



BEHAVIORAL INTENTION AND ITS ASSOCIATED FACTORS TO USE
CERVICAL CANCER SCREENING AMONG WOMEN (30-49) YEARS OLD
ATTENDING MATERNAL AND CHILD HEALTH SERVICE IN SHEBEDINO
DISTIRICT HEALTH CENTERS, SIDAMA REGIONAL STATE, ETHIOPIA,
2023.

BY

YOHANNES TEFERA AYANE

A THESIS SUBMITTED TO HAWASSA UNIVERSITY SCHOOL OF
NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR A
DEGREE OF MASTER OF SCIENCE IN ADULT HEALTH NURSING.

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HAWASSA, ETHIOPIA

ASSESSING MAGNITUDE OF BEHAVIORAL INTENTION, AND ITS ASSOCIATED FACTOR TO USE CERVICAL CANCER SCREENING SERVICE AMONG WOMEN (30-49) YEARS OLD ATTENDING MATERNAL AND CHILD HEALTH SERVICE IN SHEBEDINO DISTRICT HEALTH CENTERS. SIDAMA REGIONAL STATE, ETHIOPIA. MIXED CROSS SECTIONAL STUDY.

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HAWASSA UNIVERSITY
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APPROVAL SHEET

This is to certify that the thesis entitled “**Assessing magnitude of behavioral intention and its associated factor to use cervical cancer screening service among woman attending maternal and child health service**” innorthern Sidama zone, shebedino district. Submitted in partial fulfillment of the requirement for the degree of masters with specialization in Adult Health Nursing, the graduate program of the department of Nursing and has been carried out by Yohannes Tefera ID.NO. GPAdNROOO/6 under my/our supervision.

Therefore I/We recommend that the student has fulfilled the requirements and hence here by can submit the thesis to the department.

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We, the undersigned, members of the Board of Examiners of the final open defense by Yohannes Tefera have read and evaluated his thesis entitled “**Assessing magnitude of behavioral intention and its associated factor to use cervical cancer screening service among woman attending maternal and child health service” innorthern Sidama zone, shebedino district**” and examined the candidate. This is, therefore, to certify that this thesis has been accepted in partial fulfillment of the requirement for the degree of masters with specialization in Adult Health Nursing, the graduate program of the department of Nursing.

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DECLARATION

I, have carried out a research thesis on **“Assessing magnitude of behavioral intention and its associated factor to use cervical cancer screening service among woman attending maternal and child health service in Sidama zone, shebedino district”** Independently in partial fulfillment of the requirement of the **Master of Science in Adult Health Nursing** with the guidance and support of the research advisor, associate professor, Gezehegn Bekele and Mr Ezedin Molla (Lecturer). I, also declared that this thesis is my original work and all source of materials used for the proposal have been duly acknowledged.

I further confirm that this proposal has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Declared by: _____

Signature _____

Date _____

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ABBREVIATION AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Anti Natal Care
AOR	Adjusted odds ratio
ASEM	Attitude, Social influence and Self-efficacy model
BCC	Behavioral change communication
CCS	Cervical cancer screening service
DATT	Direct attitude
DSN	Direct subjective norm
DPBC	Direct perceived behavioral control
DNA	Deoxyribo Nucleic acid
ETB	Ethiopian Birr
FDRE	Federal Democratic Republic of Ethiopia
FMoH	Federal Ministry of Health
FP	Family Planning
HAD	Health development Army
HEW	Health extension worker
HIV	Human Immunodeficiency Virus
HPV	Human papilloma virus
IATT	Indirect attitude
IDI	In-depth interview
IEC	Information education communication
ISN	Indirect subjective norm
KAP	Knowledge Attitude Practice
KMO	Kaise-Meyer-Olkin
LBC	Liquid Based Cytology
OPD	Out Patient Department
Pap	Papanicolaou
PBC	Perceived Behavioral Control
PNC	Post Natal Care
SPSS	Statistical package for social science

TB	Tuberculosis
TPB	Theory of Planned Behavior
UK	united Kingdom
USA	United States of America.
VHTs	Village Health Team members
VIA	Visual Inspection with Acetic acid
W.H.O	World Health Organization

ABSTRACT

Background Cervical cancer is the leading cause of death from cancer in Ethiopian women. Despite numerous interventions, there is a low uptake of cervical cancer screening services. **Objective:** The aim of this study was to assess the magnitude of behavioral intention and associated factor to use cervical cancer screening services among women who are visiting maternal and child health services in Shebedino district health centers. **Method:** Institutional based mixed cross-sectional study design used to employ women's age between 30-49 years old. Systematic random sampling method employed to select participants. Qualitative Data was gathered and analyzed through discussion under major thematic area. linear regressions model was conducted to identify independent predictors of intention on cervical cancer screening among women. **Result:** Out of 401, 288(71%) of respondents had heard about cervical cancer, however, about 92(23%) of women were knowledgeable about the disease. 120 (29%), 98 (24%), 81 (20.1%), and 42(11%) of the respondents were know the sign & symptoms, risk factors, prevention methods and screening frequency of cervical cancer respectively. The qualitative finding revealed that women did not like to be screened for cervical cancer because they thought that procedure squeeze the cervix and it may result in perforating the uterus that would expose them for infertility. In addition, the qualitative findings supported quantitative results, where the constructs of the theory of planned behavior play an essential role in the improvement of women's intention. 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 screening. Perceived difficulty or easness ($\beta = 0.297$, 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).The study showed that magnitude of intention was 198 (44%) of woman had intention to screen for cervical cancers from date of interview. **Conclusion:** This study showed that women's intention to screen for cervical cancer was low. Positive attitudes towards cervical cancer screening (CCS), subjective norms, and perceived behavioral control were predictors of women's intention to screen for cervical cancer. **Recommendation:** Thus, efforts should be exerted to improve the attitude of women involving influential people, who could improve women's intention for cervical cancer screening. Moreover; behavioral change communication focuses on the constructs of the theory of planned behavior.

Key word: cervical Cancer: cancer: screening intention: women: theory of planned behavior:

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. (Novinson, D 2019) Cancers that originate in the female reproductive system are called gynecological cancers. (Novinson, D 2019) 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.(Novinson, D 2019) 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 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 (Marcus, 2021). 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, multiparty, smoking, long-term use of oral contraceptive pills, immune suppressed states(Fontham,E.T,2020).WHO recommends comprehensive multidisciplinary approach interventions across the life course to cervical cancer and these interventions include community education, social mobilization, vaccination, screening, treatment and palliative care.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. 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).(Mulongo and Chibwasha 2022). In resource-limited countries including Ethiopia, mainly because of the poor cervical cancer screening service utilization, the majority of the patients are diagnosed at an advanced stage. Cervical cancer screening offers protective benefits and is associated with a reduction in the incidence of invasive cervical cancer and cervical cancer mortality.

1.2 Statement of the problem

Globally, cervical cancer is the second most common type of woman cancer with an estimated 604,127 new cases and 341,831 deaths every year .In developing countries; it is a major public health problem where 85% of new cases and 87% of deaths take place. In these countries, it is responsible for around 12% of all cancer cases and 7.5% of all cancer related deaths (Singh, Vignat et al. 2022). Age-standardized incidence and mortality from cervical cancer are highest in Africa. For example, the age-standardized incidence of cervical cancer is 36 per 100,000 women in Southern Africa, compared with a rate of 6 per 100,000 women in North America.(Mulongo and Chibwasha 2022). In Ethiopia, cervical cancer is the most common (31.8%) diagnosed cancer among all cancer cases and the second leading gynecologic cause of death, next to breast cancer. Cervical cancer is one of the leading causes of cancer-related deaths in Ethiopia, Where vaccination and screening are less implemented. In Ethiopia, cervical cancer is the second most common female cancer in women aged 15 to 44 years. From the 2018 estimate, about 6294 new cervical cancer cases were diagnosed annually in Ethiopia (Teka, Gizaw et al. 2021). Despite this statistics, its incidence and mortality have been substantially lowered in high resource countries during the last few decades primarily due to the implementation of screening packages and the availability of improved treatment option (Denny, de Sanjose et al. 2017). The Ethiopia Federal Ministry of Health (FMOH) developed national comprehensive cervical cancer prevention and control guideline to reduce the disease burden and defined eligible women (30–49 years) for cervical screening across the country. The ministry has been committed to avail effective screening methods in health care facilities for women in the target group (Aweke, Ayanto et al. 2017). Even though more recent studies in the country reported screening uptake of 9.9–15.5% (Aweke, Ayanto et al. 2017). Still it is lower than 80% screening target set nationally for women in the 30–49 years by 2020. (Aweke, Ayanto et al. 2017). The highest cancer-related mortality rate (10.9 per 100,000) among Ethiopian women (Abamecha, Tena et al. 2019). 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. 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 (Abamecha, Tena et al. 2019). 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 (Godin, Gagné et al. 2001). 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(Godin, Gagné et al. 2001). 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 (Jalilian and Emdadi 2011). 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. Previous studies conducted in Robe and Goba Towns emphasize on knowledge, attitude and practice (KAP), accessibility of service and the same study conducted in Dessie Town, North East Ethiopia emphasized that health seeking behavior related factors (Mitiku, 2016). 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 get screened (Tefera, Kerbo et al. 2016). 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 Shebedino district Health Centers. In order to explore the motivational factors that predict variation in attendance at screening programs this study used the theory of planned behavior (TPB) model.

1.3 Objective of the Study

1.3.1 General objective

To assess magnitude of cervical cancer screening intention and associated factor to use screening service among women (30-49) year's old visiting maternal and child health in Shebedino district health centers. Sidama Regional state, Ethiopia. 2023 Mixed cross-sectional study.

1.3.2 Specific objective

To determine magnitude of intention of women attending maternal and child health service in shebedino district health centers. Sidama regional state, Ethiopia.

To identify factor associated with cervical cancer screening service among women (30-49) year's old visiting maternal and child health in Shebedino district health centers. Sidama Regional state, Ethiopia. 2023

To investigate perception of women to seek cervical cancer screening service

1.4 Significance of the Study

Cervical cancer is a major issue in Ethiopia. In recent years, cervical cancer screening tests have emerged as a viable alternative modality for cervical cancer control. Women's knowledge, beliefs, social influence, and external controls towards the use of the service were considered important factors that motivate women to have intended in order to promote screening practice. 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 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 facilitates things to encourage women's to seek the service and in addition, it may be helpful in providing information as baseline for future screening.

REVIEW OF RELATED LITERATURE

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% (Konno, Sagae et al. 2010). 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(Sasieni, Castanon et al. 2009). In countries with high screening efficacy, such as Nordic countries and other high-income countries, cervical cancer prevention is high as a result of screening and is less affected by HPV vaccine coverage. In countries with poor screening efficacy, the level of protection against cervical cancer is critically affected by HPV vaccine coverage. In intermediate-and low-resource countries where cervical screening efficacy is poor or nonexistent, approximately two-thirds of cancers could be prevented if 85% vaccine coverage is achieved.This is supported by studies done in Africa on prevention of cervical cancer (Fiander, 2011).

