CERVICAL CANCER SCREENING SERVICE UTILIZATION AND ASSOCIATED FACTORS AMONG WOMEN OF 30-49 YEARS IN JIMMA TOWN, SOUTH WEST ETHIOPIA



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JIMMA UNIVERSITY INSTITUTE OF HEALTH FACULTY OF PUBLIC HEALTH DEPARTMENT OF POPULATION AND FAMILY HEALTH

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ABSTRACT

Background: Cervical Cancer is the common gynecologic cancer affecting the life of women. It causes deaths of thousands of women annually worldwide. Cervical cancer screening is the method of early detection of cervical cancer before occurrence to decrease the mortality and morbidity of the diseases. When women screened at least once in her lifetime between the ages of 30 and 40 for cervical cancer, her risk of cancer could be decreased by 25-36%. Despite this advantage the coverage of cervical cancer screening is low in Low and Middle Income Countries including Ethiopia. Only few studies have been done in Ethiopia concerning cervical cancer screening service utilization among eligible women.

Objective: To assess cervical cancer screening service utilization and associated factors among eligible women (30-49 years) in Jimma town, south west Ethiopia, 2017.

Methodology: Community based cross sectional study was conducted among women of 30-49 years in Jimma town from March 20 to April 15, 2017. Triangulated with qualitative method of data collection. The data were collected using a structured interviewer administered questionnaire. Data were entered using epidata manager version 4.0.2 and exported to SPSS version 21 for analysis. Logistic regression analysis was performed and variables with p-value of less than 0.05 were taken as statistically significant predictors of cervical cancer screening service utilization.

Results: Of the 737 women, only 114 (15.5%) had been screened for cervical cancer. Among respondents who were screened, 51(44.7%) screened because they had been requested by a health care provider. The independent predictors of cervical cancer screening were: occupational status [AOR=2.67, 95% CI:1.29-5.49], knowing someone who had ever been screened [AOR=363, 95% CI: 2.06-6.40], history gynecologic examination [AOR =2.91, 95% CI: 1.49-5.66], no gender preference for gynecologic examination [AOR=3.59, 95% CI:1.97-6.53], consultation of health care providers [AOR=4.37, 95% CI:2.51-7.63], Knowledge status [AOR=3.46, 95% CI:1.44-8.31] and perceived susceptible status [AOR=3.23, 95% CI:1.74-5.99].

Conclusion: Utilization of screening service is low in Jimma town. Occupation, knowing someone who screened, history of gynecologic examination, gender preference for gynecologic examination, consultation/advise about cervical cancer with health care providers, perceived susceptibility for cervical cancer and knowledge about cervical cancer & screening were independent predictors for cervical cancer screening. Strengthening the screening service is important through raising the awareness of the community and integration of the services.

Key words: cervical cancer, cervical cancer screening, utilization, Jimma town

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ABBREVIATIONS AND ACRONYMS

AIDS: - Acquired Immune Deficiency Syndrome

- AOR: Adjusted Odds Ratio
- **CIN:** Cervical Intraepithelial Neoplasia
- Cx Ca: Cervical cancer
- **FMOH**: -Federal Ministry of Health
- **HBM**: Health Belief Model
- HIC: High Income Countries
- HIV: Human Immunodeficiency Virus
- HPV: Human Papilloma Virus
- LMIC: Low and Middle Income Countries
- **OPD**: Out Patient Department
- **OR**: Odds Ratio
- Pap smear: Papanicolaou smear test
- **SPSS**: Statistical package for social science
- VIA: -Visual inspection of the Cervix with Acetic Acid
- WHO: World Health Organization

CHAPTER ONE: INTRODUCTION

1.1. Background

Cervical cancer screening is the method of early detection of cervical cancer before occurrence to decrease the mortality and morbidity of the diseases. It can identify precancerous cells in women or healthy women before occurrence of cancer. Because, removal of such lesion prevent development of disease which occur after long time(1). According to American college of obstetricians and gynecologists cervical cancer screening is a procedures used to identify change in cells of cervices that could result in cancer(2).

Morbidity and mortality from cervical cancer can be prevented through primary, secondary and tertiary preventions which include screening as secondary prevention. Recommendation of World Health Organization (WHO), as primary prevention includes vaccinating girls all between the ages of 9 to 13 with human papilloma virus (HPV) vaccine and raising their awareness towards risk factors of cervical cancers and associated behaviors such as avoiding early initiation of sexual practices and multiple sexual partner. Secondary prevention, involves early detection and treatment of subclinical, asymptomatic, or early disease in women of 30 years or older, without apparent signs and symptoms of cancer(3,4).

The standard screen method for cervical cancer is cytology Papanicolaou testing (Pap test), and if cytology results are positive the diagnosis of Cervical Intraepithelial Neoplasia (CIN) is based on following colposcopy, biopsy of suspicious lesions, and then treatment only when CIN2+ has been histologically confirmed. This screening method requires highly trained human resources and extensive amount of laboratory equipment. In low and middle income countries, this screening method is difficult due to high cost of setting up screening programmes based on cytology. Coverage of screening is very low and alternative screening methods are required(4). Others screening tests includes HPV DNA test, visual inspection with acetic acid (VIA) or Lugol's iodine (VILI). Visual inspection of the cervix with acetic acid is the best method in resource limited area. This method requires few visits and offer a "screen and treat" at the same visit. So, it can save the resources and time specially in low and middle income countries(5).

When women screened at least once in her lifetime between the ages of 30 and 40 for cervical cancer, her risk of cancer could be decreased by 25-36%. Because the screening identifies precancerous lesion and leads to early treatment for lesion. Pap testing has resulted in dramatically decreased cervical cancer rates when the test is repeated every few years(6).

Every woman age of 21-60 and older years of age should get chance for screening. But routine screening program should start from age of 25 years. The choice of starting at early age and stopping at older age should be individual decision(7).

In resource limited area age at which routine screening starts and frequency of screening is different from developed countries. According to Ethiopian cervical cancer screening guideline, every woman of 30-49 years of age should have cervical cancer screening every five year intervals. But in the case of HIV/AIDS positive women the age is decreased to 25 years of age because of immune suppression can increases the occurrence of cervical cancer. In Ethiopia visual inspection with acetic acid (VIA) screening of cervical cancer is being used(8).

1.2. Statement of problem

Cervical Cancer is the second most common cancer among women worldwide and contributes for the death of 266,000 and new cases of 528,000 in women annually according to GLOBOCAN 2012(9). There is high disparity of incidence and death from cervical cancer between low and middle income countries and High income countries (HIC). Nine out ten deaths due to cervical cancer occur in low and middle income countries (LMIC). Low and middle income countries share about 85% of the cases and 87% of death due to cervical cancer. In sub-Saharan Africa, about 34.8 new cases of cervical cancer are diagnosed per 100 000 women every year, and 22.5 per 100 000 women die from the disease(9). There is disproportionately high burden of cervical cancer in sub-Saharan Africa, parts of Latin America and the Caribbean, and elsewhere in medically underserved populations(10). The death from cervical cancer in 2020 is estimated to be raise by twenty percent in low and middle income countries. According to WHO estimation within the next ten year about 3.65 billion US dollar is required to combat cervical cancer through vaccination of girls, screening services and treatment of cervical cancer in LMIC (11).

The main causes of disparity in mortality and morbidity of cervical cancer between HIC and LMIC are the utilization of appropriate prevention mechanisms such as screening service and HPV vaccine. Because of availability of appropriate screening test in HIC countries the incidence and mortality from cervical cancer is dramatically decreasing unlike that of LMIC (12).

Like others low income countries, the burden of cervical cancer is high in Ethiopia. Cervical cancer is the second leading cause of death next to breast cancer in women aged 15 - 44 years in 2012 in Ethiopia. It accounts about 11% of all cases of cancer. Annually about 7,095 new cervical cancer cases are diagnosed and 4,732 cervical cancer deaths occur in the same year(13). Study conducted in Addis Ababa at Tikur Anbessa Specialize hospital showed that the trends of cervical cancer were increasing over last 16 years. A total of 5293 new cases of cervical cancer were registered over the period. According to this study majority of the cases are from Addis Ababa. Also there are cases that could not reach health facility for different reason and when those cases are added the burden is high(14).

The coverage of cervical cancer screening service is very low in Ethiopia. Less than one percent of eligible women under go screening in the country(15). Also study indicated that knowledge about cervical cancer and cervical cancer screening is low in Ethiopia. In Jimma university specialized hospital out of 60 patient who developed invasive cervical cancer only 2(3.3%) of them have history of cervical cancer screening and only 7(11.7%) of them heard about cervical cancer(16). Study conducted in North West Ethiopia illustrate that the participants have low awareness and knowledge about cervical cancer(17).

To increase the coverage of cervical cancer screening and awareness about cervical cancer the Ethiopian government made some efforts. According to 2015 Ethiopian federal ministry of health(FMOH) report a total of 22,818 women aged 30-49 undergone cervical cancer screening, out of whom 2,801(12.3%) had precancerous lesion and 1,348 (5.9%) were identified as full-blown cancer. Cancer registry was finalized in Addis Ababa as well as in the regional states(18).

Some studies have been conducted in Ethiopia and indicating attitude and knowledge of cervical cancer screening as well as the level of cervical cancer screening among study population. But, majority of studies are focused on university students and health care providers(17,19–24). So this study will identify factors associated with cervical cancer screening service utilization among eligible women (30-49) which will help to increase service utilization by acting on those factors.

1.3. SIGNIFICANCE OF THE STUDY

Studies showed that the incidence of cervical cancer is decreasing in developed countries. This is because of effective screening methods. In contrast the burden of the disease is dramatically increasing in LMICs(12).

Many studies have been conducted in Ethiopia concerning knowledge and attitudes of participants towards cervical cancer and screening. Majority of those studies were focused on health professionals and university students. This study intended to fill this gap by focusing on eligible women for screening and at great risk for cervical cancer. Finding from this study will help to identify magnitude of cervical cancer screening utilization and associated factors in Jimma town. Identifying these factors is useful on increasing utilization of cervical cancer screening by acting on those hindering or facilitating factors. In addition, the study used Health Belief Model which allows for the consideration and influence of environmental factors that may affect screening behaviors as well as individual and system-level variables. Also this study can be used as baseline for other studies.

CHAPTER TWO: LITERATURE REVIEW

2.1. Utilization of Cervical Cancer Screening

The proportion of susceptible women who undergo screening is low in many LMICs including Ethiopia. Study conducted in Tanzania showed that self-reported cervical cancer screening is low, from total of women participated in the study about 85 percent of them know about cervical cancer and cervical cancer screening. But only about 6 percent of them utilized the screening services(25). Similarly according to community based study conducted in Kenya, out of 424 women participated only 17 percent of them have history of cervical cancer screening(26). In Nigeria out of 220 participants only 22 (10%) of them have history of ever screened for cervical cancer but about 217 (98.6%) of the respondents had good knowledge concerning cervical cancer and screening services(27). Study from Ghana which 392 participants were involved only three (0.8%) of them have ever screened for cervical cancer (28). In Malawi among 257 women selected for study less than quarters (13.2 %) of them have history of cervical cancer screening(29). Study from northern Ethiopia showed out of 1186 age eligible women, only 235(19.8%) have been screened for cervical cancer(30).

2.2. Factors Associated with Cervical Screening Utilization

Utilization of cervical cancer screening is affected by several factors. Some group factors facilitate utilization of the services while others act as obstacles of using the services. Negatively influencing factors are more prevalent in developing countries unlike those of developed countries. Low utilization of cervical cancer screening services in LMICs is attributed to barriers in accessing and utilizing of the prevention services(9). Individual factors like lack of awareness and knowledge about risk factors and prevention of cervical cancer, Age, marital status, social economic status, cultural and religious belief of the women are among determinants of women's willingness to utilize the services(31).

2.2.1. Socio-Demographic Factors Age of women

As age of women increase the rate of participating in cervical cancer screening is increasing. Study conducted in Malawi on population of 30-45 years of age showed that women of older age (40-45 years) are more likely to utilize cervical cancer screening than younger women (30-40 years of age)(29). According to study conducted in Mekele Northern Ethiopia older women are more likely to utilize cervical cancer screening i.e. Women in the age range of 30–39 years were more likely to be screened for cervical cancer compared with those 21–29 years old(30).

Educational status of women

Educational statuses of the women affect utilization of cervical cancer screening. Study conducted in Tanzania showed that women who had attended primary or secondary school accept cervical cancer screening more likely than who didn't attend school (32). Similarly study conducted on Turkish women reveal that woman with low-level education are less likely to utilize cervical cancer screening and as educational status of women increase women exposed to information about fact of cervical cancer risk and availability of cervical cancer screening services(33). Also study conducted in Addis Ababa indicate that educational status of women is positively associated to utilize cervical cancer screening service(20).

Parity

Parity is also among factors predicting cervical cancer screening service utilization. Low parity is positively associated with uptake of cervical cancer screening. Study conducted in Tanzania indicated that Women who had 0–2 children were more prone to accept screening in comparison with women who had five or more children(32).

2.2.2. Predisposing Factors

Using contraceptive Methods

Women who use contraceptive are more likely to utilize cervical cancer screening. According to study in Malawi women that previously or are currently using oral contraceptives use cervical cancer screening two times than non-users oral contraceptives(29). Use of contraceptive increase chance of women to contact with health professional and discussion

about their health including cervical cancer screening for better life. Study conducted on Turkish women reveal that women who use contraceptive method use cervical cancer screening than non-users of contraceptive methods(34).

