ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCE

SCHOOL OF PUBLIC HEALTH

Cervical cancer screening utilization and its associated factors among women aged 30 years and above in Woliso town, South West Showa Zone, Oromia region, Ethiopia

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A thesis submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Public Health.

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Praise be to almighty GOD who kept me alive, healthy, and energetic and gave me the ability to develop and successfully undertake this thesis work.

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Acronyms and Abbreviations

AAU	Addis Ababa University
AIDS	Acquired Immune-deficiency Virus
AOR	Adjusted odds ratios
CC	Cervical Cancer
CCS	Cervical Cancer Screening
CI	Confidence interval
COR	Crude odds ratios
HPV	Human Papilloma Virus
MPH	Master of Public Health
STIs	Sexually transmitted infections
STDs	Sexually Transmitted Diseases
VIA	Visual Inspection of cervix with acetic acid
WHO	World Health Organization

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Abstract

Background: Cervical cancer is the second most common cancer in women with 529,000 new cases each year worldwide. It is also a leading cause of mortality worldwide with 270,000 women every year. In Ethiopia, Cervical Cancer ranks as the second most frequent cancer among women between 15 and 44 years of age. Cervical cancer can be prevented by identifying pre-cancerous lesions early using repeated Pap smear screening and treating these lesions before they progress to cancer. In low-resource settings, screening achieves the greatest impact for the lowest cost when it is targeted to women between the ages of 30 and 49. There are various dimensions of factors which affect cervical cancer screening, but little is known about factors associated with cervical cancer screening among women 30 years and above in Ethiopia.

Objective: The study was carried out to assess cervical cancer screening utilization and associated factors among women aged 30 and above in Woliso town, south west Showa zone, Oromia region, Ethiopia.

Methods: Community based Cross sectional study was conducted among 250 women aged 30 and above in Woliso town, South west Ethiopia from March 01-March 30, 2017. The study participants were selected using systematic sampling method. Data was collected using pretested interviewer-administered questionnaire. Descriptive analysis was done and logistic regression was used to assess the association between the independent variables and dependent variable. Odd ratio with 95% confidence interval and p-value less than 0.05 was used to declare statistical significance.

Results: The magnitude of cervical cancer screening utilization in woliso town among women 30 years and above was 44 (17.60%) with 95 %CI of (13.2-23.1). The odd of cervical cancer screening utilization is 4 times more likely among women who had good knowledge about cervical cancer screening utilization than those who had poor knowledge [AOR: 3.84, 95% CI: (1.49-9.87)], 4 times more likely among women who had positive attitude than those who had negative attitude [AOR: 3.88,95%CI: (1.31-11.54)], Six times more likely among participants who were informed about cervical cancer screening by health professional than those who were not informed [AOR: 5.88, (95%CI: (1.59-21.82)]. likewise, 5 times more likely among women who perceive that cervical cancer screening has benefit than those who do not perceive that cervical cancer screening has benefit [AOR: 5.38, 95% CI: (1.91-15.18)].

Conclusion &Recommendation: cervical cancer screening utilization is low in woliso town. Knowledge about cervical cancer, attitude about cervical cancer screening, health professionals information provisions about cervical cancer screening and perceived benefit about cervical cancer screening were identified factors significantly associated with cervical cancer utilization. The ministry of health up to the local government health service authority should strengthen awareness creation, behavioral change programs in order to increase the knowledge of the residents about cervical cancer and cervical cancer screening to motivate those women in order to utilize the screening service

1. Introduction

1.1. Background

The global burden and threat of none communicable diseases constitutes a major public health challenge that undermines social and economic development throughout the world, and inter alia has the effect of increasing in qualities between countries and within population. An estimated 36 million deaths, or 63% of the 57 million deaths that occurred globally in 2008, were due to none communicable diseases, cancer comprises the second cause for this figure (21%) next to cardiovascular diseases (48% of none communicable diseases) (1).

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death. It is caused by external factors such as tobacco, infectious organisms, and an unhealthy diet. Internal factors, such as inherited genetic mutations, hormones, and immune conditions. Cancer most commonly develops in older people; 78% of all cancer diagnoses are in people 55 years of age or older. People who smoke, eat an unhealthy diet, or are physically inactive also have a higher risk of cancer (2).

Globally cancer is the fifth most frequent malignancy in men and second among women, overall, 715,000 new cancer cases and 542,000 cancer deaths were estimated to have occurred in Africa (3). There were an estimated 266 000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all female cancer deaths. Mortality rates vary 18- fold between different regions of the world, ranging from less than 2 per 100 000 women in industrialized countries to more than 20 per 100 000 in some developing countries (1–3).

Cervical cancer is a cancer arising from the cervix, which is due to abnormal growth of cells that have the ability to invade other part of the body which is a complication of Human Papillomavirus (HPV) infection, is the second most common cancer in women with 529,000 new cases each year worldwide. Eighty percent of the cases occur in low-resource countries like Africa, Latin America and South East Asia. It is also a leading cause of mortality worldwide with an estimated 270 00 0 women every year. But, 85% of these deaths occur in the developing world (4, 5).

The primary underlying cause of cervical cancer is infection with one or more high-risk types of (HPV), a common virus that is sexually transmitted. Most new HPV infections resolve

Spontaneously; if it persists, infection may lead to the development of pre cancer which, left untreated, can lead to cancer. As it usually takes 10–20 years for precursor lesions caused by HPV to develop into invasive cancer, most cervical cancers can be prevented by early detection and treatment of precancerous lesions (5&6).

A large majority (more than 80%) of cervical cancer cases occur in the less developed regions, where it accounts for almost 12% of all female cancers. High-risk regions, with estimated age-standardized cervical cancer rates more than 30 per 100 000, include eastern Africa (42.7) (4). In Sub-Saharan Africa the occurrence and mortality rates are amongst the highest in the world. Cervical cancer accounts for 34.5/100,000 of all cancers in women and a mortality rate of 25.3 per 100,000 in Eastern Africa (6–8).

In Ethiopia, Cervical Cancer ranks as the second most frequent cancer among women between 15 and 44 years of age. Every year 4648 women are diagnosed with cervical cancer and 3,235 die from the disease (9,10).

Cervical cancer screening is the systematic application of a test to identify cervical abnormalities in an asymptomatic population. Women targeted for screening may actually feel perfectly healthy and see no reason to visit health facilities (9).

Screening with visual inspection with acetic acid (VIA) in resource limited settings is commonly preferable method than HPV test and cytologic or Pap smear. This is because it does not need testing requirements (trained cytotechnicians or pathologists and other programmatic requirement) (9).

Recently, in Ethiopia cervical cancer screening centers are being established to provide screening services for all women. Screening women for cervical cancer is important because women who were found to be a high-risk group for developing invasive cervical cancer and asymptomatic at the early stage, and they have difficulty to take the action. (11)

Cervical cancer screening offers protective benefits and is associated with a reduction in the incidence of invasive cervical cancer and cervical cancer mortality (12). The World Health Organization (WHO), United States Preventive Services Task Force (USPSTF) and the

American Cancer Society (ACS) recommended that all age eligible women should have cervical cancer screening at least once every three years (13).

Ethiopia adopted the WHO recommendation and recommended women to begin cervical cancer screening at age of thirty-five and above or three years past coitarchea at least once every three years. The "see and treat" strategy is being applied using (VAI) as screening method and cryotherapy as a treatment option (11).

Since Cervical cancer is one of the cancers for which early detection and screening are most effective. according to the national cancer control plan of Ethiopia (2016-2020), the ministry of health works to achieve 80 percent coverage of VIA to detect pre-cancerous lesions among none symptomatic women aged 30-49 using population based cervical cancer screening using (VIA) for all women aged 30-49 every 5 years (11)

Surprisingly in Ethiopia, only 1% of age eligible women receive effective screening for cervical cancer and 90% of women have never had a pelvic examination at all (14)

1.2. Statement of the problem

According to the Cervical Cancer Crisis Card 2013, cervical cancer kills an estimated of 275,000 women every year and 500,000 new cases are reported worldwide. This entirely preventable disease is the second largest cancer killer of women in low and middle-income countries, an estimated 12,990 cases of invasive cervical cancer are expected to be diagnosed in 2016. The cervical cancer incidence rate declined by half between 1975 (14.8 per 100,000) and 2012 (6.7 per 100,000) due to the widespread uptake of screening with the Pap test and removal of precancerous lesions (15).

Observed disparities in cervical cancer incidence and mortality are largely accounted for by inequities in cervical cancer screening. In countries with well-organized screening programs, rates of cervical cancer morbidity and mortality have declined significantly. This decline in observed cases of cervical cancer directly corresponds to the adoption of routine cervical cancer screening practice (16). Evidence from Asia, African, and Latin America suggests that many women do not know about cervical cancer screening and are not aware what types of services are available or where and when to seek them. Cervical cancer can be prevented by identifying pre-cancerous lesions early using repeated Pap smear screening and treating these lesions before they

Progress to cancer. Prevention, early diagnosis and treatment have been shown to reduce mortality due to cervical cancer (17).

Perhaps, challenges of cervical cancer screening in developing countries include: limited access to health services and labs, no screening programs, limited or non-existent awareness among populations and health workers, limited or no access to diagnostics and laboratories, poor referral and follow up etc. Analysis of population-based surveys indicates that coverage of cervical cancer screening in developing countries is on average 19%, compared to 63% in developed countries (18).

Visual Inspection with Acetic Acid (VIA) is an evidence-based and affordable alternative approach for cervical cancer screening in low-resource Studies have reported VIA sensitivity for detecting precancerous lesions comparable to or greater than cervical cytology, while requiring fewer resources and feasible to carry out in low level health facilities (ACCP, 2009). In addition, VIA provides immediate results, thus promoting linkage of screening with treatment. This "see and treat" method ensures adherence to treatment soon after diagnosis, and reduces the risk that women will get lost in the referral system. VIA combined with cryotherapy (freezing of precancerous lesions of the cervix), ideally in a single visit approach (SVA), is an effective and efficient strategy for secondary prevention of cervical cancer in low-resource settings, and can be conducted by competent clinicians and nurses (ACCP, 2007) (11).

VIA screening combined with access to cryotherapy was piloted in Ethiopia by the FMOH in collaboration with Pathfinder1. The service was introduced in 2009 as a single-visit approach to cervical cancer prevention integrated into a comprehensive care package for people living with HIV at 14 Hospitals The service was subsequently initiated in eleven additional health facilities (clinics of the Family Guidance Association of Ethiopia (FGAE), military hospitals, and some other facilities) making the service available in a total of 25 health institutions (11).

Several barriers to cancer screening have been reported; these include a lack of awareness of the importance of screening, inadequate access to healthcare, aversion to the discomforts of screening, fear of finding cancer and logistic barriers such as having to take time off work for screening. (20).