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 hospital-based cross-sectional study has been conducted in St. Paul's Teaching and Referral Hospital revealed that the uptake of cervical cancer screening was low. Women in the potential target population of cervical cancer screening were just a proportion of all studied age groups and screening in them was more common than in younger women. Besides, rural residence, low monthly income, and lack of knowledge were important predictors for low utilization of cervical cancer screening practice (Woldetsadik, 2020).

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. (Twinomujuni, Nuwaha etal.2015).An other 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 (Jalilian and Emdadi 2011). 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 (Griffin-Mathieu, Haward et al. 2022). 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. 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 (Roncancio, Ward et al. 2013).

A cross-sectional study, conducted in Iran to assess factors related to regular undergoing Papsmeat test show that undergoing regular smear test were significantly associated with intention to have cervical cancer screening in the future(Jalilian and Emdadi 2011). Study conducted in Yirgalem town 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 (Abamecha, Tena et al. 2019). A cross-sectional study, conducted in Jimma, Gomma distirict to assess factors related to regular undergoing screening practice show that undergoing regular screening practice were significantly associated with intention to have cervical cancer screening in the future (Wollancho, Amdissa et al. 2020). Study done USA 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 (Kasting, Wilson et al. 2017). 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 (Gu, Chan et al. 2013).

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 (Mitiku and Tefera 2016). 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 (Segni, Demissie et al. 2017). 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 (Gu, Chan et al. 2013). 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 (Tefera, Kerbo et al. 2016). Study conducted in malayesea 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. (Thapa, Maharjan et al. 2018). Study in west rural Nepal indicated that women who got high level and moderate level of total knowledge score about cervical cancer and cervical cancer screening had more intention to take Pap smear.(Abudukadeer, Azam et al. 2015). generally, Women with sufficient knowledge about cervical cancer and screening are more likely to screen.

Attitudinal, subjective norm and perceived behavioral factors associated with intention to use cervical cancer screening study conducted in Debre Berehan Town ,multiple logistic regression analysis revealed that attitude towards cervical cancer screen (CCS), subjective norms, and perceived behavior control (PBC) on CCS had a significant positive association with intention to screen for cervical cancer (Getahun, Kaba et al. 2020). A cross-sectional study conducted to understand CCS intention among Yirgalem 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 (Abamecha, Tena et al. 2019). 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 R² in intention accounted for by the predictors was 0.276 and the R² in cervical cancer screening accounted for by its predictors was 0.130 (Roncancio, Ward et al. 2015) According to online survey designed using, the Theory of Planned Behavior to assess factors that influence women's intentions to attend HPV-CCS revealed that; positive attitudes and perceived behavior control were significant predictors of intention to screen for cervical cancer (Ogilvie, Smith et al. 2016). 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 (Ogilvie, Smith et al. 2013). In London, study to assess the predictors of uptake of a routine cervical smear test a comparison of 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 (Bish, Sutton et al. 2000).

2.4. Rationale of Theory of Planned Behavior Model

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 (Godin, Bélanger-Gravel et al. 2008). The TPB was developed by Ajzen 1990 to improve the predictive validity of the theory of reasoned action by incorporating perceived behavioral control (Ajzen 1991). 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 (Roncancio, Ward et al. 2015). 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 (Armitage and Conner 2001). 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 (Godin, Gagné et al. 2001). 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 (Jalilian and Emdadi 2011). Moreover, theory based studies are used to construct effective and evidence based educational programs that can assist in prevention of CCS (Jalilian and Emdadi 2011).

2.5. Theoretical framework

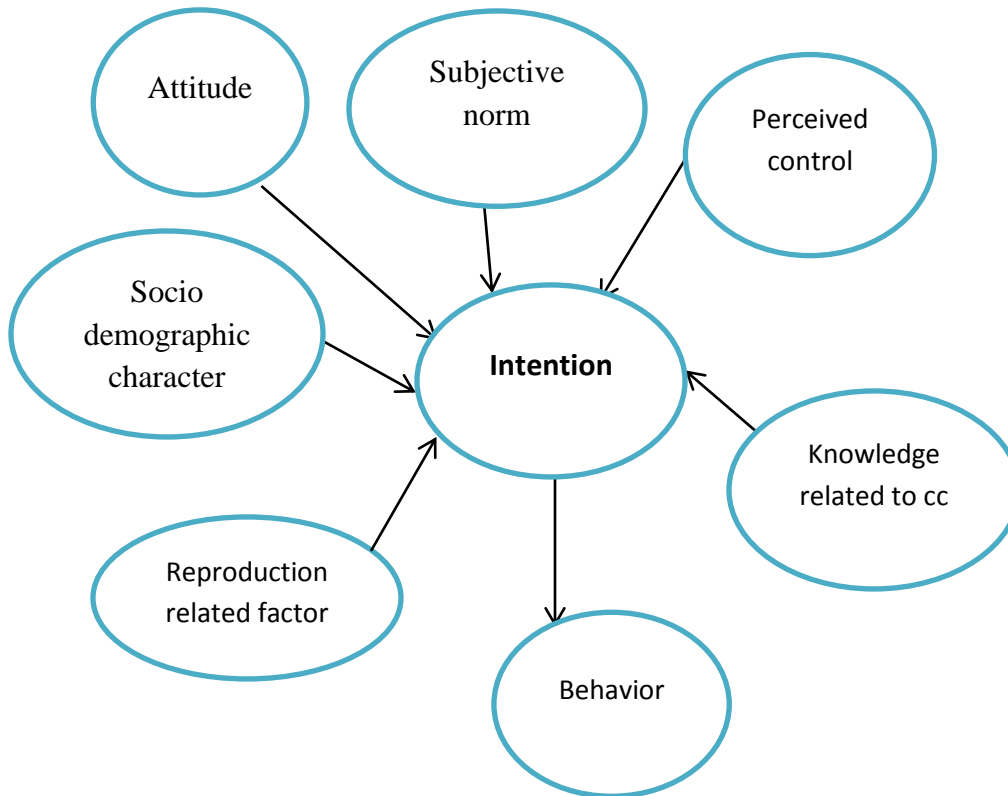


Figure 1: Theoretical framework adapted from TPB model (Ajzen, 1991)

According to theory of planned behavior, the intention to perform a behavior directly predicts engaging in that behavior. Individuals attitude toward the behavior, subjective norm and perceived behavioral control in turn predict intention. The intention to perform behavior is indication of the degree to which an individual is ready to perform a given behavior. Behavior is the degree to which the individual views engaging in the behavior as positive or negative. Subjective norm is the social pressure to engage or not engage in the behavior. Perceived behavioral control is the perceived ability successfully to perform the behavior. Socio-demographic and knowledge related characteristics also have effects on individual's intention to perform behavior.

MATERIAL AND METHOD

3.1. Study area and period

The study conducted in Shebedino district health centers from September 10-August 5, 2023. Shebedino is one of a woreda among Sidama Region, Ethiopia. It is bordered on the south by Dale, on the west by Boricha, on the north by Hawasa Zuria, on the east by Gorche, and on the southeast by Wensho. The district comprises 35 rural kebeles. It is 27 kilometers away from Hawassa, the capital city of the Sidama regional state. As shown from the estimated projection of 2007 Central Statistical Agency, the district has a total population of 267,487. From this population, 131,068 (49.3%) are males and 136,419 (50.7%) are females. The district has a total of 54,587 households. There are 42 health facilities in the district which include one general hospital, six health centers, and 35 health posts. There were 204 health care professionals in the woreda. But from 6 health facilities, five of health center offers cervical cancer screening services.

3.2. Study Design

Institution based cross-sectional study design using both qualitative and quantitative method.

3.3. Source population

All women whose age 30-49 years old lived under Shebedino District.

3.4. Study population

All sampled women clients' age 30-49 years who attending maternal and child health service in the selected health centers.

3.5. Inclusion criteria

Qualitative: Female health development army women working at community and willing to participate in the study.

Quantitative: Women who visited antenatal, postnatal and family planning service in the selected health centers whose age between 30-49 years.

3.6.Exclusion criteria

Qualitative: Male clients, and woman who have not reach information about cervical cancer.

Quantitative

Those women who are too sick and have confirmed cancer of the cervix.

3.7.Sample size and sampling procedures

Sample size determination

Qualitative data: Using purposive sampling, a total of 15 (5, 5 and 5) health development army (HDA) from Fuura, Telamo and Mero health centers rular kebele respectively were recruited in to the study. Data saturation was attained after fourteen participant; one additional interview was conducted to ensure saturation but no new information was revealed by additional participant's response. Data were collected by conducting semi-structured interviews with health development army (HDA) at the three participated health centers.

Quantitative data: The sample size has been determined using sample size determination for estimation of a single population means formula as follow

$$n = \frac{Z^2 p (1-p)}{D^2} = \frac{1.96^2 \times 0.5 (0.5)}{(0.05)^2} \approx 384$$

Assumption:

P = The estimate of predicted variance in intention to CC screening accounted by the variables in the model taken as 51% (0.51) from previous study conducted in yirgalem town (Abamecha, F., et al. (2019)

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

α = 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 women's included in the study.

After adding non-response rate of 10 % the total sample size becomes 422.

Totally, 422 samples recruited in this study.

3.8. Sampling technique

Quantitative

The sample size were proportionally allocated to each health centers based on a one-month antenatal, postnatal and family planning clients flow rate prior to the data collection. 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 interviewed each data collection day, until the required sample size was achieved. There are six (6) health centers in Shebedino District and five of them gave CCS service and included in the study. By rule of sampling proportionate to population size $p = n/N, =$ % by the size of clients visiting maternal and child health service (ANC,PNC &FP) in one month in the selected health centers to ensure proportionality. Therefore, by multiplying each of selected maternal health service unit's number of clients in each health center with number to get proportionality. Where, 422; the calculated sample size was total number of clients visiting maternal health service in shebedino district health centers of the selected health centers within one month period. 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 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 center of ANC, PNC &FP units. To get average daily patient flow, considering 3- month patient flow rate in each health center in ANC, PNC, & FP, taking the average for one month, and dividing for the data collection days.

Qualitative: A non-probability sampling method was used to select the participants. A purposive sampling was utilized in order to obtain a sample that met the inclusion criteria (Burn and Grove 2005:352).According to Streubert-Speziale and carpenter (Speziale, 2011). The logic and power of purposeful sampling in the selection of information rich participants to obtain un in-depth understanding of a phenomenon of interest. In this type of method, bias such as non-representativeness might exist in the sample. However, this method has been used by social scientists with some success (Matlala, 2015). HDA currently working has been participated from three purposely selected kebeles.

