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KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS CERVICAL CANCER AND SCREENING FOR CERVICAL CANCER AMONG JUGAL HOSPITAL STAFFS, IN HARARI REGIONAL STATE, ETHIOPIA, 2017

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ABSTRACT

Background: Cervical cancer was the fourth most frequently diagnosed cancer with an estimated 527,600 cases and the fourth leading cause of cancer death with 265,700 deaths among women worldwide in 2012. However, in developing countries, it is the second most commonly diagnosed cancer after breast cancer and the third leading cause of cancer death after breast and lung cancers. In Ethiopia among the general population about 33.6% of women are estimated to harbor cervical HPV infection at a given time. From those, 7,095 new cervical cancer cases are diagnosed annually. Cervical cancer ranks as the 2nd most frequent cancer among women between 15 and 44 years of age. Study showed that cervical cancer screening coverage in Ethiopia is one of the lowest in the world. Available data show that the Ethiopian national average coverage of cervical cancer screening is 0.6% and is even lower (0.4%) in rural areas. **Objective**: The study aimed to assess the level of knowledge, attitude and practice concerning cervical cancer among female health professionals in jugal hospital. **Methodology**: An institutional based cross-sectional study was conducted from October–November 2017 among a total of 103 female staffs, only 93 were cooperative. Structured self administered questionnaire was used for data collection. Univariate, bivaraite and multivariate analysis were used. **Results:** Lower than 15% of the respondents had good knowledge, 83 (89%) staffs heard about cervical cancer. and only Only8 (8.6%) were screened in their lifetime for cervical cancer. Lack of information about cervical cancer (said that they are healthy) was the most reported reason for not attending cervical cancer

screening. Level of knowledge of cervical carcinoma was not associated with attitude on screening, those with good knowledge also was not significantly associated with practice. **Conclusion and recommendation:** There is Limited knowledge about cervical cancer, There is Very low rate of screening for premalignant cervical lesions and The most reasons for low practice of screening are, being health and lack of information. So Efforts to promote cervical cancer screening among women should focus on informing women of their susceptibility to cervical cancer and encouraging a belief that active and regular screening can detect the pre-cancerous stage, hence enabling early treatment and prevention of cancer development, Jugal Hospital should create awareness regarding cervical cancer screening since screening services is being given at these facility and Further study should be conducted at the community and national level to target all females and other findings.

KEYWORDS: Cervical cancer Univariate, bivaraite and other findings.

1. INTRODUCTION

Non-communicable diseases like cancers are creating devastating effects in the developing countries. According to the World Health Organization (WHO) and International Union against Cancer there were 24.6 million people living with cancer around the world in 2002 and in 2008 cancer was responsible for the deaths of 7.6 million people.[1,2] Globally cancer is the fifth most frequent malignancy in men and second among women, overall, 715,000 new cancer cases and 542,000 cancer deaths were estimated to have occurred in Africa.[2,3]

Cervical cancer was the fourth most frequently diagnosed cancer with an estimated 527,600 cases and the fourth leading cause of cancer death with 265,700 deaths among women worldwide in 2012. However, in developing countries, it is the second most commonly diagnosed cancer after breast cancer and the third leading cause of cancer death after breast and lung cancers.[4]

Cervical cancer is caused mainly by infection with certain strains of the human papilloma virus (HPV), a predominantly sexually transmitted virus that infects the epithelial cells of the cervix uteri that can result in precancerous lesions and invasive cancer.[5]

Screening will be the principal preventive measure to reduce the burden of cervical cancer in these women. The main target of cervical cancer screening is to identify early-stage invasive cancer, and more importantly, cervical intraepithelial neoplasia.[6]

Pap test is the conventional cervical cytology test. A positive Pap test is followed by colpo-scopy, a procedure to examine the cervix for signs of disease (with or without biopsy) and then treatment, if necessary. Using the Pap test in population-based screening programs has helped reduce the incidence and mortality of cervical cancer by up to 80% in several developed countries over last five decades.[7]

"Cervical cancer is fully preventable and curable, at low cost and at low risk, when screening to facilitate the timely detection of early precursor lesions in asymptomatic women is available together with appropriate diagnosis, treatment and follow-up".[8]

