOR, 95%CI
Age	YES	NO		
21-30	49(16.1)	256(83.9)	1	
31-40	1(16.7)	5(83.3)	0.686[0.341-1.381]	0.47(0.19-1.14)
>41	50(16.1)	261(83.9)	0.929[0.411-2.099]	0.55(0.187-1.64)
Educational				
No formal Education	20(11.4)	155(88.6)	1	1
Primary school	14(23.3)	46(76.7)	0.25[1.11-5.03]	1.988[0.8-4.97]
Secondary School	8(16.3)	41(83.7)	1.512[0.62-3.68]	1.329[0.46-3.84]
College	4(25)	12(75.0)	2.58[2.164-8.78]	2.041[0.51-8.18]
Tertiary	4(36.4)	7(63.6)	4.43[1.19-16.48]	3.112[0.71-13.7]
Occupation				
Merchant	4(12.5)	28(87.5)	1	1
Governmental	11(29.7)	26(70.3)	2.96[0.84-10.47]	2.79(0.55-14.22)
House wife	13(17.1)	63(82.9)	1.45[0.433-4.82]	1.259(0.287-5.46)
Day laborer	4(9.1)	40(90.9)	0.7(0.161-3.03)	1.02(0.179-5.86)
No work	13(12.6)	90(87.4)	1.21(0.379-3.869)	2.84(0..67-12.09)
Marital statutes				
Currently married	31(21.9)	116(78.9)	2.41[1.21-4.80]	1.66(0.75-3.65)
Currently unmarried	19(11.6)	115(88.4)	1	1
Income				
<1000	21(11.2)	168(88.9)	0.36[0.16-0.85]*	0.651[0.25-1.73]
1000-2000	19(22.9)	64(77.1)	0.86[0.36-2.08]	1.09[0.42-2.82]
>2000	10(25.9)	29(74.4)	1	1
ART duration				
<4years	5(7.4)	63(92.6)	1	1
4-8years	21(15.9)	11(84.1)	2.36[0.85-6.57]	2.52[0.75-8.446]
>8 years	24(21.6)	87(78.4)	3.29[1.191-9.07]*	4.3[1.2-15.0]*
Number of birth				
Null parity	3(8.6)	32(91.4)	1	1
Prime parity	17(16.3)	87(83.7)	2.08[0.57-7.59]	2.21(0 .47-10.46)
Mulita parity	30(17.4)	142(82.6)	2.254[0.65-7.84]	1.94(0.43-8.74)
Number of sexual partner				
One	13(12.1)	94(87.9)	1	1
Above one	37(18.1)	167(81.9)	0.807[0.44-7.59]	1.25(0 .55-2.83)
Family history				
Yes	20(43.3)	2656.5)	4.36[2.16-8.78]*	1.57(0.53-4.67)
No	30(15)	170(85)	1	1
Good knowledge				
Yes	29(10.7)	241(89.3)	4.6 (2.15-9.83)*	5(1.6-15.88)*
No	21(51.70)	20(48.8)	1	1

*Variables that showed associated with practices of cervical cancer

7. DISCUSSION

The study was undertaken among women who lived with HIV/AIDS to assess their overall knowledge about cervical cancer, utilization level of its screening service and associated factors. The median age of study population who had initiated sex was 16 years which is comparable with the findings of the 2014 Ethiopian Demographic and Health Survey (EDHS) (38).

The study found that the level of knowledge was low in this study; only 13.2% respondents were Knowledgeable about cervical cancer and its screening service. This finding slightly lower than the similar study done in Addis Abeba (25.1%) and Zimabwa(21.1%)(16,33). This can be explained The setting difference might also be justifying the different results across these studies. However, the findings of the study in Democratic republic of Congo and (43%), Gondar (31%) reported higher percentage of woman reporting having knowledge on cervical cancer. (35,36) The differential could be explained in that the study populations across these studies were not the same.

Media was reported by the vast majority of women in this study as the commonest source of information about cervical cancer. This is in line with the findings from a study in Addis Ababa (58%), Gondar (60%), India (66%),Burkinafaso (64%)Johannesburg (27%). [16,18,28,20,29]. However; studies in LAO PDR (53.8%) and Democratic Republic of korea (69%). (25,27) revealed that the most frequently cited source for hearing about cervical cancer was health care providers. The possible explanation for this discrepancy in the favor of foreign studies is that health care providers in our setting have reported rather low knowledge on cervical cancer which is partly due to either no or insufficient amount of in-service training (39).

The study showed that, having multiple sexual partners were mentioned the major risk factor, followed by early intuition of sex which predisposing a woman to cervical cancer. These findings are consistent with studies from India (39%), North Uganda (88%) and china (31%) where having multiple sexual partner was reported as a main risk factor of cervical cancer (30, 34, 9).

Three fourth of participants in this study reported that vaginal bleeding is the symptom of woman with cervical cancer. Studies in North Uganda (85%) and China (34%) similarly reported that Viginal bleeding was mentioned the most frequent symptom of cervical cancer (34, 9).

About 63% of participants in this study responded that cervical cancer is preventable problem, of whom nearly two third had reported that avoiding multiple sexual partners can be a solution to end this cancer. This figure is smaller compared to the staggering 93% in China (9). This discrepancy might be due to the fact that the study in china might involve population with higher knowledge on cervical cancer. The setting difference between the two countries could also explain the disparity in the percentage of woman who knows that cervical cancer is preventable.

In this study only 16% participants had ever had cervical cancer screening service. This figure is relatively higher than other studies' report: Addis Ababa (11.5%), Democratic republic of Congo (8.6%), India (9.5%) and Zimbabwe (9%) [16, 30, 35]. The reasonable explanation for the relatively bigger figure in the current study could be that there had reportedly been some episode of campaign organized by Family Guidance Association in the town which increases women's chance of getting the screening service. The time elapsed between this study and other studies could have contributed to the slightly elevated percentage of women who were ever using getting screening service for cervical cancer.

