

***KNOWLEDGE ATTITUDE AND PRACTICE OF WOMEN OF AGE 15 - 49 YEARS
TOWARDS CERVICAL CANCER AND ITS PREVENTIVE MEASURES IN DEBRE
MARKOSE TOWN WOREDA EAST GOJJAM ZONE AMHARA REGION ETHIOPIA***

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A thesis paper submitted to college of Public Health and Medical science, Jimma University; in partial fulfillment for the requirement of degree of Masters of Public Health in General Public Health

May 2010

Jimma University

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June 2010

Abstract

Background: Worldwide, cervical cancer is the second-most-common type of cancer that strikes women – behind only breast cancer. Cervical cancer ranks as the 1st most frequent cancer among women in Ethiopia. Knowledge of the community about cervical cancer and its prevention strategies is of great importance in reducing morbidity and mortality rates of cervical cancer, since it affects programme acceptability, efficiency and effectiveness. Women need to understand the link between human papillomavirus (HPV) and cervical cancer in order to make appropriate, evidence-based choices among existing prevention strategies (Pap test and HPV vaccine). Assessment of the public's knowledge is a high priority for cervical cancer control.

Objective: The objective of this study is to assess the knowledge, attitude and practice of women of age 15-49 years towards cervical cancer and its prevention measures in Debre Markose Town Woreda, East Gojjam Zone, Amhara Region, Ethiopia.

Method: The study used a community-based cross-sectional study design that employed both quantitative and qualitative methods. A multi stage sampling technique was used in sampling the study participants for the quantitative part of the study. A total of 845 women of age 15-49 were included. And a total of 40 participants from different religions, age groups, income groups, marital status and educational status were selected using purposive sampling technique for FGD. A structured questionnaire was used to collect quantitative data. Qualitative data was collected by in depth discussion with the selected discussants using Guideline. The analysis results of participants' demographics and baseline outcome variables were summarized using descriptive summary measures. The chi-square test, F-test and correlation analysis were used to test for differences between groups by socio demographic variables in knowledge and attitude scores. Binary logistic regression was carried out to find the significant predictor for the outcome variables. The qualitative portion of the study (FGD) was analyzed manually based on the recordings and notes taken during the study time. Before commencement of the study, Ethical approval from the research committee of college of Public Health and Medical science, Jimma University was obtained

Results: A total of 821 participants with mean age of 30.9 (\pm SD), SD = 6.16 years were recruited. Knowledge about cervical cancer and its prevention measures was low, with an average knowledge score of 0.67 (possible scores ranged from 0 to 10) and a mode of 0. Participants age (OR = 2.2, 95% CI = 1.28-3.65, P = 0 .004), educational status (OR = 2.3, 95% CI = 1.31- 4.05, P = 0 .004), marital status (OR = 3.4, 95% CI = 1.92-5.86, P < 0 .001), and monthly family income (OR = 3.0, 95% CI = 1.65-5.20, P < 0 .001) were predictor variables of cervical cancer related knowledge. The majority (70%) of participants were in favour of cervical cancer prevention measures, with median score 3.0.

Conclusion and recommendation: Findings suggest low level of knowledge on cervical cancer and its risk factors and detection method among these women. Therefore, the findings indicate that there is a need to provide women with authoritative information on cervical cancer, HPV infection, Pap smear /screening/ tests and HPV vaccination to increase their understanding of why action needs to be taken to prevent the disease.

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ABBREVIATIONS

CC	Cervical Cancer
CDC	Center of Disease Control
DNA	Di-Nucleic Acid
E.C.	Ethiopian Calendar
FDA	Food and Drug Administration
FGD	Focused Group Discussion
GAVI	Global Alliance for Vaccines and Immunizations
HH	Household
HPV	Human Papiloma Virus
STD	Sexually Transmitted Diseases
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

1.1. Background

Cervical cancer is cancer of the cervix. Cervical cancer is caused by certain types of a virus—HPV. Most women will get one or more types of high-risk (potentially cancer-causing) HPV at least once in their lives (1). The extent and burden of HPV infection are considerable, as is the psychological and emotional impact of the diseases associated with it (2). Cervical cancer continues to be an important Public health problem for adult women in many developing countries. Although organized and high-level opportunistic, frequently repeated cytology screening has resulted in a large reduction in the cervical cancer burden in developed countries, incidence rates in developing countries continue to be unabated for want of effective screening programs (3). Prevention of cervical cancer can be achieved in one of two ways: preventing infection initially or detecting the precancers before they become cancerous and providing treatment (4).

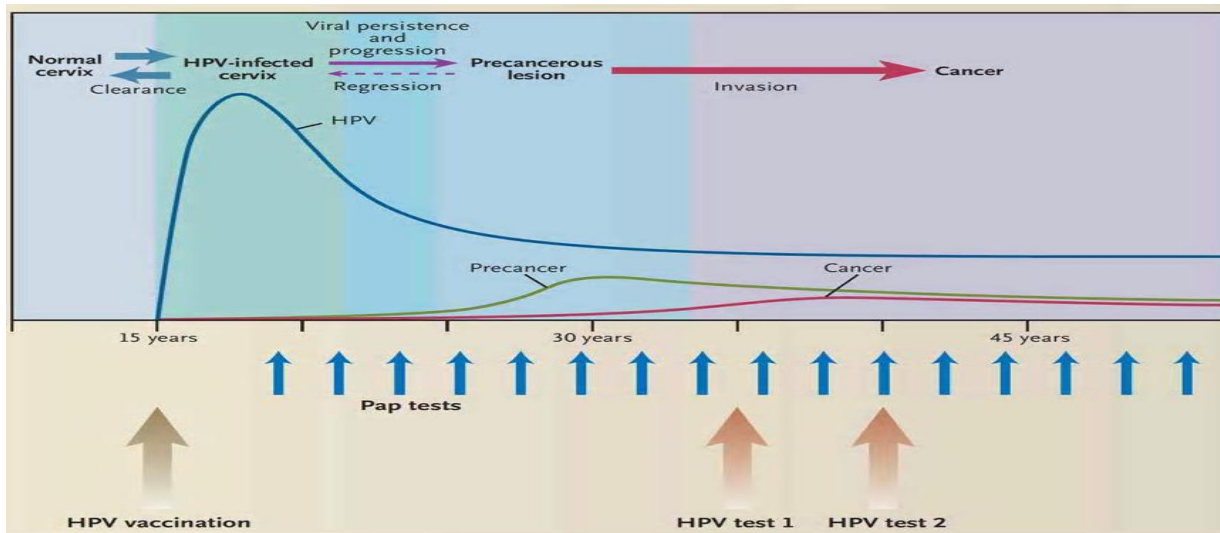


Figure 1. Natural history of HPV infection and cervical cancer.

Source: Mark Schiffman, M.D., M.P.H., and Philip E. Castle, Ph.D., M.P.H. The Promise of Global Cervical-Cancer Prevention. *engl j med* 353; 20 November 17, 2005; 2103. www.nejm.org. (5).

However, as many studies showed, the effectiveness of these prevention ways is affected by the general community's knowledge and attitude towards cervical cancer and its preventive measures (6). Women need to understand the link between human papillomavirus (HPV) and cervical cancer in order to make appropriate, evidence-based choices among existing prevention strategies (Pap test, HPV DNA test, and HPV vaccine). So assessment of the public's knowledge is a high priority for developing interventions that aim to increase awareness, intention and belief in one's ability to receive these preventive measures as well as for reducing systematic barriers to them and in general for cervical cancer control (7-9).

1.2. Statement of the problem

Cervical cancer and its global impact

Worldwide, cervical cancer is the second-most-common type of cancer that strikes women – behind only breast cancer. Nearly 500,000 new cases of cervical cancer (every minute of every day a woman is diagnosed with cervical cancer) and 274,000 cervical cancer deaths are occurring worldwide each year. It has been called “a case study in health equity” because approximately 85% of the 500,000 new cases occur in developing countries where the burden of the disease is disproportionately high and healthcare infrastructure is limited and this percentage is expected to increase to 90% by 2020 (10, 11).

Ethiopia has a population of 20.90 million women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 7619 women are diagnosed with cervical cancer and 6081 die from the disease. Cervical cancer ranks as the 1st most frequent cancer among women in Ethiopia, and the 1st most frequent cancer among women between 15 and 44 years of age. Data is not yet available on the HPV burden in the general population of Ethiopia. However, in Eastern Africa, the region Ethiopia belongs to, about 33.6% of women in the general population are estimated to harbour cervical HPV infection at a given time (12).

Cervical cancer is a disease of unfortunate inequities. The incidence and mortality rate of cervical cancer have declined significantly in industrialized countries in the past 40 or so years, but in developing countries, this disease continues to be an enormous problem. The highest incidence and mortality rates are in sub-Saharan Africa, Latin America, and South Asia. Overall, the mortality rates in developing countries are about four times those in industrialized countries. Thus, one inequity is between richer and poorer women. The second inequity is based on gender: cervical cancer is a female disease, and in many countries women do not receive equal information about or access to health care (13).

The biggest impacts of cervical cancer are on poverty, education, and gender equity, the first three goals of Millennium Development Goals (13). Cervical cancer tends to affect relatively young poor women and is the single largest cause of years of life lost to cancer, since screening and treatment programs, and health care, in general, are relatively inaccessible to these women (10, 14, 15). It is an important cause of cancer-related deaths in women in developing countries. By affecting women in their most productive years, cervical cancer strikes at the heart of families and deprives developing world economies of the many important contributions women make. The fabric of the family and the community is weakened significantly when these women die. In addition to the emotional trauma, cervical cancer deaths have significant economic costs over the short- and long-term. The differential economic and social impact on women and girls makes it more difficult to achieve gender equity. Finally, it should be noted that lower levels of female education are linked to decreased maternal and infant health – the focus of two other MDGs (13).

However, cancer has received low priority for health care services in Sub-Saharan Africa. The reason is undoubtedly the overwhelming burden of communicable diseases (10, 11).

Preventive efforts against HPV infection/cervical cancer

Since the most common form of cervical cancer starts with precancerous changes, there are two ways to stop this disease from developing. The first way is to prevent the precancers, and the second is to find and treat precancers before they become cancerous (16).

The measures to prevent precancerous changes focus on avoidance of risk factors HPV infection, the most important risk factor for cervical cancer; certain types of sexual behaviors like: having sex at an early age, having many sexual partners, having sex with uncircumcised males; smoking; human immunodeficiency virus (HIV) infection; long use of oral contraceptives and low socioeconomic status). And also focus on encouraging preventive behaviours and activities, such as using condom, HPV vaccination (6, 16-19). Two vaccines—Merck's Gardasil® and GlaxoSmithKline's Cervarix™—have been proven at least 90 percent effective in safely preventing infection with HPV types 16 and 18, which account for about 70 percent of cervical cancer cases(12, 18-24). Therefore, the high efficacy of the available cervical cancer vaccines and their proven ability to reduce the incidence of cervical cancer precursor lesions offer hope that the vaccines will have enormous worldwide impact and may dramatically reduce the cervical cancer burden (6).

The second way, measures to find and treat precancers before they become cancerous, includes: screening (Pap test, HPV DNA test and visual inspection) and treatments (surgery, radiation therapy and chemotherapy). Since its introduction more than 50 years ago, the Pap smear, also known as the cervical smear, has been used throughout the world to identify precancerous lesions for treatment or follow-up. The results of routine Pap smear screening in the industrialized world have been impressive, and the procedure has contributed to the 70% to 80% reduction of cervical cancer incidence in developed countries since the 1960s (15). The most successful strategy for cervical cancer prevention has been the implementation of population-based organized and opportunistic screening programs utilizing exfoliative cervical cytology, the Pap test, and treatment of identified precancerous lesions. The introduction of screening programs in unscreened populations has been shown to reduce cervical cancer rates by 60% to 90% within 3 years after implementation (16).

Despite the considerable success of early screening for prevention of cervical cancer, Pap smears have not fulfilled the hopes that it would lead to a large-scale reduction of this cancer's incidence. Vaccination and screening, which are complementary and synergistic for prevention of this disease, appear to be useful for a tiny portion of the world population (2, 19). A survey on levels of coverage of cervical cancer screening for the 57 countries, points to an acute shortage of cervical cancer prevention services across much of the developing world and striking inequalities in access to these services, (wide variation in the level of effective coverage across

countries, from over 80% in Austria and Luxembourg to 1% or less in Bangladesh, Ethiopia, and Myanmar) highlighting the need for new prevention and treatment strategies.(25) Lack of similar success in developing countries is largely attributable to limited resources (i.e., supplies, trained personnel, equipment, quality control, health care infrastructure, and effective follow-up procedures). As noted earlier, screening programs in developing countries either do not exist or are ineffective. Compounding the problem is that both women and health care workers often lack information about cervical cancer and cost-effective ways to prevent it (15).

Therefore, even though screening programs and prophylactic HPV vaccines may soon become available for public distribution, the community's general knowledge about HPV and HPV-associated disease is limited and may affect their acceptability (1). So it is mandatory to assess knowledge and attitude of the community towards cervical cancer and its preventive measures. Since it provides base line information for planning of interventions aimed at increasing awareness of the community with the final goal of preventing and controlling of cervical cancer by available programs and strategies.

CHAPTER TWO: LITERATURE REVIEW

2.1. General knowledge about cervical cancer and HPV

Cervical cancer is the most common HPV-related malignancy. The known primary underlying cause is the human papillomavirus (HPV), the most common sexually transmitted infection worldwide, and it is estimated that 50% to 80% of sexually active women are infected at least once in their lifetime. Progression to cervical cancer can take 20 or more years from the time of initial HPV infection. Most cervical cancer cases occur in women 35 years and older, an age when women maximize their familial, economic, social, and educational contributions, including workforce and community participation, child and elder care, and support of child education (26). The other known risk factors are the early onset of sexual activities, multiple sexual partners, lack of condom use, co infection with other sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), long use of oral contraceptives, smoking and low socioeconomic status (27).

There has been dramatic progress in understanding the role of HPV in the aetiology of cervical cancer. Despite the important public health implications of this work and the overwhelming prevalence of HPV & potentially catastrophic consequences of an HPV infection, several studies have demonstrated knowledge about HPV and its links to cervical cancer in the public appears to be low (6,8,12,28,29).

A study in UK on 420 participants showed that Poor knowledge of HPV and its links with cervical cancer. Three hundred and forty (81%, 95% CI = 76.9% to 84.6%) of the study participants had a knowledge score of 0 (mean = 0.51, SD = 1.33, median = 0). Only 25 (5.9%) participants had a score of 4 or more. Knowledge about HPV was associated with different ethnic group and socio-economic group and significant differences in knowledge scores were observed between ethnic groups, social class, with increasing age, and by gender (6). Similarly a study in U.S. on 3,076 women age 18 to 75 years old found low level of Knowledge about HPV. Only 40% of women ($n = 1,248$) reported that they had ever heard of HPV. Among those who had ever heard about HPV, <50% knew it caused cervical cancer; knowledge that HPV was sexually transmitted and caused abnormal Pap tests was higher (64% and 79%, respectively). Factors associated with having heard about HPV included: younger age, being non-Hispanic White, higher educational attainment, exposure to multiple health information sources, trusting health information, regular Pap tests, awareness of changes in cervical cancer screening guidelines, and having tested positive for HPV. Accurate knowledge of the HPV-cervical cancer link was associated with abnormal Pap and positive HPV test results (8).

A study, on 1620 women aged 16–97 years from a stratified Random probability sampling frame, reported that a quarter of participants 388 (24.2%) were aware of HPV and only 2.5% of the respondents mentioned HPV as a cause of cervical cancer. The study also showed that as there were some age differences, with 29% of respondents who were in the cervical cancer screening age (25–64 years) reported awareness of HPV compared with only 15% aged (16–24

years or 65 and over). Differences in HPV awareness by ethnic group were not significant, but awareness was lower in respondents with lower levels of education and income (30). In a cross-sectional study conducted on 289 men and women aged 18 and older, also only 33% of the respondents replied that they had never heard of HPV. Those that had heard of HPV had received information from the following sources: doctors (22.8%), a health education class (27.6%), friends (18.3%), magazines and newspapers (20.3%), and television and radio (11%) (28).

A descriptive cross-sectional study conducted in South Africa on 389 female university students indicated that less than half (42.9%) of the participants had heard about cervical cancer. Of those who had heard about cervical cancer, almost a quarter (22%) had heard from community health workers and only 19% had heard about it from the media. Twenty-six (15.6%) of 167 participants who had heard of cervical cancer, did not know any risk factors for cervical cancer, only one respondent (0.6%) knew all the risk factors and almost half (48.5%) of the respondents knew that HPV causes cervical cancer (29). Although, a survey of the general population (n=202) in USA reported that a large proportion of participants (93.6%) had heard of HPV and 74% of the study population knew that HPV was sexually transmitted. Furthermore, a large proportion of participants (84%) knew that HPV caused cervical cancer. The study also showed differences in the level of knowledge based on ethnicity and geographic location (28). And another study on college-age women (18-25) also confirmed that, of the 172 participants 21.5% had never heard of HPV. Seventy-eight percent (78.5%) had heard about HPV through various sources (each category is non-inclusive): 55.8% through television/radio, 37.2% through classes at the University, 29.1% through a family member, 20.9% through a health care provider, 17.4% through newspapers/magazines, 16.3% through the internet and (2.9%) through a significant other/male partner. Most notably, 55% knew that HPV causes genital warts, 91.4% knew that HPV can cause cervical cancer, 58% knew that now there exists a vaccine to prevent certain types of HPV infection, and 92.4% knew that that they could still transmit HPV to their partners even if they do not have any symptoms. This study also found that approximately 68.2% (n=148) of the participants scored above the 50th percentile and 31.8% scored below the 50th percentile and overall participants had a mean score of 63.69 %.(31).

