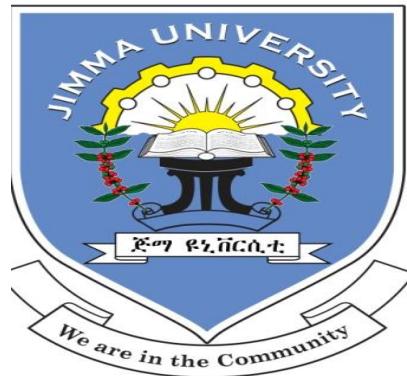


**PREDICTORS OF INTENTION TO USE CERVICAL CANCER  
SCREENING, AMONG WOMENS ATTENDING MATERNAL AND  
CHILD HEALTH SERVICE IN YIRGALEM TOWN HEALTH  
INSTITUTIONS SNNPR ETHIOPIA, THE THEORY OF PLANNED  
BEHAVIOR PERSPECTIVE**



BY:

**ATSEDE TENNA (BSC)**

*A THESIS SUBMITTED TO JIMMA UNIVERSITY; INSTITUTE OF HEALTH FACULTY OF  
PUBLIC HEALTH DEPARTMENT OF HEALTH EDUCATION AND BEHAVIORAL SCIENCES  
IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF  
MASTERS DEGREE OF PUBLIC HEALTH IN HEALTH EDUCATION AND PROMOTION*

June 2017

Jimma, Ethiopia

JIMMA UNIVERSITY  
INSTITUTE OF HEALTH FACULTY OF PUBLIC HEALTH DEPARTMENT  
OF HEALTH EDUCATION AND BEHAVIORAL SCIENCES

PREDICTORS OF INTENTION TO USE CERVICAL CANCER SCREENING,  
AMONG WOMENS ATTENDING MATERNAL AND CHILD HEALTH  
SERVICE IN YIRGALEM TOWN HEALTH INSTITUTIONS SNNPR  
ETHIOPIA, THE THEORY OF PLANNED BEHAVIOR PERSPECTIVE

BY

Atsede Tenna (BSC)

Advisor

Mr. Fira Abamecha (BSC, MPH)

And

Mr. Getachew Kiros (MPH, Assistant Professor)

June 2017

Jimma, Ethiopia

## *Abstract*

### **Background**

*Cervical cancer is a global public health problem accounting for the fourth most common cancer-affecting women worldwide.*

*Detection of the pre malignant form by cervical screening in the target age group is one of the strategies in the prevention of the disease. In Ethiopia, the proportion of women who receive cervical cancer screening service remains low. In order to promote screening behavior, it is important to understand the factors influencing people decision to use cervical cancer screening service.*

**Objective:** *To assess the predictors of intention to use of cervical cancer screening services among women visiting maternal and child health services at health institutions in Yirgalem town using theory of planned behavior.*

**Methods:** *Institutional based cross-sectional study design was used employing 422 women's age between 30-49 years old. Systematic random sampling method was used to select participants. A structured pretested interview administered questionnaire was used to collect data. Theory of planned behavior principles was considered to measure intention, attitude, perceived social pressure and perceived difficulties or easiness towards cervical cancer screening. Data was entered in to Epi-data version 3.1, then exported, and analyzed using SPSS version 21.0 statistical package.*

*Bivariate analysis (Independent t-test and one way ANOVA) was carried to examine the association between intention and socio-demographic variables, knowledge and maternal medical condition and to examine association between intention, direct and indirect measures, correlation analysis were done. Multiple linear regressions model was conducted to identify independent predictors of intention on cervical cancer screening among women. The study was obtain approval from Jimma university institutional review board.*

**Result:** *Out of 422 participants, 402 respondents were completed the interview. The study identified that 391(97.3%) of respondents had heard about cervical cancer, however, about 162(41.4%) of women were knowledgeable about the disease. Two hundred (44.2%), 154 (39.4%), 136 (34.95%), and 42(11%) of the respondents were know the sign & symptoms, risk factors, prevention methods and screening frequency of cervical cancer respectively. Having knowledge about cervical cancer and past screening practice were positively associated with intention to screen ( $\beta = 0.145$ , CI, 0.001, 0.122), ( $\beta = 0.098$ , CI, 0.093, 1] respectively. Standardized regression coefficient shows; all constructs of the theory were positively and significantly associated with intention to cervical cancer screening. Perceived difficulty or easiness ( $\beta = 0.297$ , CI, 0.172, 0.343), perceived social pressure ( $\beta = 0.248$ , CI, 0.131, 0.30) and attitude ( $\beta=0.11$ , CI, 0.018, 0.158).*

**Conclusion:** *The study revealed the likelihood of intention to use cervical cancer screening among women found that having knowledge and past screening practice were predictors of intention for future screening. Perceived difficulty or easiness being the important predictor. Due attention should be given for designing message aimed at increasing knowledge, perceived power that enable women to evaluate their control belief positively and empower them to develop ability against norms that compete with the use of cervical cancer screening and change community held norms towards screening and increase positive attitude towards outcome of screening.*

## Acknowledgement

I would like to acknowledge my advisors Mr. Fira Abamecha and Mr. Getachew Kiros  
For their unreserved guidance, encouragement and share experience through this thesis progress.  
My special thanks go to Mr. Fira Abamecha; for his relevant advice and close follow up helpful  
for my study and his timely and contractive feedback throughout my work.

I sincerely thank, to Jimma University, institute of health faculty of public health department of  
health education and promotion for giving me this opportunity.

I am grateful to all clients who participated in the study for their willingness to provide their  
personal experience. My deepest appreciation goes to all data collectors and supervisors for their  
honesty and hard work during data collection. My gratitude also goes to Yirgalem town health  
office for their support in facilitating data collection.

Finally am grateful to all my friends and colleagues for their advice, support and encouragement  
during the whole thesis work.

## Table of contents

Content	page
<i>Abstract</i> .....	iii
Acknowledgement .....	iv
Abbreviation and acronyms .....	ix
CHAPTER ONE: INTRODUCTION .....	1
1.1 Background.....	1
1.2 statement of the problem.....	3
CHAPTER TWO: LITERATURE REVIEW .....	7
2.1 Cervical cancer and screening.....	7
2.2 literature review based on the theory of planned behavior perspective .....	7
2.3 Conceptual framework.....	12
2.4 Significance of the study .....	13
CHAPTER THREE: OBJECTIVE OF THE STUDY .....	14
3.1 General objective .....	14
3.2 Specific objective .....	14
CHAPTER FOUR: METHODOLOGY .....	15
4.1 Study area and period.....	15
4.2 Study Design.....	16
4.3 Source population .....	16
4.4 Sample size and sampling procedures .....	16
4.5 Study variables .....	19
4.6 Operational definition and measurements.....	19
4.7 Data collection instrument and data collection procedure .....	22
4.8 Data quality management.....	22
4.9 Data processing and analysis .....	23
4.10 Ethical consideration.....	24
4.11 Dissemination plan.....	25
CHAPTER FIVE: RESULT .....	26
5.1 Socio-demographic characteristics of respondents .....	26
5.2 Source of information about cervical cancer and cervical cancer screening .....	27
5.3 Knowledge on Cervical Cancer and past cervical cancer screening practice .....	29
5.4 Factor analysis .....	32

5.5 Assumptions test result .....	33
5.6 Direct TPB components and intention to cervical cancer screening descriptive scores .....	34
5.7 Relationship between intention, direct and indirect measures of TPB constructs .....	35
5.8 Effect of knowledge, medical condition and socio-demographic variables on intention to cervical cancer screening.....	35
5.9 Predictors of cervical cancer screening intention.....	36
<b>CHAPTER SIX: DISCUSSION .....</b>	<b>37</b>
<b>6.1 LIMITATIONS .....</b>	<b>40</b>
<b>CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION.....</b>	<b>41</b>
<b>7.1 CONCLUSION .....</b>	<b>41</b>
<b>7.2 RECOMMENDATIONS .....</b>	<b>42</b>
Reference .....	43
Annex I: Information sheet .....	45
Annex II: Consent form for participant.....	46
Annex III: Questionnaire; English Version .....	47
Annex-iv: Sidamic version questionnaires .....	69

List of tables

Table	page
TABLE 1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS IN YIRGALEM TOWN, ETHIOPIA 2017 (N=402) -----	26
TABLE 2 .SOURCE OF INFORMATION ABOUT CERVICAL CANCER AND CERVICAL CANCER SCREENING OF RESPONDENTS IN YIRGALEM TOWN, SOUTH ETHIOPIA (N=402) -----	28
TABLE 3 KNOWLEDGE ABOUT CERVICAL CANCER AND CERVICAL CANCER SCREENING OF RESPONDENTS AND MEDICAL HISTORY IN YIRGALEM TOWN, SOUTH ETHIOPIA (N=402) -----	29
TABLE 4. PRINCIPLE COMPONENT ANALYSIS FOR DIRECT MEASURES OF TPB AND INTENTION AFTER VARIMAX ROTATION WITH LOADING FACTORS 0.4-----	32
TABLE 5.DESCRIPTIVE STATISTICS FOR COMPONENTS OF THEORY OF PLANNED BEHAVIOR AND INTENTION FOR WOMEN VISITING HEALTH INSTITUTION IN YIRGALEM TOWN (N=402) -----	34
TABLE 6. CORRELATION BETWEEN INTENTION, DIRECT AND INDIRECT MEASURE OF TPB (N=402). -----	35
TABLE 7. PREDICTORS OF BEHAVIORAL INTENTION TO CERVICAL CANCER SCREENING, YIRGALEM TOWN SOUTH ETHIOPIA (N=402) 2017-----	36

List of figures

Figure	page
FIGURE 1. CONCEPTUAL FRAMEWORK ADAPTED FROM TPB MODEL.....	12
FIGURE 2.MAP OF YIRGALEM .....	15
FIGURE 3 SCHEMATIC PRESENTATION OF SAMPLING .....	18

## Abbreviation and acronyms

<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>ANC</b>	Anti Natal Care
<b>ASEM</b>	Attitude, Social influence and Self-efficacy model
<b>ETB</b>	Ethiopian Birr
<b>FDRE</b>	Federal Democratic Republic of Ethiopia
<b>FMoH</b>	Federal Ministry of Health
<b>FP</b>	Family Planning
<b>HIV</b>	Human Immunodeficiency Virus
<b>HPV DNA</b>	Deoxyribo Nucleic acid of Human Papilloma Virus
<b>HPV</b>	Human Papilloma Virus
<b>LBC</b>	Liquid Based Cytology
<b>KAP</b>	Knowledge Attitude Practice
<b>OPD</b>	Out Patient Department
<b>Pap</b>	Papanicolaou
<b>PBC</b>	Perceived Behavioral Control
<b>PNC</b>	Post Natal Care
<b>TPB</b>	Theory of Planned Behavior
<b>TB</b>	Tuberculosis
<b>VHTs</b>	Village Health Team members
<b>VIA</b>	Visual Inspection with Acetic acid
<b>WHO</b>	World Health Organization

# CHAPTER ONE: INTRODUCTION

## 1.1 Background

Cancer is a group of diseases in which abnormal cells in the body divide and grow out of control. These abnormal cells can spread to other parts of the body. When this happens, it is called metastasis(1).Cancers that originate in the female reproductive system are called gynecological cancers. These include cancer of the cervix, breast, ovaries, vagina, vulva and endometrium. Breast and cervical cancer are the most frequently occurring types of reproductive cancers in women worldwide. Cervical cancer is a cancer arising from the cervix, which is due to the abnormal growth of cells that have the ability to invade other part of the body (1).

Seventy (70 % ) of cervical cancer (CC) is caused by presence of persistent type of Human Papilloma Virus (HPV) infection, which interferes with the normal functioning of cells; this will result in distinct change in the epithelial cells of transformation zone of the cervix (2).

Other risk factors include early age at first sexual intercourse, multiple male sexual partners, male sexual partners who have had multiple partners, early age at first birth, multiparity, smoking, long-term use of oral contraceptive pills, immune suppressed states (1).

WHO recommends comprehensive multidisciplinary approach interventions across the life course to cervical cancer prevention and control. These interventions include community education, social mobilization, vaccination, screening, treatment and palliative care (2).

Cervical cancer screening is the systematic application of a test to identify cervical abnormalities in an asymptomatic population. Screening services may be provided as either organized or opportunistic services or a combination of both (2).

Cervical cancer can be early-diagnosed using detecting service technologies such as, Pap smear test, visual inspection with acetic acid (VIA), DNA test for human papilloma virus (HPV DNA) and liquid based cytology (LBC)(3).

Cervical cancer screening offers protective benefits and is associated with a reduction in the incidence of invasive cervical cancer and cervical cancer mortality(4). 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 (5)(6)(7).

According to World Health Organization (WHO) recommendations on target age and frequency of screening, screening women between the ages of 30 and 49 years, even just once, will reduce deaths from cervical cancer (3). Cervical cancer can occur at any age in every sexually active women's and girls' but It usually develops slowly, taking 10–20 years from early pre-cancer to invasive cancer, so cervical cancer is rare before the age of 30. Screening younger women will detect many lesions that will never develop into cancer, which will lead to considerable overtreatment, and is thus not cost-effective (2).

Screening all women's in the target age group (30-49 years) every 3 years was estimated to prevent 91% of cases, followed by treatment of detected precancerous lesion could prevent the majority of cervical cancer (8).

Ethiopia adopted the WHO recommendation and recommended women to begin cervical cancer screening between 30-49 years of age at least once every three years. The “see and treat” strategy is being applied using Visual Inspection under Acetic acid (VIA) as screening method and cryotherapy as a treatment option(9)

In Ethiopia, national current initiatives lay conducive ground to mitigate the burden of cervical cancer. The ministry of health of Ethiopia launched preparatory works that have been completed to prevent cervical cancer by Visual Inspection with Acetic Acid (VIA) screening and cryotherapy in 118 hospitals across the country and has plan to expand the same services in more than 800 centers in the country(10).

## 1.2 statement of the problem

Cervical cancer is a global public health problem accounting for the fourth most common cancer-affecting women worldwide. The world has estimated population of 2,716 million women aged 15 years and older who are at risk of developing cervical cancer and 527,624 women are diagnosed with cervical cancer and 265,672 die from the disease annually worldwide, 87% occurring in sub-Saharan countries(11).

In Ethiopia, there are 27.19 million women aged 15 years and older who are at risk of developing cervical cancer(9)The age adjusted incidence of cervical cancer is 26.4 per 100,000 women, which is second to breast cancer. Every year 7,095 women diagnosed with cervical cancer and 4,732 die from the disease. The highest cancer-related mortality rate (10.9 per 100,000) among Ethiopian women(12).

Despite the importance of attendance, rates of attendance for screening programs vary widely, and are often low. The disparity in cervical cancer diagnosis and subsequent mortality between high- and low-resource countries is due largely to the low rate of screening for pre-invasive cervical disease and limited treatment options in low resource settings. For example, only 6%, 12%, and 8.3% of age eligible women in South Africa, Bhutan, and Nigeria have participated in cervical cancer screening service uptake respectively (13)(14)(15).

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 (8).

Cervical cancer's long latency and recognizable pre-cancerous lesions make screening a particularly effective way of prevention as pre-cancerous lesions, once identified, can be expectantly managed or treated safely and inexpensively in an outpatient setting(16).

The majority of cervical cancer deaths occur in women who never screened or treated and in women with well-described sexual and reproductive risk factors, such as an early sexual debut, a history of multiple sexual partners, and a high number of live births(17).

Low level of awareness, lack of effective screening programs, overshadowed by other health priorities (such as AIDS, TB, malaria) and insufficient attention to women's health are the possible factors for the observed higher incidence rate of cervical cancer in the country (18).

One major determinant for the prognosis of cervical cancer is the stage at which the patient presents(18).

Most patients in developing countries present late with advanced stage disease, in which treatment may often involve multiple modalities including surgery, radiotherapy, chemotherapy, and has a markedly diminished chance of success. Several factors such as educational status, financial capability, location, presence of health care facilities determine the stage at which patients with cancer present to the health facility(19).

In order to meet the purpose of efforts to increase or enhance cervical cancer screening and treatment, it is necessary to know more about what factors are motivating women's to get screened.

Previous studies conducted in the country emphasize on knowledge, attitude and practice (KAP), accessibility of service and health seeking behavior related factors. According to these studies, lack of awareness, lack of health seeking behavior, access to services for diagnosis and treatment was common factors that affect the screening practice. The recommended interventions were providing health education about the disease on its risk factors, sign, symptoms, and prevention methods for the women have considered as a crucial role in increasing their awareness, and health service related factors that influence health seeking behavior must be addressed through appropriate community level behavior change communications (20)(21)(22).Little is known about the intention of women in Ethiopia to screen for cervical cancer especially in the study area. Therefore, this study seeks to determine intention to CCS among women in yirgalem town.

In order to explore the motivational factors that predict variation in attendance at screening programs this study will use the theory of planned behavior (TPB) model.

The Theory of Planned Behavior (TPB), an extension of the theory of reasoned action, is one of the most widely employed social-cognitive theories used to understand the relationship between intentions and behavior (23).

The TPB was developed by Ajzen 1990 to improve the predictive validity of the theory of reasoned action by incorporating perceived behavioral control (24).

According to the TPB, the intention to perform a behavior directly predicts engaging in that behavior. Individual's attitude toward the behavior, subjective norms, and perceived behavioral control, in turn predicts intention. Further, when an individual's perceived behavioral control reflects the degree of actual control over engaging in a behavior, perceived behavioral control could directly influence engaging in the behavior. The intention to perform the behavior is an indication of the degree to which an individual is ready to perform a given behavior and actually performing the behavior is the observable response to the behavior. Attitude toward the behavior is the degree to which the individual views engaging in the behavior as positive or negative. The subjective norms construct is the perceived social pressure to engage or not engage in the behavior. Finally, perceived behavioral control is the perceived ability successfully to perform the behavior.

In comparison to similar cognitive-motivational theories models including the TPB, the health belief model, social cognitive theory and protection motivation theory, TPB have found to be the most parsimonious and superior model that predicts intentions and various behavioral outcomes(25).

A meta-analysis of 185 studies found that the TPB accounted for 39% of the variance in intentions and 27% of the variance in behavior across a broad spectrum of behaviors; which illustrates its wide applicability across behaviors (26).

Further TPB has been found to predict whether an individual engages in a wide variety of different health behaviors such as, being screened for breast and colorectal cancers(27).