According to the current study, the main reason of not taking screening service for cervical cancer is feeling of being healthy. This finding is congruent with the findings of a study done in Addis Ababa and china [16, 9]. However, reports from South Africa and Zimbabwe showed fear of procedure were the main setbacks that affect women's uptake of screening service for cervical cancer (32, 33).

Regarding factors Associated with knowledge of cervical cancer screening women who had family history has greater knowledge of cervical cancer screening than those who had not family history this is statistically significant predictor for knowledge of cervical cancer screening. The finding is inconsistent with study done in Gondar (36).

Woman whose education level falls tertiary level had higher chances of having knowledge about cervical cancer compared to their counterparts who are had no formal education. Studies in LAO PDR, Zimbabwe, democratic republic of Congo, Gondar, China and India similarly reported that educated women had increased odds of becoming knowledgeable about cervical cancer (25, 33, 35, 36, 9, 30) than who had no formal education.

The duration of taking ART has found to affect the level of cervical cancer screening practice among the studied populations. This might be related to the fact that the higher the number of years' women are on the treatment, the higher the probability for them to get interacted with health care providers, and the greater exposure to cancer related information, which might in turn resulted in increased use of screening services for cervical cancer.

The current study should women's knowledge also implicated in screening up take, consisted finding also reported from study done in Mekelle (13).

8. CONCLUSION

The result of this study revealed that the proportion of women who knew about cervical cancer and its screening service was small compared to many other studies carried out on women living with HIV. Having multiple sexual partners was the most frequently reported risk factor of cervical cancer. Out of the participants those heard screening service, less than quarter of them was ever screened. Education and family history of cervical cancer were significantly associated with knowledge of women live with HIV. Regarding to the practice women who take ART above eight years and those have good knowledge of cervical cancer screening were associated in multivariate logistic analysis. Feeling some sense of being healthy was the commonest reason for not getting the screening service for cervical cancer. There is a need to design knowledge increasing intervention plan and implementation.

9. LIMITATION AND STRENGTH OF THE STUDY

9.1. Strengths of the Study

- ❖ The study was conducted high prevalence of HIV area.
- ❖ Found base line information for future health plan.
- ❖ Experienced data collectors were used to collect data.
- ❖ Data collectors were not health professionals their bias was reduced.

9.2. Limitation of the Study

- ❖ The study failed to include nongovernmental health facilities which might have affected the representativeness of the study.
- ❖ Since the study design is cross sectional it does not show causal relationship.

10. RECOMMENDATIONS

- Based on the finding of the study the following important recommendation is forward respective body on increasing knowledge, practice and researchers who are engaged in this area. Therefore, this study recommendsto: -

Health care providers

- Health care providers should create awareness among clients about cervical cancer and the importance of receiving its screening service and the place where the service is offered

Hospital decision maker

- The health facilities including health centers should strengthen the implementation of integration service for HIV/AIDS and cervical cancer screening based on the existing national guideline.
- Strength media programs to increase knowledge of clients
- The Hospital administration should instruct and inform the health care providers to educate and teach the incoming clients on the screening services for cervical cancer

Researchers

- Other research should be conducted by including qualitative part to identify the perception of HIV positive women about cervical cancer screening.

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5. Questionnaire

Annex. I

Information sheet

Principal investigator: ASKAL ASHAGRIE

Title: -assessment of knowledge, screening practice and associated factors of cervical cancer among HIV positive women attending ART clinics in governmental health facilities, Adama, Ethiopia, 2017.

Hello! My name is..... I am here on behalf of Askal Ashagrie student of the school of public health in the Addis Ababa University. She is conducting a research for the partial fulfillment of second degree on topic mentioned above Adama city; because it is important to assess' knowledge, screening practice and associated factors of cervical cancer among HIV positive women

Before you decide whether to participate or not in this study, I would like to explain to you the Purpose of the study, any risks, or benefits and what is expected from you.

Purpose of the study: The study will assess the knowledge, screening practices and associated factor about cervical cancer among HIV positive women. This is important as the information obtained will help Addis Ababa health bureau, ministry of health and different nongovernmental organization working on cervical cancer to take measure in order to avert the course of cervical cancer.

Procedure: The study involves a face-to-face interview with the data collector that will ask you a set of questions using a structured questionnaire. After signing the consent form, the Data collector will proceed to ask you the relevant questions and your responses will be recorded on the questionnaire. The interview will take about 10-15 minutes.

Benefit of the study: There is no direct benefit to study participants but the information which will be obtained will provide information regarding source population knowledge on cervical cancer and associated factors. No money will be given in exchange for information obtained, but necessary education with regard to the risk factors, sign and

symptoms and screening modalities will be provided to those who need the services. Any question related to cervical cancer and cervical cancer screening will be entertained. The result of the study will be disseminated to concerned bodies including oromiya health bureau.

Risk of the study: There is no risk in participating in this study though part of your time will be utilized to answer the question.

Rights of Participants: Your participation is entirely voluntary. You are under no obligation; you may choose to participate or not to. If you decline not to participate no privilege will be taken away from you. You can ask any question which is not clear for you.

Confidentiality: Any information you will give will be kept confidential and names will not be written or specified and all the questionnaires will be coded for anonymity. Only the principal investigator will know the details and she will discard it after completing analysis.

Are you willing to participate in this study?

1- No (say thank you) 2- Yes (continuous interview)

II-Informed Consent

The Purpose of this study has been read to me in the language I comprehend and understand. The purpose, the benefits, risks and discomforts and confidentiality of the study has been explained to me. I further understand that: If I agree to take part in this study, I can withdraw at any time without having to give an explanation and that taking part in this study is purely voluntary.

I agree to take part in this study.