2.2. Knowledge and attitude towards cervical cancer preventive measures

The understanding of cervical cancer etiology, specifically, the identification of human papillomavirus (HPV) as a necessary cause has led to the development, evaluation, and recommendation of HPV-based technologies for cervical cancer prevention and control. Prevention of cervical cancer is effective with the use of the cervical Pap smear test if applied in an organized and continuous fashion, including treatment of precancerous lesions. Current clinical guidelines recommend using the HPV DNA test in women ages 30 and older for primary screening and in all ages for follow-up to abnormal cytology (8). More recent recommendations include administering the HPV vaccine in adolescent and young adult females (ages 9-26) to prevent the transmission of certain carcinogenic HPV types (9). However, as a number of studies discussed, the effectiveness of cervical cancer preventive strategies and how they work is

affected by knowledge of the community about HPV infection and its link with cervical cancer and by knowledge and attitude of the community towards cervical cancer prevention strategies (6, 7, 19, 28, 32-35).

A qualitative study undertaken using face-to-face in-depth interviews to investigate knowledge, attitudes and beliefs on cervical cancer screening of Malaysian women aged 21–56 years showed that despite the existence of effective screening using Pap smear, the uptake of screening is poor. The study also explored that lack of knowledge on cervical cancer and the Pap smear test and limited knowledge about the susceptibility of cervical cancer and the necessity for cervical cancer screening among the women in the study population were reasons for this poor uptake of screening test. Despite considerable awareness of a link between cervical cancer and sexual activity, as well as the role of a sexually-transmitted infection, none of the respondents had heard of the human papillomavirus. Many women did not have a clear understanding of the meaning of an abnormal cervical smear and the need for the early detection of cervical cancer. Many believe the purpose of the Pap smear test is to detect existing cervical cancer, leading to the belief that Pap smear screening is not required because the respondents had no symptoms. The findings of this study highlighted the importance of emphasizing accurate information about cervical cancer and the purpose of Pap smear screening when designing interventions aimed at improving cervical cancer screening (19).

A community based cross-sectional survey with a household interview of 640 randomly selected women ages 21-65 years in Singapore showed that the means of increasing the acceptance of the Pap smear, both for the first time and subsequently, are culture-specific and must address the appropriate health beliefs and attitudes. Of the respondents, 73.1% were aware of the Pap smear, and about half (49.7%) had obtained the information from a doctor or nurse. Overall, the belief in personal susceptibility to cancer was low (58.9%) and a substantial proportion (48.7%) of women were of the attitude that cancer could not be prevented. The effect on a future intention to have a smear varied between women who had had and women who had not had a smear. Among the former, perceived barriers such as discomfort and embarrassment had a significant influence, while a belief in personal susceptibility was an important determinant for the latter group (33).

A review of women's attitudes, knowledge, and behavior in UK has discussed the reasons why some women do not participate in the cervical cancer screening programme, and has highlighted how low levels of information, coupled with poor communication, contribute to high levels of distress in women with abnormal cervical smear results and may lead to non-attendance for colposcopy. The factors reducing the participation of women in the cervical cancer screening programme are: poor awareness of the indications and benefits of the cervical smear test; lack of knowledge of cervical cancer and its risk factors; fear of embarrassment, pain, or cancer; lack of female screeners or convenient clinic times; anxiety caused by receiving an abnormal cervical smear result; poor understanding of cervical screening procedures; and a need for additional information (36).

A study conducted among female undergraduate students at Mangosuthu University of Technology, South Africa indicated that one-hundred and sixty-three (41.9%) participants had heard about the Pap smear test. That the Pap smear test is used for detection or prevention of cervical cancer, was known to 62 (38%) of the respondents. Only 16 (9.8%) participants had had a Pap smear test. Among those who knew about the Pap smear test, 86 respondents did not have the test done mainly because of personal factors such as fear of the procedure, cultural or religious reasons, and were not ill (61.1%). Among those who knew about the Pap smear test, 61.1% respondents did not have the test done mainly because of personal factors such as fear of the procedure, cultural or religious reasons, and were not ill. This indicates a low level of knowledge of cervical cancer and utilization of the Pap smear test. The low knowledge of the Pap smear test could thus be due to a low level of knowledge of the benefits of the test and prevention of cervical cancer (29).

A survey was carried out in a random sample of 880 women between the ages of 15 and 49 years in the metropolitan area of Cuernavaca, Mexico. In the study women were interviewed to obtain information concerning their knowledge of risk factors for cervical cancer and their perception of the usefulness of vaccines. Afterward, they were provided with information on the main risk factors for cervical cancer and the future availability of a human papillomavirus (HPV) vaccine to prevent cervical cancer. Finally, the study showed that the respondents had little knowledge regarding the etiology of cervical cancer. Only 1.9% said that the principal risk factor was infection with HPV; however, 84.2% were aware of the usefulness of vaccines and 83.6% of the women indicated that they would allow their daughters to participate in a trial to evaluate the effectiveness of an HPV vaccine that helps prevent cervical cancer. The study also concluded that the main factor associated with the acceptance of a possible vaccine against HPV was the knowledge of the usefulness of vaccines (37). As different studies showed, despite the presence of efficient, cost-effective HPV vaccine, its acceptability, coverage and impact on cervical cancer had highly affected by the knowledge, attitude and experience of the public (6, 7, 28, 38). A study on preventing cervical cancer HPV vaccination in Malaysia found that respondents have low awareness about the newly released vaccine and the link between HPV and cervical cancer. When provided with information about HPV and cervical cancer, most mothers were in favor of protecting their daughters from cervical cancer using the vaccine. As with any new vaccine, efficacy and safety were the major concern, particularly when the vaccine is recommended to preadolescent. Many expressed concern about the high cost of the vaccine and hope that the inoculation could be at least partially subsidized by the government. A minority were concerned that the sexually transmitted disease-related vaccine would promote sexual activities, and some opposed making vaccination mandatory. For Muslim respondents, the kosher issue of HPV vaccine was an important factor for acceptance (38). Another study in USA showed (87%) of participants had heard of the HPV vaccine. However, only 18% of the population knew that the current FDA-approved vaccine protected against genital warts and most cervical cancer. (28)

A model based study done on Attitude of Israeli mothers with vaccination of their daughters against HPV showed that approximately 65% of mothers intend to vaccinate their daughters. Behavioral beliefs, normative beliefs, and level of knowledge had a significant positive effect on mothers' intention to vaccinate their daughters. High levels of religiosity were found to negatively affect mothers' intention to vaccinate their daughters (6). Similarly, Study done in Mysore, India found most participants were unaware of HPV and its relationship to cervical cancer. In spite of this, acceptance of an HPV vaccine appeared high with many parents being interested in immunizations that would prevent cancer (7). A study on rates of HPV vaccination, attitudes about vaccination, and HPV prevalence in young women in USA found that five percent of participants had received at least one HPV vaccine dose, 66% intended to receive the vaccine, 65% were confident they could find the time to get vaccinated, 54% believed that they could receive all three shots, and 42% believed that they could afford vaccination. Factors independently associated with intention included believing that influential people would approve of vaccination, higher perceived severity of cervical cancer or genital warts, fewer safety barriers, and pregnancy history. Factors associated with a high belief in one's ability to receive the vaccine included perceived severity of HPV, sexually transmitted disease history, insurance coverage, and fewer practical barriers to vaccination (39).

A study on Young multiethnic women's attitudes toward the HPV vaccine and HPV vaccination in Malaysia showed that poor knowledge about HPV did not influence the HPV vaccine's acceptability. Although participants were in favor of the vaccine, the majority preferred to delay vaccination because it is newly introduced, they did not perceive themselves to be at risk of HPV infection, or because of cost factors. Concerns were raised regarding the vaccine's safety, the potential to be perceived as promiscuous and sexually active, and whether the vaccine was halal. (40). A study, in Georgia, undertook 35 focus groups with stratification by gender, race and location concluded that low knowledge and the association of the vaccine with STD to be barriers to future acceptance of the vaccine (41). In summary, the literature published to date shows low levels of public knowledge about HPV and its links to cervical cancer. However, the majority of studies also show that people are generally in favour of vaccination (6).

2.3. Conceptual framework

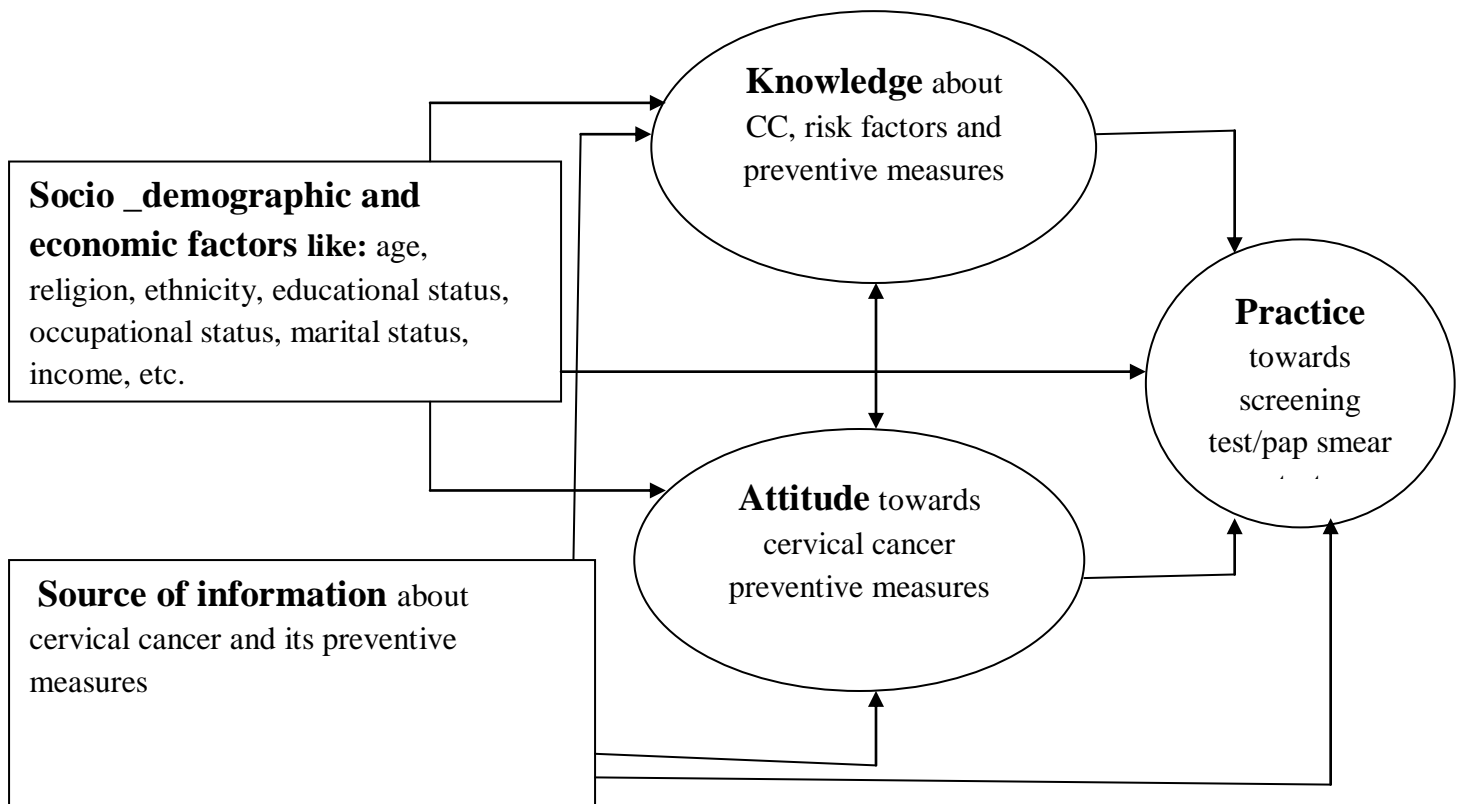


Figure 2. Conceptual framework for knowledge, attitude and practice of women of age 15-49 towards cervical cancer and pap smear test in Amhara region, east Gojjam zone, Debre Markose town woreda.

2.4. Significance of the study

Cervical cancer is one of the commonest cancers in women worldwide. It is an important cause of morbidity and mortality of women worldwide especially in developing countries (19). Cervical cancer ranks as the 1st most frequent cancer among women in Ethiopia, and the 1st most frequent cancer among women between 15 and 44 years of age (12). Cervical cancer deaths are higher in populations around the world where women do not have routine Pap tests. In fact, cervical cancer is the major cause of cancer deaths in women in many developing countries. These women are usually diagnosed with an invasive late stage, rather than as pre-cancers or early cancers. (42)

Some of the benefits of improved cervical cancer prevention are obvious, the reduction in suffering and death of mature women and the grief and economic burden felt by their families. Prevention programmes can also support development in other ways, including contributing to lowering poverty, increasing primary education, empowering women, improving child health and providing the basis for global partner-ships (13).

Knowledge, attitude and practice of the community towards cervical cancer and its prevention measures are of great importance in reducing morbidity and mortality rates resulting from cervical cancer. Since, overall community knowledge of cervical cancer and the causal relationship between HPV and cervical cancer assist in identifying potential barriers and facilitating factors towards cervical cancer prevention interventions and will inform the development of policy and programs to support these interventions in developing countries (17). Generally, preventive efforts against the spread of HPV require focus on increasing knowledge levels about the virus, including risk factors and encouraging young women to receive regular cervical screenings. The efforts also need to focus at increasing awareness towards cervical cancer and its rational prevention strategies among policy-makers, providers, and communities to ensure adequate funding, support, and use of newly available services (6, 16-19). Studies have also showed that general knowledge of the community towards HPV and HPV-associated disease could affect the preventive & treatment programs acceptability, efficiency and effectiveness (29, 34).

Formative research seeks to gather information on a target audience's beliefs, values, attitudes, knowledge, and behaviors related to a health problem of interest, as well as the context that influences and is influenced by these individual-level factors. This exploration is an important part of planning a new public health intervention, such as a vaccine introduction program; it provides a solid evidence base for designing a meaningful and grounded implementation approach (24). Hence, the necessity of baseline information on the knowledge of the general community towards cervical cancer and the causal relationship between HPV and cervical cancer to establish effective preventive & control strategies is obviously clear. However, despite its importance, in Ethiopia study findings about the public knowledge, attitude and experience

towards cervical cancer, its screening program /Pap smear test/ and other preventive measures are hardly available (12).

Therefore, the purpose of this study is to assess knowledge and attitude of women of age 15 to 49 towards cervical cancer and its preventive measures in Debre Markose Town Woreda, East Gojjam Zone, Amhara Region, Ethiopia, with the aim of coming up with valuable findings for the establishment of effective prevention & control strategies of cervical cancer. The finding could be very help full for researchers by indicating gaps for further studies, program planners/managers & policy makers in developing the prevention & control program/strategies in the country. Furthermore the findings could also be used for teaching & learning purposes in educational & training programs.

CHAPTER THREE: OBJECTIVES

3.1. General objective

To assess the knowledge, attitude and practice of women of age 15-49 years towards cervical cancer and its preventive measures in Debre Markose Town Woreda, East Gojjam Zone, Amhara Region, Ethiopia.

3.2. Specific objectives

1. To determine knowledge of women of age 15-49 years towards cervical cancer and its preventive measures.
2. To assess attitude of women of age 15-49 years towards cervical cancer and its preventive measures.
3. To assess practice of women of age 15-49 years towards Pap smear test.
4. To determine factors associated with KAP of women of age 15-49 years towards cervical cancer and its preventive measures.

CHAPTER FOUR: METHOD AND MATERIALS

4.1. Study area, study design and study period

4.1.1. Background Information of Study Area

East Gojam zone is one of the total 11 zones in Amhara region, located at the north western part of Ethiopia, about 300 kilometers from Addis Ababa and 265 kilometers from the regional capital, Bahir Dar to the zonal city, Debre Markose. The total population of the zone as of Ethiopian census report 2007 is 2,152,671; of which 1,066,094(49.5%) are male and 1,086,577 (51.5%) female. About (9.9%) 212,601 of the population live in urban and 1,940,070 (90.1%) in rural areas of the zone. Debre Markose town woreda is one of the 17 woredas of the zone and it is divided into 7 kebeles. The estimated total population of the woreda as of Ethiopian census report 2007 is about 70,857; of which 33,916 are male and 36,941 female. The total female population and women of age 15-49 years in the woreda constitute about 52.1% and 28.8% of the total population composition, respectively. Most of the population in the town is Amhara ethnicity. Orthodox Christian and Islam are the major religions in the town, Orthodox being the most predominant (43). In the town, there are 2 health centers, 7 clinics and one hospital. The hospital also serves as a referral hospital for the zone and it provides Pap smear test service.