It is also found to be effective in predicting cervical cancer screening intention (CCS) and factors associated with the use of CCS services, in different previous studies (28)(29)(30).

Moreover, theory based studies are used to construct effective and evidence based educational programs that can assist in prevention of CC (29)(30).

Hence, in order to promote CCS service –uptake in Ethiopia as well as in the study area, it is important to understand factors associated to CCS and their theoretical foundations.

Thus, this study applies TPB due to the following reasons, women's decision-making is the result of intrapersonal factors (the process of decision-making reflects people's values and attitudes). To act in a specific direction requires that people behave in line with their motivation and attitudes. In other words, a decision also implies a positive attitude towards undertaking it.

Involving in screening is a result of external factors that control or enhance the behavior. Like service availability, affordability and accessibility and once confidence to cope with these difficulties and support from other relevant people determines the extent to which women decide to participate in the screening (People influenced by others or by their perceptions of what others think they should do).

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Cervical cancer and screening

Cervical cancer screening programs have been reduced the incidence and mortality of cervical cancer and heightened public awareness of cervical cancer prevention, focusing on screening will lead to improved survival and a better quality of life.

This is supported by studies done in Japan cervical cancer screening program reduced incidence and mortality related with cervical cancer by 70% (31).

A population based case control study with prospectively recorded data on cervical screening conducted in UK indicated that, screening is associated with 60% reduction of cervical cancer in women aged 40, increasing to 80% at age of 64 and effective in preventing advanced stage(32).

### 2.2 literature review based on the theory of planned behavior perspective

#### 2.2.1 Socio-demographic factors related to intention to use cervical cancer screening services

The decision to have cervical cancer screening mainly influenced by socio-demographic factors. A Community-Based cross-sectional study conducted in Masaka Uganda using the ASE model reveled that living with a partner (being married), having 2–3 children and formal employment were statistically associated with intention to screen for cervical cancer (33).

Another cross-sectional study, conducted in Hamadan county, the west of Iran to assess factors related to regular undergoing Pap-smear test using of theory of planned behavior show that older women(>40 years) is more likely undergoing Pap smear test when compared to younger women and having family history of CC were significantly associated to intention (28).

Online survey conducted to assess Correlates of women's intentions to be screened for human papilloma virus for cervical cancer screening revealed that women with more than high school education were more likely to intend to attend screening with HPV(34).

In summary, socio-demographic factors that are associated with women's intentions to the utilization of cervical cancer screening services cited in the literature are education, marital status, employment, having children and age.

#### 2.2.2. Practice (Past behavioral experience) related to cervical cancer screening intention

Study conducted in Latin's to examine the utility of an expanded Theory of Planned Behavior model in predicting cervical cancer screening intentions show that past cervical cancer screening behavior were significantly related to higher intentions to be screened(29).

A cross-sectional study, conducted in Iran to assess factors related to regular undergoing Pap-smear test show that undergoing regular smear test were significantly associated with intention to have cervical cancer screening in the future (28).

Study conducted among Romania revealed that, the result of comparison of women's intention towards future Pap smears among women who had had screening with those who had never screened show that, women who had had a Pap smear had a much more intention towards screening compared to those who had never been screened(35).

Study done in china indicates that women who had ever had cervical screening during the past 3 years were significantly more willing to receive a screening in the future (36).

#### 2.2.3 Knowledge related to cervical cancer and cervical cancer screening intention

Understanding the relation between knowledge and intention to screen for cervical cancer considered important to assess women knowledge on cervical cancer.

A study conducted in Dessie town, northeast Ethiopia revealed that 51% of the participants had sufficient knowledge about cervical cancer (21).

It has been reported by another study that about 37.4% of women in Gulele sub-city Addis Ababa, were found to have a comprehensive knowledge about cervical cancer. Study conducted Bale zone, southeast Ethiopia showed that about 77.1% of respondents had heard of cervical cancer from these 46.3% were found to be knowledgeable about cervical cancer and in another study in Gondar Ethiopia, 78.7% of respondent had heard about cervical cancer from these 31.0% were found to have a comprehensive knowledge about cervical cancer (37)(20)(38). Also study in Bale Goba revealed that about 75.2%, 57% and 65.1% of the respondents were did not know the main presenting sign and symptoms, prevention methods and main risk factors of cervical cancer respectively (20).

Study conducted in china shows that women who have sufficient knowledge about cervical cancer and cervical cancer screening have intend more likely to screen in the future compared to those who have poor knowledge(36).

Study in Mandalay, Myanmar indicated that women who got high level and moderate level of total knowledge score abut cervical cancer and cervical cancer screening had more intention to take Pap smear (39).

#### 2.2.4 Attitudinal, subjective norm and perceived behavioral factors associated with intention to use cervical cancer screening.

A cross-sectional study conducted in Hamadan County, the west of Iran to assess factors related to regular undergoing Pap-smear test application of TPB. Show that, subjective norm is the best predictors of intention. Most important factors that persuaded the participants to take Pap smear test were 69.0% physicians' advice, 11.5% were partner, 10.5% radio &TV and 3.5% friend (28).

A cross-sectional study conducted to understand CCS intention among Latin by using expanded theory of planned behavior revealed that to intend for screening perceived behavioral control was strongest predictor of intentions; attitude and subjective norms were also positively associated. The proportion of variance  $R^2$  in intention to be screened for cervical cancer accounted for by the variables in the model was 0.65(29).

Another study conducted in Latin revealed that, to undertake screening for cervical cancer perceived behavioral control were significantly associated. Suggested behavioral controls were get next pap, appointment and regular pap's. Subjective norms were also positively associated with intention. Significant referent others for subjective norms, were family norms, friend norms, doctor norms and the proportion of variance  $R^2$  in intention accounted for by the predictors was 0.276 and the  $R^2$  in cervical cancer screening accounted for by its predictors was 0.130 (30).

A study examining low level of cervical cancer screening in Masaka Uganda using the ASE model reveled that, attitude and subjective norm were significantly associated with intention towards cervical cancer screening. Preference of male service providers were reported attitudinal factors for intention to screen for cervical cancer. Discuses with spouses 12.3%, close relatives 7.5%, peers 13.2% and with VHTs 3.8 were reported subjective norms. The identified significant barriers to screen for cervical cancer were concerns for privacy at the screening center, lack of discussion with health workers and distance from home to the nearest cancer-screening center

Intention to go for cervical cancer screening was reported among 63.0% of the respondents and only 5.5% women intended to screen within one month's period (33).

Study conducted among Romania to assess the psychosocial and health system dimensions of cervical screening revealed that attitude, subjective norm and perceived behavioral control were significant determinants of intention towards cervical cancer screening. Most women reported that going to the doctor to get a smear test is an important, wise, safe, good and advantageous behavior. Both Injunctive normative beliefs and descriptive normative beliefs were significantly determine SN. The proportion of variance  $R^2$  in intention to be screened for cervical cancer accounted for by the variables in the model was(35).

According to online survey designed using, the Theory of Planned Behavior to assess factors that influence women's intentions to attend HPV-CCS reveled that; positive attitudes and perceived behavior control were significant predictors of intention to screen for cervical cancer (34).

A study conducted among Canadian explored that significantly higher attitudinal scores, indicating their belief that HPV testing was more accurate, safe, protective and acceptable were necessary for the women to undergo screening. Both direct subjective norms and indirect subjective norms were significantly associated with intention to have an HPV test. The more likely reported indirect subjective norms includes the opinions of family physicians, friends, spouse or partner and the British Columbia Cancer Agency as important in their decision making to screen.

It also suggested that women who were more likely to intend to be screened with HPV testing reported significantly higher rates of perceived behavioral control. Women who intended to be screened reported greater comfort, sharing results with their partners and more likely to say that partners would be understanding of their HPV results (40).

In London, study to assess the predictors of uptake of a routine cervical smear test a comparison of the health belief model and the theory of planned behavior showed that attitudes towards screening were predictive of intentions and a significant proportion of variance was explained (41).

## 2.3 Conceptual framework

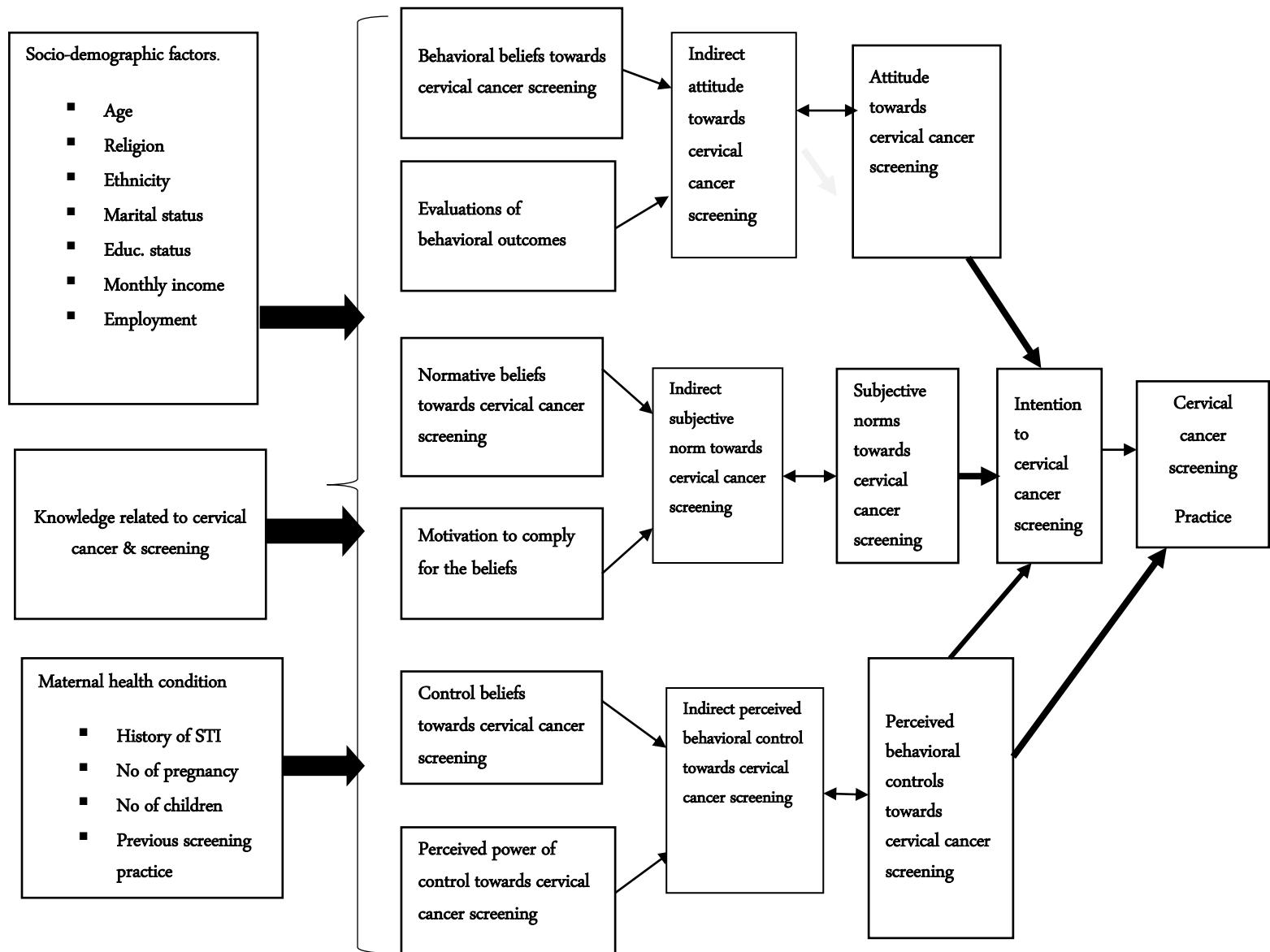


Figure 1. Conceptual framework adapted from TPB model

## 2.4 Significance of the study

Cervical cancer is a big concern in Ethiopia. In recent years, cervical cancer screening test is feasible alternative modality for control of cervical cancer. In order to promote screening practice women's knowledge, beliefs, social influence and external controls towards the use of the service were considered as important factors that motivate women to have intend.

Studies in this regard is limited in the country, thus this study is intended to fill research gaps.

The identified predictors regarding cervical cancer screening intention and barriers towards screening can help as an input to policy makers (program planner) at different level and NGO working on cancer as well as for health care workers to design appropriate theory-based interventions. It can contribute in designing a convenient health education and promotion programs in Ethiopian context that address salient beliefs related to attitude, subjective norms and perceived behavioral control towards cervical cancer screening. It also facilitate things to encourage women's to seek the service and in addition, it may be helpful in providing information as baseline for future studies.

## **CHAPTER THREE: OBJECTIVE OF THE STUDY**

### **3.1 General objective**

To assess the predictors of intended use of cervical cancer screening services among women visiting maternal and child health services at health institutions in Yirgalem town. Using theory of planned behavior, 2017.

### **3.2 Specific objective**

- To predict intention towards cervical cancer screening services
- To determine the attitude towards cervical cancer screening services
- To identify subjective norm towards cervical cancer screening service
- To elucidate the perceived behavioral controls on cervical cancer screening service
- To identify associated socio demographic factors towards cervical cancer screening.

## CHAPTER FOUR: METHODOLOGY

### 4.1 Study area and period

The study conducted in yirgalem town health institutions from March 1-March 15; 2017. Yirgalem is a town in the SNNPR of Ethiopia Part of the sidama zone, and found in the Great Rift Valley. Located 260 kilometers south of Addis Ababa and 40 kilometers south of Hawassa , the town has a latitude and longitude of 6°45'N 38°25'E and an elevation of 1776 meters.

According to census (2007) projection for 2016, the total population of the town was 61,260 of these 30,145 are men and 31,115 women. The town have five Kebele and there are one general hospital 1-health centers and seven private health institutions. Cervical cancer screening service given in the hospital, in the health centers and three private clinics.



Figure 2.Map of Yirgalem

## 4.2 Study Design

An institution based cross-sectional study design was used.

## 4.3 Source population

All women's age 30-49 years who were attending maternal and child health service in Yirgalem town health institutions.

### 4.3.1 Study population

All sampled women clients' age 30-49 years who attending maternal and child health service in the selected health institutions of Yirgalem town during data collection period.

### 4.3.2 Inclusion criteria

Women clients who visit antenatal, postnatal and family planning service in the selected health institutions whose age between 30-49 years.

### 4.3.3 Exclusion criteria

- Those women's, who were too sick or unable to give informed consent,
- women who have confirmed cancer of the cervix

## 4.4 Sample size and sampling procedures

### 4.4.1 Sample size determination

The sample size was determined using sample size determination for estimation of a single population mean formula as follow.

$$n = \left( \frac{Z_{\alpha/2}}{\sigma/d} \right)^2$$

### **Assumption:**

$\sigma$  = The estimate of predicted variance in intention to CC screening accounted by the variables in the model taken as 50%

d = Margin of sampling error tolerated 5% (0.05)

$\alpha$  = Critical value at 95% confidence interval of certainty (1.96)

n=desired sample size

After adding non-response rate of 10 % the total sample size becomes **422**, women's were included in the study.

#### 4.4.2 Sampling technique

There are nine health institutions in Yirgalem town, five of the health institutions give CCS service and five of them were included in the study. The sample size was proportionally allocated to each health institution based on a one-month antenatal, postnatal and family planning clients flow rate prior to the data collection.

By rule of sampling proportionate to population size  $p= 422/1,682= 0.25= 25\%$  by the size of clients visiting maternal and child health service (ANC,PNC &FP) in one month in the selected health institutions to ensure proportionality. Therefore, by multiplying each of selected maternal health service unit's number of clients in each health institution with 0.25 to get proportionality. Where, 422; the calculated sample size ,1,682 were total number of clients visiting maternal health service in yirgalem town of the selected health institutions within one month period and 0.25 was the proportion.

Finally, study subjects were selected using systematic sampling technique, by dividing the sample size to be taken from ANC, PNC &FP to the number of days in the data collection period. So that roughly equal numbers of clients were interviewed each data collection day, until the required sample size was achieved. That means to take participants from ANC, PNC &FP the sample was spread over each day with in the data collection period and taking average daily flow of clients from the respective health institution of ANC, PNC &FP units. To get average daily patient flow, considering 3-month patient flow rate in each health institution in ANC, PNC, & FP, taking the average for one month, and dividing for the data collection days.