According to the Cervical Cancer Crisis Card 2013, cervical cancer kills an estimated of 275,000 women every year and 500,000 new cases are reported worldwide. This entirely preventable disease is the second largest cancer killer of women in low and middle-income countries, with most women dying in the prime of life. Mortality rates highlights that, Africa is the most affected region with highest rate of cervical cancer.[9]

Cervical cancer is one of the most common cancers in women worldwide with over 500,000 new cases diagnosed each year.[10] the number of new cases and deaths per year due to cervical cancer are disproportionately high in developing countries, amounting to 86% and 88% of the worldwide cases and deaths respectively.[11]

The summary report on cervical cancer statistics in Ethiopia by WHO/ICOICHPVCC (2010) shows that close to 5,000 women are diagnosed with cervical cancer each year of which about 70% of women diagnosed with cervical cancer die of the diseases every year. Cervical cancer is the leading cause of cancer related deaths among Ethiopian women.[12]

In Ethiopia among the general population about 33.6% of women are estimated to harbor cervical HPV infection at a given time. From those, 7,095 new cervical cancer cases are diagnosed annually. Cervical cancer ranks as the 2nd most frequent cancer among women between 15 and 44 years of age.[13]

Every year in Ethiopia, between 60 to 81 women die from cervical cancer, and age at which women are dying seemed to be getting younger with the youngest between the age-group 20 to 24.[14]

Study showed that cervical cancer screening coverage in Ethiopia is one of the lowest in the world. Available data show that the Ethiopian national average coverage of cervical cancer screening is 0.6% and is even lower (0.4%) in rural areas.[15]

2. METHODOLOGY

2.1 Study area and period

The study was conducted at jugal hospital which is found 525 km to East of Addis Ababa. It has a total of 342 staffs among these 208 of them are health care professionals where as the rest are non health professionals, the hospital is found in Harar towns. It was established in 1905GC, it is the first governmental hospital in Ethiopia, named as Misrak Arbegnoch Hospital and the hospital changed its name to jugal hospital. Currently, the hospital is providing different health services including cervical cancer screening activity.

The study was conducted from October to November 2017.

2.2 Study design

The institutional cross sectional quantitative study was conducted.

2.3 Source population

All female staffs in jugal hospital.

2.4 Study population

All female health professionals in jugal hospital from all departments of the hospital.

2.5 Sample size determination

All female nurses who are working in jugal hospital were included.

2.6 Data collection Methods

The data collection instrument was pre-tested and anonymous self-administered close-ended, which was adopted and modified after reviewing different literature. The questioner was prepared by English. It was composed four parts. The first part was contained information on the socio-demographic characteristics of the study participants. The second part used to assess knowledge of staffs (study participants) about cervical cancer screening; the third part was evaluated their attitude towards cervical cancer screening while the forth part will concern with the practice of CCS.

Data was collected using a self administered questionnaire, was facilitate by four female nurses, and two supervisors. Then the data collectors were described to the staffs about the objective of the study and administer the questionnaire by crosschecking their identification number. Finally, the data collectors were collected the filled questionnaires and cross check the completeness of the questionnaire.

2.7 Data quality management

Pre-testing was conducted prior to data collection process. Based on the pre-test, questions were revised and edited with necessary modification. Questionnaires were prepared in English since our study populations are educated and can read & understand the concept of the questions this was minimized the risk related with questioner translation. Data was entered using EPI info version 3.5.1 and clean then exported to SPSS version 20 software packag by the Principal investigator. The data was cross checked prior to actual analysis. The issue of confidentiality and privacy was stressed in much depth during the training session and by using coding system.

2.8 Data analysis procedure

For data processing and analysis, SPSS version 20 was used. Data was checked for completeness and consistency; Coded data was entered into computer programs after the required cleaning was done.

Frequency distribution tables were used to describe most of the findings and graphs were also plot for some accordingly; and other descriptive summaries were calculated. Univariate and then multivariate analysis was carried out. Odds ratio (OR) with confidence intervals and p-values were calculated and tests of association for categorical variables were made. A logistic regression test to control confounding variables and identified major factors determining utilization of cervical cancer screening services were carried out. The output of the analysis were given and odds ratio with their respective confidence intervals. P value of 0.05 was taken as level of significance.

2.9 Study variables

2.9.1 Dependent Variables

Knowledge, Attitude and & Practice towards cervical cancer and cervical cancer screening.