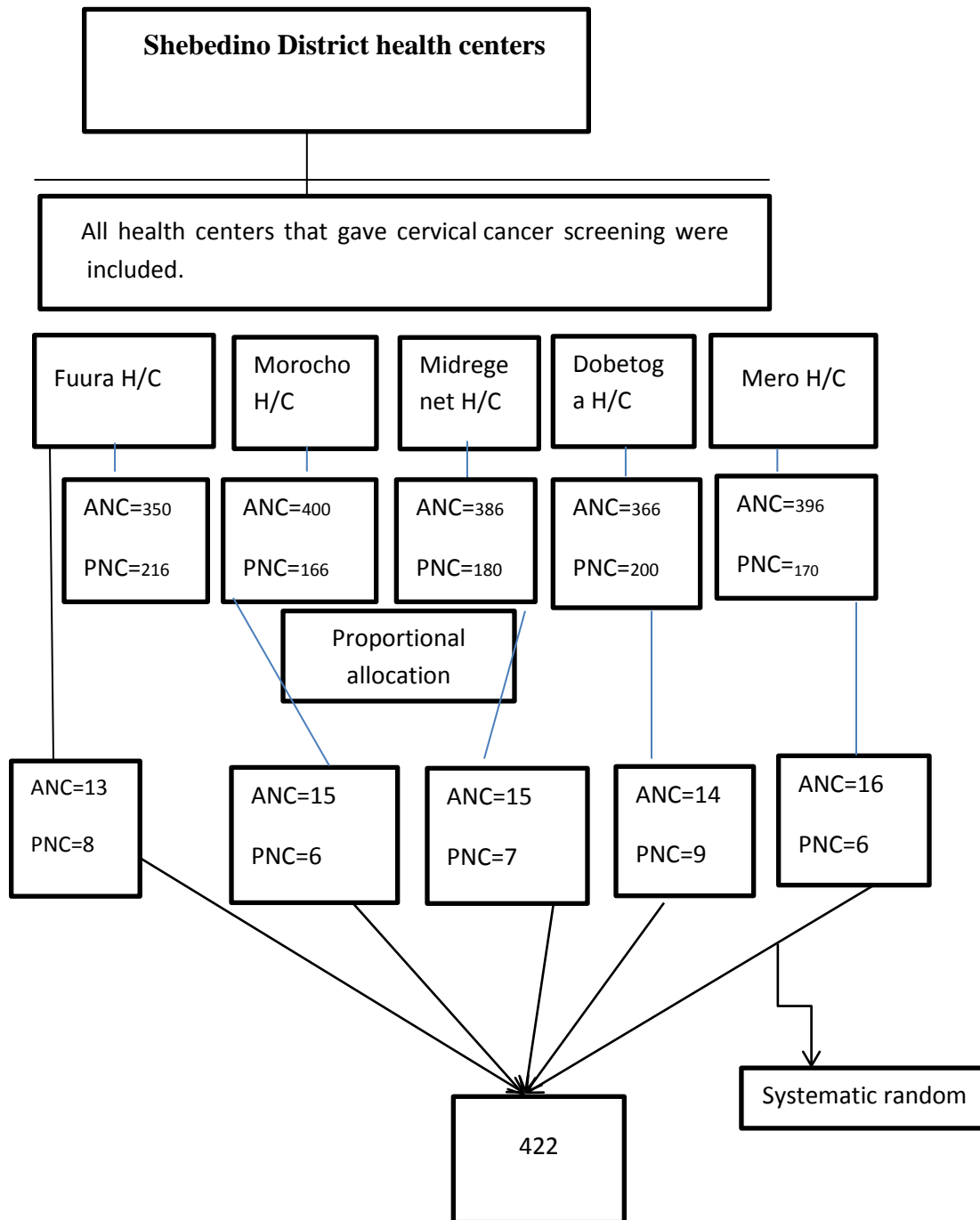


Figure 2: Schematic presentation of sampling (Proportionally allocated by $(P= n/N)422/10952= 0.038$)

Study variables

Dependent variable

- Intention to use cervical cancer screening service

Independent variables

- Socio-demographic, and economic characteristics (age, marital status, level of education, occupational status, family monthly income and place of residence),
- Knowledge for cervical cancer screening
- Sexual and reproduction related risk factors
- Theory of planned behavior constructs
- Attitude toward cervical cancer screening
- Subjective norms toward cervical cancer screening
- Perceived control toward cervical cancer screening

3.9. Data collection instrument and data collection plan

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(Ajzen 1991). And modified based on the result of elicitation study. The questionnaire structured in to 11-sections (intention, direct and indirect attitude, subjective norm and perceived behavioral control, past behavioral practice, socio demographic characteristics and knowledge)

Data collected using structured pretested interviewer administered questionnaire and translated to Amharic and Sidamic language. Six female BSc Nurse trained for 1 day and each assigned for data collection, and one Public Health Officer participated in the training as a supervisor. The training included the objectives of the study, data collection techniques, contents of the questionnaire, procedures, and issues related to confidentiality.

Data quality management plan

For quantitative

Initially, a structured questionnaire developed in English language and translated to Amharic and Sidamu Afoo and then back to English to maintain its consistencies in meaning and sense by language experts. Then, the questionnaire checked for validity and reliability conducting a pilot study with 5% of participants at another study area on the population of interest. On top of that, a reliability test was conducted to ensure internal consistency. The Cronbach alpha value of greater than or equal to 0.7 was regarded as an acceptable level. The required corrections in language and content were done for better clarity and more understanding. Furthermore, data quality assured by conducting intensive supervision, and also checking and assuring quality before electronic data entry. Statistical control during data analysis used to reduce the influence of confounding factor.

For Qualitative

For an in-depth interview, Probing questions and guidelines prepared in English, and then translated to the local languages (Amharic and Sidaamu Afoo). A checklist organized and used to take notes and guide the idea flow regarding the main issue of the study. The informant's voice was recorded by cell phone and result entered manually.

Data processing and analysis plan

For quantitative

After the data collection, data checked manually for its completeness every day. The responses in the completed questionnaire coded and entered in to Epi-data version 3.1 and exported to Statistical Packages for Social Sciences (SPSS) window 25 for analysis by the principal investigator. Further, data cleaning (editing, recoding, checking for missing values, and outliers) made after exported to SPSS. Assumption checking assured before any kind of analysis (linearity, normality, constant variance and multi collinearly test for each associated factor checked). In descriptive statistics like texts, tables, graphs, mean and frequency used to present participants' characteristics. The association of each independent variable with the outcome

variable examined by performing a linear regression analysis. Collinearity diagnostics computed among constructs of the theory of planned behavior variables. A p-value < 0.05 with a 95% confidence interval and standardized beta coefficient used to determine the level of significance. Lastly, Hosmer and Lemeshow goodness of fit test performed and decision made at $P > 0.05$.

For Qualitative

The theory of planned behavior was employed to construct exploratory themes for in-depth interviews. The themes explored individual constructs of behavioral intention towards cervical cancer screening. These themes were 4: level of attitude, subjective norms, perceived behavior control for women's intention to screen for cervical cancer, and the possible recommendation which are used to improve intention to screen. The qualitative data was analyzed manually by the principal investigator through thematic analysis. First, the audio record was fully transcribed to a word and then translated into English. From the transcribed data, codes were created. Based on the pattern of the responses, a set of categories was identified and each category was placed in their corresponding theme. Finally, the finding was discussed by complementing with the quantitative result.

3.10. Operational definition, measurement and scoring

The intention to perform behavior is indication of the degree to which an individual is ready to perform a given behavior.

Behavior is the degree to which the individual views engaging in the behavior as positive or negative.

Subjective norm is the social pressure to engage or not engage in the behavior.

Perceived behavioral control is the perceived ability successfully to perform the behavior.

Intention to use CC measured by using four items; Response ranged from "not likely At all" to very likely" 1-5. composite score done by summing up all the items.

Direct attitude towards use cervical cancer screening measured by using four items On semantic differential scales measuring about the benefit/outcome of using CCs in the next 3 month on

bipolar adjectives (word with opposite meaning) six items used to measure behavioral belief with response ranging from “Strongly Disagree to strongly agree” 1-5.

Cervical cancer screening belief measured by asking respondent to evaluate six salient consequences occurring from using CCs. Each behavioral belief multiplied by the Score of outcome evaluation to create new variable (indirect attitude).

Direct subjective norm measured by four likert scale items.

Indirect subjective norm, measured by seven likert scale items to indicate the extent to which they thought health extension worker (HEW), health development army (HDA), Neighbour, public forum, leader and health worker likely to appreciate use of CCS.

Direct measure of perceived behavioral control

Measured by using four items on bipolar differential scales. high composite score showed strong perceived ability or less difficulty to have CC screening within the specified period of time.

Indirect PBC measured by six control belief items ranging from very unlikely to very likely

Perceived power of control, measured using six on bipolar likert scale ranging from strongly Disagree to strongly agree scored on -2 to +2 scale response format; the control belief items multiplied by those of perceived power of the control of belief. Summing up of this product score yield the composite score of IPBC. The higher score indicate greater value for all measured TPB construct toward the use of cervical cancer screening service.

Knowledge about cervical cancer and screening assessed by using 19 items with Yes or No Response format about sign and symptoms, risk factors, method of prevention, Frequency of screening, and eligibility for screening. Their mean score will be computed for further analysis.

Practice of cervical cancer screening (past experience) one item used to ask respondent whether they have ever been screened for by using Yes or No approach.

3.11. Ethical consideration

After approval of the proposal, ethical clearance was obtained from Institutional Review Board of the college of medicine and health science, Hawassa University. The necessary permission obtained from shebedino health office and Written or verbal informed consent also attained from the study participants after explaining the purpose of the study.

2.12. Dissemination plan

The result of this study will be presented to Hawassa University school of Nursing as partial fulfillment of master's degree in Adult health nursing. The finding of this study will be disseminated through presentation, publication, and distribution to relevant bodies. Hard and soft copies will be available in the library of HU, Sidama zone health office, Shebedino health offices 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 make to present in various seminars and workshops and for publication in national or international journal.

RESULT

4.1. Socio-demographic characteristics of respondents

Results from the qualitative and quantitative data were reviewed to pursue support, to clarify result from the quantitative research, and to extend the extent of understanding about women's intention to screen from cervical cancer.

Quantitative

From 422 participants 401 respondents were completed the interview and producing 95.03% response rate. The age of the respondents ranged between 30 and 49 years with mean age of 36.40 ± 3.00 years. The majority 317 (79.1%) of the respondents were protestant followed by orthodox accounting for (10.5 %). Most of, 327 (81.5%) of the respondents were sidama, while the remaining 74 (18.4 %) belonged to other ethnic groups. Majority of the respondents 271 (67.6%) were married. About 154 (38.3%) of respondents were housewife. About 347(86.5%) of respondents had >1000 Ethiopian birr monthly income. Among the respondents 195 (48.6%) have completed primary school and above 206 (51.4%) were illiterates. One hundred eighteen (29.4%) of the respondents have gave birth 1-2 times

Qualitative: From 15 HDA participants, all of them interviewed and producing 100% response rate. The age of respondents ranged between 30 and 49 years with mean age of 34.the majority of respondent 13(86.6%) were protestant and followed by orthodox 2(13.4) All of the respondent were Sidama and married. Among respondents 12(80%) have completed secondary school and 3(20%) were completed primary education. All of respondents have gave birth 2-3 time (Table 1)

4.2. Socio-demographic characteristics of participants (qualitative)

Table 4. 1: socio-demographic characteristics of participants.

