

**Utilization of cervical carcinoma screening service and associated factors among currently married women in Arba Minch Town, Gamo Gofa Zone, Southern Ethiopia**



**A research project submitted to department of Population and Family Health, College of Public Health and Medical Sciences, Jimma University; in partial fulfilment for the requirement for masters of public health (MPH), in Reproductive Health speciality**

**Jimma University, Ethiopia  
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**Utilization of cervical carcinoma screening service and associated factors  
among currently married women in Arba Minch Town, Gamo Gofa Zone,  
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## Abstract

**Background-** Cervical cancer is major public health problem worldwide, worsening in the developing world including Sub-Saharan Africa. And cervical cancer screening has been consistently shown to be effective in reducing the incidence rate and mortality from cervical cancer. But very few of eligible women undergo cervical cancer screening. Therefore knowing their practice on screening for cervical premalignant lesions is the key to prevention of overt carcinoma of the cervix.

**Objective:** To assess the level of utilization of screening service for cervical cancer among currently married women in Arba Minch Town

**Methods:** Community based cross sectional study design was conducted among randomly selected 680 currently married women. Data was collected from February 20-March 2, 2015 by using structured interviewer administered questionnaire and analysed using SPSS Version .21.Descriptive statistics was used to describe the status of study population and multi-variable logistic regression was used to see predictors of screening service utilization.

**Result;** Among 236, (47.4%) were knowledgeable. Among 643, 53.8% have positive attitude towards cervical cancer screening. Of 224, only 38(5.9%) of the respondents get screened. The most common reason (60.02%) for non-utilization was being healthy. The odds of ever screening for CA was 60 times higher for those who agree on Severity to cervical cancer than those who dis-agree Severity to cervical cancer [AOR=60.85(13.662, 271)]. The odds of ever screening was 0.210 times lower for those who had <5children than those who had >=5 children [AOR= 0.210(0.062, 0.707)]. The odds of ever screening was 3.599 times higher for those who with average monthly income>=1170 than those who with average monthly income <1170 (AOR=3.599(1.223, 10.593).The odds of ever screening was 8.181 times higher for those who age >=30 yrs. than those who age <30 yrs. [AOR= 8.181(3.107, 21.539)].

**Conclusion and Recommendations;** only few of the respondents get screened with majority mentioned for non-screening as being healthy. Among variables age of the respondent, perceived severity to cervical cancer, parity & average income were independently associated with ever screening for cervical cancer screening. There is a need for creating awareness & intensifying health education provision on cervical cancer screening in the town & need to influence perceptions by targeting the women.

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## Abbreviations/Acronyms

<b>AA</b>	Addis Ababa
<b>ANC</b>	Antenatal care
<b>FMOH</b>	Federal minister of health
<b>FP</b>	Family planning
<b>HIV</b>	Human immune deficiency virus
<b>HPV</b>	Human Papilloma Virus
<b>HSV II</b>	Herpes Simplex Virus type II,
<b>KAP</b>	Knowledge, attitude and practice
<b>LEEP</b>	Loop electrosurgical excision procedure
<b>LETZ</b>	Loop excision of the transformation zone
<b>OR</b>	Odds ratio
<b>Pap</b>	Papa-Nikolaou
<b>PHC</b>	Primary health-care
<b>PI</b>	Principal Investigator
<b>PNC</b>	Post natal care
<b>RH</b>	Reproductive health
<b>ROC</b>	Reproductive organ cancer
<b>STI</b>	Sexual transmitted infection
<b>VIA</b>	Visual inspection with acetic acid
<b>WHO</b>	World Health Organization

## **Chapter one -Introduction**

### ***1.1 Background***

Cancer of the cervix is major cause of morbidity and mortality among women worldwide with estimated 500 000 new patients' diagnosed and over 250 000 deaths /yr. Greater than 80% of the world's new case and deaths occurred in the developing world including those in Sub- Saharan Africa, (1, 2). It also contributed around 250,000 deaths /year of the maternal deaths among the estimated 342,900 deaths in 2008/yr., (3).

It is deadly disease once it reaches its invasive stages, even though the progression of lesions to invasive cancer is slow (at most 10 years) & may vary depending on the overall health status of the affected woman. Most lesions are asymptomatic but can be detected by cervical screening as it is the only preventable cancer if detected at its early stages evidenced, (4, 5). So Secondary prevention of cervical cancer through screening and treatment of precancerous lesions of the cervix is associated with an overall reduction of morbidity and mortality due to cancer of cervix, (5, 6). For example, the introduction of the papanicolau smear during the late 1940's in the USA decreased the incidence of invasive cancer of the cervix by 70 %,( 7).

Denny suggests the following requirements for a successful screening program in low resource settings: availability of screening, diagnosis, and treatment in accessible clinics; low-cost, low-technology screening tests, wide-coverage of target population, appropriate programs for public awareness, and built-in mechanisms for evaluation of the programs. The two most widely studied alternative approaches to cervical cancer prevention are visual inspection (with acetic acid or Lugol's iodine) and HPV-DNA testing, (8).

Virtually in all developing countries, cytology-based services are confined to teaching hospitals or private laboratories in urban areas & delays in reporting cytology results make it less likely that test positive women ever receive their results, let alone treatment or follow-up. These are some of the barriers that prevent cytology-based screening program from being effective in developing countries, (9). Recent studies have demonstrated that visual inspection with acetic acid (VIA) is an alternative sensitive screening method. VIA is cheap and non-invasive, and can be done in a low level health facility like a health center. More importantly, VIA provides instant results, and those eligible for treatment can receive treatment of the precancerous lesions using cryotherapy on the same day and in the same health facility. This "see and treat" method ensures adherence to treatment soon after diagnosis, (10).

## ***1.2 problem statement***

Even if Cancer of the cervix is major problem worldwide it worsened in the developing world including those in Sub- Saharan Africa, (11,12). In Zimbabwe it accounts for 28.7% of all cancers accounting 80% of all reproductive system cancers, which responsible for about one third of all deaths due to cancer among women,(13). In Ghana estimated 3,038 Ghanaian women in 2008 have developed cervical cancer and more than 2,006 Ghanaian woman died because of cervical cancer, (14).

Eastern Africa also remains with high incidence and mortality from cervical cancer, (15). In Tanzania Crude incidence rate of cervical cancer was 40.6 per 100,000 women, (16). It was the also second most common cancer among women in Kenya in 2008, (17, 18).

In Ethiopia it was estimated that 20.9 million women in 2010 were at risk of developing cervical cancer and projected that the number of new cervical cancer cases will almost double by 2025 with Estimated 7,619 annual number of new cases and 6,081 deaths every year in 2010. And it accounted for 25.8% to 32% of all female malignancies, (19, 20).

In order to help low-resource countries like Ethiopia to improve cervical cancer screening rates, the WHO and other research agencies have evaluated and reported efficacy, effectiveness, specificity and sensitivity results of an alternative model of cervical cancer screening known as visual inspection,(21). But In sub-Saharan Africa, there are few organized efforts to ensure that women over the age of 30 years are screened,(22) & very few approximately 5% of eligible women undergo cytology-based screening in a 5-year period,(9). In West African, Less than 1% of women in four countries had ever been screened, (23).

In addition majority of cases in Sub- Saharan Africa (over 80%) were detected in late stages, which associated with low survival rates after surgery or radiotherapy. In addition, these treatment modalities may be lacking altogether, or too expensive and inaccessible for many women. And left untreated, invasive cervical cancer is almost always fatal, causing enormous pain and suffering for the individual and having significant adverse effects on the welfare of their families and communities, (24).

Evidence show success of cervical screening initiatives depend on high participation of the target population, which in turn is determined by the women's knowledge, perceptions, health orientations and other socio-cultural issues,(25). These KAP of cervical cancer screening also affected by factors including early marriage, early sexual practice, delivery of the first baby

before the age of 20, too many or too frequent childbirths, multiple sexual partners & low socio economic status,(26). Some results Show women with a history of screening had had higher awareness & attitude & also show women with perceived risk of cervical cancer were more likely to intend to have cervical cancer screening in the future,(27).

Several studies have showed poor knowledge of the disease in Africa. In Lagos, Nigeria only 4.3% of attendees in a maternal and child health clinic were found to be aware of cervical cancer. Similar in Kenya and Tanzania have confirmed very poor knowledge of the disease in patients, (28). Similarly Women have limited knowledge and a negative attitude towards cervical cancer and Pap smear screening which contributed to their non-participation in screening programs in Uganda, Botswana and Nigeria, (29). Women in Uganda Over 80% of women having advanced disease have attitude and practices towards Pap smear screening were negative, (30, 31).

Ethiopian government with the stakeholders increase the availability and accessibility of preventive and curative services at public health facility but attendance rate is very low. At the same time little is known about Ethiopian women's knowledge and beliefs about cervical cancer and screening & what factors affect KAP of CC screening. CC is a major health problem from the high prevalence of its risk factors, only 6.5% of all the respondents had ever get screening test in service area. A study has indicated that more than 50% of women 30 years or older had their first birth in their teens; 27% of women ages 20 to 49 years have had sexual intercourse by age 15 (64% by age 18) and that the median age at the first intercourse for women age 20 to 49 is 16, (13). Considering the prevalence of the risk factors for cancer of the cervix, the need for a cervical cancer screening program is evident. What is the problem, is it knowledge or attitude, what are the barriers making a low turnout for screening. Therefore, it is important to know reasons for women's nonparticipation in the screening programs. Assessment in any community is essential to any plan to promote health behavior in area.

## Chapter two- literature review

Cervical cancer is the commonest occurring cancer among women in sub-Saharan Africa, accounting for an estimated 20-25% of all new cancers among women. The age-adjusted incidence rate of cervical cancer in Ethiopia is 35.9 per 100,000 patients (6 folds of North America which was 7.7 per 100,000 patients) with 7619 annual number of new cases and 6081 deaths every year in 2010, (29).

There is ample evidence to suggest that screening is effective in reducing cervical cancer where it has been found that the rate of new cervical cancers has fallen between 30% and 78% in countries with organized screening programs, (25). And has reduced cancer incidence and deaths dramatically in industrialized countries; this has not been true in developing countries despite the greatest burden of cervical cancer.

Every woman should be screened at every opportunity of contact with a health professional, at first ante-natal clinic visit, family planning clinics, STI clinics and gynaecological clinics. For women who are sexually active, annual screening from age 18 to 35 years is advised; thereafter every 3 to 5 years provided the test results remain negative, (32). And success of cervical screening initiatives depends on high participation of the target population, which in turn is determined by the women's perceptions, health orientations and other socio-cultural issues, (25).

### *1. Utilization of cervical carcinoma screening service*

There is significant differences exist in terms of utilization of cervical carcinoma screening service in different country. A study showed less than 5% & 27.1% had got screened at least once in their life in Laos & Iran respectively, (39). Most common reason for having the test in the latter country was physicians' or other health workers' advise and for not having the test was no recommendation by health providers & lack of knowledge about Pap smear. Embarrassing, fear of the test result or economic problems mentioned by only 12 (4.2%) as the main barrier. Women with a history of Pap smear had had higher awareness and attitudes score, (33).