2.9.2 Independent variables

Socio-demographic variables such as: Age, Educational status, Marital status, Department and, profession.

2.10 Operational definitions

Knowledge

Awareness or familiarity with a cervical cancer and its screening. It was classified in to two parts and scored according to the number of questions in each part to assess the students' level of knowledge.

After the responses were summed up and a total scored was obtained for each respondent so they were categorized as knowledgeable and not knowledgeable.

Knowledgeable

Referee to for those who were scored mean and above the mean considered as knowledgeable.

Not knowledgeable

Refers to for those scored below the mean were considered as not knowledgeable.

Attitude

Opinion, way of thinking: behavior reflecting about cervical cancer screening.

Attitude

Was assessed by questions on Likert's scale. And the mean score was calculated to use as a cut point.

Positive attitude

Refers to for those scored the mean and the above mean.

Negative attitude

refers to for those scored below the mean.

2.11 Ethical considerations

Ethical clearance was obtained from Harar Health Science College institutional review board (IRB) before the staring of the field work. An official letter of co-operation was written to jugal hospital. Respondents were informed about the objective and purpose of the study and

verbal consent was obtained from each respondent. Moreover, all the study participants were informed that they have a full right to participate or decline from participating in the study and the study participants were assured for an attainment of confidentiality for the information obtained from them.

3. RESULTS

3.1 Socio-demography characteristics of respondents

Out of 103 female health professionals, a total of 93 staffs completed the questionnaire making the response rate 96%. A total of 36(38.7%) of the respondents were found in the age category of 18-24. Out of total study subject 39(41.9) of respondents had degree where as the rest 54(58.1) had diploma, of whom 40(43%) were married while the remaining 53(57 %) not married yet.

About respondents departments 19(20.4%) respondents were from obstetric ward followed by pharmacy 10(10.8%) and the rest were from different department like surgical, gynecological, OPD, ICU, laboratory, radiography, OR and pediatrics and others. Out of total respondents most of them were nurse 56(60.2 %) and flowed by midwives (Table 1).

Table 1: Socio-demographic characteristic of Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

Variable		Number	Percent
Age	18-24	36	38.7
	25-31	32	34.4
	32-38	14	15.1
	39-45	4	4.3
	46-52	4	4.3
	53+	3	3.2
Educational level	Diploma		
	Degree		
Marital status	Married	40	43
	Not yet married	53	57
Profession	Nurses	56	60.2
	Midwives	20	21.5
	Other health	17	18.3

3.2 Knowledge of respondents on cervical cancer

Lower than 15% of the respondents had good knowledge, 83(89%) staffs heard about cervical cancer. Of these who had heard about cervical cancer the most frequently source of information 32(34.4%) was teachers followed health workers 29(31.2%), mass-media

18(19.4%), mentioned family, neighbours and friends 12(13%) mentioned and the least source of information 2 (2%) was from religious leaders (Table 2).

Table 2: Knowledge about cervical cancer among Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

Knowledge Variable	Frequency	Percent (%)
Knowledge score(Good)	14	13.9
Heard about cervical cancer(yes)	83	89
Source of information (n=93)		
Heard from teacher	32	34.4
Heard from health worker	29	31.2
Heard from news media	18	19.4
Heard from family, neighbour, friend	12	13
Heard from religious Leaders	2	2

Regard knowledge about symptom and risk factors of cervical cancer. Vaginal foul smelling discharge was the most known symptom by respondents accounted for 57(61.3%), Vaginal bleeding during sexual intercourse was mentioned by 31 (33%) and 5 (5.4%) answered do not know as the symptom of cervical cancer. When asked on the knowledge about the risk factors for cervical cancer, 70(75.3%) respondents said that having multiple partners as a risk factor, followed by 12(13%), early sexual intercourse 10(10.8%) acquire HPV and 1(1%) cigarette smoking as risk factors(Table 3).

Table 3: Knowledge about symptoms and risk factors of cervical cancer among Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

Symptoms of cervical cancer	Frequency	Percent
Vaginal foul smelling discharge	57	61.3
Vaginal bleeding during sexual intercourse	31	33
do not know	5	5.4
Risk factor for cervical cancer		
having multiple partners	70	75.3
early sexual intercourse	12	13
acquire HPV	10	10.8
cigarette smoking	1	1

Regarding cervical cancer prevention, treatment and screening options. Fifty four (58.1%) participants said that cervical cancer is prevented by avoiding multiple sexual partners, 22(23.7%) reported that avoiding early sexual intercourse and 4(4.3%) quitting smoking prevent cancer of the cervix. forty two (45.2%) respondents reported vaccination against HPV infection.