Most women present with advanced stages of cervical cancer with poor prognosis (22, 23). The major factor associated with low cervical cancer screening are, inadequate knowledge about the disease process and client's negative attitude towards the procedure. Besides, Poor knowledge about cervical cancer, and lack of awareness of available screening methods have been identified as the most important factors hindering the use of available cervical cancer screening services (20). Much of the recent research identify low levels of knowledge, is believed, to contribute low rates of screening uptake in the populations (30).

Although cervical cancer is preventable and early screening might decrease the mortality associated with it, most challenges faced by the patients and health providers can be affected early detection practices care (24).

In low-resource settings, screening achieves the greatest impact for the lowest cost when it is targeted to women between the ages of 30 and 49(26).

There are various dimensions of factors which affect cervical cancer screening, but little is known about factors associated with cervical cancer screening among women 30 years and above in Woliso town,

Therefore, this study aimed to identify which factors affect cervical cancer screening among women 30 years and above in Woliso town.

1.3. Significance of the study

Cervical cancer is public health priority in Ethiopia as there is high prevalence of cervical cancer and related mortality and morbidity. Emerging research suggests that gynecologic health care including cervical cancer screening is underutilized by women in general in Ethiopia. Despite low coverage of screening and high prevalence of the disease there are only limited bodies of researches that elucidate why women population in general was not utilize the service. It is also extremely hard to find studies which depict the factors that influence women not to utilize the screening service, even though those groups are at higher risk (27).

So, this study aimed to get a better understanding of the perception and barriers that prevent women in Woliso town south west Showa zone, Oromia region Ethiopia from getting cervical cancer screening.

The finding of this study provides information regarding the knowledge and practices of women which can make them susceptible to cervical cancer or prevent detection of the disease at an early stage by utilizing screening service.

2. Literature Review

2.1. Cervical Cancer

Globally, cervical cancer is second to breast cancer as the commonest female cancer but in the developing countries, it is the leading cause of gynecological cancer related morbidity and mortality. An estimated 500,000 new cases and 250,000 deaths occur worldwide annually with vast majority (80%) of these in developing countries (10).

Cervical cancer remains a public health challenge as it is the second commonest cancer in women worldwide. Africa at the moment shared the largest burden of the disease. About 530,000 new cases are diagnosed annually worldwide with over 85 percent presenting with advanced disease when curative intervention is not feasible in developing countries that are mostly in Africa and more than 274,000 deaths have been estimated annually to be attributable to the disease. The age specific incidence ranges from 25 to 30/100,000 with a mean value of 28.5/ 100,000. The peak age incidence is about 4th to 6th decades of life (28).

Eastern Africa cervical cancer is 34.5 per 100,000 as first and the second in Africa 25.2 among the highest in the world and is more than three times the rates in Europe and North America. Absence of effective screening programs to identify precancerous conditions, and inadequate attention to women's health are the possible factors for the observed higher incidence rate of cervical cancer in these developing countries. In Ethiopia (2005), a report from a retrospective review of biopsy results has revealed that cervical cancer is the common prevalent malignancy in women living in the country (29).

2.2. Risks Factors of Cervical Cancer

A study done in Yemen in 2012 reported that, HPV infection (42.3%) as a cause of cervical cancer. Vaginal bleeding (77.2%), pelvic pain (43.9%), menstrual disturbances (35.1%) were the commonest symptoms Screening (59%) and HPV vaccine (18%) were methods reported for prevention of cervical cancer (30)

A study done in England shows that Although there was some awareness of the sexual behavioral risk factors for cervical cancer (e.g. „Having many sexual partners" – 20%), very few people were able to name HPV as the main cause (1%), and the second most commonly mentioned factor was heredity, which is not considered to be a risk factor for cervical cancer.

Fewer than 10% of women were able to recall smoking as a risk factor in this unprompted format (24).

A study in Uganda reported that, persistent infection with high risk HPV is the most important risk factor for cervical cancer. HPV is transmitted sexually, so women who have had multiple partners or a high risk partner or who began having intercourse at an early age are more at risk for HPV infection than others. Not every woman infected with HPV will develop cervical cancer, however, research indicates that women with HPV who smoke, have used birth control pills for more than 5 years, or have a weakened immune system have a greater chance of developing cervical cancer (30, 31).

A facility-based cross-sectional study which was conducted in Bhopal, India shows that, knowledge regarding the early symptoms of cervical cancer was limited as 64% (n = 256) of the total participants were not aware of even a single symptom. Furthermore, there was little knowledge about the risk factors as only 39% (156) were aware of at least a single risk factor. About (34.5%) which is one-third of the total participant women had heard of cervical cancer screening (32).

A cross sectional study in Tanzania reported that the risk factors to acquire carcinoma of the cervix were known by 50% of the respondents. The most common risk factor mentioned was multiple sexual partners. This finding is different from the finding in a study done in Ilala Municipality, Dare salaam where the most common mentioned risk factors were early marriage and multiparty. In a Niger survey, twenty-two percent of the respondents could not list any risk factor for cervical carcinoma, while in a study done in Ghana, the commonly mentioned risk factor by half of the respondents was multiple sexual partners, similarly to what was found in my study. The knowledge on risk factors is an important element in the prevention of cervical carcinoma. Knowing the risk factors can make someone avoid them and hence prevent herself from acquiring the disease. Knowledge on risk factors was poor in this study and hence education on this important part with respect to prevention should be provided (18).

2.3. Perceived barriers to cervical cancer screening

From study in Zimbabwe barriers to accessing cervical cancer screening were identified and included the following: (1) lacked knowledge about cervical screening tests and cervical

screening, (2) most females lacked access to cervical screening, (3) most females could not afford the cost of cervical screening because of lack of health insurance, (4) most females had no access to cervical screening because it was not offered at their nearest health center, even at a 6-week postnatal examination, and (6) some females did not believe in their risk for cervical cancer because it was not in their family history (33).

Most of the women found in Arbaminch town felt that they did not believe that they were susceptible to cervical cancer, and that this might affect whether a woman felt it necessary to be screened When probed, two women said that they had never been sexually active and so thought that they did not need to attend for screening, and seven cited other reasons, including lack of understanding of the need to attend screening, hearing others‟ negative stories about the test, and embarrassment (34). Fear of the test was cited as an obstacle to some women, even if they appreciated the need for screening, perceived as a painful instrument. Cancer was not only described as being rare, but also as stigmatized. Few women remarked that cancer evoked secrecy; in some cases, being associated with other stigmatized illnesses. Fear of certain death from cancer lead women to avoid the service. A few women talked about potential shame if diagnosed with cervical cancer as a barrier to attending screening among others. A 36 years old woman mentioned: "…even if the women develop the disease, they kept secret saying their disease other than cervical cancer (34).

2.3.1. Knowledge about Signs and symptoms:

A study done in Tanzania regarding sign and symptoms revealed that Knowledge on symptoms was also poor. Almost half of the respondents didn't know the symptoms for carcinoma of the cervix. But vaginal bleeding was the commonly mentioned symptom among study participants. This finding is similar to the finding in a study done in Ilala Dare salaam (18).

A study in the Democratic People's Republic of Korea shows that almost all respondents know about cervical cancer. The majority of the participants responds that cervical cancer is the most common cancer of the reproductive tract (77%), that all women are at risk (81%), and that the majority of cervical cancer develop through a series of gradual, well-defined precancerous lesions (78%) and more than half of them knew about cervical cancer symptoms. Also most respondents know that CC is preceded by dysplasia, which can be treated to avoid progression

towards cancer. However, approximately half of the study population considered that HPV infection and dysplasia are generally asymptomatic (35).

The most common symptom of cervical cancer identified was blood stained vaginal discharge (53.3%), followed by post-coital bleeding (46%), painful coitus (43.1%) and post-menopausal bleeding (38%). Only 19% and 9.5% identified pelvic pain and inter-menstrual bleeding as symptoms (35).

2.3.2. Awareness on cervical cancer and cervical cancer screening

On awareness of cervical cancer, most of the participants stated that they have never heard about cervical cancer. Only a few women said they had heard about it as a terrible disease and one that often result in huge stress and physical suffering. A 25-year-old married woman responds as: "I heard from radio that the cancer affects the opening of the womb or …the entire uterus" This statement shows even those that have heard about did not have accurate information about the disease. When they were asked about the source of information mass media (television/radio) was the predominant source. Few respondents also knew someone who has cervical cancer. Most of the respondents did not know any symptom (34).

An assessment of women's knowledge of cervical screening was considered important as up to 92% of those dying from this form of cancer have never been tested. It has been noted that some women lack the knowledge about Pap smear tests and its indications. Many women do not have a clear understanding of the meaning of an abnormal smear or the concept of pre-cancerous changes and many believe that the purpose of the Pap smear test is to detect cancer (36).

A study done in India revealed that there are several barriers to cervical cancer screening uptake for women in low resource areas like India that include-low level of awareness and knowledge of risk factors and early signs and symptoms of disease, prevention services, stigma and misconceptions about female cancer and gynecological diseases, socioeconomic limitations, and an overall lack of national cervical cancer screening guidelines and policies (32).

2.3.3. Attitude towards cervical cancer and screening

Analysis of data from a study conducted in Netherlands showed that women's beliefs about cervical screening and attendance are the best predictors of screening uptake (37). A study from Nigeria suggested that only 6% of all women interviewed reported ever receiving cervical

Cytology testing. The main reasons for not screening were lack of awareness of cytology testing (48%), dislike of pelvic examinations (47%) and absence of symptoms (17% rural, 31% urban. Long distance travel to service delivery points was also reported as a barrier by rural women (62%) (38).

A study done in Brazil among women revealed that the main reasons women reported for not having undergone a smear test before were embarrassment and fear of pain. In fact, 76% of the respondents cited either one as an obstacle to undergo a first smear test. Interestingly, among women who had already under- gone a Pap smear test, a significant proportion still reported embarrassment (58%) and nearly half of them (48%) indeed felt pain during the gynecological exam for the Pap test. These issues should be targeted in programs to increase compliance to future cervical screening among women in this population (39).

A cross sectional study that was conducted in Congo Kinshasa Most of the respondents (80.0%) was willing to consult a medical doctor in case of abnormal bleeding between menstruations. In addition, 56.7% told the interviewers that they were willing to regularly consult a physician for screening of cervical cancer. Eighty percent were willing to have a smear test and 95% were in favor of the installation of a national screening program. Although the majority wanted to be screened, only 31.7% was prepared to pay for it. On bivariate analysis, four factors were significantly associated with a sufficient score on attitude: age, place of residence, education and religion (40).

2.3.4. Cervical cancer screening utilization

The barriers to cervical cancer screening were; fear of pain, lack of time, cost of test and the fear that some- thing wrong will be detected. In other studies, factors that hindered screening were; fear of pain, shyness, cost and also the thought that they were healthy and didn't have a reason to be screened. These findings suggest the importance of providing information about the value of cervical cancer screening to abate anxiety associated with these barriers. It is only by such actions, that practice of screening for cervical cancer can be in- creased with a concomitant decrease in cervical cancer morbidity and mortality in our community (3, 26).

A study conducted in India on women who were non-compliant with cervical cancer screening revealed that most of them have lower literacy rate compared to those who were compliant.