Study in Korea showed only 6% of participants had ever received a screening test. Among the reasons for not screening, 48% mentioned a lack of awareness of cervical cytology; 47% their dislike of pelvic examinations; 17% of rural and 31% of urban interviewees reported the absence of symptoms and 62% of rural and 0% of urban women mentioned travelling long distances to

service delivery points, (34).

Descriptive cross-sectional study in South Africa shows only 16 (9.8%) participants had had a Pap smear test. Among those who knew about the Pap smear test (n=136), 86 respondents did not have the test done mainly because of personal factors such as fear of the procedure, cultural or religious reasons, and were not ill (61.1%),(35).

A cross sectional study on Utilization of screening services for cancer of the cervix in Nigeria showed only 7% of the study population have ever screened for the disease. Reasons for non-utilization of services were; Ignorance, absence of screening centers, perceived non-necessity, faith in God, prohibitive cost, physician's non-recommendation among others, (36).

A cross sectional study in Kenya shows, 12.3% of participants had screened. In Ethiopia only 6.5% of all the respondents had ever had a Pap smear test. The reasons given for not having the test were: no gynecologic symptoms (41.2%); don't know the place where it was done (32.4%); wait till older (14.7%) and consider it was not important (11.8%). For those who had ever had the test, the indications for undergoing the test were doctor/nurse consultation (72.2%) and personal initiative (20.7%). Almost all the respondents were willing to undergo the screening test in the future, (37).

## ***2. Factors affecting utilization of screening service for cervical cancer***

A number of factors may affect a woman's ability and desire to participate in cervical cancer prevention programs. It is therefore essential that cervical cancer prevention efforts eliminate the most critical barriers that affect women's participation, as well as identify and foster conditions that support their use of services. Many women find it difficult to participate in cervical cancer screening services due to various factors such as, non-availability of screening services, fear of being diagnosed with cancer, coping with cancer and lack of knowledge and awareness about cervical cancer and screening services. There are risk factor known to affect screening of cervical cancer includes low level of awareness, women's knowledge, beliefs, attitudes towards cervical screening and cancer and Socio-demographic & cultural factors. All these factors contribute to inefficient testing, late diagnosis and late treatment. However, a common denominator of these factors is the level of awareness and attitude patients have about the diseases, (38).

## 2.1. Socio-demographic & cultural factors

Mini review showed risk factors known to increase the incidence of cervical cancer including early marriage (child marriage) and sexual practice, delivery of the first baby before the age of 20, too many or too frequent childbirths, multiple sexual partners, poor practice of personal hygiene, low socio economic status, Human Papilloma Virus, Herpes Simplex Virus type II, HIV positivity, use of oral contraceptive pill, smoking etc., (29).

A descriptive cross-sectional study in India shows the prevalence of factors like multiparty, early age of marriage, use of cloth during menstruation, use of condom and OCP, early age of first intercourse was 37.2%, 82%, 83.3%, 5.4%, 15.8% and 65.6% respectively. Regarding KAP, using chi-square tests, surprisingly, level of education is found to be significant for each element of KAP in urban areas in contrast to complete absence of association between education and elements of KAP in rural areas, (40),(26,40).

Studies have reported a relationship between cervical screening and demographic variables. People in younger age groups and with higher education levels were found to have greater awareness of cervical screening. Women's choice of not attending cervical cancer screening was complex; more specific information is needed about what kind of knowledge and what specific health perception determines screening, into account the significant demographic factors, (38).

Descriptive cross-sectional study in Zimbabwean Women shows females who were financially independent were 6.61% more likely to access cervical screening compared with those who were dependent on their husbands. Females in mining villages were 4.47% more likely to access cervical screening than those in traditional rural reserve villages. Females in resettlement villages were 20% less likely to access cervical screening than those in traditional rural reserve villages, (40).

A study in Tanzania on Determinants of acceptance of cervical cancer Screening shows, women aged 45–59 had increased. Increased accepting rates were also found among single women & among women who had attended primary or secondary school Women who had 0–2 children were also more prone to accept screening in comparison with women who had five or more children, (41).

Cross-sectional study in Kenya shows Women of over 30 years were more likely to have screened. And a cross-sectional study in Ethiopia shows women who had a Pap smear test had higher level of education than those who never had a Pap smear, (37).

## 2.2. Knowledge about Cervical Cancer and Screening

Findings of the study showed low levels of awareness and poor knowledge of cervical cancer coupled with unavailability and inaccessibility of cervical cancer screening services are responsible for the very small number of women being screened in developing countries including sub-Saharan Africa, (42,43).

A study in Laos showed 58% had knowledge about cervical cancer, 62% believed it was possible to prevent cervical cancer, but only 14% knew about risk factors. Lack of subjective symptoms was the main reason for women to refrain from gynaecological examinations, (29). Relatively a study in India shows low awareness about the cause, signs and symptoms, prevention of cervical cancer, Pap test and HPV vaccination was 3.6%, 6.3%, and 3.6%, 9.5% and 14.5% respectively,(44).

Study in Yemen showed 80.6% (228) had various levels of knowledge about cervical cancer. As for prevention of cervical cancer, 72% had some knowledge; 59% have an idea about the periodic cervical screening, while only 18% knew the HPV vaccine. As regard to the clinical presentation of cancer cervix, women knew that vaginal bleeding (77.2%), pelvic pain (43.9%), menstrual disturbances (35.1%) were the commonest, (52) but a study in Iran shows only 44.3% were aware of the Pap smear. With Mean ( $\pm$ SD) knowledge score of the women who had heard about the Pap smear was 59.4 (24.3), (33).

A study in South Africa shows less than half (42.9%) of the participants had heard of cervical cancer. And of these, 26 (15.6%) did not know any risk factors for cervical cancer, while 96 (58.6%) of 164 participants who knew of risk factors, did not know that cervical cancer is preventable. One-hundred and sixty-three (41.9%) participants had heard about the Pap smear test. That the Pap smear test is used for detection or prevention of cervical cancer, was known to 62 (38%) of the respondents, (45).

Descriptive cross-sectional study in Zimbabwean Women shows 91% had never had cervical screening and 81% had no previous knowledge of cervical screening tests; 80% of the group expressed positive beliefs about cervical screening tests after an educational intervention.



A study in Tanzania on Determinants of acceptance of cervical cancer Screening shows Knowledge of cervical cancer and awareness of the existing screening program were also associated with increased acceptance rates, (41). A cross sectional study on Utilization of screening services for cancer of the cervix in Nigeria shows education significantly affected awareness for both cancer of the cervix and screening services.(38).

A study in Ghana shows Women were unaware of local screening initiatives. The most prevalent barriers were lack of awareness that the purpose of pap screening is to diagnose cancer, concerns about what others may think, and lack of information about how to obtain screening services, (39).

Studies on utilization of screening services for cancer of the cervix in Nigeria shows about 65% were aware of cancer of the cervix. And 51% were aware of cervical cancer screening. Main source of information was through the mass media (35.5%), (21).

Across sectional study on Comprehensive knowledge about cervical cancer is low among women in Northwest Ethiopia shows of all the respondents, 495 (78.7%) of them had heard about cervical cancer and only 195 (31%) of them were knowledgeable about the disease, (40). But another study in Ethiopia shows, most respondents (81.2%) had never heard of Pap smear screening. The source of information for those who had heard about this test was health institutions for 65.4% of the respondents. Women who had heard about Pap smear screening were younger than those who had never heard of it, (37).

A qualitative study on Health seeking behavior for cervical cancer in Ethiopia: shows Participants had very low awareness of cervical cancer. However, once the symptoms were explained, participants had a high perception of the severity of the disease. The etiology of cervical cancer was thought to be due to breaching social taboos or undertaking unacceptable behaviors, (45).

### **2.3. Attitude & behaviour towards Cervical Cancer and Screening**

Positive attitude towards cervical cancer and preventive health-seeking behavior increases service s utilization including cervical cancer screening. A study in Laos shows approximately one third (38%) considered themselves to be at risk, (29). And in China less than one-third of the participants (28.5%) believed that they did not have control of their health. And cervical screening was significantly correlated with health perception except when influenced by

family/relatives' health, (27).

Descriptive cross-sectional study in Iran shows, Embarrassing, fear of the test result or economic problems mentioned by only 12 (4.2%) as the main barrier. Mean ( $\pm$ SD) attitudes score of all participants was 48.5 (11.6) from possible range score of 0-100, (47).

Crosses sectional study in Kenya shows 22.8% felt that they were at risk of the cervical cancer, 65% of all participants, nevertheless, wished to be screened. Perception of being at risk was significantly associated with a felt need for screening. Fear of abnormal results and lack of finances were the commonest barriers to screening reported by 22.4% and 11.4% of respondents, respectively, (48).

A study in Ghana shows Over 64 % believed that the test could find cervical changes before they became cancerous while 78.5% thought those changes could be easily cured. Among the perceived barriers to screening, the most prevalent perceived barrier was that only half of respondents believed the purpose of cervical cancer was to diagnose cancer, the second commonest reported barrier (40.6%) was the belief that their partner would not allow them to obtain cervical cancer screening, the following barriers were also important; cost (23.2%), not knowing where to go (24.3%), and belief that everyone would think they were sexually active (24.6%). While more than 68% perceived that young women were susceptible to cervical cancer, a lower percentage (52.5%) believed that they themselves were at risk for cervical cancer. About three quarters of respondents (73%) believed that cervical cancer was a serious disease that would make a woman's life difficult and about 62% of students also believed that there were effective cures for cervical cancer. In general, a low percentage received screening cues from their social environment by way of knowing peers who had screened or from a healthcare worker recommendation, (21).

A qualitative study on Health seeking behaviour for cervical cancer in Ethiopia: shows the aetiology of cervical cancer was thought to be due to breaching social taboos or undertaking unacceptable behaviours. As a result, the perceived benefits of modern treatment were very low, and various barriers to seeking any type of treatment were identified, including limited awareness and access to appropriate health services. Women with cervical cancer were excluded from society and received poor emotional support, (46).

## THE HEALTH BELIEF MODEL- Selected "Health Belief Model"

For five decades the Health belief model (HBM) has been one of the most widely used conceptual frame works in health behaviour. The HBM has been used both to explain change and maintenance of health related behaviours and as a guiding framework for health behaviour intervention. The HBM has been expanded, broken down in to components, compared to other frameworks and analysed using a wide array of multivariate analytic techniques.

### COMPONENTS OF THE HBM

It is now believed that people will take action to prevent or control ill health conditions, if they regard themselves as susceptible to the condition, if they believe it would have potentially serious consequences, If they believe that a course of action available to them would be beneficial in reducing either their susceptibility to or the severity of the condition, and if they believe that the anticipated barriers to (or cost) taking the action are outweighed by its benefits. Accordingly the same assumption is believed to be holds true for screening as well.

### **Chapter three- significance of the study**

Carcinoma of the cervix is a preventable disease; its prevention, among other ways, is through detection of premalignant stages of the disease and treatment. Detection of the premalignant lesions also requires knowledge on the disease so that people are aware and hence have positive attitude towards practice of screening for premalignant cervical lesions, (13). Despite CC is a major health problem from the high prevalence of its risk factors, only 6.5% of all the respondents had ever got screening test in service area. This study aimed at looking on how knowledgeable these women were, what was therefore their attitude and what was their practice on screening for cervical premalignant lesions which is the key to prevention of overt carcinoma of the cervix. So the information gained from this study might show the type of specific intervention based on identify area of focuses needed to currently married women of urban in order to prevent this fatal disease. Information obtained from this study might alert authorities including policy makers so that proper measures can be taken to save the lives of Ethiopian women by educating them and providing screening services in many places. To the programmers help as area of intervention and focus of attention. And also might be used as an input for researchers to do further study on the area. This might also help to guide the CC screening services.