4.1.2. Study design and study period

The study used a community-based cross-sectional study design that employed both quantitative and qualitative methods. This study was conducted from March to April 2010.

4.2. Study population

4.2.1. Source population:

The source population for this study was women of age 15-49 years, who reside in Debre Markose woreda.

4.2.2. Study population:

The study population was women of age 15-49 years sampled (selected) from the population residing in Debre Markose woreda during the study period.

4.3. Sample size determination and sampling technique

4.3.1. Sample size determination

The sample size has been calculated using a single population proportion formula designated as:

$$n = \frac{(Z_{\alpha/2})^2 p(1-p)}{d^2}$$

Where;

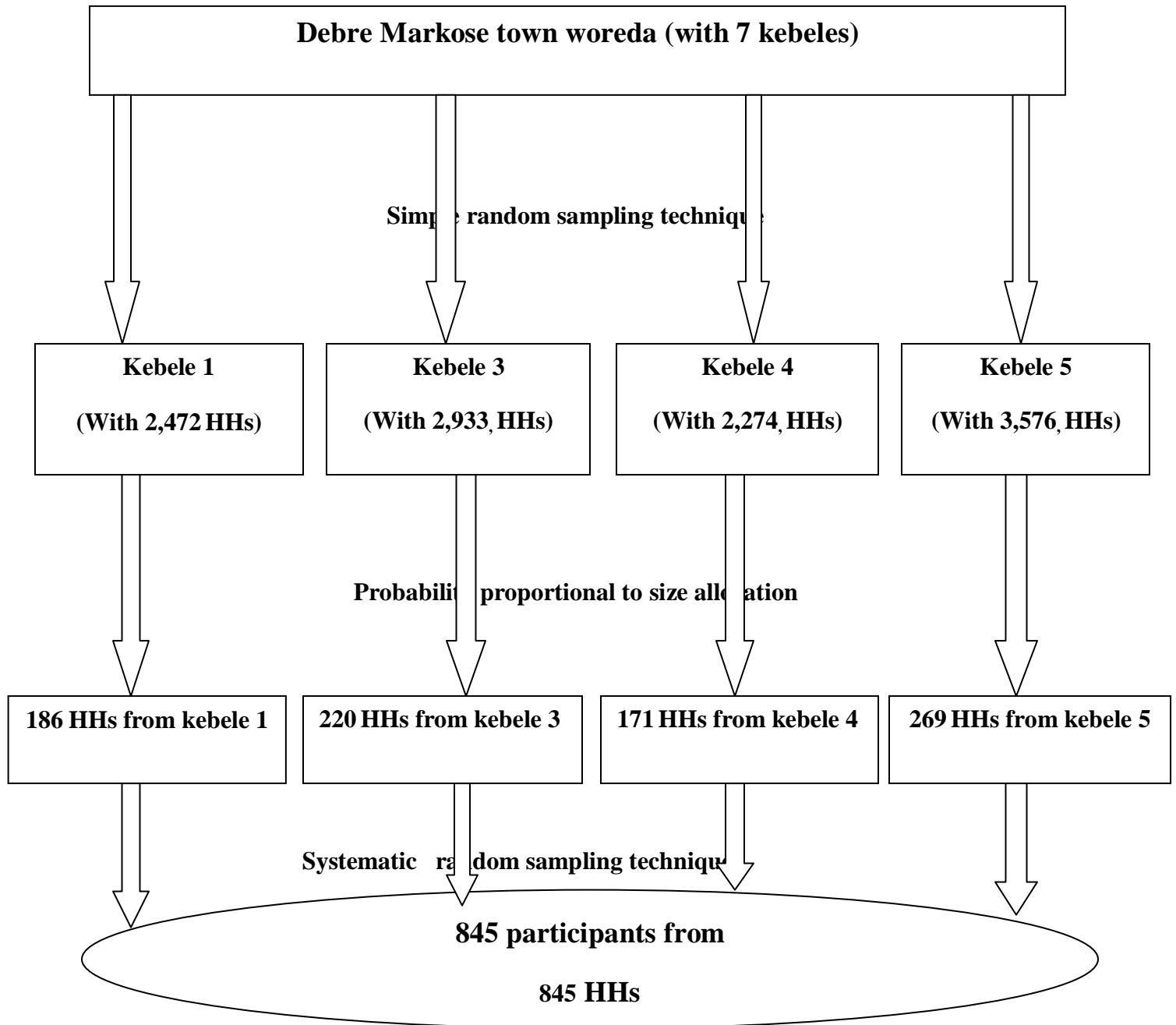
- n = the required sample size.
- $Z_{\alpha/2}$ = 95 % confidence (1.96).
- P = Expected proportion of the population who have correct knowledge towards cervical cancer and its preventive measures to be 0.5, since such type of study was not conducted so far in the population in the study area.
- d = Desired precision /the margin of error / (5 %).

A design effect of 2 and 10 % non-response rate also considered in the calculation. Based on the above assumptions, the total sample size calculated was 845 women of age 15-49 years.

4.3.2. Sampling technique:

Sampling Procedures of the Quantitative Study:

Multi stage sampling technique was used in sampling the study participants. To make the sample more representative, from the total 7 kebeles of the woreda 4 kebeles /greater than half / was selected by simple random sampling technique. The total number of households found in each selected kebeles was taken and proportional sample size was calculated by probability proportional to size allocation for each kebele so as to give the total number of sample households. From each selected kebeles, sample households were selected by using systematic random sampling technique. And then, eligible respondents within the selected households were included in the study. When there were more than one eligible in the same household one was chosen by lottery method. Using this technique, a total of 845 respondents for the study were obtained from the households included in the sample.



Where: HH . household.

Figure 3 Schematic Presentation of the Sampling Procedure.

Inclusion criteria:

- Women of age 15-49 years and who were residing in Debre Markose woreda at least for 6 months were included in the study.

Exclusion criteria

- Women of age 15-49 years and who were critically sick at the time of study and unable to communicate and respond to questionnaire were not included in the study.

Sampling Procedures for the Qualitative part of the Study:

A total of 40 participants from different religions (Protestant, Muslims and orthodox), age groups (15-30 and 31-49 years), different income groups (high and low income), different marital status (single and married) and different educational status (educated and uneducated) were selected using purposive sampling technique for FGD. Members were selected by giving emphasis to include members that would represent respective areas. A total of six groups, two from each religion were formed for FGD. The groups were homogenous in terms of age, educational status, marital status and income. The size of the groups was 6 to 8 individuals in order to assure that all individuals participate, and that each participant has enough time to speak. It also helped to reduce dominance within groups and reduce the tendency for side conversation between discussants.

4.4. Measurement variables:

4.4.1. Independent variables:

- Socio demographic characteristics of the respondents such as:
 - Age,
 - Religion,
 - Ethnicity,
 - Educational status,
 - Occupational status,
 - Marital status,
 - Income.
 - Source of information about HPV/CC.

4.4.2. Dependent variables

- Knowledge of women of age 15-49 years towards CC and its preventive measures.

- Attitude of women of age 15-49 years towards its cervical cancer preventive measures.
- Practice of women of age 15-49 years towards Pap smear test.

4.5. Data collection tools and procedures

4.5.1. Data collection tools

For the Quantitative part of the Study:

A structured questionnaire was used to collect data. The questionnaire was adapted to local situation with certain modifications from different literatures after review of relevant literatures and previous studies questions that can satisfy the objectives of the study (6, 19, 23, 29). The questionnaire consisted of 36 pre-coded items in a variety of formats: 4 true/false/don't know questions; 8 yes/no/don't know questions; 16 multiple-choice questions requiring one or more answers, and 8 questions using a rating scale. Ten items on the questionnaire inquire about socio-demographic characteristics, 15 items about knowledge about cervical cancer and its preventive measures, information source about cervical cancer and its preventive measures, 8 items about attitude towards cervical cancer preventive measures, and 3 items inquire about practice of respondents on Pap smear test and reasons not to had Pap smear test.

Answers were described in terms of knowledge, attitudes, and practice, and their respective scores with respect to cervical cancer preventive measures, as previously defined. A knowledge score scale was calculated from the ten knowledge items. One point was allocated for each correct answer resulting in a score from zero (no knowledge) to ten (high knowledge). A Likert scale ranging from strongly agree (score: 5) to strongly disagree (score: 1) was used to measure attitude score from the eight attitude items. The reliability and validity of the questionnaire had been tested by studies from which the questionnaire was adapted; further more it was pretested before the study.

For the Qualitative part of the Study:

Qualitative data was collected by in depth discussion with the selected discussants using guideline for focus group discussions. The FGDs covered areas of discussion like: knowledge towards cervical cancer and its preventive measures, attitude towards cervical cancer preventive measures and practice of the discussants towards Pap smear test.

4.5.2. Data collection procedures

For the Quantitative part of the Study:

The questionnaire was prepared originally in English and then translated to Amharic language and back to English to assess consistency. It was pre-tested in kebele 7, one of the Kebeles in the town, which was out of the surveyed Kebeles, but with similar characteristics within the study

district. After that, the data collection process was carried out following minor amendments incorporated within the final questionnaire.

The questionnaire was administered by ten high school completed Amharic language speaking data collectors using face to face interviewing technique. The interview process was administered in Amharic language. The data collectors and 3 supervisors (nurses) were trained for 2 days by the principal investigator on how to interview the participants and how to fill the questionnaire based on a prepared instruction/ guidelines. During data collection if there was absenteeism of the respondent, thrice visits were attempted after which an eligible in the adjacent house hold was interviewed. Questionnaire administration was commenced with socio-demographic questions, followed by an assessment of cervical cancer and its preventive measures knowledge. If the respondent answered "No" to the first of these questions ("Have you ever heard of cervical cancer?"), then the remaining cervical cancer related knowledge questions were not asked. Subsequent to the provision of standardized information (information provided to all participants, irrespective of cervical cancer knowledge score) related to cervical cancer and its preventive measures, attitudes to HPV vaccination and Pap smear test were assessed using rating questions . Finally Pap smear test practice related questions were asked.

For the Qualitative part of the Study:

The FGD guideline was prepared in English and translated to Amharic language. A two day orientation and practical exercise was given for the data collectors and moderators by the principal investigator on how to take notes and how to moderate the discussion sessions based on a prepared instruction/ guideline. Focus group discussions were facilitated by the principal investigator using prepared guideline and were conducted at the end of the quantitative survey. A trained data collector was jot down the points. Group discussions with the discussants were conducted in a quiet and comfortable place. Notes were taken during each focused group discussions. After the information obtained was similar and new ideas were not generated, the FGD was ended.

4.5.3. Data quality control:

The quality of the data was assured through careful design; translation, retranslation and pretesting of the questionnaire and the guideline; proper training of the data collectors and supervisors; close supervision of the data collectors and proper handling of the data. During the training, the importance of obtaining the respondents verbal consent and respecting their right to respond or not to respond to any part of the questions was emphasized, in addition to ensuring privacy and confidentiality. Moreover, during data collection supervisors were checked in the field how the data collectors were doing their task. The principal investigator also closely supervised the field activity on daily basis. At the end of each data collection day the principal investigator also checked the completeness of filled questionnaires and whether recorded information makes sense to ensure the quality of the data collected. Besides this, the principal

investigator and the data clerk were carefully entered and thoroughly cleaned the data before the commencement of the analysis.

4.6. Data management and data analysis procedures

For the Quantitative part of the study:

After data collection, each questionnaire was coded separately, cleaned and entered in to SPSS version 16.0 statistical software for analysis by a principal investigator and an experienced data clerk. Coding of different variables was also carried out before analysis. The measures for knowledge and attitude of respondents, knowledge scores and attitude scores respectively were calculated from the responses on specific items in the questionnaire. The sum of all items in the section was obtained, with a higher score indicating more knowledge or more positive attitude. For the purposes of modelling, the knowledge score was reduced to a binary variable (no knowledge: knowledge score = 0 vs. some knowledge: knowledge score >0). Continuous variables were grouped into ordinal categories to facilitate inclusion in the multivariate logistic regression analysis. The frequency distribution of dependent and independent variables was worked out. Descriptive statistics of socio-demographic information, knowledge, attitudes and practices of participants regarding cervical cancer and its preventive measures were determined and reported in the forms of mean, standard deviation, proportions and percentages.

The knowledge scores and attitude scores were used to determine associations between independent (socio demographic) variables and outcome (knowledge, attitude and practice) variables. The chi-square test, F-test and correlation analysis (Spearman's rho correlations), as indicated by the variable type, were used to test for differences between groups by socio demographic variables in knowledge and attitude scores. Binary logistical regression was carried out to find the significant predictor for the outcome variables. Moreover, multiple logistic regression analysis was employed to control the possible confounding effect and assess the separate effects of the variables. All statistical tests were performed using two-sided tests at the 0.05 level of significance. Odds ratio with 95 % confidence intervals and associated p-values was computed to assess the presence and degree of association between dependent and independent variables. P-values were reported to three decimal places with values less than 0.001 reported as <0.001. For all regression models, the results were expressed as effect or odds ratios for binary outcomes. Tables and graphs were used to present frequencies of pertinent analysis results of participants' demographics and baseline outcome variables.

For the Qualitative part of the study:

The qualitative portion of the study (FGD) was analyzed manually based on the recording and notes taken during the study time. The records were transcribed verbatim and translated into English. Data were sorted and organized. Thematic analysis was used to code and categorize the data. Central and repetitive themes were highlighted and conceptual similarities across themes were noted. Data were compared across groups with the aim of identifying differences as well as

generating the most representative summative categories. Findings were summarized and compared with the quantitative findings and finally reported by narrating the finding.

4.7. Ethical considerations

Before commencement of the study, Ethical approval from the research committee of college of Public Health and Medical science, Jimma University was obtained. Letters of support was received from East Gojjam Zonal Health Department and Debre Markose Health Office. Informed verbal consent was obtained from the respondents before data collection. Similarly the respondents were informed the purpose of the study that it will contribute necessary information for policy makers and other concerned bodies to look after the health needs of the community in the study area and in the country at large. They were also informed that all information obtained from them was kept confidential and as they had the right either to involve or not in the study.

4.8. Dissemination of findings

The result of the study will be submitted to college of Public Health and Medical science, Jimma University. The findings will be disseminated to the Ministry of Health, the respective health departments & other concerned and interested organizations that will have a contribution to improve the burden due to cervical cancer. The findings will be also presented in various seminars and workshops, and will be published in a scientific journal.

4.9. Operational definitions

Attitude: The perception or outlook (measured by items of the tool which related with outlook) of the study group towards cervical cancer prevention measures.

Early sexual activity: Regardless of marital status, practicing of sexual intercourse before reaching to age 18.

Knowledge: awareness or understanding of basic facts about cervical cancer and its prevention measures, (measured by items related to these basic facts).

Negative attitude: non supportive attitude, those study participants who had negative outlook towards cervical cancer prevention measures and who scored low score (less than or equal to 2) calculated from the scoring scale for 8 attitude questions.

No knowledge: those study participants who scored a knowledge score zero on a knowledge score scale calculated for 10 questions related to cervical cancer and its prevention measures knowledge.

Positive attitude: supportive attitude, those study participants who had positive outlook towards cervical cancer prevention measures and who scored high score (greater than to 2) calculated from the scoring scale for 8 attitude questions.

Practice: if a respondent has had at least one pap smear test regardless of her knowledge towards cervical cancer and prevention methods.

Risk factor: is a factor that increases the likelihood of acquiring HPV and cervical cancer.

Some knowledge: those study participants who scored a knowledge score greater than zero on a knowledge score scale calculated for 10 questions related to cervical cancer and its prevention measures knowledge.

Unemployment: A respondent who not having his own regular job and dependent on other.

CHAPTER FIVE: RESULTS

5.1. Socio-demographic characteristics of the participants

A total of 821 participants completed the survey questionnaire for a 97% response rate. The mean age of the respondents was 30.9 years (\pm SD), SD = 6.16, and the age ranged from 15 to 49 years. The educational level of respondents ranged from no formal education to tertiary level, but only (25.2%) had tertiary level education. Two hundred three (24.7%) of the respondents were single and the rest were married. The majority (89.5%) was Orthodox, 25 (3%) and 61 (7.4%) were Protestant and Muslim respectively in religion (Table: 1).

Overall, 96.3% of the study respondents were Amhara, 4 (0.5%) Oromo and 26 (3.2%) were from Agew Awi ethnic group. While the occupational status of respondents was 32.0% gov't employee, 28.7% house wife, 21.7% merchant, 9.0% daily laborer, 7.9% student and 5(0.6%) house servant. The average number of family member of the respondents was 4.2 and ranged from one to ten. Almost a quarter (25.5%) of participants had a monthly household income per number of family member less than 375 Eth. Birr. Only 7 respondents were household heads.

Table 1 Socio-demographic characteristics of the study participants in Debre Markose town woreda, March 2010.