Most common reasons cited for non-attendance were being reluctant to go for test in the absence of any symptoms and apprehension to have a test that detects cancer. For those women who were willing to go, the most common hurdles were inability to leave household chores, pre-occupation with family problems and lack of approval from husbands (32).

Most invasive cancers of the cervix can be prevented if women have cervical cancer screening regularly. The general recommendation for screening is each woman in high-risk target demographic groups is screened once before any woman is screened a second time. In this study only 13.7% of the women had heard about screening and only 14.7% of them had the test. This finding is consistent with the study in Nigeria where 73.0% of the women were not aware of the test and only 5.2% had the test (41).

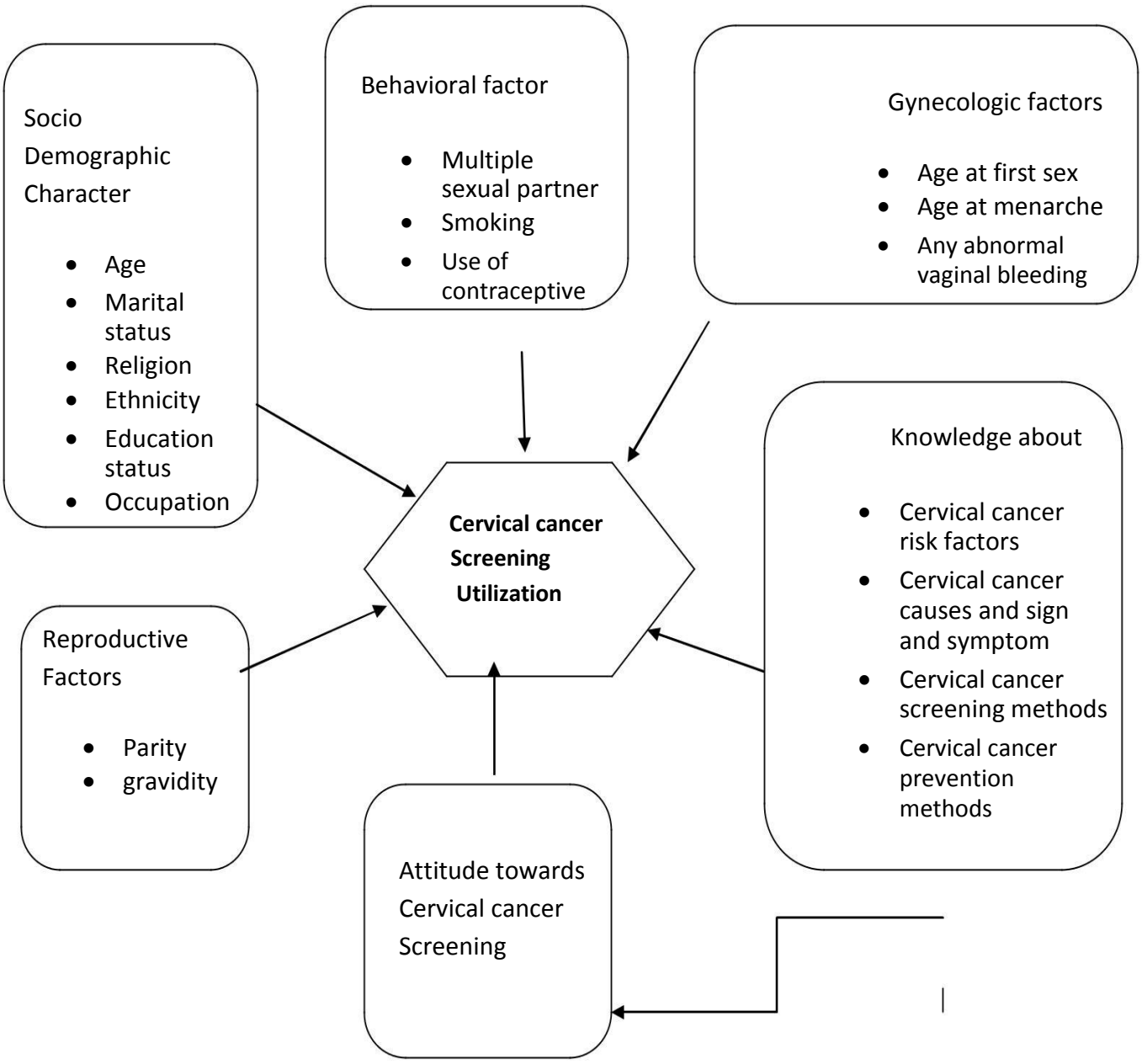


Figure 1: Conceptual framework for factors associated with cervical cancer screening utilization in woliso town which is derived from similar literatures (19, 42).

3. Objectives

3.1. General objective

To asses cervical cancer screening utilization and associated factors among women 30 years and above in Woliso town, south west Showa zone, Oromia region, Ethiopia, 2017.

3.2. Specific Objectives

- To determine magnitude of cervical cancer screening utilization
- To identify factors associated with utilization of cervical cancer screening utilization and associated factors among women 30 years and above in Woliso town.

4. Methodology

4.1. Study area and period

The study was conducted in Woliso town, south west Showa Zone. Woliso Woreda is one of the 14 Woredas in South West Showa Zone in Oromia region located 114 kilometers west of capital city of Ethiopia, Addis Ababa. Woliso Woreda has total population of 171,287, among them 85,175 are males and 85,975 are females (43). Currently Woliso town is serving as being the center of South West Showa zone of Oromia region. There are one health post, one health center and one referral hospital. Cervical cancer screening service using VIA is done in S't Luke hospitals and in the selected health centers in the town under the health office. There are also five private medium clinics and one none governmental reproductive health clinic in the town. The altitude of Woliso above sea level is about 1900 meter with annual rain fall of1200 ml and temperature ranges from18-27 0_C. At the moment the town of Woliso has area coverage of 2,225.25 hectares and a population 53,000. The study was conducted from March 01 to March 30, 2017.

4.2. Study design

Community based cross sectional study design was conducted.

4.3. Source population and Study population

4.3.1. Source population

The source population were all women (aged 30 and above years) in Woliso town.

4.3.2. Study population

The study subjects were systematically selected women aged 30 years and above in selected kebeles of Woliso town who had been living in Woliso town for at least 6 months.

4.3.3. Sampling unit

Household were taken as sampling unit.

4.4 Sample size determination

The sample size for the study was determined using single population proportion formula by considering proportion of cervical cancer screening utilization among child bearing Women (p) = 11 % (57), z=standard score corresponding 95% confidence interval 1.96 and d =marginal error corresponding (d) 5%. n= sample size required is calculated as:

$$n = \frac{(z)^2\, p(1-p)}{d^2}$$

$$n = \frac{(1.96)^2\, 0.11(0.89)}{(0.05)^2}$$

$$n = 151$$

After using design effect 1.5 and adding 10% non-response rate the final sample size become 250.

4.5. Sampling techniques and procedures

Multi stage sampling technique was used. Kebele was the primary sampling unit and households were the secondary sampling unit. Three kebeles out of the total 07 kebeles were selected using simple random sampling method. The total sample size was allocated to each selected kebeles using proportional allocation. Then after systematic random sampling method was used to select households for an interview. The first household was selected by lottery method and then every k interval was included in the study. A woman 30 and above age group were interviewed from the selected households and if there were more than one woman in the selected household lottery method was used to select only one

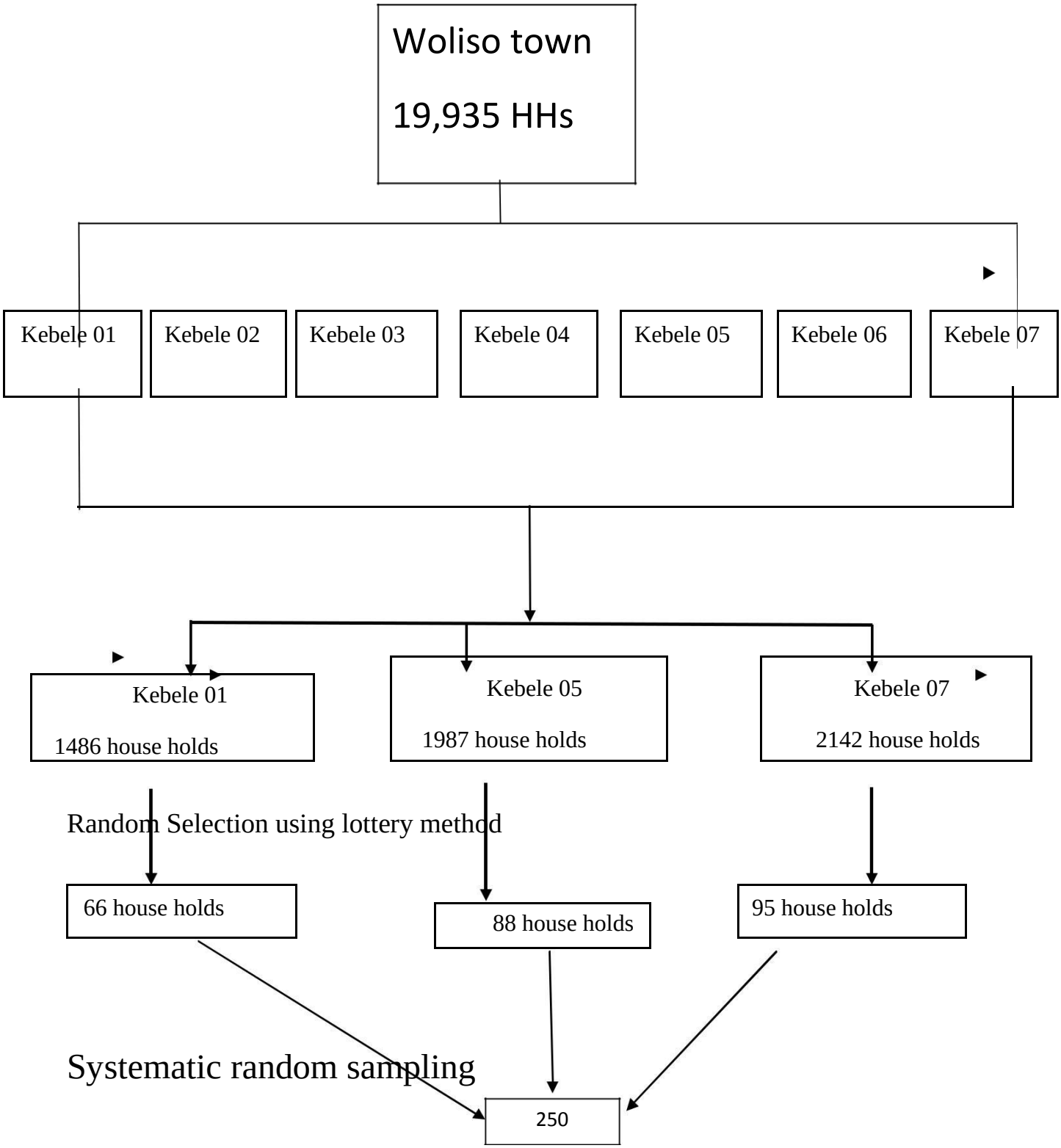


Figure 2: Schematic presentation of the sampling procedure

4.6. Data collection procedures

4.6.1. Variables

4.6.1.1. Dependent variable

The outcome variable was woman's history of having at least one lifetime cervical cancer screening

4.6.1.2. Independent variables

Socio demographic characteristics; age, residence, marital status, educational status, ethnicity, income and religion, obstetric and gynecological histories age at first sex, age at menarche, age at first marriage. Knowledge about cervical cancer screening and attitude towards cervical screening.