**Schematic presentation of sampling (Proportionally allocated by (P \* n/N))**

$$P=422/1,682=0.25$$

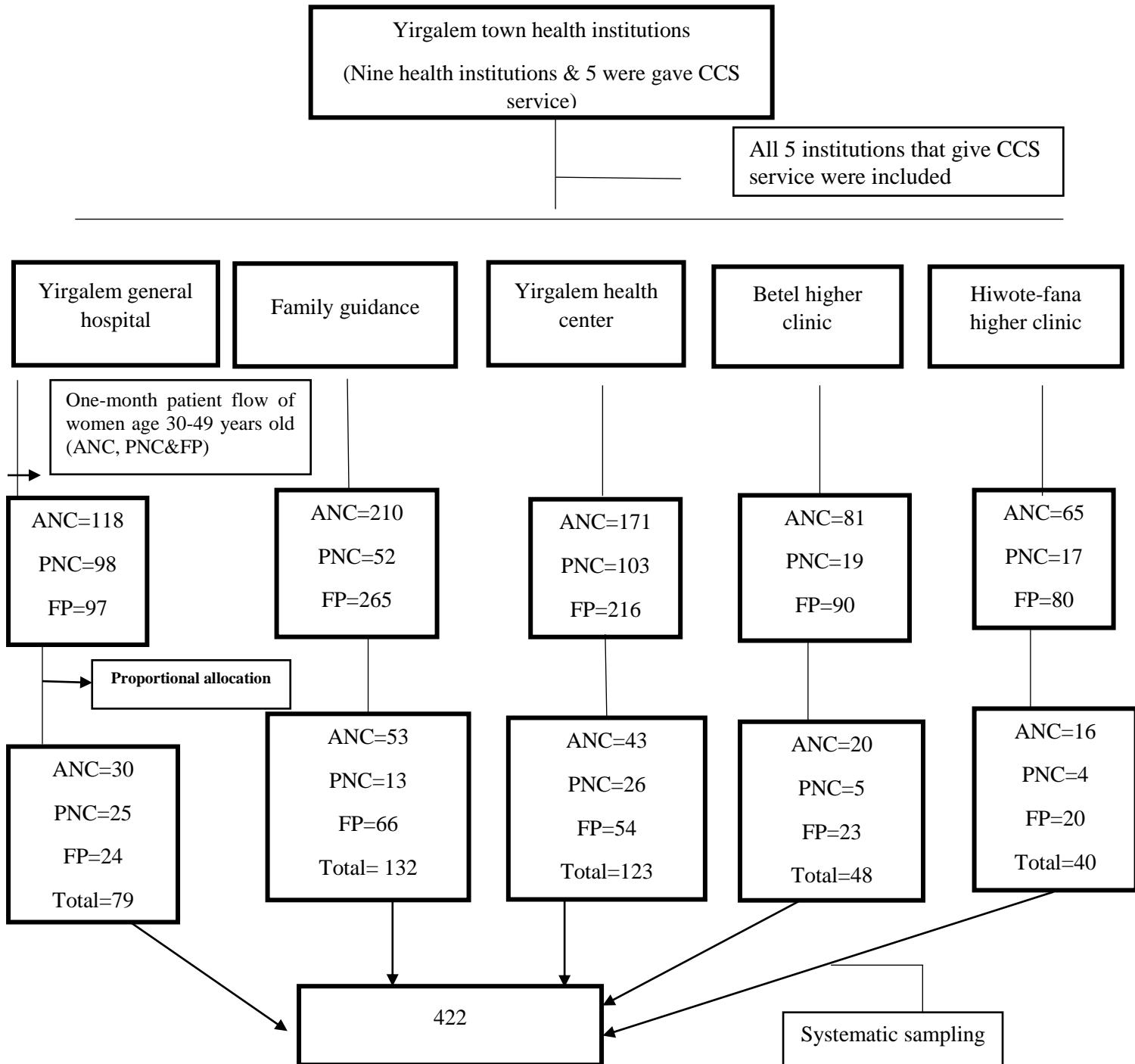


Figure 3. Schematic presentation of sampling

## 4.5 Study variables

### 4.5.1 Dependent variable

Intention to use cervical cancer screening service

### 4.5.1 Independent variables

- Socio-demographic factors, (Age ,religion, marital status, educational status ,monthly income, employment, number of pregnancy, number of children and ethnicity)
- previous screening practice
- History of STI
- knowledge
- Attitude
- Subjective norms
- Perceived behavioral control

## 4.6 Operational definition and measurements

**Behavioral intention of having CCS-** this referred to the individual's plan to use CCS service in the near future (in the next 3month). Measured by using four items with a bipolar 5-point scale with ends "likely- unlikely" response format. A sum score was constructed by adding the four items. The higher the score in the intention was refers the strong the intention formation.

**Attitude toward the use of CCS-** this meant an individual's predisposition to respond in a favorable or unfavorable manner toward the use of CCS service.

**Direct measurement of attitude:** measured using four semantic differential scale items using bipolar adjectives, which are judgmental, items that are negatively worded points were recorded and summed, so that higher numbers reflect a positive attitude to CCS.

For indirect measurement of attitude, six behavioral belief items with five point Likert scale score was multiplied with its corresponding outcome evaluation on bipolar scale and then summed to calculate composite score of indirect attitude scale. In which higher scores indicate more positive attitude towards CCS.

**Subjective CCS norms-** this is an individual's perception that significant others, in general, think that the individual uses CCS services as a normative action.

**Direct measurement of subjective norm:** measured using four items with Likert scale format ranging from ‘strongly disagree’ to ‘strongly agree’. Strongly disagree =1, disagree=2, neutral=3, agree= 4, strongly agree =5. Recode the items that have negatively worded endpoints on the right and the responses was summed and a total score obtained, so that higher numbers reflects referent others was approve using of CCS service.

For indirect measure, normative beliefs was measured using seven bipolar unlikely-likely scored -2 to +2, for motivation to comply with each referents seven unipolar scale scored 1 to 5 was used and each normative belief items were multiplied with motivation to comply to compose the indirect subjective norm scale. The higher scores (+) score indicate greater perceptions that referent other endorse to screen for cervical cancer negative (-) score means that, the participant experiences social pressure not to screen for CC.

**Perceived behavioral control towards CCS-** this indicated an individual’s confidence about using CCS services in the near future, if they desired to.

**Direct perceived behavioral control:** four semantic differential scale with bipolars was used to measure perceived behavioral control directly. A sum score was constructed by adding items higher numbers reflect greater control concerning consequences of CCS service.

For indirect measure, six control belief items was measured using unlikely-likely scale and perceived power is measured using six items with bipolar Likert scale format ranging from ‘strongly disagree’ to ‘strongly agree’ scored -2 to +2 scale response format. The control belief items was multiplied by those of perceived power to control the beliefs and summing these product scores across all control factors to compose the perceived behavioral control, in which higher scores indicate a greater of perceived behavioral control concerning consequences of cervical cancer screening services.

**Knowledge about cervical cancer and screening** – the understanding of the respondents on sign and symptoms, risk factors, prevention method, frequency and eligibility for screening on cervical cancer.

Assessed using 19 items with Yes or No response format about sign and symptoms, risk factors, method of prevention, stage of curacy, frequency of screening and eligibility for screening.

For each knowledge question, (sign and symptoms were assessed by four items, risk factors with six items, method of prevention assessed by six items and the rest by one question each).

Each items measuring knowledge about cervical cancer treated as continuous variable, and scored and pulled together and the mean score was computed to determine the overall knowledge of the respondents. Average and above average was considered as knowledgeable and below the average score was not knowledgeable (37)

**History of STI-** is the respondent's previous history of exposure for sexually transmitted infection. Measured using one items that asks exposure status with yes or no response type.

**Previous screening practice-** this component considered past CCS experience of clients at least once in their lifetime. One item was used to ask respondents whether they have ever screened for cervical cancer by using yes/No approach.

**Elicitation study:** tools contains open-ended questions that asks, beliefs regarding advantages and disadvantages following use of ccs services, the people/groups that would approve/disapprove her use of CCS and factors that would either hinder or facilitate her use of the services was included.

#### **Beliefs related to cervical cancer screening**

According to the result of the elicitation study regarding the important of screening, as an advantage the first most salient belief reported by majority of respondents were 'knowing once own status', 'CCS is required in protecting oneself from death related with cervical cancer'. Next this was the belief 'screening for CC makes you to get early treatment' and another belief observed as advantage is 'increase confidence' and 'beneficial for health'. Concerning the perceived disadvantage outcome of CCS, the most frequently responded belief was as "there is no disadvantage. "

In response to the question, asking respondents to list referents who would approve of them to screen, most respondents, chose health workers, H.E.W and leaders as the most influential referent others. H.D.A influence was also found to be important. As the respondents rated those, who have previously screened women were also mentioned as being referents.

Regarding to the response to the question "What factors would facilitate or make easy for you to get screening and hinder you? Most respondents expressed that they would find it difficult to test because they perceive that they are' healthy' and have 'no symptom of the disease'.

Another belief found was ‘perceiving there is pain during screening’ rarely listed by the respondents. Other few respondents indicated that ‘not knowing the place where the screening is given ‘and ‘lack of knowledge’ about the disease’

#### **4.7 Data collection instrument and data collection procedure**

The tools for this study was adapted from previous studies and using a manual for health services researchers constructing questionnaires based on the theory of planned behavior (30)(33)(42) and was modified based on the result of elicitation study.

The questionnaire was structured in to 11-sections (intention, direct and indirect attitude, subjective norm and perceived behavioral control, past behavioral practice, socio demographic characteristics and knowledge)

Ajzen (42) suggested that the behavior of interest must be defined in terms of its target, action, context, and time (TACT). For this questionnaire, the initial TACT elements was the intention to be screened for CC (the action) for CCS (the target), during 30-49 years (the time). Health institutions (place where the screening provided), is the context of the study.

Data were collected using structured pretested interview administered questionnaire that was translated to Amharic and Sidamic language.

Nine female BSC nurse working on maternal and child health service units and two health officer supervisors from the selected health institution collect the data and ensure quality of the whole data collection process respectively. The principal investigator coordinate the overall activity. Recruitment of study participants were taken place between March 1-30, 2017

#### **4.8 Data quality management**

Data quality ensured during instrument development. Tool adapted from published similar studies, by conducting of elicitation study. Elicitation study is first step study, to identify salient local beliefs (important beliefs) held by the study population regarding the behavioral consequences of using cervical cancer screening.

Contains 14 open-ended questions that asks, beliefs regarding advantages and disadvantages following use of CCS services, the people/groups that would approve/disapprove her use of CCS and factors that would either hinder or facilitate her use of the services was included.

Before data collection, the questionnaire was translated by language expert from English version to Amharic language then to sidamic language and back translated to English language by different translator to keep the consistency of the questionnaire.

A two day training was given before actual data collection by the principal investigator for the supervisors and the data collectors about the purpose of the study, how to supervise and collect the interview questionnaire respectively.

To avoid respondents fatigue due to the chance being asked two times, the Instrument was pre tested on 5% of the same respondents in Hawass referral hospital, before the actual data collection; and correction was taken accordingly. For instance, in the direct measure of attitude before pretest, all items have similar ends (positive end), and the response is similar throughout the questionnaires. After pre-test mixing of positive and negative endpoints was done to minimize the risk of ‘response set’, or a tendency to answer questionnaire items in the same way regardless of their content.

During data collection, questionnaire was checked for its completeness on daily basis by data collectors, supervisors and then by investigator. Incorrectly, filled or missed questionnaire were discarded from analysis.

The validity and reliability of instrument was checked by conducting factor analysis, factor loading score and varimax method of rotation was employed to observe whether items are associated with a given factor or not; items with factor loading  $>0.4$  were taken.

Cronbach’s alpha was used to determine internal consistency of items. For each scale Cronbach’s alpha, ( $\alpha$ ) score of  $\geq 7$  % was taken as an acceptable measure of internal consistency of items on the scale). Negatively stated items were reversed before running reliability analysis.

#### 4.9 Data processing and analysis

After the data collection, data was checked manually for its completeness every day. the responses in the completed questionnaire were coded and entered in to Epi-data version 3.1 and

exported to Statistical Packages for Social Sciences (SPSS) window 21.0 for analysis by the principal investigator. Further, data cleaning (editing, recoding, checking for missing values, and outliers) was made after exported to SPSS. Assumption checking was assured before any kind of analysis (linearity, normality, constant variance and multi collinearity test for each associated factor was checked).

The data analysis was ranges from the basic description to the identification of potential predictors of intention towards CCS.

Independent T-test, one way ANOVA and correlation analysis were performed to identify significant predictors of intention to use CCS after controlling for other independent variables.(P-value less than 0.25 and 95 % CI was considered statistically significant).

Explanatory variables which had statistically significant association with the outcome variable were entered into the final multiple linear regressions and independent predictors of intention of CCS among women's was identified. Standardized  $\beta$  coefficient at 95% CI and P-value less than 0.05 was considered to declare an independent effect of explanatory variables. To examine association between the direct and indirect measures Correlation analysis were done. The result was presented by using frequency tables and discussed with previous study findings.

#### 4.10 Ethical consideration

After approval of the proposal, ethical clearance was obtained from research and ethics committee of Jimma university institute of health ethics review board. The necessary permission was obtained from yirgalem town health office. Written or verbal informed consent was obtained from the study participants after explaining the purpose of the study. Data was kept confidential and anonymous and it was used only for research purpose. The participants were informed that the information was accessed by the investigator. The participants were also informed that they are not forced to answer the entire question and they can withdraw at any time if they do not want to participate.

#### **4.11 Dissemination plan**

The findings will be presented to Jimma University scientific community in a defense and after approval of the findings of this study by Jimma university institute of health facility of public health and department of health education and promotion. The result will be disseminated to SNNPR health office, Sidama zone health office, Yirgalem town health institutions and different NGOs working in cervical cancer prevention and control. The findings will also disseminated to different stakeholders that will have a contribution to improve women's health services. Finally, effort will made to present in various seminars and workshops and for publication in national or international journals.

## CHAPTER FIVE: RESULT

### 5.1 Socio-demographic characteristics of respondents

From 422 participants 402 respondents were completed the interview and producing 95% response rate. The age of the respondents ranged between 30 and 49 years with mean age of  $36.40 \pm 4.791$  years. The majority 278 (69.2%) of the respondents were protestant followed by orthodox accounting for 66 (16.4 %). Most of, 288 (71.6%) of the respondents were sidama, while the remaining 114 (28.3 %) belonged to other ethnic groups. Majority of the respondents 362 (90%) were married. About 154 (38.3%) of respondents were housewife. About 187 (46.5%) of respondents had >1000 Ethiopian birr monthly income.

Among the respondents 132 (38.3%) have completed primary school and above 19 (4.7%) were illiterates. One hundred seventy two (42.8%) of the respondents have gave birth 0-1 times (Table 1).

Table 1 Socio-demographic characteristics of respondents in Yirgalem town, Ethiopia 2017 (n=402)

Variables	Categories	Frequency	Percent
<b>Age in years (n=402)</b>			
	30-34	150	37.3
	35-39	131	32.6
	40-44	94	23.4
	45-49	27	6.7
<b>Religion (n=402)</b>			
	Protestant	278	69.2
	Orthodox	66	16.4
	Muslim	33	8.2
	Catholic	25	6.2
<b>Ethnicity (n=402)</b>			
	Sidama	288	71.6
	Amahara	42	10.4
	Oromo	29	7.2
	Gurage	17	4.2
	Wolayita	14	3.5

Silte	12	3
<b>Marital status (n=402)</b>		
Married	362	90.0
Widowed	21	5.2
Single	13	3.2
Divorced	6	1.5
<b>Occupational status</b>		
Housewife	185	46
Self	129	32.1
Governmental	88	21.9
<b>Monthly income (n=402)</b>		
>1,000	231	57.5
500-999	94	23.4
<500	77	19.2
<b>Educational status</b>		
Primary	191	47.5
Secondary and above	151	37.6
uneducated	60	14.9

## 5.2 Source of information about cervical cancer and cervical cancer screening

Three hundred ninety and one (97.3%) have heard about cervical cancer and 381(94.8%) aware that there is pre cancer screening procedures. From all the participants 166(42.5), and 164(42.9%) were heard from mass media about cervical cancer and cervical cancer screening procedure respectively. Of the respondents, 114(29.8) heard about the presences of pre cancer screening service from health workers (table 2).

Table 2 .Source of information about cervical cancer and cervical cancer screening of respondents in yirgalem town, south Ethiopia (n=402)

Source of information	About CC		About CCS	
	Frequency	Percent (%)	Frequency	Percent (%)
<b>Heard</b>				
yes	391	97.3	371	95.4
no	11	2.7	18	4.6
<b>From radio/TV</b>				
yes	166	42.5	164	42.9
no	225	57.5	218	57.1
<b>From printed materials</b>				
yes	4	1	8	2.1
no	387	99	374	97.9
<b>From health workers</b>				
yes	85	21.7	114	29.8
no	306	78.3	268	70.2
<b>From friend, family</b>				
yes	115	29.4	78	20.4
no	276	70.6	304	79.6
<b>From leaders</b>				
yes	13	3.3	14	3.7
no	378	96.7	368	96.3
<b>From school system</b>				
yes	8	2	4	1
no	383	98	378	94

### 5.3 Knowledge on Cervical Cancer and past cervical cancer screening practice

Among the participants 200 (44.2%) know about symptoms of cervical cancer, 154 (39.4%), know about risk factors for cervical cancer 136 (34.95%) prevention methods of cervical cancer, 193 (49.4%) know about stages of curacy. Regarding frequency of screening 42(11%) of the respondents knew cervical cancer screening is necessary every 5 years and 90 (23.6%) know age group mostly affected. For each knowledge items, scores were summed and mean score was computed and only (162) 41.4% of the respondents were answered above the mean and considered as knowledgeable.

Among all respondents, only 36 (9.2%) had cervical cancer screening experience in the past and 355 (90.8%) were not screened (table 3).

Table 3 Knowledge about cervical cancer and cervical cancer screening of respondents and medical history in yirgalem town, south Ethiopia (n=402)

Knowledge items	Frequency	Percent (%)
Over all knowledge score		
Knowelegabel	162	41.4
Not knowelegabel	229	58.6
Sign and symptoms		
Vaginal bleeding		
Yes	248	36.6
No	143	63.4
Vaginal foul smelling discharge		
Yes	271	69.3
No	120	30.7
Post coital bleeding		
Yes	148	36.8
No	243	42.1

Pain during sex	Yes	133	34.0
	No	258	66.0
Do not know		40	10.2
<hr/>			
Having multiple sexual partners	Yes	195	49.9
	No	196	50.1
Sex at an early age < 15 year	Yes	160	40.9
	No	231	59.1
<hr/>			
Acquiring HPV	Yes	60	15.3
	No	331	84.7
Cigarette smoking	Yes	169	43.2
	No	222	56.8
Using birth control pills for a long time	Yes	169	43.2
	No	222	56.8
Exposure to sexually transmitted infections	Yes	169	43.2
	No	222	56.8
Don't know		15	3.8
<hr/>			
Prevention methods	Yes	161	41.2
	No	230	58.8
Be faithful to sexual partner			
Avoid sex at an early age <15 year	Yes	128	32.7
	No	263	67.3
No smoking or quit smoking	Yes	176	45.0
<hr/>			

	No	215	55.0
To be vaccination for HPV vaccine	Yes	65	16.6
	No	326	83.4
Regular medical checkup (screening)	Yes	161	41.2
	No	230	58.8
Prevent STIs by safe sex	Yes	129	33
	No	262	67
Don't know about prevention		6	1.5
Cured if early	Yes	198	50.6
	No	193	49.4
30-49 years old	Yes	90	23.6
	No	292	76.4
Every 5 years	Yes	42	11
	No	340	89
Past screening practice	Yes	36	9.2
	No	355	90.8
History of STI	Yes	4	1
	No	385	99
Number of pregnancy	0-1	148	36.8
	2-3	88	46.8
	4+	66	16.4
Number of children	0-1	212	52.7
	2-3	145	36.1
	4+	45	11.2

## 5.4 Factor analysis

Before total score was computed, for items that were measured in scale, factor analysis was done to confirm whether items were loaded to their respective constructs or not. Factor analysis was computed for items measuring each of the direct measures of TPB components and intention each with four items, each factor with Eigen-value, 4.894, 1.736, 1.248, and 1.167 was identified. The items were loaded on four factors, in order of percentage variance explained, represented by the first dimension were intention towards CCS (14.4%), second attitude (14.338%), third subjective norm (14.329%), and the last dimension were perceived behavioral control (13.464) (Table 6).