Characteristics	No	%
Age in years		
15-24	231	28.1
25-34	252	30.7
35-49	338	41.2
Educational status		
No formal education	217	26.4
Primary level	197	24.0
Secondary level	200	24.4
Tertiary level	207	25.2
Marital status		
Single	203	24.7
Married	618	75.3
Religion		

Orthodox	735	89.5
Protestant	25	3.0
Muslim	61	7.4
Ethnicity		
Amhara	791	96.3
Oromo	4	0.5
Agew Awi	26	3.2
Occupational status		
Student	65	7.9
House wife	236	28.7
House servant	5	0.6
Daily laborer	74	9.0
Merchant	178	21.7
Gov't employee	263	32.0
Monthly family income (Eth. Birr)		
Less than 375	209	25.5
376-750	197	24.0
751-1125	203	24.7
Greater than 1125	212	25.8
Position in the HH		
Head of the HH	7	0.9
Not head of the HH	814	99.1
Total	821	100.0

Table 2 *Socio demographic characteristics of focused group discussion participants in Debre Markose town woreda, March 2010.*

Characteristic	Category	N	%
Age	15-30 years	19	47.5
	31-49 years	21	52.5
Marital status	Single	19	47.5
	Married	21	52.5
Educational status	No formal education	19	47.5
	Tertiary level education	21	52.5
Monthly family income	< 375 Eth. birr	19	47.5
	≥ 375 Eth. birr	21	52.5
Religion	Orthodox	14	35.0
	Muslim	13	32.5
	Protestant	13	32.5

5.2. Knowledge

5.2.1. Knowledge about cervical cancer

Knowledge of the participants about cervical cancer was low, with only 19.0% had heard about cervical cancer before. Of those who had heard about cervical cancer, 11.5% had heard about it from family members, 16.0% from friends, 56.4% from health workers, 28.8% from media /radio, TV, newspaper, magazine/ and one (0.6%) from other sources of information (Table 3). Among the subjects that had heard of cervical cancer, only 21(13.5%) heard about HPV and from those heard about HPV, 10(47.6%) knew as HPV is the primary cause of cervical cancer and 11(%) knew that HPV is sexually transmitted. Furthermore of those heard of cervical cancer, 66.7% knew cervical cancer as a prevalent female cancer which mostly affects middle-aged or elderly women.

Table 3 Assessment of knowledge on cervical cancer and its preventive measures among women aged 15-49 years in Debre Markose town woreda, March 2010.

Questions related cervical cancer and its prevention methods	Correct answer	No	%	
			n=821	n=156
Heard about cervical cancer.	Yes	156	19.0	100.0
From who heard about cervical cancer?*				
Family members	Yes	18	2.2	11.5
Friends	Yes	25	3.0	16.0
Health workers	Yes	88	10.7	56.4
Mass media /radio, TV, newspaper, magazine . . . /	Yes	45	5.5	28.8
Others (books)	Yes	1	0.1	0.6
Cervical cancer is a prevalent female cancer which mostly affects middle-aged or elderly women.	True	104	12.7	66.7
Heard about HPV.	Yes	21	2.6	13.5
HPV is the primary cause of cervical cancer.	True	10	1.2	6.4
HPV is not sexually transmitted.	False	11	1.3	7.1
Risk factors for cervical cancer other than HPV?*				
Early onset of sexual activity	Yes	65	41.7	7.9
Having multiple sexual partners	Yes	59	37.8	7.2
Low socio economic status	Yes	53	34.0	6.5
Infection with other STIs including HIV	Yes	27	17.3	3.3
Don't know	Yes	22	14.1	2.7
Cigarette smoking	Yes	4	2.6	0.5
Can cervical cancer prevented?	Yes	96	11.7	61.5
Heard about pap smear test.	Yes	70	8.5	44.9

The purpose of Pap smear test is detection or prevention of cervical cancer.	True	44	5.4	28.2
All healthy women aged 21 and above years have no a need to have pap smear test.	False	21	2.6	13.5
Heard about the HPV vaccine (a vaccine to prevent HPV infection).	Yes	21	2.6	13.5

** Not included in the calculation of knowledge scores. And sum of percentages different from 100 due to possibility of more than one answer.*

Findings from the FGDs also showed this low level of knowledge. Cervical cancer risk factors including HPV were not recognised by the majority of the respondents. Most had not ever heard of cervical cancer, but most were heard of cancer in general and they didn't know cervical cancer is a serious and prevalent disease affecting women. Many emphasised the influence of low socio economic status, but the risks posed by HPV infection were unfamiliar to all (except one) of the respondents. A 31 years, who was married and uneducated in formal school said, *"Since we are poor, we hadn't learn and we couldn't take care of our health. Therefore we are at risk of this disease."*

5.2.2. Knowledge about cervical cancer prevention measures

Of those heard of cervical cancer, Only 96 (61.5%) respondents knew that cervical cancer can be prevented. Seventy (44.9%) and 21(13.5%) heard about pap smear test and HPV vaccine respectively. Furthermore, 44 (28.2%) knew the purpose of pap smear test and only 21(13.5%) respondents knew that all healthy women aged 21 and above years should have a need to have pap smear test. The specific responses to the items used to calculate the knowledge score are displayed in Table 3.

5.2.3. Knowledge scores on cervical cancer and its prevention measures

Six hundred sixty five (81%) of the study participants had a knowledge score of zero. The average score on this scale was 0.67 with a mode of 0. Only 44 (5.4%) participants had a score of 5 or more (Table: 4).

Table 4 Knowledge scores on cervical cancer and its preventive measures among women aged 15-49 years in Debre Markose town woreda, March 2010.

Characteristics	n	Knowledge scores							Mean	SD
		0	1	2	3	4	5	8		
Age in years										
15-24	231	208(90.0)	6(2.6)	5(2.2)	5(2.2)	5(2.2)	1(0.4)	1(0.4)	0.28	0.98
25-34	252	203(80.6)	11(4.4)	10(4.0)	7(2.8)	8(3.2)	7(2.8)	6(2.4)	0.66	1.66
34-49	338	254(75.1)	14(4.1)	14(4.1)	14(4.1)	13(3.8)	15(4.4)	14(4.1)	0.96	2.02
Education										
No formal educ.	217	194(89.4)	6(2.8)	6(2.8)	5(2.3)	4(1.8)	2(0.9)	0(0)	0.27	0.89
Primary level	197	166(84.3)	8(4.1)	8(4.1)	6(3.0)	6(3.0)	3(1.5)	0(0)	0.41	1.09
Secondary level	200	165(78.0)	9(4.5)	8(4.0)	7(3.5)	7(3.5)	7(3.5)	6(3.0)	0.79	1.81
Tertiary level	207	149(72.0)	8(3.9)	7(3.4)	8(3.9)	9(4.3)	11(5.3)	15(7.2)	1.24	2.38
Marital status										
Single	203	187(92.1)	1(0.5)	3(1.5)	6(3.0)	2(1.0)	2(1.0)	2(1.0)	0.29	1.13
Married	618	478(77.3)	30(4.9)	26(4.2)	20(3.2)	24(3.9)	21(3.4)	19(3.1)	0.80	1.82
Ethnicity										
Amhara	791	646(81.7)	29(3.7)	29(3.7)	23(2.9)	22(2.8)	22(2.8)	20(2.5)	0.70	1.74
Oromo	4	3(75.0)	0(0)	0(0)	0(0)	1(25.0)	0(0)	0(0)	0.34	1.12
Agew Awi	26	16(61.5)	2(7.7)	0(0)	3(11.5)	3(11.5)	1(3.8)	1(3.8)	0.68	1.31
Religion										
Orthodox	735	593(80.7)	26(3.5)	27(3.7)	25(3.4)	22(3.0)	21(2.9)	21(2.9)	0.65	1.67
Protestant	25	17(68)	4(16.0)	2(8.0)	0(0)	1(4.0)	1(4.0)	0(0)	1.00	2.00
Muslim	61	55(90.2)	1(1.6)	0(0)	1(1.6)	3(4.9)	1(1.6)	0(0)	1.38	2.16
Occupation										
Student	65	52(80.0)	1(1.5)	4(6.2)	4(6.2)	2(3.1)	2(3.1)	0(0)	0.60	1.32

Knowledge, attitude and practice of women of age 15 -49 years towards cervical cancer and preventive measures

House wife	236	192(81.4)	14(5.9)	12(5.1)	9(3.8)	5(2.1)	2(0.8)	2(0.8)	0.47	1.22
House servant	5	5(100.0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0.00	0.00
Daily laborer	74	61(82.4)	1(1.4)	2(2.7)	4(5.4)	1(1.4)	4(5.4)	1(1.4)	0.66	1.62
Merchant	178	144(80.9)	8(4.5)	5(2.8)	2(1.1)	8(4.5)	7(3.9)	4(2.2)	0.69	1.71
Gov't employee	263	211(80.2)	7(2.7)	6(2.3)	7(2.7)	10(3.8)	8(3.0)	14(5.3)	0.88	2.09
Monthly family income (birr)										
< 375	209	188(90.0)	5(2.4)	5(2.4)	4(1.9)	4(1.9)	3(1.4)	0(0)	0.28	0.94
375-750	197	168(85.3)	6(3.0)	6(3.0)	5(2.5)	5(2.5)	4(2.0)	3(1.5)	0.49	1.43
751-1125	203	160(78.8)	8(3.9)	7(3.4)	7(3.4)	8(3.9)	7(3.4)	6(3.0)	0.78	1.81
> 1125	212	149(70.3)	12(5.7)	11(5.2)	10(4.7)	9(4.2)	9(4.2)	12(5.7)	1.14	2.19
Position in HH										
Head	7	5(71.4)	0(0)	0(0)	1(14.3)	0(0)	0(0)	1(14.3)	1.57	3.05
Not head	814	660(81.1)	31(3.8)	29(3.6)	25(3.1)	26(3.2)	23(2.8)	20(2.5)	0.67	1.67
Total	821	665(81.0)	31(3.8)	29(3.5)	26(3.2)	26(3.2)	23(2.8)	21(2.5)	0.67	1.69

Almost all of the respondents of FGDs also did not know as cervical cancer could be prevented and how it could be prevented. Many respondents think cervical cancer, generally cancer, as a deadly disease with absolutely no way to prevent or cure. Most of the respondents asserted that they had no knowledge of the Pap smear test, and majority of them had never even heard of this term. Many believed that the Pap smear is only for married women. Two women aged 18 and 23 years noted that since they were never married or sexually active, they did not need to go for Pap smear tests. None of the respondents were heard of HPV vaccine, a vaccine to prevent cervical cancer. Few respondents think raising socio economic status and education about the disease like HIV/AIDS could prevent cervical cancer. Most of those who had heard of cervical cancer, heard about it from health professionals, even it is true only if they were relative or friends of those health professionals. For example, a 33 years old participant said, “*I had heard about cervical cancer from my husband.*” ... “*He is health officer.*” Another 41 years old participant said, “*You have no chance to talk about any health information with health professionals, unless you have a relative or a friend. Even you are ill and go to a health institution, the health workers doesn't tell you about your health problem. So no one will tell you about cervical cancer. But I heard the name, cervical cancer from medical metshet.*”

Certain characteristics of respondents were examined for association with knowledge scores. These findings are summarized in Table 5. Knowledge scores were significantly different between groups classified by marital status (with mean scores of single = 0.29, married = 0.80, $P = .001$). The participants age (correlation coefficient = 0.159, $P < 0 .001$), educational status (correlation coefficient = 0.183, $P < 0 .001$) and monthly family income (correlation coefficient = 0.193, $P < 0 .001$) were positively correlated with knowledge score. No significant differences were found by religion, occupational status and position in the family.

Table 5 Knowledge on cervical cancer and its preventive measures among women aged 15-49 years by various socio demographic Groupings in Debre Markose town woreda, March 2010.

Variables	Respondents		Knowledge score				F -value (df)	p-value
	No	%	Mean	SD	95% CI			
					LB	UB		
Age in years							11.4 (2, 818)	< 0.001
15-24	231	28.1	0.28	0.98	0.15	0.41		
25-34	252	30.7	0.66	1.66	0.46	0.87		
35-49	338	41.2	0.96	2.01	0.74	1.17		
Educational status							14.4(3, 817)	< 0.001
No formal education	217	26.4	0.27	0.89	0.16	0.39		
Primary level	197	24.0	0.41	1.09	0.26	0.56		
Secondary level	200	24.4	0.79	1.81	0.53	1.04		
Tertiary level	207	25.2	1.24	2.38	0.92	1.57		
Marital status							14.2(1, 819)	< 0.001
Single	203	24.7	0.29	1.13	0.13	0.45		
Married	618	75.3	0.80	1.82	0.66	0.95		
Religion							1.3(2, 818)	0.283
Orthodox	735	89.5	0.70	1.74	0.56	0.83		
Muslim	61	7.4	0.34	1.12	0.06	0.63		
Protestant	25	3.0	0.68	1.31	0.14	0.22		
Ethnicity							2.5(2, 818)	0.086

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Amhara	791	96.3	0.65	1.67	0.53	0.77		
Oromo	4	0.5	1.00	2.00	-2.18	4.18		
Agew Awi	26	3.2	1.38	2.16	0.51	2.26		
Occupational status							1.7(5, 815)	0.137
Student	65	7.9	0.60	1.32	0.27	0.93		
House wife	236	28.7	0.47	1.22	0.31	0.63		
House servant	5	0.6	0.00	0.00	0.00	0.00		
Daily laborer	74	9.0	0.66	1.62	0.29	1.04		
Merchant	178	21.7	0.69	1.71	0.44	0.94		
Gov't employee	263	32.0	0.88	2.09	0.63	1.14		
Monthly family income							10.5(3, 817)	< 0.001
Less than 375 birr	209	25.5	0.28	0.94	0.15	0.41		
375-750 birr	197	24.0	0.49	1.43	0.29	0.69		
751-1125 birr	203	24.7	0.78	1.81	0.53	1.03		
Greater than 1125 birr	212	25.8	1.14	2.19	0.84	1.43		
Position in the HH							2.0(1, 819)	0.159
Head of the HH	7	0.9	1.57	3.05	-1.25	4.39		
Not head of the HH	814	99.1	0.67	1.67	0.55	0.78		

Logistic regression modeling explored the effect of age group, educational status, marital status and monthly family income on knowledge scores (no knowledge: knowledge score = 0 vs. some knowledge: knowledge score >0)

Table 6 Factors associated with knowledge on cervical cancer and its preventive measures among women aged 15-49 years in Debre Markose town woreda, March 2010.

Variables	Knowledge				Crude OR(95% CI)	p-value
	No knowledge		Some knowledge			
	No	%	No	%		
Age in years						
15-24	208	90.0	23	10.0	1	
25-34	203	80.6	49	19.4	2.2 (1.28-3.71)	P = 0.004
35-49	254	75.1	84	24.9	3.0 (1.81-4.91)	P < 0.001
Educational status						
No formal education	194	89.4	23	10.6	1	
Primary level	166	84.3	31	15.7	1.6 (0.88 - 2.81)	0.123
Secondary level	156	78.0	44	22.0	2.4 (1.34 -4.11)	0.002
Tertiary level	149	72.0	58	28.0	3.3 (1.94-5.57)	< 0.001
Marital status						
Single	187	92.1	16	7.9	1	
Married	478	77.3	140	22.7	3.4 (1.99-5.90)	< 0.001
Religion						
Orthodox	593	80.7	142	19.3	1	
Muslim	55	90.2	6	9.8	2.2 (0.93-5.20)	0.740
Protestant	17	68.0	8	32.0	4.3 (1.31-14.18)	0.016
Ethnicity						
Amhara	646	81.7	145	18.3	1	
Oromo	3	75.0	1	25.0	1.5 (0.15-14.38)	0.733
Agew Awi	16	16.5	10	38.5	2.8 (1.24-6.26)	0.531
Occupational status						
Student	52	80.0	13	20.0	1	
House wife	192	81.4	44	18.6	0.9 (0.46-1.83)	0.805

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House servant	5	100.0	0	0.0	0.0 (0.00-)	0.999
Daily laborer	61	82.4	13	17.6	0.9 (0.36-2.00)	0.714
Merchant	144	80.9	34	19.1	0.9 (0.46-1.93)	0.875
Gov't employee	211	80.2	52	19.8	1.0 (0.50-1.94)	0.967
Monthly family income						
Less than 375 birr	188	90.0	21	10.0	1	
375-750 birr	168	85.3	29	14.7	1.5 (0.85-2.81)	0.154
751-1125 birr	160	78.8	43	21.2	2.4 (1.37-4.22)	0.002
Greater than 1125 birr	149	70.3	63	29.7	3.8 (2.21-6.49)	< 0.001
Position in the HH						
Head of the HH	5	71.4	2	28.6	1	
Not head of the HH	660	81.1	154	18.9	0.6 (0.11-3.04)	0.522

Age, educational status and marital status remained as factors of knowledge. Older age (35-49 years) and higher educational level resulted in a decreased probability of not knowledgeable (OR=2.2, 95% CI= 1.28 to 3.6.5, p=0.021) and (OR=2.3, 95% CI= 1.31 to 4.05, p=0.004) respectively. Being single marital status was also a predictor of no knowledge (OR=3.4, 95% CI= 1.92 to 5.86, p < 0.001). Higher monthly family income was also another predictor factor, (OR=3.0, 95% CI= 1.65 to 5.20, p < 0.001), (Table 7).

Table 7 Factors independently associated with knowledge on cervical cancer and its preventive measures among women aged 15-49 years in Debre Markose town woreda, March 2010.