Knowledge about cervical cancer

Knowledge about cervical cancer is the main factors that affect utilization of cervical cancer screening service utilization. Those women who have knowledge are more likely to utilize cervical cancer screening than those who lack knowledge(35). A qualitative study done in Ibadan, Nigeria indicated that respondents reported not being aware of cervical cancer and did not know what cervical cancer screening entailed or the screening methods and thus, they were not utilizing the services(36). Study from Malawi also showed that those women that demonstrated high level knowledge were more likely to use cervical cancer screening unlike those with low level knowledge(29). Study from Kenya revealed that significant associations were found between awareness of cervical cancer and screening utilization(22). Similarly study conducted in Mekele showed that knowledge on cervical cancer and screening were significant predictors of cervical cancer screening service utilization (30).

Income Status

Income affect utilization of many services including cervical cancer screening because it influences life style, accessibility of the services and directly or indirectly income influence factors such as possession of communication media materials, expenditure of health services. Knowledge about cervical cancer, risk factors of cervical cancer and preventive measures of cervical cancer is low among rural and un employed women(37). According to study conducted in Belgrade Serbia, women with better income status are more likely to use cervical cancer screening compared to those low income level (38). Other study conducted on Turkish women indicated that low income status is among barriers of cervical cancer screening(33).

Possession of Radio/TV

Currently in many developing countries the major form of communications are radio and television. Women those have access media such as radio and television can access information about cervical cancer and availability of the screening. Study conducted in Serbia showed that possession of media is positively associated with utilization of cervical cancer screening(38). Study conducted in North West Ethiopia reveals that among participant those have information about cervical cancer majority of them accessed information from television/radio. This shows availability of those medias affect utilization cervical cancer screening(17).

Occupation

Women who are working outside of home can easily access much information concerning their health including about cervical cancer and cervical cancer screening availability and usefulness of the services. Study showed that women who work outside of their home are more likely to participate on cervical cancer screening than women who work at home(34).

2.2.3. Perceived susceptibility for cervical cancer

After knowing about cervical cancer and risk factors for the disease women may perceive as they are at risk to develop the disease and undergo screening. Study conducted in Uganda reveals that cervical cancer screening is high among women who said they were at risk of developing cervical cancer(39). The women who are not aware as they are susceptible for the disease do not use the screening service and feeling not at risk is negatively associated with utilization screening(26). Study in Nigeria showed that regardless knowledge about cervical cancer and cervical cancer screening, the utilization of the screening service is low. The main reason why women do not use screening was the perception that they were not at risk of the disease (27).

2.2.4. Perceived barriers

Gender preference for gynecologic examination

Gender preference for a gynecologic examination can negatively influence the utilization of cervical cancer screening and other services that involving pelvic examination. Women who prefer male or female health worker may miss the service while waiting for their preference but not assigned to area. Study conducted in Serbia showed that those women have no gender preference use cervical cancer screening than women with gender preferring women(38)

2.2.5. Cue to action

Knowing Someone with Cervical Cancer

When women see someone who has developed cervical cancer in their surrounding they may take preventive measures for themselves. Study conducted among Turkish women reveal that women who know history of cancer in women's family or relatives or from their surrounding are more prone for utilizing cervical cancer screening when compared to those without history of cancer in women's family or relatives(34).

Knowing Someone who ever screened for Cervical Cancer

If women discuss about cervical cancer and screening with other women who screened for cervical cancer the chance of being screened will be increased as the result of screened women share experience about the procedures, time it takes, cost of the services and other related information. The study conducted in Uganda showed that women who know someone ever screened were more likely to utilize cervical cancer screening when compared with those who do not know someone who ever screened(40).

Consultation/Advise from physician/health care providers

Communication of women with health care provider about their health has great role on their health outcomes. When they communicate with health workers about their health they become take care of themselves and practice healthy life. So if women got information about cervical cancer and preventive measure they will practice screening services. Study in Serbia showed that women who consult with physician are more likely to utilize cervical cancer screening(38). Also discussion with women about cervical cancer, risk factors, availability

and benefit of screening services when they presented to health facility for other service, it increases the rate of engagement of women to cervical cancer screening. So discussion is important above issue with women presented to health facility for any services(7).

2.3. Health Belief Model

The Health Belief Model is the theoretical model most frequently used to explain health behavior. The model includes six key constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy, which determine an individual's decision to take up a health behavior(41).

Perceived susceptibility is an individual's assessment of the probability of suffering from a negative health condition. This feeling of vulnerability regarding the development of an undesirable health condition motivates the individual to take preventative action. Perceived severity is an individual's perception of the seriousness of the effects of this condition. The more severely the condition is perceived, the greater the chance of the individual taking action against it. Perceived benefit is an individual's opinion of the effectiveness of the recommended health behavior to reduce the risk, severity or impact of the condition, while perceived barriers are the costs, both psychological and tangible, which prevent the individual from carrying out the behavior. Thus, what occurs is a cost-benefit analysis where the individual weighs the positive outcomes and effectiveness of the behavior against the possible costs of the behavior as cues to action(41).So this model is applicable to assess individual perception as well as environmental factors to increase cervical cancer screening utilization.



CONCEPTUAL FRAMEWORK

Figure 1: Conceptual framework for cervical cancer screening service utilization and associated factors among women of 30-49 years of age in Jimma town adapted from Stretcher V. Rosen stock I.M(1997)

CHAPTER THREE: OBJECTIVES OF THE STUDY

General objective

To assess cervical cancer screening service utilization and associated factors among eligible women (30-49 years) in Jimma town, south west Ethiopia, 2017

Specific objectives

- To determine magnitude of cervical cancer screening service utilization among women of 30 49 years in Jimma town, south west Ethiopia,2017
- To identify factors affecting cervical cancer screening service utilization among women of
 30-49 years in Jimma town, south west Ethiopia, 2017

CHAPTER FOUR: METHODS AND MATERIALS

4.1. Study Area and Period

Study was conducted in Jimma town among women of 30-49 years of age. Jimma town is the capital of Jimma zone which is 352 Km far from Addis Ababa. There are two Public hospitals, four health centers and more than 15 private clinics providing health services in Jimma town. From these health facilities two hospitals and two NGO (Non-Governmental Organization) health facilities provide cervical cancer screening using visual inspection with acetic acid. In the last two years media campaign and sensitization were done in Jimma town to increases cervical cancer screening service utilization (42).

Study was conducted from March 20 to April 15, 2017.

4.2. Study Design

Community based cross sectional study design complemented with qualitative method was used.

4.3. Population

4.3.1. Source population for Quantitative study

Source population includes all female population age eligible for cervical cancer screening (30-49 years of age) in Jimma town(8).

4.3.2. Study Population for Quantitative study

All randomly selected age eligible women (30-49 years) in Jimma town in selected kebele during study period(8).

4.3.3. Sampling Units for Quantitative study

Randomly selected households in selected kebeles' of Jimma town

4.3.4. Study Unit for Quantitative study

Randomly selected eligible women in selected house hold

4.3.5. Study population for qualitative study

Include health care providers working in OPDs of health facilities providing cervical cancer screening service, HEW and screened women for cervical cancer in Jimma town during study period.

4.3.6. Inclusion and Exclusion Criteria

Inclusion criteria

✓ All women aged 30-49 years, in selected Kebele of Jimma town who lived at least 6 months.

Exclusion criteria

✓ Women in severe illness and unable to give response during interview

4.4. Sample size and sampling technique/sampling procedure

4.4.1 Sample size determination

Sample size was determined by using single population proportion formula by considering the following assumptions for the first objective:

p = 19.8% the prevalence of cervical cancer screening from a study at mekele zone(30).

D = 3% the margin of error

 $Z_{\alpha/2} = 95\%$ confidence of certainty (1.96)

 $n = [(Z_{\alpha/2})^2 * p(1-p)]/d^2 = 678$

10% non-response rate = 68 and the total sample size become = 746

Sample size for second specific objective was calculated as follows variables from the same study with objective one.

$$n = \frac{\left(Z_{\alpha} + Z_{2\beta}\right)^2 \left\{p_1(1-p_1) + p_2(1-p_2)\right\}}{\left(p_1 - p_2\right)^2}$$

Where p1= prevalence screening among exposed group

P2= prevalence screening among non-exposed group

Table 1: Sample size determination for cervical cancer screening service utilization and	
associated factors in Jimma town among women of 30-49 years of age 2017	

		Sample size (n)		
Variable	CI	Power	Proportion	
Knowledge about cervical cancer	α= 5%	β= 80%	P1= 23% P2= 8%	97
Perceived susceptibility	α= 5%	β= 80%	P1=26% P2=7%	62

The largest sample size was taken from sample size of first objective as sample size of the study. n=746

For qualitative (in-depth interviews) 12 individuals were included. (Three health care providers, five HEW and four screened women for cervical cancer)

4.4.2. Sampling Procedure for quantitative study

Systematic random sampling was employed for quantitative study. Five Kebele (\approx 30%) was randomly selected from total of seventeen kebeles of Jimma town. Then the total sample was allocated proportionally to each Kebele based on the house holds of each kebeles. K=20 was determined based on the total number house hold in kebeles. The data collection was started from first zone and continued to next zone guided by health extension worker of each kebele by adding K on the first chosen house hold. The first house of each Kebele was selected after getting the center of first zone of each Kebele and selected among the first twenty house hold by chance. The starting direction was chosen by spinning the pen and the next direction was started after reaching the end of the zone. To avoid missing respondents in houses, interview also done after working hours and during weekends. For households which would not fulfill inclusion criteria, and for those houses that would closed and family might not present, the next nearest household was selected. For house hold with more than eligible women one woman was randomly selected by using lottery method.



Schematic Presentation of Sampling Procedure

Figure 2: Schematic presentation of sampling procedure in assessment of cervical cancer screening and associated factors in Jimma town 2017

4.4.3 Sampling Procedure for qualitative study

For qualitative study five health extension worker one from each Kebele to explore their experience, four screened women to assess their perception about screening before and after screening and three health professional from institution providing cervical cancer screening services to assess their experience during they provide screening service for women were included for in-depth interview.

4.5. Data collection procedures

4.5.1. Data collection tool & personnel

The data were collected using interviewer-administered structured questionnaires which was adapted from related literatures(22–24). The questionnaire has parts like: sociodemographic, reproductive characteristics, knowledge about cervical cancer and screening, practices related to cervical cancer screening, constructs of health belief model (perceived susceptibility perceived severity, perceived benefit and perceived barriers). Cronbach's alpha coefficients were computed to test internal consistency reliability of the HBM construct scales. Perceived susceptibility was measured by three items with Cronbach alpha of 0.83, perceived severity was measured with six items Cronbach alpha of 0.84 while perceived benefit was measured with five items giving Cronbach alpha of 0.87 and perceived barriers was measured with 10 items with Cronbach alpha of 0.92.

Qualitative data: Data collection tools for qualitative study also adapted from similar study(43). The interview was made by PI and two MPH students using tape recorder and note taking. Before conducting the interview, explanation on the need to do the in-depth interview was made and the participants were asked for their willingness for the interview. In-depth interview was conducted on age range of 25 -42 years. For each participant, the interview took 25–35 minutes.

4.5.2. Recruitment and training of data collectors

Ten data collectors and three supervisors who are qualified with BSc in public health were recruited and trained. The data collectors and the supervisors were trained for two days on objective study, data collection tool, approach to the interviewees, details of interviewing techniques, respect and maintaining privacy and confidentiality of the respondents.

4.6. Study variables

Dependent Variable

✓ Cervical Cancer screening service utilization

Independent variables

* Socio demographic

- ✓ Age, Age at first sexual
 - intercourse and marriage
- ✓ Possession of Radio/TV
- ✓ marital status
- ✓ Educational status,
- Predisposing factors
 - ✓ Knowledge about cervical cancer and cervical cancer screening,
 - \checkmark using contraceptive methods,
 - ✓ history of HIV test
 - ✓ history of STD
- Perceived susceptibility and severity of cervical cancer
- Perceived threat of cervical cancer
- Perceived benefit of undergo cervical cancer screening
- Perceived barriers to undergo cervical cancer screening
 - \checkmark Gender preference for gynecologic examination

Cues to action

- ✓ Consultation/advise with health professional about cervical cancer screening,
- ✓ Knowing someone with cervical cancer,
- ✓ Knowing someone screened for cervical cancer,
- ✓ Hearing about cervical cancer from mass media

4.7. Operational Definition

- **4** Cues to action: are factors that triggers women to use cervical cancer screening
- Knowledge about cervical cancer and screening: fifteen knowledge questions on about cervical cancer and screening were presented and correct answer scored 1 and incorrect answer score 0. Total points to be scored were 15 and the minimum was 0. On assessment, Modified Bloom's cut off points were adapted from Nahida's KAP-Study (2007)(44). A score

- ✓ Occupation,
- ✓ Husband educational status,
- ✓ Income status,
- ✓ Parity

of 80 - 100% of correct responses meant a good knowledge, a score of 50 - 79% put a scorer in a level of satisfactory knowledge and a poor knowledge was for the respondents with a score less than 50% of the corrects responses.