## **4. Chapter four: Objective:**

### ***4.1 General Objective***

To assess the level of utilization of screening service for cervical cancer & associated factors among currently married women in Arba Minch Town, Gamo Gofa Zone, and Southern Ethiopia

### ***4.2 Specific Objective:***

1. To determine the lever of utilization of screening service for cervical cancer among currently married women in Arba Minch Town
2. To identify factors associated with utilization of screening service for cervical cancer among currently married women in Arba Minch Town

## **Chapter Five: Methods and Materials**

### ***5.1 Study Area and Period***

Arba Minch is one of the Town administrations in South Nations, Nationalities and People's Regional state which is found in Gamo Goffa zone, 502 Kms to South West of Addis Ababa, capital city of Ethiopia. The town is situated 1285 meters above sea level. The town has a total population of 125, 411, (65668 male & 59743 female) and reproductive age women of 25,060 for the year 2014/15 which is projected from 2007 CSA. The town has one general hospital and two health centers providing basic maternal health services including; FP, ANC, Delivery, PNC & Indicated Abortion & Post Abortion care services & currently cervical cancer screening using visual inspection with acetic acid was done at hospital. This study was conducted from February –March, 2015 in Arba Minch town.

### ***5.2 Study design***

Community based cross sectional study design complemented with qualitative method was employed

### ***5.3 populations***

#### **5.3.1 Source population**

All currently married women living in Arba Minch Town,

#### **5.3.2 Study population**

All randomly selected currently married women who were living in selected kebeles of Arba Minch town

#### **5.3.3 Sampling units;**

Kebeles or clusters

#### **5.3.4 Study unit;**

Currently married women in the cluster

#### **Inclusion and Exclusion criteria**

##### **Inclusion criteria**

All currently married women in selected kebele aged 15-65year who lived at least 6 month.

##### **Exclusion criteria**

Women who are critically ill & unable to be interviewed were excluded from the study

## 5.4 Sample Size Determination and Sampling Techniques

### 5.4.1 Sample size for quantitative part

The sample size was determined by using sample size calculation formula for single population proportion estimation assuming:

- Proportion of 50% (considering screening practices of currently married women with sufficient knowledge of screening, positive attitude towards screening, availability of skilled personnel and service provision)
- Level of confidence 95%,
- Z = reliability coefficient at 95% confidence interval (standard value of 1.96)
- Margin of error d= 4%, (standard value of 0.04) and
- Non-response rate = 10%

The formula for calculating the sample size is,

$$n_0 = \frac{(z_{\sigma/2})^2 p(1 - p)}{d^2}$$

$$n_0 = \frac{(1.96)^2 0.50(1 - 0.50)}{(0.04)^2} = 600$$

Non-response rate of 10%=60

\* Total sample size =600+60=660 currently married women

### 5.4.2 Sample size for qualitative data

- In-depth interviews =20 individuals

### 5.4.3 Sampling Techniques quantitative

A simple random sampling technique was used to select 4 kebeles out of 11 kebeles that were included as the data collection site. The required sample was proportionally allocated for each kebele according to size of HHs in each kebele (the selected kebeles were Bere, Chamo, Wuha Minch & Menaheria). The total number of households in selected the kebeles was 9,028. To get the required sample size (HHs) Modified HH selection method was used since;

- ✓ No possibility to get or build an updated list of households,
- ✓ The distributions of households were also scattering & large population size of the kebeles.

And the procedure looks like the following.

- 1 First found the center of the each kebeles or segment where the survey conducted.
- 2 And random direction was chosen by spinning a pen.
- 3 Then walked in a straight line until reaching the boundary of the kebele
- 4 Spine the pen again.
- 5 Walked along 2<sup>nd</sup> direction, by numbering HHs on both sides (left and right);
- 6 A random number was chosen between 1 and number of HHs in each kebele
- 7 Went back to household number chosen. This was the first household to survey.
- 8 Continued to next household on the same direction until the cluster was completed.

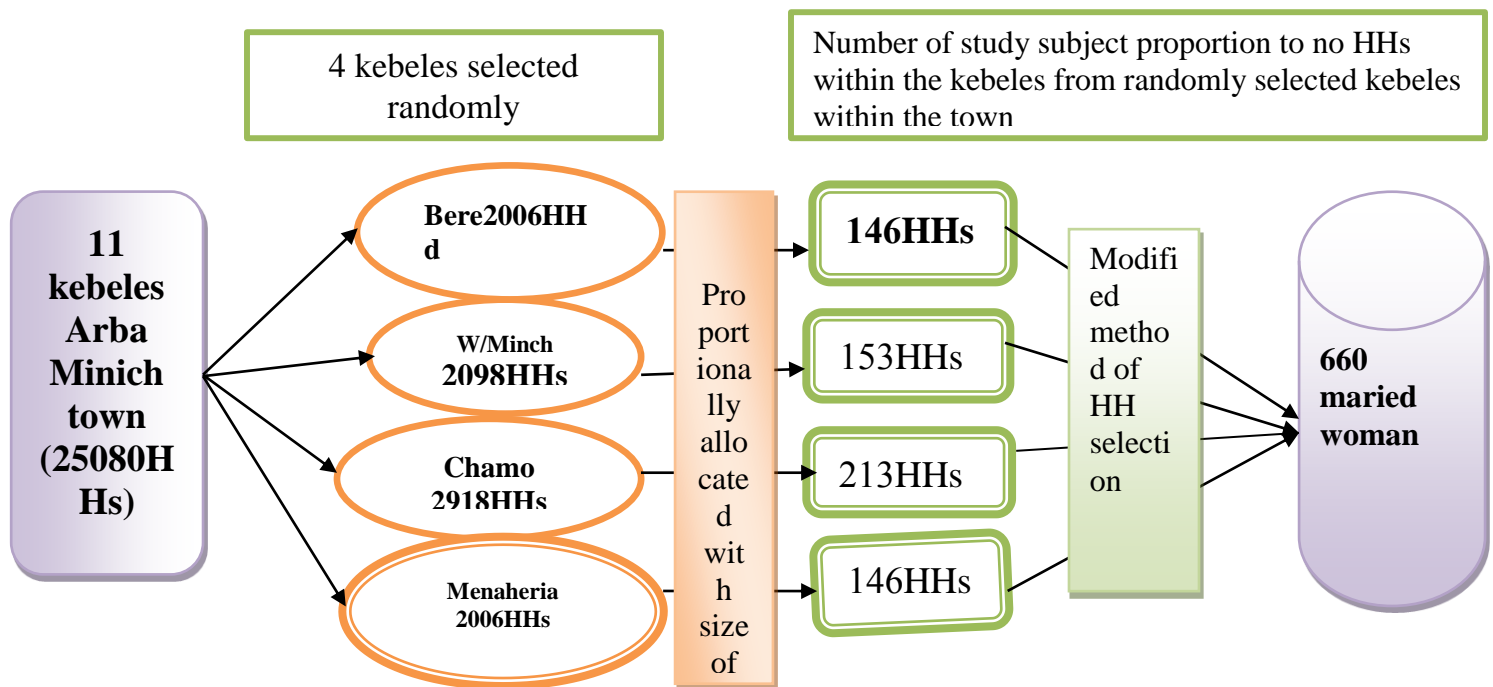
Interviewers went door-to-door till the desired sample in that particular kebele collected. To avoid missing respondents in houses, interview also done after working hours and during weekends. For households which would not fulfill inclusion criteria, and for those houses that would closed and family might not present, the next nearest household was selected.

#### **5.4.4 Sampling technique for qualitative**

Purposive sampling technique was used to identify the members for key informants in the In-depth interview.

In-depth interview was conducted on age range of 24 -47. For each key informant, the interview took 30– 45 minutes.





**Figure 1** Schematic presentation of sampling procedure for the selecting currently married women living in Arba Minch Town, 2015

**For In-depth interview key informants were;**

Four health extension worker, seven community members, one female school teacher, one female health professional from hospital, two female health professional from h/c, one female from women & child affairs & four female from social institution “IDIR”

**5.5 The study variables**

**5.5.1 Dependent variables**

Utilization of screening service

**5.5.2 Independent variables**

- ✓ Socio-demographic & socio-cultural variables (age, marital status, education, occupation, income, age of first intercourse, age of marriage, multiparty & family history of cancer),
- ✓ Level of knowledge on cervical cancer screening
- ✓ Attitude towards cervical cancer screening
- ✓ Perceived susceptibility to cervical cancer
- ✓ Perceived seriousness (severity) of cervical cancer
- ✓ Perceived benefits of utilizing cervical cancer screening
- ✓ Perceived barriers utilizing of preventive services

## *5.6 Data collection process and measurement*

### **5.6.1 Data collection instruments**

Data collection instrument was developed by considering the objective of the study using different researches on KAP of cervical cancer screening used as a source of data. Interviewer administered structured questionnaire which consists of different parts like;

**Part one – socio-demographic characteristics** of the participants

**Part two – knowledge** on carcinoma of the cervix and screening

**Part 3 –Attitude** towards screening for premalignant cervical lesion

The third part asked questions relating to attitude and the questions have been constructed in line with the Health Belief Model (HBM) which looked at the women's perceived susceptibility towards cervical cancer, perceived severity of cervical cancer, perceived benefits and perceived barriers to screening.

**Part 4 Practice questions** on this part asked about whether the respondents had ever been screened, how many times and when the last time when they were screened.

### **5.6.2. Data collection methods and personnel**

**Face to face interview:** Quantitative data was collected by recruiting data collectors after common understanding on the questionnaire. Interviewer administered structured questionnaire was used as data collection methods. Two weeks before data collocation notice was posted to recruit data collectors and supervisors in Arba Minch hospitals. After two weeks the eligible applicants were selected, recruited, and agreement was made. Data collectors were 13 Diploma holder female nurses from Arba Minch hospital and 2 female HOs supervisors, a total of 15 individuals. Total data collection period was 1 weeks (8 days) and had morning and afternoon sessions.

**In-depth interview:** The interview was made by PI. Before conducting the interview, explanation and elaboration of the need to do the in-depth interview was made and the participants were asked for their willingness for the interview. Audio recorder and notes was used for taking qualitative data In-depth interview.

## 5.7 Operational Definition

### Dependent variable

#### A. Knowledge

The knowledge of carcinoma of the cervix and screening for premalignant cervical lesion was assessed using 18 questions that carried a total of 18 correct responses. Each correct response was given a score of 1 and a wrong response a score of 0. Total points to be scored were out of 18 and the minimum was 0.

Knowledge: defined in this study, from total knowledge related question, if the participant responds: less than 60% correctly categorized as having poor knowledge, 60-79% correctly categorized as having faire knowledge and greater than 80% having good knowledge.