Variables	Knowledge				Adjusted OR(95% CI)	p-value
	No knowledge		Some knowledge			
	No	%	No	%		
Age in years						
15-24	208	90.0	23	10.0	1	
25-34	203	80.6	49	19.4	2.0(1.10-3.33)	0.021
35-49	254	75.1	84	24.9	2.2(1.28-3.65)	0.004
Educational status						
No formal education	194	89.4	23	10.6	1	
Primary level	166	84.3	31	15.7	1.5(0.78-2.60)	0.245
Secondary level	156	78.0	44	22.0	2.0(1.09-3.50)	0.023
Tertiary level	149	72.0	58	28.0	2.3(1.31-4.05)	0.004
Marital status						
Single	187	92.1	16	7.9	1	
Married	478	77.3	140	22.7	3.4(1.92-5.86)	< 0.001
Religion						
Orthodox	593	80.7	142	19.3	1	
Muslim	55	90.2	6	9.8	2.2(0.86-5.56)	0.101
Protestant	17	68.0	8	32.0	0.4(0.12-1.06)	0.069
Monthly family income						
Less than 375 birr	188	90.0	21	10.0	1	
375-750 birr	168	85.3	29	14.7	1.5(0.81-2.78)	0.200
751-1125 birr	160	78.8	43	21.2	2.0(1.13-3.70)	0.017
Greater than 1125 birr	149	70.3	63	29.7	3.0(1.65-5.20)	< 0.001

In line with this, the findings from the FGDs also identified that the younger, uneducated, and single respondents lacked factual information about cervical cancer and its prevention measures when compared to the older, educated, and married respondents respectively.

5.3. Attitude towards cervical cancer preventive measures

Six hundred and sixty (70.0) participants had scores greater than 2 on the Likert scale containing items to measure attitude towards cervical cancer preventive measures. The median score was 3.0 and the mean score was 3.16 (95 CI = 3.11 to 3.21). The specific responses to the items used to calculate the attitude score are displayed in Table 8. Even though, respondents had a better attitude score on the subscale related to HPV vaccine, (median score 4.33 and mean score 4.15, 95 % CI = 4.11 to 4.19).

Table 8 Assessment of attitude towards cervical cancer preventive measures among women aged 15-49 years in Debre Markose town woreda, March 2010.

Items to measure attitude towards cervical cancer preventive measures	Attitude score									
	1		2		3		4		5	
	N	%	N	%	N	%	N	%	N	%
Subscale - I: Attitude towards pap smear test										
Early knowing of HPV infection is beneficial. (After getting standard information)	1	0.1	305	37.1	371	45.2	45	5.5	99	12.1
As pap smear test is used to early detect and treat cervical cancer, it is important to prevent and control cervical cancer (After getting standard information)	0	0	370	45.01	311	37.9	54	6.5	86	10.5
All healthy and sexually active women should have regular pap smear test to prevent cervical cancer is a good idea (After getting standard information)	370	45.1	307	37.4	23	2.8	38	4.6	83	10.1
Do you encourage your sister/s and other female relatives to have the pap smear test? (After getting standard information)	326	39.7	363	44.2	19	2.3	42	5.2	71	8.6
Subscale - II: Attitude towards HPV vaccine										
Vaccination helps to raise the body's ability to fight against infections.*	0	0	0	0	0	0	0	0	821	100.0
As HPV vaccine is a vaccine against HPV infection, having this vaccine is beneficial to prevent and control cervical cancer.	0	0	0	0	0	0	15	1.8	806	98.2
If there is a plan for HPV vaccine introduction by MOH whereby girls aged 9-26 years would	0	0	0	0	0	0	673	82.0	148	18.0

receive 3 doses of the vaccine via her school or the health extension worker, The introduction of HPV vaccination is a good idea to prevent cervical cancer.

The introduction of HPV vaccination is necessary to prevent cervical cancer. 246 30.0 0 0 0 0 427 52.0 148 18.0

** Not included in the calculation of attitude score, since constant value for all respondents.*

Almost all of the respondents of FGDs were supportive of cervical cancer prevention measures. Almost all of the respondents said that they were unaware of about their risk to have cervical cancer and as there is a possibility to prevent it. One participant explained it this way: *“I don’t know cervical cancer before, and also I don’t know if there is a risk that I could have it. So, now if there is a possibility to prevent it, I am happy to have Pap smear test and the vaccine.”* And when asked why, she said, *“I knew that Prevention is better than treatment. It costs less and saves time. Prevention is better than waiting until you get disease and die.”* However participants were more supportive of HPV vaccine than Pap smear test. The main reason was their knowledge to vaccination was high. Most participants said that they were aware of vaccines through contact with the government universal immunization program. One mother put it this way; *“Nobody wants their daughters to be sick. If they knew the vaccine is available, they would have their daughters vaccinated.”*

Table 9 Attitude scores towards cervical cancer preventive measures among women aged 15-49 years, in Debre Markose town woreda, March 2010.

Characteristics	n	Attitude scores									mean	SD
		2.6	3.0	3.3	3.4	3.9	4.3	4.4	4.7	5.0		
Age in years												
15-24	231	67(29.0)	137(59.3)	0(0)	6(2.6)	1(0.4)	6(2.6)	1(0.4)	6(2.6)	7(3.0)	3.04	0.56
25-34	252	61(24.2)	141(56.0)	0(0)	11(4.4)	1(0.4)	10(4.0)	0(0)	7(2.8)	21(8.3)	3.18	0.71
34-49	338	118(34.9)	136(40.2)	6(1.8)	8(2.4)	0(0)	14(4.1)	0(0)	14(4.1)	42(12.4)	3.24	0.84
Education												
No formal edu.	217	45(20.7)	146(67.3)	0(0)	6(2.8)	2(0.9)	6(2.8)	1(0.5)	5(2.3)	6(2.8)	3.07	0.53
Primary level	197	98(49.7)	68(34.5)	0(0)	8(4.1)	0(0)	8(4.1)	0(0)	6(3.0)	9(4.6)	3.00	0.66
Secondary level	200	57(28.5)	98(49.0)	0(0)	9(4.5)	0(0)	8(4.0)	0(0)	8(4.0)	20(10.0)	3.22	0.77
Tertiary level	207	46(22.2)	102(49.3)	6(2.9)	2(1.0)	0(0)	8(3.9)	0(0)	8(3.9)	35(16.9)	3.37	0.87
Marital status												

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Single	203	67(33.0)	119(58.6)	0(0)	1(0.5)	1(0.5)	3(1.5)	0(0)	6(3.0)	6(3.0)	2.99	0.54
Married	618	179(29.0)	295(47.7)	6(1.0)	24(3.9)	1(0.2)	27(4.4)	1(0.2)	21(3.4)	64(10.4)	3.22	0.78
Ethnicity												
Amhara	791	244(30.8)	398(50.3)	5(0.6)	24(3.0)	1(0.1)	30(3.8)	1(0.1)	24(3.0)	64(8.1)	3.15	0.72
Oromo	4	0(0)	3(75.0)	0(0)	0(0)	0(0.0)	0(0)	0(0)	0(0)	1(25.0)	3.50	1.00
Agew Awi	26	2(7.7)	13(50.0)	1(3.8)	1(3.8)	1(3.8)	0(0)	0(0)	3(11.5)	5(19.2)	3.61	0.91
Religion												
Orthodox	735	226(30.7)	362(49.3)	4(0.5)	22(3.0)	2(0.3)	28(3.8)	1(0.1)	26(3.5)	64(8.7)	3.17	0.75
Protestant	25	0(0)	17(68.0)	1(4.0)	3(12.0)	0(0)	2(8.0)	0(0)	0(0)	2(8.0)	3.33	0.64
Muslim	61	20(32.8)	35(57.4)	1(1.6)	0(0)	0(0)	0(0)	0(0)	1(1.6)	4(6.6)	3.02	0.23
Occupation												
Student	65	19(29.2)	32(49.2)	0(0)	1(1.5)	1(1.5)	4(6.2)	0(0)	4(6.2)	4(6.2)	3.20	0.75
House wife	236	37(30.9)	119(50.4)	1(0.4)	13(5.5)	0(0)	12(5.1)	0(0)	9(3.8)	9(3.8)	3.10	0.64
House servant	5	2(40.0)	3(60.0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	2.83	0.23
Daily laborer	74	22(29.7)	38(51.4)	0(0)	1(1.4)	0(0)	3(4.1)	0(0)	4(5.4)	6(8.1)	3.19	0.76
Merchant	178	54(30.3)	89(50.0)	3(1.7)	5(2.8)	1(0.6)	5(2.8)	0(0)	2(1.1)	19(10.7)	3.16	0.74
Gov't employee	263	76(28.9)	133(50.6)	2(0.8)	5(1.9)	0(0)	6(2.3)	1(0.4)	8(3.0)	32(12.2)	3.22	0.80
Monthly family income (birr)												
< 375	209	60(28.7)	124(59.3)	0(0)	5(2.4)	1(0.5)	6(2.9)	1(0.5)	5(2.4)	7(3.3)	3.04	0.57
375-750	197	47(23.9)	121(61.4)	0(0)	6(3.0)	0(0)	6(3.0)	0(0)	5(2.4)	12(6.1)	3.12	0.64
751-1125	203	73(36.0)	86(42.4)	0(0)	8(3.9)	1(0.5)	7(3.4)	0(0)	7(3.4)	21(10.3)	3.18	0.79
> 1125	212	66(31.1)	83(39.2)	6(2.8)	6(2.8)	0(0)	11(5.2)	0(0)	10(4.7)	30(14.2)	3.32	0.87
Position in HH												

Head	7	0(0)	5(71.4)	0(0)	0(0)	0(0)	0(0)	0(0)	1(14.3)	1(14.3)	3.53	0.91
Not head	814	246(30.0)	409(50.2)	6(0.7)	25(3.1)	2(0.2)	30(3.7)	1(0.1)	26(3.2)	69(8.5)	3.16	0.73
Total	821	246(30.0)	414(50.4)	6(0.7)	25(3.1)	2(0.2)	30(3.7)	1(0.1)	27(3.3)	70(8.5)	3.16	0.73

Association of attitude scores with socio-demographic characteristics and knowledge score of respondents was examined. Attitude was significantly differed by educational groups (correlation coefficient = 0.172, $P = 0.001$); marital status (mean attitude score 3.0 for single and 3.2 for married, $p < 0.001$); age groups (mean attitude score 3.11, 3.27 and 3.33 for 15-24, 25-34 and 35-49 years respectively, $p = 0.004$); and monthly family income religion (with mean attitude score 2.97 for income <375 , 3.03 for 375-750, 3.07 for 751-1125 and 3.20 for >1125 birr, $p=0.001$). Attitude did not differ significantly by religion, occupational status, ethnic groups and position in the family (Table 10). Knowledge was also significantly associated with attitude scores, (correlation coefficient = 0.741, $P < 0.001$).

Table 10 Attitude scores on cervical cancer and its preventive measures among women aged 15-49 years in Debre Markose town woreda, March 2010.

Variables	Respondents		Attitude score				F -value (df)	p-value
	No	%	Mean	SD	95% CI			
					LB	UB		
Age in years							5.45(2,818)	0.004
15-24	231	28.1	3.04	0.56	2.96	3.11		
25-34	252	30.7	3.18	0.71	3.10	3.27		
35-49	338	41.2	3.24	0.84	3.15	3.33		
Educational status							10.78(3,817)	< 0.001
No formal education	217	26.4	3.07	0.53	2.10	3.14		
Primary level	197	24.0	3.00	0.66	2.90	3.09		
Secondary level	200	24.4	3.22	0.77	3.11	3.33		
Tertiary level	207	25.2	3.37	0.87	3.25	3.49		
Marital status							14.88(1,819)	< 0.001
Single	203	24.7	2.99	0.54	2.92	3.07		
Married	618	75.3	3.22	0.78	3.16	3.28		
Religion							1.76(2,818)	0.172

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Orthodox	735	89.5	3.15	0.72	3.12	3.22		
Muslim	61	7.4	3.50	1.00	3.07	3.58		
Protestant	25	3.0	3.61	0.91	2.87	3.18		
Ethnicity							5.48(2, 818)	0.068
Amhara	791	96.3	3.17	0.75	3.09	3.20		
Oromo	4	0.5	3.33	0.64	1.90	5.09		
Agew Awi	26	3.2	3.02	0.23	3.24	3.98		
Occupational status							0.90(5,815)	0.482
Student	65	7.9	3.20	0.75	3.02	3.39		
House wife	236	28.7	3.10	0.64	3.02	3.18		
House servant	5	0.6	2.83	0.23	2.54	3.12		
Daily laborer	74	9.0	3.19	0.76	3.01	3.36		
Merchant	178	21.7	3.16	0.74	3.05	3.27		
Gov't employee	263	32.0	3.22	0.80	3.12	3.31		
Monthly family income							5.39(3,817)	0.001
Less than 375 birr	209	25.5	3.04	0.57	0.04	2.97		
375-750 birr	197	24.0	3.12	0.64	0.05	3.03		
751-1125 birr	203	24.7	3.18	0.79	0.06	3.07		
Greater than 1125 birr	212	25.8	3.32	0.87	0.06	3.20		
Position in the HH							1.76(1,819)	0.185
Head of the HH	7	0.9	3.53	0.91	2.69	4.37		
Not head of the HH	814	99.1	3.16	0.73	3.11	3.21		

The effects of age, educational status, religion, ethnic group, marital status, income and cervical cancer related knowledge on attitude to preventive measures of cervical cancer (negative, median score < 3 vs. not negative, median score \geq 3) are summarized in Table: 10.

Table 11 Factors associated with attitude towards cervical cancer preventive measures among women aged 15-49 years, in Debre Markose town woreda, March 2010.

Variables	Attitude				Crude OR(95% CI)	p-value
	Negative		Positive			
	No	%	No	%		
Age						
15-24	67	29.0	164	71.0	1	
25-34	61	24.2	191	75.8	1.2(0.85-1.92)	0.233
35-49	118	34.9	220	65.1	0.8(0.53-1.09)	0.140
Educational status						
No formal education	45	20.7	172	79.3	1	
Primary level	98	49.7	99	50.3	0.3(0.17-0.41)	0.710
Secondary level	57	28.5	147	71.5	0.6(0.42-1.03)	0.666
Tertiary level	46	22.2	157	77.8	0.9(0.58-1.46)	< 0.001
Marital status						
Single	67	33.0	136	67.0	1	
Married	179	29.0	439	71.0	1.2(0.86-1.70)	0.276
Religion						
Orthodox	226	30.7	509	69.3	1	
Muslim	20	32.8	41	67.2	7.7(0.00-)	0.998
Protestant	0	0.0	25	100.0	0.9(0.52-1.59)	0.741
Ethnicity						
Amhara	244	30.8	547	69.2	1	
Oromo	0	0.0	4	100.0	0.7(0.00-)	0.999
Agew Awi	2	7.7	24	92.3	5.4(1.26-22.83)	0.053
Monthly family income						
<375	60	28.7	119	71.3	1	

375-750	47	23.9	150	76.1	1.3(0.82-2.00)	0.268
751-1125	73	36.0	130	64.0	0.7(0.47-1.08)	0.116
>1125	66	31.1	146	68.9	0.9(0.58-1.35)	0.587

The significant predictor of having a positive attitude towards preventive measures was tertiary level education (OR = 0.9, 95CI = 0.17 to 0.41, p < 0.001).

Table 12 Factors independently associated with attitude towards cervical cancer preventive measures among women aged 15-49 years, in Debre Markose town woreda, March 2010.

Variables	Attitude				Adjusted OR(95% CI)	p-value
	Negative		Positive			
	No	%	No	%		
Educational status						
No formal education	45	20.7	172	79.3	1	
Primary level	98	49.7	99	50.3	0.3(0.17-0.41)	0.721
Secondary level	57	28.5	147	71.5	0.7(0.42-1.03)	0.071
Tertiary level	46	22.2	157	77.8	0.9(0.58-1.46)	< 0.001

The results from the FGDs showed that there is attitude difference between groups of different educational level. Educated participants were more supportive of cervical cancer prevention measures as compared to those no formal education. But no difference was observed among groups by age, religion and income.

5.4. Practices on Pap smear test

Only 8 (0.97%) participants had had a Pap smear test. Of those, who had pap smear test done, only 1 (12.5%) had a pap test more than one times and the rest 7(87.5%) had once. Those respondents, who had not had pap test, indicated 797(98.0) lack of information about cervical cancer and its prevention measures, 21(2.6%) no access to Pap smear test service, 4(0.5%) discouraged by partner or others, 2(0.2%) fear of the procedure, 1(0.1%) religious reason, 1(0.1%) were not ill and 1(0.1%) others, as their reasons not to had pap smear test. Among those who heard about the Pap smear test (n=70), 62(88.6%) respondents did not have the test done mainly because of personal factors such as lack of information about cervical cancer and its prevention measures 46(65.7%), no access to Pap smear test service 21(30%), discouraged by

partner or others 4(05.7%), fear of the procedure 2(2.9%), religious reason 1(1.4%) and 1(1.4%) others.

Table 13 Assessment of practice of Pap smear test among women aged 15-49 years, in Debre Markose town woreda, March 2010.