Therefore, the scores with their respective knowledge levels were

I) 12 - 15 good knowledge

II) 8 – 11 satisfactory knowledge

III) 0 - 7 poor knowledge

- **Gynecological examination:** if women has history of exposing her genitalia at health facility for medical purpose e.g. for delivery, abortion care etc.
- Gender preference for gynecologic examination: when woman prefer male or female health care providers for physical examination involving pelvis.
- Consultation with health care providers: if woman has discussion/advice about cervical cancer and screening with any health care providers.
- Constructs of HBM like Perceived susceptibility, perceived severity perceived benefit and perceived barriers were measured using Likert's scale. The scoring system used with respects to respondents' responses was as follows: strongly agree scored 5, agree 4, neither agree nor disagree 3, disagree 2, strongly disagree 1. The responses were summed up and a total score was obtained for each respondent. The mean score was calculated and those scored the mean and above had positive/high attitude and scores below the mean meant negative/low attitude towards screening for cervical cancer(45,46).
- Perceived susceptibility for cervical cancer: Beliefs about the chances of experiencing a risk or getting cervical cancer. It was assessed using Likert Scale (1 strongly disagree. 2. disagree 3. neutral 4. Agree 5. strongly agree). Mean scores were computed and dichotomized into high/positive and low/negative. If a respondent score mean and above, she was labeled as having positive perceived susceptibility otherwise negative.
- Perceived severity of cervical cancer: Beliefs about how serious and sequelae of cervical cancer. It was assessed using Likert Scale (1 strongly disagree. 2. disagree 3. neutral 4. Agree 5. strongly agree). Mean scores were computed and dichotomized into positive and negative. If a respondent score mean and above, she was labeled as having high/positive perceived severity otherwise low/negative.

- Perceived benefit of undergoing cervical cancer screening: Beliefs in efficacy of the advised action to reduce risk or seriousness of cervical cancer. It was assessed using Likert Scale (1 strongly disagree. 2. disagree 3. neutral 4. Agree 5. strongly agree). Mean scores were computed and dichotomized into positive and negative. If a respondent score mean and above, she was labeled as having positive perceived benefit otherwise negative.
- Perceived barriers for undergoing cervical cancer screening: Beliefs about the tangible and psychological factors to undergo cervical cancer screening. It was assessed using Likert Scale (1 strongly disagree. 2. disagree 3. neutral 4. Agree 5. strongly agree). Mean scores were computed and dichotomized into positive and negative. If a respondent score mean and above, she was labeled as having positive/high perceived barriers otherwise negative/low.
- Practice assessment: The practice was assessed by looking on the respondent's action towards screening for premalignant cervical lesion in the past five years. Those who ever screened within the past five years were regarded as having regular practice, those who ever screened but more than five years ago from the time of data collection were regarded as having irregular practice and those who never screened were regarded as having no practice on screening.

4.8. Data processing and analysis

The data were entered into Epi-data manager version 4.0.2 and exported to SPSS version 21 statistical packages for analysis. The exported data were explored to check outliers, missing value and assumptions. Frequencies were done for different variables as necessary. Cross-tabulations and bivariate analysis were performed to select variables for multivariate analysis. Hence variables with p-value < 0.25 in the bivariate analysis were taken as candidates for multivariable analysis. Finally, multivariable logistic regression analysis was performed to control for possible confounding effect of the selected variables and variables with p-value of less than 0.05 was taken as statistically significant determinants for cervical cancer screening utilization and OR with its 95% CI was used to show the degree of association between the independent and the outcome variable. Multicolinerity was checked with Variance inflation factors(VIF) and VIF less than 10 was used as cut off point to diagnose Multicolinerity. Model fitness was checked with Hosmer and Lemeshow model goodness of fit test at p value of greater than 0.05 used to declare model is fit. Thematic analysis was done for qualitative data

from in-depth interview and it was translated, transcribed, coded, categorized and triangulated with the quantitative result.

4.9. Data quality control

The structured questionnaire was adapted from different related studies. It was translated from English to local language (Afan Oromo and Amharic) and back to English by independent person to assure its consistency. The questionnaire was pre-tested in Agaro town on 5% of total sample size and modification was made on sequence, grammar and how to conduct interview. The principal investigator was supervising the performance of the data collectors on daily basis. The collected data was checked for completeness, clarity and consistency by the principal investigator.

4.10. Ethical consideration

Ethical clearance was obtained from ethical review committee of Jimma University institute of health science. Support letter was obtained from department of population and family health. The necessary permission was obtained from Jimma town health department, and selected kebele administrative offices. All the study participants were informed about the purpose of the study, their right to refuse and assured confidentiality and informed verbal consent was obtained prior to the interview. At the end of each interview awareness creation was given to study participants in about cervical cancer and the importance of screening as well as they in

4.11. Dissemination plan

The study is a requirement for partial fulfillment of the degree of masters of public health, the thesis will be presented to the Jimma University, advisors and examiners, submitted to the department of population and family health and copies will be given to the Oromia Regional Health Bureau and Jimma town health office so that it can be used as a source of information for possible planning and implementation of health intervention. Additionally, information will be provided as necessary to other relevant bodies, and effort will be made for possible publication.

CHAPTER FIVE: RESULT

5.1. Socio Demographic Characteristics

A total of 737 women were interviewed from five selected kebeles making a response rate of 98.8%. The mean age of the respondents was 36.6 ± 5.3 years. About 380(51.6%) were Oromo in Ethnicity and 304(41.2%) were Muslims by religion. Most of respondents 610(82.8%) were married. Two hundred fifteen (29.2%) respondents were attended tertiary education. Concerning occupation majority of the respondents 255(34.6%) were house wife. Table 2

Variable	n(%)
Age group	
30-39	508(68.9)
40-49	229(31.1)
Religion	
Muslim	304(41.2)
Orthodox	261(35.4)
Protestant	167(22.7)
Catholic	5(0.7)
Ethnicity	
Oromo	380(51.6)
Amhara	145(19.7)
Kafa	61(8.2)
Dawuro	59(8)
Yem	55(7,5)
Others*	37(5)
Marital status	37(3)
Married	610(82.8)
Widowed	56(7.6)
Divorced	37(5)
Single	34(4.6)
Educational status	0 1(110)
No education	166(22.5)
Primary education	196(26.6)
Secondary education	160(21.7)
More than secondary	215(29.2)
Occupational status	
House wife	255(34.6)
Government employee	199(27)
Merchant	206(28)
Daily laborer	76(10.4)
Income status	
<900	93(12.6)
901-1600	148(20.1)
1601-2700	110(14.9)
>2700	386(52.4)

Table 2: Socio-demographic Characteristics of women of age eligible women for cervical cancer screening (30-49 years) in Jimma town (N=737) June, 2017

* Tigre, Wolayita, Hadiya

5.2. Reproductive characteristics of the respondent

Five hundred seventy-one (77.8%) of them started sexual intercourse before age of 20 years. Most of the respondents, 661 (90.5%) have history of child birth from these 425(57.7%) have three or more children. Regarding contraceptive use, majority of the respondents 587 (79.6%) had history of modern contraceptive use(Table 3).

Variables	n(%)
Age of first sexual intercourse	
<20	571(77.8)
>=20	163(22.2)
Parity	
<3 children	236(35.7)
>=3 children	425(64.3)
Use of modern contraceptive	
Yes	587(79.6)
No	150(20.4)
History of STD	
Yes	108(14.7)
No	629(85.3)
History of HIV test	
Yes	657(89.1)
No	80(10.9)
Self-reported HIV sero status	
Positive	25(3.8)
Negative	632(96.2)

Table 3: Reproductive Characteristics of age eligible women for cervical cancer screening	(30-49 years) in
Jimma town (N=737) June, 2017	

5.3. Knowledge on cervical cancer and screening

About 524 (71.1%) and 484(65.7%) of the respondents had ever heard about cervical cancer and cervical cancer screening test respectively. Among those ever heard about cervical cancer only108(20.6%)have good knowledge(**Figure 3**). Knowledge about cervical cancer and screening was low among respondents which was also supported by qualitative finding. Almost all of health extension workers and health service providers described as the majority of women had no detail knowledge about cervical cancer and screening services. There were rumors in the community concerning cervical cancer, its causes and prevention. A 42 years old screened women said ".... *people say when women sit for long time, when woman sit on hot stone, long journey in the car can result to cervical cancer because of heat...*"



Figure 3: Knowledge status of 30-49 years about cervical cancer and cervical cancer screening in Jimma town June, 2017

Source of information about cervical cancer

The major source of information for respondent about cervical cancer and screening was radio.



Figure 4

Figure 4: Source of information for women of 30-45 years about cervical cancer and screening in Jimma town June, 2017

5.4. Constructs of Health Belief Model Perceived susceptibility

About 265(50.4%) of respondents had positive perceived susceptibility while the rest had negative perceived susceptibility to wards cervical cancer. The qualitative finding of this study showed every woman can develop cervical cancer. Participants of in-depth interview explained as every woman have chance of developing cervical cancer in her life time.

Perceived severity

About 394(75.3%) of respondents had positive perceived severity of cervical cancer. From qualitative part the screened women reported as it is a killer disease and can affect the life of women as well as their family.

Perceived benefit

The majority of the participants responded positively to statements about perceived benefits. Three hundred eighty-seven (74.3%) of respondents had positive perceived benefit towards cervical cancer screening. The result from qualitative part showed screening for cervical cancer has many advantages. Almost all of in-depth interview participants explained screening give psychological comfort for screened women with free of disease and provide chance of early treatment for women with pre-cancerous lesion.

Perceived barriers

Three hundred eighty-eight (74.5%) had low perceived barriers for cervical cancer screening. Barriers for cervical cancer screening such as lack of knowledge, lack of information and gender preference for gynecologic examination were also identified through the qualitative study. All of health care providers participated on in-deepth interview reported as majority of their clients were want to be screened by female providers. Also health care providers and HEW explained as there is no enough information in the community about cervical cancer and screening.

Cues to action

From those who ever heard about cervical cancer 487(92%) of them got information about cervical cancer from mass media (**Figure 5**). Health care providers from indepth interview also explained most of their clients had communication with health care providers of other department and they were linked to their OPD from different services delivery of health institutions.



Figure 5: Distribution of responses for cues to action towards cervical cancer screening among age eligible women for cervical cancer screening in Jimma town June, 2017

5.5. Practices Related to Cervical Cancer Screening

5.5.1. Magnitude of Cervical Cancer Screening

From a total of 524 heard about cervical only about **114(15.5%)** had history of cervical cancer screening within the last five years.



Figure 6: Magnitude of cervical cancer screening service utilization among women of 30-49 years of age in Jimma town June, 2017

5.5.2 History of Gynecologic Examination and Related Practices

From a total of 524 heard about cervical cancer 353(67.5%) have history of gynecologic examination. From these about half of them 238(45.5%) have gender preference for gynecologic examination **Table 4**.

Table 4: Distribution of practices related to cervical cancer screening among age eligible women for cervical cancer screening in Jimma town June, 2017

Variables	n (%)
History of gynecologic examination	
Yes	353(67.5)
No	170(32.5)
Gender preference on gynecologic examination	
Yes	238(45.5)
No	285(54.5)
History of screening in the last five years	
Yes	114(15.5)
No	623(84.5)
Indication of screening	
Request by health care provider	51(44.7)
Personal initiative	63(55.3)
Frequency of screening	
Once	97(85.1)
More than one	17(14.9)

Reason for not screened for cervical cancer

Most of eligible women were not screened for cervical cancer in Jimma town. The most common reason of not being screened were feeling healthy.



Figure 7: Reasons not screened cervical cancer screening service among age eligible women for cervical cancer screening in Jimma town May June, 2017

5.6. Factors Associated with Cervical Cancer Screening Bivariate analysis

In bivariate analysis educational status, occupation, possession of radio, Contraceptive use, history of STD, self-reported history of HIV test, knowing somebody with cervical cancer, knowing somebody who screened for cervical cancer, history of gynecologic examination, gender preference for gynecologic examination, advice/consultation from health professional about cervical cancer, knowledge about cervical cancer and screening, income, perceived susceptibility, perceived barriers perceived severity of cervical cancer screening were associated in bivariate analysis with ever screened.

Multivariable Analysis

In multivariable logistic regression 19 variables are entered and variables like occupation of respondent, knowing someone who screened for cervical cancer, history of gynecologic examination, gender preference for gynecologic examination, consultation/advise about cervical cancer, perceived susceptibility to cervical cancer and knowledge about cervical cancer & screening were independently associated with cervical cancer screening.

Women who were government employee were 2.67 more likely to be screened when compared with women who were house wife (AOR 2.67, 95%CI=1.29-5.49).

Women who know someone who screened for cervical cancer were 3.63 times more likely to undergo screening compared to those who did not know someone who screened for cervical cancer (AOR=3.63, 95%CI=2.06-6.40).

Women who had history of gynecologic examination for any reason were 2.91 times more likely to utilize cervical cancer screening service utilization when compared with women who had no history gynecological examination by health professional (AOR=2.91, 95% CI=1.49-5.66). Result from qualitative part also indicated that the history of previous gynecologic examination facilitates utilization of cervical cancer screening. Health service providers reported that women who had previous history of delivery at health facility are more comfortable for screening.

Women who do not prefer gender for gynecological examination were 3.59 more likely to undergo cervical cancer screening than women who prefer gender for gynecological examination (AOR=3.59, 95%, CI=1.97-6.53).

Women who have history of consultation/advise from health professions were 4.37 times more likely to undergone screening when compared with women who did not had consultation/advise from health professions (AOR=4.37, 95%, CI=2.51-7.63).