(On assessment, Modified Bloom's cut off (Bloom cut off points was adopted from Ms Nahida's KAP (knowledge, attitude and practice) Study, 2007 points)

Therefore the scores with their respective knowledge question as;

- i)  $\geq 14.4$  good knowledge
- ii) 10.8 – 14.3 satisfactory knowledge
- iii)  $< 10.8$  poor knowledge

#### B. Attitude assessment

For the attitude section, each variable such as susceptibility, severity, benefits and barriers were viewed individually and assessed for overall attitudes status as negative or positive.

Attitude was assessed by 20 questions put on Likert's scale. The questions on Likert's scale had positive and negative responses that ranged from strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The scoring system used with respects to respondents' responses was as follows 5 = strongly agree; 4 = agree, 3= undecided, 2 = disagree & 1 = strongly disagree. The responses were summed up and a total score was obtained for each respondent. Those who scored  $\geq 60\%$  were considered to have positive perception and those who had  $< 60\%$  were considered to have negative perception. The highest score would expect to be 100 and the lowest score to be 0, (Latifa M., 2013).

#### C. Practice assessment

The practice was assessed by looking on the respondent's action towards screening for premalignant cervical lesion in the past three years. Those who ever screened within the past three years were regarded as having regular practice, those who ever screened but more than

three 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. Three questions on this part, asked about whether the respondents had ever been screened, how many times and when was the last time when they were screened.

And to facilitate further analyses, the women's scores were prepared to binary variables (knowledgeable/non-knowledgeable for knowledge, positive/negative for attitude & screened/non-screened for practice) definition of a "sufficient" score was based on;

❖ For Knowledge & attitude; using mean score

❖ For Practice -If a respondent woman reported that she was screened

**Cervical cancer:** a cancer of the cervix or neck of the uterus. (Altaia NandSarg, 2000)

**Screening:** a test used to detect a disease when there is little or no evidence that a Person has a disease. (BerkowandBeer, 1997)

**Currently married women;** living together after having a formal civil or religious ceremony or legal or formal marriage

#### **Independent variable**

- Perceived susceptibility: If participants believed that they might had premalignant cervical cancer & identified risk of developing cc & total score obtained then classified as low & high perceived susceptibility based on mean score.
- Perceived severity: If participants believed that CC is sever related with others, has good Chance of cure & the TX of cc worth putting & total score obtained then classified as low & high Perceived severity based on mean score.
- Perceived benefit – If participants believed that regular screening valuable, detect pre-malignant lesion & total score obtained then classified as low & high perceived benefit based on mean score.
- Perceived barriers – any one of emotional (fear), non-availability of services, time, economy & total score obtained then classified as low & high Perceived barriers based on mean score.

### ***5.8. Data entry and analysis***

The completed questionnaire was checked for completeness, consistency and entered in to EPI Data version 3.1 software programs and exported to SPSS for analysis. The data was analysed descriptively for socio demographic and other study variables.

The first analysis was description of each variable. Then the second analysis was b/n Independent variable with the dependent variable using bivariate analysis. The third analysis was Multivariate analysis b/n Independent variable with the dependent variable. Multivariate logistic regression analysis was done for all independent variables with a p-value of <0.25 on bivariate analysis was included in the multivariate logistic regression models. The results of all logistic regression analyses were reported as odds ratios (OR) with 95% confidence intervals (95% CI). Data from in-depth interview was transcribed, coded, categorized (family) and triangulated with the quantitative findings with qualitative result.

### ***5.9. Data quality assurance***

Questionnaire was prepared by English language and translated in to Amharic and translated in to English to see its consistency. The questionnaire was pre-tested on 5% of the total sample size, and which was not included in the main analysis. Training was given for data collectors & supervisor. Data collectors were instructed to check the completeness of each questionnaire at the end of each interview. And visited houses were marked (given number) to avoid revisit by other data collectors and to enable revisit in case of incomplete and inconsistent responses. Collected data were checked for completeness and consistency on daily basis by group member. The principal investigator together with supervisor rechecked completeness of the questionnaire after interview at field level and during submission. The collected data were cleaned & coded before analysis. A guideline was followed when in - depth interviews was conducted

### ***5.10. Ethical considerations***

Before the commencement of field work, ethical clearance was obtained from Ethical Review committee of Jimma University College of Public Health and Medical Sciences. Then formal support letter was sent to Gamo Goffa Zone Health Department. The Zonal Health Department further would communicate letter of cooperation to Arba Minich Town Health office. And informed verbal consent was obtained from each study participant & they were assured that they have full right to discontinue or refuse to participate in the study if they don't feel comfortable at any time during the data collection period. One page consent letter was attached to the cover page of each questionnaire stating about the general purpose of the study and issues of confidentiality to be discussed by interviewers before commencing the interview.

### ***5.11. Dissemination plan of the findings***

The results of this study will present to Department of Population and Family Health under Jimma University College of Public Health and Medical Sciences. After having secured approval from the Department, it may communicated to Federal Ministry of Health, SNNP Regional Health Bureau, Gamo Goffa Zone Health Department, Ariba Minich Town Health office and other concerned bodies through reports. The findings will be disseminated to different organizations that have a contribution to improve the status of the cervical cancer screening. The findings also will present in various seminars and workshops. Efforts will be made to publish the research article in scientific journals.

## Chapter SIX: Result

### 6.1 Socio-demographic characteristics

A total of 643 currently married women were participated resulted with response rate of 97 %. Around one third 174(27.1%) of the respondents were in the age range of 20-24 year with the mean age 40(12 years). Majority of the respondents were attended post primary education 483 (75.1 %), start sex at age  $\geq 18$  year 360(56%), married at age  $\geq 18$  year 476 (74%) & multi-para 496(77.1%). Regarding occupation around half 300(46.7%) were housewives, followed by governmental employer 213 (33.1%). The entire respondents were non-smoker & had no family history of cervical cancer, (Table 1).

**Table 1** Socio-demographic characteristics of currently married women, A/M, Ethiopia, 2015.

<i>Variables</i>	<i>Frequeny</i>	<i>Percentage (%)</i>
Age		
15-19	12	1.9
20-24	174	27.1
25-29	155	24.1
30-34	86	13.4
35-39	47	7.3
40-44	80	12.4
>49	89	13.8
Mean + SD	40(12)	
Educational status.		
Illiterate	118	18.2
Primary education	43	6.7
Post primary	482	75.1
Age at first sexual intercourse		
<18 year	150	23.3
$\geq 18$ year	360	56.0
I do not know	133	20.7
Marital age		
<18	132	20.6
$\geq 18$	476	74.0
I do not know	35	5.4
Parity		
Nulliparous	54	8.4
1-4children	496	77.1
$\geq 5$	91	14.5
Income condition		
Dependent	327	50.9
Independent	316	49.1

Average family income		
<1170 ETB	112	17.4
>=1170ETB	392	61.0
I do not know	139	21.6

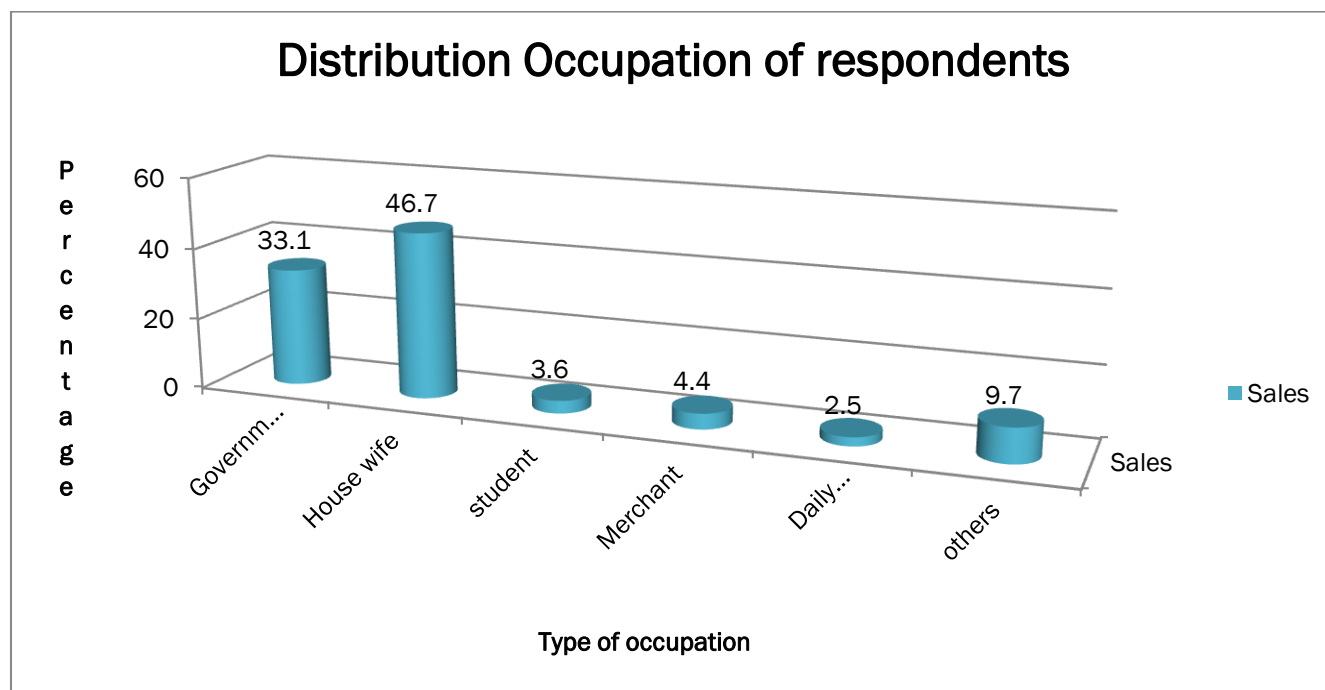


Figure 2 Distribution of occupation among currently married women, Arba Minch, Ethiopia, 2015.

### 6.2. Knowledge on cervical cancer screening

Two hundred thirty four (36.4%) & 224(34.8%) of the respondents have ever heard about cervical cancer and cervical cancer screening test respectively. The main sources of information were media most from Ethiopian broadcasting corporation (59%) & from health workers (5.1%). The above findings were in contrary with In-depth interview result that showed most participants had heard of about cervical cancer & cervical cancer screening.

Among ever heard about cervical cancer screening 154(65.8 %), 64(27.4%) & 16(6.8%) of the respondents have low level knowledge, fair knowledge & good knowledge about cervical cancer screening respectively. when knowledge level was categorized for analysis, 305(47.4%) were knowledgeable and 338(52.6%) were not knowledgeable about cervical cancer screening.



Among the aware group, (82.5%) early sexual intercourse & (76.5%) having multiple sexual partners mentioned as risk factor for development of CC.

The above findings were consistent with In-depth interview result that showed most participants believed cervical cancer cervical was due to a variety of factors which include “unprotected sex, using family planning methods, contamination during unsafe abortion, inserting “yebisana kenbet”, multiparty, unprotected sexual intercourse, related with personal hygiene, delivering many children & may be having many partners. Only few mentioned as infection by Virus called HPV or by bacteria.

For example; a 36 year health professional explain her experience ever heard from the community as; *“inserting “yebisana kenbet “cause development of cervical cancer”*. In explaining the association between CC and inserting “yebisana kenbet” *“...yebisana kenbet is used for terminating pregnancy if unwanted, as a result irritant nature of it damages the cervix finally this leads to development of cervical cancer “*

Among the aware group; (82.5%) avoid early sexual intercourse & (77.4%) avoid multiple sexual partners mentioned as Preventions measures.