Variables	N	n = 70	n = 821
Ever had a Pap smear done	8	11.4	1.0
How many times had a Pap smear done			
Once	7	87.5	0.9
More than two times	1	12.5	0.1
Reasons given for not doing Pap smear			
Lack of information about cervical cancer and its prevention measures	797	65.7	98.0
Fear of the procedure	2	2.9	0.2
Religious reasons	1	1.4	0.1
I'm not ill so it's not necessary	1	1.4	0.1
Discouraged by partner or others	4	5.7	0.5
No access to institution where Pap smear is done	21	30.0	2.6
Other reasons	1	1.4	0.1

Supporting this, none of the participants of all FGDs ever had Pap smear test done. Most of the participants put lack of knowledge about Pap smear as their reason not to have the test. For example, a 33 years old participant said, *“I have not heard of it and that’s why I had not it. We have discussed as there was not enough education, information, or service. ... If people do not know and are not clear, they may not be willing to do it until they have the information.”*

CHAPTER SIX: DISCUSSIONS

This study assessed knowledge, attitudes and practice towards cervical cancer and its prevention measures and the findings showed that the majority of participants had little awareness of cervical cancer, HPV, Pap smear test and HPV vaccination. This is almost similar with finding of a study done among women of age 16-54 years in UK, (81.0%) (6). Knowledge of the participants about cervical cancer was low, with only 19.0 had heard about cervical cancer before, 12.7 % knew cervical cancer as a prevalent female cancer which mostly affects middle-aged or elderly women and only 21(2.6%) heard about HPV. Very few, 11(1.3%) knew that HPV is sexually transmitted and 10(1.2%) knew as HPV is the primary cause of cervical cancer.

The majority of participants were unaware of important information about HPV infection. In general, respondents were unaware of HPV infection and its link to cervical cancer which is lower than findings in the United Kingdom, (24.2%) aware of HPV and only 2.5% cited HPV as the cause of cervical cancer (30). Findings are somewhat better than the earliest study of HPV knowledge of women ages 18 to 65 living in the U.S., that found that 13% had ever heard of HPV and only 8 of them knew that it was associated with cervical cancer (1992) (44); however, lower than another similar study after 8 years, which found that only 28% had ever heard of HPV and only 41% of those knew that HPV infection associated with cervical cancer (45). The findings of this study are by far less than findings of recent studies, about 40% of American women aged 18–75 years have heard about HPV and of these women, only 20% were aware that it can cause cervical cancer (8) and another recent study on the general population of US, 96.3% of the participants have heard about HPV, 84 % were aware that it can cause cervical cancer and a substantial proportion (74%) knew that HPV was sexually transmitted, 2/3 of the participants knew that the incidence of HPV infection is highest among women in their 20 s and 30 s (28). The difference in knowledge levels between early and recent findings of similar studies may due to efforts to raised awareness of the public and wide spreading of screening services, which showed the effect of interventions done on increasing the knowledge level of the community studied (8). One possible explanation for the differences in reported findings between other studies and this study is that the majority of participants in our study consisted of participants with low educational status however the mentioned studies consisted of participants some post-secondary education. Furthermore, socio-economic differences between countries where the studies conducted may also be another explanation for the differences.

Cervical cancer risk factors were recognised by less than 10% of the respondents. Almost all FGD participants emphasised the influence of low socio economic status as risk factor for most diseases including cervical cancer, which affect women health. The findings are almost less than half of the findings of a study in UK which reported that 28% of respondents identified: multiple sexual partners (14%), Sex at a young age (7%), not using condoms (3%), other sexually transmitted diseases (wart virus, genital warts, herpes, Chlamydia and HIV/AIDS) (2%) and smoking (7%) (30).

Overall, findings of this study showed that the knowledge of respondents about prevention of cervical cancer was low. Only 96 (11.7%) respondents knew as cervical cancer can be prevented. Seventy (8.5%) and 21(2.6%) heard about pap smear test and HPV vaccine respectively. As findings of the qualitative part of this study, participants think cervical cancer, generally cancer, as a deadly disease with absolutely no way to prevent or cure. The respondents asserted that they had no knowledge of the Pap smear test, and majority of them had never even heard of this term. Many of those heard of it could not explain what a Pap smear test was, despite saying that they knew about it. Of those who knew of the existence of the Pap smear, their understanding of the purpose of the test was poor. Many believed that the Pap smear is only for married women. These low levels of knowledge are very much lower, and are not surprising given that there is no wide coverage of cervical cancer preventions like screening tests and awareness creation interventions (12).

Women reported hearing of cervical cancer related information through different sources but overwhelmingly through health workers (56.4%). This is likely due to the absence of awareness creation activities other than opportunistic conditions, even as it was raised in FGDs; it is true only if they were relative or friends of those health professionals. And although HPV is the most common STI in the Ethiopia (12, 17), most infections are transient; thus, most women probably do not receive treatment and therefore miss an opportunity to learn about the infection from a health care provider.

These data suggest that although generally low, there were differences in the level of knowledge based on some socio-demographic factors. Consistent with studies in other countries (6, 8, 13, 19) age, educational level, marital status, and monthly family income was predictor variables for knowledge about cervical cancer and its preventive measures. Knowledge scores were higher in older age groups (35-49 years), they were 2.2 times likely to have knowledge than younger, and women with higher educational level (tertiary level) were 2.3 times likely to have cervical cancer related knowledge when compared to those who have no formal education. Married women also 3.4 times likely to be knowledgeable than women of single marital status, and in the higher monthly family income groups the probability of being knowledgeable was 3.0 times likely than the lower (monthly family income) group.

Nevertheless, after the provision of brief cervical cancer related information messages, most (70%) participants were supportive of Pap smear test and HPV vaccination with mean attitude scores (2.4) and (4.2) respectively. These findings are in accordance with previous studies (6, 8, 28), which have demonstrated that people generally know little about HPV, but after the provision of information, most support pap smear test as well as the introduction of the vaccine and re-enforce the need for educational intervention in order to raise awareness. Moreover, in this study respondents had higher attitude score towards HPV vaccine than Pap smear test. This may be because of the familiarity of the community about the benefits of vaccination in general, since as the result of this study showed, all of the participants strongly agreed on the item,

vaccination increases the body's ability to prevent infections. Many participants of FGDs also expressed the notion that prevention was preferable to treatment and saw vaccines as an investment in their child's future, one mother put it this way; *"Nobody wants their daughters to be sick. If they knew the vaccine is available, they would have their daughters vaccinated."*

However the participants were generally supportive of cervical cancer prevention measures, age, marital and educational status and monthly family income were associated with attitude. But only educational level was a predictor variable of attitude, women with tertiary level education was 0.9 times less likely to have negative attitude as compared to those women with no formal education.

Among those who heard about the Pap smear test and were supportive of the test, the majority 62(88.6%) respondents did not have the test mainly because of lack of information about cervical cancer and its prevention measures 46(65.7%), no access to Pap smear test service 21(30%), and other personal factors. This is very much lower than previous studies done in US and UK (36-38), even much lower than study in South Africa, which found that of those who knew about the Pap smear test, 61.1% respondents had not had the test because of personal factors such as fear of the procedure, cultural or religious reasons, and were not ill (29). And this finding is almost similar with findings of Ethiopian national health survey result, only 0.6% of the respondents had had pap smear test done (46). This indicates a low level of knowledge of cervical cancer and utilization of the Pap smear test. As many quantitative and qualitative studies showed the low knowledge of the Pap smear test could thus be due to a low level of knowledge of the benefits of the test and prevention of cervical cancer this in turn coupled with low coverage /or absence of Pap smear test service may causes low practice of pap smear test done (29, 32, 36-38). This has been also strengthened by qualitative part of this study, for example, a 33 years old participant said, *"I have not heard of it and that's why I had not it. We have discussed as there was not enough education, information, or service. ... If people do not know and are not clear, they may not be willing to do it until they have the information."*

Strength and limitations of the study

Strength of the study

1. Using both qualitative and qualitative-triangulation

Limitations of the study

1. Due to the absence of similar studies in Ethiopia the discussion was only with studies in other countries. However, earlier literatures, which were conducted before cervical cancer prevention initiatives took part, had been included in the discussion.
2. Another possible limitation was that the prompted question format probably encouraged guessing; however, nothing in the literature suggests that guessing is differential across socio

demographic groups. Therefore, the bias due to this possible limitation was probably underestimated the magnitude of the patterns of associations.

3. Knowledge cut off points may not be perfect in different set up to compare and contrast the finding.

CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

7.1. Conclusions

The findings indicate that awareness about cervical cancer and its prevention measures among women of reproductive age is low. Women were not aware of the high prevalence of HPV and the link between cervical cancer and HPV and lack knowledge of the purpose and indications of the cervical smear test and HPV vaccine.

There were differences in the level of knowledge based on women's socio demographic characteristics, level of knowledge was low, especially among those who are younger, less educated, and low monthly family income.

The study confirms that there is a lack of information or access to information about cervical cancer and its prevention measures. Nevertheless, it appears that a significant number of women would be agreeable to HPV testing and vaccination after the provision of the quite simple messages.

This paper has showed the reasons why most women did not had Pap smear test, and has highlighted how low levels of awareness, coupled with women's lack of knowledge of the purpose and indications of the cervical smear as main reasons not to have the test. Public understanding of cervical cancer, the high prevalence of HPV, the link between cervical cancer and HPV is necessary to ensure informed consent for vaccination and testing which in turn requires a need for educational programmes.

7.2. Recommendations

- **To Federal MOH and partners:**

- ✓ There should be an intervention to provide women with authoritative information on cervical cancer, HPV infection, Pap smear /screening/ tests and HPV vaccination to increase their understanding of why action needs to be taken to prevent the disease.
- ✓ A first step in addressing this low level of awareness should be to identify women least likely to have knowledge on cervical cancer and prevention measures and to develop clear and appropriate messages for them.
- ✓ Hence, health education initiatives should include specific efforts to reach younger, less educated, and low monthly family income, in general lower socio economic groups, who have the lowest awareness but are at greatest risk.

- **To Health Care Providers**

- ✓ Health care services and other agencies should have to play a more active role in publicising, educating and informing women on HPV and potential value of HPV test and vaccination.

- **To Researchers**

- Further work is required:
 - ✓ To study this topic in a wider scale (national level).
 - ✓ To look at other factors related to: the health service system, health professionals, and strategies to prevent and control the disease in Ethiopia.

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ANNEX

ANNEX 1

ENGLISH QUESTIONNAIRE

QUESTIONNAIRE TO ASSES AWARENESS, ATTITUDE AND EXPERIENCE OF WOMEN OF AGE 15 AND ABOVE YEARS TOWARDS CC AND ITS PREVENTIVE MEASURES IN DEBRE MARKOSE TOWN WOREDA

INTRODUCTION:

Greeting: Good morning / Good afternoon?

My name is ----- . I am working as data collector in a survey conducted by the college of Public Health and Medical science, Jimma University. We are interviewing women here about cervical cancer and its prevention measures related knowledge, attitude, and experience in order to generate information necessary for the planning of appropriate strategies (interventions) to prevent cervical cancer in the town and the country. To attain this purpose, your honest and genuine participation by responding to the questions prepared is very important & highly appreciated.

CONFIDENTIALITY AND CONSENT

We would like you to answer some personal questions that some people may find it difficult to answer. Your answers are completely confidential. Your name will not be written on this form. The nurses, doctors, and other people will not be told what you said in connection to your name. You do not have to answer any question if you don't want to and you can stop the interview at any time. However your honest answer to these questions will help us to better understand of the experience of mothers related to cervical cancer and its prevention measures. We would greatly appreciate your help in responding to this study. The interview will take about 20 - 30 minutes. Would you be willing to participate?

If yes, proceed and if no, thank and stop here.

_____ (Signature of interviewer certifying that respondent has given informed consent verbally)

SECTION 0: QUESTIONNAIRE IDENTIFICATION DATA

001 Questionnaire identification number _____

002 Region: _____

003 Woreda: _____

004 City: _____

005 Kebele: _____

006 Household Number: _____

007 No of visits (use the following table)

	Visit 1	Visit 2	Visit 3
Date			
Interviewer			
Result			

008 Visit Result _____

Completed _1

Not at home _2

Refused _3

Partially completed_ 4

Other (specify)_____ 5

CHECKED BY SUPERVISOR

Name _____ Signature _____ Date _____

009 Interviewer's: code _____ name _____

010 Supervisor's: code _____ name _____

011 Date of interview: _______________ day\ month\ year

SECTION I: SOCIO-DEMOGRAPHIC CHARACTERSTICS

No.	Questions	Coding categories	Skip to
101	How old are you? (Probe for best estimate)	_____ Years	
102	What is the highest education level you completed?	Unable to read & write 88 Able to read & write 99 Grade completed_____	
103	What is your current marital status?	Single1 Married 2 Divorced 3 Widowed 4 Separated 5	

104	What is your religion?	Orthodox 1 Protestant 2 Catholic 3 Muslim 4 Other (describe)_____ 5	
105	What ethnic do you belong to?	Amhara 1 Oromo 2 Agew Awi 3 Gurrage 4 Others (describe) _____ 5	
106	What is your current occupation?	Student 1 Housewife 2 House servant 3 Daily laborer 4 Merchant 5 Government Employee 6 Private employee 7 Other (specify) _____ 8	
107	What is your total monthly family income (approximately)?	_____Eth. Birr Don't know 88 No response 99	
108	What is the total number of the members of the household?	No of members of house hold _____	
109	Are you the head of the house hold?	Yes 1 No 2	If 1, Skip to Q. 111
110	What is your relation to the head of the household?	Wife (one only) 1 Wife (one among several) 2 daughter 3 house (maid) servant 4 other (specify)_____ 5	

SECTION II: KNOWLEDGE TOWARDS CERVICAL CANCER AND ITS PREVENTIVE MEASURES

No.	Questions	Coding categories	Skip to
201	Have you heard about cervical cancer?	Yes 1 No 2	If 2, Skip to Q. 301
202	From whom did you hear about cervical cancer?	Family members 1 Friends 2 Health worker 3	

		Mass media /radio, TV, newspaper, magazine/ 4 Others (specify)_____ 5	
203	Cervical cancer is a prevalent female cancer which mostly affects middle-aged or elderly women.	Yes 1 No 2 Don't know 3	
204	Have you heard about HPV?	Yes 1 No 2	If 2, Skip to Q. 208
205	From whom did you hear about HPV?	Family members 1 Friends 2 Health worker 3 Mass media /radio, TV, newspaper, magazine/ 4 Others (specify)_____ 5	
206	HPV is the primary cause of cervical cancer.	True 1 False 2 Don't know 3	
207	HPV is not sexually transmitted	True 1 False 2 Don't know 3	
208	What are the risks of cervical cancer	Early onset of sexual activity 1 Multiple sexual partners 2 Smoking 3 HPV 4 Low socio economy 5 Infection with other sexually transmitted infections (STIs), including 6 Do not know 7 Long-term use of oral contraceptives 8 Others_____ 9	
209	Can cervical cancer be prevented?	Yes 1 No 2 Don't know 3	
210	Have you heard about Pap smear test?	Yes 1 No 2	If 2, Skip to Q.214
211	From whom did you hear about Pap smear test?	Family members 1 Friends 2 Health worker 3 Mass media /radio, TV, newspaper,	

		magazine/ 4 Others (specify)_____ 5	
212	The purpose of Pap smear test is detection or prevention of cervical cancer.	True 1 False 2 Don't know 3	
213	All healthy women aged 21 and above years have no a need to have pap smear test.	True 1 False 2 Don't know 3	
214	Have you heard about the HPV vaccine (a vaccine to prevent HPV infection)?	Yes 1 No 2	If 2, Skip to Q. 301
215	From whom did you hear about HPV vaccine?	Family members 1 Friends 2 Health worker 3 Mass media /radio, TV, newspaper, magazine/ 4 Others (specify)_____ 5	

SECTION III: ATTITUDE AND EXPERIANCE TOWARDS CERVICAL CANCER PREVENTIVE MEASURES

No.	Questions	Coding categories	Skip to
301	Early knowing of HPV infection is beneficial.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	
302	As pap smear test is used to early detect and treat cervical cancer, it is important to prevent and control cervical cancer.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	
303	All healthy and sexually active women should have regular pap smear test to prevent cervical cancer is cancer is a good idea.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	
	Do you encourage your sister/s and other female relatives to have the pap smear test?	Strongly disagree 1 disagree 2	

304		No opinion 3 agree 4 Strongly agree 5	
305	Have you ever had a Pap smear test?	Yes 1 No 2	
306	If yes, for Q 305, how many times?	Once 1 Twice 2 Three and above times 3	
307	If no, for Q 305, what is/are your reasons not to have a Pap smear test?	Lack of information about cervical cancer and its preventive measures 1 Fear of the procedure 2 Cultural reasons 3 Religious reasons 4 I'm not ill so it's not necessary 5 Discouraged by partner or others 6 No access to Pap smear test service 7 Others(specify)_____ 8	
308	Vaccination helps to raise the body's ability to fight against infections.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	
309	As HPV vaccine is a vaccine against HPV infection, having this vaccine is beneficial to prevent and control cervical cancer.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	
310	If there is a plan for HPV vaccine introduction by MOH whereby girls aged 9-26 years would receive 3 doses of the vaccine via her school or the health extension worker, The introduction of HPV vaccination is a good idea to prevent cervical cancer.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	
311	If there is a plan for HPV vaccine introduction by MOH whereby girls aged 9-26 years would receive 3 doses of the vaccine via her school or the health extension worker, The introduction of HPV vaccination is necessary to prevent cervical cancer.	Strongly disagree 1 disagree 2 No opinion 3 agree 4 Strongly agree 5	

That is the end of our questionnaire. Thank you very much for taking time to answer these questions. We very much appreciate your help!!