Code	Age	Marrital status	Educational status	Religion
IDI-1	35	married	secondary	protestant
IDI-2	37	married	secondary	protestant
IDI-3	38	married	secondary	orthodox
IDI-4	35	married	secondary	protestant
IDI-5	33	married	secondary	protestant
IDI-6	32	married	secondary	orthodox
IDI-7	33	married	primary	protestant
IDI-8	34	married	primary	protestant
IDI-9	39	married	secondary	protestant
IDI-10	40	married	primary	protestant
IDI-11	34	married	secondary	protestant
IDI-12	33	married	secondary	protestant
IDI-13	45	married	secondary	protestant
IDI-14	39	married	secondary	protestant
IDI-15	32	married	secondary	protestant

Table 4. 2: Socio-demographic characteristics of respondents in Shebedino district rural health centers, Ethiopia 2023

Variables	Categories	Frequency	Percent
Age in years (n=401)			
	30-34	231	57.6
	35-39	96	24
	40-44	44	10.9
	45-49	30	7.5
Religion (n=401)			
	Protestant	317	79.1
	Orthodox	42	10.5
	Muslim	35	8.7
	Catholic	7	1.7
Ethnicity (n=401)			
	Sidama	327	81.5
	Amahara	41	10.3
	Oromo	33	8.2

4.3. Source of information about cervical cancer and cervical cancer screening

Two hundred and eighty eight (71%) have heard about cervical cancer and 122(30.4%) aware that there is pre cancer screening procedures. From all the participants 221(55.1) hear from health worker, and 67(16.7%) were heard from mass media about and cervical cancer screening procedure respectively. Of the respondents, 60(15.) heard about the presences of pre cancer screening service from family.

Table 4. 3: Source of information about cervical cancer and cervical cancer screening of respondents in Shebedino district, Sidama, Ethiopia (n=401)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	from radio ot tv	67	16.7	16.7	16.7
	from health worker	221	55.1	55.1	71.8
	from family	65	16.2.	15.0	86.8
	from leader	48	12.0	12.0	98.8
	Total	401	100.0	100.0	

4.4. Knowledge on Cervical Cancer and past cervical cancer screening practice

Among the participants 120 (29%) know about symptoms of cervical cancer, 98 (24%), know about risk factors for cervical cancer 81 (20.1%) prevention methods of cervical cancer, 72 (17.9%) 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 (92) 23% of the respondents were answered below the mean and considered as not knowledgeable. Among all respondents, only 36 (9.2%) had cervical cancer screening experience in the past and 355 (90.8%) were not screened.

Table 4. 4: Knowledge about cervical cancer screening of respondents and medical history in Shebedino district health centers, Sidama Regional State, Ethiopia. (n=401)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	having multiple sexual partiner	13	3	3	3
	sex at an early age	12	3	3	4
	acquiring HPV	16	4	4	4
	cigarette smoking	13	3	3	3
	using birth control pills for a long time	15	4	4	4
	exposed to STI	29	7	7	7
	i don't know	303	76	76	76
	Total	401	100.0	100.0	

Table 4. 5: Knowledge on Cervical Cancer and past cervical cancer screening practice

Knowledge items	Frequency	Percent (%)
Over all knowledge score		
Knowledgeable	92	23
Not knowledgeable	309	77
Sign and symptoms		
Vaginal bleeding		
Yes	12	2.99
No	200	49.8
Vaginal foul smelling discharge		
Yes	25	6.23
No	103	25.6
Post coital bleeding		
Yes	55	13.7
No	6	1.5

4.5. 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 4). 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 controls for the whole scale. The sample size adequacy was checked by KMO, which was 0.822, and the multicollinearity was checked by looking the determinants were 0.007.

Table 4. 6: Principle component analysis for direct measures of TPB and intention after varimax rotation with loading factors 0.4

SerialNo	Component	Number of items	% variance explained afterrot	Cronbach's alpha
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	-

4.6. Assumptions test result

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

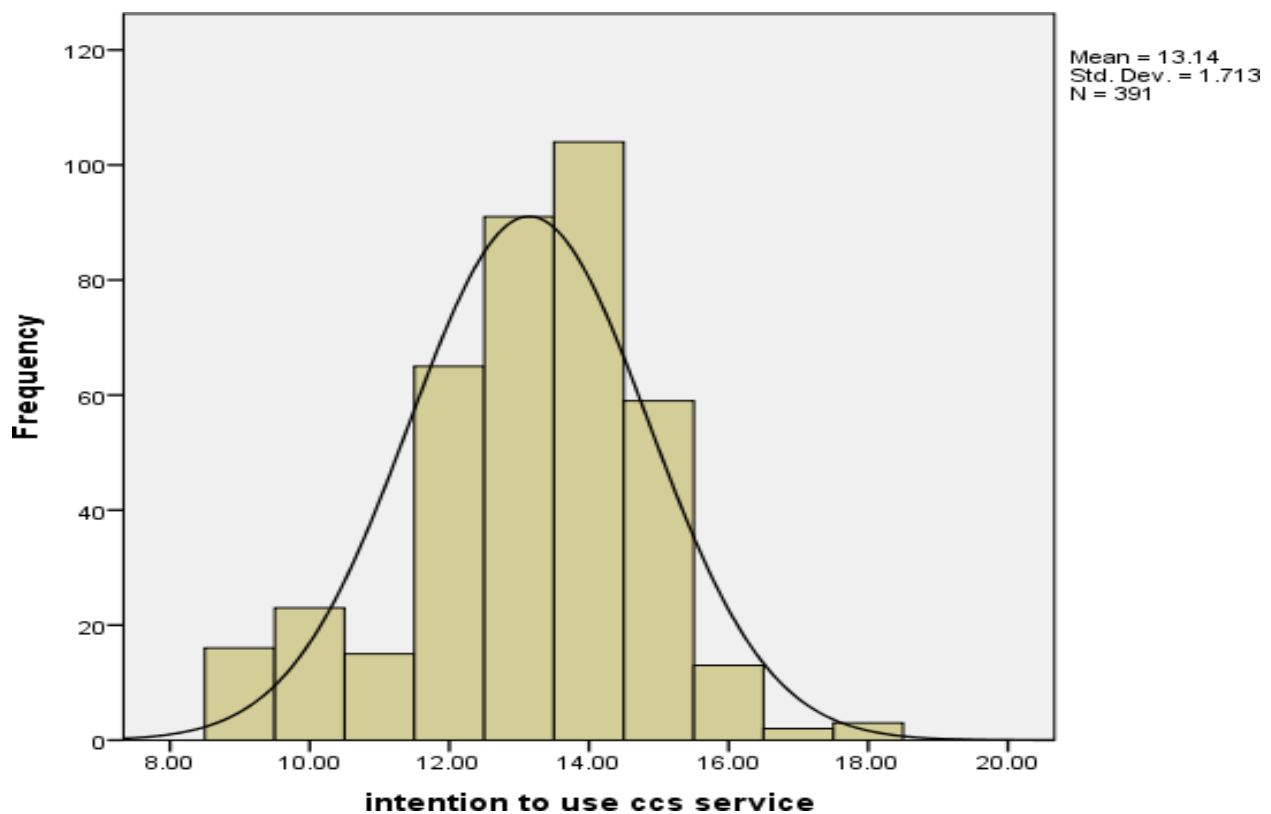


Figure 3: Normality

Table 4. 7: 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

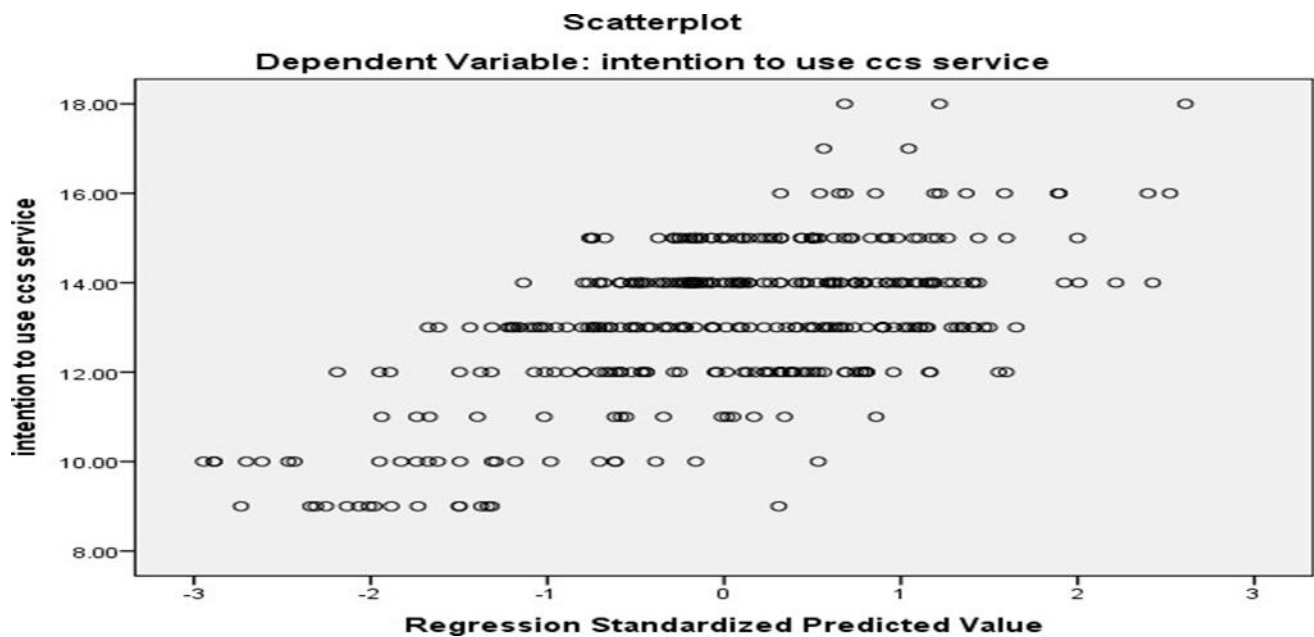


Figure 4: Heteroscedasticity

4.7.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 4. 8: Descriptive statistics for components of theory of planned behavior and intention for women visiting health center in shebedino district. (N=401)

Components	N	Number of items	scale range	scale mean	SD
Intention	401	4	4-20	13.14	1.7
Attitude	401	4	4-20	14.4	2.1
Subjective norms	401	4	4-20	13.71	1.97
Perceived behavioral control	401	4	4-20	13.74	1.97

4.8. 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 4. 9: Correlation between intention, direct and indirect measure of TPB (n=401).

Components	DATT	DSN	DPBC	IATT	ISN	IPBIntention C
DATT	1					
DSN	0.307**	1				
DPBC	0.328**	0.526**	1			
IATT	0.361**	0.335**	0.357**	1		
ISN	0.152**	0.361**	0.313**	0.698**	1	
IPBC	0.231**	0.408**	0.401**	0.546**	0.487**	1
INTENTION	0.302**	0.461**	0.485**	0.491**	0.462**	0.431

**

*Correlation is Significant at 0.01

4.9. 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. 198 (44%) of women had intention for cc from date of interview. In 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 cancers 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.

4.10. 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 4. 10: Predictors of behavioral intention to cervical cancer screening, Shebedino Health centers. Sidama Regional State, Ethiopia (n=401) 2023

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

Standardized regression coefficient shows, all constructs of theory of planned behavior were positively and significantly associated with intention to screen.