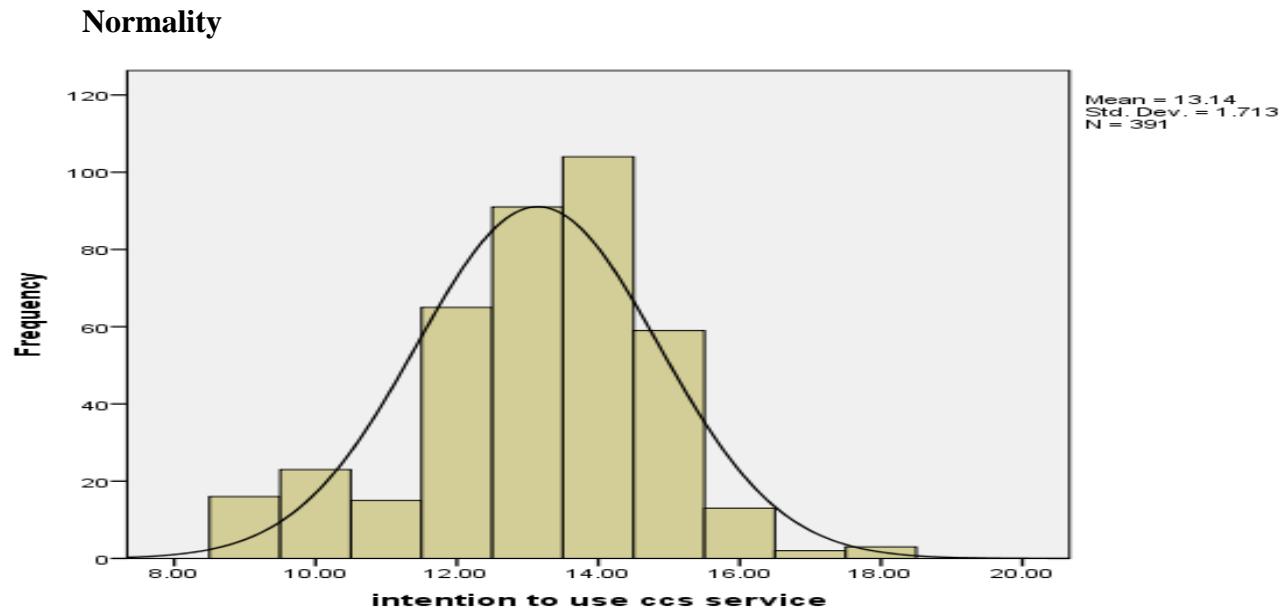
The Cronbach's alpha confirmed internal consistency of the dimension, which was 0.691 for intention, 0.713 for attitude dimension, 0.726 for the subjective norm dimension and 0.732 perceived behavioral control for the whole scale. The sample size adequacy was checked by KMO, which was 0.822, and the multicollinearity were checked by looking the determinant were 0.007.

Table 4. Principle component analysis for direct measures of TPB and intention after varimax rotation with loading factors 0.4

<b>Serial No</b>	<b>Component</b>	<b>Number of items</b>	<b>% variance explained after rotation</b>	<b>Cronbach's alpha</b>
1	Intention	4	14.4	0.69
2	Attitude	4	14.34	0.71
3	Subjective norm	4	14.33	0.73
4	Perceived behavioral control	4	13.46	0.73
5	Total	16	56.5	-

## 5.5 Assumptions test result

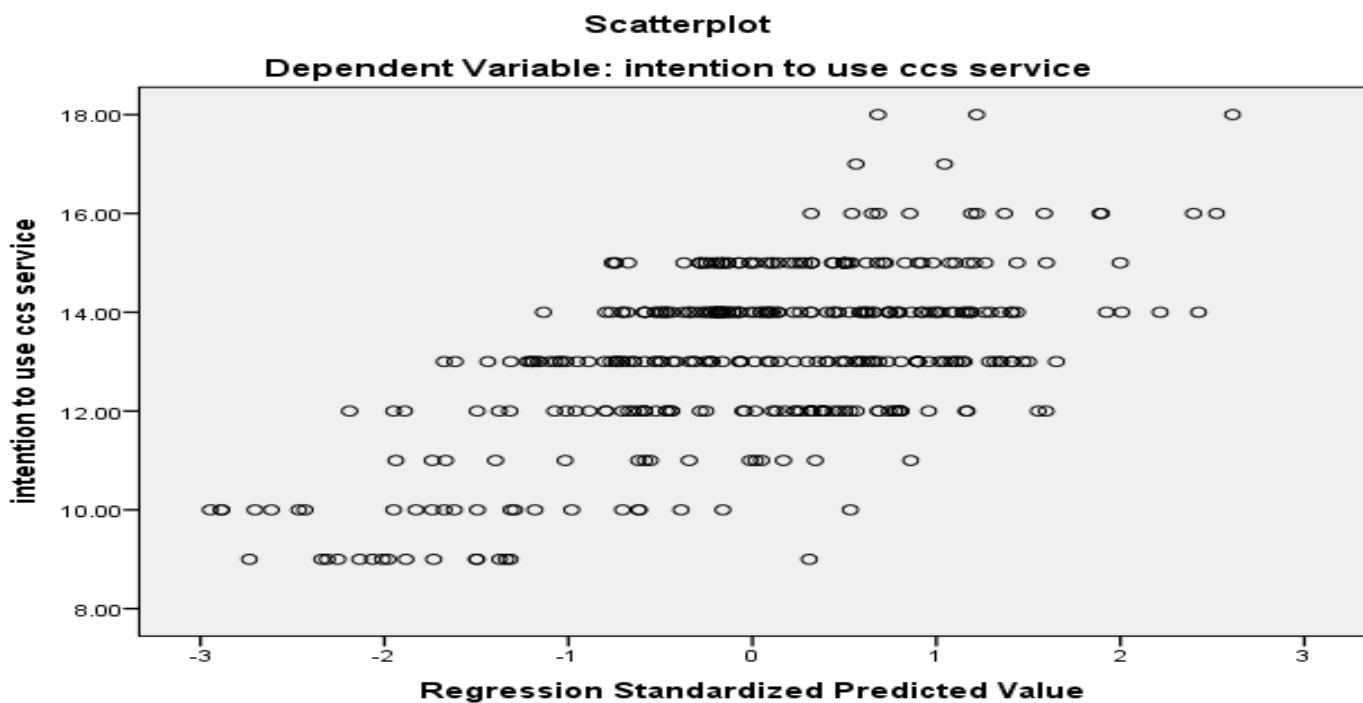
Assumption of multiple linear regression; normality, multi collinearity test for each associated factor, constant variance and linearity was checked.



## Collinearity Statistics

Dependent variables	Tolerance	VIF
Direct PBC	.69	1.45
Direct SN	.69	1.48
Direct ATT	.86	1.16
Knowledge	.97	1.03
Past screening practice	.99	1.01

## Heteroscedasticity



## 5.6 Direct TPB components and intention to cervical cancer screening descriptive scores

The mean score of direct attitude, subjective norm and PBC had were 14.4 (SD=2.1), 13.71 (SD=1.97) and 13.74 (SD=1.97) respectively and intention with mean score of 13.14(SD=1.7). There was higher attitude score 14.4 (SD=2.1) to CCS among women.

Table 5.Descriptive statistics for components of theory of planned behavior and intention for women visiting health institution in Yirgalem town (N=402)

Components	N	number items	of	scale range	scale mean	SD
<b>Intention</b>	391	4		4-20	13.14	1.7
<b>Attitude</b>	391	4		4-20	14.4	2.1
<b>Subjective norms</b>	391	4		4-20	13.71	1.97
<b>Perceived behavioral control</b>	391	4		4-20	13.74	1.97

## 5.7 Relationship between intention, direct and indirect measures of TPB constructs

For both direct and indirect measures of TPB, the relationship between the constructs was seen using Pearson correlation coefficients. As the correlation coefficient suggest, all the direct measures of TPB were correlated with indirect to each other. Regarding the relationship of each of the direct measures of TPB and intention to CCS, showed statistically significant positive association with intention; i.e. with attitude ( $r=0.302(p<0.01)$ ), subjective norm,(  $r=0.461(p<0.01)$ ) and PBC (, $r=0.485(p<0.01)$ ).

Table 6. Correlation between intention, direct and indirect measure of TPB (n=402).

Components	DATT	DSN	DPBC	IATT	ISN	IPBC	Intention
DATT	<b>1</b>						
DSN	<b>0.307**</b>	<b>1</b>					
DPBC	<b>0.328**</b>	<b>0.526**</b>	<b>1</b>				
IATT	<b>0.361**</b>	<b>0.335**</b>	<b>0.357**</b>	<b>1</b>			
ISN	<b>0.152**</b>	<b>0.361**</b>	<b>0.313**</b>	<b>0.698**</b>	<b>1</b>		
IPBC	<b>0.231**</b>	<b>0.408**</b>	<b>0.401**</b>	<b>0.546**</b>	<b>0.487**</b>	<b>1</b>	
INTENTION	<b>0.302**</b>	<b>0.461**</b>	<b>0.485**</b>	<b>0.491**</b>	<b>0.462**</b>	<b>0.43**</b>	<b>1</b>

\*Correlation is Significant at 0.01

## 5.8 Effect of knowledge, medical condition and socio-demographic variables on intention to cervical cancer screening.

Over all knowledge score of women on sign and symptoms, risk factors, prevention methods, stage of curacy, frequency of screening and eligibility for screening were seen all socio demographic variable, past cervical cancer screening practice, history of STI, number of pregnancy and number of children were separately seen in bivariate analysis. In binary linear regression knowledge is significantly and positively associated with intention  $\beta=0.242$  [0.11, 0.258],  $p<0.001$ . In independent T-test, there is difference in mean of intention for cervical cancer screening between past cervical cancer screening practice (p-value, 0.07). All the socio demographic variables were not significantly associated with intention to cervical cancer screening in one way ANOVA that means there is no difference in mean levels of intention to CCS between the three group of occupational status , income level, educational status, number of pregnancy, number of children, and the four level of marital status.

## 5.9 Predictors of cervical cancer screening intention

In the final model variables that were significant in bivariate ( T-test and correlation analysis) were included, these were attitude, subjective norms, perceived behavioral control, knowledge and past screening practice were interned in multivariate analysis and PBC was found to be best predictor ( $\beta=0.297$  ( $p<0.01$ ), next to PBC, subjective norm ( $\beta=0.248$  ( $p<0.01$ )).

Table 7. Predictors of behavioral intention to cervical cancer screening, Yirgalem town south Ethiopia (n=402) 2017

<b>Variables</b>	<b>unstandardized</b>	<b>Standardized</b>	<b>Sig.</b>	<b>95% CI</b>
	<b>B</b>	<b><math>\beta</math></b>		
<b>Constant</b>	4.5		<0.01	[3.24, 5.78]
<b>Perceived behavioral control</b>	0.257	0.297	<0.01	[0.172, 0.343]
<b>Subjective norm</b>	0.216	0.248	<0.01	[0.131, 0.30]
<b>Attitude</b>	0.088	0.11	0.014	[0.018, 0.158]
<b>Past screening practice</b>	0.579	0.098	0.02	[0.093, 1]
<b>Cumulative knowledge</b>	0.11	0.145	<0.01	[0.001, 0.122]

The overall model explained 33% variation in intention towards cervical cancer screening, which was significant as F-statistics of ANOVA. The difference between R-square and Adjusted R-square was 0.8%, which was less than 5% that showed there was no sample error. The overall model goodness of fitness was prominent from p-value (sig= 0.000) which was less than 0.01 that overall model was significant.

## CHAPTER SIX: DISCUSSION

This study describes intention to use cervical cancer screening among women. The risk of developing cervical cancer is high in the third world due to atypical socio-economic characteristics including poverty, illiteracy, high parity and less availability and utilization of screening facilities (43).

Among the objectives of the study, one was identifying the socio-demographic characteristics associated with likelihood of intention to use CCS. However, the results of this study revealed no significant socio-demographic predictor. In contrast to this, socio-demographic variable like age and educational status is significantly associated in study conducted in Iran and online survey respectively (28, 34). This may be due to variation in socio-demographic characteristics in different setting.

Among all respondents of this study, 391 (97.3%) have heard about cervical cancer and 381(94.8%) aware that there is pre cancer screening procedures. This finding is high as compared to community-based studies done in Bale Goba Ethiopia in 2016,(20) a study conducted in Gondar in 2010 (38). This difference may due to the living arrangements of women and the setting in which the study conducted (those who visit institution may have higher chance of getting access for information than those not visit).

Knowledge on risk factors and prevention methods is an important element in the prevention of cervical cancer. Knowing the risk factor can make someone avoid them and hence prevent from acquiring the disease. In this study knowledge on sign and symptom 200 (44.2%), risk factors was 154 (39.4%) and prevention methods 136 (34.9%) were poor and hence education on this issue for women is important. However, it is relatively higher than the finding of a cross-sectional Study in Bale Goba, which revealed that only 24.8% and 27% of the respondents were; know about sign and symptom and main risk factors of cervical cancer respectively (20). This gap might be due to the difference in study time, study setting and nature of the population involved in the studies conducted.

Women knowledge on the age of women who are eligible for cervical cancer screening indicated that, 90 (23.6%) of respondents in this study knew exactly the age at which one has to undergo screening. Regarding frequency of screening 42(11%) of the respondents knew cervical cancer screening is necessary every 5 years.

In this study, 162(41.4%) of the respondents were considered to be knowlegabel, being knowlegabel about cervical cancer and cervical cancer screening was significantly and positively associated with cervical cancer screening intention and its contribution on intention to screen was  $\beta=0.145$  [0.001, 0.122]. The finding is similar to some related studies which done in China women (36) and Mandalay, Myanmar women(39).

This might be because, having knowledge is necessary to have positive attitude and it make an individual to intend for screening.

With respect to past behavior of cervical cancer screening, in this study only 9.2% of the respondents reported that they had been screened previously for cervical cancer.

Past cervical cancer screening was significantly and positively associated with future cervical cancer screening intention and its contribution on intention to screen was  $\beta=0.098$  [0.093, 1]

This is in line with the study conducted in Latin and Iran, where previous cervical cancer screening was associated with future cancer screening intention, women who were screened in the past are more likely to have screening in the future (29, 28).

Regarding the direct and indirect measures, this study described that both direct and indirect measures were associated to each other and contributed the larger portion to intention.

The result of the direct measurement was reliable with the composite measures and there was significant positive relationship between both measures in this study. This is consistent with the concept of theory of planned behavior as the founder of this theory suggested when different items tapping the same construct; scores are expected to be positively correlated (42).

Ajzen, identified that the intention to perform a behavior is a function of attitude, subjective norms, and PBC, and that this varies according to the behavior, the population under study, the context and time in which the study conducted (42).

Concerning the prediction of TPB constructs in this study, intention to cervical cancer screening among women was mostly influenced by perceived behavioral control followed by subjective norm to cervical cancer screening.

It show that women with lower perceived behavioral control expressed weaker intentions to be screened for cervical cancer. This suggests the need for interventions to increase women sense of control over undergoing screening.

Subjective norms was the second strongest predictor of intention, in that those women who were more strongly endorsed that their, important others expected them to be screened for cervical cancer expressed stronger intention to be screened for cervical cancer. As such, interventions should include messages that strengthen women beliefs that people who are important to them expect them to undergo screening.

This result is consistent with a study conducted among Latin's, perceived behavioral control was strongest predictor of intentions; followed by subjective norms to be screened for cervical cancer (29, 30).

However, other study conducted in Masaka Uganda found that, attitude is the best predictor followed by subjective norm with intention towards cervical cancer screening (33). This could be attributed to the difference in the context and the place where the study conducted.

This study revealed that, perceived behavioral control is significantly and positively associated and very important in explaining the variability in intention to cervical cancer screening  $\beta=0.297[0.172, 0.343]$ . In line with this, study conducted on online survey showed that women intended to screen for cervical cancer, if they have greater perceived behavioral control (34).

In contrast to this, study conducted in London found that perceived behavioral control, on its own, did not have a significant effect on intentions to seek cervical cancer screening (41). This

may be due to high control beliefs influence on intention in the study area as the theory suggests the potential differences in place and beliefs across culture.

In this study, Subjective norm was significantly and positively associated with intention to cervical cancer screening  $\beta=0.25[0.131, 0.30]$ .

Similar to this, study conducted in the west of Iran Show that, subjective norm was the best predictors of intention with odds ratio estimate of 1.14 [95% CI: 1.04, 1.23] (28). In contrast to this, study conducted in online survey revealed that direct and indirect subjective norm did not have significant effect on intention to seek cervical cancer screening (34). This gap could be attributed to the difference in the context where the study undertaken.

In this study, attitude were also significantly and positively associated with cervical cancer screening intention.  $\beta= 0.11 [0.018, 0.158]$ . Similar to this, study done in London revealed that attitudes towards screening were predictive of intentions and a significant proportion of variance was explained (41).

## 6.1 LIMITATIONS

- ✓ The scope of this study is confined to yirgalem town; the sample should not be generalized as the belief and intention towards CCS behavior to the other population.
- ✓ The findings of this study depend largely on the honesty of the respondents. It is known that individuals would agree more on socially desirable answers and disagree more towards socially undesirable answers rather than fully and truly express their feelings and the opinions.
- ✓ Since it is not longitudinal study, it does not show the proportion of screening practice from those who intend for screening.

## CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

### 7.1 CONCLUSION

This study emphasized on the predictors of behavioral intention to cervical cancer screening among women visiting health institution in Yirgalem town sidama zone. The study found that none of the socio demographic factors was associated with intention to CCS. Only 162(41.4%) of the respondents were knowlegabel about CCS. Having knowledge on sign and symptoms, risk factors, prevention methods, frequency of screening and age group eligible for screening is associated with intention to have cervical cancer screening intention.

In the present study only 36 (9.2%) of the respondents were screened previously, being screened previously have significantly and positively association with future screening practice.

The study found that perceived behavioral control to cervical cancer screening was found to be best predictor of behavioral intention followed by subjective norm and knowledge.