The above findings were consistent with In-depth interview result that showed they mentioned preventive measures including using condom, preventing unwanted abortion, regular check-up, being faithful, limit number partners & keeping personal hygiene.

Concerning treatment modalities mentioned; radiotherapy, surgery & chemotherapy by 55.4%, 30.3% & 21.8 % respectively.

The above findings were inconsistent with In-depth interview result as only few of the participants mentioned treatment modalities including cryotherapy, chemotherapy& radiation. Procedures used in screening mentioned by 19.8% of participants

The above findings were supported by In-depth interview result, only few of the participants’ mentioned any of the procedures used in screening for cervical cancer.

About (67.9%) of the participants mentioned possibility of preventing CC before development of symptom. The remaining questions had variable responses which could probably serve as pointers for areas requiring more education and awareness particularly frequency of screening for premalignant cervical lesion & procedures used in screening, (Shown at Table 2).

**Table 2** Proportion of correct answers to knowledge questions, among currently married women, Arba Minch, Ethiopia 2015

Questions	No of correct answer	Percentage	Percentage from total
1. Vaginal bleeding is symptoms of cervical CA	136	58.1	21.2
2. foul smell vaginal discharges is symptoms of CA	107	45.7	16.6
3. Having multiple sexual partners is risk for cervical CA	179	76.5	27.8
4. Early sexual intercourse is risk factor for cervical CA	193	82.5	30
5. Cigarette smoking is risk factor for cervical CA	103	44.0	16
6. Quit smoking is preventive measure for cervical CA	103	44.0	16
7. Avoid early sexual intercourse is preventive measure	193	82.5	30
8. Avoid multiple sexual partners is preventive measure	181	77.4	28.1
9. is Vaccination prevent from cervical CA	3	1.3	0.5
10. Prevention before symptom for cervical CA	159	67.9	24.7
11. Radiotherapy is one of the treatment modalities	129	55.4	20.1
12. Surgery is one of the treatment modalities	71	30.3	11
13. Chemotherapy is one of the treatment modalities	51	21.8	7.9
14. Cost of treatment for cervical CA	98	41.9	15.2
15. Presence screening procedures to detect CA	179	79.9	27.8
16. Frequency of screening for cervical CA done	11	5.0	10
17. Concerning who should be screened	141	63.5	21.9
18. Any Procedures used in screening	44	19.8	5.3

Regarding who should be screened most of the participants of In-depth interview mentioned all women. Very small number of the participants mentioned frequent of screening for premalignant cervical lesion & most said below 1 year.

### 6.3 Attitude towards cervical cancer screening

This section on attitude was divided into 4 sub-sections as: susceptibility, severity, benefits and barriers. And attitude score obtained for total score which helped for further analysis & each HBM components. Among 643, 346(53.8%) & 297(46.2%) have positive & negative attitude towards cervical cancer screening respectively.

#### Perceived susceptibility to cervical cancer

Up to 265(41.4%) of participants had high perceived susceptibility. With regard to risk of exposing, majority, 76.5% of the respondent's did not know their level of risk on which only 18.4% & 5.1 % reported small & big risk respectively.

#### Perceived Severity to cervical cancer related to other cancer

About (30.3%) had high perceived severity. Third of the participants felt that cervical cancer is more severe than other forms of cancer (28.6%). Up to 25.7% of them thought that there might have a good chance of cure. 35.1% that the treatment of cervical cancer was worth putting up with.

The above findings were in contrary by In-depth interview result concerning Curability that showed almost all of the participants said good chance if detected early.

The above finding was supported by In-depth interview result, the majority of participants believed that the TX of cc worth putting up.

Some participants believe it might be incurable. A 37 year old woman said:

*"...this disease is less likely to cure once developed, no need of screening as I have heard almost all die once developed "*

#### Perceived Benefits of cervical cancer screening

About (48.2%) had high perceived benefits. More than third of them felt that screening testing detects pre-cancerous cells (36.7%), that they satisfied after having a screening test(55.2%) and having a test is valuable (97.2%) and give them a sense of control (53.7%).

#### Perceived Barriers to cervical cancer screening

About (49.0%) had low perceived barriers. For emotional barrier, more than a third of the participants (37.9%) disagreed that having screening test is painful. Approximately 9.6% agreed that it is painful and 52.4% 'did not know' as they had never had a test done. Also 41.2% of the

participants disagreed that having a check might unpleasant and/or embarrassing while the rest (10.6%) agreed that it is unpleasant and/or embarrassing. For the barrier of time, 76.8% did not think that it was difficult to take time off from work and go and have a screening check while 7.2% agreed and 16% felt that it's not applicable. Majority of the participants (60.2%) did not think that it was difficult to get a screening clinic. Up to 7.3% agreed that being busy and the priority for other things got in the way of screening check.

For economical barrier, most of the participants agreed that screening was necessary even if there were no signs and symptoms (71.5%). They also disagreed with the statement that it is unnecessary to go only for screening test (85.8%) and 45.4% disagreed that going for screening test was too expensive.

The above findings were supported by In-depth interview result, various factors including cultural, socio-economic, and beliefs about the disease and the health care system were found to affect the treatment seeking behaviour for CC. Some of the barriers included; the service is not available here, I don't have information, I heard that any cancer service costly & referred outside Ethiopia, time shortage, I am healthy,

One participant believes fear plays role in treatment seeking. A 36 years old health professional concerning fear said: *"...even the women develop the disease, they kept secret saying their disease other than cervical cancer"*

One participant mentioned the cost of treatment is unaffordable, I haven't screened.

E.g. 22 years old HEW said: *"...since the cost of screening & treatment is unaffordable & as I heard all referred outside Ethiopia I don't want screen for cervical cancer, if I screened the condition affects more than the disease once I know"*

Among the perceived barriers to Screening, the most prevalent perceived barrier were that more than half of respondents believed that Pain full to have screening (62.1%), having a check is unpleasant/or embarrassing (58.8%) & going for screening is too expensive (54.6%).

**Table 3** Distribution of responses agreement with HBM components among currently married, 2015.

HBM Variables	N (%) agreed
<b>Susceptibility</b>	
Perceived susceptibility	232(36.1%)
Risk of exposing	151 {23.5%}
<b>Severity</b>	
Severity related to others	184(28.6%)
Cure	165(25.7%)
The TX of cc worth putting up with	226(35.1%)
<b>Benefits</b>	
Satisfied after having screening test	355(55.2%)
Sense of control once having regular screening	345(53.7%)
Valuable to have regular screening	625(97.2%)
Screening test detect pre-cancerous cell before symptoms	236(36.7%)
<b>Barriers</b>	
Pain full to have screening	244(37.9%)
Having a check is unpleasant/or embarrassing	265(41.2%)
Difficult to take time off from work to go & to have screening check	494(76.8%)
Difficult to get screening clinic	387(60.2%)
Being busy & the priority for other things get in the way of screening	505(78.5%)
Screening is unnecessary if there is no s/s	460(71.5%)
Unnecessary to go for screening test	552(85.8%)
Going for screening is too expensive	292(45.4%)

#### 6.4. Screening practice of cervical cancer

Among 643, majority 605(94.1%) & 38(5.9%) of the respondents get never screened & screened respectively. Majority (81.6%) undergo screening by personnel initiation & only (18.4%) by health worker. Concerning frequency of screening (68.4%) screened once only. Duration of screening (57.9 %) regularly screened, 43.1 % were not regularly screened. About (60.02%) respondent mentioned for non-screening was being healthy, (Table 12).

**Table 4** Distribution of respondents related to practice questions, among currently married, 2015

<i>Variables</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Ever screened		
Yes	38	5.9
No	605	94.1
Reason for screening		
Health provider consultation	7	18.4
Personal initiative	31	81.6
Frequency of screening		
Once	26	68.4
More than once	12	31.6
plan for screening		
Yes	580	90.2
No	63	9.8
Preference to receive results		
Face-to-face	223	34.7
Written	51	7.9
Both	59	9.2
Don't care	247	38.4
Preference to conduct the screening		
Female	236	40.7
Male	52	9.0
Anyone	292	50.3
Preference where screening takes place		
hospital	579	99.8
clinics	1	.2
Screening positive follow up		
Yes	578	99.8
No	1	.2

### 6.5. Reasons for non-participation

As mentioned above only few women participate in utilizing screening service for carcinoma of cervical cancer. The majority (60.02%) mentioned being healthy for non-participations.

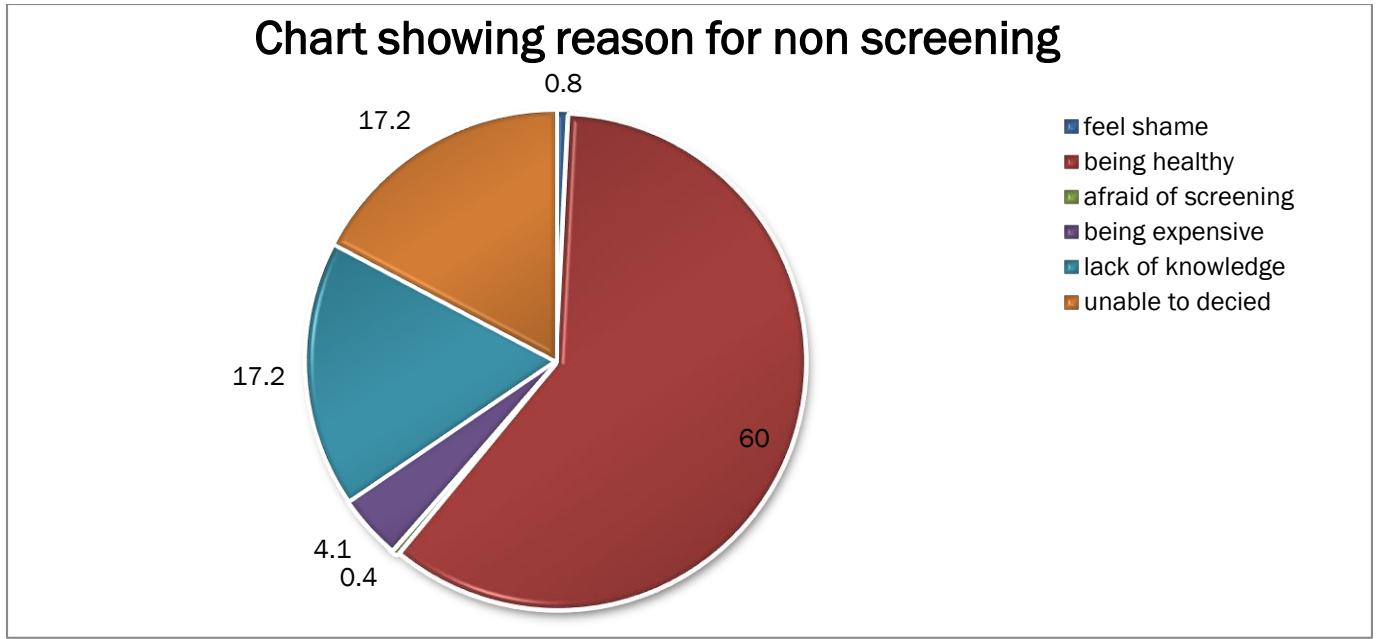


Figure 3 Distribution of reason for non-screening among currently married in A/M, May 2015.