4.6.2 Data collection tool

Data was collected using prepared interviewer administered questionnaire which is adopted from WHO and similar literatures (19, 44). The structured questionnaire was initially developed in English after reviewing existing literatures and it was translated into local language and then backward translation to English to check its consistency. The questionnaire includes socio-demographic characteristics, obstetric and gynecological histories, knowledge about cervical cancer screening, attitude towards cervical screening and practice of cervical cancer screening. Five trained diploma nurses collected the data and were supervised by 2 health officers.

4.7. Data quality control

Pre-test was conducted in 5% of sample size among women aged 30 and above in the study area from randomly selected kebeles which were not included in the study before the initiation of the main study. Findings and experiences from the pre-test were utilized in modifying the data collection tool. Training was given to five diploma data collectors and two Bsc supervisors for two days regarding the aim of the study, data collection tool and procedures going through the questionnaires question by question. Supervision was conducted by the Principal Investigator and Supervisors. All completed data collection form was examined for completeness and Consistency during data collection period. Supervisor and principal investigator reviewed each questionnaire daily and check for completeness and further edition was made.

4.8. Data Processing and Analysis

Data was entered using Epi-data version 3.1 and was exported to and analyzed using SPSS version 20 statistical software. Frequencies, percent, tables and graphs were used to describe the study population in relation to relevant variables. In addition, summary statistics such as mean and standard deviation were computed. Binary Logistic regression was used to assess the association between independent variables and dependent variable. Variables with a p-value less than 0.2 in the bivariate analysis were included in the multivariable logistic regression analysis. Multivariable logistic regression analysis was done to control for possible confounding variable. Statistically Significance was determined using crude and adjusted odds ratios with 95% confidence intervals and p-value of less than 0.05.

4.9. Operational definitions

Cervical cancer: A growth or abnormal proliferation of cells on the opening of the uterus (5).

Cancer screening: A procedure that is performed to identify the presence of abnormal cell in particular tissue.

Cervical cancer screening utilization: those who ever had got cervical cancer screening using VIA test once in a life time considered as utilizing screening service weather regularly or not. And those who never screened were regarded as not utilized the service (8, 9).

Knowledge assessment

Eight items composite score of the knowledge to measure the knowledge level of respondents regarding (one point each for knowledge questions: heard about cervical cancer, heard about cervical cancer screening, leading cause of death , Know symptoms of cervical cancer, Cervical cancer is preventable, knows factor for cervical cancer, cervical cancer is communicable, knows health institution in woliso that do cervical cancer screening) The cumulative mean score of knowledge of participants about cervical cancer was estimated using mean score

Based on this,

Those who had scored less than the mean was considered to have **poor knowledge** and

Those who had scored greater than or equal to the mean value were considered as having **good knowledge.**

Attitude assessment

Six questions measuring attitude were asked for the respondents and the mean score was calculated to use as a cut point for those respondent attitude as positive and negative.

Positive attitude: refers to for those scored the mean and above regarding attitude questions

Negative attitude: refers to for those scored below the mean regarding attitude questions

Perceived benefit of cervical cancer screening assessment

Perceived benefit of cervical cancer screening was assessed by 4 questions (Precancerous cervical screening beneficial to my wellbeing, Pre cervical screening is good for early detection, cervical cancer screening can find changes in the Cervix before they become cancer, if Cervical Changes are found early from Cervical Cancer screening, and they are easily curable)

Receptive perception: refers to those scored the mean and above regarding perception questions

Non-receptive perception: refers to those scored below the mean regarding perception questions

4.10. Ethical consideration

The proposal was approved by research ethics committee of Addis Ababa University, School of Public Health, and the College of Health Science Institutional Ethical Review Board. Official support letter was obtained and given to Woliso town Administration to seek essential cooperation. Verbal and written informed consent was secured from the study participants and the participants were assured that the information will be kept confidential and secured. Name of the study participants was not included on the questionnaire. In addition, participants were

allowed to interrupt the interview on desire and at the time of data collection. The data collector gave advice and health education to the participants at the end if they had poor knowledge.

4.11. Dissemination of results

The results of the study will be presented in Addis Ababa University School of Public Health as partial fulfillment of master's degree in public health. In addition to this, the final result document will be communicated to Woliso Woreda Health Office, Regional Health Bureau and other responsible bodies working in the area. Beside to this, the findings of the study will be sent to peer reviewed journals for publication.

5. Results

5.1. Socio demographic characteristics

A total of 250 subjects who were aged 30 and above were interviewed resulting in a response rate of 100%. The median age of the study participants was 36 years with (IQR=8). Nearly two-third, of the respondents were Oromo 169 (67.6%) by ethnicity followed by Amhara comprising 46 (18.4). More than half, one hundred thirty-six (54.4%) of the respondents were Orthodox Christian by religion while 26 (10.4%) of them were Muslims.

Half of the respondents 129(51.6 %) attended secondary and above education. While Fifty-eight (23.2%) of the respondents had no formal education. one hundred fifteen (46%) were housewives. One hundred nine (52.6 %) of the respondents earned monthly income less than 2000 Ethiopian birr (Table 1).

Table 1: Socio-demographic characteristic of women who are >30 years in woliso town south west Showa zone, Oromia, Ethiopia, 2017. (N=250)

Variable	Frequency	Percent (%)
Age		
30-39	184	73.6
40-49	53	21.2
50 and above	13	5.2
Ethnicity		
Oromo	169	67.6
Amhara	46	18.4
Gurage	19	7.6
Tigre	16	6.4
Religion		
Orthodox	136	54.4
Muslim	26	10.4
Protestant	73	29.2
Catholic	3	1.2
Other	12	4.8
Marital status		
Married	194	77.6
Single	23	9.2
Divorced	19	7.6
Widowed	14	5.6
Educational status		
Unable to read and write	30	12.0
Read and write only	28	11.2
Primary (1-8)	63	25.2
Secondary (9-12)	68	27.2
College and above	61	24.4
Occupational status		
Farmer	11	4.4
House wife	115	46.0
Government Employ	77	30.8
Merchant	34	13.6
other	13	5.2
Monthly income		
<1000	52	25.5
1000-2000	57	27.1
2000-3000	55	21.5
≥3000	86	25.9

5.2. Utilization of cervical cancer screening

The magnitude of cervical cancer screening utilization in woliso town among women 30 years and above was 44 (17.60%) with 95 %CI of (13.2-23.1) (Figure 1). Among women who did not screened for cervical cancer, the main reason for not screening was their feeling of being healthy100(40.0%) followed by painful procedure 51 (20.4%)and I have no time 40(16.0) (Figure2)

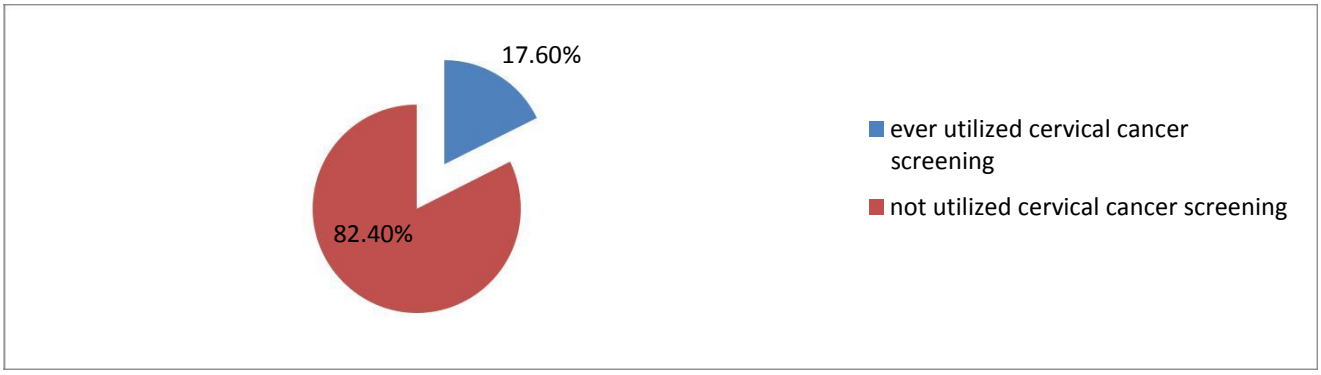
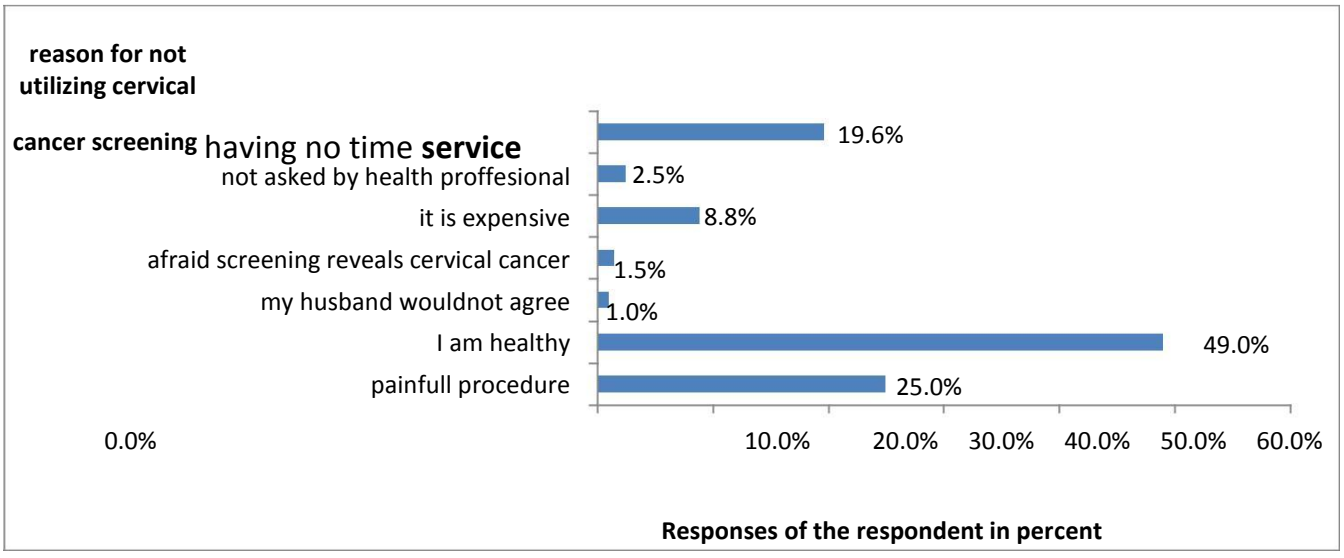


Figure 3: Magnitude of cervical cancer screening utilization in woliso town, south west Showa zone Ethiopia, 2017



Since multiple response percentage greater than 100%

Figure 4: Reason not utilizing cervical cancer screening service in woliso town, south west showa zone Ethiopia, 2017.