Cervical cancer related information given to the participants

- Cervical cancer is a prevalent female cancer mostly affects middle-aged or elderly women. Each year there are over 7619 new cases of cervical cancer and 6081 cervical cancer related deaths in Ethiopia. Risk factors for cervical cancer includes:
 - Having multiple sexual partners increases the risk of cervical cancer.
 - Early onset of sexual activity
 - Multiple sexual partners
 - Smoking
 - HPV infection
 - Low socio economy
 - Infection with other sexually transmitted infections (STIs), including HIV/AIDS
 - Long term use of oral contraceptives
- Most cervical cancer is caused by HPV infection.
 - HPV infection is very common with over 50 of people being exposed to the virus at some stage in their life. This may lead to cervical cancer if it is not picked up early on Pap smear.
 - HPV is a sexually transmitted infection that can affects both males and females.
- Cervical cancer can be prevented
- The prevention methods for cervical cancer include:
 - Avoidance of risk factors discussed above.
 - ✓ Regular cervical cancer screenings with the Pap smear test (a test for early detection of HPV infection and then detection or prevention of cervical cancer).
 - All sexually experienced women aged 21 years or above should have to have regular cervical cancer screening with the Pap smear test.
 - ✓ Getting the new HPV vaccine
 - The vaccine which protects against HPV infection.
 - HPV vaccination raises the body's immunity against high-risk HPV. As a result, the risk of cervical cells being infected and subsequently developing into cervical cancer is lowered.
 - The HPV vaccination will be given to female age between 9 – 26 years.

ANNEX 2

ENGLISH FGD GUIDE

INTRODUCTION

Good morning/afternoon! Well come to our group discussion.

My name is ----- and I work for ----- & I come from -----.
We are here today to discuss a bout cervical cancer and its preventive measure in order to generate information necessary for the planning of appropriate strategies (interventions) to prevent cervical cancer in the town and the country. To attain this purpose, your honest and genuine participation in the discussion is very important & highly appreciated. There is no right or wrong answers. All comments, both positive and negative, are well come. We would like to have many points of view. We want this to be a group discussion, so you need not wait for me to call on you. In order not to miss any points of the discussion, we will be using a tape recorder. Please, speak one at a time so that the tape recorder can pick up everything. We would like to confirm to you that all your comments are confidential and used for research purpose only. Your names will not be recorded to protect your confidentiality. Are you willing to participate in the discussion? If yes,

Thank you for your willingness.

Specific research questions (points of discussion) are arranged under 4 major headings.

- These are:
- 1) Knowledge about Cervical cancer.
 - 2) Knowledge cervical cancer prevention measures.
 - 3) Attitude towards cervical cancer prevention measures.
 - 4) Practice towards Pap smear test.

1) Knowledge about Cervical cancer.

❖ Have you heard about cervical cancer?

Probe:

- What is cervical cancer?
- What are its causes?
- From whom did you hear about cervical cancer?

- What are the risk factors?
- Who can become infected with HPV?
- Is there a problem regarding HPV/CC in your community in general?

Probe:

- How far is the community aware of the disease?
- Who are more affected? (Age, sex, occupation, or behavior difference)

2) Knowledge about cervical cancer prevention measures.

- ❖ Can cervical cancer be prevented?

Probe:

- How?
- What are the prevention methods? (Behavior, pap smear test, HPV vaccine...)?
- How they prevent?
- Who is eligible for each method?

Probe:

- For pap smear test: Sex? Age? Why? Infection status/HPV infected or not? When (age) it starts? How many tests in life?

3) Attitude towards cervical cancer prevention measures.

- Do you think that cervical cancer is it the community's health problem? How? How deep?
- Do you think that Pap smear test is important in treating and preventing HPV/CC?

Probe: why? How? By whom?

- Do you think that the introduction of HPV vaccination is a good idea to prevent CC?

Probe: why? How? By whom?

4) Practice towards Pap smear test.

- Did cervical cancer prevention measures practiced in your community?
Probe: which measures? Where? By whom?
- Have you ever had Pap smear test?
Probe: why? When? How many tests?
- What are your reasons not to have a Pap smear test?

Probe: ☐

- Lack of adequate information?
- Cultural/religious reason?
- I'm not ill so it's not necessary?
- Bad attitude of doctors/nurses?
- Discouraged by partner or others?
- No access to a health institution where Pap smear is done? (Accessibility, Availability of different kinds of methods, Acceptability)
- Fear of the procedure?

This is the end of our discussion. Thank you very much for your participation in the discussion.

Topic for Discussion: _____ Date ____/_____/____

Type of participants: _____ Time FGD started: _____

No. Of participants: _____ Time FGD ended: _____

Venue of the FGD: _____

ANNEX 3

AMHARIC QUESTIONNAIRE

በብረ-ማርቆስ ከተማ ወረዳ ውስጥ ለሚኖሩ እድሜያቸው 15 -49 ዓመት ለሆኑ እናቶች ስለማህፀን ካንሰር በር በሽታና መከላከያ መንገዶች ግንዛቤ፣ አመለካከትና ልምድ በተመለከተ ተተ መቅ

እንደምን ዋላችሁ/ አደራችሁ?

ስሜ ----- ይባላል በጅማ ዩኒቨርሲቲ በሚገኘው የህክምናና የህብረተሰብ ጤና ኮሌ ተካሄደ ላለው ጥናታዊ ዳሰሳ መረጃ ሰብሳቢ ነኝ። እድሜያቸው 15 ዓመትና በላይ የሆኑ እናቶችን ስለማህፀን ካንሰር በሽታና መከላከያ መንገዶች ያላቸውን ግንዛቤ፣ አመለካከትና ልምድ በተመለከተ ቃለ-መቅ ያደረግን ሲሆን፤ ዓላማው የማህፀን ካንሰር በሽታን ለመከላከል የሚያስችሉ ስልቶችን/ አሰራቶችን/ ለመቀየስ የሚያስችል መረጃ ለማግኘት ነው። ይህንን አላማ ለማሳካት ለተዘጋጁ ጥያቄዎች ለሚሰጡን እውነተኛና በጣም ጠቃሚ ለሆኑት መልሶችዎ በቅድሚያ ልናመሰግን እንወዳለን።

ሚስጢርን የመጠበቅና የፈቃደኝነት መግለጫ

በቅድሚያ አንዳንድ ሰዎች ለመመለስ ሊያስችግራቸው የሚችሉ በጣም የግል የሆነ ጥያቄዎችን መጠየቁ ማካተቱንና የምንጠይቅዎት መሆኑን እንገልጻለን። ሆኖም ግን የሚሰጡን ማንኛውም ዓይነት መልሶችዎ በሚስጢር እንደሚያዙና ስምዎን ወይም የእርስዎን ማንነት የሚተልጽ ማንኛውም ዓይነት ነገር እንደማይጻፍ በደንብ እንዲረዱልን እንፈልጋለን ስለዚህ ስምዎ ከሰጡን መልሶች ጋር ፈጽሞ እንደማይያያዝና ለህኪሞች ለነርሶችም ሆነ ለማንኛውም ሰው ስምዎ ፈጽሞ ሊገለጽም ሆነ ሊታወቅ አይችልም። በመጠየቁ ወቅት መመለስ የማይፈልጉትን ማንኛውም ዓይነት ጥያቄ መተው ወይም በማንኛውም ሰዓት ማቋረጥ ይችላሉ። ነገር ግን ለጥያቄዎች የሚሰጡን የእርስዎ መልሶች እናቶች በዚህ ወቅት ስለማህፀን በር ካንሰር በሽታና መከላከያ መንገዶች በተመለከተ ያላቸውን ግንዛቤ፣ አመለካከትና ልምድ በይበልጥ ለመረዳት እንድንችል ይጠቅመናል። ስለሆነም በቅድሚያ ለሚያደርጉልን ትብብር ምሥጋናችን ከልብ የመነጨ ነው። መጠይቁ ከ 20 ከ 30 ደቂቃ ሊወስድ ይችላል። በዚህ ጥናት ላይ ለመሳተፍ ችላሉ?

መልሱ አዎ ከሆነ ወደሚቀጥለው ጥያቄ አ/

መልሱ አልችልም ከሆነ አመስግነህ/ሽ መጠይቁን አቋርጥ/ጭ

የተጠያቂዎን እናት ፈቃደኝነት ለማረጋገጠ/ጧ የመረጃ ሰብዳቤው ስምና ፊርማ

ል 0: መ ቁ መለ መረጽ

001 መ ቁ መለ ቁዓ ር -----

002 ልል -----

003 ረ -----

004 ከተማ -----

005 ቀበሌ -----

006 የቤት ቁጥር -----

	ጉብኝት 1	ጉብኝት 2	ጉብኝት 3
ቀን			
መረጽ ሰብሳቢ			
ውጤት			

ውጤት:- የተጠናቀቀ 1

ተጠያቂዎ አልተገኘም 2

ታመመ 3

በከፊል ተመልሷል 4

ሌላ () ----- 5

ረ ተቆ ሪ ስም ----- ርማ ----- ቀን -----

007 መረጃ ሰብሳቢው መለስ ቁጥር ----- ስም -----

008 ይህ ቅጽ ለምን ስም -----

009 መጠይቁ የተካሄደበት ቀን ----- ቀን/ወር/ዓመት

ክፍል 1: የግለሰብን ማህበራዊና ኢኮኖሚያዊ ሁኔታን በተመለከተ

ተ.ቁ	ጥያቄዎች	መልስና ኮድ	<input type="checkbox"/> ለ <input type="checkbox"/> <input type="checkbox"/>
101	እድሜዎ ስንት ነው? (በጣም <input type="checkbox"/> ተቀራረብ ግምት ላይ ለመድረስ ጥረት ማግለጫ)	----- ዓመት	
102	ያጠናቀቁት ክፍተኛ የትምህርት ደረጃ ስንት ነው?	ማንበብና መጻፍ የማትችል 88 ማንበብና መጻፍ የምትችል 99 ያጠናቀቁት የትምህርት ደረጃ -----	
103	በአሁኑ ሰዓት የትዳር ሁኔታ?	ያገባች 1 ያላገባች 2 አግብታ <input type="checkbox"/> ታች 3 በሞት የተለየች 4	
104	ሃይማኖትዎ ምንድን ነው?	ኦርቶዶክስ 1 <input type="checkbox"/> ሮቲስታንት 2 ካቶሊክ 3 ሙስሊም 4 ሌላ (<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>) -----5	
105	የየትኛው ብሄር አባል ነዎት?	አማራ 1 ኦሮሞ 2 አገዳ 3 <input type="checkbox"/> <input type="checkbox"/> 4	

		ሌላ (□□□) ----- 5	
106	በአሁኑ ሰዓት ሥራዎ ምንድን ነው?	<p>ተማሪ 1</p> <p>የቤት አመቤት 2</p> <p>የቤት ሠራተኛ 3</p> <p>የቀን ተቀጣሪ 5</p> <p>ነጋዴ 6</p> <p>የመንግስት ሰራተኛ 7</p> <p>የግል ድርጅት ሰራተኛ 8</p> <p>ሌላ (□□□) ----- 9</p>	
107	አጠቃላይ የቤተሰብዎ የወር ገቢ ስንት ነው? (በግምት)	<p>----- የኢትዮጵያ ብር</p> <p>ምንም ገቢ የለንም 88</p> <p>መልስ □ ለም 99</p>	
108	የቤተሰብ አባላት ብዛት ስንት ነው?	የቤተሰብ ብዛት /በቁጥር/ -----	
109	እርስ- □ቤተሰብ ኃላፊ ነዎት?	<p>አዎ 1</p> <p>አይደለሁም 2</p>	
110	ከቤተሰቡ ኃላፊ ጋር ያለዎት ግንኙነት ምንድን ነው?	<p>ሚስት/ አንድ ብቻ 1</p> <p>ሚስት/ ከብዙዎች መካከል አንደኛዋ/ 2</p> <p>ል□ 3</p> <p>የቤት ሠራተኛ 4</p> <p>ሌላ (□□□) -----</p>	

ጠቅላይ ልብ ወለድ 2 ስለ ማህፀን በር ካንሰር በሽታ ግንዛቤ በተመለከተ

201	ስለ ማህፀን በር ካንሰር በሽታ ስምተት ስላለው ያውቃሉ?	አዎ 1 ሰምቼ አላውቅም 2	መልሱ 2 ከሆነ ወደ 301 እለፍ
202	ከማን ነበር ስለማህፀን ካንሰር በሽታ የሰሙት?	ከቤተሰብ 1 ከጓደኛ 2 ከህክምና ባለሞያ 3 ከህብረተሰብ ጤና ሰራተኛ 4 ከዘመድ 5 ሌላ (ጠቅላይ) ----- 6	
203	የማህፀን በር ካንሰር በክፈተኛ ደረጃ የተስፋፋና በመካከለኛ የእድሜ ክልል የሚገኙ ሴቶችን የሚያጠቃ በሽታ ነው	እውነት 1 ሐሰት 2 አላውቅም 3	
204	ስለ ኤች.ፒ.ቪ. ስምተው ያውቃሉ?	አዎ 1 ሰምቼ አላውቅም 2	መልሱ 2 ከሆነ ወደ 208 እለፍ
205	ከማን ነበር ስለ ኤች.ፒ.ቪ. የሰሙት?	ከቤተሰብ 1 ከጓደኛ 2 ከህክምና ባለሞያ 3 ከህብረተሰብ ጤና ሰራተኛ 4 ከዘመድ 5 ሌላ (ጠቅላይ) -----6	
206	በኤ.ፒ.ቪ. መያዝ ለማህፀን በር ካንሰር በሽታ ዋነኛ ምክንያት ነው	እውነት 1 ሐሰት 2	

		አላውቅም 3	
207	ኤች.ፒ.ቪ. በግብረ-ሥጋ ግንኙነት አተላለፊም	እውነት 1 ሐሰት 2 አላውቅም 3	
208	ለማፀን ካንሰር በሽታታ አጋላጭ ሁኔታዎች ምንድን ናቸው?	ለአቅመ ሄዋን ሳይደርሱ የግብረ ስጋ ግንኙነት ማድረግ 1 ከአንድ ሰው በላይ ጋር የግብረ ሥጋ ግንኙነት ማድረግ 2 ሲጽራ ማሬ ስ 3 በኤች.ፒ.ቪ. መያዝ 4 የብልት ክንታሮት 5 አላውቅም 6 ሌላ (□□□) ----- 7	
209	የማፀን በር ካንሰር በሽታታ መከላከል ይቻላል?	አዎ 1 መከላከል አይቻልም 2 አላውቅም 3	
210	ስለ ማፀን በር ናሙና ምርመራ ሰምተህ ባለህ?	አዎ 1 ሰምቼ አላውቅም 2	መልስ 2 ከሆነ ወደ 214 እለፍ
211	ከማን ነበር የሰሙት	ከቤተሰብ 1 ከንደኛ 2 ከጤና ባለሙያ 3 ከህብረተሰብ ጤና ሰራተኛ 4 ከዘመድ 5 ሌላ (□□□) ----- 6	
212	የማፀን በር ናሙና ምርመራ ዓላማው የማፀን ካንሰር በሽታታ መኖሩን	እውነት 1	

	ለማወቅ ወይም ለመከላከል ነው?	<p>ሐሰት 2</p> <p>አላውቅም 3</p>
213	ጤነኛ እና እድሜያቸው 21 ዓመትና በላይ የሆኑ እናቶች የማህፀን በር ናሙና ምርመራ ማድረግ አያስፈልጋቸውም?	<p>እውነት 1</p> <p>ሐሰት 2</p> <p>አላውቅም 3</p>
214	ስለ ኤች.ፒ.ቪ. መከላከያ ክትባት ሰምተው ያውቃሉ	<p>አዎ 1</p> <p>ሰምቼ አላውቅም 2</p>
215	ከማን ነበር ስለ ኤች.ፒ.ቪ. መከላከያ ክትባት የሰሙት	<p>ከቤተሰብ 1</p> <p>ከጓደኛ 2</p> <p>ከህክምና ባለሙያ 3</p> <p>ከህብረተሰብ ጤና ሰራተኛ 4</p> <p>ከዘመድ 5</p> <p>ሌላ (□□) ----- 6</p>

□□ል 3: ስለማህፀን በር ካንሰር በሽታ መከላከያ መንገዶች አመለካከትና ልምድ በተመለከተ

301	በኤች.ፒ.ቪ. መያዝን ወዲያውኑ ማወቅ ጠቃሚ ነው	<p>በ□ም እቃ□ማለሀ 1</p> <p>እቃ□ማለሀ 2</p> <p>ሀሳብ የለኝም 3</p> <p>□አስማማለሀ 4</p> <p>በ□ም □አስማማለሀ 5</p>
302	የማህፀን በር ናሙና ምርመራ፤ በኤች.ፒ.ቪ. መያዝን ወዲያውኑ ለማወቅ ስለሚያገለግል የማህፀን በር ካንሰር በሽታን ለመከላከል አስፈላጊ	<p>በ□ም እቃ□ማለሀ 1</p> <p>እቃ□ማለሀ 2</p> <p>ሀሳብ የለኝም 3</p>

