

Knowledge, attitude and practice towards cervical cancer among women in Finote Selam city administration, West Gojjam Zone, Amhara Region, North West Ethiopia, 2017

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Abstract

Introduction: Cancer of the cervix is the leading cause of cancer-related death among women, especially in developing countries affecting women at a time of life when they are critical to social and economic stability.

Method: The study was conducted at Finote Selam City Administration from February 01 to March 01, 2017 using a community-based cross-sectional study design. The representative sample size was selected using multistage sampling technique. The data were collected using an interviewer-administered questionnaire adapted from the previous study. Data were entered using EpiData Version 3.1 statistical software and analyzed using SPSS version 20 statistical package.

Result: One hundred seventy (23.1%) were knowledgeable about cervical cancer whereas 63% of participants had a negative attitude and only 7.3% had ever screened for the disease. Logistic regression analysis showed that age, marital status, religion, experienced sexual intercourse and age at 1st sexual intercourse were found to be significantly associated with the knowledge of cancer of the cervix.

Conclusion: Ministry of health in collaboration with other concerned bodies should design a strategy to give education about cervical cancer including information on risk factors, signs and symptoms; and availability of screening should be provided for women and as well as for the public.

Keywords: Cervical cancer, screening, Finote Selam, North West Ethiopia.

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Introduction

Cancers that originate in the female reproductive system are called women's reproductive cancers. These include cancer of the cervix, breast, ovaries, vagina, vulva, and endometrium¹. Cervical cancer is an important women's reproductive health problem, especially in developing countries. Cervical cancer, though largely preventable, is the second most common female cancer internationally and a leading cause of cancer deaths among females in

the developing countries². *Human papilloma virus*, a common sexually-transmitted infection, is the primary underlying cause of cervical cancer. Multiple sexual partners, early age of onset of sexual activity, increasing parity, early age of marriage and child birth, poor personal hygiene, low socio-economic status, use of hormonal contraceptives for 5 years or longer, current or previous sexually-transmitted infection and smoking are the risk factors for cervical cancer^{3,4}.

Cancer of the cervix is the leading cause of cancer-related death among women, especially in developing countries affecting women at a time of life when they are critical to social and economic stability⁵. Of 86% of all cervical cancer diagnosed, 88% of death occur in developing regions of the world³. Every year, 500 000 new cases are diagnosed and 270 000 women die of this disease, mostly 85% in developing countries⁶.

Cervical cancer is increasingly recognized as a critical public health problem in Africa. While communicable diseases continue to burden African populations. Increases in life expectancy, changes in diet and lifestyle, and lower burden of communicable diseases promise to increase the cancer burden in Africa over the coming years⁷.

A majority of cancers including cervical cancer are diagnosed at an advanced stage of disease because of lack of screening and early detection services, as well as limited awareness of early signs and symptoms of cancer⁷. Cervical cancer awareness is generally low worldwide but worse in developing countries despite the increased prevalence of the disease in these countries⁸.

Most patients and their families don't properly know what a cancer is and its treatment options. Consequently, 80% to 90% of cancer patients already suffer from advanced and incurable cancers at the time of diagnosis. The families also do not have adequate knowledge of home-based care to be given for the patients and consequently they fail to provide such care to their patients⁹.

Cervical cancer prevention efforts worldwide have focused on screening women at risk of disease using pap smears and treating pre-cancerous lesions. Cytology-based screening (Pap smear test) is considered the best approach to reduce cervical cancer incidence in developing countries^{2,10,11}.

Ethiopia has invested little in the infrastructure, training, and laboratory capacity required for successful Pap smear

screening¹⁰. In resource-limited countries like Ethiopia, cervical cancer prevention will be successful and cost-effective because it requires few visits and we offer a "screen and treat" (single-visit) approach¹².

Nevertheless, the level of women's awareness about cervical cancer is unknown. Knowledge, attitude, and practice (KAP) are important elements for designing and monitoring in awareness creation and screening programs.

The aim of this study was to assess Knowledge, Attitude, Practice and factors associated with uptake of cervical cancer screening among Finote Selam City Administration Community, West Gojjam Zone, Amhara Region, North West Ethiopia, 2016.