Sign: Date: Participant's signature or thumb print

Sign: Date: (data collector)

Sign: Date:(Researcher)

Contact details of principal investigator and the person to whom to contact at any time for further explanation:

Name of principal investigator: Askal Ashagrie

Cell phone No - 0939147914

E-mail: askalashagri@gmail.com

Name of health facility.....

Name of interviewer_____ signature_____

Date of interview (Ethiopian calendar) ____/____/____

Result of interview:

1- Completed..... 2- Refused

3- Partially completed

Checked by supervisor;

Name Signature Date

PART ONE

Assessment of tools on knowledge of cervical cancer

Instruction spaces for theses without option

English version questionnaire

1.1. Respondents socio-demographic characteristics			
Q. No.	Questionnaire	Responses	Skip
101	How old are you? (Completed years)	years old	
102	What is your Religion?	Orthodox1 Protestant2 Catholic3	

		Muslim.....4 Others(specify)98	
103	What is your current educational status?	Illiterate.....1 Read and write only.....2 Primary school.....3 Secondary school.....4 Tertiary.....5	
104	What is your current occupational status?	Student.....1 Merchant.....2 Government Employee.....3 House wife.....4 Day laborer.....5 No work.....6 Others(specific).....98	
105	What is your current marital status?	Single.....1 Married2 Divorced.....3 Widowed.....4 Separated.....5	108
106	What is your husband's occupation currently?	Student.....1 Merchant.....2 Government Employee.....3 NGO.....4 day laborer5 No work.....6 Others (Specify).....98	
107	What is your husband's educational status currently?	Illiterate.....1 Read and write only.....2 Primary school.....3 Secondary school.....4 Tertiary.....5 Other6	
108	What is your monthly Income in Birr?	_____ _____	
109	How long have you been since you had known you HIV status?(year or duration)	_____	

110	Currently are you on HAART	Yes.....1 No.....2	
1.2 Assessment of Risk exposure among the study subjects			
201	What is your age at first sexual intercourse? (Completed years)	_____	
202	What is your age at first marriage? (Completed years)	_____	
203	Could you tell me the number of births you have experienced?	_____	
204	In total, with how many different people have you had sexual Intercourse in your lifetime?	_____	
205	Have you ever had history of STD?	Yes.....1 No.....2 Don't know.....99	→ 207
206	How many times have you ever got STD?	_____	
207	Do you ever smoke?	Yes.....1 No.....2	→ 211
208	For how many years have you been smoking?	_____	
209	How many cigarettes per day where you smoking?	_____	
210	Are you currently smoking?		
211	Did you use any contraceptive methods?	Yes.....1 No.....2	→ 214

212	What type of contraceptive methods?	Oral contraceptive pills.....1 → Injectable2 Norplant3 Barrier methods.....4 Other specify98	213
213	For how long did you Use oral contraception?	_____	
214	Was there any one in your family with history of cervical cancer?	Yes.....1 No.....2 Don't know.....99	
1.3 Knowledge of the women on cervical cancer and cervical cancer screening			
301	Have you ever heard of cervical cancer?	Yes.....1 No.....2 →	END
302	Where did you hear about cervical cancer for the first time?	Media.....1 Health personnel.....2 Teachers.....3 Relatives/family.....4 Friends.....5 Religion leaders.....6 Other specify.....98	
303	What are the predisposing factors to cervical cancer? Multiple answer possible	Having multiple sexual partners.....1 Early onset sexual intercourse.....2 Infection by HPV virus.....3 Cigarette smoking.....4 Low immunity due to HIV/AIDS.....5 Do not know.....99 Other98	
304	Who is at risk of developing cervical cancer? Multiple answer possible	All women1 Married women.....2 HIV positive women.....3 Women who are sexually active.....4 Others specify.....98	

305	What are the signs and symptoms of cervical cancer? Multiple answer possible	Vaginal bleeding.....1 Foul smelling vaginal discharge.....2 Pelvic or back pain.....3 post coital bleeding.....4 I don't know.....99 Other specify.....98	
306	Is cervical cancer preventable disease?	Yes.....1 No.....2 Don't know.....99	
307	How to prevent cervical cancer?	Avoid multiple sexual partners.....1 Avoid early onset sexual intercourse.....2 Quit smoking.....3 Through vaccination.....4 seek screening services.....5 Do not know.....99 Other (please explain).....98	
308	Do you know any screening procedures to detect cervical cancer?	Yes.....1 No.....2 →	311
309	From where did you hear about cervical cancer screening methods for the first time?	Hospital.....1 Health care providers.....2 Television.....3 Radio.....4 Friend.....5 Relative/family.....6 Other specify.....98	
310	Which cervical cancer screening methods do you know? Multiple answer possible	Pap smear.....1 Visual Inspection of cervix with Acetic Acid (VIA).....2 HPV testing.....3 Others specify.....98	
311	When a woman should have screening?	Women <30 years of age.....1 Women ≥30 years of2 Women at any age.....3 Women ≥30 years of age and HIV infected4 Other specify.....98 Don't Know.....99	

312	How frequent, screening should be done for cervical cancer?	Once every year.....1 Once every three years....2 Once every 5 years.....3 I don't know.....99 Others specify.....98	
313	Is cervical cancer curable if detected early?	Yes.....1 No.....2 Don't know.....99	
314	What treatment modalities do you know for cervical cancer? multiple answers possible	Herbal remedies.....1 Surgery.....2 Radiotherapy.....3 Chemotherapy.....4 Cryo therapy and LEEP.....5 Do not know.....99 Other.....98	

PART TWO

ASSESSMENT TOOLS ON PRACTICE CERVICAL CANER SCREENINGS

Instruction spaces for theses without option

Number	Questions	Response / Options	Skip
401	Have you ever heard of cervical cancer screening?	Yes.....1 No.....2 →	End
402	Have you ever screened for cancer of the cervix?	Yes.....1 No.....2 →	407
403	Where did you get the screening service?	Hospital(Mention).....1 Name of hospital----- Health center(mention).....2 Name of health center ----- Private/NGO(Mention).....3	