5.3 Reproductive health characteristics

Thirty-three women (13.2%) had sexual intercourse for the first time at the age of six- teen or below. Majority of the women, 225 (90%) have given birth at least once while 158 (63.2%) had a history of combined oral contraceptive use. Seventy-one (28.4%) participants admitted that they had history of multiple sexual partners during the last three years. two hundred fifteen (86.0%) of participants had HIV test and 2(0.8%) of them were found to be positive. Five (2.0%) and 27(10.8%) participants had history of smoking and STD respectively (Table 2).

Table 2: Reproductive Health characteristics of study subjects, woliso town, south west Showa zone, Oromia Ethiopia, 2017

Variables	Frequency	percent
Age at first sexual intercourse		
less than 16	33	13.2
greater than, 16	212	84.8
Ever given birth		
Yes	225	90.0
No	25	10.0
Multiple sexual partner		
Yes	71	28.4
No	179	71.6
Ever had history of STI		
Yes	27	10.8
No	223	89.2
Ever used contraceptive		
Yes	158	63.2
No	92	36.8
Family history of cervical cancer		
Yes	12	4.8
No	238	95.2
Ever tested for HIV		
Yes	215	86.0
No	35	14.0
HIV sero status		
positive	2	0.8
negative	212	84.8
Ever had history of smoking		
Yes	5	2.0
No	245	98.0

5.4 Health facility and health provider related characteristics

161(65.7%) of the respondents had visited health institution once and more within a year. While 39(15.9%) visited health institution once and more within two years. While 47(19.2%) of the respondents had no health institution visit.74 (30.2%) of the respondents knew a person with cervical cancer. Out of the respondents 131 (53.5%) were informed by health professional about cervical cancer and cervical cancer screening. (Tabe3)

Table 3*:* Health facility and health provider related characteristics of the study subjects in woliso town south West Showa zone, Oromia, Ethiopia, 2017

Variable		Frequency	Percent
visit health institution Once a year or more			
	Yes	161	65.7
	No	84	34.3
visit health institution Once every two year or more			
	Yes	39	15.9
	No	206	84.1
have no health institution visit			
	Yes	47	19.2
	No	198	80.8
your husband knows about cervical cancer			
	Yes	66	26.9
	No	179	73.1
know a person with cervical cancer			
	Yes	74	30.2
	No	171	69.8
health professional tells you about pre cervical cancer screening			
	Yes	131	53.5
	No	114	46.5

5.5. Knowledge about cervical cancer

Lower than 36% of the respondents had good knowledge about cervical cancer and cervical cervical cancer screening. Out of the total respondents only 36(14.4%) and35 (14.0%) heard about cervical cancer and its screening respectively. Only thirteen participants (5.2%) knew that cervical cancer is the leading cause of death in women. Even though majority of the respondents 166 (66.4%) didn't know cervical cancer is communicable 183(73.2%), they knew that cervical cancer is preventable. One Hundred forty-two (56.8%) of participants knew about sign and symptoms of cervical cancer but only 75(30%) knew factors for cervical cancer. Majority of the participants 206(82.6%) knew the presence of institution in woliso town that do cervical cancer screening.

Table 4*:* knowledge, about cervical cancer and cervical cancer screening among the study subjects in woliso town south West showa zone, Oromia, Ethiopia, 2017.

Variable		Frequency	Percent
Knowledge about cervical cancer and screening			
	good knowledge	89	35.6
	poor knowledge	161	64.4
Ever heard about cervical cancer			
	Yes	36	14.4
	No	214	85.6
Ever heard about cervical cancer screening			
	Yes	35	14.0
	No	215	86.0
Cervical cancer leading caused death			
	Yes	13	5.2
	No	201	80.4
Know symptoms of cervical cancer			
	Yes	142	56.8
	No	108	43.2
Cervical cancer is preventable			
	Yes	183	73.2
	No	67	26.8
knows factor for cervical cancer			
	Yes	75	30.0
	No	175	70.0
cervical cancer is communicable			
	Yes	84	33.6
	No	166	66.4
knows health institution in woliso that do cervical cancer Screening			
	Yes	206	82.4
	No	44	17.6

5.6. Attitude about cervical cancer screening

Out of the total respondents, 109(43.6%) had good attitude score regarding attitude question. Two hundred twenty-two (88.0%) of the participants believed that cervical cancer is a major health problem and 194(77.6) also believed that cervical cancer is a killer if not detected early. More than half 137(54.3) of the participants agreed that cervical cancer is curable.

Table 5: attitude of cervical cancer among the study subjects in woliso town south West showa zone, Oromia, Ethiopia, 2017.

Variable		Frequency	Percent
Attitude about cervical cancer screening			
	Positive attitude	109	43.6
	Negative attitude	141	56.4
Cervical cancer is a killer if not detected early			
	Agree	194	77.6
	Disagree	56	22.4
Cervical cancer is a major health problem			
	Agree	220	88.0
	Disagree	30	12.0
Screening can detect treatable, precancerous lesions before they Progress to cancer.			
	Agree	140	56.0
	Disagree	110	44.0
Cervical cancer develops slowly and is Preventable.			
	Agree	159	63.6
	Disagree	91	36.4
A screening test that is positive is not mean a woman will die			
	Agree	157	62.8
	Disagree	93	37.2
Do you think cervical cancer screening in general, can be cured			
	Agree	137	54.8
	Disagree	113	45.2

5.7. Perceived Benefit of cervical cancer screening

Out of the four questions that set to measure perceived benefit of cancer screening, 105(42.0%) of the respondents had receptive perception about the benefit of cervical cancer screening.

Out of the total participants, 224(89.6%) of them perceived that screening is good for early detection of cervical cancer and Two hundred ten (84.0%) of participant responded that cervical cancer screening is beneficial to my wellbeing.

151(60.4%) of the respondents perceived that if cervical changes are found early from cervical cancer screening, they are easily curable and 141(56.4%0 of the respondents perceived that cervical cancer screening can find changes in the cervix before they become cancer.

Table 6: perceived benefit of cervical cancer screening among the study subjects in woliso town south West showa zone, Oromia, Ethiopia, 2017.

Variable		Frequency	Percent
Perception about the benefit of cervical cancer screening			
	Receptive	105	42.0
	None receptive	145	58.0
Precancerous cervical screening beneficial to my wellbeing			
	Yes	210	84.0
	No	40	16.0
Pre cervical screening is good for early detection			
	Yes	224	89.6
	No	26	10.4
Cervical Cancer Screening Can Find Changes In The Cervix Before they Become Cancer			
	Yes	141	56.4
	No	109	43.6
If Cervical Changes Are Found Early From Cervical Cancer Screening, They Are Easily Curable			
	Yes	151	60.4
	No	99	39.6

5.8. Factors associated with cervical cancer screening utilization

In bivariate logistic regression analysis, educational status, monthly income, ever usage of contraceptive, visited health institution once or more per year health professional tells you about cervical cancer screening, knowledge about cervical cancer, attitude about cervical cancer screening and perception about the benefit of cervical cancer screening had a significant association with cervical cancer screening utilization. Those with p-value ≤ 0.2 in the bivariate logistic regression analysis and adjusted in **table 7** were entered into multi-variable logistic regression analysis to Control the effect of confounding factors.

From the multivariate logistic regression analysis, good knowledge about cervical cancer, positive attitude about cervical cancer screening, those who were told by health professionals about cervical cancer screening and good perception about the benefit of cervical cancer screening showed a significant association with cervical cancer screening utilization when adjusted for all other variables.

The odd of cervical cancer screening utilization is 4 times more likely among women who had good knowledge about cervical cancer and screening utilization than those who had not good knowledge about the screening utilization [AOR: 3.84, 95% CI: (1.49-9.87)]. Similarly, the odd of cervical cancer screening utilization is 4 times more likely among women who had positive attitude than those who had negative attitude about cervical cancer screening utilization [AOR: 3.86,95%CI: (1.29-11.54)]. And also, the odd of cervical cancer screening utilization is 6 times more likely among participants who were informed about cervical cancer screening by health professional than those who were not informed [AOR: 6.17, (95%CI: (1.63-23.35)]. likewise, the odd of cervical cancer screening utilization is 5 times more likely among women who perceived that cervical cancer screening has benefit than those who did not perceive that cervical cancer screening has benefit [AOR: 4.92, 95% CI: (1.74-13.87)]. (**Table 7**).

Table 7*:* Bivariate and multivariate analysis for factors associated with cervical cancer screening utilization among women age >30 in Woliso town. south west showa zone, Oromia, Ethiopia

Variable	Cervical cancer screening utilization		COR(95%CI)	AOR(95%CI)
	Yes	No		
Educational Status				
Read and write only	3	25	1.68(0.26-10.89)	4.79(0.43-54.01)
Primary (1-8)	6	57	1.48(.28-7.77)	0.94(0.12-7.19)
Secondary (9-12)	14	54	3.63(0.77-17.11)	2.08(0.31-13.82)
College and above	19	42	6.33(1.37-29.35)*	1.72(0.26-11.20)
Unable to read and write	2	28	1	1
Average monthly income				
1000-2000	9	48	3.06(0.781-12.003)	4.47 (0.73-27.25)
2000-3000	11	44	4.08(1.07-15.59)*	2.37(0.43-12.98)
<1000	3	49	1	1
Ever used contraceptive				
Yes	37	121	3.71(1.58-8.72*	0.44(0.15-1.29)
No	7	85	1	1
Family history of cervical cancer				
Yes	4	8	2.48(0.71-8.62)	2.10(0.35-12.71)
No	40	198	1	1
visit health institution Once a year or more				
Yes	39	123	5.263(1.99-13.91)*	2.11(0.65-6.86)
No	5	83	1	1
health professional tells you about pre cervical cancer screening				
Yes	40	93	11.94(4.12-34.59)*	6.17(1.63-23.35)**
No	4	11	1	1
Knowledge about cervical cancer				
good knowledge score	33	56	8.04 (3.80-16.98)*	3.59(1.40-9.14)**
not good knowledge score	11	150	1	1
Attitude about cervical cancer screening				
positive attitude	71	38	12.04(4.86-29.85*)	3.86(1.29-11.54)**
Negative attitude	6	135	1	1
Perception about the benefit of cervical cancer screening				
Receptive	35	70	7.56(3.44-16.60)*	4.92(1.74-13.87)**
None receptive	9	136	1	1

2017.

* Statistical significance in COR ******Statistical significance in AOR, **CI** confidence interval, **COR** crude odds ratio, **AOR** adjusted odds ratio.