Women who have good knowledge were 3.46 times more likely to undergo cervical cancer screening when compared with women with poor knowledge. (AOR=3.46, 95% 1.44-8.31). Similarly, women with fair knowledge were 2.66 times more likely to use cervical cancer screening service than women with poor knowledge (AOR=2.66, 95%, CI=1.22-5.79).

Participants who have positive perception about potential susceptibility to develop cervical cancer were about 3.23 times more likely to undergo screening than those who have negative perception (AOR = 3.23, 95% CI = 3.23 1.74-5.99)

	Screening status		Crude OR	AOR (95% CI)	
Variables	Yes	No	(95% CI)		
Educational status					
No education	10(6.1)	156(93.9)	0.16(0.08-0.33)	0.68(0.25-1.84)	
Primary school	17(8.7)	179(91.3)	0.24(0.13-0.43)	0.49(0.31-1.75)	
Secondary	26(16.3)	134(83.7)	0.49(0.29-0.82)	1.63(0.75-3.56)	
More than secondary	61(28.4)	154(71.6)	1		
Occupational status					
Government employee	63(31.7)	136(68.3)	4.03(2.29-7.11)	2.67(1.29-5.49)*	
Daily laborer	5(6.5)	72(93.5)	1.46(0.73-2.87)	1.99(0.50-7.87)	
Merchants	27(13.1)	179(86.9)	1.28(0.44-3.69)	1.71(0.77-3.77)	
House wife	19(7.5)	236(92.5)	1	1	
Income status					
<900	2(2.2)	91(97.8)	0.08(0.02-0.32)	1.85(0.28-12.27)	
901-1600	9(6.1)	139(93.9)	0.25(0.11-0.46)	2.07(0.29-14.51)	
1601-2700	17(15.5)	93(84.5)	0.64(0.36-1.13)	0.65(0.09-4.68)	
>2700	86(22.3)	300(77.3)	1	1	
Possession of radio					
Yes	105(16.6)	522(83.4)	2.26(1.11-4.61)	0.90(0.31-2.60)	
No	9(8.2)	101(91.8)	1	1	
Age group					
30-39	89(17.5)	419(82.5)	1.73(1.08-2.79)	1.17(0.59-2.29)	
40-49	25(10.9)	204(89.1)	1	1	
Contraceptive use					
Yes	108(23.6)	350(76.4)	5.41(2.32-12.57)	1.77(0.57-5.47)	
No	6(9.1)	60(90.9)	1	1	
History HIV test					
Yes	109(17.1)	548(82.9)	2.98(1.18-7.55)	0.61(0.16-2.37)	
No	5(6.3)	75(93.7)	1	1	
Know somebody with cx ca					
Yes	82(33.3)	164(66.7)	3.81(2.42-6.00)	0.89(0.44-1.81)	
No	32(11.6)	244(88.4)	1	1	
Knowing someone who screened fo	or cx ca				
Yes	82(40.5)	122(59.5)	6.00(3.79-9.52)	3.63(2.06-6.40)*	
No	32(10)	286(90)	1	1	
History gynecologic examination					
Yes	93(26.3)	260(73.7)	2.54(1.52-4.25) 1	2.91(1.49-5.66)*	
No	21(12.4)	149(87.6)		1	
Gender preference for gynecologic	al examination				
Yes	28(11.8)	210(88.2)			
	86(30.2)	199(69.7)	3.24(2.03-5.18)	3.59(1.97-6.53)*	
Consultation of health worker		111(50.4)	5 27(2 44 9 20)		
Yes	/6(40.6)	111(59.4)	5.3/(3.44-8.39)	4.3/(2.51-7.63)*	
No	38(11.3)	298(88.7)	1	1	
Knowledge status	57(25 1)	104(64.6)	10 41(5 25 20 (2)	2 16/1 11 0 2114	
	37(33.4)	104(04.0) 117(71.0)	10.41(3.23-20.02) 5 97(2 0 11 0)	3.40(1.44-8.31)* 2.66(1.22.5.70)*	
	40(28.2)	11/(/1.8) 190(04.5)	5.87(2.9-11.9) 1	2.00(1.22-5./9)* 1	
FUUI Domosiwad Susaantihilit	11(3.3)	189(94.3)	1	1	
High	80(33.6)	176(66 4)	177(2040775)	3 23(1 74 5 00)*	
Ingn I ow	07(33.0) 25(0.8)	170(00.4) 236(01.2)	4.//(2.740-/./ <i>J)</i> 1	J.4J(1./4-3.77)*	
	7.117.01	4 NN 71.41			

Table 5: Bivariate and Multivariable analysis of factors associated with cervical cancer screening service utilization among age eligible women for cervical cancer screening in Jimma town June, 2017

Perceived severity				
High	105(26.4)	289(73.6)	4.84(2.37-9.89)	2.28(0.94-5.55)
Low	9(7)	120(93)	1	1
Perceived benefit				
High	96(24.8)	291(75.2)	2.13(1.23-3.68)	1.13(0.55-2.34)
Low	18(13.4)	116(86.6)	1	1
Perceived barrier				
Low	20(15)	113(85)	1.81(1.06-3.07)	0.79(0.38-1.63)
High	94(24.2)	294(75.8)	1	1

* p<0.05, OR- Odds Ratio, AOR- Adjusted Odds Ratio

CHAPTER SIX: DISCUSSION

The study showed that only 114(15.5%) had self-reported history of screening for cervical cancer with in the last five years. This finding was in line with the study conducted in Mekele zone(30). But it was higher when compared with prevalence at country level at 2008 G.C. which showed only 1% of eligible women undergone screening. This may be due to time difference and cervical cancer screening service is one of routine service for eligible women currently. Also there were campaign by health facilities providing screening service in Jimma town on cervical cancer screening and radio program about cervical cancer by Jimma university specialized hospital. The finding was slightly lower than community based cross sectional study conducted in Tanzania which about 22% of study participants were undergone screening(47). This inconsistency may be due to difference in the socio-demographic characteristics of the participants of the studies and study conducted in Tanzania employed women between 18 and 49 years of age.

The result from this study showed that the main reason for not utilizing cervical cancer screening service was feeling healthy. This result was similar with study conducted in northern Ethiopia Mekele zone and Arbaminch town Southern Ethiopia(30,48).

This study revealed that occupational status was among one of cervical cancer screening service utilization predictors. Government employed women were more likely to be screened when compared with house wives. This finding was similar with the study conducted in Nigeria which shows employed women utilize cervical cancer screening services more likely than unemployed women(37). This may be because of majority of employed women have high educational status and they had access to information about cervical cancer & screening service from different sources.

Finding from this study showed that knowing someone who were ever screened for cervical cancer was among factors that predict cervical cancer screening service utilization. Women who know someone ever screened are more likely to undergone cervical cancer screening when compared with women who do not know someone screened for cervical cancer. This result was consistent with the study done in Uganda which shows that knowing someone who had ever screened was positively associated with utilization of cervical cancer screening services(40). This may due to screened women discuss with unscreened women about the

screening service, procedures, time it takes which decrease fear of women towards undergoing screening.

History of gynecologic examination was also associated with utilization of cervical cancer screening. Women who had previous history of gynecologic examination for any reason were more likely to be screened for cervical cancer. From qualitative part of this study, all of health care providers working on cervical cancer screening OPD explained as women who gave birth at health facility are comfortable for screening than those do not gave birth at health facility. This association can be explained by women who had history of exposure for health professionals do not afraid to expose their genitalia for cervical cancer screening. In addition to this the previous examination may inforce them for cervical cancer screening.

Gender preference for gynecologic examination was among factor which negatively affect cervical cancer screening service utilization. Women who do not prefer gender for gynecological examination are more likely to undergone cervical cancer screening services than women who prefer gender for gynecologic examination. This finding was in line with study conducted in Serbia which showed that women with no gender preference for a gynecologist were more likely to undergo screening when compared with those have gender preference for a gynecologist(38). This may be because of women who prefer gender for gynecologic examination miss the service when the service is provided by gender that they do not prefer. In contrast, women do no prefer gender for gynecologic examination will use the service who ever providing the service.

Consultation/advice from health professions was associated with cervical cancer screening service utilization. Women who had consultation /advise from health care providers were more likely to be screened when compared with women who had no advice. Finding from qualitative part also indicated as women who came for screening have advice and linked from different service department of health facility. This finding was consistent with study conducted in Jamaica and Uganda which shows women who had discussion with health care provider about cervical cancer were more likely to undergo cervical cancer screening than those who had no history of discussion with health care providers(40,49). This may be due to the information from health care provider increase awareness about disease and advantages of having screening services.

Knowledge about cervical cancer and screening service was another factors that affect cancer screening service utilization. From qualitative part of this study it was also explained as there is no comprehensive knowledge about cervical cancer in the community. This result was in line with study conducted in Mekele zone northern Ethiopia, Tanzania and Malawi which showed that women who had good knowledge about cervical cancer were more likely to utilize cervical cancer screening than those who have poor knowledge about cervical cancer and screening(29,30,47). This may be due to knowledge about cervical cancer clear rumors about cervical cancer and increase their awareness about advantage of undergoing screening.

Other important predictor of cervical cancer screening service utilization was perceived susceptibility status of the study subjects. Women who had positive/high perceived susceptibility were more likely to undergone screening when compared with low perceived susceptibility. This finding was in line with study conducted in Mekele zone northern Ethiopia(30). This result was also similar the findings of a study done in Kenya. The study showed respondents who perceive they were at risk of developing cervical cancer were more likely to seek screening when compared with those who believe they had a low risk(26). This may be because of these women have information about the disease and know their susceptibility as the result they undergo screening to protect themselves.

Strength and limitation of the study

- ✤ Strength
 - The study used both quantitative and qualitative method of data collection to strength the information found from the study.
- Limitation of the study
 - The social desirability bias may occur on some variable during data collection.
 - Recall bias may occur for those screened before long time to remember which come first screening or exposure.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS 7.1. Conclusion

Knowledge about cervical cancer and screening was low in Jimma town. The prevalence of screening service is low when compared to accessibility of health facilities providing cervical cancer screening. The common reasons for not undergoing screening were feeling of healthy. Occupation, knowing someone who screened, history of gynecologic examination, gender preference for gynecologic examination, consultation/advise about cervical cancer with health care providers, perceived susceptibility for cervical cancer and knowledge about cervical cancer & screening were independent predictors of cervical cancer screening.

7.2. Recommendation

* To Jimma town health office

- To increase awareness of the community through health extension workers and local mass media.
- ✓ To encourage women to use health facilities for different purposes such delivery services, abortion, Family planning and other services.

* To Health care providers

- Health care providers should council screened women to disseminate information for those women who have not screened.
- ✓ Providers have to create awareness about screening and issues of gender preference

To Local Mass Medias

✓ Should give due emphasis on creating awareness on cervical cancer and screening by inviting experts

✤ To researchers

✓ Should conduct further study on the topic using strong study design and also involving rural community.

ANNEX- I: References

- 1. African Centre of Cancer Control E for W. Screen-and-Treat Cervical Cancer Prevention Programmes in Resource-Constrained Environments. 2014.
- 2. Gynecolegists A college O and. Frequently asked questions special procedures. 2016.
- 3. WHO. Options for linking health interventions for adolescents. 2014.
- 4. WHO. Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention. 2013.
- 5. Cancer AGC to SC. New Options for Cervical Cancer Screening and Treatment in Low-Resource Settings. 2007.
- 6. International PF. Combating Cervical Cancer in Ethiopia Addressing the Screening and Treatment Gap : The Single-Visit Approach. 2010;(April).
- Toward PO. Toward Optimized Practice (TOP) Cervical Cancer Screening Working Group. 2016. Cervical cancer screening: clinical practice guideline. Edmonton, AB: Toward Optimized Practice. Available from: http://www.topalbertadoctors.org. 2016.
- 8. E.FMOH. National guidelines for the management of sexually transmitted infections using syndromic approach. 2015.
- 9. WHO. Comprehensive Cervical Cancer Control. 2014.
- 10. Kahesa C, Kjaer S, Mwaiselage J, Ngoma T, Tersbol B, Dartell M, et al. Determinants of acceptance of cervical cancer screening in Dar es Salaam, Tanzania. BMC. 2012;(800).
- 11. Global coalition to stop Cancercervical. Investing in Cervical Cancer Prevention Meeting Report. 2015.
- 12. Jeronimo J, Castle PE, Temin S, Denny L, Gupta V, Kim JJ. Secondary Prevention of Cervical Cancer : ASCO Resource-Stratified Clinical Practice Guideline executive summary. 2016;
- 13. Bruni L, Barrionuevo-Rosas L, Albero G, Serrano B, Mena M, Gómez D, et al. Human Papillomavirus and Related Diseases Report. 2016.
- 14. Abate SM. Cervical Cancer : Trends of Cervical Cancer in Ethiopia. 2016;1(1):1–4.
- 15. Emmanuel Gakidou, Stella Nordhagen ZO. Coverage of Cervical Cancer Screening in 57 Countries. PLoS Med. 2008;5(6):863–8.
- Bezabih M, Tessema F, Sengi H, Deribew A. Risk Factors Associated with Invasive Cervical Carcinoma among Women Attending Jimma University Specialized Hospital, Southwest Ethiopia : A Case Control Study. Ethiop J Heal Sci. 2015;25(4):3–10.
- 17. Getahun F, Mazengia F, Abuhay M, Birhanu Z. Comprehensive knowledge about cervical cancer is low among women in Northwest Ethiopia. 2013;