		Name of private health facility -----	
404	What was the indication?	Self-initiated.....1 Offered by the health Professionals.....2 Media (radio, television)3 Family/friend.....4 Other(specify)98	
405	How many times ever have you been screened?	Once.....1 Above once.....2	
406	When was the last time you made the screened?	within the past three years...1 More than three years ago...2	
407	If no, why?	It is embarrassing.....1 Don't know where it is done.....2 I am healthy.....3 My husband would not agree.....4 Fear of positive results.....5 It is expensive.....6 Religion/cultural.....7 Long waiting time at health institution.....8 Health care providers are not Knowledgeable.....9 No screening service in the nearby Health institution.....10 Other(specify).....98	

Annex II

Gaafii fi deebii Afaan Amaariiffaa

Qoratuun Askaala Ashaagree

Mata duree: Qoranoo duraanii doronyoo balbala gadameessaa waliin walqabatee beekumsa qabanuu fi waa'ee hirmaanaa qorannoo duraanii doronyoo balbala gadameessaa akkasumas waa'ee haalawwan dhukubiichaaf saaxiilaa ta'anii ilaalchisee Adaamaatti Buufatawwan fayya filataman keessatti dubartoota beektoota vaayyasiin HIV AIDSi dhigaa isaanii keessa jiruu irratti qoranoo gochuudhaaf

Akam jirtu maqaan koo _____ ani har'a asiitti kannan argameef baratuu Yuunivarsitii Finfinnee Fayyaa Hawwaasa _____ bakka bu'uudhan yemmuu ta'u buufatawwan fayyaa Adaamaa filataman keessatti _____ mata duree oliitti caqafamee irratti qoranaa gochaa kan jiru yemmuu ta'u kuniis Maastaars Digrii ishee argachuudhaaf kan ishee fayyadudha. Kana gaditti qoraniichaa irratti hirmaachuuf murteessuu keessan dura kaayyoo qoraniichaa, qoraniichaa irratti hirmaachuudhan faayyiidaa argatanuu fi midhaa isaa akkasumaas ammoo wanta isiin irraa barbaadamuun isiniif ibsa.

Kaayyoo: Mataaduree

Qoranoo duraanii doronyoo fiixee balbala gadameessaa waliin beekumsa qabanuu fi waa'ee hirmaanaa qorannoo duraanii doronyoo balbala gadameessaa akkasumas waa'ee haalawwan dhukubiichaaf saaxiilaa ta'anii ilaalchisee Adaamaatti Buufatawwan fayya filataman keessatti dubartoota beektoota vaayyasiin HIV AIDSi dhigaa isaanii keessa jiruu irratti qoranoo gochuudhaaf A.L.A 2017 qoranoo gochuufidha.

Duraaf duuba

Waraqaa waliigaltee mallatteeffamuu booda odeeffannoo sasaabataan gaafiiwwan roguumaa qaban gaafii ijaarama faayyadamuudhan fuuleedhan isiin gaafata. Deebii keessan gaafii fi deebii kana irraa ni kaa'a. Gaafii deebiichii daqiiqaa 10-15 fudhata.

Gaafatamaadhaaf faayyiidaa innii kennuu

Gaafatamaadhaaf faayyiidaa fuullee qabaachuu dhisuu ni malaa. Garuu erga qoraniichii gaggeeffamaa booda bu'aan qoraniichaa hirmaatootaa doronyoo fiixee gadameessa waliin

haala walqabateen beekumsa qaban akkasumas qorannoo doronyoo fiixee gadameessa beekuudhaaf gargaaraa. Kuuniis seera baastoonii fi dhaabbileen gargaarsaa doronyoo fiixee gadameessaa irratti hojatanuu dadarba doronyoo fiixee gadameessaa ittisuudhaaf tarkaanfii akka fudhatan gargaaraa. Odeeffannoo kenaniifiis kafaltiin maallaqa tokko ilee isiniif hin kafalamu. Garuu hirmaataan qoraniichaa kamtiyyuu doronyoo fiixee gadameessaa waliin walqabatee gaafii qabuuf baruumsa kennaaf bu'aan qoraniichaa kutaa ilaallatuuf Biiroo Fayyaa Adaamaa dabalatee ni raabsama.

Midhaa qoraniichii hordoofsiisuu danda'u

Qoraniichaa irratti hirmaachuudhaaf midhaa kamiyyuu hin hordoofsiisu. Garuu gaafiichaa yemmuu deebiifatanuu yeroo keessan fudhachuu ni dandeenya.

Mirgoota gaafatamaa

Hirmaanaan keessan gonkumaa feedhii irratti kan hundaa'edha. Hirmaataan tokko qoraniichaa irratti hirmaachuus hirmaachuu dhisuus ni danda'a. qoraniichaa irratti hirmaachuu barbaaduu dhabuudhan faayyiidaa tokko ilee hin dhorkamtan. Gaafii hin hubanee kamiyyuu yoo qabaatan gaafachuu ni dandeessu.

Iciitumaa

Odeeffannoon martiinuu iciitumaan isaa kan eegamee yemmuu ta'u kan keessan waan hin barreessineef iciitumaa isaa eeguudhaaf lakkooffsa iciitii kan faayyadamnuu taa'a.

Qorannoo kana irratti hirmaachuudhaaf heeyamamoodha?

1. Mitii (galatoomaa jedhi)
2. Eyyee

Waltaa'iinsa

Oliitti kaayyoon qoraniichaa faayyiidaan isaa midhaan isaa akkasumaas iciitumaan isaa siriitti akka naa galuu fi afaan naagaluun naaf ibsameerra. Dabalataaniis qorannuuchaa irratti hirmaachuudhaaf yoon waliigalees ibsa kamiyyuu kennuu osoo na hin barbaachisiin yeroon barbaadeetti addaan kutee deemuu nan danda'a. qorannoo kana irratti hirmaanaan koo feedhii irratti kan hundaa'edha.