### 6.6 Predictors of ever screening on cervical cancer screening

Among the variables parity, marital age, average monthly income, age group, educational status, perceived severity to cervical cancer & perceived benefits of cervical cancer screening were associated in bivariate analysis but age at first sex, income condition, knowledge status, perceived susceptibility, perceived barriers to cervical cancer screening & occupation were not associated with ever screened. And finally in order to control confounding factors a multivariate analysis was used. Those variables having P-values less than 0.25 in bivariate analysis were included in multivariate analysis. Among variables age of the respondent, perceived severity to cervical cancer, parity & average income were independently associated with ever screening for cervical cancer screening.

The odds of ever screening for CA was 60 times higher for those who agree on Severity to cervical cancer than those who dis-agree Severity to cervical cancer [AOR=60.85(13.662, 271)]. The odds of ever screening was 0.210 times lower for those who had <5children than those who

had  $\geq 5$  children [AOR= 0.210(0.062, 0.707)]. The odds of ever screening was 3.599 times higher for those who with average monthly income  $\geq 1170$  than those who with average monthly income  $< 1170$  (AOR=3.599(1.223, 10.593).The odds of ever screening was 8.181 times higher for those who age  $\geq 30$  yrs. than those who age  $< 30$  yrs. [AOR= 8.181(3.107, 21.539)].

**Table 5** Association of independent variable and ever screening in bivariate analysis among currently married in A/M town. May 2015.

Variable	Ever screened		Crude OR (95% CI)	AOR(95% CI)
	screened N (%)	Not screened N (%)		
Age at first sexual intercourse				
$\geq 18$	18(47.4)	342(56.5)	0.692(.359, 1.335)	0.598(.163,2.190)
$< 18$	20(52.6)	263(43.5)	1	1
Marital age				
$\geq 18$	23(60.5)	453(74.9)	0.514(.262, 1.011)	0.790(.183, 3.406)
$< 18$	15(39.5)	152(25.1)	1	1
Parity				
$< 5$	23(60.5)	527(87.1)	0.227(.114, .454)	<b>0.210(.062, .707)</b>
$\geq 5$	15(12.6)	78(12.9)	1	1
Income condition				
dependent on others	24(63.2)	292(48.3)	1.544(0.276, 1.074)	2.099(.769, 5.731)
self-dependent	14(36.8)	313(51.7)	1	1
Average monthly income				
$\geq 1170$	31(81.6)	361(59.7)	2.993(1.297, 6.90)	<b>3.599(1.223, 10.59)</b>
$< 1170$	7(18.4)	244(40.3)	1	1
Age group				
$> 30$	29(76.3)	257(42.5)	4.363(2.030, 9.377)	<b>8.181(3.107, 21.53)</b>
$< 30$	9(23.7)	348(57.5)	1	1
Educational status				
literate	27(71.1)	498(82.3)	0.527(.254, 1.096)	0.580(.188, 1.787)
illiterate	11(28.9)	107(17.7)	1	1
Perceived susceptibility				
Agree	38(100.0)	339(56.0)	.000(.000)	0.000(.000)
Dis-agree	0(0.0)	266(44.0)	1	1
Perceived Severity to cervical cancer				
Agree	36(94.7)	159(26.3)	1.020(.005, .083)	<b>60.855(13.662, 271)</b>
Dis-agree	2(5.3%)	446(73.7)	1	1
knowledge status				
Knowledgeable	38(100.0)	73(37.2)	0.000	
Not knowledgeable	0(0.0)	123(62.8)	1	



## Discussion

Among ever heard about cervical cancer screening (47.4%) were knowledgeable and (52.6%) were not knowledgeable about cervical cancer screening. This finding is lower than that of a study conducted in Iran where 59.4 had various levels of knowledge about cervical cancer, (47). This variation might be related to the difference in data collection methods techniques as this was facility based might affect privacy & convenience of interview This finding is higher than that of a study conducted in Zimbabwean Women where 81% had no previous knowledge of cervical screening tests,(38). This variation might be related to the Zimbabwean study was on conducted rural females between 12 and 84 years of age. This finding is higher than that of a study conducted in Northwest Ethiopia where about only 31% were knowledgeable about the disease, (48). This gap might be due to the difference may from sociocultural variation which is more common on the Northern Ethiopia which affects Female in accessing health information.

Among 643, 346(53.8%) & 297(46.2%) have positive & negative attitude towards cervical cancer screening respectively. This finding is lower than that of a study conducted in Nepal where more than 85% of women had positive attitude towards screening, (50). This variation might be related to the study was on patients attending the out-patient department. This finding is lower than that of a study conducted in Zimbabwean, where 80% of the group expressed positive beliefs about cervical screening, (40).This variation might be related to the educational intervention was given before attitude measurements. This finding is nearly similar with a study conducted in Iran where 48.5 of the respondents have positive attitude, (47). This finding is far lower than that of a study conducted in Ghana where 52.5% believed that they themselves were at risk for cervical cancer, (21). This variation might be related literate young women in a college environment might have been exposed to public health a education message which is important in positive attitude development. This finding is lower than that of a study conducted in Kenya, 65% of the respondents believe susceptibility, (52). This variation might be related study in Kenya was all target women without considering of marital status.

Of those who had ever heard about cervical cancer screening, (5.9%) of the respondents screened. This finding is similar with a study in Korea where Only 6% of participants had ever received a cervical screening,(48)0 And this finding is nearly similar with a study in South Africa shows only 16 (9.8%) participants had had a Pap smear test,(53). And also this finding is nearly similar with a study in at three teaching hospitals, Addis Ababa where only 6.5% of all the

respondents had ever had a Pap smear test, (13). This finding is far lower than that of a study conducted in Iran shows where 27.1% had had it at least once in their life, (47). This variation might be related the study in Iran was carried out on 350 outpatient married women at visit at the clinics which may have better health seeking behaviour. This finding is lower than that of a study conducted in Kenya shows, 12.3% of participants had screened, (48). This variation might be related study in Kenya was all target women without considering of marital status & Kenya has a national cervical cancer screening policy.

The most prevalent (60.0%) reasons mentioned for non-screening were being healthy followed by not informed/knowledge (21.8%). This finding is higher than that of a study conducted in Kenya where 42% being no gynaecologic symptoms,(48). This variation might be related study in Kenya was all target women without considering of marital status & Kenya has a national cervical cancer screening policy. This finding is higher than that of a study conducted in Korea where 31% of urban interviewees reported the absence of symptoms,(52). This variation could be related to the difference due to education.

Females those who agree on Severity to cervical cancer were 60 times more likely to access cervical Screening compared those who dis-agree Severity to cervical cancer with. Females those with average monthly income  $\geq 1170$  were 3.599 more likely to access cervical Screening compared with those average monthly income  $< 1170$ . Females those age  $\geq 30$  yrs. were 8.181 more likely to access cervical screening compared those who age  $< 30$  yrs. This finding is similar with a study in China, that cervical screening was significantly correlated with health perception, (27). A study in Tanzania on determinants of acceptance of cervical cancer screening shows, cervical cancer screening & age of the respondent women aged 45–59 had increased Screening,(41). This finding is similar with health perception and attendance rate among Hong Kong Chinese women shows significant factors identified after controlling for all other factors in the model. Were; Younger participants (37 years), had attained tertiary education, perceived having control over their own health, and had better knowledge of risk factors were more likely to attend cervical screening, (27). This finding is similar with a study in Iran showing women with a history of Pap smear had had higher awareness & attitude,(47). This finding is similar with a study in Kenya which showed women with perceived risk of cervical cancer were more likely to intend to have cervical cancer screening in the future, (48). This finding is similar with a study in China which showed Women with perceived having Control over their own health and

had better knowledge on risk factors, were more likely to Attend cervical cancer screening,(27). This finding is similar with a study in Zimbabwean Women which showed Females who were financially independent were more likely to access cervical screening compared with those who were dependent on their husbands, (40).

#### ***Limitation of the study***

- ✚ Its external validity since its focuses only on women living in town & only currently married women the result may not be inferred to rural women & those who are not currently married women
- ✚ Sampling procedure as SRS or systematic sampling was not possible due to;
  - ✓ No possibility to get or build an updated list of households,
  - ✓ The distributions of households were also scattering & large population size of the kebeles.

## **CHAPTER SEVEN -Conclusion and Recommendations**

### ***Conclusion***

Only few of the respondents get screened with majority mentioned for non-screening as being healthy. Among variables age of the respondent, perceived severity to cervical cancer, parity & average income were independently associated with ever screening for cervical cancer screening

### ***Recommendations***

Based on the findings of the study, we recommend the following points;

#### **To Arba Minch Town health office**

- Facilitating screening services, with considering income of community & extend screening program among all public health services
- Needs to work with Arba Minch Town women's & child affairs to Strengths women's economic status
- Needs to work with Health extension worker, kebele leaders, religious leaders& social institutions to influence perceptions by targeting the women themselves.

#### **To Local mass Medias**

- Should give due emphasis on creating awareness on cervical cancer screening

#### **To Health care providers**

- Provide Health education on creating awareness & intensifying information on d/t aspects of cervical cancer & by giving attention to health perceptions.

#### **To Researchers**

- Larger scale study in the nation and the study to be conducted out in the community in all target women as this study is limited on currently married women.