Regarding the treatment, 80(86%) participants knew that cervical cancer is treatable, 9(9.7%) do not know whether it is treatable or not, and 4(4.3%) participants said cervical cancer cannot be treated. Of those, who responded that cervical cancer is treatable herbal therapy, surgery, specific drugs and radiotherapy were reported as treatment means by 2.6%, 24.8%, 6.6% and 66% respectively. Respondents were asked about the cost of cervical cancer treatment 39(42%) answered it is free of charge, 24(26%) said is reasonable price, 14(15%), moderately expensive, 11(11.7%) very expensive, and 5(5.3%) did not know about cost of cervical cancer treatment.

Concerning how frequent one should be screened for cervical cancer, 38 (40.9%) participants answered once a year, 8(8.6%) every three years, 14(15%) every five years and 33(35.5%) did not respond on the frequency of screening. Fifty nine (63.4%) answered that women of above 25 years of age should be screened, while 17(18.3%) said that prostitutes and 17(18.3%) answered elderly women should be screened.

Twenty seven (29.0%) participants knew that biopsy is used as one method of screening procedures of cervical cancer, 59(63.4%) said Pap-smear and 7 (7.5%) mentioned VIA.

3.3 Attitude of respondent about screening of cervical cancer

A total of six questions put on Likert's scale to assess the attitude of participants towards cervical cancer screening. Based on the respondents score on the attitude part question 39(42%) the respondents had positive attitude towards cervical cancer screening. while the rest 54(58%) had negative attitude.

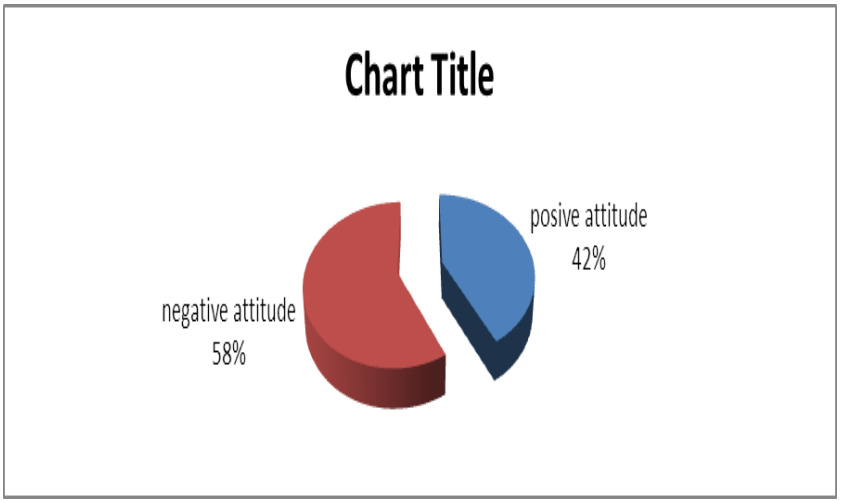

Figure 1: Attitudes towards cervical cancer screening among Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

5.4 Practice towards screening for cervical cancer

Eighty-five (91.4%) participants were not screened for cervical cancer. Only8 (8.6%) were screened in their lifetime.

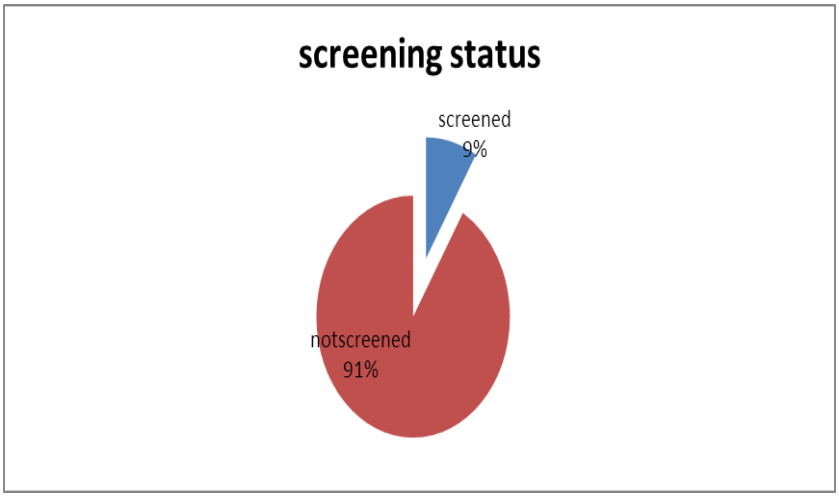

Figure 2: Status of cervical cancer screening among Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