Qorannoo kana irratti hirmaachuudhaaf waliigaleerra
Mallattoo (Ashaaraa qubaa abuuduu) guyyaa (hirmaataa)
Mallattoo guyyaa (sasaabaa odeeffannoo)
Mallattoo guyyaa (qoratuu)
Gaafii qabaatanuuf teessoo faayyiidaa qabeessaa fi odeeffannoo qoratu

Maqaa qoratu: Askaalaa Ashaagree

Lakk.bilbiilaa: 0939147914

Emeli: Askalashagri@gamaail.com

Maqaa fi mallattoo gaafataa

Guyyaa itti gaafatame (A.L.I) _____

Bu'aa qoraniichaa 1. Xumurameerra 2. Gaafatamuu hin barbaadne 3. Gara
tokkoodhan kan xumurame

Suparvaayzariidhaan mirkanaa'eerra. Maqaa _____ Guyyaa

Gaaffii waa'ee beekumsa kaanserii afaan gadameessaa

1.1gaaffii waa'ee nama qorannoo irratti hirmaatuu			
Lakk.	Gaafii	Deebii	Irra darbii
101	Umuriin keessan mee'aa? (waggaa gutuu)	Waggaa _____	
102	Amantaan hordooftan maali?	Ortoodooksii.....1 Pirooteestaantii.....2 Kaatooliikii.....3 Muuliimaa4 kan biroo yoo ta'e caqasaa.....98	
103	Sadarkaa barnootaa keessanii natti himaa	Barreessuu fi duubiisuu kan hin dandeeny.....1 Barreessuu fi duubiisuu qofaa2 Baruumsa sadarkaa jalqabaa3 Baruumsa sadarkaa lammaffaa4 Kooleejii5 Yuuniivarsitti6 kan biroo yoo ta'e caqasaa.....98	
104	Ga'een hojii keessanii maaliidha?	Barataa1 Daldalaa2 Hojataa Mootummaa3 Haadha manaa4 Hojii guyyaa5 Hojii kan hin qabnee6 Kan biraa yoo ta'e caqasaa98	
105	Haalii gaa'eelaa keessanii akamiidha?	Kan hin heeruumnee1 → Kan heruumte.....2 Kan hiktee3 Dhirsii kan irraa du'e.....4 Kan addaan baatee5	108
106	Haalii hojii miiltoo gaa'iilaa keessanii akamiidha?	Barataa1 Daldalaa2 Hojataa Mootummaa3 Haadha manaa4 Hojii guyyaa5 Hojii kan hin qabnee6 Kan biraa yoo ta'e caqasaa98	
107	Haalii baruumsa miiltoo gaa'iilaa keessanii	Barreessuu fi duubiisuu kan hin dandeeny.....1	

	akamiidha?	Barreessuu fi duubiisuu qofaa2 Baruumsa sadarkaa jalqabaa3 Baruumsa sadarkaa lammaffaa4 Kooleejii5 Yuuniivarsitti6	
108	Ji'a keessatti walumaa galatti galiin keessan hagamii?	Qr. Itoophiyaa _____	
109	Vaayraasiin HIV AIDSi dhigaa keessan keessa akka jiru kan beektan yoomii? (bara ykn waggaa waliigalaa)	_____	
110	Qoriichaa faraa HIV AIDSi amma ni fayyadamtuu?	Eyyee1 Hin fayyadamu.....2	
1.2 Doronyoo fiixee gadameessaa fi qorannoo duraa doronyoo fiixee gadameessaa irratti beekumsa dubartoonii beektaoonii qaban qorachuudhaaf kan qophaa'e			
201	Jalqaba saal-qunnamtii saalaa yemmuu raawwatan umuriin keessan meeqa turee? (waggaa gutuu)	_____	
202	Jalqaba yemmuu heeruumtan umuriin keessan meeqa turee? (waggaa gutuu)	_____	
203	Ijoolee meeqaa deesaniituu?	_____	
204	Walumaa galatii ama amatii namaa meqqaa wajiin wal qunamtii saala gotee beetaa?	_____	
205	Dhukubbnii wal wuunnamtii saalaan daddarbu isiin qabee beekaa?	Eyyee1 Hin beekuu.....2	
206	Dkukubaa wal wuunnamtii saalaan daddarbu yeroo meqaa yalamtee bekta?	_____	
207	Sigaara xuuxe bektaa?	Eyyee1 Hin beekuu.....2	210

208	Yeroo amamitif Xuuxee?	_____	
209	Guyyaa tokoo kessati sigaraa meeqa xuuxaa?	_____	
210	Amaa sigaara ni xuuxaa?	Eyyee1 lakkii.....2	
211	Qoricha ulfa dhoorku gargaramtee bektaa?	Eyyee1 Hin beekuu.....2	214
212	Gargaramtee bektaa yoo ta,e maal?	Kan Liqimfamu.....1 Bifaa marfeetin kan kenamu.....2 Iree keesa kan galchamu.....3 Kondomii.....4 Kan biraa yoo ta'e caqasaa98	213
213	Yeroo amamitiif gargaramtee?	_____	
214	Maatii keessan keessaa namnii kaanserii fiixee gadameessaa qabuu jira?	Eyyee1 Lakki.....2 Hin beekuu.....99	
1.3 Doronyoo fiixee gadameessaa fi haalawwan fiixee gadameessaaf saaxiilan irratti beekumsa dubartoonii beektoonii qaban qorachuuf kan qophaa'e			
Lakk.	Gaafii	Deebii	Irra darbii
301	Kanaan duraa waa'ee dhukubbaa kaanserii fiixee gadameessaa dhageessanii beektuu?	Eyyee1 Hin beekuu.....2	End
302	Yeroo jalqabaatiif waa'ee dhukubbaa kaanserii fiixee gadameessaa essaa dhageessanii?	Meeshaa sabqunamtii irraa1 Oggeessaa fayyaa irraa2 Barsiisaa irraa3 Fira irraa4 Hiriyootaa koo irraa5 Dhaabbataa amantaa irraa6 Kan biroo yoo jiraatee caqasaa98	
303	Haalawwan kaanserii fiixee gadameessaa tiif saxiilanuu isiin beektan yoo jiraatee nuuf caqasaa (filannoowwan hedduun jiru. Deebii tokkoo ol deebiisuun ni dandaa'ama)	Dhiiroota garaagaraa waliin saal-qunnamtii raawwachuu1 Osoo umuriin hin gaahiin saal-qunnamtii raawwachuu2 Maatii keessaa seenaan dhukubbiichaa yoo jiraate3 Vaayrasii humaan poopiiloomaa jedhamuun qabamuu4 Tamboo arsuu5 Dandeetiin dhukubaa ittisuu dadhabuu sababa	