Additionally, the finding of the study shows that the direct and indirect measures were positively correlated. The belief-based components (indirect measures) of the TPB can influence the direct measures of the TPB so that intention to use CCS will be increased. Strategies to empower women on perceived difficulty, social pressure resistance and programs targeted at changing negative attitude on CCS can enhance intention of women to use CCS service.

Hence, providing health education about the disease on its risk factors, sign and symptoms and prevention methods for the women has a crucial role in increasing their knowledge. This in turn reduces the morbidity and mortality of women due to this preventable and curable disease.

Empowering women to have positive behavioral belief on the outcome of screening, with regard to influence of referents, increase positive social pressure, can improve intention towards CCS among women in Yirgalem town. ‘Health workers ‘and ‘leaders’ were found to be the most positively influence. Enabling women to develop sense of control on the identified salient control beliefs such as thinking screening is not needed for healthy person, absence of any sign and symptoms of disease and not knowing the place where the screening is given; these all had effect on intention to cervical cancer screening among the study participants.

## 7.2 RECOMMENDATIONS

This study identified some of the predictors of intention, which can be improved in order to increase screening. Level of knowledge, past screening practice, control beliefs, normative beliefs and behavioral beliefs were the most determinants of high variance in intention, therefore,

For Zonal health department and woreda health office:

- ✓ Concerned body should give high attention that health interventions programs be designed to develop individuals' ability.

Health institutions should focus on:

- ✓ Disseminate information that focuses on educating women about cervical cancer risks and cervical cancer screening.
- ✓ Promote regular cervical cancer screening among women through IEC and BCC materials specific to cervical cancer screening.

For researchers

- ✓ Further research was recommended using longitudinal study to overcome the limitation of this study.

## Reference

1. CDC. Get the Facts About Gynecologic Cancer. Vol. 22. 2010. 1-10 p.
2. WHO. Comprehensive Cervical Cancer Control. second edt. 2014. 137-140 p.
3. W H O guideline. Comprehensive cervical cancer prevention and control : a healthier future for girls and women. Vol. 20. 2013. 6-8 p.
4. Peirson L, Fitzpatrick-Lewis D, Ciliska D, Warren R. Screening for cervical cancer: a systematic review and meta-analysis. *Syst Rev.* 2013;2(1):2-5.
5. WHO. Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention. 2013. 27-28 p.
6. Moyer VA. Screening for Cervical Cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med.* 2012;156(12):1-4.
7. Saslow D, Runowicz CD, Solomon D, Moscicki A-B, Smith R a, Eyre HJ, et al. American Cancer Society guideline for the early detection of cervical neoplasia and cancer. *CA Cancer J Clin.* 2002;52:342-62.
8. Gakidou E, Nordhagen S, Obermeyer Z. Coverage of cervical cancer screening in 57 countries: Low average levels and large inequalities. *PLoS Med.* 2008;5(6):0863-8.
9. FMOH. Guideline for Cervical Cancer Prevention and Control in Ethiopia. February 2015 [Internet]. Available from: available:  
[http://www.moh.gov.et/resources//asset\\_publisher/R1dUfCspGqqN/document/id/5467019](http://www.moh.gov.et/resources//asset_publisher/R1dUfCspGqqN/document/id/5467019).
10. FDREMOH. The World Cancer Day February 11, 2015 P 1-2. Available from:  
[www.mathycancersoc.org%0A9](http://www.mathycancersoc.org%0A9)
11. Bruni L, Barrionuevo-Rosas L, Albero G, Serrano B, Mena M, Gómez D, Muñoz J, Bosch FX de SS. Human Papillomavirus and Related Diseases Report. ICO HPV Information Centre. 2016.
12. IOC. Human Papillomavirus and Related Cancers, Fact Sheet October 7, 2016. 1-2 p.
13. South African guidelines. Cervical cancer and human papilloma virus: Vol. 2. 2010. 23-26 p.
14. Dhendup T, Tshering P. Cervical cancer knowledge and screening behaviors among female university graduates Bhutan. *BMC Womens Health.* 2014;14(1):44.
15. WHO. Prevention of cervical cancer through screening using visual inspection with acetic acid ( VIA ) and treatment with cryotherapy. Vol. II. 2003. 33 p.
16. L. A., Chumworathayi, B., Blumenthal PD. Feasibility of Community-Based careHPV for Cervical Cancer Prevention. *J Low Genit TRACT Dis Trope.* 2013;17 (3):315-9.
17. Chelimo C, Woudes TA, Cameron LD, Elwood JM. Risk factors for and prevention of human papillomaviruses (HPV), genital warts and cervical cancer. *J Infect.* 2013;66(3):207-17.
18. Bayu H, Berhe Y, Mulat A, Alemu A. Cervical cancer screening service uptake and associated factors among age eligible women in Mekelle zone, Northern Ethiopia, 2015: A community based study using health belief model. *PLoS One.* 2016;11(3):1-13.
19. R.S. B, C.E. S, D. B, D. B. Trends in cervical cancer mortality in South Africa. *Int J Epidemiol.* 1996;25(3):488-93.
20. Tefera TB, Kerbo AA, Gonfa DB, Haile MT. Knowledge of Cervical Cancer and its Associated Factors among Reproductive Age Women at Robe and Goba Towns, Bale Zone, Southeast Ethiopia. *Glob J Med Res.* 2016;16(1):27-8.
21. Mitiku I, Tefera F. Knowledge about Cervical Cancer and Associated Factors among 15-49 Year Old Women in Dessie Town , Northeast Ethiopia. *PLoS One.* 2016;10(1371):1-10.
22. Birhanu Z, Abdissa A, Belachew T, Deribew A, Segni H, Tsu V, et al. Health seeking behavior for cervical cancer in Ethiopia: a qualitative study. *Int J Equity Health.* 2012;11(1):83.
23. Glanz K, Rimer BK. *G l a n c e Th a e o r y.* 2005. 27-29 p.
24. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process.* 1991;50(2):179-211.
25. Abraham, C.; Sheeran P. Predicting Health Behaviou. Open Univ Press Berkshire, Engl. 2005;28-80.

26. Armitage CJ, Conner M. Efficacy of the Theory of Planned Behaviour. *Br J Soc Psychol.* 2001;40(1988):471–99.
27. Godin G, Gagné C, Maziade J, Moreault L, Beaulieu D, Morel S. Breast cancer: The intention to have a mammography and a clinical breast examination – Application of the Theory of Planned Behavior. *Psychol Health.* 2001;16(4):423–41.
28. Jalilian, Farzad SE. Factors Related to Regular Undergoing Pap-smear Test: Application of Theory of Planned Behavior. *J Res Heal Sci J.* 2011;11(2):103–8.
29. Angelica M. Roncancio, Kristy K. Ward, , and Maria E. Fernandez. Understanding Cervical Cancer Screening Intentions Among Latinas Using An Expanded Theory of Planned Behavior Model. *HHS Public Access.* 2013;39(3):66–72.
30. Roncancio AM, Ward KK, Sanchez IA, Miguel A, Byrd TL, Vernon SW, et al. Cancer Screening among Latinas. 2016;42(5):621–6. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4932857/pdf/nihms-797212.pdf>
31. Rayo. K SS, Y. Hiroyuki, B. ParthaSartha, H. Sharon J.B et al; cervical cancer working group report Japan: *Jpn J Clin Oncol.* 2010;40(1):i44–i50.
32. Sasieni P, Castanon A, Cuzick J. Effectiveness of cervical screening with age: population based case-control study of prospectively recorded data. *Bmj.* 2009;339:b2968.
33. Twinomujuni C, Nuwaha F, Babirye JN. Understanding the low level of Cervical cancer screening in Masaka Uganda using the ASE model: A community-based survey. *PLoS One.* 2015;10(6):1–15.
34. Ogilvie GS, Smith LW, van Niekerk D, Khurshed F, Pedersen HN, Taylor D, et al. Correlates of women's intentions to be screened for human papillomavirus for cervical cancer screening with an extended interval. *BMC Public Health.* 2016;16(1):213.
35. Adriana Băban, Róbert Balázs, Janet Bradley, Camelia Rusu AS& RT. Psychosocial and Health System Dimensions of Cervical Screening in Romania. 2013;28–35p.
36. Gu C, Chan CWH, He GP, Choi KC, Yang SB. Chinese women's motivation to receive future screening: The role of social-demographic factors, knowledge and risk perception of cervical cancer. *Eur J Oncol Nurs.* 2013;17(2):154–9.
37. Mamo T, Worku A. Level of Knowledge and Associated Factor toward Cervical Cancer among Women Age ( 21-64 ) Years Visiting Health Facilities in Gulele. 2017;18(1):44–8.
38. Getahun F, Mazengia F, Abuhay M, Birhanu Z. Comprehensive knowledge about cervical cancer is low among women in Northwest Ethiopia. *BMC Cancer.* 2013;13(1):2.
39. Pyae C, Han P, Yamarat K. Factors Affecting Intention To Take Pap Smear Screening Among Married Women in Mandalay , Myanmar. 2012;26(6):323–7.
40. Ogilvie GS, Smith LW, Van Niekerk DJ, Khurshed F, Krajden M, Saraiya M, et al. Women's intentions to receive cervical cancer screening with primary human papillomavirus testing. *Int J Cancer.* 2013;133(12):2934–43.
41. Bish A, Sutton S, Golombok S. Predicting uptake of a routine cervical smear test: A comparison of the health belief model and the theory of planned behaviour. *Psychol Health.* 2000;15(1):35–50.
42. Francis J, Eccles MP, Johnston M, Walker a. E, Grimshaw JM, Foy R, et al. A manual for health services researchers. 2004. 10-23 p.
43. Ayinde AO, Omigbodun AO, Ollesanmi A. Awareness of Cervical Cancer, PapanicolaouSmear and Its Utilization among Female Undergraduates in Ibadan. *Afr J Reprod Health.* 2004; 8(3):68–80.

## Annex I: Information sheet

Jimma University, institute of health faculty of public health department of health education and behavioral sciences.

Study on predictors of intention towards cervical cancer screening services among women attending maternal health service at yirgalem town health institutions SNNPR, Ethiopia. Using theory of planned behavior, 2017

Good morning/afternoon! My name is.....and I am going to conduct an interview with you on behalf of **Ms. Atsede Tenna** a postgraduate student at Jimma University, institute of health faculty of public health. I would like to ask questions related to cervical cancer screening service utilization intention.

This study is designed to investigate what women know about cervical cancer and cervical cancer screening. It also would like to determine women's attitude, subjective norm and perceived behavioral control towards intention to use cervical cancer screening.

The study will summarize your thoughts on the issues raised and the intention is use the data to come up with a better plan of how to provide this service for women.

Honesty is needed to make this information useful in identifying strength/weakness of the current system and addressing them.

The interview may take between 20-30 minutes you are requested to answer the question as honestly as you can.I assure you that whatever information you provide will only be used for the purpose of this research and will not be made available to anyone and your name is not mentioned in the form.

I appreciate you too much for your willingness and support to respond the interview. I also assure that the interview process will not bring any harm to you and your family. Your participation is voluntary. If you choose not to answer a particular question, that is your right. You are also permitted to withdraw any time from the study when you feel uncomfortable with it.

Therefore, to participate in this study you:

- Agree
- Not agree

Address of the principal investigator:

Atsede Tenna Adale

Cell phone: +251 916362966, E-mail [atsedet12@gmail.com](mailto:atsedet12@gmail.com)

## Annex II: Consent form for participant

In signing this document, I am giving my consent to participate in the study titled predictors of intention to use cervical cancer screening service, among women attending maternal health service at yirgalem town health institutions SNNP, Ethiopia, using theory of planned behavior, 2017

I have been informed about the purpose of the study. I have understood that participation in this study is entirely voluntarily. I have been told that my answers to the questions will not be given to anyone else and no reports of this study ever identify me in any way. I have also been informed that my participation or non-participation or my refusal to answer questions will have no effect on me. I understood that participation in this study does not involve risks.

I understood that Atsede Tenna is the contact person if I have questions about the study or about my rights as a study participant.

Respondent's signature \_\_\_\_\_

If no, skip to the next participant

Date of interview: \_\_\_\_\_ Time started: \_\_\_\_\_ Time finished: \_\_\_\_\_

Interviewer Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Supervisor's name \_\_\_\_\_ Signature \_\_\_\_\_

### **Results of interview questionnaire**

1. Completed

2. Refused

3. Partially completed

## Annex III: Questionnaire; English Version

This questionnaire is designed to assess predictors of intention towards cervical cancer screening among women visiting maternal health service at yirgalem town health institutions.

Code \_\_\_\_\_ Date of filling /\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_ DD/MM/YY

### **Questions for elicitation study**

1. What do you believe are the advantages of using cervical cancer screening service?
2. What do you believe are the disadvantages of using cervical cancer screening service?
3. Is there anything else you associate with your own views about using cervical cancer screening service?
4. Are there any individual or groups who would approve of your using of cervical screening service? If yes who?
5. Are there any individual or groups who would disapprove of your using of cervical screening service? If yes who?
6. Is there anything else you associate with other people's views about your using of cervical screening service?
7. What factors or circumstances would enable you to get screening for cervical cancer?
8. What factors or circumstances would make it difficult or impossible for you to have screening for cervical cancer?
9. Are there any other issues that come to mind when you think about screening for cervical cancer?

### **Part 1: socio-demographic characteristics**

1. What is your current age in complete years? \_\_\_\_\_
2. What is your religion? \_\_\_\_\_
  1. Protestant
  2. orthodox
  3. muslim
  4. catholic
  5. Other (specify) \_\_\_\_\_
3. What is your ethnic group?
  1. Sidama
  2. Amahara
  3. Oromo
  4. Other, specify \_\_\_\_\_
4. What is your occupation?
  1. Governmental employee
  2. Self
  3. Housewife
5. What is your marital status?
  1. Single
  2. Married
  3. Divorced
  4. Widowed/Separated
6. What is your total monthly income in Birr? \_\_\_\_\_
7. What is your higher educational status?
  1. primary education
  2. Secondary education & above
  3. Uneducated.
8. How many pregnancy do you have experiences? (Party) \_\_\_\_\_
9. What is your number of children's? \_\_\_\_\_

### **Part 2: knowledge related to cervical cancer and screening**

**1.** Have you ever heard about cervical cancer?

**1. Yes**      **0. No**      (if No go to 8)

**2.** Where did you first learn about cervical cancer?

- |  |               |              |
|--|---------------|--------------|
| 1. From Radio/TV                               | <b>1. Yes</b> | <b>2. No</b> |
| 2. From Printed materials (Brochures, posters) | <b>1. Yes</b> | <b>2. No</b> |
| 3. From Health workers                         | <b>1. Yes</b> | <b>2. No</b> |
| 4. From Family, friends, and neighbors         | <b>1. Yes</b> | <b>2. No</b> |
| 5. From Leaders                                | <b>1. Yes</b> | <b>2. No</b> |
| 6. From Teachers/school systems                | <b>1. Yes</b> | <b>2. No</b> |

**3.** What are the symptoms of cervical cancer?

- |                                     |               |              |
|-------------------------------------|---------------|--------------|
| 1. Vaginal bleeding                 | <b>1. Yes</b> | <b>2. No</b> |
| 2. Vaginal foul smelling discharges | <b>1. Yes</b> | <b>2. No</b> |
| 3. Post-coital bleeding             | <b>1. Yes</b> | <b>2. No</b> |
| 4. Pain during sex.                 | <b>1. Yes</b> | <b>2. No</b> |
| 5. I do not know                    |               |              |

**4.** What are the risk factors for cancer of the cervix?

- |  |               |              |
|--|---------------|--------------|
| 1. Having multiple sexual partners           | <b>1. Yes</b> | <b>2. No</b> |
| 2. Sex at an early age <15yrs                | <b>1. Yes</b> | <b>2. No</b> |
| 3. Acquiring HPV                             | <b>1. Yes</b> | <b>2. No</b> |
| 4. Cigarette smoking                         | <b>1. Yes</b> | <b>2. No</b> |
| 5. Using birth control pills for a long time | <b>1. Yes</b> | <b>2. No</b> |
| 6. Exposed to sexually transmitted infection | <b>1. Yes</b> | <b>2. No</b> |
| 7. Do not know                               |               |              |

5. How can a person prevent getting cancer of the cervix?

- |  |               |              |
|--|---------------|--------------|
| 1. Being faithful for sexual partners  | <b>1. Yes</b> | <b>2. No</b> |
| 2. Avoid Sex at an early age <15yrs    | <b>1. Yes</b> | <b>2. No</b> |
| 3. No smoking / Quit smoking           | <b>1. Yes</b> | <b>2. No</b> |
| 4. Through vaccination of HPV vaccine  | <b>1. Yes</b> | <b>2. No</b> |
| 5. Regular medical checkup (screening) | <b>1. Yes</b> | <b>2. No</b> |
| 6. Prevent STIs by safe sex            | <b>1. Yes</b> | <b>2. No</b> |
| 7. Do not know                         |               |              |

6. Can cancer of the cervix be cured in its earliest stages?

- |               |              |
|---------------|--------------|
| <b>1. Yes</b> | <b>2. No</b> |
|---------------|--------------|

7. Are you aware that, there is screening procedures to detect premalignant cervical lesion?

- |               |              |
|---------------|--------------|
| <b>1. Yes</b> | <b>2. No</b> |
|---------------|--------------|

8. Where did you first hear about cervical cancer screening?

- |   |               |              |
|---|---------------|--------------|
| 1. From Radio/TV                          | <b>1. Yes</b> | <b>2. No</b> |
| 2. Printed materials (Brochures, posters) | <b>1. Yes</b> | <b>2. No</b> |
| 3. From Health workers                    | <b>1. Yes</b> | <b>2. No</b> |
| 4. From Family, friends, and neighbors    | <b>1. Yes</b> | <b>2. No</b> |
| 5. From Leaders                           | <b>1. Yes</b> | <b>2. No</b> |
| 6. From Teachers/school systems           | <b>1. Yes</b> | <b>2. No</b> |

9. Who should be screened?

- |                                       |               |              |
|---------------------------------------|---------------|--------------|
| 1. All Women of 30years and above     | <b>1. Yes</b> | <b>2. No</b> |
| 2. All reproductive age group women's | <b>1. Yes</b> | <b>2. No</b> |

10. How frequently dose women received cervical cancer screening

- |                      |               |              |
|----------------------|---------------|--------------|
| 1. Every 5 years     | <b>1. Yes</b> | <b>2. No</b> |
| 2. Every three years | <b>1. Yes</b> | <b>2. No</b> |
| 3. Every years       | <b>1. Yes</b> | <b>2. No</b> |

### **Part 3: Past experiences**

1. Have you ever been screened for CC before?

1. Yes 0.No

2. If yes for the above question how many times did you use CCS services?

1. Once 2. More than one times

### **Part 4: Direct attitude measures**

1. For you receiving of cervical cancer screening services in the next 3 months will be

1. Not beneficial	1	2	3	4	5	Beneficial
2.unsafe	1	2	3	4	5	safe
3. Pleasant	1	2	3	4	5	unpleasant
4. Good	1	2	3	4	5	Bad

### **Part 5: Indirect attitude measurement**

#### **A. Behavioral beliefs measurement and B. Evaluation of outcomes**

**1A.** Screening for cervical cancer will help you to prevent yourself from death related to cervical cancer:

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

**1B.** For you preventing yourself from death related to cervical cancer is:

-2. Very Bad - 1. Bad 0. Neutral 1. Good 2. Very good

**2A.** Screening for cervical cancer will help you to know your status:

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

**2B.** For you knowing your status by cervical screening is:

-2. Very Bad - 1. Bad 0. Neutral 1. Good 2. Very good

**3A.** Screening for cervical cancer will help you to get early treatment:

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

**3B.** For you getting early treatment by pre cancer screening is:

-2. Very Bad - 1. Bad 0. Neutral 1. Good 2. Very good

**4A.** Screening for cervical cancer will help you as a means to reduce severity of the disease:

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

**4B.** For you reducing the severity of the disease by early screening is:

-2. Very Bad - 1. Bad 0. Neutral 1. Good 2. Very good

**5A.** Screening for cervical cancer will help you to increase your confidence:

1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree

**5B.** For you increasing confidence by pre-cancer screening is:

-2. Very Bad      -1. Bad      0. Neutral      1. Good      2. Very good

**6A.** Screening for cervical cancer will be beneficial for your health:

1. Strongly disagree    2. Disagree    3. Neutral    4. Agree    5. Strongly agree

**6B.** For you benefited from cervical cancer screening is:

-2. Very Bad      -1. Bad      0. Neutral      1. Good      2. Very good

#### **Part 6: Direct subjective norms**

s.no	Items	1 SD	2 D	3 N	4 A	5 SA
1	Most people who are important to you will approve of your using SCC services in the 3 months.					
2	It is expected from you that you will use CCS services in the next 3months.					
3	You feel under social pressure to use CCS service in the next 3 months.					
4	Most people who are important to you think that you should use CCS services in the next 3 months.					