One standard deviation change of perceived behavioral control, increase intention by 0.297 times .One standard deviation change of Subjective norm, increase intention by 0.248 times. One standard deviation change of Attitude, increase intention by 0.11 times .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.

4.11. Themes and categories of qualitative findings

Table 4. 11: Themes and categories of qualitative findings.

	Themes and categories
Theme 1	Knowledge about cervical cancer screening
Category 1.1	Lack of Knowledge about screening test and significance of detection
Category 1.2	Knowledge about significance of early detection
Category 1.3	Information provide about cervical cancer screening method
Theme 2	Subjective norm regarding screening for cervical cancer
Category 2.1	Pressure from family member ,peer and others
Category 2.2	Husband know the importance of cervical cancer screening
Theme 3	Attitude towards screening
Category 3.1	Belief related to cervical cancer screening
Category 3.2	Assumption of women about cervical cancer screening practice
Theme 4	Perceived behavioral control regarding cervical cancer screening
Category 4.1	Perceived deficulty about cervical cancer screening
Category 4.2	Confidence and fear to be screened
Theme 5	Intention to be screened for cervical cancer
Category 5.1	How other motivate for screening
Category 5.2	Discouragement not to be screened
Category 5.3	Self-motivation for screening

4.12. Qualitative Result

Among all key informant in-depth interview, some participant said as follows:

Attitude category

(IDI-1) *"Women would believe that if they attempted to use the screening services, the community would misunderstand them: if someone saw them when they were being screened for cervical cancer, they would wonder why this woman was screening. They would assume that she had a problem since she was married and left with her spouse."*

Knowledge category

(IDI-2) *"Working women found the clinic hours for cervical screening inconvenient. The inaccessibility of the services during this time will affect the cervical screening of those women because of their added home duties, which limited their opportunity to go for screening to the weekend."*

(IDI-3) *"Rural women came from areas that could be as far as 5 kilometer from the health institutions providing the screening services. It would be difficult for those women to cover the transportation cost because those women did not have their own income."*

Subjective norm category

(IDI-4) *"In our community, you might not make decisions by yourself; you have to discuss with your husband before you decide to do something including screening for cervical cancer. If you did not listen, you would be in conflict with your husband and it may also result at the end of your relationships."*

(IDI_5) *"Husbands would support and motivate their wife to undergone CCS. So, husband involvement during motivational talks would improve the motivation for screening services utilization"*

(IDI-6) *"Even if they want to be screened; they assumed that screening procedure will cost money beyond their capacity."*

Pecieved control category

(IDI-7) *“They afraid screening because it will be painful procedure”*

Knowledge category

(IDI-8) *“Rural women had no access to learn and get training”*

Attitude category

(IDI-9) *“People assume them as sinner.”*

(IDI-10) *“They feel the public will be asking “where is that elderly woman going?”*

(IDI-11) *“They belief that traditional healer will help them.”*

(IDI-12) *“Some say they should view my private parts as if I am delivering a baby.”*

Knowledge category

(IDI-13) *“Health information through Mass-medias such as Televisions, and radio and printed materials about cervical cancer including its risk factors, symptoms, ways of prevention, and screening methods would change the women’s myths and misconception that would improve their service utilization.”*

Subjective norm category

(IDI-14) *“They hear, after inserting the metal the uterus is removed, cleaned and put back.”*

(IDI-15) *“Screening destroys the ability of a woman to have a baby.”*

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. 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 (Jalilian and Emdadi, 2011),(Ogilvie et al., 2016) . This may be due to variation in socio-demographic characteristics in different setting.

All respondents of this study, 288 (71%) have heard about cervical cancer and 122(30.4%) 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,(Tefera et al., 2016). a study conducted in Gondar in 2010 (Getahun et al., 2013).Study participant interviewed gave emphasis to influence of information hearing to be screened for cervical cancer.one respondent reported that (IDI-13) : Health information through Mass-medias such as Televisions, and radio and printed materials about cervical cancer including its risk factors, symptoms, ways of prevention, and screening methods would change the women's myths and misconception that would improve their service utilization. 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 120 (29%), risk factors was 98 (24%) and prevention methods 81 (20.1%) 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; known about sign and symptom and main risk factors of cervical cancer).One study participant explained this in such way that (IDI-8) : The rural women had no enough access to learn get training. This gap might be due to the difference in study time, study setting and nature respectively (Tefera et al., 2016, Gu et al., 2013)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, 92(23%) of the respondents were considered to be not knowledgeable, being knowledgeable 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 (Gu et al., 2013) and Mandalay, Myanmar women(Han and Yamarat, 2012)

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 (Han and Yamarat, 2012),

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(Francis et al., 2004). 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 conduct(Francis et al., 2004).

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. One key informant interview reported that (IDI-7) “They afraid screening because it will be painful procedure”

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. one respondent reported that (IDI_5) “Husbands would support and motivate their wife to undergone CCS. So, husband involvement during motivational talks would improve the motivation for screening services utilization”

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 (Roncancio et al., 2013),(Roncancio et al., 2015)

However, other study conducted in Masaka Uganda found that, attitude is the best predictor followed by subjective norm with intention towards cervical cancer screening (Twinomujuni et al., 2015). 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 (Ogilvie et al., 2016).

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 (Bish et al., 2000).

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](Jalilian and Emdadi, 2011). 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(Ogilvie et al., 2016). This gap could be attributed to the difference in the context where the study undertaken.

In this study, attitudes 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 (Bish et al., 2000).

5.1. LIMITATIONS

- ❖ The scope of this study is confined to Shebedino district rural health centers; 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.
- ❖ Social desirability bias cannot be ruled out as some respondents may give a response in a positive way.

CONCLUSION AND RECOMMENDATION

6.1. CONCLUSION

This study emphasized on the predictors of behavioral intention to cervical cancer screening among women visiting health centers in Shebedino district, Sidama Regional State. The study found that none of the socio demographic factors was associated with intention to CCS. Only 92(23%) of the respondents were knowledgeable 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. Only 36 (9.2%) of the respondents in the current study had previously undergone screening, although this fact was significantly and favorably associated with subsequent screening practices. According to the study, behavioral intention was best predicted by perceived behavioral control over cervical cancer screening, which was followed by subjective norm and knowledge.

The study's results also revealed a good correlation between the direct and indirect measurements. 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 Shebedino district health centers. '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.

6.2. 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 Regional health bureau, Zonal health department and woreda health office:

- ❖ Should give high attention that health interventions programs be designed to create awareness in community level at large.

Health centers 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 investigation using longitudinal studies was advised to get over this study's limitations.

REFERENCE

1. Abamecha, F., et al. (2019). "Psychographic predictors of intention to use cervical cancer screening services among women attending maternal and child health services in Southern Ethiopia: the theory of planned behavior (TPB) perspective." *BMC public health* 19(1):
2. Abudukadeer, A., et al. (2015). "Knowledge and attitude of Uyghur women in Xinjiang province of China related to the prevention and early detection of cervical cancer." *World journal of surgical oncology* 13(1): 1-7.
3. Ajzen, I. (1991). "The theory of planned behavior." *Organizational behavior and human decision processes* 50(2): 179-211.
4. Armitage, C. J. and M. Conner (2001). "Efficacy of the theory of planned behaviour: A meta-analytic review." *British journal of social psychology* 40(4): 471-499.
5. Aweke, Y. H., et al. (2017). "Knowledge, attitude and practice for cervical cancer prevention and control among women of childbearing age in Hossana Town, Hadiya zone, Southern Ethiopia: Community-based cross-sectional study." *Plos one* 12(7): e0181415.
6. Bish, A., et al. (2000). "Predicting uptake of a routine cervical smear test: A comparison of the health belief model and the theory of planned behaviour." *Psychology and Health* 15(1): 35-50.
7. Bish, a., sutton, s. & golombok, s. 2000. predicting uptake of a routine cervical smear test: a comparison of the health belief model and the theory of planned behaviour. *psychology and health*, 15, 35-50.
8. Bruni, L., et al. (2022). "Cervical cancer screening programmes and age-specific coverage estimates for 202 countries and territories worldwide: a review and synthetic analysis." *The Lancet Global Health* 10(8): e1115-e1127.
9. Denny, L., et al. (2017). "Interventions to close the divide for women with breast and cervical cancer between low-income and middle-income countries and high-income countries." *The Lancet* 389(10071): 861-870.
10. Fontham, E. T., et al. (2020). "Cervical cancer screening for individuals at average risk: 2020 guideline update from the American Cancer Society." *CA: a cancer journal for clinicians* 70(5): 321-346.
11. Francis, j., eccles, m. p., johnston, m., walker, a., grimshaw, j. m., foy, r., kaner, e. f., smith, l. & bonetti, d. 2004. constructing questionnaires based on the theory of planned behaviour: a

manual for health services researchers.

12. Getahun, f., mazengia, f., abuhay, m. & birhanu, z. 2013. comprehensive knowledge about cervical cancer is low among women in northwest ethiopia. *bmc cancer*, 13, 1-7.
13. Getahun, T., et al. (2020). "Intention to screen for cervical cancer in debre berhan town, amhara regional state, ethiopia: application of theory of planned behavior." *Journal of cancer epidemiology* 2020.
14. Godin, G., et al. (2001). "Breast cancer: The intention to have a mammography and a clinical breast examination-application of the theory of planned behavior." *Psychology and Health* 16(4): 423-441.
15. Godin, G., et al. (2008). "Healthcare professionals' intentions and behaviours: a systematic review of studies based on social cognitive theories." *Implementation science* 3(1): 1-12.
16. Griffin-Mathieu, G., et al. (2022). "Ensuring a successful transition from cytology to human papillomavirus-based primary cervical cancer screening in canada by investigating the psychosocial correlates of women's intentions: protocol for an observational study." *JMIR research protocols* 11(6): e3891
17. Gu, c., chan, c. w., he, g.-p., choi, k. & yang, s.-b. 2013. chinese women's motivation to receive future screening: the role of social-demographic factors, knowledge and risk perception of cervical cancer. *europaean journal of oncology nursing*, 17, 154-161.
18. Gu, C., et al. (2013). "Chinese women's motivation to receive future screening: the role of social- demographic factors, knowledge and risk perception of cervical cancer." *European Journal of Oncology Nursing* 17(2): 154-161.
19. Han, c. p. p. & yamarat, k. 2012. factors affecting intention to take pap smear screening among married women in mandalay, myanmar. *journal of health research*, 26, 323-327.
20. Jalilian, f. & emdadi, s. 2011. factors related to regular undergoing pap-smear test: application of theory of planned behavior.
21. Jalilian, F. and S. Emdadi (2011). "Factors related to regular undergoing Pap-smear test: application of theory of planned behavior."
22. Kasting, M. L., et al. (2017). "Differences in cervical cancer screening knowledge, practices, and beliefs: An examination of survey responses." *Preventive Medicine Reports* 5: 169-174.
23. Konno, R., et al. (2010). "Cervical cancer working group report." *Japanese Journal of Clinical Oncology* 40(suppl_1): i44-i5