		HIV AIDSi ttin6 Hin beekuu99 Kan biroo yoo jiraatan caqasaa.....98	
304	Dhukubbaa kannserii fiixee gadameessaatiif dubartootaa kamtuu saaxiilamoodha jetanii yaadu?	dubartootaa maraa1 dubartootaa heeruuman.....2 dubartootaa dhigaa isaanii keessaa Vaayراسiin HIV jiru3 hin beekuu99 kan biroo yoo jiraate caqasaa.....98	
305	Mallattoowwan kaanserii fiixee gadameessaa isiin beektan yoo jiraatee caqasaa madaa isaa (filannoowwan hedduun jiru deebii tokkoo ol deebisuun ni dandaa'amaa)	Gadameessaan dhignii dhangala'u.....1 Dhangalaa'a gadameessaa foolii qabu2 Dhukubbaa naannoo dugdaa ykn diiraa3 Haala dhukubbaa saal-qunnamtii booda4 Hin beeku.....99 Kanneen biroo yoo jiraatan caqasaa98	
306	Dhukubnii kaanserii fiixee gadameessaa dhukubbaa ittisuun dandaa'amuudha jetanii yaaduu?	Eyyeen1 Mitti2 Hin beekuu99	
307	Dhukuba doronyoo fiixee gadameessaa akkamitin itiisu dandeyhaa?	Wal qunamtisala nama bayyee wajiin gochuu dhiisuu.....1 Ijolumati walqunamti sala gochuu dhisu....2 Ijolee bayyee da,uu dhiisuu.....3 Sigaaraa xuuxuu dhisuu.....4 Yeroo dheeradhaf qoricha ulfaa kan liqimfamu fudhachuu dhisuu.....5 Kitibata fudhachu.....6 Hin beeku.....7 Kan biroo yoo jiraatan caqasaa.....98	
308	Kanaan duraa waa'ee malawwan qorannoo dursaa kannserii fiixee gadameessaa dhageessanii beektuu? (siriitti haagaafatamu)	Eyyeen1 Hin beekuu2	→ 311
309	Yeroo jalqabaatiif waa'ee mala qorannoo duraa doronyoo fiixee gadaameessaa eessaa dhageessanii?	Meeshaa sabqunamtii irraa1 Oggeessaa fayyaa irraa2 Barsiisaa irraa3 Fira irraa4 Hiriyootaa koo irraa5 Dhaabbataa amantaa irraa6 Kan biroo yoo jiraatee caqasaa98	

310	Eeyyeen yoo jeetan malootaa qorannoo dursaa kannserii fiixee gadameessaa kamiin beektuu? (filannoowwan hedduun jiru deebii tokkoo ol deebisuun ni danda'ama)	Paapaasmiir (qorannoo fiixee gadameessaa irraa qunxuuramee hojatamuu)1 VIA2 Qorannoo Vaayrasii Human paapiiloomaa3 Kan biroo yoo jiraate caqasaa98	
311	Dubartiin tokkoo qorannoo dursaa kaanserii fiixee gadameessaa gochuu kan qabduu umurii kamiitti?	Umurii Waggaa <301 Umurii Waggaa ≥302 Waggaa kamittiyyuu3 Umurii waggaa 30 gadii ta'ee dhibee HIV yoo qabaatte.....4 Hin beekuu.....99 Kan biroo yoo jiraatee caqasaa98	
312	Namnii tokkoo qorannoo dursaa kaanserii fiixee gadameessaa yeroo meeqaatti gochuu qabaa jetanii yaaduu?	Waggaatti yeroo tokkoo1 Waggaa sadiitti yeroo tokkoo2 Waggaa shaniitti yeroo tokkoo3 Hin beekuu98	
313	Kaanseriin afaan gadameessaa dafanii yoo yaalaman irraa fayyuun ni danda'ama?	Eeyeee.....1 Lakkii.....2 Hin beeku.....99	
314	Wal'aansa kaanserii fiixee gadameessaa isiin beektan yoo jiraatee ibsaa (filannoowwan hedduu tujiru deebii tokko ol deebisuun ni danda'ama)	wallaansa aadaa -----1 Baqqsaniiyaaluu ----- 2 Wallansa calaqqee -----3 Keemoo terraappii ----- 4 Keerayoo teeraappii -----5 Hinbeeku -----.98 Kan biroo yoo jiraate caqasaa-----99	