Methods and materials

The study was conducted at Finote Selam City Administration using Community-based cross-sectional study design. The study was conducted from February 01 to March 01, 2017. Finote Selam is a relatively young city, which was founded in 1947. Its foundation and naming in one way or another, was the result of the resistance against the Italian occupation of the country. Finote Selam is situated in the Amhara National Regional state at 376 k.m away from Addis Ababa city towards North-West direction of the country, geographically located at latitude 10° 41' 23" North of the Equator and longitude 37° 15' 35" East of the Prime Meridian. The city administration has three urban and two rural (Bakel and Shembekuma) kebeles with a total area of 1663.14 hectares. The population aged between 15-64 years and those above 64 years is 68% and 2.25 %, respectively.

The study population of the study was those women whose age is 15 years and above residing in Finote selam City Administration.

Sample size and sampling procedure

Sample size was calculated using a formula for single proportion with the assumption of knowledge about cervical cancer screening 19%¹³ with 95% confidence interval, margin of error taken as 0.04. Then the sample size was 370, after adding 10% none respondent rate and multiplying with a design effect of 2, it became 814. The representative sample size was selected using multistage sampling technique. The first household was taken by lottery method and if more than one eligible individual was present in the same household, one was recruited using lottery method, but if an eligible individual was not pres-

ent in the selected household the next house was considered. The data were collected using an interviewer-administered questionnaire adapted from a previous study¹⁴.

Data collection instrument

Socio-demographic characteristics of the respondents which included age, educational level, and other relevant characteristics was developed by the investigator. The rest of the questions related to risk exposure, knowledge, attitude and screening practice towards cervical cancer were adapted from different published literature.

Operational definition

Questions regarding knowledge of risk factors, symptoms, treatment options and prevention and early detection measures for cervical cancer were scored and pulled together and the median score was computed to determine the overall knowledge of respondents.

Knowledgeable: Respondents scored above the median score of knowledge assessing questions.

Not knowledgeable: Respondents scored below the median score of knowledge assessing questions.

Positive attitude: Those respondents who scored above median score of attitude assessing questions.

Negative attitude: Those respondents who scored below median score of attitude assessing questions.

Practice: Those respondents who screened for cervical cancer at least once¹⁵.

Personnel for data collection and data quality control

A total of six data collectors were recruited to distribute and collect the data and two supervisors supervised the overall data collection process. To ensure the quality of the data, the data collectors and supervisors trained for one day before the actual data collection regarding the approach, objective of the study, ethical issues including how to approach the respondents. The supervisor routinely did a checkup for the completeness and consistency of the data.

To check for the accuracy of responses, language clarity, and appropriateness of the tools; the questionnaire was pre-tested on 5% (41) of the total sample size before a week of the actual data collection period in Bahir Dar City Administration.

Data processing and analysis procedures

The collected data were edited, coded, categorized and entered into EpiData version 3.1 and exported to SPSS version 20.0 windows statistical software for analysis.

Variables with P-value ≤ 0.20 in binary logistic regression analysis with 95% confidence interval was used to assess the degree of association between dependent and independent variables. Variables which had a significant association with the outcome variable in the bivariate analysis were entered into the multivariable logistic regression analysis to form the model and variables having P-value of < 0.05 were considered as statistical significance to determine the association.

Then the data were summarized using graphic presentations for the interpretation of findings and descriptive statistics based on percentages and frequencies.

Ethical consideration

Ethical clearance was obtained from Research Ethical Review Committee (RERC) of Bahir Dar University College of Medicine and Health Sciences. Permission and supporting letter were secured from Amhara National Regional State Health Bureau and Finote Selam City Administration Health Office before data collection. Verbal informed consent from each study participant was also obtained during data collection. The respondents had the right to refuse to take part in the study as well as to withdraw at any time during the study. No names or identifying information was indicated on the questionnaires, and all subjects were assured of confidentiality.