- 18. FMOH E. Annual performance report. 2015.
- 19. Dibaba B, Wondu Y. Care Knowledge, Attitude and Practice towards Cervical Cancer Screening among Arsi University Female Students. J Women's Heal. 2016;5(6):6–11.
- BeleteN E, Tsige Y, Habtamu Mellie. Willingness and acceptability of cervical cancer screening among women living with HIV / AIDS in Addis Ababa, Ethiopia. BMC Pregnancy Childbirth [Internet]. 2015;4–9. Available from: http://dx.doi.org/10.1186/s40661-015-0012-3
- 21. Kress CM, Sharling L, Owen-smith A, Blumberg H, Goedken J, Sharling L. cervical cancer and screening among Ethiopian health care workers Copyright information : Knowledge, attitudes, and practices regarding cervical cancer and screening among Ethiopian health care workers. 2015;
- 22. Kibicho J. Factors influencing utilization of cervical cancer screening. 2014.
- 23. Bekele E, Adamu A, Gizaw M. Assessment of knowledge and attitude of cervical cancer and screening among primary health care workers of west Wollega zone, Ethiopia. 2016.
- 24. Enquselassie F, Ayele W, Tadesse A. Knowledge , attitude and practice (KAP) towards screening for cervical cancer among Adama University female students. 2015.
- 25. Melissa SC, Krastins E, Fitzpatrick R, Jindal P, Oneko O, Yeates K, et al. Cervical cancer screening and HPV vaccine acceptability among rural and urban women in Kilimanjaro Region, Tanzania. open access. 2015;1–9.
- 26. Morema EN, Atieli HE, Onyango RO, Omondi JH, Ouma C. Determinants of Cervical screening services uptake among 18 49 year old women seeking services at the Jaramogi Oginga Odinga Teaching and Referral Hospital, Kisumu, Kenya. BMC Pregnancy Childbirth. 2014;
- Oche MO, Kaoje AU, Gana G, Ango JT. Cancer of the cervix and cervical screening : Current knowledge, attitude and practices of female health workers in Sokoto, Nigeria. Int J Med Med Sci. 2013;5(April):184–90.
- 28. Ebu NI, Mupepi SC, Sampselle CM. Knowledge , practice , and barriers toward cervical cancer screening in Elmina , Southern Ghana. Int J Women's Heal. 2015;31–9.
- 29. SesuCh osamata M, Hong SA, Tiraphat S. Determinants of cervical cancer screening utilization among women aged 30-45 years in Blantyre district, Malawi. J Public Heal Dev. 2015;13(3):19–34.
- Bayu H, Berhe Y, Mulat A, Alemu A. Cervical Cancer Screening Service Uptake and Associated Factors among Age Eligible Women in Mekelle Zone, Northern Ethiopia, 2015 : A Community Based Study Using Health Belief Model. plos. 2016;1–13.
- 31. Fresier Chidyaonga- Maseco, Chirwa ML, Muula AS. Underutilization of cervical cancer prevention services in low and middle income countries: a review of contributing factors. PanAfrica Med Lornal. 2015;8688:1–9.

- 32. Kahesa C, Kjaer S, Mwaiselage J, Ngoma T, Tersbol B, Dartell M. Determinants of acceptance of cervical cancer screening in Dar es Salaam , Tanzania. BMC Public Health [Internet]. 2012;12(1):1. Available from: BMC Public Health
- 33. Reis N, Bebis H, Kose S, Sis A, Engin R, Yavan T. Knowledge , Behavior and Beliefs Related to Cervical Cancer and Screening Among Turkish Women. 2012;13:1463–70.
- 34. Erbil N, Tezcan Y, Gür EN, Yıldırım M, Alış N. Factors Affecting Cervical Screening Among Turkish Women. Asian Pacific J Cancer. 2010;11(May 2009):1641–4.
- 35. Owoeye IOG, Ibrahim IA. Knowledge and attitude towards cervical cancer screening among female students and staff in a tertiary institution in the Niger Delta. Int J Med Biomed Res. 2013;2(1):48–56.
- 36. Ndikom CM, Ofi BA. Awareness, perception and factors affecting utilization of cervical cancer screening services among women in Ibadan, Nigeria: a qualitative study. Reprod Health [Internet]. 2012;9(1):1. Available from: Reproductive Health
- 37. Ramamurthi RRRR. Comparison Of Knowledge Attitude And Practices Regarding Cervical Cancer Screening And Hpv Vaccination, Between Employed And Unemployed Women : A Cross Sectional Study. 2015;2(01).
- 38. Matejic B, Vukovic D, Pekmezovic T, Kesic V, Markovic M. Determinants of preventive health behavior in relation to cervical cancer screening among the female population of Belgrade. 2011;26(2):201–11.
- 39. Twinomujuni C, Nuwaha F, Babirye JN. Understanding the Low Level of Cervical Cancer Screening in Masaka Uganda Using the ASE Model : A Community-Based Survey. PLoS One. 2015;1–15.
- 40. Ndejjo R, Mukama T, Musabyimana A, Musoke D. Uptake of Cervical Cancer Screening and Associated Factors among Women in Rural Uganda : A Cross Sectional Study. PLoS One. 2016;142:1–13.
- 41. Ma GX, Gao W. Health Beliefs Associated with Cervical Cancer Screening Among Vietnamese Americans. J Women Heal. 2013;22(3):276–88.
- 42. Jimma town HO. Health office data. 2016.
- 43. Chantelle De Abreu, Horsfall H. Black Women's Perceptions and Experiences of Cervical Screening. :1–39.
- 44. Nahida A. Knowledge, attitude and practice of Dengue fever prevention among people in Mali, Maldives. Masters thesis. Chulalongkorn University, College of public health sciences; Bangkok. 2007.
- 45. Dube L, Teha M, Asefa H. Determinants of Infant mortality in community of Gilgel Gibe Field Research Center, Southwest Ethiopia: A Matched Case Control Study.
- 46. John J. The knowledge, attitude, practice and perceived barriers towards screening for

premalignant cervical lesions among women aged 18years and above, in Uongea urban, Ruvuma. 2011. 2011.

- 47. Lyimo FS, Beran TN. accessibility factors associated with uptake of cervical cancer screening among women in a rural district of Tanzania : Three public policy implications. BMC Public Health [Internet]. 2012;12(1):22. Available from: http://www.biomedcentral.com/1471-2458/12/22
- 48. Gebru Z, Gerbaba M, Dirar A. Barriers to Cervical Cancer Screening in Arba Minch Town, Southern Ethiopia. Community Med Heal Educ. 2016;6(1):1–5.
- 49. Ncube B, Bey A, Knight J, Bessler P, Jolly PE. Factors Associated with the Uptake of Cervical Cancer Screening Among Women in Portland , Jamaica. N Am J Med Sci. 2015;7(3).

ANNEX –II: Data Collection Tools Introduction and Consent

Greetings!

Hello! My name is ------ I am data collector of the study that will be conducted by Tadesse Nigussie, master's student at Jimma University, institute of health, faculty of public health department of population and family health. This is a study to be conducted with objective to assess cervical cancer screening service utilization and associated factors among eligible women (30-49 years) in Jimma town, south west Ethiopia. The study is directly related to female of 30-49 years of age, therefore you are kindly requested to participate in this study and provide the information required from you. This study is completely on voluntary bases, you have the right to refuse participation and you can interrupt interview at any point after you have started. Your response will be kept confidential and there will be no way of linking your individual responses to the final result of the study findings. We would like to inform you that the responses that you provide the questions are very essential, not only, for accomplishment of the study but also for producing relevant information which will be helpful in improving the cervical cancer screening service utilization.

Name of Data collector	sign	Date
Name of the supervisor	Sign	Date

THANK YOU!!!

Sr.No	Question	Respo	onse	Remark
	Part I- Socio-Demographic Charac	teristics		1
101	Age	ye	ars	
102	Religion	1. Mus	lim	
		2. Orth	odox	
		3. Prote	estant	
		4. Cath	olic	
		5. Othe	er(specify)	
103	Ethnicity	1.	Oromo	
		2.	Amhara	
		3.	Kafa	
		4.	Dowuro	
		5.	Yem	
		6.	Other(Specify)	
104	Educational status	1. Don't read	and write	
		2 . Primary (1-	-8)	
		3 . Secondary		
		4. Tertiary/ co	ollege and above	
105	Marital status	1. Single		
		2. Marrie	d	
		3. Widow	ved	
		4. Divorc	ed	
		5. Separa	ted	
106	Family average monthly income		_ETB	
107	Current occupation status	1. Hous	se wife	
		2. Merc	chant	
		3. Daily	y laborer	
		4. Gove	ernmental employee	
108	Educational status of husband/partner	1 Do	on't read and write	
		2. Pr	imary (1-8)	
		3. Se	econdary	
		4. Te	ertiary/ college and above	
109	Do you have radio from your house?	1. Yes	2. No	
110	Do you have TV?	1. Yes	2. No	
	Part II: Reproductive Health Related F	actors		1
201	What was your age of marriage?		years	
203	Did you gave birth?	2	1. Yes 2. No	
204	How many births do you have? If yes for Q 20.	3	number.	
205	Have you ever used modern contraceptive?		1. Yes 2. No	
206	If yes for question 205. What is a type of contra	aceptive?	1. Oral contraceptive	More than
			2. Depo-Provera	one answer is
			3. Implant	possible
			4. IUCD	
			5. Tubal ligation	

Questionnaire

		6. Others specify ()	
207	For how long you have used modern contraceptive	?years	
208	Have you history of STD?1. Yes 2. No		
209	Do you have history of HIV test?	1. Yes 2. No	
210	If yes for 209 what was the result?	1. Positive 2. Negative	
211	What was your age of first sexual intercourse?	years	
	Part –III Knowledge about cervical cancer	· · ·	
301	Have you ever heard about cervical cancer?	1. Yes 2. No	
302	If yes where did you hear about it?	 Radio TV Brochures, posters and other printed Health workers Family Teachers Other (specify) 	More than one answer is possible
303	Is cervical cancer preventable?	1. Yes 2. No	
304	How can a person prevent getting cervical cancer? If yes for Q. 303	 Avoid multiple sexual partners Avoid early sexual intercourse Quit smoking Through vaccination of HPV vaccine Do not know Other 	
305	Is cervical cancer can happen without symptoms?	1. Yes 2. No	
306	Is cervical cancer is communicable disease?	1. Yes 2. No 3. Don't know	
307	Is cancer is a killer if not detected early?	1. Yes 2. No	
308	What are the symptoms of cervical cancer?	 Vaginal bleeding Post coital bleeding Painful coitus Post-menopausal bleeding Vaginal foul smelling discharges Weight Loss Other(Mention) 	More than one answer is possible
309	What are the risk factors for cervical cancer?	 Having multiple sexual partners Early sexual intercourse Acquiring HPV virus Cigarette smoking Do not know Other 	
311	Do you think you are susceptible for cervical	 An women above 50 years Prostitutes Elderly women women with HIV positive Women with multiple sexual partner Others(Mention)	
	cancer?		

312	Can cervical cancer be cured in its earliest stages?	1. Yes 2. No 3. Don't know
313	Is cervical cancer severe and hazardous when not detected early?	1. Yes 2. No 3. Don't know
	IV. Knowledge about cervical cancer Screening	
401	Have ever heard about cervical cancer screening?	1. Yes 2. No 3. Don't know
402	Can screening prevent cervical cancer?	1. Yes 2. No 3. Don't know
403	Are there screening procedures to detect early stages of cervical cancer?	1. Yes 2. No 3. Don't know
404	Is early detection of cervical cancer good for treatment outcome?	1. Yes 2. No 3. Don't know
405	Is there cervical cancer screening in Jimma?	1. Yes 2. No 3. Don't know
406	How expensive do you think cervical cancer screening is?	 It is free of charge It is reasonably priced It is somewhat/moderately Expensive It is very expensive Don't know
407	Who should be screened for cervical cancer?	 All women of 30 years and above Prostitutes Elderly women Women with HIV positive Women with multiple sexual partner Others specify
408	How frequent cervical cancer screening should done?	 Once every year Once every three years Once every 5 years Other specify
409	Do you know someone with cervical cancer?	1. Yes 2. No
410	Do you know someone who screened for cervical cancer?	1. Yes 2. No
	Part- V Question about gynecological examinati	on and Cx Ca screening
501	Have you ever had any gynecological examination?	1. Yes 2. No
502	Do you prefer gender for screening/ examination?	1. Yes 2. No
503	If yes which gender?	1. Male 2. Female
504	Did you have consultations with a physician about cervical cancer prevention?	1. Yes 2. No
505	Have you ever had history of cervical cancer screening	1. Yes 2. No
506	If yes for 505 how many times?	
507	If yes for 505 when was your last screening?	1. Before five years 2. Within the last five years
508	If yes what was indications for undergoing screening?	 Request by health care provider Personal initiative