#### **Part 7: Indirect subjective norm measurement**

##### **A. Normative beliefs and B. Motivation to comply**

**1A.** women's, who have screened for cervical cancer, think that you should have cervical pre-cancer screening

-2. Very unlikely    -1. Unlikely    0. Neutral    1. Likely    2. Very likely

**1B.** women's' approval of your practice is important to you

1. Not very much    2. Not Much    3. Neutral    4. Much    5. Very much

**2A.** Health development army think that you should have cervical cancer screening:

-2. Very unlikely    -1. Unlikely    0. Neutral    1. Likely    2. Very likely

**2B.** Health development army approval of screening for cervical cancer is important to you:

1. Not very much    2. Not Much    3. Neutral    4. Much    5. Very much

**3A.** Health extension workers approve your cervical pre cancer screening:

-2. Very unlikely    -1. Unlikely    0. Neutral    1. Likely    2. Very likely

**3B.** Health extension workers approval of cervical pre-cancer screening is important to you

1. Not very much    2. Not Much    3. Neutral    4. Much    5. Very much

**4A.** Most women important for you go to have cervical cancer screening:

-2. Very unlikely    -1. Unlikely    0. Neutral    1. Likely    2. Very likely

**4B.** Doing what most important women do is important to you:

1. Not very much    2. Not Much    3. Neutral    4. Much    5. Very much

**5A.** leaders in public forum approve your cervical pre cancer screening:

-2. Very unlikely    -1. Unlikely    0. Neutral    1. Likely    2. Very likely

**5B.** leaders in public forum approval of cervical pre-cancer screening is important to you

1. Not very much      2. Not Much      3. Neutral      4. Much      5. Very much

**6A.** Neighbors approve your cervical pre cancer screening:

-2. Very unlikely      -1. Unlikely      0. Neutral      1. Likely      2. Very likely

**6B.** Neighbors approval of cervical pre-cancer screening is important to you

1. Not very much      2. Not Much      3. Neutral      4. Much      5. Very much

**7A.** Health care providers approve your cervical pre cancer screening:

-2. Very unlikely      -1. Unlikely      0. Neutral      1. Likely      2. Very likely

**7B.** Health care providers' approval of cervical pre-cancer screening is important to you

1. Not very much      2. Not Much      3. Neutral      4. Much      5. Very much

#### **Part 8:direct perceived behavioral control**

1 .For you to use cervical cancer screening services in the next 3 months is

1. Difficult	1	2	3	4	5	Easy
2. Not under control	1	2	3	4	5	Under control
3. Unconditional	1	2	3	4	5	Conditional
4. Sudden	1	2	3	4	5	Planned

## **Part 9: Indirect perceived behavioral beliefs**

### **A. Control beliefs measurement and B. perceived power of control measurement**

**1A.** If you want to have screening, you did not know the place where the screening service is given:

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

**1B.** Not knowing where the screening service is giving make it difficult to attend cervical cancer screening:

- 2. Strongly disagree -1. Disagree 0. Neutral 1. Agree 2. Strongly agree

**2A.** Absence of sign and symptom of cervical cancer make you not to seek screening service:

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

**2B.** No sign and symptom of disease make it useless for you to attend cervical cancer screening:

- 2. Strongly disagree -1. Disagree 0. Neutral 1. Agree 2. Strongly agree

**3A.** Perceiving you are being healthy make you not to seek screening service:

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

**3B.** Being healthy from any disease make it not important to you to attend cervical cancer screening:

- 2. Strongly disagree -1. Disagree 0. Neutral 1. Agree 2. Strongly agree

**4A.** Due to presence of other disease, make the screening procedure more complicated for you:

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

4B.Presence of other disease make it difficult to attend cervical cancer screening

-2. Strongly disagree -1. Disagree 0. Neutral 1. Agree 2. Strongly agree

5A .If you want to have screening, you think that the producer is pain full:

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

5B.Presence of pain during screening make it difficult to attend cervical cancer screening:

-2. Strongly disagree -1. Disagree 0. Neutral 1. Agree 2. Strongly agree

6A. you think that you have no enough knowledge about cervical cancer:

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

6B. Lack of enough knowledge about cervical cancer make it difficult for you to attend cervical cancer screening:

-2. Strongly disagree -1. Disagree 0. Neutral 1. Agree 2. Strongly agree

#### **Part 10: Intention to cervical cancer screening**

1. How likely is it that you will need CCS services in the next 3 months?

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

2. In the coming 3 months, how likely is it that you will be screened for CC?

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

3. In the next 3 months, how likely is it that you will look for and request CCS services?

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

4. How likely is that you will think to screen for cervical cancer for the next 3 month.

1. Very unlikely 2. Unlikely 3. Neutral 4. Likely 5. Very likely

## **Part 11: Family history and Medical history**

1. Is there any one of your family member have cervical cancer?

1. Yes      2. No

2. Do you a have history of STI?

1. Yes      2. No

3. If your answer to question No. 2 is yes, how many times did you have sexually transmitted infections? -----

4. What type of sexually transmitted infection you suffer from?

- |                      |                        |
|----------------------|------------------------|
| 1. Vaginal discharge | <b>1. Yes    2. No</b> |
| 2. Inguinal Swelling | <b>1. Yes    2. No</b> |
| 3. Genital Sore      | <b>1. Yes    2. No</b> |
| 4. Genital wart      | <b>1. Yes    2. No</b> |

***THANK YOU FOR YOUR PARTICIPATION***

በ የደንብ ክፍያ መሰረት የአድቶች ማስታወሻ አገልግሎት የሚጠቀው እድሜዋቸው ከ30-49 ዓመት አድቶች በሚሆነ ማር የቁድሙ ካንሰር ምርመራ አገልግሎቱ ለመጠቀም ተከተለትነት የሚጠቀው ሆኖታችን ለማጥናት የተዘጋጀ መጠቃቅ:

ስጥናት ተሳታፊዎች ስለ ጥናት የቀረበ ሙሉት

ክፍል የዚህ ጥናት ተሳታፊ

በዚህ በ ይርጋለም ከተማ መሰጥ የአናቶች ገዢ አገልግሎት የሚጠቀሙ ለተቶ ስሜ የሚሆበን ማረጋገጫ ከነበር/ነቅርብ ቅድመ ምመራ አስመልክቶ በሚካኤል ተናት ስሜ ተናታል እንዲሁም ተጠበኑ፡፡ በዚህ ተናት ለመሳተፍ ከመወሰንም በፊት ተናቱን አስመልክቶ የተዘረዘሩትን ይህንን መረጃ በይዞግ ይደምጻል፡፡ መረጃዎን

እድሜው ለመሳተፍ በመወሰንም በጣም ፍመስጥናቸውን ነገርን ይግባኝ እስከተፈጻሚ ወሰን ለመሰንም በሆነ ተርቃቶን እኩበር በመጠኑም እና እድርገን ፍመስጥናቸውን ተከታታይ ስራውን እስከተፈጻሚ በማስተም እናዚያ ተከናና የሚያስከተሉ መሆኑን ለመግለጫ ነውል፡፡

#### **የጥናቱ ባኅ አሳጣ**

ይህንን ተናት የሚካኤልበት ውኅ አሳጣ በ ይርጋለም ከተማ መሰጥ የአናቶች ገዢ አገልግሎት የሚጠቀሙ ለተቶን ማረጋገጫ ማረጋገጫ ከነበር ምመራ ሁኔታ እኩበር ቅድመ ሁኔታዊ የሚደረግ ለማሆበን ማረጋገጫ ቅድመመመራ አገልግሎት ለመጠቀሙ ይሞላ ያልተኞች የሚጠቀሙ ነገሮችን መስከት ነው፡፡

#### **ስታኩተሚያ የቀረበው የስምምነት ስነድ**

ቀን.....ስኗት.....የቁስ መጠቃቅ መሰም ቅጽ.....

#### **አንድምን አድራሻ/ዋስት**

አዲሱ በቁስ በንግድም ሆነ በጽሁፍ ተናቱን አስመልክቶ በቁ መረጃ የቀረበውና በቀረበው መረጃ ስሜ ተያወቃች እንዲጠቀቁ እና ተስተካክል ስጠራነት ተያወቃች ተገቢ ማስቀ እንዳታስስ፡፡ በተጨማሪም በዚህ ተናት መሰጥ ለመሳተፍ በመስ ሪፖርትና የተመስረተ፡ ማሆነውን የተጠበቀ በማናቃቄም ገዢ ከጥናቱ መተወስኑ በፈጸግም መተወስኑ እንዲሚችል ተገኘዙኑ፡፡ ስለዚህ የጥናቱ አሳጣ በሚገባ የተረዳሱ ስለሆነ በዚህ ተናት ለመሳተፍ በመስ ሪፖርትና መተወስኑ በፈጸግም እኩወገጫስ፡፡

#### **የጥናቱ መሰጥ ለመሳተፍ ይችላል ነው?**

አሁን መሬ ማቋጥልው ገዢ ይገኘ

አይደለሁም እመስገናለሁ

የሰምምነት ይችላል የወሰኝው (የተቀበለው) መሬ ስሜ ----- ፍርማ-----

የቁስ ማስፈጸሚ መጠኑ

1. የተማሳ----- 2. በከራይየተማሳ----- 3.የቁቃደኛዕስነት----- 4. ስሳ-----

የመረጃ ስጠራበው ስሜ ----- ፍርማ -----

የተቀባዩበው ስሜ ----- ፍርማ -----

#### **ክፍል 1: የሚጠረዋ የአናቶች የሚመለከት እና ስራ-ሆኑን መረጃ**

1. የሚመለከት በመስ የመስ ስንድ ነው? -----

2. ሂሳብ የሚመለከት ነው? 1. ተርተስተናት 2. አርተማ እና መስፈርም 4. ከተሰነ

5.ስሳ ከስ ይገለፋ-----

3. ከዚህ በአሁን / በኋላበት ነው የተገኘበት? 1. ስም 2. አሳጣ 3. አድራሻ 4. ስሳ ከስ ይገለፋ-----

4. ስራው የሚመለከት ነው? 1.የመንግስት ስራትና 2.የገበ ተቀባዩ 3. ኦርም 4.ገበዎች 5. የበት እመስረት

6. ስሳ ካስ ይታቀስ-----
5. በእሱት ስዋት የጋብቻ ሁኔታም ማንኛውን ነው? 1. የሰንበ 2.የግብ 3. የተሰም 4. የተፋታ 5. የመተባት
6. በእሱት ስአት መርሃዊ ገቢዎች በጥር ስንት ነው? -----
7. የጠናቀቀት ክፍተኛ የተማህጻኑ ይረዳም ማንድ ነው? 1.አንድሬ ይረዳ 2.ሀስተኛ ይረዳ
3. ፕሮግራም 4. ደንብ እና ከዘ በጣይ
8. ስንት ገዢ እርትአ ሆነው ይወቻል? -----
9. ምን የህጻኑ ለእና መልካም? -----

**ክፍል 2: ስሳ ማህበን ማሩ ካንሰር ፍ ስሳ ማህበን ማሩ ካንሰር ቁጥሮ ማርሃዎች በተመሳሳተ የእውቅት (ፖ.ግንዘብ) መሰኞም ተያቀምቶ**

1. ስሳ ማህበን ማሩ ካንሰር/እቅበሩ ስምተው ይወቻል?

1. አም 2. የሰም መሰኞም የሰም ካሆነ ወደ ተያቄ 207 ይስኅ

2. ስሳ ማህበን ማሩ ካንሰር/እቅበሩ በሽታ ለመጀመሪያ ገዢ የሰመት ካሆት ነው::

- |                      |                |
|----------------------|----------------|
| 1. ክፈልጋ/ ተስፊዎን       | (1. አም 2. የሰም) |
| 2. ሂሳብ መጠቃቄ          | (1. አም 2. የሰም) |
| 3. ክጠና ማስቀመጥ         | (1. አም 2. የሰም) |
| 4. ክበተሰሳ/መጽሑፍ ገዢዎት   | (1. አም 2. የሰም) |
| 5. ክመረጥ              | (1. አም 2. የሰም) |
| 6. ክመምሮኑ /ት/ት አገልግሎት | (1. አም 0.የሰም)  |
| 7.ስሳ ካስ ይገለፉ         | (1. አም 0. የሰም) |

3. የማህበን ማሩ ካንሰር/እቅበሩ በሽታ ማስከተሉት የሚከተሉት ምን ምን እናወ?

- |                               |                |
|-------------------------------|----------------|
| 1. በማህበን በነበሮ ዓይነ መፈጸሙ        | (1. አም 2. የሰም) |
| 2. መጥሪ መረጃ ያለው የሰዕት ፈሳሽ       | (1. አም 2. የሰም) |
| 3. ክግበረ-ኩር ግንኙነት በኋላ ዓይነ መፈጸሙ | (1. አም 2. የሰም) |
| 4. በግብረ-ኩር ግንኙነት ወቀት ማመም መሰማኑ | (1. አም 2.የሰም)  |
| 5. አሳይቷም                      | (1. አም 2. የሰም) |

4. የማህበን ማሩ ካንሰር/እቅበሩ አጋጣም ሁኔታም ይተካና እናወ?

- |   |                |
|---|----------------|
| 1. ክስናድ በሳይ የወሰን አገር መኖር                  | (1. አም 2. የሰም) |
| 2. ክ15ዓመት አድጋ በፊት ቁጥሮ በስ የሚጀመር ወሰንዋ ግንኙነት | (1. አም 2. የሰም) |
| 3. ስሃመማን ተተክሏ የተባበ ምርመራ መርከት              | (1. አም 2.የሰም)  |

- |                                    |                |
|------------------------------------|----------------|
| 4. ስርፈ ማጠስ                         | (1. እም 2. የሰጠ) |
| 5. ለረቃም ገዢ የእርግዥና መቅመጫው እንከባለ መጠፊድ | (1. እም 2. የሰጠ) |
| 6. በእባክዎ በሽታ መያዝ                   | (1. እም 2 የሰጠ)  |

5. የሚሆነን ማፅ ከንሰር/እቀበሩ እንዲሁ መከተሉት ይታሳል?

- |  |                |
|--|----------------|
| 1. በገኘድ የተዘረዘሩ የደኝ በመወሰን                   | (1. እም 2. የሰጠ) |
| 2. ኮ15ዕመት እድሜ በፊት ቁጥር በሎ መሰማዊ ገንዘኖት በስመጀመር | (1. እም 2. የሰጠ) |
| 3. ስርፈ ለሰማይስ/ማቀሻ                           | (1. እም 2. የሰጠ) |
| 4. ስራውማን ታተሞ ምርመራ ከተባለ ማግኘት                | (1. እም 2. የሰጠ) |
| 5. በየገዢው ምርመራ በማድረግ                        | (1. እም 2. የሰጠ) |
| 6. ተንቃቄ የገዢው መሰን በማስተኞቸ ከእባክዎ በሽታ መከተሉት    | (1. እም 2. የሰጠ) |

6. የሚሆነን ማፅ ከንሰር/እቀበሩ ፈይሳሱ በገዢ ከታወቂ በሆነምና ሌጅን ይታሳል?

- |       |        |
|-------|--------|
| 1. እም | 2. የሰጠ |
|-------|--------|

7. የሚሆነን ማፅ ከንሰር/እቀበሩ ቁጥር ምርመራ መኖሪን ይወቻል?

- |       |                                     |
|-------|-------------------------------------|
| 1. እም | 2. የሰጠ መሰነም የሰጠ ካሸነ ወደ እኩል 3 ብቻ ይሰራ |
|-------|-------------------------------------|

8. ለስ ማፅዎን ማፅ ከንሰር/እቀበሩ ቁጥር ምርመራ ለመጀመሪያ ገዢ ይሰጣል ነው?