Results

Socio-demographic characteristics of study participants

From the total of 814 sampled study participants, 735 were successfully interviewed yielding a response rate of 90.3%. The age distribution of the respondents showed that 274 (37.3%) were between 24-34 years of age. The mean age of participants was 30.8 ± 9.8 SD years, with a minimum of 17 and maximum of 88 years. From all study participants, 633 (86.1%) were Christian Orthodox religion followers, 344 (46.8%) were single in their marital status, 111 (15.1%) and 248 (33.7%) were illiterate or had a diploma in their educational status respectively, and 263 (35.8%) were merchants in their occupation. Four hundred one (54.6%) of the total respondents had a child/children and of these, 308 (41.9%) had 1 to 3 children (Table 1).

Table 1: Socio-demographic characteristics of study participants, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Socio-demographic characteristics of the respondents		N	%
Age category	< 24 years	231	31.4
	24 – 34 years	274	37.3
	35 – 49 years	193	26.3
	> 49 years	37	5.0
Religion	Orthodox	633	86.1
	Muslim	71	9.7
	Protestant	31	4.2
Marital Status	Married	290	39.5
	Single	344	46.8
	Other*	101	13.7
Educational Status	Illiterate	111	15.1
	Primary school completed	126	17.1
	Secondary school completed	82	11.2
	College/university student	111	15.1
	Diploma	248	41.9
	4 to 6	75	10.2
	More than 6	18	2.4
Total		735	100

Other*= Widowed, divorced

Risk exposure status among study participants

Among all interviewed 735 study participants 431 (58.6%) had experienced sexual intercourse. The mean age of experiencing the first sexual intercourse was 19.18 ± 3.08 SD years old, with a minimum of 10 and maximum of 32 years of age. Of these; 101 (23.4%) experienced sexual intercourse below the age of 18. Three hundred three

(41.2%) of the total respondents had ever used modern contraceptive methods. Of these, 84 (11.4%) used oral contraceptive (OCP), 173 (23.5%) injectable and 37 (5.0%) Norplant. The mean age of modern contraceptive methods utilization among study participants was 2.78 ± 1.97 SD years with the minimum of 2 months and a maximum of being 9 years. Currently 81 (11.0%) study participants were using OCP (Table 2).

Table 2: Risk exposure status among study participants, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Variables in the study		N	%
Have you ever experienced sexual intercourse? (n = 735)	Yes	431	58.6
	No	304	41.4
Age at 1 st sexual intercourse (n = 431)	< 18 years old	101	13.7
	>= 18 years old	330	63.6
Ever used contraceptive (n = 735)	Yes	303	41.2
	No	432	58.8
Type of contraceptive (n = 303)	Oral contraceptive (OCP)	84	11.4
	Injectable	173	23.5
	Norplant	37	5.0
	Barrier method	9	1.2
Length in utilizing contraceptives (n = 303)	< 1 year	42	13.9
	1 to 5 years	210	69.3
	>5 years	51	16.8
Current user of OCP	Yes	81	11.0
	No	654	89.0

Knowledge towards cervical cancer

From all the study participants, 509 (69.3%) had heard about cervical cancer. For 262 (51.5%) respondents; their family and friends were the source of information, health workers were the source of information for 101 (19.8%) respondents. Of those who had heard about cervical cancer, 221 (43.4%) mentioned vaginal bleeding as a major symptom of the disease whereas, 292 (57.4%) and

322 (63.3%) of them did not know the risk factors and the prevention strategies of cervical cancer respectively. Three hundred eighty-six (75.8%) of study participants did not know that cervical cancer is curable in its earliest stage. Twenty-nine (5.7%) of them know someone with the disease (Table 3).

Generally, from all study participants, 170 (23.1%) were knowledgeable about cervical cancer (Figure 1).