Kutaa lammaffaa

Gaaffii waa'ee kaanserii afaan gadameessaa dursanii qoramuu

Lakk.	Gaafii	Deebii	Irra darbi
401	Kanaan dura wa'ee dursanii qoratamuu kanserii afaan gadameessaa dhageessee beektaa?	Eeyyee ----- 1 Hinbeeku ----- 2 →	End
402	Kanaan dura kaanserii afaan gadameessaaf dursitee qoratamtee beektaa?	Eeyyee ----- 1 Hinbeeku ----- 2 →	407
403	Qorannoo dursaa doronyoo eessatti goote?	Hospitaala (hacaqafamu) ----- 1 _____ Buufata fayyaa -----2 _____ Ran biroo hacaqafamu ----- 98 _____	
404	Qorannoo dursaa gochuuf maaltu sikakaase? Kakaaftummaa qgeeyyii fayyatiin	Kaka'umsa kootiin ----- 1 Ogeeyyii fayyatiin -----2 Firaan.....3 Hiriyootaan.....4 Mana amantii.....5 Kanbiroo caqasaa98	
405	Yeroo meeqa qoratamte?	Yeroo tokko1 Waggaa darbe2	
406	Yeroo dhumaaf kan qoratamte yoomi?	Waggaa sadii darban keessaatti.....1 Waggaa sadii darban dura 2	

407	Maalif hin sakata'amnee?	Esaaiti akka godhamu hin beekuu.....1 Qorannoo dursaa doronyoo gochuun nan sodadha.....2 Fayaa wanaan ta,ef sakata,amu naan barbachisu.....3 Abaan waraa koo nan ayaamu.....4 Yoon qabadhee jedhee wanaan sodadhuuf...5 Gaati jabeesa gatii ta,ef.....6 Amantii/Aadaa.....7 Bufataa fayaa beelamni waan dheraatuuf.....8 Hojeetoti fayaa bekuumsa ga,aa waan hin qabneef.....9 Bufaati fayaa Qorannoo dursaa doronyoo nanoo kehyaa waan hin jireef.....10 Kan biroo caqasaa98	
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የእርሶተሳትፎፈፅሞበፍላጎትላይየተመሰረተነዉ።፡አንድተሳታፊጥናቱላይመሳተፍምያለመሳተፍምይችላል።፡ጥናቱላይመሳተፍባይፈልጉምንምአይነትጥቅምአይከለከሉም።፡ማንኛኛዉምያልተረዱትጥያቄካለመረጃሰብሳቢዉንመጠየቅይችላሉ።፡

ምስጢራዊነት፡-

ሁለምመረጃምስጢራዊነቱየተጠበቀሲሆንየእርሶስምባለመፃፍምስጢራዊነቱንለመመጠበቅየምስጢርቁጥርየምንጠቀምይሆናል።፡

በዚህጥናትላይለመሳተፍፍቃደኛነዎት

1.አይደለሁም (አመሰግናለሁበል)

2.አዎ

ስምምነት

ከላይየጥናቱአላማ፣ጥቅሙ፣ጉዳቱ፣እንዲሁምሚስጥራዊነቱበሚገባኝእናበምረዳዉቋንቋተገልጾልኛል።፡በተጨማሪምበጥናቱላይለመሳተፍበስማምእንኳንምንምአይነትማብራሪያመስጠትሳያስፈልገኝበፈለኩትጊዜአቋርጬምሄድኝላለሁ።፡በዚህጥናትላይተሳትፎፈፅሞበፍላጎትላይየተመሰረተነዉ።፡

በዚህጥናትላይለመሳተፍተስማምቻለሁ።፡

ፊርማ(የአዉራጣትአሻራ)ቀን(ተሳታፊ)

ፊርማቀን(መረጃሰብሳቢ)

ፊርማቀን (ጥናትአድራጊ)

ለሚኖርዎትጥያቄየሚጠቀሙትአድራሻእናየጥናትአድራጊዎመረጃ

የጥናትአድራጊዎስም፡አስካልአሻግሬ

ስልክቁጥር0939147914

ኢ-ሜይሌ፡askalashagri@gmail.com

የጠያቂውስምእናፊርማ._____

የተጠየቀበትቀን (በኢትዮጵያአቆጣጠር) -----/-----/-----

የጥናቱውጤት 1. ተጠናቋል 2. መጠየቅአልፈለጉም3. በከፊልየተጠናቀቀ

በሱፐርቫይዘርተረጋግጧልስም -----ፊርማ----- ቀን_____

የጥናቱ ተሳታፊዎች የጥናት መለያና ስነ ህዝባዊ መረጃ

ተ.ቁ	መጠይቅ	መልስ	ዝላል
101	እድሜዎ ስንት ነው? (ለመጨረሻ ጊዜያዊ ክብሩ ትስንተኛ የልደት በዓል ያውቁት?)	ዓመት	
102	የሚከተሉት ሃይማኖት ምን ድንገት ነው?	ኦርቶዶክስ.....1 ፕሮቴስታንት.....2 ካቶሊክ.....3 ሙስሊም.....4 ሌላ ከሆነ ይጥቀሱ.....98	
103	የትምህርት ደረጃዎን ይገነዘቡ;	ማኅበራዊና መጻፍት የማይችል.....1 ማኅበራዊና መጻፍት ብቻ.....2 መጀመሪያ ደረጃ ትምህርት.....3 ሁለተኛ ደረጃ ትምህርት.....4 ኮሌጅ.....5 ዩኒቨርሲቲ.....6	
104	የእርስዎ የስራ ሁኔታ ምን ድንገት ነው?	ተማሪ.....1 ነጋዴ.....2 የመንግሥት ሰራተኛ.....3 የቤት እመቤት.....4 የቀንሰራ.....5 ስራ የሌለው.....6 ሌላ ከሆነ ይጠቀሱ.....98	
105	የጋብቻ ሁኔታዎ እንዴት ነው?	ያላገባች.....1 ያገባች.....2 የፈታች.....3	ያላገባች ከሆነ ወደ ጥያቄ ቁጥር 109 ዝላል