- |                     |                |
|---------------------|----------------|
| 1. ከፈድድ/ ቴስታትዎን     | (1. እም 2. የሰጠ) |
| 2. ሆነዎት መጠታች        | (1. እም 2. የሰጠ) |
| 3. ከጠና ባለሙያ         | (1. እም 2. የሰጠ) |
| 4. ከበተሰብ፡/መፍቻ፡/ገበዙት | (1. እም 2. የሰጠ) |
| 5. ከመራጥች            | (1. እም 0. የሰጠ) |
| 6. ከመምሮች/ት/ እንደገባዎት | (1. እም 2. የሰጠ) |
| 7. ለስ ከስ ይገለዙ       | (1. እም 2. የሰጠ) |

9. የሚሆነን ማፅ ከንሰር ቁጥር ምርመራ እንደገባዎት ማግኘት ይሰባቸው እናማን ፍቃድ?

- |  |
|--|
| 1. ምድሚያችው 30-49 ዓመትና ከዘም በቅር የሚኖችው ለተቶ በመስ |
| 2. ለእቅዱ ሂዋን የድረሰ ለተቶ                       |

10. የሚሆነን ማፅ ከንሰር/እቀበሩ ቁጥር ምርመራን እንደ ስት በየገንዘት ገዢ ማድረግ

ይኖርባቸል?

- |                     |
|---------------------|
| 1. በእመት እንድ ገዢ      |
| 2. በእምነት ዓመት እንድ ገዢ |

**ክፍል 3. ስሰ ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ በተመስከተ ቁጥጥር አመሰካከት ይሚስና ቅስ መጠቃቅ.**

**1.ገንዘብ በሚቀጥበት ስሰት መፈጸም መሰጥ ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ ማድረግ:**

- |                         |   |   |   |   |   |                      |
|-------------------------|---|---|---|---|---|----------------------|
| 1. ምንም አይመቀምም           | 1 | 2 | 3 | 4 | 5 | በጣም ይመቀበል            |
| 2. በጣም ይገኛል             | 1 | 2 | 3 | 4 | 5 | ምንም ገዳት ይሰጠም         |
| 3. በጣም ይስ ይሚሱ ስሜት ይፈጥሩል | 1 | 2 | 3 | 4 | 5 | በጣም ይስ ይሚሱ ስሜት ይፈጥሩል |
| 4. በጣም መጥሪ ነው           | 1 | 2 | 3 | 4 | 5 | በጣም ጥሩ ነው            |

**ክፍል 4. ስሰ ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ በተመስከተ በተዘዋዋሪ አመሰካከት ይሚስና ቅስ መጠቃቅ.**

**1ሀ. ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ ማድረግ እፈሰሽን ከሚካርን ማኅ ከነሰር ጋር ተያይዞ ከሚመጣ ፖስት ለመከተላለ ይመቀመጥናል.**

- 1.በጣም አስቀማሚያም      2.አስቀማሚያም    3.ድምጽ አስቀጥም    4.አስማሚስ    5.በጣም አስማሚስ

**1ለ. ሌንደ እፈሰሽን ከሚካርን ማኅ ከነሰር ጋር ተያይዞ ከሚመጣ ፖስት ለመከተላለ**

1. በጣም መጥሪ ነው 2. መጥሪ ነው 3. ደምጽ አስቀጥም 4. ጥሩ ነው 5. በጣም ጥሩ ነው

**2ሀ. ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ ማድረግ ይስሰበትን የጋና ሆኖታ ስሜ ስሜ ይፈጥሩ ይረዳናል**

- 1.በጣም አስቀማሚያም      2.አስቀማሚያም    3.ድምጽ አስቀጥም    4.አስማሚስ    5.በጣም አስማሚስ

**2ለ. ሌንደ ቁድመ ከነሰር ምርመራ በሚቻሉን እፈሰሽን ማወቅ**

1. በጣም መጥሪ ነው 2. መጥሪ ነው 3. ደምጽ አስቀጥም 4. ጥሩ ነው 5. በጣም ጥሩ ነው

**3ሀ. ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ ማድረግ ቢሮና ቢሮና የሚከተሉ ይመቀመጥናል**

- 1.በጣም አስቀማሚያም      2.አስቀማሚያም    3.ድምጽ አስቀጥም    4.አስማሚስ    5.በጣም አስማሚስ

**3ለ. ሌንደ ቁድመ ከነሰር ምርመራ በሚቻሉን ቁድመ ቢሮና ማግኘት**

1. በጣም መጥሪ ነው 2. መጥሪ ነው 3. ደምጽ አስቀጥም 4. ጥሩ ነው 5. በጣም ጥሩ ነው

**4ሀ. ዓማካርን ማኅ ከነሰር ቁድመ ምርመራ ማድረግ ይስሰበትን አስተሳሰቢነት/ሁይሳሰነት/ ይቀንስል**

- 1.በጣም አስቀማሚያም      2.አስቀማሚያም    3.ድምጽ አስቀጥም    4.አስማሚስ    5.በጣም አስማሚስ

**4b. ከንድ ቅድመ ካንሰር ምርመራ በማድረግ ይበሽታውን እስከኩልንት መቀነስ**

1. በጠዋም መጥሪ ነው
2. መጥሪ ነው
3. ይመሬ እስከተዋም
4. ጥሩ ነው
5. በጠዋም ጥሩ ነው

**5a. የሚሆነ ማራ ካንሰር ቅድመ ምርመራ ማድረግ በፈሳ መተማሙንን ይጨምሩ**

- 1.ዠጠዋም እስከሚማቸው
- 2.እስከሚማቸው
- 3.የሚሬ እስከተዋም
- 4.አስማማ ስሏ
- 5.ዠጠዋም እስማማለሁ

**5b. ከንድ ቅድመ ካንሰር ምርመራ በማድረግ በፈሳ መተማሙንን መጨመር**

1. በጠዋም መጥሪ ነው
2. መጥሪ ነው
3. ይመሬ እስከተዋም
4. ጥሩ ነው
5. በጠዋም ጥሩ ነው

**6a. የሚሆነ ማራ ካንሰር ቅድመ ምርመራ ማድረግ ስጠናሽ ተቋሚ ነው**

- 1.ዠጠዋም እስከሚማቸው
- 2.እስከሚማቸው
- 3.የሚሬ እስከተዋም
- 4.አስማማ ስሏ
- 5.ዠጠዋም እስማማለሁ

**6b. ከንድ ቅድመ ካንሰር ምርመራ በማድረግ ሲነኑ መሆኑ**

1. በጠዋም መጥሪ ነው
2. መጥሪ ነው
3. ይመሬ እስከተዋም
4. ጥሩ ነው
5. በጠዋም ጥሩ ነው

**ክፍል 5: ቅጥተና ዘመን ገዢዎች ይተለመደ ይገባብ**

ተ.ቁ	ጥቅም	1.ዠጠዋም እስከሚማቸው	2. እስከሚማቸው	3.የሚሬ እስከተዋም	4.አስማማለሁ	5.ዠጠዋም እስማማለሁ
1	የሚሆኑ አይደለም ከንድ የሚጠቀሙ በዘመኑ ስሜ በሚቀጥሉት 3 መሬታቸው የሚሆነ ማራ ካንሰር ቅድመ ምርመራ እንዲታደረገ ይደግኝኝል					
2	በሚቀጥሉት 3 መሬታቸው የሚሆነ ማራ ከንድ ቅድመ ካንሰር ምርመራ ማድረግ ከንድ ይጠበቃል					
3	በሚቀጥሉት 3 መሬታቸው የሚሆነ ማራ ከንድ ቅድመ ካንሰር ምርመራ እንዲታደረገ					

	<b>ማብረሪስ ቁጥር ፪</b>				
<b>4</b>	የሚከራከሩ አይነት ስንጋጀ የሚጠቁሙ በዘመኑ በሚቀጥሉት 3 መሬታዎች የሚያስን ፈፋ ካንሰር ቅድመ ምርመራ አንድታደርግ ይሰባል				

#### **ክፍል 6: ቁጥጥር የሰበት ግብርጣዊ የተሰጠው ደንብ መስከተም**

**19. የሚያስን ማረኞች ካንሰር ምርመራ ቅድጋገት ስንጋጀ ስንጋጀ የሚያስን ማረኞች ካንሰር ቅድመ ምርመራ እንዲታደርግ  
ይሰባል(ይመከሩሻል)**

- 1.በጠዋ ሲሆን አይችልም
2. ሲሆን አይችልም
- 3.ይመግ አልሰጥም
4. ሲሆን ይሽጠል
5. በጠዋ ሲሆን  
ይችለል

**10. የሚያስን ማረኞች ካንሰር ምርመራ ቅድጋገት ስንጋጀ ስንጋጀ እንዲታመረመሩ ማስቀበዣ ስንጋጀ ይጠቀማኩል**

- 1.እኔን በጠዋ አይችልም
2. አይችልም
3. ይመግ አልሰጥም
4. ይጠቀማል
5. እኔን በጠዋ  
ይጠቀማል

**20. የጠና ልማት ስራዎች (በት ማስቀበትኩት) የሚያስን ማረኞች ካንሰር ቅድመ ምርመራ እንዲታደርግ ይሰተምረቅል  
(ይኗገሩሻል)**

- 1.በጠዋ ሲሆን አይችልም
2. ሲሆን አይችልም
- 3.ይመግ አልሰጥም
4. ሲሆን ይሽጠል
5. በጠዋ ሲሆን  
ይችለል

**20. የጠና ልማት ስራዎች የሚያስን ማረኞች ካንሰር ቅድመ ምርመራ እንዲታደርግ ማስተማረቂያ ስንጋጀ ይጠቀምኩል**

- 1.እኔን በጠዋ አይችልም
2. አይችልም
3. ይመግ አልሰጥም
4. ይጠቀማል
5. እኔን በጠዋ  
ይጠቀማል

**30. የጠና ስከሰኑን ስራዎች የሚያስን ማረኞች ካንሰር ቅድመ ምርመራ እንዲታደርግ ይደግኝኩል**

- 1.በጠዋ ሲሆን አይችልም
2. ሲሆን አይችልም
- 3.ይመግ አልሰጥም
4. ሲሆን ይሽጠል
5. በጠዋ ሲሆን  
ይችለል

**30. የጠና ስከሰኑን ስራዎች የሚያስን ማረኞች ካንሰር ቅድመ ምርመራ እንዲታደርግ ምድግኝቶ ስንጋጀ ተቋሚ ነው  
1.እኔን በጠዋ አይችልም
- 2. አይችልም
- 3. ይመግ አልሰጥም
- 4. ይጠቀማል
- 5. እኔን በጠዋ  
ይጠቀማል**

**40. ገንዘብ አርከም (ሙዲል) የሚሆኑ በዘመና ስት የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ ይኖርባለ**

- 1.በጣም ለሆነ አይችልም 2. ለሆነ አይችልም 3.ድምጽ አሰሰጥም 4. ለሆነ ይሻሳል 5. በጣም ለሆነ  
ቋናስል

**41. ሌንዘብ አርከም (ሙዲል) የሚሆኑ በዘመና ስት የሚያደርግኝና ማድረግ ሌንዘብ ተቀባዩ ነው**

- 1.አቶ በጣም አይችልም 2. አይችልም 3. ፍምጽ አሰሰጥም 4.ይጠቅሚል 5.አቶ በጣም  
ቋጠቅሚል

**50. የህዝብ ገንዘብ ስብሰብ አመራሪዎች የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ እንዲታደረጋ ይኖሩ ይፈጸማል**

- 1.በጣም ለሆነ አይችልም 2. ለሆነ አይችልም 3.ድምጽ አሰሰጥም 4. ለሆነ ይሻሳል 5. በጣም ለሆነ  
ቋናስል

**51. የህዝብ ገንዘብ ስብሰብ አመራሪዎች የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ እንዲታደረጋ መዲንገኛው ሌንዘብ ተቀባዩ  
ነው**

- 1.አቶ በጣም አይችልም 2. አይችልም 3. ፍምጽ አሰሰጥም 4.ይጠቅሚል 5.አቶ በጣም ይጠቅሚል

**60. ገረበቶችኩ የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ እንዲታደረጋ ይደንገኙል(ይመከሩል)**

- 1.በጣም ለሆነ አይችልም 2. ለሆነ አይችልም 3.ድምጽ አሰሰጥም 4. ለሆነ ይሻሳል  
5. በጣም ለሆነ ይሻሳል

**61. ገረበቶችኩ የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ እንዲታደረጋ መመከራቸው ሌንዘብ**

- 1.አቶ በጣም አይችልም 2. አይችልም 3. ፍምጽ አሰሰጥም 4. ይጠቅሚል  
5.አቶ በጣም ይጠቅሚል

**70. የጠና ባለሙያዎች የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ እንዲታደረጋ ይመከሩል**

- 1.በጣም ለሆነ አይችልም 2. ለሆነ አይችልም 3.ድምጽ አሰሰጥም 4. ለሆነ ይሻሳል  
5. በጣም ለሆነ ይሻሳል

**71. የጠና ባለሙያዎች የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ እንዲታደረጋ መዲንገኛው ሌንዘብ ተቀባዩ  
ነው**

- 1.አቶ በጣም አይችልም 2. አይችልም 3. ፍምጽ አሰሰጥም 4. ይጠቅሚል 5.አቶ በጣም ይጠቅሚል

**ክፍል 7. ቅጥተኩ የሆነ ባህሪው እንዲጨረጡ የሚያደርግና ስሜትኩ**

**1.ሽንጻ በሚቀጥሉት ስነት መፈተኝ መሰተ የሚሆኑን ማረጋገጫ ተደርሱ ምርመራ ማድረግ**

1. በጠዋ ክብድ ነው	1	2	3	4	5	በጠዋ ቁሳል ነው
2. ከቀጥተርና ወጥ ነው	1	2	3	4	5	የቀጥተርና ስር ነው
3. በሁኔታዎች ደማጋዊነት ነው	1	2	3	4	5	በሁኔታዎች ደማጋዊነት ነው
4. ይንገተኛ ነው	1	2	3	4	5	የታችልበት ነው

#### ክፍል 8. ቅጥተኛ ያልሆነ ባህሪው አገልግሎቶና የደረሰኑ ተስስው ደሚታዊነት እያወኑት

10.በሚቀጥለት 3 መሬት መስተምሮ ማረጋገጫ ንብረቱ ተከራካሪ ቅጥተኛ የሚመለከት የሚመለከት የሚሰጥበትን ስራ ስምምነት

- 1.በጠዋ ሌሎች አይቻልም
- 2. ሌሎች አይቻልም
- 3.ደምጽ አልሰጥም
- 4. ሌሎች ቃል
- 5. በጠዋ ሌሎች ይቻላል

11. የሚመለከትን ደሚሰጥበትን ስራ ስምምነት የሚመለከት ክብድ የደረሰኑ የሚመለከት

- 1.በጠዋ አልሰጥም
- 2.አልሰጥም
- 3.ደምጽ አልሰጥም
- 4.አሰጣጥ ሌዩ
- 5.በጠዋ አሰጣጥበት

20.ማኑም የበሽታ ምልክት ስሰሰባበት ምርመራ አያዝናልን የሚመለከት

- 1.በጠዋ ሌሎች አይቻልም
- 2. ሌሎች አይቻልም
- 3.ደምጽ አልሰጥም
- 4. ሌሎች ቃል
- 5. በጠዋ ሌሎች ይቻላል

21. የበሽታ ምልክት በስራበት ምርመራ ምድረት ምኑም ተቀም የስተም

- 1.በጠዋ አልሰጥም
- 2.አልሰጥም
- 3.ደምጽ አልሰጥም
- 4.አሰጣጥ ሌዩ
- 5.በጠዋ አሰጣጥበት

30. ማኑ ሌሎች(ማኑም በሽታ ስሰሰባበት) ምርመራ ማድረግ አያዝናልን የሚመለከት

- 1.በጠዋ ሌሎች አይቻልም
- 2. ሌሎች አይቻልም
- 3.ደምጽ አልሰጥም
- 4. ሌሎች ቃል
- 5. በጠዋ ሌሎች ይቻላል

31. ሌሎች ስው ደማጋዊነት ማረጋገጫ ንብረቱ ተከራካሪ ቅጥተኛ የሚመለከት ምድረግ ምኑም ተቀም የስተም

- 1.በጠዋ አልሰጥም
- 2.አልሰጥም
- 3.ደምጽ አልሰጥም
- 4.አሰጣጥ ሌዩ
- 5.በጠዋ አሰጣጥበት

40. ለሳ በሽታ ማኑ (ተጨማሪ በሽታ) ስሰሰባበት ደማጋዊነት ማረጋገጫ ንብረቱ ተከራካሪ ቅጥተኛ የሚመለከት

1.በოფስ ሌሎች አይቻልም 2. ሌሎች አይቻልም 3.ድሬሻ አልሰጥም 4. ሌሎች ብቻበት

5. በოቃው ሌሎች ይቻባል

4ለ. ተጨማሪ በጀት መኖሩ የሚሆኑን ማረጋገጫ ከንሰር ቁጥሮች ምርመራ ማጋገጫን ገንዘብ ከባድ ይደርግባል

1.በოቃው አልሰጥማማም 2.አልሰጥማማም 3.ድሬሻ አልሰጥም 4.አሰጣጥ ስሁ 5.በოቃው አሳጣማስ

5ለ. የሚሆኑን ማረጋገጫ ከንሰር ቁጥሮች ምርመራ ለማድረግ በታክስ ምርመራ ወቅት የሚከሰተውን ምርመራ ተፈጸማል

1.በოቃው ሌሎች አይቻልም 2. ሌሎች አይቻልም 3.ድሬሻ አልሰጥም 4. ሌሎች ብቻበት

5. በოቃው ሌሎች ይቻባል

5ሐ. ምርመራው ወቅት ምርመራ መኖሩ ገንዘብ ምርመራውን ከባድ ይደርግባል

1.በოቃው አልሰጥማማም 2.አልሰጥማማም 3.ድሬሻ አልሰጥም 4.አሰጣጥ ስሁ 5.በოቃው አሳጣማስ

6ለ. ስለ ማህበኑ ማረጋገጫ ከንሰር ቁጥሮች ምርመራ በቋ አውቀት ይሰኞም በስዕስ ተሰጠዋል

1.በოቃው ሌሎች አይቻልም 2. ሌሎች አይቻልም 3.ድሬሻ አልሰጥም 4. ሌሎች ብቻበት

5. በოቃው ሌሎች ይቻባል

6ሐ. ስለ ማህበኑ ማረጋገጫ ከንሰር ቁጥሮች ምርመራ በቋ አውቀት አስተዳደር እንዲከተሉበት ይደርግኝል

1.በოቃው አልሰጥማማም 2.አልሰጥማማም 3.ድሬሻ አልሰጥም 4.አሰጣጥ ስሁ

5.በოቃው አሳጣማስ

ክፍል 9: የሚሆኑን ማረጋገጫ ከንሰር ቁጥሮች ምርመራ ለማድረግ ይሰጣል ተነሳነት የሚሰነ ተያቄ

1.በሚቀጥስት 3-ወራቶች ውስጥ የሚሆኑን ማረጋገጫ ከንሰር ቁጥሮች ምርመራ ለማድረግ ማረጋገጫ ምን የሚሰነ ተያቄ ሌሎች ይቻባል

1.በოቃው ሌሎች አይቻልም 2. ሌሎች አይቻልም 3.ድሬሻ አልሰጥም 4. ሌሎች ብቻበት

5. በოቃው ሌሎች ይቻባል

2. በሚቀጥስት 3 ወራቶች ውስጥ የሚሆኑን ማረጋገጫ ከንሰር ቁጥሮች ምርመራ ለማድረግ ምን የሚሰነ ተያቄ ሌሎች ይቻባል

1.በოቃው ሌሎች አይቻልም 2. ሌሎች አይቻልም 3.ድሬሻ አልሰጥም 4. ሌሎች ብቻበት

5. በოቃው ሌሎች ይቻባል

3. በሚቀጥስት 3 ወራቶች ውስጥ የሚሆኑን ማረጋገጫ ከንሰር ቁጥሮች ምርመራ ለማድረግ መጠየቂ እና ሂሳቦች አይነት መገኘት ምን የሚሰነ ተያቄ ሌሎች ይቻባል

1.በოቃው ሌሎች አይቻልም 2. ሌሎች አይቻልም 3.ድሬሻ አልሰጥም 4. ሌሎች ብቻበት

5. በოቃው ሌሎች ይቻባል

4. በሚቀጥለት 3 መ&#252;ች መሰተ የሚሆን ማራ ካንሰር ቁድመ ምርመራ ስማና ደሳሰነት ምን ዘዴስ ለምን ይችላል  
 1.በጣም ለምን እያወልም 2. ለምን እያወልም 3.ይመስ እስከተያሸ 4. ለምን ይታሳል  
 5. በጣም ለምን ይችላል

#### **ክፍል 10 የጠናት ትምህር**

1. የሚሆን ማራ ካንሰር ቁድመ ምርመራ እድርገው ያወቻል?