24. Lemma, D., et al. (2022). "Determinants of utilization of cervical cancer screening among women in the age group of 30–49 years in Ambo Town, Central Ethiopia: A case-control study." *Plos one* 17(7): e0270821.
25. Mitiku, I. and F. Tefera (2016). "Knowledge about cervical cancer and associated factors among 15-49 year old women in Dessie town, Northeast Ethiopia." *Plos one* 11(9): e0163136.
26. Mulongo, M. and C. J. Chibwesa (2022). "Prevention of Cervical Cancer in Low-Resource African Settings." *Obstetrics and Gynecology Clinics of North America* 49(4): 771-781.
27. Ogilvie, G. S., et al. (2013). "Women's intentions to receive cervical cancer screening with primary human papillomavirus testing." *International Journal of Cancer* 133(12): 2934- 2943.
28. Ogilvie, G. S., et al. (2016). "Correlates of women's intentions to be screened for human papillomavirus for cervical cancer screening with an extended interval." *BMC public health* 16(1): 1-8.
29. Ogilvie, g. s., smith, l. w., van niekerk, d., khurshed, f., pedersen, h. n., taylor, d., thomson, k., greene, s. b., babich, s. m. & franco, e. l. 2016. correlates of women's intentions to be screened for human papillomavirus for cervical cancer screening with an extended interval. *bmc public health*, 16, 1-8.
30. Organization, W. H. (2021). "WHO guideline for screening and treatment of cervical pre-cancer lesions for cervical cancer prevention."
31. Roncancio, A. M., et al. (2013). "Understanding cervical cancer screening intentions among Latinas using an expanded theory of planned behavior model." *Behavioral Medicine* 39(3): 66-72.
32. Roncancio, A. M., et al. (2015). "Using the theory of planned behavior to understand cervical cancer screening among Latinas." *Health Education & Behavior* 42(5): 621-626.
33. Roncancio, a. m., ward, k. k. & fernandez, m. e. 2013. understanding cervical cancer screening intentions among latinias using an expanded theory of planned behavior model. *behavioral medicine*, 39, 66-72.
34. Roncancio, a. m., ward, k. k., sanchez, i. a., cano, m. a., byrd, t. l., vernon, s. w., fernandez-esquer, m. e. & fernandez, m. e. 2015. using the theory of planned behavior to understand cervical cancer screening among latinias. *health education & behavior*, 42, 621-626.
35. Sasieni, P., et al. (2009). "Effectiveness of cervical screening with age: population based

- case- control study of prospectively recorded data." *Bmj* 339.
36. Segni, M. T., et al. (2017). "Level of knowledge and associated factor toward cervical Cancer among women age (21-64) years visiting health facilities in Gulele sub-city Addis Ababa Ethiopia." *J Pancreas* 18(1): 44-48.
 37. Singh, D., et al. (2022). "Global estimates of incidence and mortality of cervical cancer in 2020: a baseline analysis of the WHO Global Cervical Cancer Elimination Initiative." *The Lancet Global Health*.
 38. Tefera, T. B., et al. (2016). "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* 16(1): 24-31.
 39. Tefera, t. b., kerbo, a. a., gonfa, d. b. & haile, m. t. 2016. 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*, 16, 27-8.
 40. Teka, B., et al. (2021). "Population-based human papillomavirus infection and genotype distribution among women in rural areas of South Central Ethiopia." *International Journal of Cancer* 148(3): 723-730.
 41. Thapa, N., et al. (2018). "Knowledge, attitude, practice and barriers of cervical cancer screening among women living in mid-western rural, Nepal." *Journal of gynecologic oncology* 29(4).
 42. Twinomujuni, C., et al. (2015). "Understanding the low level of cervical cancer screening in Masaka Uganda using the ASE model: a community-based survey." *Plos one* 10(6): e0128498.
 43. Twinomujuni, c., nuwaha, f. & babirye, j. n. 2015. understanding the low level of cervical cancer screening in masaka uganda using the ase model: a community-based survey. *plos one*, 10, e0128498.
 44. Wollancho, W., et al. (2020). "Determining behavioral intention and its predictors towards cervical cancer screening among women in Gomma district, Jimma, Ethiopia: Application of the theory of planned behavior." *Plos one* 15(11): e0238472.

ANNEXES

Annex I: Information sheet

Hawassa University,

School of medicine and Health sciences Department of Nursing.

Study on predictors of intention towards cervical cancer screening services among women attending maternal health service at Shebedino districts Health center Sidama, Ethiopia. Using theory of planned behavior, 2023 E.c

Good morning/afternoon! My name is Yohannes Tefera and I am going to conduct an interview with you on behalf of Ms. Yohannes Tefera a postgraduate student at Hawassa University, School of Nursing 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 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 studies you:

Agree _____ Not agree _____

Address of the principal investigator:

Yohannes Tefera Ayane

Cell phone: +251 934082481, E-mail teferayohannes2010@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 Shebedino district health centers Sidama, Ethiopia, using theory of planned behavior, 2023. 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 Yohannes Tefera 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: _____

Completed Refused

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 Shebedino District health centers

Code -----Date of filling // /DD/MM/YY

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. Not educated.
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?

Yes 0. No (if No go to 8)

2. Where did you first learn about cervical cancer?

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

3. What are the symptoms of cervical cancer?

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

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

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

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

1. Being faithful for sexual partners 1. Yes 2. No
 2. Avoid Sex at an early age 1. Yes 2. No
 3. No smoking / Quit smoking 1. Yes 2. No
 4. Through vaccination of HPV vaccine 1. Yes 2. No
 5. Regular medical checkup (screening) 1. Yes 2. No
 6. Prevent STIs by safe sex 1. Yes 2. No
 7. Do not know
6. Can cancer of the cervix be cured in its earliest stages? 1. Yes 2. No
7. Are you aware that, there is screening procedures to detect premalignant cervical lesion?
1. Yes 2. No
8. Where did you first hear about cervical cancer screening? 1. Yes 2. No
1. from radio/TV
 2. Printed materials (Brochures, posters) 1. Yes 2. No
 3. From Health workers 1. Yes 2. No
 4. From Family, friends, and neighbors
 5. from leaders
 6. From Teachers/school

9. Who should be screened?

1. All Women of 30years and above
2. All reproductive age group women's

10. How frequently does women received cervical cancer screening

1. Every 5 years
2. Every three years
3. Every year

Part 3: Past experiences

1. Have you ever been screened for CC before? 1. Yes 2.No
- 1.1 If yes for the above question how many times did you use CCS services?
 2. Once
 2. More than one time

Part 4: Direct attitude measures

1. For you receiving of cervical cancer screening services in the next 3 months will be
2. Not beneficial
3. Beneficial
4. Unsafe
5. Safe

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

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

1. Very Bad 2. Bad 3. Neutral 4. Good 5. 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:

1. Very Bad 2. Bad 3. Neutral 4. Good 5. 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 are:

-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	2	3	4	5
		SD	D	N	A	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 precancer -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 armies 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 unlikel -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 are 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. Are health care providers approving 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. How you describe to be screened by your self:

1. Difficult 2. easy 3. conditional 4. Sudden 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 makes 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 makes 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 makes 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 makes 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
2. 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
3. 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 if yes go to 4.
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 1. Yes 2. No
 2. Inguinal Swelling 1. Yes 2. No
 3. Genital Sore 1. Yes 2. No
 4. Genital wart 1. Yes 2. No

Qualitative research questionnaire

Questions for in-depth interview grounded in the Theory of Planned Behavior

Good morning/afternoon! My name is Yohannes Tefera. I am going to conduct an

Interview with you. I am postgraduate student at Hawassa University, School of Nursing.

I would like to ask questions related to cervical cancer screening service utilization intention.

This study is designed to investigate women perception 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 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.

Agree _____ Not Agree _____

This questionnaire is designed to explore predictors of intention towards cervical cancer screening among women visiting maternal health service at Shebedino District health centers. Sidama Regional State, Ethiopia 2023 e.c

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. Others

Part 2 question related to perception (open ended)

1. Have you ever heard about cervical cancer? Could you describe it?

2. Describe the place where you first learn about cervical cancer.

3. Tell me the symptoms of cervical cancer.

4. Tell me the risk factors for cancer.

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

6. Please share with me if you ever had been screened for CC before.

7. Tell me about the feelings or thoughts that you associated with the screening for cervical Cancer

8. Tell me why it is or is not important that you screening for cervical cancer

9. If you wanted to screen, tell me what would make that hard or easy

THANK YOU FOR PARTICIPATION!

Annex V

ለጥናት ተሳታፊዎች ስለ ጥናቱ የቀረበ መረጃ

በ በሽቦዲኖ ወረዳ ወስጥ የእናቶች ጤና አገልግሎት የሚጠቀሙ እድሜያቸው ከ30-49 ያሉ እናቶች በማህፀን ጫፍ የቅድመ ካንሰር ምርመራ አገልግሎቱ ለመጠቀም ተነሳሽነትን የሚጠቁሙ ሁኔታዎችን ለማጥናት የተዘጋጀ መጠይቅ:

ክብርት የዚህ ጥናት ተሳታፊ

በዚህ በበሽቦዲኖ ወረዳ ወስጥ ወስጥ የእናቶች ጤና አገልግሎት የሚጠቀሙ ሴቶች ላይ የማህፀን ጫፍ ካንሰር/ነቀርሳ ቅድመ ምመራ አስመልክቶ በሚካሄደው ጥናት ላይ ተሳታፊ እንዲሆኑ ተጋብዟል። በዚህ ጥናት ለመሳተፍ ከመወሰንዎ በፊት ጥናቱን አስመልክቶ የተዘጋጀውን ይህንን መረጃ በደንብ ያድምጡ። መረጃውን አድምጠው ለመሳተፍ በመወሰንዎ በጣም ናመሰግናታለን ነገርግን ደግሞ አልሳተፍም ብሎ ለወሰኑም ቢሆን

ጥርያችን አክብሮ በመጣትዎ እጅግ አድርገን ናመሰግናለን ብቻም ሳይሆን አልሳተፍም በማለትዎ አንዳች ተፅእኖ የማያስከትል መሆኑን ለመግለጽ ንወዳለን:

የጥናቱ ዋና ዓላማ

ይህንን ጥናት የሚካሄድበት ዋነኛ አላማ በሽቦዲኖ ወረዳ ወስጥ የእናቶች ጤና አገልግሎት የሚጠቀሙ ሴቶችን በማህፀን ጫፍ የቅድመ ካንሰር ምርመራ ህክምና ዙፋን ሳይንሳዊ ግምገማ በማድረግ ለማህፀን ጫፍ ቅድመምርመራ አገልግሎት ለመጠቀም ያላቸው ፍለጎት ናቸው የሚጠቁሙ ነገሮችን መለካት ነው።

ለታሳታፊዎች የቀረበው የስምምነት ሰነድ

ቀን.....ስዓት.....የቃለ መጠይቅ መለያ ቁጥር እንደምን አደሩ/ዋሉ?