6. Discussion

This study aimed to show cervical cancer screening utilization and associated factors in woliso town. About only one sixth (17.60%) of women who were participated in this study were utilized cervical cancer screening service. Factors associated with low utilization were poor knowledge about cervical cancer, having negative attitude about cervical cancer screening, having no perception about the benefit of cervical cancer screening and not told by health professional about the screening practice.

Cervical cancer screening utilization observed in this study was 17.60 % which was consistent with a study done in Haddya zone, Hosanna 14.2%(45), Mekele 19.8%(14). The study was also consistent with studies conducted in African countries; in Tanzania 22.6%(18), and Kenya 17.5%(46). However, this finding is higher than the studies done in Addis Ababa 12.79(20) which could be explained as in out of Addis Ababa local health extension program strength helped the community to be aware of the availability of the service that might contribute for the utilization of the service more. And also since in the study area the availability of St Luke hospital which is known in Ethiopia as one of the contemporary hospital providing the comprehensive cervical cancer screening service also might be one reason, North West Ethiopia, Dessie 11%(25), Gondar 10%(4), neighboring African countries Uganda 4.8%(31), western Kenya 11%(47) and in Asian country India 12%(9). This might be due to difference in study area, period, and study participants.

In this study, the odd of cervical cancer screening is 6 times more likely among women who were informed by health professional about cervical cancer and cervical cancer screening than those who were not informed by health professional (AOR=6.17,95% CI= (1.63-23.35)). which is similar with a study done in Uganda (8) and United States of America (26). this is possibly explained as Women who frequently visited health institution may have a good opportunity to discuss with health professional on different health concerns among them reproductive health components will take the highest share of which the client gets information about cervical cancer and cervical cancer screening that initiates her to utilize the service.

In this study, it revealed that the odd of cervical cancer screening is 4 times more likely among women who had good knowledge about cervical cancer and cervical cancer screening than those who had poor knowledge (AOR = 3.59, 95%CI = (1.40-9.14)). This can be explained as the awareness level of the women towards cervical cancer and cervical cancer screening might enable to analyze the risk and benefits of utilizing the service, then the intention to utilize the service increases simultaneously. Which is consistent with a study done in Addis Ababa (12), Mekele (3) Hadya (2) Uganda (8), Tanzania (4) and Botswana (48) but lower than a study done in Hossana town (27)

The study showed that, the odd of cervical cancer screening is 4 times more likely among Women who have positive attitude towards cervical cancer screening than those who have negative attitude (AOR= 3.86, 95%CI = (1.29-11.54)). Which might be explained as when women's knowledge towards cervical cancer screening is good their attitude towards utilizing the service increases and the vice versa.

This was observed in other studies that negative attitude towards screening service had a strong association with poor knowledge (27). And the other explanation could be also attitude of a woman could incorporate different beliefs originated from customs, traditions and culters, some unique beliefs were common among specific cultural groups. For example, Hispanic women noted some body-focused notions and believed that childbirth, menses, sex, and stress play a role in one's susceptibility to cervical cancer, this could affect the utilization of cervical cancer screening (49). Similar finding was obtained in a study conducted in Adama (44) while a study done in UK showed majority women had negative attitude towards cervical cancer screening (36).

This study indicated that the odd of cervical cancer screening is 5 times more likely among women Having good perception about the benefit of cervical cancer screening (perceived benefit of cervical cancer screening) which is **(**AOR=4.92, 95%CI ((1.74-13.87)). This can be explained accordingly by the health belief model, Health Belief model which predicts that those with perceived benefits are more likely to take preventive actions, than those with no perceived benefits or low perceived benefits. Thus, it most likely that the low uptake of cervical cancer screening among women in woliso town could be attributed to this factors which is perceived benefits of cervical cancer.

Even if a person perceived personal susceptibility to a serious health condition (perceived treat), whether this perception leads to behavior change it will be influenced by the person's belief regarding the perceived benefits of the various available actions for reducing the threat. A meta-analysis concluded that cervical cancer screening offers substantial protective benefits to women, especially when screening is done for women aged 30 years and above (50). However, the finding is higher than the study done in Ghana (34). which might be due to study setting and educational differences between the study participants.

7. Strength and limitation of the study

7.1. Strength

The strengths of this study are it is a community based cross sectional design. And satisfactory response rates among participants. To promote willingness to respond to gender-specific issues, the interviewers were mostly female. Bilingual interviewers spoke the same language as the participants and also who can speak Amharic in addition are assigned, thus promoting under-standing about the study purpose and specific interview questions.

7.2. Limitation

There were also social undesirability concerns due to some sensitive questions such as report on lifetime sex partners, age at first sex which increased the chance for misclassification of an outcome and therefore, it's likely to impact on estimated crude and adjusted odds ratios. And also cervical cancer screening status was self-reported and could have been affected by social desirability. However, potential bias was minimized by asking respondents to provide dates when they accessed the service and duration since they last accessed it, which ensured reliability and validity of the data.

As the study was community based cross–sectional study with analytic component, it didn't represent any causal relationship. So interpretation of the result should be cautious.

Finally, we did not collect information in all possible confounders for the association between out- come and exposures. This gave us little chance to control for other possible confounders that could explain utilization of cervical cancer screening services

Although the study had a smaller sample size (N = 250), there was low uptake of cervical cancer screening (17.60%), which affected the statistical tests and led to some wide confidence intervals.

8. Conclusion and Recommendation

8.1. Conclusion

Generally cervical cancer screening utilization is low in woliso town, south west showa zone. Knowledge about cervical cancer, attitude about cervical cancer screening, health professionals information provisions about cervical cancer screening and perceived benefit about cervical cancer screening were some of the associated factors identified.

8.2. Recommendation

The ministry of health up to the local government health service authority should strengthen awareness creation, behavioral change programs in order to increase the knowledge of the residents about cervical cancer and cervical cancer screening to motivate those women in order to utilize the screening service.

Health professionals should incorporate cervical cancer and cervical cancer screening utilization in their day to day health education program. Specifically, health professionals in Maternity service delivery encouraged to strengthen one to one health information delivery on cervical cancer and cervical cancer screening utilization particularly its benefit.

Health extension workers must work in coordination with health professional to deliver awareness about cervical cancer screening and screening service utilization for the community in their home visit schedule and also in community conversation.

Further study should be conducted at the community and national level to asses cervical cancer screening utilization and associated factors.

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ANNEX II: Study Questionnaire

Hello! My name is ----------I am one of the members of the research team, which has the objectives of Cervical cancer screening utilization and associated factors among women 30 years and above in Woliso town, south west Showa zone, Oromia region, Ethiopia. As the study is directly related to women who are 30 years and above, and you may be one of the women who will be selected to participate in this study, therefore you are kindly requested to participate in this study and provide the information required from you. Your participation in this study is completely on voluntary basis and you have the right to refuse from participating. Your responses will be kept confidential and there will be no way of linking your individual responses to the final results of the study findings. We would like to inform you that the responses that you provide to the questions are very essential, not only, for the successful accomplishment of this study, but also for producing relevant information which will be helpful improving the cervical cancer screening service utilization.

Are you willing to participate in this study to give your responses based on the questionnaire?

Yes ----------signature---------- No

Name and Signature of the data collector _____

Name and signature of the supervisor _____

Date interview_____

Code Number _____

Address:

Ketema _____ Kebeles _____House Number_____

Date of interview_____

Time interview started_____ time interview completed_____

Name of data collector_____ signature_____

Name of supervisor _____ signature

Questionnaire code _____ ID-code of informant_____

Section 1: Socio-demographic characteristics of the mother				
S.NO	**Question**	**Alternative answers**	**Skipping pattern**	**Code**
101	Age in years	_____		
102	Ethnicity	**1.** Oromo 2. Amhara 3. Gurage 4. Tigre 88. Other (specify)_____		
103	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 88. Others (Specify)		
104	Marital Status	1. Married 2. Single 3. Divorced **4.** Widowed		
105	Educational Status	1. Unable to read and write 2. Read and write only 3. Primary (1-8) **4.** Secondary (9-12) **5.** College and above		
106	Occupational Status	1. Farmer 2. House wife 3. Government Employ 4. Merchant 88. Other (Specify)		
107	Average monthly Income	_____ Ethiopian Birr		

Section 2: Reproductive History

201	Age at first sexual intercourse	_____		
202	Have you given birth?	1. Yes 2. No		
203	If your answer for Q202yes how many	_____		
204	Have you ever tested for HIV	1. Yes 2. No		
205	If yes for Q204,are you willing to tell me your HIV test result	1. Yes 2. No		
206	If Yes, what was the HIV result?	1. Positive 2. Negative		
207	Lifetime history of STD	1. Yes 2. No		
208	Family history of cervical cancer	1. Yes 2. No		
209	Life time number of sexual partners	_____		
210	Did you use contraceptive	1. Yes 2. No		
211	If yes for Q210, what is the type of contraceptive use	1. oral contraceptive 2. Inject able 3. Implant 4. Intrauterine Device 88. Others specify _____		
212	How many years use contraceptive if you used 1	_____		
213	Ever history of smoking	Yes----------1 No----------2	**Section-3**	
214	If you smoke how many years and how many packs per day	_____		

Section 3: Knowledge related questions about cervical cancer

301	Have you ever heard about cervical cancer	1. Yes 2. No	
302	If yes Q 301, from where you get the information	1. Radio 2. TV 3. Health profession 4. Relatives and friends 88. Other specify _____	
303	Cervical cancer is a leading cause of death in women	1. Yes 2. No	
305	Have you heard any information about cervical Cancer screening?	1. Yes 2. No	
306	If yes for Q 305, from where you get the information	1. Radio 2. TV 3. Health professionals 4. Relatives and friends 88. Others specify _____	
307	How frequent is screening for precancerous cervical Lesion done?	1. Once every year 2. Once every three years 3. Once every 5 years	
308	Do you know symptoms of cervical cancer?	1. Yes 2. No	
309	Which one among these if you said yes	1. Vaginal bleeding 2. Post coital bleeding 3. Foul smelling vaginal discharge 4. Painful coitus 5. I don‟t know 88. Other specify _____	
310	Cervical cancer is communicable	1. Yes 2. No	
311	Do you know any health institution in Woliso which provides cervical screening	1. Yes 2. No	
312	Cervical cancer is preventable	1. Yes 2. No	
313	Do you know factors that causes cervical cancer	1. Yes 2. No	
314	If yes for Q no.313, what are they	1. Family history 2. Multiple sexual partner 3. Smoking 4. STI infections 5. OCP use 6. Early sexual inter course 88. Others specify _____ 99. Don‟t know	