		3. Other specify	
509	If no for 505 what is your reason of not screening	1. Feeling healthy	
	for cervical cancer?	2. Fear of positive result	
		3. Do not know about service	
		4. It is expensive	
		5. Service is not available	
		6. My husband would not agree	
		7. I feel shy	
		8. Other specify	
	VI - Perceived susceptibility		
601	Do feel you will get cervical cancer some time	1. Strongly disagree 2 Disagree. 3. Neutral 4. Agree	
	during your life	5. Strongly agree	
602	It is likely that you will get cervical cancer in the	1. Strongly disagree 2 Disagree. 3. Neutral 4. Agree	
	future	5. Strongly agree	
603	Your chances of getting cervical cancer in the next	1. Strongly disagree 2 Disagree. 3. Neutral 4. Agree	
	few years are high	5. Strongly agree	
	VII- perceived severity		
701	If you thought about cervical cancer you worry	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
		5. Strongly agree	
702	When you think about cervical cancer, you will	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	afraid	5. Strongly agree	
703	Problems you would experience with cervical	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	cancer would last a long time	5. Strongly agree	
704	Cervical cancer would threaten a relationship	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	with my boyfriend, husband, or partner	5. Strongly agree	
705	If you had cervical cancer your whole life would	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	affected	5. Strongly agree	
706	If you developed cervical cancer, you would not	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	live longer than 5 years	5. Strongly agree	
	VIII- Perceived benefit		
801	If you have a cervical cancer screening regularly	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	and the result is good, you don't need to worry	5. Strongly agree	
	too much about cervical cancer		
802	Having regular cervical cancer screening will	1. Strongly disagree 2 Disagree. 3. Neutral 4. Agree	
	help to find changes to the cervix, before they	5. Strongly agree	
	turn into cancer		
803	If cervical cancer was found at a cervical cancer	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	screening its treatment would not be so bad	5. Strongly agree	
804	Having a regular cervical cancer screening is the	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	best way for cervical cancer to be diagnosed early	5. Strongly agree	
805	Having regular cervical cancer screening will	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	decrease your chances of dying from cervical	5. Strongly agree	
	cancer		
	IX- Perceived barriers		
901	You may afraid to have a cervical cancer	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree	
	screening for fear of a bad result	5. Strongly agree	

902	You don't know where to go for a cervical	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	cancer screening	5. Strongly agree
903	You would be ashamed to lie on a gynecologic	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	examination table and show your private parts to	5. Strongly agree
	have a cervical cancer screening	
904	Having a cervical cancer screening takes too	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	much time	5. Strongly agree
905	Having a cervical cancer screening is too painful	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
		5. Strongly agree
906	You neglect or cannot remember to have a	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	cervical cancer screening regularly	5. Strongly agree
907	You have other problems more important than	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	having a cervical cancer screening in your life	5. Strongly agree
908	You are too old to have a cervical cancer	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	screening regularly	5. Strongly agree
909	There is no health center close to your house to	1. Strongly disagree 2. Disagree. 3. Neutral 4. Agree
	have a cervical cancer screening	5. Strongly agree
910	You prefer a female doctor to conduct a cervical	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree
	cancer screening	5. Strongly agree

Thank you!!!

Amharic version Questionnaire

*መግ*ቢያ እና ስምምነት

ጤናይስጥልኝ ፣ እኔ ስሜ_________እባላለሁ ፡፡ በጅማ ዩኒቨርስቲ የህብረተሰብ ጤና አጠባበቅ 2^ኛ ድግሪ ተማሪ በሆነ ታደሰ ንጉሴ በሚካሄድ ጥናት መረጃ ወብሳቢ ነኝ ፡፡ ይህ ጥናትና ምርምር በጅማ ከተማ የሚገኙት 30 እስህ 49 ዕድሜ ያሉት ሴቶች ስለ የማህፀን በር ቅድመ ካንሰር ምርመራ እንድያደርጉ የሚወሲኑ ነገሮች ላይ የተዘጋጀ መጠይቅ ነው፡፡ ከዚህ ጥናትም የሚገኘው ውጤት የማህፀን በር ቅድመ ካነሰር ምርመራ አጠቃቀም እንድጨምር ለማድረግ ይረዳል፡፡ ጥናቱ በፍቃደኝነት ላይ የተመሰረተ ስለ ሆነ አለመሳተፍ ወይም ከጀመሩ በመንኛዉም የማቋረጥ መብት የተጠበቀ ነዉ፡፡ስለማንነትዎ እና ስለሚሰጥዋቸው መልሶች በምስጥር መጠበቅ ምንም አይነት ሲጋት አይግባዎ፡፡ የእርስዎ በዚህ ጥናት ውስጥ መሳተፍ ጥናቱ በተሳካ ሁኔታ ለማጠናቀቅ ብቻ ሳይሆን ለማህፀንበር በር ቅድመ ካንሰር ምርመራ ዘዴ አገልግሎት መሻሻል ከፍተኛ አስተዋፅኦ ስለሚኖረው በዚህ ጥናት ውስጥ እንድሳተፉ በአክብሮት እጠይቃላሁ፡፡

የሱተርቫይዘር ስም ------ ፍርሚያ ------ ቀን------

አመሰግናለሁ!!!

መጠይቅ

ተ.ቁ	ጥያቄ ዎች	መልስ	Remark
	ከፍል 1፡ አ ጠቃላይ የማ ህበራዊ <i>መ</i> ረን		
101	ዕድሜ	ዓመት	
102	ሀይጣኖት	1. ኦርቶዶክስ 2. ሙስልም 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ	
		(nh朱)	
103	ብሄር	1. አሮም 2. አማራ 3. ካፋ 4. ዳዉሮ 5. ዬም 6. ሌላ	
		(NAK)	
104	የትምህርት ሁኔታ	1. ያልተማረች 2.1ኛ ደረጃ 3.2ኛ ደረጃ 4.ከ2ኛ ደረጃ በላይ	
105	የ <i>ጋ</i> ብቻሁኔታ	1. ያላንባች 2. ያንባች 3. የተፈታች 4. በምትየተለዩ 5. ተለያይቶ	
		የሚትኖር	_
106	የብተሰብ ወራዊ ነቢ በአማካይ	nc	
107	የስራ ሁኔታ	1. የቤት እመቤት 3. ነጋኤ 4. የቀን ሥራተኛ 5. የመንግስት ሥራተኛ	
1.0.0		2. የባል/መንግስታዊ ያልሆነ ድርዲተ ሥራተና	
108	የባል የተምህርተ ሁኔታ	1.ያልተማረ 2. ነና ደረዳ 3. 2ና ደረዳ 4. በ2ና ደረዳ በላይ	
109	ረዲዮ አላቹ?	1. አዎ 2. የለንም	
110	ቴሌቭዥን አላቹ?	1. አዎ 2. የለንም	
	ክፍል 2፡ የስነ ተዋልዶ መረጃ		
201	በስንት አመት ዕድሜ አንባሽ?	ዓመት	
203	ልጅ ወለድሽ?	1. አዎ 2. አየደለም	
204	ስንት ልጅ ወለድሽ	ልጅ	
205	የወሊድ መቆጣጠሪያ ተጠቅመሽ ታቅዋለሽ?	1. አዎ 2. አይደለም	
206	205 አዎ ከሆነ ምን አይነተ?	1. እንከብል 2. መረሪ。 3. በሰዉነት የሚቀበር 4. ሉፐ	ከአንድ መልስ
		4. የሴት ዘር ቱቦ መቋጠር 6. ሌላ (ግለፅ)	በላይ ይቻላል
207	ለስንት ዓመት ተጠቀምሽ?	ዓመት	
208	የአባለዘር በሽታ ይዞሽ ያዉቃል?	1. አዎ 2. አይደለም	
209	HIV ምርመራ አድርາሽ ታቅዋለሽ	1. አዎ 2. አይደለም	
210	209 አዎ ከሆነ ዉጤቱ ምን ነበር	1. ፖኬትቭ 2. ኔጋትቭ	
211	በስንት አመት ዕድሜ የግበረ ስጋ ግንኙነት	1. ከ 20ዓመት በታች 2. 20በላይ 3. በጭራ የግብረስጋ ግንኙነት ያላደረነች	
	<i>ጀመረር</i> ሽ?		
	ከፍል 3፡ ስለ ማህፀን በር ካንሰር ዕዉቀት	1	
301	ስለ ማህፀን በር ካንሰር ሰምተሽ ታቂዋለሽ?	1.አዎ 2. አይደለም	
302	301 አዎ ከሆነ ከቡት ሰማሽ?	1. ከ ረድዮ 2. TV 3. በራሪ ወረቀት 4. ከጤና ባለሙያ	ከአንድ መልስ
202	amual of blac mbaba of the	5. nlln11 6. nxn74976 7. na (9/08)	אוי קט, טאיוו
303	197007 III. 97112 0019916 500 500 2	1. δγ 2. δβξηγ 1. δληθο δληθη στη διαφορ 1.	
304	ለ 303 ለዎ በሆነ አንኤተ መበባበል ይታባል?	1. በለንድ በባይ የግብረበጋ ግን ኮንተ ግበሠንድ ጋ. አትመ ዘመን ላይ ደረላ የወረረ አካ መንድኑት የአመው ለመ	
		2. $(\Psi^{0} \mathcal{S}^{*} \mathcal{I})$ (Set if formally of the terms of \mathcal{S}^{*}	
		2. パロ 76660 4. HPV わわのわ	
		5. አላዉቅም	
		6. ^Δ \ (?\\delta)	
305	የማህፀን በር ካንሰር ምልክት ሳየሳይ ልከሰት	1. አዎ 2. አይደለም	
	ይቸላል?		
306	የማህፀን በር ካንሰር ተሳላፊ በሽታ ነዉ?	1. አዎ 2. አይደለም 3. አላዉ.ቅም	

307	የማህፀን በር ካንሰር በግዜ ካል,ታወቀ ንዳይ ነዉ?	1. አዎ 2. አይደለም 3. አላዉቅም	
308	የማህፀን በር ካንሰር ምልክቶች ምንድናቸዉ?	1. የሴት ብልት መድማት	
		2. ከግብረስ <i>ጋ</i> ግንኙነት በጎላ <i>መ</i> ድማት	ከአንድ <i>መ</i> ልስ
		3. የግብረስጋ ግንኙነት የህመም	በላይ ይቻላል
		4. የሚሸት የብልት ፌሳሽ	
		5. የከብደት መቀነስ	
		6. ሌላ (<i>ግለፅ</i>)	
309	ለ <i>ማህፀን</i> በር ካንሰር የሚያ <i>ጋ</i> ልጡ ለ <i>ገሮች ምን</i> ድ	1. ከአንድ በላይ የግብረስ <i>ጋ ግንኙነት መ</i> ኖር	
	ናቸዉ?	2. ለቅመ ሄዋን ሳይደርሱ የግብረስጋ ግንኙነት	
		3. በ HPV መያዝ	
		4. ስ <i>ጋራጣ</i> ጨስ	
		5. አላዉቅም	
		6. ሌላ (<i>ግለፅ</i>)	
310	ለማህፀን በር ካንሰር የተጋለጡ እነማን ናቸዉ?	1. ሁሉም የግብረስጋ ግንኙነተ ያደረጉ 30 ዓመት በላይ	
		2. ሴተኛ አዳሪ	
		3. ያረፉ ሴቶች	
		4. HIV በደማቸዉ የሚገኝ	
		5. ከአንድ በላይ <i>ጋ</i> ር የግብረስ <i>ጋ ግንኙ</i> ነት የምያደርጉ	
		6. ሌላ (<i>ግለፅ</i>)	
311	ለማህፀን በር ካንሰር ተጋላጭ ነኝ ብለሽ ታስባለሽ?	1. አዎ 2. አይደለም 3. አላዉቅም	
312	የማህፀን በር ካንሰር በግዜ ከታወቀ ይድናል?	1. አዎ 2. አይደለም 3. አላዉቅም	
313	የ <i>ማህፀን</i> በር ካንሰር በግዜ ከል <i>ታወቀ አደገኛና ገዳ</i> ይ	<u> </u>	
	ነዉ.?		
	ክፍል 3፡ ማህፀን በር ቅድመ ካንሰር ምርመራ ዕወ	ቀት 	-
401	ስለ ማህፀን በር ቅድመ ካንሰር ምርመራ ሰምተው	1. አዎ 2. አይደለም 3. አላዉቅም	
102	ያውንድ የመህሳን በር ቅይመ መርመን የመህሳን በር ክንስር		_
402	የግንፅን በር ዋይውን ምርውሯና የግንፅን በር ግንበር ይከላከላል	1. እም 2. አይደለም 3. አሳዉዋም	
403	የመጀመሪያ ደረጃ የማህፅን በር ካንሰርን በምርመራ	<u>1. አዎ 2. አይደለም 3. አላዉቅም</u>	
	ሂደት ማረጋገጥ ይቻላል		
404	የማህፀን በር ቅድመ ካንሰር ምርመራ ለህክምና	1. አዎ 2. አይደለም 3. አላዉቅም	
	ውጤት ተሻለ ነው		_
405	የማህፀን በር ቀድመ ካንስር ምርመራ ድማ ላይ አለ	1. አዎ 2. አይደለም 3. አላዉቅም	
406	የማህፀን በር ቀድመ ካንሰር ምርመራ ክፊያ እንኤተ	1) hh&s 19	
	<i>γ</i> ω.?	2) ተመጣጣን	
		3) ተንሽ ክፍ ያለ ነዉ	
		4) ወ.ድ ነወ.	
		5) በጣም ዉድ ነዉ	
		6) አላዉቅም	
407	ለማህፀን በር ካንሰር ተጋላጭ እነማን ናቸው?	1. ሁሉም የግብረስ <i>ጋ ግንኙነተ ያደረጉ 30 ዓመት</i> በላይ	
		2. ቤተና ለላሪ	
		3. <i>5</i> 2株 低作T 	
		4. ΠΙΥ ΙΙΧΥΤΤΨ. ΥΥΤΤ - bt 3.0: 0.0: 0.0: 0.0: 0.0: 0.0: 0.0: 0.0:	
		ק. וות אב וויוקט אב דדיווגווא <i>דו דריד</i> לאייגגניד ב אא (מאא	
		о. тыт (//tb)	