እላይ በቃል በንባብም ሆነ በጽሁፍ ጥናቱን አስመልክቶ በቂ መረጃ የቀረበልኝና በቀረበው መረጃ ላይ ጥያቄዎች

እንድጠይቅ እድል ተሰጥቶኝል ለጠየኩት ጥያቄዎች ተገቢ ምላሽ አግኝቼአለሁ። በተጨማሪም በዚህ ጥናት ውስጥ ለመሳተፍ በሙሉ ፈቃደኝነት የተመሰረተ፣ ሚሥጢራዊነቱ የተጠበቀና በማናቸውም ጊዜ ከጥናቱ መውጣት

በፈለግም መውጣት እንደሚችል ተገቢልኛል። ስለዚህ የጥናቱ አላማ በሚገባ የተረዳሁ ስለሆነ በዚህ ጥናት ለመሳተፍ በሙሉ ፈቃደኝነት መወሰኔ በፌርማዎ አረጋግጣለሁ።

በጥናቱ ውስጥ ለመሳተፍ ፍቃደኛ ነዎት? አዎ ወይ ሚቀጥለው ገፅ ይለፉ አይደለሁም አመሰግናለሁ የስምምነት ፍቃዱን የወሰደው (የተቀበለው) ጠያቂ ስም ----- ፊርማ የቃለ ምልልሱ ውጤት 1.

የተሟላ----- 2. በከፊል የተሟላ----- 3. ፍቃደኛ ያልሆነ ----- 4. ሌላ የመረጃ ሰብሳቢዉ

ስም ፊርማ የተቆጣጠሪዉ ስም ፊርማ

ክፍል 1: የማህበራዊ ተጠቃሚዎች ፣ ስነ-ተዋልዶ እና ስነ-ህዝብ መረጃ

- 1. ዕድሜዎ በሙሉ ዓመት ስንት ነው? - 2. ሃይማኖትዎ ምንድን ነው? 1. ፕሮቴስታንት 2. ኦርቶዶክስ 3. ሙስሊም 4. ካቶሊክ 5. ሌላ ካለ ይገለጹ----- 3. ከየትኛው ብሔር / ብሄረሰብ ነው የተገኙት? 1. ሲዳማ 2. አማራ 3. አሮሞ 4. ሌላ ካለ ይገለጹ----- 4. ስራዎ ምንድን ነው? 1. የመንግስት ሰራተኛ 2. የግል ተቀጣሪ 3. ነጋዴ 4. ገበሬ 5. የቤት እመቤት 6. ሌላ ካለ ይጥቀሱ-----

ክፍል 2: ስለ ማህፀን ጫፍ ካንሰር ና ስለ ማህፀን ጫፍ ካንሰር ቅድመ ምርመራ በተመለከተ የእውቀት (የግንዛቤ) መለኪያ ጥያቄዎች

- 1. ስለ ማህፀን ጫፍ ካንሰር/ነቀርሳ ሰምተው ያውቃሉ? 1. አዎ 2. የለም መልስዎ የለም ከሆነ ወደ ጥያቄ 207 ይለጩ
- 2. 2. ስለ ማህፀን ጫፍ ካንሰር/ነቀርሳ በሽታ ለመጀመርያ ጊዜ የሰሙት ከየት ነው:: 1. ከፊደሉ/ ቴሌቪዥን (1. አዎ 2. የለም) 2. ህትመት ውጤቶች (1. አዎ 2. የለም)
- 3. 3. ከጤና ባለሙያ (1. አዎ 2. የለም)
- 4. 4. ከቤተሰብ፣ ጋደኛ፣ ጎረቤት (1. አዎ 2. የለም)
- 5. 5. ከመሪዎች (1. አዎ 2. የለም)
- 6. 6. ከመምህራን /ት/ት አገልግሎት (1. አዎ 0. የለም)
- 7. 7. ሌላ ካለ ይገለጹ (1. አዎ 0. የለም)
- 3. የማህፀን ጫፍ ካንሰር/ነቀርሳ በሽታ ምልክት/ቶች ምን ምን ናቸው?
 - 1. በማህፀን በኩል ደም መፍሰስ (1. አዎ 2. የለም)
 - 2. መጥፎ ጠረን ያለው የብልት ፈሳሽ (1. አዎ 2. የለም)
 - 3. ከግብረ-ስጋ ግንኙነት በኋላ ደም መፍሰስ (1. አዎ 2. የለም)
 - 4. በግብረ-ስጋ ግንኙነት ወቅት ህመም መሰማት (1. አዎ 2. የለም)
 - 5. አላውቅም (1. አዎ 2. የለም)
- 4. ለማህፀን ጫፍ ካንሰር/ነቀርሳ አጋላጭ ሁኔታዎች የትኞቹ ናቸው?
 - 1. ከአንድ በላይ የወሲብ አጋር መኖር (1. አዎ 2. የለም)
 - 2. ከ15 ዓመት እድሜ በፊት ቀደም ብሎ የሚጀምር ወሲባዊ ግንኙነት (1. አዎ 2. የለም)
 - 3. ለሂወት ምርመራ የተባለ ቫይረስ መጋለጥ (1. አዎ 2. የለም)
 - 4. ሲጋራ ማጨስ (1. አዎ 2. የለም)
 - 5. ለረጅም ጊዜ የእርግዝና መቆጣጠር እንክብካቤ መውሰድ (1. አዎ 2. የለም)
 - 6. በአባላዘር በሽታ መያዝ (1. አዎ 2 የለም)

5. የማህፀን ጫፍ ካንሰር/ነቀርሳ እንዴት መከላከል ይቻላል?

- 1. በአንድ የትዳር ጓደኛ በመወሰን (1.አዎ 2.የለም)
- 2. ከ15ዓመት እድሜ በፊት ቀደም ብሎ ወሲባዊ ግንኙነት ባለመጀመር (1.አዎ 2.የለም)
- 3. ሲጋራ አለማጨስ/ማቆም (1.አዎ 2.የለም)
- 4. ለሂወት ፓፕሎማ ቫይረስ ክትባት ማግኘት (1.አዎ 2.የለም)
- 5. በየጊዜው ምርመራ በማድረግ (1.አዎ 2.የለም)
- 6. ጥንቃቄ የጎደለው ወሲብ በማስወገድ ከአባላዘር በሽታ መከላከል (1.አዎ 2.የለም)

6. የማህፀን ጫፍ ካንሰር/ነቀርሳ ሳይሰራጭ በጊዜ ከታወቀ በህክምና ሊድን ይችላል?

- 1. አዎ 2. የለም

7. የማህፀን ጫፍ ካንሰር/ነቀርሳ ቅድመ ምርመራ መኖሩን ያወቃሉ?

- 1. አዎ 2. የለም መልስዎ የለም ከሆነ ወደ ክፍል 3. ጥያቄ ይለፉ

8. ስለ ማህፀን ጫፍ ካንሰር/ነቀርሳ ቅድመ ምርመራ ለመጀመርዎ ጊዜ የሰሙት ከየት ነው?

- 1. ከፊደሮ/ ቴሌቭዥን (1. አዎ 2. የለም)
- 2. ህትመት ውጤቶች (1. አዎ 2. የለም)
- 3. ከጤና ባለሙያ (1. አዎ 2. የለም)
- 4. ከቤተሰብ፣ጋደኛ፣ጎረቤት (1. አዎ 2. የለም)
- 5. ከመሪዎች (1. አዎ 0. የለም)
- 6. ከመምህራን/ት/ት አገልግሎት (1. አዎ 2. የለም)
- 7. ሌላ ካለ ይገለፅ (1. አዎ 2. የለም)

9. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ አገልግሎት ማግኘት ያለባቸው እነማን ናቸው?

- 1. ዕድሜያቸው 30-49 ዓመትና ከዚያ በላይ የሆናቸው ሴቶች በሙሉ
- 2. ለአቅመ ሄዋን የደረሱ ሴቶች

10. የማህፀን ጫፍ ካንሰር/ነቀርሳ ቅድመ ምርመራን አንድ ሴት በየሰንት ጊዜ ማድረግ ይኖርባታል?

1. በአመት አንድ ጊዜ
2. በአምስት ዓመት አንድ ጊዜ

ክፍል 3. ስለ ማህፀን ጫፍ ካንሰር ቅድመ ምርመራ በተመለከተ ቀጥተኛ አመለካከት የሚለካ ቃለ መጠይቅ.

1. ላንቺ በሚቀጥሉት ሶስት ወራቶች ውስጥ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ፤

1. ምንም አይጠቅምም 1 2 3 4 5 በጣም ይጠቅማል
2. በጣም ይጎዳል 1 2 3 4 5 ምንም ጉዳት የለውም
3. በጣም ደስ የማይል ስሜት ይፈጥራል 1 2 3 4 5 በጣም ደስ የሚል ስሜት ይፈጥራል
4. በጣም መጥፎ ነው 1 2 3 4 5 በጣም ጥሩ ነው

ክፍል 4. ስለ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ በተመለከተ በተዘዋዋሪ አመለካከት የሚለካ ቃለ መጠይቅ.

1ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ እራስሽን ከማህፀን ጫፍ ካንሰር ጋር ተያይዞ ከሚመጣ ሞት ለመከላከል ይጠቅምኛል.

1. በጣም አልስማማም
2. አልስማማም
3. ድምጽ አልሰጥም
4. እስማማለሁ
5. በጣም እስማማለሁ

1ለ. ላንቺ እራስሽን ከማህፀን ጫፍ ካንሰር ጋር ተያይዞ ከሚመጣ ሞት መከላከል

1. በጣም መጥፎ ነው
2. መጥፎ ነው
3. ድምጽ አልሰጥም
4. ጥሩ ነው
5. በጣም ጥሩ ነው

2ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ ያለሽበትን የጤና ሁኔታ ለማወቅ ይረዳኛል

1. በጣም አልስማማም
2. አልስማማም
3. ድምጽ አልሰጥም
4. እስማማለሁ
5. በጣም እስማማለሁ

2ለ. ላንቺ ቅድመ ካንሰር ምርመራ በማድረግ እራስሽን ማወቅ

1. በጣም መጥፎ ነው
2. መጥፎ ነው

- 3. ድምጽ አልሰጥም
- 4. ጥሩ ነው
- 5. በጣም ጥሩ ነው

3ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ ህክምና ቶሎ እንድታገኝ ይጠቅምሻል

- 1. በጣም አልሰማማም
- 2. አልሰማማም
- 3. ድምጽ አልሰጥም
- 4. እስማማለሁ
- 5. በጣም እስማማለሁ

3ለ. ላንቺ ቅድመ ካንሰር ምርመራ በማድረግ ቀድሞ ህክምና ማግኘት

- 1. በጣም መጥፎ ነው
- 2. መጥፎ ነው
- 3. ድምጽ አልሰጥም
- 4. ጥሩ ነው
- 5. በጣም ጥሩ ነው

4ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ የበሽታውን አስከፊነት/ሀይለኝነት/ ይቀንሳል