Section 4 perception (perceived susceptibility, severity, benefits and barriers)				
	Perception About Susceptibility to Cervical Cancer;			
401	Any reproductive age woman is susceptible to develop cervical cancer.	I agree ----------1 I disagree----------2		
402	Like any women, I am susceptible to develop cervical cancer.	I agree ----------1 I disagree----------2		
403	Cervical Cancer Only Happens To Women Who Are Above The Age of 50 Years.	I agree ----------1 I disagree----------2		
	Perception About Seriousness or Severity of Cervical Cancer;			
405	Having Cervical Cancer Will Make A Woman‟s Life Difficulty.	I agree ----------1 I disagree----------2		
406	Cervical Cancer Is Not as Serious as Other Types of Cancers.	I agreeing ----------1 I disagree----------2		
407	Death Resulting from Cervical Cancer Is Rare.	I agree ----------1 I disagree----------2		
408	Cervical cancers can be severe and may be hazardous to my well being	I agree ----------1 I disagree----------2		
	Perceived Benefits of Cervical Cancer Screening;			
409	Precancerous cervical screening to may be beneficial my wellbeing	I agree ----------1 I disagree----------2		
410	Prcervical screening is good for early detection	I agree ----------1 I disagree----------2		
411	Cervical Cancer Screening Can Find Changes in The Cervix Before They Become Cancer.	I agree ----------1 I disagree----------2		
412	If Cervical Changes Are Found Early from Cervical Cancer Screening, They Are Easily Curable.	I agree ----------1 I disagree----------2		
	Perceived Barriers To Cervical Cancer Screening;			
413	Even if you wanted to get a screening, there is/are barrier (perceivedbarriers	Yes----------1 No----------2		

414	if your answer yes foe no.Q 411 , which of the following may prevent you to do so.	Unavailability of H. facilities ----------1 Unavailability of skilled professionals in HF---------- 2 I cannot pay for services---------- 3 The procedure is pain full---------- 4 The procedure is time taking--------- 5 Worry about privacy---------- 6 Fear of the result---------- 7 Don"t know where to go ---------- 8 Fear of viginal exam---------- 9 Lack of paretner approval---------- 10 Lack of information about cervical cancer screening----------11 Attitude of health provider---------- 12 I am not at risk---------- 13		
	Section 5 : Attitude for cervical cancer			
501	Cervical cancer is a killer if not detected early	I agree ---------- 1 I disagree---------- 2		
502	Do you think that you can have cervical cancer but not symptoms	I agree ---------- 1 I disagree---------- 2		
503	Via screening prevent from cervical cancer	I agree ---------- 1 I disagree---------- 2		
504	Cervical cancer is a major health problem	I agree ---------- 1 I disagree---------- 2		
505	Screening can detect treatable, precancerous lesions before they Progress to cancer.	I agree ---------- 1 I disagree---------- 2		
506	Cervical cancer develops slowly and is Preventable.	I agree ---------- 1 I disagree---------- 2		
507	A screening test that is positive is not mean a woman will die	I agree ---------- 1 I disagree---------- 2		
508	Do you think cervical cancer screening in general, can	I agree ---------- 1 I disagree---------- 2		
	Section 6 : Health facility, health provider and other questions			
601	How often do you visit	Once a year or more---------- 1		

	health institution?	Once every two year or more year------- 2 Ever no visit---------- 3		
602	If you Visit health institution, did your health provider speak to you about precervical cancer screening?	Yes---------- 1 No---------- 2		
603	Do you know a person with cervical cancer?	Yes---------- 1 No---------- 2		
604	Does your husband know about cervical cancer	Yes---------- 1 No---------- 2		
	Section 7: screening practice			
701	Have you ever screened for cancer of the cervix?	Yes---------- 1 No---------- 2		
702	If yes for Q 701 When was the last time you screened?	within the past 3 years---------- 1 More than 3 years ago.---------- 2		
703	What was the indication if you screened	Self-initiated---------- 1 offered by the health Professionals--------- Partner initiation---------- 3 Know someone screened---- 4 other(specify) ---------- 5		
704	If no, why?	It may be painful------ 1 I am healthy---------- 2 My husband would not agree------- 3 .I am afraid a screening test would reveal cervical cancer---------- 4 It is expensive---------- 5 I have not information about cervical cc ------ 6 I am not asked by health provider----- 7 No time---------- 8 Other, please specify---------- 9		

Thank you for your participation and your time.

ክፍልአንድ: መረጃመስጫወረቀት
Amharic questionnaires

በወሊሶ ከተማ ነዋሪዎች አድሜአቸው 30 እና ከዚያ በላይ የሆኑ ሴቶችን የማህፀን በር ነቀርሳ ምርመራ አጠቃቀም ሁኔታ እና ተያያዥ ተግዳሮቶች ዙሪያ ለመገምገም የተዘጋጀ መጠይቅ

ክፍል 1፡የስምምነትማረጋገጫቅፅ

ጤናይስጥልኝ፣እኔ_____በአዲስአበባ ዩኒቨርስቲ የህብረተሰብ ጤና አጠባበቅ ተማሪ ነኝ፡፡ይህ ጥናትና ምርምር በወሊሶ ከተማ ነዋሪዎች አድሜአቸው 30 እና ከዚያ በላይ የሆኑ ሴቶችን የማህፀን በር ነቀርሳ ምርመራ አጠቃቀም ሁኔታ እና ተያያዥ ተግዳሮቶች ዙሪያ ለመገምገም የተዘጋጀ መጠይቅ ነው፡፡ ከዚህ ጥናትም የሚገኘው ውጤት ለባለሙያዎች በማስረጃ የተደገፈ እቅድ ለማቀድ እና በዚሁ ዙሪያ ተመሳሳይ ጥናት ለማከናወን ለሚፈልጉ አጥኚዎች እንደመንደርደሪያነት ያገለግላል ተብሎ ይታሰባል፡፡

ይህንን በፍቃደኝነት ላይ የተመሰረተ መጠይቅ ለመሙላት 15 ደቂቃ የሚፈጅብዎት ሲሆን ለመሳተፍ ካልፈጉ አይገደዱም፣እንዲሁም መሳተፍ ከጀመሩ በኋላ በማንኛውም ጊዜ አቋርጠው መውጣት ይችላሉ፡፡

ለጥያቄዎቹ የሚሰጥዋቸው መልሶች በሙሉ ሚስጥራዊነታቸው የተጠበቀ ይሆናል፡፡ስለዚህ ስለማንነትዎ እና ስለሚሰጥዋቸው መልሶች በምስጢር መጠበቅ ምንም አይነት ስጋት አይግባዎ፡፡የእርስዎ በዚህ ጥናት ውስጥ ተሳታፊ መሆንሆ ጥናቱ

በተሳካ ሁኔታ መጠናቀቅ ብቻ ሳይሆን ለማህፀን በር ነቀርሳ -ምርመራ ዘዴ አገልግሎት መሻሻል ከፍተኛ አስተዋፅ ስለሚኖረው በዚህ ጥናት ውስጥ እንዲሳተፉ በአክብሮት እጠይቃለሁ፡፡

ለተጨማሪ መረጃ በስልክቁጥር 0913486677 ወይም ኢሜይል eliabrhammikel@gmail.com ሊያገኙኝ ይችላለሉ፡፡በጥናቱ ለመሳተፍ ፈቃደኛ ኖት?

እሳተፋለሁ _____

አልሳተፍም _____

ለመሳተፍ ፍቃደኛ ከሆኑ ወደ ቀጣዮቹ ጥያቄዎች ይለፉ፡፡ለመሳተፍ ፈቃደኛ ካልሆኑ ደግሞ አመስግነው ጥያቄውን ያቋርጡ

አልሳተፍም _____

ክፍል 1. የጠያቂዉ አጠቃላይ ማህበራዊ መረጃ የተመለከተ መጠይቅ

ተ.ቁ	ጥያቄዎች	መልስ	እለፍ	ኮድ
101	እድሜ			
102	ብሔር	1. ኦሮሞ 2. አማራ 3. ጉራጌ 4. ትግሬ 5. ሌላ (ግለጹ)----------		
103	ኃይማኖት	1. ኦርቶዶክስ 2. እስልምና 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ (ግለጹ)----------		
104	የጋብቻ ሁኔታ	1. ያገባ 2. ያላገባ 3. የተፋታ 4. በሞት የተለየ		
105	የትምህርት ደረጃ	1. ማንበብና መፃፍ የማይችል 2. ማንበብና መፃፍ የሚችል 3. ከ1ኛ-8ኛ ክፍል 4. ከ9ኛ-12ኛ ክፍል 5. ኮሌጅና ከዚያ በላይ		
106	የሥራ ሁኔታ	1. ግብርና 2. የቤት እመቤት 3. የመንግስት ሰራተኛ 4. ነጋዴ 5. ሌላ ካለ ይገለጽ----------		
107	አማካይ ወርኃዊ ገቢ	---------- ብር		
ክፍል 2፡የስነ ተዋልዶ ጤናን የተመለከተ መጠይቅ				
201	ግብረ ስጋ ግንኙነት ለመጀመሪያ ግዜ ማድረግ ሲጀመሩ እድሜዎት ስንት ነበር?	----------		
202	ልጅ ወልደዋል	1. አዎ 2. አይደለም		
203	ለጥያቄ ቁጥር 202 መልሱ አዎ ከሆነ ስንት ልጆች ወልደዋል	----------		

204	የኤች አይ ቪ ኤድስ ምርመራ አድርገዉ ያዉቃሉ	1. አዎ 2. አይደለም		
205	ለጥያቄ ቁጥር 204 መልሱ አዎ ከሆነ የምርመራ ዉጤተዎን ሊነግሩን ይችላሉ	1. አዎ 2. አይደለም		
206	ለጥያቄ ቁጥር 204 መልሱ አዎ ከሆነ ዉጤቱ ምን ነበረ	1. ፖዘቲቭ 2. ኔጌቲቭ		
207	እስከ አሁን ድረስ የአባላዘር በሽታ ታመዉ ያዉቃሉ	1. አዎ 2. አይደለም		
208	ከቤተሰብዎ መካከል የማህጸን በር ካንሰር ያለበት ሰዉ አለ	1. አዎ 2. የለም		
209	እስከ አሁን ድረስ ከስንት ሰዎች ጋር የግብረ ስጋ ግንኙነት አድርገዋል	----------		
210	የእርግዝና መከላከያ ይጠቀማሉ	1. አዎ 2. አይደለም		
211	ለጥያቄ ቁጥር 210 መልሰዎ አዎ ከሆነ የትኛዉን የእርግዝና መከላከያ መንገድ ነዉ የሚጠቀሙት	1. በእየቀኑ የሚዋጥ እንክብል 2. በመርፌ የሚሰጠዉን 3. በክንድ የሚቀመጠዉን 4. ሉፕ 5. ሌላ ካለ ----------		
212	ከተራ ቁጥር 211. 1ኛዉን መንገድ የሚጠቀሙ ከሆነ ለምን ያህል አመት ተጠቅመዉታል	----------		
213	ሲጋራ አጭሰዉ ያዉቃሉ	1. አዎ 2. አይደለም		
214	ለጥያቄ ቁጥር 213 አዎ ከሆነ መልሰዎ ለምን ያህል አመት በቀን ምን ያህል ፓኬት	----------		
ክፍል 3 ፡ ሥለ ማህፀን በርነቀርሳ ግንዛቤ የተመለከተ መጠይቅ				
301	ስለ ማህፀን በር ነቀርሳ ሰምተዉ ያዎቃሉ	1. አዎ 2. አይደለም		
302	ለጥያቄ ቁጥር 301 አዎ ከሆነ መልሰዎ ከየት ነዉ የሰሙት	1. ከሬድዮ 2. ከቴሌቭዥን 3. ከጤና ባለሙያ 4. ከጓደኞች		
303	የማህጸን ጫፍ ነቀርሳ በሴቶች	1. አዎ		