Table 3: Knowledge status of respondents towards cervical cancer, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Variables in the study		N	%
Heard about cancer (n = 735)	Yes	612	83.3
	No	123	16.7
Heard about cervical cancer(n = 735)	Yes	509	69.3
	No	226	30.7
Source of information for cancer of the cervix (n = 509)	Media	84	16.5
	Broachers, posters, printed materials	22	4.3
	Health workers	101	19.8
	Family & friends	262	51.5
Symptoms of cervical cancer (n = 509)	Others*	40	7.9
	Vaginal bleeding	221	43.4
	Faull smelling vaginal discharge	201	39.5
	Do not know	87	17.1
Risk factors for cervical cancer (n = 509)	Having multiple sexual partners	89	17.5
	Early sexual intercourse	84	16.5
	Use of OCP for prolonged period	20	3.9
	Acquiring HPV	13	2.6
	Cigarette Smoking	11	2.2
	Do not know	292	57.4
Prevention from acquiring cervical cancer (n = 509)	Avoiding multiple sexual intercourses	82	16.1
	Avoiding early sexual intercourse	70	13.7
	Avoid prolonged OCP utilization	23	4.5
Can cancer of cervix cured in the earliest form (n = 509)	Through vaccination for HPV	12	2.4
	Do not know	322	63.3
Treatment options for cervical cancer (n = 509)	Specific drugs are given by hospitals	285	56.0
	Surgery	55	10.8
	Radiation therapy	54	10.6
	Do not know	115	22.6
Knowing the presence of screening methods for diagnosis (n = 509)	Yes	127	25.0
	No	382	75.0
How frequent is the screening (n = 127)	Once every year	81	63.8
	Once every three year	4	3.1
	Once every five year	3	2.4
	Do not know	39	30.7
Who should be screened (n = 127)	All reproductive age women	78	61.5
	Elderly women	6	4.7
	Prostitutes	5	3.9
	Do not know	38	29.9
Do you know procedures used in the detection of cervical cancer (n = 127)	Yes	27	21.3
	No	100	78.7
Do you know anyone with cervical cancer (n = 509)	Yes	29	5.7
	No	480	94.3

* Others = teachers, religious leaders

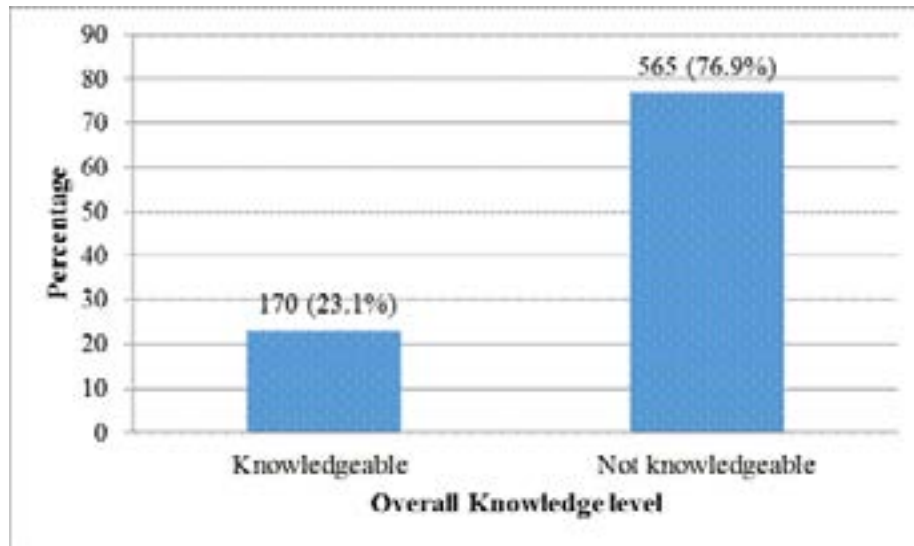


Figure 1: Overall knowledge status of respondents towards cervical cancer, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Attitude towards cervical cancer

From all study participants who heard about cervical cancer, 244 (47.9%) have a positive attitude for the item "If screening is free and causes no harm, they will be screened." For the item "Screening for pre-malignant cervical lesions is not expensive" 181 (35.6%) had a positive

attitude. Two hundred ten (41.3%) of the study participants had a positive attitude towards the item "screening causes no harm to clients" whereas for the item "Any adult woman including you can acquire cervical carcinoma?", only 152 (29.9%) had a negative attitude (Figure 2). Generally, 272 (37%) of study participants had a positive attitude towards cervical cancer screening (Figure 3).