408	የማህፀን በር ቅድመ ካንሰር ምርመራ በየምን ያህል	1) በዓመት አንድ ባዜ
	ግዜ ነዉ የሚደረገዉ?	2) በሶስት ዓመት አንድ ግዜ
		3) በአምስት ዓመት አንድ ግዜ
		4) ሌላ <i>ግለፅ</i>
409	በማህፀን በር ካንሰር የታመመ ሰውያ ውቃሉ	1. አዎ 2. አይደለም
410	የማህፀን በር ቅድመ ካንሰር ምርመራ የደረገ ሰው	1. አዎ 2. አይደለም
	ያውቃሉ	
	ክፍል 5፡ <i>የጣህፀ ምርመራና የጣህፀን</i> በር ቅደቀመ ካን	ክስር ምርመራ
501	ማንኛውም የማህፀን ምርመራ አድርገው ያውቃሉ	1. አዎ 2. አይደለም
502	በምርመራ ጊዜ የጤና ባለሙያ ፆታ ይመርጣሉ	1. አዎ 2. አይደለም
503	አዎን ከሆነ የትኛው	1.ወንድ 2. ሴት
504	ስለማህፀን በርካንሰር መከላል የጤና ባለሙያ	1. አዎ 2. አይደለም
	አማክረው ያው,ቃሉ	
505	የማህፀን በር ቅደቀመ ካንሰር ምርመራ ተመርምረው	1. አዎ 2. አይደለም
	ያው.ቃሉ	
506	505 አዎ ከሆነ ሰንት <i>ግ</i> ዜ	
507	አዎ ከሆነ በቅርብ መቼ ተመረመሩ	ነ. ከ 5 ዓመት በፊት 2. ባለፉት 5 ዓመት ዉስት
508	505 አዎ ከሆነ እንድ መረመሉ ያነሳሳዎት ምን ነበር	1. ጤና ባለሙያ ዋያቄ
		2. በራስ ተነሳሽነት
		3. ሌላ ግለፅ
509	ለማህፀን በርካንሰር ምርመራ ያላደረጉበት ምክንያት	1. ጤነኛ ስለ ሆንኩ
	^{ዓም} ንድንነው	2. ተበሽታው ይኖርብኛል ብዬ ስለሚፈራ
		3. ስለ ምርመራው ግንዛቤ አልነበረኝም
		4. የምርመራ ዋጋ ውድ ስለሆነ
		5. አንልግሎቱ ስላልነበረ
		6. ባለቤቴ ስለማይስማማ
		7. ስለማሬር
		8. an ()
	ክፍል 6፡ <i>የተጋላጭነት ግ</i> ምት	· · · · ·
601	በህይወት ዘመንሽ ለማህፀን በር ካንሰር የመጋለጥ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልችልም
	<i>ዕድ</i> ል አለን ዝለበ <i>ታ</i> ምናለበ	4. እስማማለሁ 5. በጣምእስማማለሁ
602	ለማህፀን በር ካንሰር ወደፊት የምጋለጥ ይመስለኛል	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልችልም
		4. እስማማለሁ 5. በጣምእስማማለሁ
603	በቀጣዮቹ ጥቂት ዐመታት ለማህፀን በር ካንሰር	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም
	የመጋቢሳ ወድል በፍተና ነው	4. እስማማለሁ 5. በጣምእስማማለሁ
	ክፍል 6፡ የበሽታ ከብደ ትግምት	
701	ስለማህፀንበርካንሰርማሰብእፌራለው	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቸልም
		4. እስማማለሁ 5. በጣም እስማማለሁ
702	በለማህፀን በርካንስር ባበብልቤ ይመታል	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም
		ኣልትልም 4. እስማማለው 5. በጣምእስማማለው
703	በለማህፀን በርካንስር አልፌልማም	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቸልም
		4. እስማማለሁ 5. በጣም እስማማለሁ
704	በማህፀንበር ካንሰር እርሐንደሻስሽሐየረጃመን ዘታውሮ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቸልም
		4. እስማማለሁ 5. በጣም እስማማለሁ
705	የማህፀን በርካንስር ምርመራ ያለንን ግንኙነት ይፋላላል ወደ እስታታም	1. በጣም አልስማማም 2. አልስ ማማም 3. መስማማትም ኣለማስማማትም ኣልቸልም
	ን ምፅባፅን ግሎ ለበጋለሙ	4. እስማማለሁ 5. በጣምእስማማለሁ

706	የማህፀን በር ካንሰር ካለብኝ ህይወቴ ይመሳቀላል	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቸልም	
		4. እስማማለሁ 5. በጣም እስማማለሁ	
707	<i>የማህፀን</i> በር ካንሰር ካለብኝ ከ5 <i>ዓመት</i> በላይ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም	
	አልኖርም	4. እስማማለሁ 5. በጣም እስማማለሁ	
	ከፍል 8፡ ጥቅም	· ·	
801	<u>በየጊዜውየማህፅንበርካንሰርምርመራየማደርግከሆነ</u>	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም	
	<i>ማህፀ</i> ንበርካንሰርእ <i>ጋ</i> ለጣለውብዬአልፈራም	4. እስማማለሁ 5. በጣም እስማማለሁ	
802	በየጊዜውየ <i>ማህፅን</i> በርካንሰርቅድ <i>መ</i> ምር <i>መ</i> ራማድረግ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም	
	ለካንሰርእንዳል <i>ጋ</i> ለጥይረዳኛል	4. እስማማለሁ 5. በጣም እስማማለሁ	
803	በማህፀንበርካንሰርቅድመምርመራወቅትካንሰርቢንኝ	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም	
	ብኝየህክምናውጤቴየተሻለይሆናል	4. እስማማለሁ 5. በጣም እስማማለሁ	
804	<i>ቋሚየማህፅን</i> በርካንሰርቅድ <i>መ</i> ምር <i>መራማድረግ</i> ወደካ	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም	
	ረሰርከመቀሩበፊትለማወቅትክክለኛዘዴነው	4. እስማማለሁ 5. በጣም እስማማለሁ	
805	<i>ቋሚየማህፅን</i> በርካንሰርቅድ <i>መ</i> ምርመራበካንሰርየመ	1. በጣም አልስጣጣም 2. አልስጣጣም 3. መስጣጣትም ኣለጣስጣጣትም ኣልቾልም	
	ሞትዕድልይቀንሳል	4. እስማማለሁ 5. በጣም እስማማለሁ	
	ከፍል 9፡ እንቅፋት		
901	መጥፎ ዉጤት ስለሚፈራ የማህፀን በር ቅድመ	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልችልም	
	ካንሰር ምርመራ ጣድረግ ፈራለሁ	4. እስማማለሁ 5. በጣም እስማማለሁ	
902	የማህፀን በር ቅድመ ካንሰር ምርመራ የት	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቾልም	
	እንደምደረግ አላዉቅም	4. እስማማለሁ 5. በጣም እስማማለሁ	
903	ለማህፀን በር ቅድመ ካንሰር ምርመራ ብልትን	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልችልም	
	ማሳየት አፍራለሁ	4. እስማማለሁ 5. በጣም እስማማለሁ	
904	የማህፀን በር ቅድመ ካንሰር ምርመራ ብሁ ግሄ	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልችልም	
	ይፈጃል	4. እስማማለሁ 5. በጣም እስማማለሁ	
905	የማህፀን በር ቅድመ ካንሰር ምርመራ ማድረግ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም	
	በጣም ያጣል	ኣልቻልም 4. እስማማለሁ 5. በጣም እስማማለሁ	
906	የማህፀን በር ቅድመ ካንሰር ምርመራ ማድረግ	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልቸልም	
	አላስታዉስም ወይም ትቻለሁ	4. እስማማለሁ 5. በጣም እስማማለሁ	
907	በህይወቴ ከማህፀን በር ቅድመ ካንሰር ምርመራ ሌላ	1. በጣምአልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም ኣልችልም	
	ቸግር አለን	4. እስማማለሁ 5. በጣም እስማማለሁ	
908	የማህፀን በር ቅድመ ካንሰር ምርመራ ለማድረግ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም ኣለማስማማትም	
	<i>ዕድሜ</i> ዬ አርጅቷል	ኣልቾልም 4. እስማማለሁ 5. በጣም እስማማለሁ	
909	የማህፀን በር ቅድመ ካንሰር ምርመሉ ለማድረግ	1 በጣምአልስማማም 2 አልስማማም 3 መስማማትም አለማስማማትም አለችልም	
,0,	በቅርብ የጤና ተቋም የለም	4 λ homometry λ	
910	የማህፀን በር ቅድመ ካንሰር ምርመራ ለማድረግ	1. በጣም አልስማማም 2. አልስማማም 3. መስማማትም አለማስማማትም አልቾልም	
10	የሴት ጤና ባለሙያ ብትሆን መርጣለሁ	4. $\lambda h g g h h h g g h h h g g h h h h h h $	
		kanaa ala ala ala ala ala ala ala ala ala	

Afan Oromo version Questionnaire

Seensa fi unka waliigaltee

Maqaan koo ------jedhama. Ani qorannoo Taaddasaa Nugusee barataa maastersii yuuniversitii jimma kan fayyaa hawaasaa ta'een geggeeffamaa jiru irratti odeeffannoon funaana. Odeeffannoo isin nuuf laattan kaanserii ulaa gadameessaa ittisuuf ga'ee guddaa qaba. Kaayyon qo'annoo kanaa wantoota qorannoo kaansarii ulaa gadaamessaa taasisuuf murteessan dubartoota umurii 30-49 jiran keessatti addaan baasuuf fayyada. Akka irratti hirmaattan kabajaan afeeramtaniirtu. Qorannoon kun fedhii irratti kan hundaa'e dha, irratti hirmaachuu dhiisuu ykn erga eegaltanii addaan kutuuf mirga qabdu. odeeffannoon isin kennitan iccitiidhan qabama, akkasumas odeeffannoon nama dhuunfaa akka bu'aa qorannootti hin gabaafamu. Odeeffannoon isinirraa argamu qorannicha xumuruuf qofa osoo hin taane qorannoo kaansarii ulaa gadaamessaa fooyyessuuf gahee guddaa qaba.

Maqaa Nama Daataa funaanuu	Mallattoo	Guyyaa
Maqaa Nama Hordofuu	Mallattoo	Guyyaa

GALATOOMAA!!!

Lak.	Gaaffiilee	Deebii	Yaadachiisa
	Kutaa 1: Gaaffii odeeffannoo walii gala		1
101	Umurii	waggaa	
102	Amantii	1. Ortodooksii 2. Musliima 3. Protestaantii	
		4. kaatolikii 5. kan biraa (ibsi)	
103	Qomoo	1. Oromoo 2. Amharaa 3. Kafaa 4. Daawuroo	
		5. Yeem 6. kan biraa (ibsi)	
104	Sadarkaa barumsaa	1. kan hin baratin	
		2. Sadarkaa 1ffaa	
		3. Sadarkaa 2ffaa	
		4. Sadarkaa 2ffaa ol	
105	Haala gaa'ila	1. Kan hin heerumin 2. Kan heerumte	
		3. Abbaan manaa kan du'e4. Kan wal hiikan	
		5. Kan gargar jiraatan	
106	Galii maatii ji'atti giddu galeessan	Qarshii	
107	Gosa hojii	1. Haadha manaa 2. Daldaltuu	
		3. hojjettuu guyyaa	
		4. hojjettuu mootummaa	
		5. hojii dhuunfaa/ dhaabbata miti-mootummaa	
108	Sadarkaa barumsaa abbaa warra/hiriyaa	1. kan hin baratin	
		2. Sadarkaa Iffaa	
		3. Sadarkaa 2maa	
		4. Sadarkaa 211aa of	
109	Raadiyoo qabduu?	1. Eeyye 2. Miti	
110	TV qabduu?	1. Eeyyee 2. Miti	
	Kutaa-2: Odeeffannoo sirna wal ho	ormaata	
201	Waggaa meeqatti heerumtee ture?	Waggaa	
203	Deessee jirtaa?	1. Eeyyee 2. Miti	
204	Ijoollee meeeqa deesse? Yoo gaafii 203	ijoollee	
	eeyyee ta'e		
205	Mala ittisa da'umsa ammayyaa fayyadamtee	e 1. Eeyyee 2. Miti	
	beektaa?		
206	Yoo gaafiin 205 eeyyee ta'e, mala ittisa	1. Kiniiniinliqimsaa	Debii tokkoo ol
	da'umsaa gosa kam?	2. Kan lilmoon kennamu(diippoo)	deebisuun ni
		3. Kan irree keessa kaa'amu	danda'ama
		4. Kan gadaamessa keessa kaa'amu(Luuppii)	
		5. Mala ittisa da'umsaa dhaabbataa(TL)	
20-		6. Kan biro ibsi ()	
207	Mala ittisa da'umsaa ammayyaa hammamii	t waggaa	
200	tayyadamte?		
208	Dhukkubni wal qunnamtii saalaan daddarbu	1 SI 1. Eeyyee 2. Miti	
200	qabee beekaa?		
209	Ver 200 server take her ?	1. Eeyyee 2. Mitti	
210	1 1 00 209 eyyee ta'e bu'aan qorannoo maali	1. POSOTIVII 2. Negaativii	