- 1. በጣም አልሰማማም
- 2. አልሰማማም
- 3. ድምጽ አልሰጥም
- 4. እስማማለሁ
- 5. በጣም እስማማለሁ

4 ለ. ላንቺ ቅድመ ካንሰር ምርመራ በማድረግ የበሽታውን አስከፊነት መቀነስ

- 1. በጣም መጥፎ ነው
- 2. መጥፎ ነው
- 3. ድምጽ አልሰጥም
- 4. ጥሩ ነው
- 5. በጣም ጥሩ ነው

5ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ በራስ መተማመንሽን ይጨምራል

- 1. በጣም አልሰማማም
- 2. አልሰማማም
- 3. ድምጽ አልሰጥም

4.እስማማ ለሁ

5.በጣም እስማማለሁ

5ለ. ላንቺ ቅድመ ካንሰር ምርመራ በማድረግ በራስ መተማመንሽን መጨመር

1. በጣም መጥፎ ነው

2. መጥፎ ነው

3. ድምጽ አልሰጥም

4. ጥሩ ነው

5. በጣም ጥሩ ነው

6ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ ለጤናሽ ጠቃሚ ነው

1.በጣም አልስማማም

2.አልስማማም

3.ድምጽ አልሰጥም

4.እስማማ ለሁ

5.በጣም እስማማለሁ

6ለ. ላንቺ ቅድመ ካንሰር ምርመራ በማድረግ ጤነኛ መሆን

1. በጣም መጥፎ ነው

2. መጥፎ ነው

3. ድምጽ አልሰጥም

4. ጥሩ ነው

5. በጣም ጥሩ ነው

ክፍል 5: ቀጥተኛ የሆነ ግለሰባዊ የተለመዱ ደንቦች

ተ.ቁ	ጥያቄ	1.በጣም አልስማማም	2. አልስማማም	3.ድምጽ አልሰጥም	4.እስማማለሁ	5.በጣም እስማማለሁ
1	በማህበራዊ ኑሮሽ ላንቺ የሚጠቅሙ ብዙ ሰዎች በሚቀጥሉት 3 ወራቶች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገ ይደግፋሻል					
2	በሚቀጥሉት 3 ወራቶች የማህፀን ጫፍ ቅድመ ካንሰር ምርመራ ማድረግ ካንቺ ይጠበቃል					
3	በሚቀጥሉት 3 ወራቶች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገ ማህበረሰቡ ይገፋፋሻል					
4	በማህበራዊ ኑሮሽ ላንቺ የሚጠቅሙ ብዙ ሰዎች በሚቀጥሉት 3 ወራቶች የማህፀን ጫፍ ካንሰር					
5.	ቅድመ ምርመራ እንድታደርገ ያስባሉ					

ክፍል 6: ቀጥተኛ ያልሆነ ግለሰባዊ የተለመዱ ደንቦች መለኪያ

1ሀ. የማህፀን ጫፍ ካንሰር ምርመራ ያደረጉ ሴቶች ላንቺ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገ ያስባሉ(ይመክሩሻል)

- 1. በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3. ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

1ለ. የማህፀን ጫፍ ካንሰር ምርመራ ያደረጉ ሴቶች አንቺ እንድትመረመሪ ማሰባቸው ላንቺ ይጠቅማሻል

- 1. እጅግ በጣም አይጠቅምም
- 2. አይጠቅምም
- 3. ድምጽ አልሰጥም
- 4. ይጠቅማል
- 5. እጅግ በጣም ይጠቅማል

2ሀ. የጤና ልማት ሰራዊቶች (በጎ መልዕክተኞች) የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገ ያስተምሩሻል (ይነግሩሻል)

- 1. በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3. ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

2ለ. የጤና ልማት ሰራዊቶች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገ ማስተማራቸው ላንቺ ይጠቅምሻል

- 1. እጅግ በጣም አይጠቅምም
- 2. አይጠቅምም
- 3. ድምጽ አልሰጥም
- 4. ይጠቅማል
- 5. እጅግ በጣም ይጠቅማል

3ሀ. የጤና ኤክስቴንሽን ሰራተኞች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገው ይደግፋላል

- 1. በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3. ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

3ለ. የጤና ኤክስቴንሽን ሰራተኞች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገው መደግፋቸው ላንቺ ጠቃሚ ነው

- 1. እጅግ በጣም አይጠቅምም
- 2. አይጠቅምም
- 3. ድምጽ አልሰጥም
- 4. ይጠቅማል
- 5. እጅግ በጣም ይጠቅማል

4ሀ. ላንቺ አርአያ (ሞዴል) የሚሆኑ ብዙ ሴቶች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ያደርጋሉ

- 1. በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3. ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

4ለ. ላንቺ አርአያ (ሞዴል) የሚሆኑ ብዙ ሴቶች የሚያደርጉትን ማድረግ ላንቺ ጠቃሚ ነው

- 1. እጅግ በጣም አይጠቅምም

- 2. አይጠቅምም
- 3. ድምጽ አልሰጥም
- 4.ይጠቅማል
- 5.እጅግ በጣም ይጠቅማል

5ሀ. የህዝብ ጉባኤ ሰብሳቢ አመራሮችዎች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገው ድጋፍ ደረጋሉ

- 1.በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3.ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

5ለ. የህዝብ ጉባኤ ሰብሳቢ አመራሮችዎች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገው መደግፋቸው ላንቺ ጠቃሚ ነው

- 1.እጅግ በጣም አይጠቅምም
- 2. አይጠቅምም
- 3. ድምጽ አልሰጥም
- 4.ይጠቅማል
- 5.እጅግ በጣም ይጠቅማል

6ሀ. ጎረቤቶችሽ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርገው ይደግፋሻል(ይመክሩሽል)

- 1.በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም

3.ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

6ለ. ጎረቤቶቻችሁ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርጉ መምከራቸው ላንቺ

1.እጅግ በጣም አይጠቅምም

2. አይጠቅምም

3. ድምጽ አልሰጥም

4. ይጠቅማል

5.እጅግ በጣም ይጠቅማል

7ሀ. የጤና ባለሙያዎች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርጉ ይመከሩሻል

1.በጣም ሊሆን አይችልም

2. ሊሆን አይችልም

3.ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

7ለ. የጤና ባለሙያዎች የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ እንድታደርጉ መደግፉቸው ላንቺ ጠቃሚ ነው

1.እጅግ በጣም አይጠቅምም

2. አይጠቅምም

3. ድምጽ አልሰጥም

4. ይጠቅማል

5.እጅግ በጣም ይጠቅማል

ክፍል 7. ቀጥተኛ የሆነ ባህሪው እንዳይፈጠረ የሚያደርጉ ስሜቶች

1. ላንቺ በሚቀጥሉት ሶስት ወራቶች ውስጥ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ

1. በጣም ከባድ ነው	1	2	3	4	5	በጣም ቀላል ነው
2. ከቁጥጥርሽ ውጭ ነው	1	2	3	4	5	በቁጥጥርሽ ስር ነው
3. በሁኔታዎች የማይወሰን ነው	1	2	3	4	5	በሁኔታዎች የሚወሰን ነው
4. ድንገተኛ ነው	1	2	3	4	5	የታቀደበት ነው

ክፍል 8. ቀጥተኛ ያልሆኑ ባህሪው እንዳይፈጠረ ያደርጋሉ ተብለው የሚታሰቡ እምነቶች

1ሀ. በሚቀጥሉት 3 ወራቶች ውስጥ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ለማድረግ ብትፈልገህ ምርመራው የሚሰጥበትን ስፍራ አታውቁም

1. በጣም ሊሆን አይችልም
2. ሊሆን አይችልም
3. ድምጽ አልሰጥም
4. ሊሆን ይቻላል
5. በጣም ሊሆን ይችላል

1ለ. የምርመራውን የሚሰጥበትን ስፍራ አለማወቅ ላንቺ ምርመራውን ከባድ ያደርገዋል

1. በጣም አልሰማማም
2. አልሰማማም
3. ድምጽ አልሰጥም
4. እስማማ ለሁ
5. በጣም እስማማለሁ

2ሀ. ምንም የበሽታ ምልክት ስለሌለብሽ ምርመራ አያስፈልግሽም

1. በጣም ሊሆን አይችልም
2. ሊሆን አይችልም
3. ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

2ለ. የበሽታ ምልክት በሌለበት ምርመራ ማድረግ ምንም ጥቅም የለውም

1. በጣም አልስማማም

2. አልስማማም

3. ድምጽ አልሰጥም

4. እስማማ ለሁ

5. በጣም እስማማለሁ

3ሀ. ጤነኛ ስለሆንሽ(ምንም በሽታ ስለሌለብሽ) ምርመራ ማድረግ አያስፈልግሽም

1. በጣም ሊሆን አይችልም

2. ሊሆን አይችልም

3. ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

3ለ. ለጤነኛ ሰው የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግ ምንም ጥቅም የለውም

1. በጣም አልስማማም

2. አልስማማም

3. ድምጽ አልሰጥም

4. እስማማ ለሁ

5. በጣም እስማማለሁ

4ሀ. ሌላ በሽታ መኖሩ (ተጨማሪ በሽታ) ስላለብሽ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ አታገርጊም

1. በጣም ሊሆን አይችልም

2. ሊሆን አይችልም

3. ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

4ለ. ተጨማሪ በሽታ መኖሩ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ማድረግን ላንቺ ከባድ ያደርገዋል

1. በጣም አልስማማም

2. አልስማማም

3. ድምጽ አልሰጥም

4. እስማማ ለሁ

5.በጣም እስማማለሁ

5ሀ. የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ለማድረግ ብታስቢም በምርመራ ወቅት የሚከሰተውን ህመም ትፈሪያለሽ

- 1.በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3.ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

5ለ. በምርመራው ወቅት ህመም መኖሩ ላንቺ ምርመራውን ከባድ ያደርገዋል

- 1.በጣም አልስማማም
- 2.አልስማማም
- 3.ድምጽ አልሰጥም
- 4.እስማማ ለሁ

5.በጣም እስማማለሁ

6ሀ. ስለ ማህፀን ጫፍ ካንሰር ቅድመ ምርመራ በቂ እውቀት የለኝም ብለሽ ታስቢያለሽ

- 1.በጣም ሊሆን አይችልም
- 2. ሊሆን አይችልም
- 3.ድምጽ አልሰጥም
- 4. ሊሆን ይቻላል
- 5. በጣም ሊሆን ይችላል

6ለ. ስለ ማህፀን ጫፍ ካንሰር ቅድመ ምርመራ በቂ እውቀት አለመኖሩ እንዳትመረመሪ ያደርግሽል

- 1.በጣም አልስማማም
- 2.አልስማማም
- 3.ድምጽ አልሰጥም
- 4.እስማማ ለሁ
- 5.በጣም እስማማለሁ

ክፍል 9: የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ለማድረግ ያለውን ተካላሽነት የሚለካ ጥያቄ

1. በሚቀጥሉት 3-ወራቶች ውስጥ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ለማድረግ መፈለግሽ ምን ያህል ሊሆን ይቻላል

1. በጣም ሊሆን አይችልም

2. ሊሆን አይችልም

3. ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

2. በሚቀጥሉት 3 ወራቶች ውስጥ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ለማድረግ ምን ያህል ሊሆን ይችላል

1. በጣም ሊሆን አይችልም

2. ሊሆን አይችልም

3. ድምጽ አልሰጥም

4. ሊሆን ይቻላል

5. በጣም ሊሆን ይችላል

3. በሚቀጥሉት 3 ወራቶች ውስጥ የማህፀን ጫፍ ካንሰር ቅድመ ምርመራ ለማድረግ መጠየቅ እና ህክምና ስፍራን መጎብኘት ምን ያህል ሊሆን ይችላል