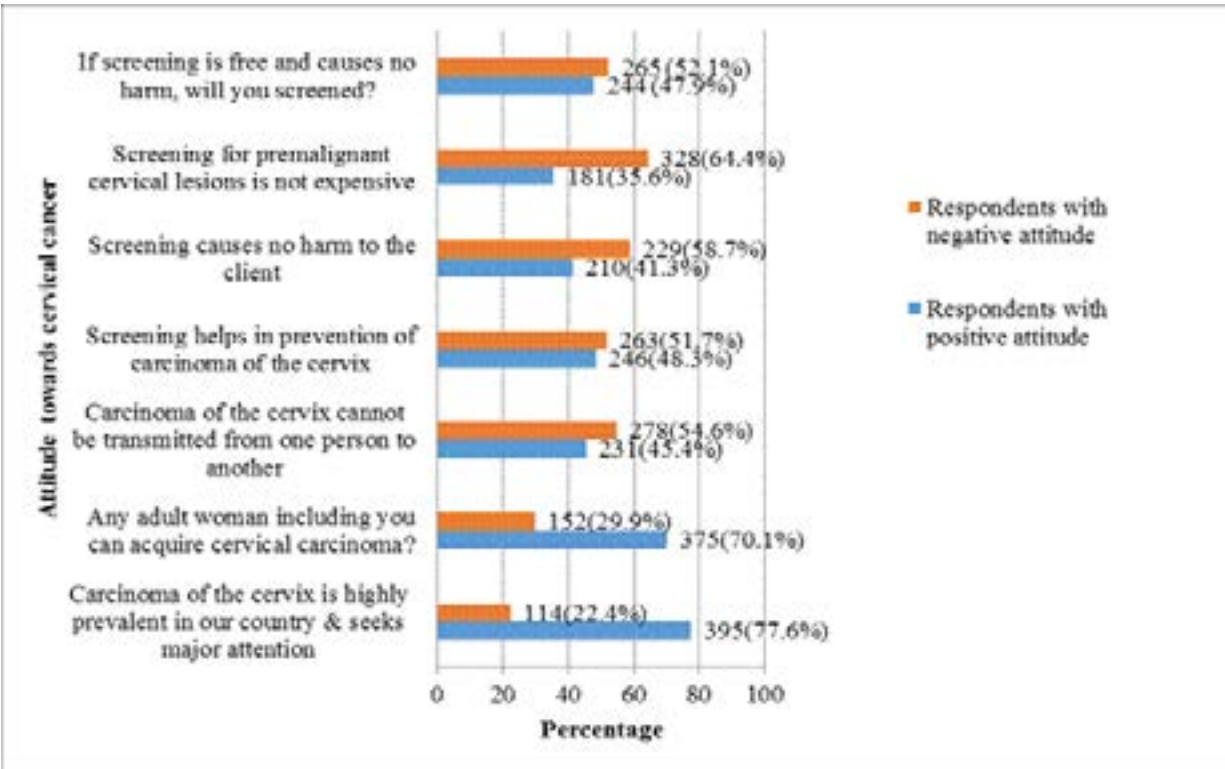


Figure 2: Attitude status of respondents towards cervical cancer, Finoteselam City Administration Amhara Region, North West Ethiopia, 2017.