Gaaffilee odeeffannoo

211	Wal quunnamtii saalaa yeroo jalqabaaf	waggaa	
	waggaa meeqatti raawwatte?		
	Kutaa –3: Beekumsa waa'ee kaansar	ii ulaa gadaamessaa	
301	Waa'ee kaansarii ulaa gadaamessaa	1. Eeyyee 2. Miti	
202	dhageessee beektaa?		
302	Yoo gaffii 301 deebin eyyee ta'e, eessaa	1. Raadiyoorraa	D 1 1 / 11 1
	dhageesse?	2. IV IITaa	Debii tokkoo ol
		5. Poostarii liwantoota maxxaniaman	deedisuun ni
		4. Hojjetaa fayyaafraa	danda ama
		5. Maatiinaa 6. Barsiisarraa	
		$7 ext{ kan hiraa (ihsi)}$	
303	Kaansarii ulaa gadaamessaa ittisuun	1 Evve 2 Miti	
303	nidanda'amaa?		
304	Yoo gaffii 303 deebin eyyee ta'e,	1. Hiriya walqunnamtii baay'ee saalaa ittisuu	
	akkamitti ittisuu dandeenya?	2. Wal-qunnamtii dafanii eegaluu dhiisuu	
		3. Tamboo xuuxuu dhiisuu	
		4. Talaallii HPV	
		5. Hin beeku	
205		6. kan biraa (1bs1)	
305	Kaansariin ulaa gadaamessaa osoo	1. Eyyee 2. Miti	
206	mallattoo hin mul isin dhufuu danda aa?		
306	Kaansariin ulaa gadaamessaa ni daddarbaa?	1. Eyyee 2. Miti 3. Hin beeku	
307	Kaansariin ulaa gadaamessaa yoo dafee beekamuu dhiise nama ajjeesaa?	1. Eyyee 2. Miti	
308	Mallattoon Kaansarii ulaa gadaamessaa	1. Dhiiguu qaama saalaa	Deebii tokkoo ol
	maal fa'i?	2. Dhiiguu wal-qunnamtii saalaa booda	deebisuun ni
		3. Dhiiguu umurii wal-hormaataa booda	danda'ama
		4. Dhangala'aa foolii badaa qaama saalaa	
		5. Hir'achuu ulfaatina qaamaa	
		6. kan biraa(ibsi)	
309	Wantootni kaansariin ulaa gadaamessaaf	1. hiriyaa walqunnamtii saalaa baay'ee	
	nama saaxilan maal fa'i?	2. wal-qunnamtii saalaa dafanii eegaluu	
		3. HPV dhaan faalamuu	
		4. Tamboo xuuxuu	
		5. Hin beeku	
		6. kan biraa (ibsi)	
310	Kaansariin gadaamessaa eenyu qabuu	1. dubartii umurii30 olii kamiiyyuu	
	danda''a?	2. Dubartoota sagaagaluun jiraatan	
		3. Dubartoota dullooman	
		4. Dubartii Hiving analanan	
		5. Dubartii niriyaa walqunnamtii saalaa baay´ee	
		qabdu 6 kap hiraa (ibai	
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410 Nama kaanserii ulaa gadaamessatif 1. Eevvee 2. Miti
qoratamee beeku beektaa?
Kutaa -5: Qorannoo qaama wal hormaataa fi kaansarii ulaa gadaamessaa
501 Qorannoon qaama wal hormaataa siif 1. Eeyyee 2. Miti
taasifamee beekaa?
502 Qorannoon yoo siif taasifamu koorniyaa 1. Eeyyee 2. Miti
ogeessa fayyaa ni filattaa?
503Yoo eeyyee ta'e, koorniyaa kam?1. dhiira2. Dhalaa
504 Waa'ee ittisa kaanserii ulaa gadaamessaa 1 Feyyee 2 Miti
irrati gorsa ogeossaa argattee beektaa?

505	Umirii kee keessatti qorannoon kaansarii	1. Eeyyee 2. Miti	
	ulaa gadaamessaa siif godhamee beekaa?		
506	Yoo gaafiin 505 eeyyee ta'e yeroo		
	meeqa?		
507	Yoo gaafiin 505 eeyyee ta'e qorannoon	1. Wagga shan dura 2. Waggoota shaman daban keessa	
	dhiyeenyatti siif godhame yoomi?		
508	Yoo gaafiin 505 eeyyee ta'e maaltu akka	1. Gorsa ogeessa fayyaatin.	
	qoratamtu si taasise?	2. Tattaaffii dhuunfaatiin.	
		3. Kan biro ibsi()	
509	sababni kaansarii ulaa gadaamessaaf akka	1. Fayyummaan waan natti dhagahamuuf	
	hin qoratamne si godhe maali?	2. Soda bu'aa qorannoo	
		3. Tajaajilichi jiraachuu wallaaluu	
		4. Kaffaltiin mi'aawa dha	
		5. Tajaajilichi waan hin jirreef	
		6. Abbaan warraa koo naa hin deeggaru	
		7. Nan qaaneffa dha	
		8. Kan biroo (ibsi)	
	Kutaa -6: Tilmaama Saaxilamummaa		
601	Umrii kee keessatti kaansarii ulaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gadaamessaan akka qabamuu dandeessu	4. Walii gala 5. Sirriitti walii gala	
	sitti dhaga'ama.		
602	Gara fuulduraatti carraan kaansarii	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gadaamessaan qabamuu kee jira.	4. Walii gala 5. Sirriitti walii gala	
603	Waggoottan dhufan muraasaa keessatti	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	carraan kaansarii ulaa gadaamessaan	4. Walii gala 5. Sirriitti walii gala	
	qabamuu keetii olaanaadha.		
	Kutaa -7: Tilmaama hammeenyummaa/b	alaafamummaa	1
701	Waaaa'ee kaansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	yaaduun nama naasisa.	4. Walii gala 5. Sirriitti walii gala	
702	Waa'ee kaansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	yaaduun si sodaachisa.	4. Walii gala 5. Sirriitti walii gala	
703	Rakkoon kaansarii ulaa gadaamessaan wal	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	qabatee si mudatu yeroo dheeraaf tura.	4. Walii gala 5. Sirriitti walii gala	
704	Kaanseriin ulaa gadaamessaa hariiroo	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	hiriyaa yookiin abbaa warraa kee waliin	4. Walii gala 5. Sirriitti walii gala	
	qabduuf ni sodaachisa.		
705	Yoo kaansarii ulaa gadaamessaa qabaatte	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	jireenyi kee hundi ni miidhama.	4. Walii gala 5. Sirriitti walii gala	
706	Yoo kansariin ulaa gadaamessaa si qabe	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	waggaa shan caalaa hin jiraattu.	4. Walii gala 5. Sirriitti walii gala	
	Kutaa -8: Tilmaama Fayyadamumma		
801	Yoo qorannoo kansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	yeroo yeroon gootee fi bu'aansaa gaarii	4. Walii gala 5. Sirriitti walii gala	
	ta'e waaa'een kaansarii ulaa gadaamessaa		
	si hin dhiphisu.		
802	Yeroo yeroon kaansarii ulaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gadaamessaaf qoratamuun, jijjirama ulaa	4. Walii gala 5. Sirriitti walii gala	

	gadaamessaa kan booda kaansariitti		
002	jijjiramu arguul layyada.	1 Contract d'Aliment O Well' Lineat 2 D'Ille	
803	Yoo kaansariin ulaa gadaamessaa yeroo	1. Gonkuma walii nin galu. 2 walii nin galu. 3. Bilisa	
	qorannoo argame yaam isaa saipnaa una.	4. wani gala 5. Siffilu wani gala	
804	Yeroo yerootti ilaalamuun, kaansarii ulaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gadaamessaa sadarkaa salphaatti arguuf	4. Walii gala 5. Sirriitti walii gala	
	fayyada.		
805	Yeroo yeroon qorannoo kaansarii ulaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gadaamessaa gochuun carraa kaansarii	4. Walii gala 5. Sirriitti walii gala	
	gadaamessaan du'uu ni hir'isa.		
	Kutaa -9: Gufuu		
901	Qorannoo kaansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2. Walii hin galu. 3. Bilisa	
	gochuu ni sodaatta bu'aa qorannoo	4. Walii gala 5. Sirriitti walii gala	
	badaaf.		
902	Qorannoo kaansarii ulaa gadaamessaaf	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	eessa akka deemuu qabu hin beektu.	4. Walii gala 5. Sirriitti walii gala	
903	Qorannoo kaansarii ulaa gadaamessaaf	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	iddoo qorannootti qaama saalaa kee	4. Walii gala 5. Sirriitti walii gala	
	mul'isuu ni qaaneffatta.		
904	Qorannoo kaansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gochuun yeroo dheeraa fudhata.	4. Walii gala 5. Sirriitti walii gala	
905	Qorannoo kaansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gochuun nama dhukkubsa/ dhukkubbii	4. Walii gala 5. Sirriitti walii gala	
	qaba		
906	Yeroo yeroon qorannoo kaansarii ulaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gadaamessuu ni dhiifte ykn hin yaadattu.	4. Walii gala 5. Sirriitti walii gala	
907	Jiruu kee keessatti rakkoo qorannoo	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	kaansarii ulaa gadaamessaa caalu qabda.	4. Walii gala 5. Sirriitti walii gala	
908	Qorannoo kaansarii ulaa gadaamessaa	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	gochuf ati dulloomterta.	4. Walii gala 5. Sirriitti walii gala	
909	Qorannoo kaansarii ulaa gadaamessaaf	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	buufatni fayyaa dhiyootti hin argamu.	4. Walii gala 5. Sirriitti walii gala	
910	Qorannoo kaansarii ulaa gadaamessaaf	1. Gonkuma walii hin galu. 2 Walii hin galu. 3. Bilisa	
	ogeessa fayyaa dhalaan feeta.	4. Walii gala 5. Sirriitti walii gala	

Galatoomaa!!!

ANNEX- III: In-Depth Interview Guide

a. For screened women

- 1. Do you tell me something about cervical cancer?
 - ✓ Cause
 - ✓ Risk factors
 - ✓ prevention
- 2. What is it that you have heard other people say about cervical cancer?
- 3. Do you regard cervical cancer to be a major health issue for women?
 - ✓ How it affects life of women
 - ✓ Family relation and quality of life
 - \checkmark Is it lethal
- 4. Susceptibility and severity of cervical cancer
 - ✓ How would you judge your risk of developing cervical cancer?
 - \checkmark What do you think is the chance of cure of cervical cancer?
 - ✓ Please explain how difficult you think it is, to get the treatment of cervical cancer?
- 5. Can you tell me how cervical cancer screening done?
 - \checkmark How it be done for women
 - \checkmark for whom it should be done?
 - \checkmark at what age?
- 6. What is advantage of undergoing cervical cancer screening?
 - \checkmark Do you think it is beneficial to have a cervical cancer screening? How beneficial is it?
 - ✓ Can you explain to me how cervical cancer screening can give you satisfaction?
 - ✓ How important is it to have regular cervical cancer screening?
 - ✓ How important is detecting precancerous cells before onset of symptoms?
 - 7. Do you feel that there is adequate health information for women in regards to cervical cancer and screening?
 - ✓ If yes, why do you think this?
 - ✓ If no, what would you recommend or like to see implemented more effective approach?

b. For health extension workers

- 1. Do you regard cervical cancer to be a major health issue for women?
 - ✓ How it affects life of women
 - ✓ Family relation and quality of life
- 2. What is it that you have heard women say about cervical cancer?
 - ✓ Cause
 - ✓ Risk factors
 - ✓ prevention
- 3. Do you feel that there is adequate health information for women in regards to cervical cancer and screening?
 - ✓ If yes, why do you think this?
 - ✓ If no, what would you recommend or like to see implemented more effective approach?
- 4. What is advantage of undergoing cervical cancer screening for women?
- 5. What factors could facilitate or hinder women from accessing cervical cancer screening services?
 - ✓ Does it take long time to have a cervical cancer screening?
 - ✓ How important it is to visit a cervical cancer screening clinic even when they don't even have any other illness?
 - ✓ How expensive it is to have a cervical cancer screening?
- 6. What do you think could be done in order increase cervical cancer screening in Jimma?

C. For health service providers

- 1. Do you regard cervical cancer to be a major health issue for women?
 - \checkmark How it affects life of women
 - ✓ Family relation and quality of life
 - \checkmark Is it lethal
- 1. What is it that you have heard other people (women) say about cervical cancer?
 - ✓ Cause of disease
 - ✓ How to prevent
 - \checkmark Communicable or not
 - \checkmark How disease is severing
- 2. How severe do you think the problem of cervical cancer is in Ethiopia?
- 3. Do you feel that there is adequate health information for women in regards to cervical cancer and screening?
 - ✓ If yes, why do you think this?
 - ✓ If no, what would you recommend or like to see implemented more effective approach?
- 4. What is advantage of undergoing cervical cancer screening for women and how women perceive about screening?
 - ✓ Advantage
 - \checkmark who should undergo screen
 - \checkmark at what age to be screened
- 5. What factors could facilitate or hinder women from accessing cervical cancer screening services?
 - ✓ Does it take long time to have a cervical cancer screening?
 - ✓ How important it is to visit a cervical cancer screening clinic even when they don't even have any other illness?
 - 6. What do you think could be done in order increase cervical cancer screening in Jimma?

DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.	
Name:	
Signature:	
Name of the institution:	
Date of submission:	
This thesis has been submitted for examination with my approval as University advisor Name and Signature of the first advisor	
Name and Signature of the second advisor	