	ላይ ገዳይ ከሆኑት በሽታዎች ግንባር ቀደሙ ነዉ	2. አይደለም		
304	ስለ ማህጸን በር ነቀርሳ ምርመራ ሰምተዉ ያዉቃሉ	1. አዎ 2. አይደለም		
305	ለጥያቄ ቁጥር 304 አዎ ከሆነ መልሰዎ የሰሙት ከየት ነዉ	1. ከሬድዮ 2. ከቴሌቭዥን 3. ከጤና ባለሙያ 4. ከጓደኞች		
306	የማህፀን በር ቅድመ ነቀርሳ ምርመራ በስንት ጊዜ ይደረጋል	1. በአመት አንድ ጊዜ 2. በ3 አመት አንድ ጊዜ 3. በ5 አመት አንድ ጊዜ		
307	የማህፀን በር ነቀርሳ ምክንያቶችን ያዉቃሉ	1. አዎ 2. አላዉቅም		
308	ለጥያቄ ቁጥር 307 አዎ ከሆነ መልሰዎ ከእነዚህ ምልክቶች የትኞቹን ያዉቃሉ	1. ከማህጸን የሚወጣ ደም 2. ከግብረ ስጋ ግንኙነት በኃላ የሚኖር ደም 3. ሽታ ያለዉ ማህጸን ፈሳሽ 4. ከግብረ ስጋ ግንኙነት በኃላ ሚኖር ህመም 5. አላዉቅም 6. ሌላ ካለ ይገለጽ----------		
309	የማህፀን በር ቅደመ ነቀርሳ ተላላፊ ነዉ	1. አዎ 2. አይደለም		
310	በወሊሶ ከተማ ዉስጥ የማህጸን በር ምርመራ ሚያደርግ ተቋም ያዉቃሉ	1. አዎ 2. አይደለም		
311	የማህፀን በር ካንሰር መከላከል ይቻላል	1. አዎ 2. አይደለም		
312	የማህፀን በር ነቀርሳ ሊያመጡ የሚችሉ ምክንያቶችን ያዉቃሉ	1. አዎ 2. አላዉቅም		
ክፍል 4፡በቀላሉስለመጠቃት፣ስለህምመክብደት፡ስለምርመራውጥቅም፡እና፡ስለተግዳሮቶቹያለውየመረዳትሁኔታ				
	በማህፀንበርነቀርሳበቀላሉስለመጠቃትያለውንግንዛቤየሚመለከትመጠይቅ			
401	በማንኛዉም የመዉለድ እድሜ ክልል ያሉ ሴቶች ለማህፀን በር ነቀርሳ የተጋለጡ ናቸዉ	1. እስማማለሁ 2. አልስማማም		
402	እንደማንኛዉም ሴቶች እርሰዎ	1. እስማማለሁ		

	ለማህፀን በር ነቀርሳ የተጋለጡ ነዎት	2. አልስማማም		
403	የማህፀን በር ነቀርሳ የሚያጋጥመዉ እድሜያቸዉ	1. እስማማለሁ 2. አልስማማም		
ስለማህፀንበርነቀርሳአሳሳቢነትወይምክብደትያለውየመረዳትሁኔታ				
404	የማህጸን በር ነቀርሳ መሆኑ የህይወት እንቅስቃሴን ከባድ ያደርገዋል	1. እስማማለሁ 2. አልስማማም		
405	የማህጸን በር ነቀርሳ እንደሌሎቹ ነቀርሳዎች ከባድ አይደለም	1. እስማማለሁ 2. አልስማማም		
406	በማህጸን በር ነቀርሳ ምክንያት የሚመጣ ሞት ትንሽ ነዉ	1. እስማማለሁ 2. አልስማማም		
407	በማህጸን በር ነቀርሳ ከባድና በህይወቴ ላይ አደጋ ያስከትላል	1. እስማማለሁ 2. አልስማማም		
ስለማህፀንበርነቀርሳምርመራጠቀሜታያለውየመረዳትሁኔታ				
408	የማህፀን በር ቅድመ ነቀርሳ ምርመራ ለጤንነት ጠቀሜታ አለዉ	1. እስማማለሁ 2. አልስማማም		
409	የማህፀን በር ቅድመ ነቀርሳ ቀድሞ ማወቅ ጠቀሜታ አለዉ	1. እስማማለሁ 2. አልስማማም		
410	የማህፀን በር ነቀርሳ ምርመራ ከጅምሩ ያሉትን ለዉጦች ነቀርሳ ከመሆናቸዉ በፊት ይለያል	1. እስማማለሁ 2. አልስማማም		
411	የማህፀን በር ነቀርሳ ምርመራ ወቅት ነቀርሳ ደረጃ ያልደረሱ ለዉጦች በቀላሉ ይድናሉ	1. እስማማለሁ 2. አልስማማም		

ስለማህፀንበርነቀርሳምርመራተግዳሮቶች				
412	ለማህፀን በር ነቀርሳ ምርመራ ማድግ ቢፈልጉ እንኳን የሚያግደዎት ነገር አለ	1. አዎ 2. የለም		
413	ለጥያቄ ቁጥር 412 መልሰዎ አዎ ከሆነ ከተዘረዘሩት ምክንያቶች የትኞቹ ናቸዉ	1. የጤና ተቋም ያለመኖር 2. የሰለጠነ ባለሙያ ያለመኖር 3. መክፈል ስለማልችል 4. ምርመራዉ ስለሚያም 5. ምርመራዉ ጊዜ ስለሚፈጅ 6. Worry about privacy 7. ዉጤቱን ስለምፈራ 8. የት እንደሚሔድ ስለማለዉቅ 9. በማህፀን የሚደረግ ምርመራ ስለምፈራ 10. ባለቤቴ ስለማይፈቅድልኝ 11. ስለማህፀን በር ነቀርሳ ምርመራ መረጃዉ ስለሌለኝ 12. የጤና ባለሙያዉ አመለካከት 13. ስለማይመለከተኝ		
ክፍል 5፡- ስለማህፀን በር ነቀርሳ አመለካከት የሚመለከት መጠይቅ				
501	የማህፀን በር ነቀርሳ ቶሎ ካልተገኘ ገዳይ ነዉ	1. እስማማለሁ 2. አልስማማም		
502	የማህጸን በር ነቀርሳ ኖሮ ምልክቶቹ ላይታዩ ይችላሉ ብለሽ ታስቢያለሽ	1. እስማማለሁ 2. አልስማማም		
503	**VIA** የሚባለዉ ምርመራ የማህጸን በር ነቀርሳን ይከላከላል	1. እስማማለሁ 2. አልስማማም		
504	የማህፀን በር ነቀርሳ ዋና የጤና ችግር ነዉ	1. እስማማለሁ 2. አልስማማም		
505	የማህፀን በር ነቀርሳ ምርመራ በቀላሉ የሚድኑና ነቀርሳ ደረጃ ያደረሱ ( ) ነቀርሳ ደረጃ ከመድረሳቸዉ በፊት ይለያል	1. እስማማለሁ 2. አልስማማም		
506	የማህፀን በር ነቀርሳ በሂደት	1. እስማማለሁ		

	የሚመጣና መከላከል የሚቻል ነዉ	2. አልስማማም		
507	የምርመራ ዉጤት ፖዘቲቭ ማለት አንዲት ሴት ትሞታለች ማለት አይደለም	1. እስማማለሁ 2. አልስማማም		
508	በአጠቃላይ የማህፀን ነቀርሳ ይድናል ብለዉ ያስባሉ	1. እስማማለሁ 2. አልስማማም		
ክፍል 6 ፡ስለጤና ተቋም የጤና ባለሙያና ሌሎች ተያያዥ ጉዳዮች የሚመለከት መጠይቅ				
601	ወደ ጤና ተቋም በምን ያህል ጊዜ ልዩነት ይሔዳሉ	1. በአመት አንድ ጊዜ ወይም ከዚያ በላይ 2. በሁለት አመት አንድ ጊዜ ወይም ከዚያ በላይ 3. ሄጄ አላዉቅም		
602	ወደ ጤና ተቋም ሔደዉ የሚያዉቁ ከሆነ የጤና ባለሙያ ስለ ማህፀን በር ካንሰር(ነቀርሳ)ቅድመ ምርመራ አናግሮዎት ያዉቃል	1. አዎ 2. አይደለም		
603	በማህጸን በር ነቀርሳ የተያዘ ሰዉ ያዉቃሉ	1. አዎ 2. አላዉቅም		
604	ባለቤተዎ ስለ ማህፀን በር ነቀርሳ ያዉቃል	1. አዎ 2. አያዉቅም 3. አላዉቅም		
ክፍል 7፡ ሥለ ማህፀን በር ነቀርሳ ምርመራ ተግባር የሚመለከት መጠይቅ				
701	ለማህፀን በር ነቀርሳ ምርመራ አድርገዉ ያዉቃሉ	1. አዎ 2. አላዉቅም		
702	ለጥያቄ ቁጥር 701 ምላሽዎ አዎ ከሆነ መቼ ነዉ ለመጨረሻ ጊዜ ምርመራዉን ያካሄዱት	1. ባለፉት 3 አመታት ጊዜ ዉስጥ 2. ከ3 አመት በፊት		
703	ተመርምረዉ የሚያዉቁ ከሆነ እንዲመረመሩ ያደረገዎት	1. በራስ ተነሳሽነት 2. በጤና ባለሙያ አነሳሽነት 3. በጓደኛ አነሳሽነት 4. የተመረመረ ሰዉ ስለማሳወቅ		

		5. ሌላ ካለ ይገለጽ----------		
704	ተመርምረዉ የማያዉቁ ከሆነ ለምን	1. ህመም ሥላለዉ 2. ጤነኛ ስለሆንኩ 3. ባለቤቴ ስለማይስማማ 4. አለብሽ የሚባለዉን ዉጤት ስለምፈራ 5. ዉድ ስለሆነ 6. ስለ ማህፀን በር ነቀርሳ ምርመራ መረጃዉ የለኝም 7. ጤና ባለሙያ ስላልነገረኝ 8. ጊዜ ስሌለለኝ 9. ሌላ ካለ ይገለጽ----------		

ጊዜዎትን ስለሰጡኝ እና በቃለ መጠይቁ ስለተሳተፉ አመሰግናለሁ።

Declaration:

I, the under signed, declared that this is my original work and has not presented in this or any other University and all sources of materials used for this thesis have been duly acknowledged.

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