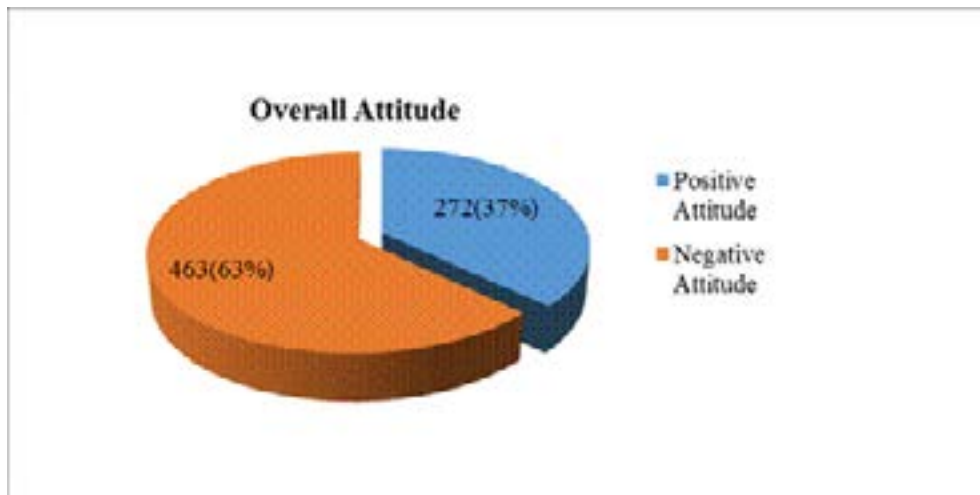


Figure 3: Overall attitude status of respondents towards cervical cancer, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Screening practice for cervical cancer

From all study participants, 142 (19.3%) had heard about screening for cervical cancer and from these 54 (38%) were screened for the disease. From those screened study participants, 45 (83.3%) screened once in their lifetime.

Thirty-seven (68.5%) of these initiated the screening by themselves and 34 (63%) had been diagnosed before three years ago. Regarding for the reason for not screening, 334 (45.4) said it was because they felt they were healthy whereas 160 (21.8%) it was because of fear of the result (Table 4).

Table 4: Screening status for cervical cancer among study participants, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Variables in the study		N	%
Ever heard for screening (n = 735)	Yes	142	19.3
	No	593	80.7
Ever screened for any sexually transmitted diseases (n = 735)	Yes	397	54.0
	No	338	46.0
Ever screened for cervical cancer (n = 142)	Yes	54	38.0
	No	88	62.0
How many times you screened (n = 54)	Once	45	83.3
	More than once	9	16.7
Who initiates you for screening (n = 54)	Self-initiation	37	68.5
	Offered by health professionals	17	31.5
Your last screening (n = 54)	In the last three years	20	37.0
	More than three years ago	34	63.0
Reason for not screening	I am healthy	334	45.4
	I afraid the result	160	21.8
	I am not informed	148	20.1
	It may be painful	39	5.3

Factors associated with knowledge of cervical cancer

Candidate predictor variables from bivariate regression with knowledge of cervical cancer were entered to the multivariable logistic regression analysis. And the logistic regression analysis showed that age (AOR = 2.8, 95% CI: 1.01, 7.9), marital status (AOR = 0.22, 95% CI: 0.06, 0.70), religion (AOR = 8.8, 95% CI: 2.04, 37.7), experienced sexual intercourse (AOR = 2.9, 95% CI: 1.15, 7.49) and age at 1st sexual intercourse (AOR = 3.7, 95% CI: 1.8–7.5) were found to be significantly associated with the knowl-

edge of cancer of the cervix. The odds of respondents in the age range of 35-49 years being knowledgeable about cervical cancer were 2.8 times more as compared to other age groups. Protestant religion followers were 8.8 times more likely to be knowledgeable than other religion followers. Those who had no history of sexual intercourse were almost 3 times more likely to be knowledgeable than those who had sexual intercourse and from those who had experienced sexual intercourse at the age ≥ 18 years were 3.7 more likely to be knowledgeable than their counterparts (Table 5).

Table 5: Factors associated with knowledge towards cervical cancer among study participants, Finoteselam City Administration (n=735) Amhara Region, Northwest Ethiopia, 2017.