When asked reasons for not screened, 31(33.33%) said that they are healthy, 20(21.5%) said they have not decided, 19(20.4%) afraid screen result reveal cervical cancer, 17(18.3%) painful and 6(6.5%) said feel shy (Table 8).

Table 4: Shows why not they screened for cervical cancer Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

Variables	Number	Percent
said that they are healthy,	31	33.33
said they have not decided	20	21.5
afraid screen result reveal cervical cancer,	19	20.4
painful	17	18.3
feel shy	6	6.5

Association between socio-demographic characteristics and practice toward cervical cancer screening. None of the socio-demographic characteristics were significantly associated with practice of cervical cancer screening.

Table 5: Table shows result of bi-variate analysis of Jugal Hospital female health professional staffs, Harar, Ethiopia November 2017.

Variable	Crude Odds Ratio with (95%CI)	P-value
Age		
Less than 30	1	
Greater than 30	1.29(0.21-7.91)	.782
Educational level		
Diploma	1	
Degree	1.778(.553-5.72)	.335
Marital status		
Not married	1	
Married	1.148(.461-2.858)	.767
Profession		
Nurse	1	
Midwifery	1.74(0.58-5.22)	0.327
Others	0.981(0.436-2.209)	0.964

4. DISCUSSIONS

In this study knowledge, attitude and practice about cervical cancer screening were examined. In this study 83(89 %) staffs heard about cervical. This finding is higher than the finding done in Addis Ababa in three hospitals on KAP study conducted in 2008 showed that, 38% respondents had heard of cervical cancer and Pap smear screening.[16] In this study the most frequently source of information 32(34.4%) was teachers followed health workers 29 (31.2%), mass-media 18(19.4%), mentioned family, neighbours and friends 12(13%) mentioned and the least source of information 2(2%) was from religious leaders.) and in Addis Ababa 2008, the main source of information was health institutions,[16] A study conducted in Kenya in 2003 The source of information was health care providers (17). The difference could be due to the study subjects and the study place.

In this study overall good knowledge score of the respondents was 13.9%. Similar low level findings were reported in Botswana study in 2003.[15] In this study Vaginal foul smelling discharge was the most known symptom by respondents accounted for 57(61.3%), Vaginal bleeding during sexual intercourse was mentioned by 31(33%) and 5(5.4%) answered do not know as the symptom of cervical cancer. the finding is lower than study done in Yemen in 2012 reported that Vaginal bleeding (77.2%), pelvic pain (43.9%), menstrual disturbances (35.1%).[18] This difference may be due to cultural and socio-economic deference, study area or study subject.

In this Study awareness vaccination against HPV infection and cervical cancer prevention was well identified by (45.2%) respondents reported. Similar with Study done in awareness of HPV and cervical cancer prevention among Cameroonian healthcare workers the causative link between high-risk HPV and cervical cancer was well identified by most respondents.[19,20]

In this study Only 8(8.6%) were screened in their lifetime. The finding is higher than study from Nigeria that only 6% of all women ever receiving cervical cytology testing.[16] and lower than study In Uganda 19% of female health workers have ever had a cervical cancer screening.[18] The difference might be due to study subject, study area.

5. CONCLUSION AND RECOMMENDATIONS

5.1 conclusion

There is Limited knowledge about cervical cancer.

There is Very low rate of screening for premalignant cervical lesions.

The most reasons for low practice of screening are, being health and lack of information.

5.2 Recommendations

Efforts to promote cervical cancer screening among women should focus on informing women of their susceptibility to cervical cancer and encouraging a belief that active and regular screening can detect the pre-cancerous stage, hence enabling early treatment and prevention of cancer development.

Jugal Hospital should create awareness regarding cervical cancer screening since screening services is being given at these facility.

Further study should be conducted at the community and national level to target all females and other findings.

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