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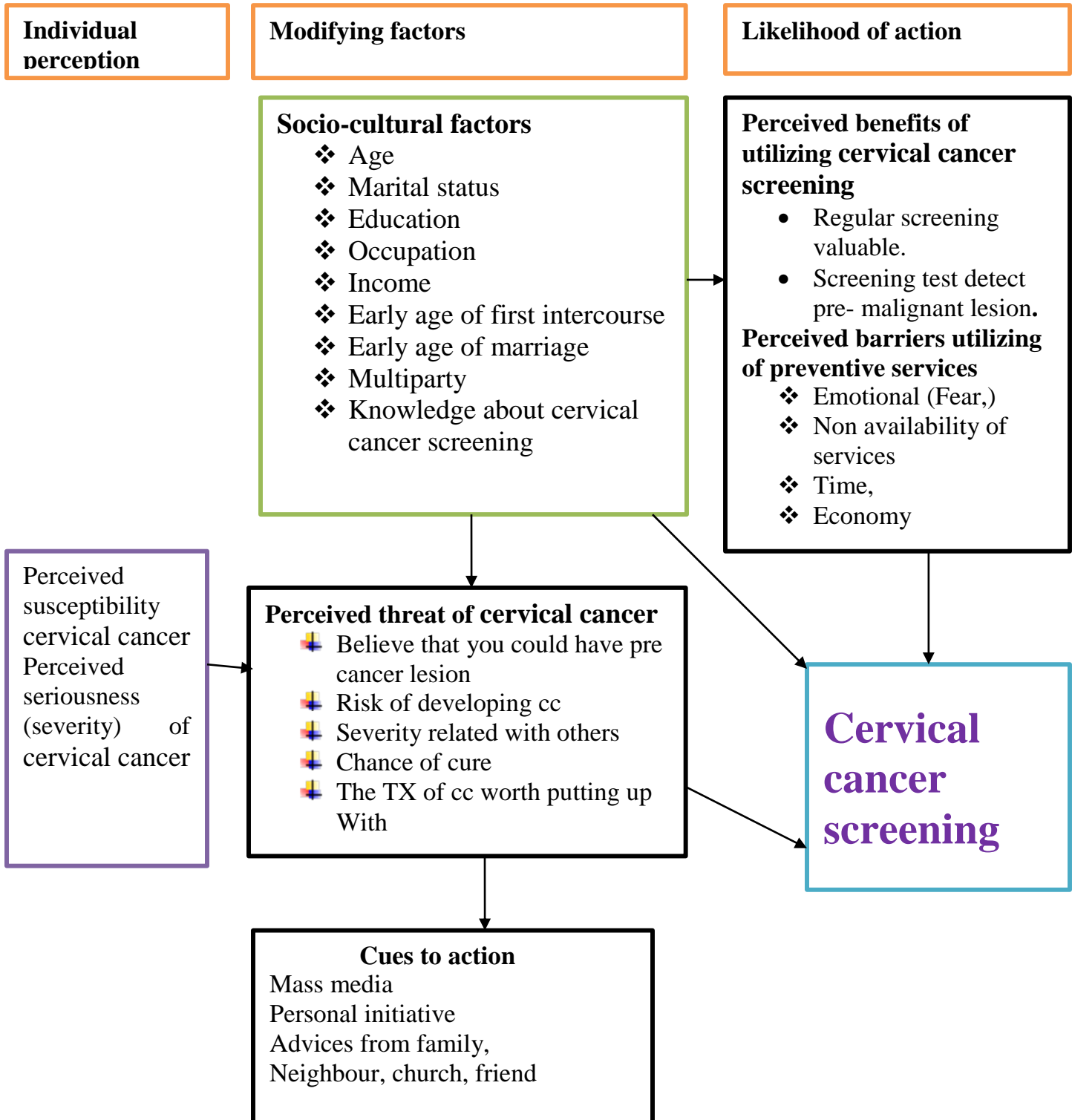


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**ANNEXES**  
*Annex-I. conceptual frame work*



**Figure 4** CFW adapted from Randall R. Cottrell, James T. Girvan, James F. McKenzie, as Predictor of Preventive Behaviour 2006

*Annex-II Questionnaire (English version)*

Jimma University college of Public Health and Medical Sciences

Questionnaires on Assessment of knowledge, attitude and practice of screening for cervical carcinoma among currently married women among Arba Minch Town, Ethiopia. Community based cross sectional study design

To be filled by data collectors

Cod number of the HH\_\_\_\_\_

Good morning dear client! My name is \_\_\_\_\_. I came from Gamo Goffa zone health bureau. I am a member of research team on Assessment of knowledge, attitude and practice of screening for cervical carcinoma among currently married women among Arba Minch Town, Ethiopia. Community based cross sectional study design, which is going to be carried out by Jimma University. It is believed that Assessment of knowledge, attitude and practice of improves screening for cervical cancer which in turn reduce maternal mortality and morbidity. The purpose of this study is to assess the on Assessment of knowledge, attitude and practice of screening for cervical carcinoma among currently married women among Arba Minch Town, Ethiopia and finally to give important comment that will help to strengthen and improve screening service. To do this, your information is very important. We would like to ask you a few questions about your knowledge, attitude and practice of screening? We would be very grateful if you could spend a few minutes to answer questions related to the service. We will not put your name or registration number in the format. All the information you give will be kept strictly confidential.

Your participation is voluntary and you are not obliged to answer any questions you don't want.

But your honest participation will contribute to generate information that can be used to improve screening service

Do I have your permission to continue? Yes -----No-----

Code number of the client ----- Interviewer: -

Name\_\_\_\_\_ Cod number\_\_\_\_\_

Checked by supervisor/investigator, Signature\_\_\_\_\_

**Part I-Socio Demographic data**

NO.	QUESTION AND FILTERS	CODING CATEGORIES	SKIP
101	Age		
103	Marital status	1 Single 2 Married 3 Separated 4 Divorced 5 Widow	
104	.Level of education	1 No formal education 2 Primary education 3 Secondary education 4 College education	
105	Occupation	1 Government employee 2 Private Enterprise employee 3 Merchant 4 Farmer 5 House wife 6 Student 7 Daily labourer 8 Other _____	
106	age of first intercourse		
107	Age of marriage	1 1. <=18                      2.>18	
108	Parity	1 Nulliparous 2 2 – 4 children 3 5 and above children	
109	Financial condition	1. Self-dependent    2. Husband dependent 3. Other _____	
110	Average family income per month		
111	Family history of cancer	1 Yes 2 2. No	

## Part II. Knowledge on cervical cancer screening

112	Have you ever heard about cervical cancer?	1 Yes 2 2. No	
113	Where did you first learn about carcinoma of the cervix? (Check all that are mentioned.)	1 News Media 2 Brochures, posters and other printed materials 3 Health workers 4 Family, friends, neighbors & colleagues 5 Religious leaders 6 Teachers 7 Other (please explain):	
114	What are the symptoms of	1 Vaginal bleeding	

	carcinoma of the cervix?	<ul style="list-style-type: none"> <li>2 Vaginal foul smelling discharges</li> <li>3 Do not know</li> <li>4 Other:</li> </ul>	
115	What are the risk factors for cancer of the cervix? (Please check all that are mentioned.)	<ul style="list-style-type: none"> <li>1 Having multiple sexual partners</li> <li>2 Early sexual intercourse</li> <li>3 Acquiring HPV virus</li> <li>4 Cigarette smoking</li> <li>5 Do not know</li> <li>6 Other (please explain)</li> </ul>	
116	preventive measures	<ul style="list-style-type: none"> <li>1 quit smoking</li> <li>2 avoid early sexual intercourse</li> <li>3 avoid multiple sexual partners</li> <li>4 vaccination</li> </ul>	
117	Can cancer of the cervix be cured in its earliest stages?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> <li>3. Don't know</li> </ul>	
118	treatment modalities	<ul style="list-style-type: none"> <li>1 Radiotherapy</li> <li>2 surgery</li> <li>3 Chemotherapy</li> <li>4 Herbal remedies</li> </ul>	
119	How expensive do you think cancer of the cervix treatment is in this country?	<ul style="list-style-type: none"> <li>1. It is free of charge</li> <li>2. It is reasonably priced</li> <li>3. It is somewhat/moderately expensive</li> <li>4. It is very expensive</li> <li>5. don't know</li> </ul>	
120	Have you ever heard about cervical cancer screening?	<ul style="list-style-type: none"> <li>1 Yes</li> <li>2 No (go to 125)</li> </ul>	
121	are there screening procedures to detect premalignant cervical lesion?	<ul style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ul>	
122	How frequent is screening for premalignant cervical lesion done?	<ul style="list-style-type: none"> <li>1 Once every year</li> <li>2 Once every three years</li> <li>3 Once every 5 years</li> <li>4 Any other.....mention</li> </ul>	
123	Who should be screened?	<ul style="list-style-type: none"> <li>1 Women of 25years and above</li> <li>2 Prostitutes</li> <li>3 Elderly women</li> <li>4 Others.....</li> </ul>	
124	Can you mention any of the procedures used in screening for premalignant Cervical lesions?	<ul style="list-style-type: none"> <li>1 VIA</li> <li>2 VILI</li> <li>3 Pap Smear</li> <li>4. Don't know</li> <li>5. Other.....</li> </ul>	

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### Part III. ATTITUDE

I) Susceptibility			
125	Do you believe that you could have pre cancer lesion?	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
	I have a big risk of developing cc	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
	I have a small risk of developing cc	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
ii) Severity			
127	More severe than other cancer	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
	The same as other	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
	Less than other forms cancer	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
128	cure	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
	Good chance		
	not so good chance	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
129	the tx of cc worth putting up with?	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
iii) Benefits			
130	Will you be satisfied after having screening r test?	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
131	Once having regular screening test give you a sense of control?	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
132	Is it valuable to have regular screening	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
133	Screening test detect pre-	1 = strongly disagree, 2 = disagree, 3=	

	cancerous cell before symptoms?	undecided, 4 = agree & 5 = strongly agree	
iv) barriers-emotional			
134	Is it pain full to have screening	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
135	Having a check is unpleasant/or embarrassing	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
Barriers –time consuming			
136	It is difficult to take time off from work to go & to have screening check	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
137	It is difficult to get screening clinic	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
138	being busy & the priority for other things get in the way of screening	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
Barriers –economical			
139	screening is unnecessary if there is no s/s	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
140	It is unnecessary to go for screening test	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
141	Going for screening is too expensive	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
V) Feeling of anxiety			
142	I am afraid that something wrong will be detected if I go to screening test	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	
143	i am un easy about talking about cancer	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly	

		agree	
144	i would be worried if I was found to have early signs of cancer	1 = strongly disagree, 2 = disagree, 3= undecided, 4 = agree & 5 = strongly agree	

**Part IV. Practice towards screening for premalignant cervical lesion**

145	Have you ever screened for cancer of the cervix	1 Yes 2 No (go to 153)	
146	If yes indications for undergoing screening	1 doctor/nurse consultation 2 Personal initiative 3 other	
147	how many times in since you become sexually active	1 Once 2 More than once	
148	When was the last time you screened?	1 within the past three years 2 More than three years ago.	
149	If no, why?	1 It may be painful. 2 I feel shy 3 I am healthy 4 My husband would not agree 5 I am afraid a screening test would reveal cervical cancer 6 It is expensive 7 I am not informed/knowledge 8 I haven't just decided 9 Other	
150	Are you planning to have or continue with screening test in the future?	1 yes 2 no	
151	How do you prefer to receive the result of your screening?	1 face to face 2 in writing 3 both 1 &2 4. it does not matte	
152	Would you prefer a man or a woman to conduct your screening test?	1 woman 2 man 3 it does not matter	
153	Where do you prefer to have your screening test?	1 Doctors clinic 2 nures clinic 3 organized screening sit 4 it does not matter	
154	If your screening test result showed that you had some cancer changes, would you go for further follow up?	1 yes 2 No	

***Annex-III: Amharic version questionnaire***



**ጅማዩኒቨርሲቲ በሕብረተሰብ ጤናና ሕክምና ሳይንስ ኮሌጅ**

በህብረተሰብ ውስጥ በጋብቻ ውስጥ ያሉ ሴቶች ስለ ማህጸን በርካን ሰርያላቸው እዉቀት፣ ጠባይና ልምምድ ለማወቅ የሚጠቅም መተዋቅር በመረጃ ሰብሳቢ ዉያሚ ሞላ