Variables		Cervical cancer screening knowledge				AOR (95% CI)
		Knowledgeable		Not knowledgeable		
		n	%	n	%	
Age	< 24 years	35	15.2	196	84.8	1
	24 – 34 years	66	24.1	208	75.9	1.03(0.42,2.53)
	35 – 49 years	63	32.6	130	67.4	2.8(1.01,7.9)*
	>49 years	6	16.2	31	83.8	3.2(0.4,23.1)
Marital status	Married	59	20.3	231	79.7	1
	Single	92	26.7	252	73.3	0.63(0.25,1.5)
	Others¥	19	18.8	82	81.2	0.22(0.06,0.7)*
Religion	Orthodox	137	21.6	496	78.4	1
	Muslim	22	31.0	49	69.0	1.1(0.36,3.3)
	Protestant	11	35.5	20	64.5	8.8(2.04,37.7)*
Experienced sexual intercourse	Yes	118	27.4	313	72.6	1
	No	52	17.1	252	82.9	2.9 (1.15,7.49)*
Age at 1 st sexual intercourse	< 18 years old	86	85.1	15	14.9	1
	>= 18 years old	227	68.8	103	31.2	3.7(1.8,7.5)*

Others¥= Divorced & Widowed, AOR = Adjusted Odds Ratio, * = P Value < 0.05

Factors associated with attitude towards cervical cancer

Candidate predictor variables from bivariate regression with attitude of cervical cancer were entered to the multivariable logistic regression analysis. Logistic regression analysis showed that age (AOR = 1.9, 95% CI: 1.3, 3.0 & AOR = 2.0, 95% CI: 1.2, 3.5), educational status (AOR = 1.8, 95% CI: 1.0, 3.3, AOR = 2.9, 95% CI: 1.5, 5.3), AOR = 1.9, 95% CI: 1.04, 3.3 & AOR = 2.2, 95% CI: 1.12, 4.4) and use of contraceptives (AOR = 0.6, 95%

CI: 0.5,09) were found to be significantly associated with attitude towards cancer of the cervix. Study participants who were found in the age range of 24-49 years were almost 2 times more likely to have a positive attitude when compared with other age groups. Regarding educational status, those who had BSc Degree and above were 2.2 times more likely to have a positive attitude when compared with illiterate counterparts. Those who did not use contraceptives were 0.6 less likely to have a positive attitude when compared with those who used contraceptives (Table 6).

Table 6: Factors associated with attitude on cervical cancer screening, Finoteselam City Administration, Amhara Region, Northwest Ethiopia, 2017.

Variables		Attitude Towards Cervical Cancer Screening				AOR (95% CI)
		Positive Attitude		Negative Attitude		
		n	%	n	%	
Age	< 24 years	68	29.4	163	70.6	1
	24 – 34 years	116	42.3	158	57.7	1.9(1.3,3.0)*
	35 – 49 years	77	39.9	116	60.1	2.0(1.2,3.5)*
	>49 years	11	29.7	26	70.3	1.5(0.6,3.7)
Educational status	Illiterate	28	25.2	83	74.8	1
	primary school	49	38.9	77	61.1	1.8(1.0,3.3)*
	secondary school	42	51.2	40	48.8	2.9(1.5,5.3)*
	College/ University student	44	39.6	67	60.4	1.9(1.04,3.3)*
	Diploma	83	33.5	165	66.5	1.5(0.9,2.5)
	BSc and above	26	45.6	31	54.4	2.2(1.12,4.4)*
Used any contraceptive	Yes	128	42.2	175	57.8	1
	No	144	33.3	288	66.7	0.6(0.5,0.9)*

AOR = Adjusted Odds Ratio, * = P Value < 0.05

Discussion

Despite the high growing burden of cervical cancer, it continues to receive low public health priority in Africa, largely because of limited resources and other pressing public health problems, including communicable diseases such as acquired immune deficiency syndrome (AIDS), malaria, and tuberculosis. It may also be in part due to a lack of awareness about the magnitude of the current and future cancer burden among policy makers, the general public, and international private or public health agencies⁷.

The aim of this study was to assess knowledge, attitude and practice towards cervical cancer for women residing at Finote selam City Administration.

In the current study, the overall knowledge of the reproductive age women towards cervical cancer was 23.1%, 63 % having a negative attitude towards cervical cancer

screening and 7.3% had a history of screening for the disease.