1. አዋ 2. የሰም

2. ስንት ገዢ የሚሆን ማራ ካንሰር ቁድመ ምርመራ እድርገዋል

1. አንድ ገዢ 2. ሁሉት ገዢ 3. ከሁሉት ገዢ በኋላ

#### **ክፍል 11: የጠተሰብ ታሪክ እና የጠና ህኑታ**

1.በጠተሰብ አባል መሰተ በሚሆን ካንሰር የተያዘ ስው እና?

1. አዋ 2. የሰም

2. የእባባዬር በስታ ይዘዋል ያወቻል?

1. አዋ 2. የሰም

3. ስጥቶ ቅጥር 2 የሰጠት ምስቅ አዋ ከሆነ ስምን ዘዴስ ገዢ የእባባዬር በስታ እንጥሞች ያወቻል? -----

4. የእባባዬር በስታ ባርመሙት ገዢ የታደሩ ውና ውና ምልክቶች ምንድን ፍቃድ?

- |                 |      |       |
|-----------------|------|-------|
| 1.የበሌት ፈሳሽ ነበረው | 1.አዋ | 2.የሰም |
| 2.የበሻነትናበጣት     | 1.አዋ | 2.የሰም |
| 3.የበሌት ቁስስት     | 1.አዋ | 2.የሰም |
| 4.የበሌት ካንታይነት   | 1.አዋ | 2.የሰም |

**Annex-iv: Sidamic version questionnaires**  
**Jimmu Universite, Fayyimmate Institute, Fayimate Temirte Rosu Kifile**

**Sidamu Afii Xa'mo**

Su'mi'ya \_\_\_\_\_ yaamamanno. Xa loosanni noommohu kalaa kalaa wog eranehu Jimmu Universite, Fayyimmate Institute, Fayimate Temirte Rosu Kifile layinki digire (Mastersete) rosaancho ikkinohu Yirgalemete woradi giddo gumulshu xiinxallo loosanni noo daafira tenne xiinxallora ikkitanno hedo gamba assanni afameemmo. Xiinxallote birxichino; **Yirgalemete woradigiddo mageeshi godowi noo amuwi fayyimmate minira yanate doonokirona yanate daanoki assitano korkatuwa xiinxalla** yitannote.

Anino amuwu mereerinni xa'mote kaayyora dooramino amuwa xa'manni noommo daafira atino tenne kaayyo beeqqaancho ikkoottahura hasiissanno dawaro qolattae gede shaqqillunni xa'mireemmohe. Ledeno kummi assate baxeemori ati qolatta dawaro ikkinnina ate mayimma woyi su'makki horontanni diborreessinanni. Ati qolootta dawaro wol u ayino la"aranna maciishshara didandaanno. Tenne xiinxallorano beeqqaancho ikkattahu baxxe ikkinnina giwate qoossokki agarantinote. Ati kolatta dawaro tenne xiinxallo gumulo iillishate hattono woradinke giddo afamanno amuwinna qaaqquullinsa keeraanchimma woyyeessate lowo kaa'lo assitanno daafira beeqqaancho ikkittaro addinta tashshi yaannonke.

Hanafa dandeemmo?

1. **Dee'ni** → Galatte uurrisi.
2. **Ee** → Hanafi

kifle1: mannu heesho gari xamubba			
kiiro	Xamubba	Maxooshu milikaita	Ka'a ha'ri
1	Ama diro		
2	Amano mati	1. Protestant 2. Ortodoxi 3. Muslime 4. Catholic	
3			
4	Illima	1. Sidama 2. Amhara 3. oromo	

		4.other specify	
5	Looso	1. mangistete looso 2. umiseni loosata 3. mini galte	
	Adhamate gara	1.adhatinokita 2. Adhate mitee heedhawota 3.aduulante noota 4. Reenoseta, tidhantinota	
6			
7	Aganuni afidhano eo		
	Rosu deera	1. Umi dirima [1-8] 2. Layinki dirima [9-10] and aleni 3. nababa dandiitanota	
8	Mea hige godobota?		
9	Mea kakule ilita?		

#### Kifle 2. Ototote cancere daffira egeno bikano xamo

1. Ototote cancere daffira machishite egenota?
  1. Ea
  2. Dimachishoma (dawaro 2 ikituro xamo 8 mari)
2. ototote cancere daffira magamaria mamine machishita
 

1. Radiote/TVte	1. Ee	2. Deen'
2. maxafa anabane	1. Ee	2. Deen'
3. xinu balemoyate	1. Ee	2. Deen'
4. betasabete,olate na jalate	1. Ee	2. Deen'
5. marete	1. Ee	2. Deen
6. astamarete/ temirtete mime	1. Ee	2. Deen'
3. Ototote cancere malate ma mate?
 

1. otote gido mundu dunama	1. Ee	2. Deen'
2. tototote gido bushu folle nosi fasashe fulla	1. Ee	2. Deen'
3. simute xadoshe asinana nunde fulla	1. Ee	2. Deen'

4. simute xadoshe asinana xiso machishama  
5. diafoma

1. Ee      2. Deen'

4. ototote cancerera agalatanoricho ma mate ?

1. mitu aleni labalu ledo xadoshe asa	1. Ee	2. Deen'
2. 15 dirro woroni simote xagoshe asa	1. Ee	2. Deen'
3. HPV tagalache ika	1. Ee	2. Deen'
4. Cigara aga	1. Ee	2. Deen'
5. illa garegarate lobo diro kinine hadha	1. Ee	2. Deen'
6. simato xibira tagalache ika	1. Ee	2. Deen'
7. diaffoma		

5. Ototote cancerere hito gargadinani?

1. galetete tamagne ikate	1. Ee	2. Deen'
2. 15 dirro woroni simote xadoshe aso hogo	1. Ee	2. Deen'
3. cigara aga agurate	1. Ee	2. Deen'
4. HPV yinayti vairusera katabama	1. Ee	2. Deen'
5. yana yanate miremaru asira	1. Ee	2. Deen'
6. simato xiso garegarate	1. Ee	2. Deen'
7. diafoma		

6. Ototote cancerere yanate hikiminaa asiniro hurtanonso dihurtano?

1. Ee      2. Deen'

7. Ototote cancerera miremaru mota afotanso diafota ?

1. Ee      2. Deen'

8. ototote cancerera mirimaru nota majamaria mamine machesita ?

1. Radiote/TVte	1. Ee	2. Deen'
2. maxafa anabane	1. Ee	2. Deen'
3. xinu balemoyate	1. Ee	2. Deen'
4. betasabete,olate na jalate	1. Ee	2. Deen'
5. marete	1. Ee	2. Deen'
6. astamarete/ temirtete mime	1. Ee	2. Deen'

9. Mirimaru ayeora hasisano ?

1. 30-49 dirro no mantra

2. mimi asirara illno sinira balla

10. Meaki meakita miremara asira hasisano

1. Onte dirro mitege
2. Saase diro mitehige
3. Dirruye mite hige

### **Kifle 3 Ototote cancere alebani nore afate shiqino xamo**

- |  |             |                    |
|--|-------------|--------------------|
| 1.konii alebani maramarante edenota?             | 1. Ee       | 2. Deen'           |
| 2. xamo kirro 1 ee yitaro mea hige maramaramita? | 1 mite hige | 2. Mite hige aleni |

### **Kifle 4 kaxitagn amalakakate kibitati xamo**

1. Atera dagano 3 agana gido ototote cancere miremara asira?

1. horro dinosi	1	2	3	4	5	Horonosi
2.digaraho	1	2	3	4	5	Garaho
3.tashe yano	1	2	3	4	5	Tashe diyano
4.danchaho	1	2	3	4	5	bushaho

Kifle5. Tazawawarete dogo laooshshe bikitano xamuba

- a. Laoshete amano bika    b. ananote uyenani wadga

1a. Ototote cancer miremara asira umiki reyote garegadahe

1. loho gesha sumuu di ya
2. sumuu diya
3. Demexe deata
4. sumuu yoo
5. loho gesha sumuu yoo

1b. Atera umoki ototote cancerete amadamino danote reyote gargadh?

- 2. lowo gesha bushaho
- 1. Bushaho
0. Demexe deata
1. Danchaho
2. Lowo gesha

danchaho

2a. Ototote cancer miremara asira umoki afate kalahe :

1 loho gesha sumuu di ya 2. sumuu diya 3. Demexe deata 4. sumuu yoo  
5. loho gesha sumuu yoo

2b. Miremarate umiki afa aateraa

-2. lowo gesha bushaho -1. Bushaho 0. Demexe deata 1. Danchaho  
2. Lowo gesha danchaho

3a. Miremarate asira hikimina yanate afirata gede kalahe:

1 loho gesha sumuu di ya 2. sumuu diya 3. Demexe deata 4. sumuu yoo  
5. loho gesha sumuu yoo

3b. atera miremarate asite hikimina yanate afira

-2. lowo gesha bushaho -1. Bushaho 0. Demexe deata 1. Danchaho  
2. Lowo gesha danchaho

4a. Ototote cancere mirimara xisote lowo derra iletanoki dege asitano

1 loho gesha sumuu di ya 2. sumuu diya 3. Demexe deata 4. sumuu yoo  
5. loho gesha sumuu yoo

4b. atera xisote bategn yanate mimara asine gargadh

-2. lowo gesha bushaho -1. Bushaho 0. Demexe deata 1. Danchaho  
2. Lowo gesha danchaho

5a. Ototote cancere mirimara asira umi tamamanato gede asanohe

1 loho gesha sumuu di ya 2. sumuu diya 3. Demexe deata 4. sumuu yoo  
5. loho gesha sumuu yoo

5b. Atera maramarante umikni tamamana

-2. lowo gesha bushaho -1. Bushaho 0. Demexe deata 1. Danchaho 2. Lowo gesha danchaho

6a. Ototote cancere meremara fayimakira danchaho

1 loho gesha sumuu di ya 2. sumuu diya 3. Demexe deata 4. sumuu yoo  
5. loho gesha sumuu yoo

6b. Atera mirmara asite taxaqama

-2. lowo gesha bushaho -1. Bushaho 0. Demexe deata 1. Danchaho

2. Lowo gesha danchaho

**Kifle6. Qaxitate meessi bude bikitano xamuba**

s.no	Items	1 LSD	2 SD	3 DD	4 SY	5 LGS
1	Aatera xaqamamo lowo mana dano sasi agana gido ototote cancere miremara asirata gede asata gedi baxano.					
2	Dano sasi agana gido ototote cancere miremara asiraa atebi agadhnayichote .					
3	Dagano sase agana gido ototote cancere mirara asirata gede qurqru gifite asanohe .					
4	Lowomana aatera kalaanohe dano sasi agana giddo ototote cancere maramaramata gedde xinxalano					

**Kifle7.Tazawaware qaxitate meessi bude bikitano xamuba**

a. bubu ama'no b. sumuu yaa

1a. Albani mamarantino mancho ati maramaramata gedi asabano

-2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano

1b. Mento asaba maramaramata gede atera xaqamanohe

1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano

5. Lowo gesha xaqamano

2a. Bogo malekitangu ototote cancerete miremara asata gede asabanohe

-2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano

- 2b. Bogo malekitangu maramaramatara gede asaba atera
- 1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano
  5. Lowo gesha xaqamano
- 3a. Xenna extenshinet ototote cancerete miremara asata gede asabanohe
- 2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano
- 3b. Xenna extenshinet ototote cancerete maramaramata gede asaba atera
- 1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano
  5. Lowo gesha xaqamano
- 4a. Atera xaqamano menti ototote cancerera mermara asirano
- 2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano
- 4b. Wole menti asitanoricho asa atera xaqamanohe
- 1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano
  5. Lowo gesha xaqamano
- 5a. Gubayete marota ototote cancere mermara asirata gede amaletahe
- 2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano
- 5b. Gubayete marota ototote cancere mermara asirata gede amalansa atera xaqamahe
- 1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano
  5. Lowo gesha xaqamano
- 6a. Oluwaki ototote cancere mermara asirata gede kuletahe/ amaletahe
- 2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano
- 6b. Oluwaki ototote cancere mermara asirata gede kulansa atera
- 1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano 5. Lowo gesha xaqamano
- 7a. Xenu balemuya ototote cancere mermara asirata gede kuletahe/ amaletahe
- 2 lowo gesha diekano -1. Diekano 0. Demxe deema 1. Ekano 2. Diekano
- 7b. Xenu balemuya ototote cancere mermara asirata gede kulansa atera
- 1.lowogesha dexaqamano 2. Hakeshati 3. Demxe deema 4. Xaqamano
  5. Lowo gesha xaqamano

## **Kifel 8. Qaxitanu dogu maramaramate holtaricho bekitano xamuba**

1. Atera dagano 3 agana gido ototote cancer mermara asira

1. kabadano	1	2	3	4	5	Qalalete
2. quxuxurete alenite	1	2	3	4	5	Quxuxurete woronite
3. wosanoye	1	2	3	4	5	Dewasanoye
4. deggatahgho	1	2	3	4	5	Aqandoni

## **Kifile 9. A. ama'no agarra    B. ama'no agarate wolqa**

1a. Meremara asirate hasiritaro miremara wyinaninbayicho deafata

1 lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

1b. Cancerete mirmara uyinani bayicho afa hoga miremara kabade asanohe

-2. loho gesha sumuu di ya -1. sumuu diya 0. Demexe deata 1. sumuu yoo  
2. loho gesha sumuu yoo

2a. Ototote癌ere malate hoga maramar horo dinosi

1 lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

2b. Ototote癌ere malate hoga atera maramaramataki gede assanohe

-2. loho gesha sumuu di ya -1. sumuu diya 0. Demexe deata 1. sumuu yoo  
2. loho gesha sumuu yoo

3a. Ani keranchoho yete asabaki mirmara hasirata gebe assanohe

1 lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

3b. Fayo ikaki ototote kancerera maramaramataki gede asanohe

-2. loho gesha sumuu di ya -1. sumuu diya 0. Demexe deata 1. sumuu yoo

2. loho gesha sumuu yoo

4a. Wole xiso nohe dafira maramaramumora kabade asitanoea

1 lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

4b. Wole xiso hera mirmara kabade asano

-2. loho gesha sumuu di ya -1. sumuu diya 0. Demexe deata 1. sumuu yoo

2. loho gesha sumuu yoo

5a. Maramaramate hasirumoro xiso machishantanoea yite wajata

1 lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

5b. Miremarate sate xiso herasi miremara kabade asitanohe

-2. loho gesha sumuu di ya -1. sumuu diya 0. Demexe deata 1. sumuu yoo

2. loho gesha sumuu yoo

6a. Ototote kancere daffira lowo egenno dinoea yite hadata

1 lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

6b. Ototote kanceredaffira lowo egenno hogaki mirmara holahe

-2. loho gesha sumuu di ya -1. sumuu diya 0. Demexe deata 1. sumuu yoo

2. loho gesha sumuu yoo

## Kifile 10. Ototote kancere maramaramate no mixo bikitano xam'uba

1. dagano 3 agana gedo Ototote kancere maramara mageshigesha hasirata

1. lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

2. dagano 3 agana gedo Ototote kancere mageshigesha maramara qexabata

1. lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

3. dagano 3 agana gedo Ototote kancere maramara mageshigesha gesha xamata/gobaghata

1. lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

4. dagano 3 agana gedo Ototote kancere mamarate mageshegesha hedata

1. lowo gesha diekano 2. Diekano 3. Demxe deema 4. Ekano 5. Diekano

### **Kifel 11. Ayidete na keranchemate tarike daffira laano xamo**

1.betasabete gido ototote cancer xisamino mana no?

1. Ee 2. Deen'

2. koni alebani sinaxote xiba amade egeninohe?

1. Ee 2. Deen'

3. alide xamo ra dawaroki ee ikkiro mie hige amadinohe -----

4. hito dana sinaxote xiba amadenohe

1. ototote wido fasashe fultano gara
2. siimu darsha
3. siimu mada
4. siimu quintidho