ቀበለ \_\_\_\_\_ የቤት ቁጥር \_\_\_\_\_

እንደ ምን አደሩ ዉድ

ስማ \_\_\_\_\_ ይባላል። የመጣሁት ከ ጋሞን ፋጤና ቢሮ

ነዉ። የጅማዩኒቨርሲቲ ስለ ማህጸን በርካን ሰርያላቸው እዉቀት፣ ጠባይና ልምምድ ለሚያደርገው ጥናታዊ ምርመራ አባል ነኝ።

የአንድ አገልግሎት ተጠቃሚ እዉቀት፣ ጠባይና ልምምድ ማወቅ አገልግሎት ተጠቃሚዎችን ቁጥር እንድሚጨምር ይታመናል።

የዚህ ጥናት ዋና ዓላማ በጋብቻ ውስጥ ያሉ ሴቶች ስለ ማህጸን በርካን ሰርያላቸው እዉቀት፣

ጠባይና ልምምድ ለማወቅ ጠቃሚ መረጃዎችን በመስጠት ለወደፊት ጥራቱን ለማሳደግና ድጋፍ ለማድረግ የምርመራ አገልግሎት ተጠቃሚዎችን ቁጥር ከፍለማድረግ ነዉ። ስለ እዉቀት፣ ጠባይና ልምምድ ጥቂት ጥያቄዎችን እጠይቃለሁ።

ጊዜዎን መሰብሰብ አድርገዉ ለጥያቄዎቻችን መልስ ለመስጠት ፈቃደኛ ከሆኑ ልንምስጋናችን ከፍተኛ ነዉ።

ስምዎን የካርድ መለያ በዚህ መጠይቅ ላይ ሞላ ሞ።

የሚሰጧቸው መረጃዎች ሙሉ በሙሉ ሚስት ራቸው በከፍተኛ ደረጃ የተጠበቀ መሆኑን ላረጋግጥልዎ እዉዳለሁ።

በጥናቱ ተሳታፊ ለመሆን የእርሶዎ ፈቃድ ያስፈልጋል።

በጥናቱ ተሳታፊ ከሆኑ የሚሰጡት እዉነተኛ መረጃ ለጥናቱ ለምርመራ አገልግሎት ጥራት ለማሻሻል ከፍተኛ አስተዋጾ ያደርጋል።

ፍቃደኛ ነዎትል ቀጥል?

ፍቃደኛ ነኝ ፍቃደኛ  ም

ተጠቃሚ

መለያ ኮድ ቁጥር \_\_\_\_\_

የደረሰብት ሰዓት \_\_\_\_\_

የቃለ መጠይቅ አድራጊ ዉ

ስም \_\_\_\_\_ መለያ ኮድ ቁጥር \_\_\_\_\_

ቃለ መጠይቁን ያረጋገጠዉ አጥኝ ፊርማ \_\_\_\_\_

**ክፍል አንድ፡ ማህበራዊ መረጃዎችን በተመለከተ የሚቀርብ መጠይቅ**

ተቁ	ጥያቄና ማጣሪያ	የመልስ አማራጭና መለያ ኮድ ቁጥር	ይዘት
10 1	እድሜዎ ስንት ነው?		
10 3	የጋብቻዎ ሁኔታ	1 ያላገባች 2 ያገባች 3 የተለያዩ 4 የተፋታች 5 የሞተባች	
10 4	የትምህርት ደረጃዎ	1 አልተማርሁም 2 የመጀመርያ ደረጃ 3 ሁለተኛ ደረጃ 4 4. ኮሌጅና ከዛ በላይ	
10 5	የሥራ ሁኔታዎ	1 የመንግስት ሰራተኛ 2 የግል ሥራ 3 ነጋዴ 4 ገበሬ 5 የቤት እመቤት 6 ተማሪ 7 የቀንሰራተኛ 8 ሌላ ይጠቀስ _____	
10 6	የግብረሰጋ ግኑኝነት የጀመሩት በስን ዓመቶ ነው?		
10 7	ጋብቻ የፈጸሙት በስን ዓመቶ ነው?	1. <=18                      2. >18	
10 8	ስንት ወልደዎል	1 አልወለድሁም 2 2 - 4 ልጆች 3 3. 5 ና በላይ	
10 9	በወር አማካይ የቤተሰብ ዎ የገቢ መጠን		
11 0	ስንት ነው		
11 1	በቤተሰብ ዎ የማህጸን በርካን ሰርያለው/የነበረው ያወቁ ሉ?		

**ክፍል ሁለት የተጠቃሚ የካንሰር ናምር መራ እውቀት አሰሳ**

11 2	የማህጸን በርካን ሰርን ሰምተው ያወቁ ሉ?	1. አዎ 2. አልሰማሁም (ካልሰሙ ወደ ጥያቄ ዓይኒ ያዩ)	
11 3	ከየት ነው ለመጀመሪያ ጊዜ የሰሙት?	1 ከመገናኛ ብዙኃን 2 ከፖስተር 3 ከጤና ባለሙያ	

		<ul style="list-style-type: none"> <li>4 ከቤተሰብ፣ ከጓደኛ፣ ከጎረቤትና ከአቻ</li> <li>5 ከሀይማኖት መሪዎች</li> <li>6 ከመምህራን</li> <li>7 ሌላይ ጠቀስ _____</li> </ul>	
11 4	ምልክቶቹ ምን ድናቸው?	<ul style="list-style-type: none"> <li>1 ከብልት ደም መፍሰስ</li> <li>2 ከብልት ቭታ ያለ ወፊ ፊት ሽመ ወጣት</li> <li>3 አላወቅም</li> <li>4 ሌላይ ጠቀስ _____</li> </ul>	
11 5	የሚያጋልጡ ነገሮች ምን ድናቸው?	<ul style="list-style-type: none"> <li>1 ከብዙ ሰው ጋር የግብረሰታዎች ነገት ማድረግ</li> <li>2 የግብረሰታዎች ነገት ያለ እድሜ መጀመር</li> <li>3 HPV virus መያዝ</li> <li>4 ሲጋራ ማጨስ</li> <li>5 አላወቅም</li> <li>6 ሌላይ ጠቀስ _____ :</li> </ul>	
11 6	መከላከያዎች	<ul style="list-style-type: none"> <li>1. ሲጋራ ማጨስ ማቅም</li> <li>2. የግብረሰታዎች ነገት ያለ እድሜ ያለ መጀመር</li> <li>3. ከብዙ ሰው ጋር የግብረሰታዎች ነገት ማረግ ማቆም</li> <li>4. ክትባት</li> </ul>	
11 7			
11 8	የህክምና አይነቶች	<ul style="list-style-type: none"> <li>1 ጨረር</li> <li>2 ቀዶ ህክምና</li> <li>3 መድሀኒት</li> </ul>	
11 9			
12 0	ስለ ማህጸን በርካን ሰርም ስር መራሰም ተወያወያ ይወቃል?	<ul style="list-style-type: none"> <li>1 አዎ</li> <li>2 አልሰማሁም (ካልሰሙ ወደ ጥያቄ 122 ይሂዱ)</li> </ul>	
12 1			
12 2	ምርመራው በየሰንት ጊዜ መካሄድ አለበት?	<ul style="list-style-type: none"> <li>1 በየአመቱ</li> <li>2 በሶስት አመት አንዴ</li> <li>3 በአምስት አመት አንዴ</li> <li>4 ሌላይ ጠቀስ _____</li> </ul>	
12 3	ማነው ምርመራው ማድረግ ያለበት?	<ul style="list-style-type: none"> <li>1 ከ25 ዓመት በላይ ያሉ ሴቶች</li> <li>2 ሴቶች አዳሪዎች</li> <li>3 ትልልቅ ሴቶች</li> <li>4 ሌላይ ጠቀስ _____</li> </ul>	
12 4	ምርመራ ለማድረግ የሚረዱ ዘዴዎች ሊዘረዝሩ ልኝ ይችላሉ?	<ul style="list-style-type: none"> <li>1 VIA</li> <li>2 VILI</li> <li>3 Pap Smear</li> </ul>	

		4 አላውቅም	
		5 ሌላይጠቀስ_____	

**ክፍል ሦስት. የተጠቃሚ ጠባይ**

I) ተጋላጭነት			
125	ቅድመካንሰችጠቋሚሁነታዎችይኖሩብኛልብለውያምናሉ?	1. አልስማማም 2. አላውቅም 3. እስማማለሁ	
126	ተጋላጭነቶችምንያህልነውይላሉ?	1 ትልቅተጋላጭነትአለኝ 2 ትልቅተጋላጭነትአለኝCC 3 አላውቅም	
ii) አደገኛነት			
127	ከሌሎችካንሰሮችሲነጻጸርምንያህልአደገኛነዉ?	1 ከሌሎችበላይአደገኛነው 2 ተመሳሳይነው 3 ከሌሎችበላይአደገኛነው 4 አላውቅም	
128	የመዳንእድሉምንያህልነውይላሉ?	1. ጥሩእድል2. ጥሩአይደለም3. አላውቅም	
129	ህክምናዉ ጠቃሚ ነው?	1 አዎ 2 አልስማሁም	
iii) ተጠቃሚነት			
130	ከተመረመሩበኔላእረካለሁብለውይምናሉ?	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4. እስማማለሁ, 5. በጣም እስማማለሁ	
131	ከተመረመሩበኔላእረስዎየመቆጣጠርስሜትይስማዎታል?	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4. እስማማለሁ, 5. በጣም እስማማለሁ	
132	መደበኛምርመራማድረግጠቃሚነውብለዎያምናሉ	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4. እስማማለሁ, 5. በጣም እስማማለሁ	
133	ምርመራውካንሰርከመከሰቱበፊትለመለየትይረዳልብለውያምናሉ?	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4. እስማማለሁ, 5. በጣም እስማማለሁ	
iv) እንቅፋቶች-የመንፈስ			
134	ምርመራውህመምአለው	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4. እስማማለሁ, 5. በጣም እስማማለሁ	
135	ምርመራማድረግጠቃሚነውይላሉ	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4. እስማማለሁ, 5. በጣም እስማማለሁ	
እንቅፋቶች - ጊዜይወስዳል			
136	የስራሰክትወስዶምርመራማድረግከባድ	1. በጣም አልስማማም 2. አልስማማም 3. አላውቅም, 4.	



		7 መረጃየለኝም/እውቀት 8 አልወሰንሁም 9 ሌላካለ	
150	ምርመራለማድረግ/ለመቀጠልአቅደዋለ?	1 አዎ 2 የለም	
151	የምርመራውጤትዎእንዴትቢቀበሉይመርጣሉ?	1 ፊትለፊት 2 በጽሁፍ 3 1 & 2 4 ግድየለኝም	
152	ምርመራውወንድወይስሴትቢያዲግሎትይመርጣሉ?	1 ሴት 2 ወንድ 3 ግድየለኝም	
153	ምርመራውየትቢሆንይመርጣሉ?	1 ሃኪሞችክሊኒክ 2 ነርሶችክሊኒክ 3 የተጠናከረየምርመራማእከል 4 ግድየለኝም	
154	ምርመራዎቅድመካንስርምልክትቢያሳርክትትልያደርጋሉ?	1 አዎ 2 2.የለም	

*Measurement tools for Qualitative- interview guide*

A .Knowledge on cervical cancer screening

- ❖ What is CA & symptoms of carcinoma of the cervix?
- ❖ What are the risk factors for cancer of the cervix?
- ❖ preventive measures
- ❖ Can cancer of the cervix be cured in its earliest stages?
- ❖ treatment modalities
- ❖ Are there screening procedures to detect premalignant cervical lesion?

B. ATTITUDE

- ❖ Susceptibility
- ❖ Severity
- ❖ Benefits
- ❖ Barriers

C. Practice towards screening for premalignant cervical lesion