A study done in Addis Ababa on reproductive age women showed that the overall knowledge of cervical cancer and attitude towards cervical cancer screening was 43.8% & 56% respectively and an overall practice of cervical cancer screening was 3.5%¹⁵. Another study which was done at the Southern Ethiopia, Hossana Town, also showed that 53.7% of participants had good knowledge, 34.8% had negative attitude and 9.9% of study participants had been screened for the cervical cancer¹⁶. The probable discrepancy here maybe, because of the study setting difference where Addis Ababa and Hossana Town are urban cities whereas Finote selam is relatively a rural town. These and other factors may have their own impact on the information access, lifestyle differences, and service utilization access differences. All factors have their own

role on study participants having the varied knowledge, attitudes and screening practice for the disease.

In a study done in Malaysia, the prevalence of ever having had a Pap test was 6%. Majority of the participants had adequate knowledge about risk factors for cervical cancer. The highest knowledge about cervical cancer risk factor reported by the respondents was having more than one sex partner, whereas the lowest was the relationship between HPV and cervical cancer¹⁷.

In a study done in Tanzania district less than one quarter (22.6%) of the participants had obtained cervical cancer screening¹⁸. Even if the Tanzania's study was conducted on rural reproductive age women, there may be a presumed difference with our study because in Tanzania, there is screening service access, awareness creation activities regarding the disease and screening availability was highly promoted in the area. Whereas in our setting all awareness creation about the disease is almost null and this makes the initiation to participate in the screening service very low.

In a study done in Qatar, almost 40% had had a Pap smear test at least once and 85.5% of the rest would have a test if they were told that the procedure was painless and simple. Over half wanted the test to be done in the well-woman clinic at the primary health care center¹⁹. The possible discrepancy here may be lifestyle changes, active involvement of health professionals in awareness creation.

In a study done in India, 85 % of the HCPs were aware of the major risk factors and symptoms of cancer cervix. Eighteen point four percent of the female HCPs had ever undergone cervical cancer screening³. Another study from Northern Ethiopia, Gondar, showed that from 633 women only 31% were knowledgeable about the disease¹. The difference in these results may be attributed to the fact that Gondar is relatively a large town, having a teaching hospital and many more private clinics that may have their own role to create awareness towards the disease. Even there is an oncology center in Gondar.

In the current study, age of the study participants, marital status, religion, and experiencing sexual intercourse were found to affect knowledge of cervical cancer. This finding is somewhat not consistently with a study done in Ni-

geria, which revealed that educational level was found to significantly affect knowledge of cervical cancer screening test. Age and marital status were not found to affect knowledge of cervical cancer². This discrepancy may be due to that differences in socio-cultural and economic variations in the regions of Ethiopia and that of Nigeria. Whereas our finding is somewhat consistent with a study done in Malaysia that revealed that age, marital status, ethnicity, and monthly family income were significantly associated with knowledge of cervical cancer screening¹⁷.

Conclusion

The mean age of participants was $30.82.7 \pm 9.83SD$ years, with a minimum of 17 and maximum of 88 years. Averagely from those who practiced sexual intercourse, the average age was 19.18 years and 10 years was the minimum one.

Almost one-fourth of the study participants experienced sexual intercourse below the age of 18 years.

Five hundred nine (69.3%) had heard about the disease (cervical cancer). Three hundred eighty-six (75.8%) of study participants did not know that cervical cancer can be cured in its earliest stage.

Four hundred sixty-three (63%) had a negative attitude for cervical cancer screening and only fifty-four participants participated in cervical cancer screening. From those who were not screened for the disease, 334 (45.4%) thought they were healthy, thus did not need the screening. It will be beneficial to work with religious leaders on awareness creation program towards cervical cancer programs.

Ministry of health in collaboration with other concerned bodies should design a strategy to educate the women and public about cervical cancer including information on risk factors, signs and symptoms of the disease and availability of screening.

Establishing population-based cervical smear screening programs for cervical cancer should be done because such programs have shown the effectiveness of screening in reducing the mortality rate.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

AS wrote the proposal, participated in data collection, analyzed the data and drafted the paper. TD & WA approved the proposal with some revisions, participated in data analysis and manuscript preparation. All authors read and approved the final manuscript.

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