		ባሏቸው ባት.....4 የተለያዩች.....5.	
106	የትዳር አጋርዎ የስራ ሁኔታ ምን ድንገት ነው?	ተማሪ.....1 ከጋዴ.....2 የመንግስት ሰራተኛ...3 የቀንስራ.....4 ስራ የሌለው.....5 ሌላ ከሆነ ይጠቀስ....10	
107	የትዳር አጋርዎ የትምህርት ሁኔታ እንዴት ነው?	ማንበብና መጻፍ የማይችል....1 ማንበብና መጻፍ ብቻ.....2 መጀመሪያ ደረጃ ትምህርት....3 ሁለተኛ ደረጃ ትምህርት.....4 ኮሌጅ.....5 ዩኒቨርሲቲ.....6	
108	የወር ምን ያህል ይሆናል ?	_____ (የኢ/ትብር)	
109	መቼ ነው እኔ እንደሚገኝበት ሰዓት ለመወሰን ስኬት ሊያወቁት? (ዓመት ምህረት ወይም አጠቃላይ ዓመት)	_____	
110	የፀረ እኔ እንደሚገኝበት ሰዓት ለመወሰን ስኬት ሊያወቁት?	አዎ.....1 አልጠቀምም.....2	
1.2 በማህፀን ጫፍ ካንሰርና በማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ላይ ያገኘውን እውቀት ለማጥናት የተዘጋጀ			
201	መጀመሪያ የግብረ ሰጋ ግንኙነት ሲፈፀም እድሜዎት ስንት ነበር ?	_____	
202	መጀመሪያ ሲያገቡ እድሜዎት ስንት ነበር ?	_____	

203	ስንትልጅወልደዋል ?	-----	
205	ከስንተውንዶችጋርየግብረሰጋግንፕነትአድርገውየው ቃሉ?	-----	
205	የአባላዘርበሽታይዝዎትያውቃል ?	አዎ-----1 አላወቅም.....2	
206	ስንትጊዜ	-----	
207	ሲጋራአጭሰሽታቂያለሽ	አዎ-----1 አላወቅም-----2	
208	ለስንትጊዜአጨሰሽ	-----	
209	በቀንስንትሲጋራታጨሻለሽ	----- -----	
210	አሁንሲጋራታጨሻለሽ	አዎ-----1 አላወቅም.....2	
211	የወሊድመቆጣጠርያወስደሽታቂያለሽ		
212	ምንደይነት	የሚዋጥኪነን.....1 በመርፌየሚሰጥ.....2 በክንድየሚቀበር.....3 ኮንዶም.....4 ሌላ.....5	
213	ለምንደይህልጊዜ	-----	
214	በቤተሰብዎወስጥየማህፀንጫፍካንሰርየነበረበትሰዉ አለ ?	አዎ.....1 የለም.....2	

1.3 በማህፀንጫፍካን ሰርና በማህፀንጫፍላማ ህጻንጫፍካን ሰርሊያ ጋልጡ የሚችሉ ሁኔታዎችን ላልዋቂ ሴቶች ያላቸውን እውቀት ለማጥናት የተዘጋጀ

ተ.ቁ	መጠይቅ	መልስ	ዝላል
301	ከዚህ በፊት ስለ ማህፀንጫፍካን ሰር በሽታ ሰምተው ያውቃሉ?	አዎ 1 አላዉቅም 2	አላዉቅም ካሉ ወደ ጥያቄ ቁጥር 401
302	ለመጀመሪያ ጊዜ ስለ ማህፀንጫፍካን ሰር በሽታ ከየት ሰሙ?	ከመገናኛ ብዙሀን 1 ከጤና ባለሙያ 2 ከአስተማሪ (መምህር) 3 ከዘመድ 4 ከጓደኞቼ 5 ከሐይማኖት ተቋም 6 ሌላ ካለይ ጥቀሱ 98	
303	እርስዎ የሚያውቁት ለማህፀንጫፍካን ሰር ሊያጋልጡ የሚችሉ ሁኔታዎችን ይጥቀሱልን (ብዙ አማራጮች አሉ (ከአንድ መልስ በላይ መመለስ ይቻላል))	ከተለያዩ ወንዶች ጋር የታወቀኩኝ ነት መፈፀም 1 እድሜ ሳይደርስ የታወቀኩኝ ነት መፈፀም 2 በቤተሰብ የበሽታ ታሪክ ካለ 3 ሁማን ፓፒሎማ በሚባል ቫይረስ መያዝ 4 ሲጋራ ማጨስ 5 የበሽታ መከላከል አቅም መዳከም በኤች.አይቪ.ኤ ድስም ክንያት 6 አላዉቅም 99 ሌሎች ካሉ ይጠቀሱ 98	
304	ለማህፀንጫፍካን ሰር ተጋላጭ የትኞቹ የሴት ክፍል ናቸው ብለዉ ያስባሉ?	ሁሉም ሴቶች 1 ያገቡ ሴቶች 2 በደማቸው ውስጥ ኤች.አይቪ.ኤ ቫይረስ ያለባቸው ሴቶች 3 አላዉቅም 99 ሌላ ካለይ ጥቀሱ 98	
305	እርስዎ የሚያውቁት የማህፀንጫፍካን ሰር ምልክቶች ካሉ ይጥቀሱልን (ብዙ አማራጮች አሉ፣ ከአንድ መልስ በላይ መመለስ ይቻላል)	በማህፀን ደም መፍሰስ 1 ሽታ ያለው የማህፀን ፈሳሽ 2 የወገብ ወይም የዳሌ አከባቢ ህመም --- 3 የህመም ስሜት ከግብረ ሰው ጋር ግንኙነት በኋላ 4 አላዉቅም 99 ሌሎች ካሉ ይጠቀሱ 98	

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The undersigned agrees to accept responsibility for the scientific ethical and technical conduct of the research project and for provision of required progress reports as Per terms and conditions of the Research Publications Office in effect at the time of Grant is forwarded as the result of this application.

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DECLARATION

I the undersigned, declare that this thesis is my original work, has never been presented in this or any other university, and that all the resources and materials used for the thesis development, Have been acknowledged as complete references.

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