	ነው	<input type="checkbox"/> አስማማለሁ 4 <input type="checkbox"/> ም <input type="checkbox"/> አስማማለሁ 5	
303	የማህፀን ካንሰር በሽታን ለመከላከል ሁሉም ጤነኛ የሆኑና የግብረ ሥጋ ግንኙነት የጀመሩ እናቶች መደበኛ <input type="checkbox"/> ማህፀን በር ናሙና ምርመራ ማድረግ አለባቸው	<input type="checkbox"/> ም እቃ <input type="checkbox"/> ማለሁ 1 እቃ <input type="checkbox"/> ማለሁ 2 ሀሳብ የለኝም 3 <input type="checkbox"/> አስማማለሁ 4 <input type="checkbox"/> ም <input type="checkbox"/> አስማማለሁ 5	
304	እህትዎ ወይም ሴት ዘመድዎ <input type="checkbox"/> ማህፀን በር ናሙና ምርመራ እንዲያደርጉ ያበረታታሉ	<input type="checkbox"/> ም እቃ <input type="checkbox"/> ማለሁ 1 እቃ <input type="checkbox"/> ማለሁ 2 ሀሳብ የለኝም 3 <input type="checkbox"/> አስማማለሁ 4 <input type="checkbox"/> ም <input type="checkbox"/> አስማማለሁ 5	
305	<input type="checkbox"/> ማህፀን በር ናሙና ምርመራ ተመርምረው ያውቃሉ	አዎ 1 ተመርምረው አላውቅም 2	
306	መልሱ አዎ ከሆነ ስንት ጊዜ	አንድ ጊዜ 1 ሁለት ጊዜ 2 ሦስትና ከዚያ በላይ 3	
307	መልሱ ተመርምረው አላውቅም ከሆነ ላለመመርመር ምክንያትዎ ምንድን ነበር	ስለየማህፀን በር ካንሰር በሽታና ስለመከላከያ መንገዶቹ እውቀት ስለሌለኝ 1 ምርመራ ሂደቱን በመፍራት 2 በባህል ምክንያት 3 በሃይማኖት ምክንያት 4 ጤነኛ ስለሆነኩ ምርመራው ስለማያስፈልገኝ 5	

		<p>ባለቤት ወይም ሌሎች እንዳልመረመር ስለሚመዘኑ/ ተጽዕኖ ስለሚያደርጉብኝ 6</p> <p>ምርመራ የማድረግበት የጤና ተቋም ባለመኖሩ 7</p> <p>ሌላ () ----- 8</p>	
308	ክትባት የሰውነትን ከበሽታ የመከላከል አቅም ለማጠናከር ይጠቅማል	<p><input type="checkbox"/> ምን እቃ ማለሁ 1</p> <p>እቃ ማለሁ 2</p> <p>ሀሳብ የለኝም 3</p> <p><input type="checkbox"/> አስማማለሁ 4</p> <p><input type="checkbox"/> ምን አስማማለሁ 5</p>	
309	የኤች.ፒ.ቪ. ክትባት የማህፀን በር ካንሸር በሽታን ለመከላከል ስለሚያገለግል ክትባቱን መከተብ አስፈላጊ ነው	<p><input type="checkbox"/> ምን እቃ ማለሁ 1</p> <p>እቃ ማለሁ 2</p> <p>ሀሳብ የለኝም 3</p> <p><input type="checkbox"/> አስማማለሁ 4</p> <p><input type="checkbox"/> ምን አስማማለሁ 5</p>	
310	ጤና ጥበቃ ሚኒስቴር የኤች.ፒ.ቪ ክትባትን ለማስገባት ዕቅድ ቢኖረውና፤ እድሜያቸው ከ9-26 ዓመት የሆኑ ሴቶች ክትባቱን በጤና ባለሙያዎች/ ጤና ኤክስቴንሽን ሰራተኞች በኩል ቢሰጥ፤ የክትባቱ መኖር/ወደ እኛ ሀገር መግባቱ የማህፀን ካንሸር በሽታን ለመከላከል ጥሩ ሀሳብ <input type="checkbox"/> መስልታል?	<p><input type="checkbox"/> ምን እቃ ማለሁ 1</p> <p>እቃ ማለሁ 2</p> <p>ሀሳብ የለኝም 3</p> <p><input type="checkbox"/> አስማማለሁ 4</p> <p><input type="checkbox"/> ምን አስማማለሁ 5</p>	
311	ጤና ጥበቃ ሚኒስቴር የኤች.ፒ.ቪ ክትባትን ለማስገባት ዕቅድ ቢኖረውና፤ እድሜያቸው ከ9-26 ዓመት የሆኑ ሴቶች ክትባቱን በጤና ባለሙያዎች/ ጤና ኤክስቴንሽን ሰራተኞች በኩል ቢሰጥ፤ የክትባቱ መኖር/ወደ እኛ ሀገር መግባቱ የማህፀን ካንሸር በሽታን	<p><input type="checkbox"/> ምን እቃ ማለሁ 1</p> <p>እቃ ማለሁ 2</p> <p>ሀሳብ የለኝም 3</p> <p><input type="checkbox"/> አስማማለሁ 4</p>	

ለመከላከል አስፈላጊ <input type="checkbox"/> መስል- ታል?	በ <input type="checkbox"/> ም <input type="checkbox"/> አስማማለሁ 5	
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ለተሳታፊዎች የተሰጡ ከማህጸን በር ካንሰር ርዕሰ-ጉዳይ መረጃዎች

- የማህጸን በር ካንሰር በሽታ በጣም ተስፋፋቶ የሚገኝ እና በመከላከል የእድሜ ክልል ውስጥ የሚገኙ ሴቶችን የሚያጠቃ በሽታ ነው። በኢትዮጵያ በየአመቱ 7619 የማህጸን በር ካንሰር ሀሙስና 6081 ከማህጸን በር ካንሰር ጋር የተያያዘ ሞት እንደሚከሰት ይገመታል።
- ለማህጸን በር ካንሰር በሽታ አጋላጭ ሁኔታዎች የሚከተሉት ናቸው፡
 - የግብረ-ሥጋ ግንኙነት በህጻንነት መጀመር (ለአቅመ ሄዋን ሳይደርሱ)
 - ከአንድ በላይ የሆነ የግብረ-ሥጋ ግንኙነት ጌደኛ ማበጀት
 - ኤችፒቪ(ሂውማን ፓፒሎማ ቫይረስ) በሚባል በሽታ አምጪ ጅርም መያዝ
 - ሲጃራ ማጨስ
 - ዝቅተኛ የማህበራዊና ኢኮኖሚያዊ ደርጃ
 - የስወነትን ከበሽታ የመከላከል አቅም የሚያዳክሙ በሽታዎች ለምሳሌ ኤች አይ ቪ ኤድስ
 - ለረጅም ጊዜ በአፍ የሚዋጥ የወለድ መከላከያ ክኒን መጠቀም የመሳሰሉት ናቸው።
- ቫቫራ በግብረ-ሥጋ ግንኙነት የሚተላለፍ ሲሆን ሁሉንም (ወንድን ሴትንም) ቃልላል ሲሆን በሴቶች ላይ የማህጸን ካንሰር በሽታን ያስከትላል።
- በኤችፒቪ መያዝ ዋነኛው የማህጸን በር ካንሰር በሽታ መንስኤ ነው።
- ለቫይረሱ ከሚጋለጡ ሰዎች ውስጥ 50 ያህሉ በቫይረሱ ይያዛሉ። ከዚህ ውስጥ አብዛኛው ሰዎች በተፈጥሮ ቫይረሱ ከሰውነታቸው አንዲጠፋ ያደርጋሉ።
- የማህጸን ካንሰር በሽታን መከላከል ይቻላል። መከላከያ መንገዶቹም ለማህጸን ካንሰር በሽታ ከሚያጋልጡ ሁኔታዎች መራቅና የሚከተሉት ናቸው፡
 - ሲጋራ አለማጨስ
 - ከአንድ ሰው ጋር ብቻ የግብረ-ሥጋ ግንኙነት ማድረግ/ አንድ ለአንድ መወሰንና መተማመን)
 - ኮንዶም መጠቀም
 - ለአቅመ ሄዋን ሳይደርሱ የግብረ-ሥጋ ግንኙነት አለመፈጸም
 - መብኛ የማህጸን በር ናሙና ምርመራ ማድረግ
 - ምርመራ ለማ፡-
 - በኤች.ፒ.ቪ. መያዝን ማረጋገጥ
 - የማህጸን በር ካንሰር በሽታ መኖሩን ማረጋገጥና መከላከልና ለማከም

- አዲሱን የኤች.ፒ.ቪ. ክትባት መከተብ
 - ክትባቱ - በኤች.ፒ.ቪ. መያዝን ይከላከላል
 - እድሜያቸው ከ9-26 ዓመት ለሆኑ ሴቶች ይሰጣል
 - ከዚህ በፊት በኤች.ፒ.ቪ. ላልተያዙ ሴቶች ብቻ እንደሚሰራ
ታቃል::
 - የማህፀን ካንሰር በሽታን ይከላከላል::

ይህ የመጠይቁ ማብቂያ ነው ጊዜዎትን ሰውተው ለጥያቄዎች መልስ ስለሰጡን በ□ም እያመሰገንን ያደረጉልንን ትብብር ከልብ እናደንቃለን::

ANNEX 4

AMHARIC FGD GUIDE የቡድን ውይይት መመሪያ

መግቢያ

እንደምን አደራችሁ/ዋላችሁ? ወደ ቡድን ውይይታችን እንኳን በደህና መጣችሁ።

ስሜ _____ ባላል። ሥራ _____ ሲሆን የመጣሁት ከ _____ ነው። ጌ ህ የተሰበሰብነው ስለማህፀን በር ካንሰር በሽታና መከላከያ መንገዶች በተመለከተ በመወያየት ሲሆን አላማውም የማህፀን በር ካንሰር በሽታን ለመከላከል የሚያስችሉ ስልቶችን/አሰራሮችን/ ለመቀየስ ማቅም መረጃ ለማግኘት ነው። ይህንን ዓላማ ለማሳካት በውይይታችን ወቅት የምታደርጉት ተሳትፎና የምትሰጡን ውነተኛና ጠቃሚ ሀሳቦች በጣም አስፈላጊ ናቸው። በምናደርገው ውይይት ላይ ትክክለኛ ወይም የተሳሳተ የሚባል ሀሳብ የለም። ስለሆነም ሁሉም አስተያየቶች/ሀሳቦች ተቀባይነት አላቸው ውይይታችን በቡድን እንዲሆን የተፈለገበት ምክንያት የተለየ በርካታ ሀሳቦችን ለማግኘት ነው። ስለዚህ ሀሳቦችን ለመግለጽ እኔ እስከምጠቁማችሁ/ እስከምጠይቃችሁ ድረስ መጠበቅ የለባችሁም። በተጨማሪ የሚነሱ ሀሳቦች ምንም ሳይረሱ/ሳይዘለሉ ለመያዝ እንድንችል ውይይታችን በቴፕ ሪከርደር ይቀረጃቁ። ስለዚህ ቴፕ ሪከርደሩ ሁሉንም ሀሳቦች በትክክል ለመቅረጽ እንዲችል በተራ/ አንድ በአንድ/ መናገር ይኖርብናል። በውይይቱ ወቅት የምታነሷቸው ማንኛውም ዓይነት ሀሳቦች በሚስጢር እንደሚያዙና ስማችሁን ወይም የእናንተን ማንነት የሚገልጽ ማንኛውም ዓይነት ነገር እንደማይባዩ ማረጋገጥ እንወዳለን።

በቅጥሮችን ለመሳተፍ ፍቃደኛ ናችሁ?

መልሱ አዎ ከሆነ በማመስገን በቅደም ተከተል በተዘጋጁት 4 ዋና ዋና የመወያያ ነጥቦች እክለ።

1. ስለማህፀን በር ካንሰር/ ኤች.ፒ.ቪ ግንዛቤ በተመለከተ

1. ስለማህፀን በር ካንሰር በሽታ ሰምታችሁ ታውቃላችሁ? ምንድን ነው? መነሻው ምንድን ነው? ከማን ሰማችሁ?
2. ኤች.ፒ.ቪ ምን እንደሆነ ታውቃላችሁ? እእንዴት ይተላለፋል? አጋላጭ ሁኔታዎች ምንድን ናቸው? ሊያጠቃ የሚችለው አነማንን ነው?
3. እናንተ በምትኖሩበት ህብረተሰብ ውስጥ በኤች.ፒ.ቪ ወይም የማህፀን ካንሰር በሽታ ምክንያት የተከሰተ ችግር አለ? ምን? ህብረተሰቡ ችግሩን ምን ያህል ያውቀዋል? በችግሩ በበልጻ ማቅም አነማን ናቸው? (እኔ ማን፣ በቅጥ፣ በሥራ፣ በትምህርት፣ በባህሪ)

2. ስለማህፀን በር ካንሰር በሽታ መከላከያ መንገዶች ግንዛቤ በተመለከተ

4. የማህፀን በር ካንሰር በሽታን መከላከል ይቻላል? አንዴት? መከላከያ መንገዶችስ ምን ምን ናቸው?
(ባህሪይ፣ የማህፀን በር ናሙና ምርመራ፣ የኤች.ፒ.ቪ. ክትባት) አንዴት ይከላከላሉ?

- 5. የተገለፁጽ መከላከያ መንገዶች ለነማን ነው የሚሆኑት?
- ለባህሪ ፣ ታ? አድሜ? ለምን? መቼ?
- ለማህፀን በር ናሙና ምርመራ፣ አድሜ? ለምን? መቼ?
- ለኤች.ፒ.ቪ. ክትባት፣ ምን? አድሜ? ለምን? መቼ?

3. ስለማህፀን በር ካንሰር በሽታ መከላከያ መንገዶች አመለካከት በተመለከተ

- 6. የማህፀን በር ካንሰር በሽታ የህብረተሰቡ ችግር ነው ብላችሁ ታምናላችሁ? እንዴት? ምን ያህል?
- 7. በህብረተሰቡ ውስጥ ስለ ኤች.ፒ.ቪ/ የማህፀን ካንሰር በሽታ ግንዛቤ መፍጠር በሽታውን ለመከላከል ዓሩ ሀሳብ ነው ትላላችሁ? ለምን? አንዴት? በማን?
- 8. ለኤች.ፒ.ቪ. አጋላጭ ሁኔታዎችን ማስወገድ የማህፀን ካንሰር በሽታን ለመከላከል ጠቃሚ ይመስላችኋል? ለምን? አንዴት?
- 9. ማህፀን በር ናሙና ምርመራ የማህፀን ካንሰር በሽታን ለመከላከል ወይም ለማከም ጠቃሚ ይመስላችኋል? ለምን? አንዴት?
- 10. የኤች.ፒ.ቪ. ክትባት መከተብ (የክትባቱ መጀመር) የማህፀን ካንሰር በሽታን ለመከላከል ጠቃሚ ይመስላችኋል? ለምን? አንዴት? በማን? ከ9-26 ዓመት ያሉ ሴቶች ክትባቱን እንዲከተቡ ወጭ እንዳይከተቡ የሚወስን ማን ይመስላችኋል? ለምን? ክትባቱ ቢጀመር አናንተ ትከተባላችሁ? ለምን?

4. የማህፀን በር ካንሰር በሽታ መከላከያ መንገዶች ልምድ በተመለከተ

- 11. የማህፀን ካንሰር በሽታ መከላከያ መንገዶች እናንተ በምትኖሩበት ህብረተሰብ ውስጥ ይተገበራሉ? የትኞቹ? በማን? የት?
- 12. አናንተ የማህፀን በር ናሙና ምርመራ ተመርምራችሁ ታውቃላችሁ? ለምን? መቼ? ስንት ?
- 13. እናንተ በአጠቃላይ ህብረተሰቡ የማህፀን በር ናሙና ምርመራ አንዳይመረመር የሚያደርጉት ምክንያቶች ምን ይመስላችኋል?
- የግንዛቤ/ መረጃ ማጣት?
- ባህላዊና ሃይማኖታዊ ምክንያቶች?
- አልታመምንም ብሎ ማሰብ?
- በቤተሰብ ወይም በሌሎች ሰዎች ተፅዕኖ?
- አገልግሎቱን የሚሰጥ ጤና ተቋም አለመኖር (አርቀት? የተለያዩ ምርመራዎች አለመኖር? የምርመራው ተቀባይነት አለመኖር?)

ህ ታችን ማግኔያ ነው በውይይቱ ላደረጋችሁት ተሳትፎ በጣም አናመሰግናለን።

የውይይት ርዕስ ----- ቀን -----

ተሳታፊዎች ዓይነት ----- ውይይቱ የተጀመረበት ሰዓት -----

ተሳታፊዎች ብዛት ----- ውይይቱ ያበቃበት ሰዓት -----

የቡድን ውይይቱ የተካሄደበት ቦታ -----

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Declaration

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

Name: _____

Signature: _____

Name of the institution: _____

Date of submission: _____

This thesis has been submitted for examination with my approval as University advisor.

Name and Signature of the first advisor

Name and Signature of the second advisor
