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Assessment of Knowledge, Attitude and Pratice on Cervical Cancer Screening among Female Students of Mizan Tepi University, Ethiopia, 2016

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Abstract

Background: Women's reproductive cancer is defined as the different types of cancers found in the women reproductive system caused due to various health conditions either acquired or congenital. Out of the many type of female cancers, cervical carcinoma may be prevented if proper medical measures are taken in time. These preventive measures include detection and regular screening of the condition during premalignant stages. Ample knowledge is important to spot the premalignant lesions and the understanding should be spread among common people to increase the awareness towards screening and preventing the disease conditions as soon as possible. The aim of the study was to Asses knowledge, attitude and practice towards cervical cancer screening among female students in Mizan-Tepi University, Ethiopia, 2016.

Materials and methods: The study was conducted among female students in Mizan-Tepi University From February to May, 2016 G.C. Descriptive cross sectional study design was used. Simple Random sampling method was used to select total sample size of 209. Data was collected through standard pre tested tools. Ethical clearance was obtained from collage of health science,and Data was analyzed by using SPSS and finally, presented by using bargraph, table and pie chart.

Result: Generally the knowledge and practice of cervical cancer screening were found to be very poor, but the attitude was positive to majority of a respondents. The results showed that 71(33.97%) had poor knowledge, 85(40.67%) had satisfactory knowledge and only 53(25.36%) had good knowledge. Overall 128(61.24%) of the respondents had positive attitude towards screening for cervical cancer. And 31(14.83%) of the study participants have ever been screened.

Conclusion and recommendation: The study has shown that there is a lack of knowledge on cervical cancer and its screening. There is also poor utilization of screening services. We recommend Mizan-Tepi University has to increase awareness of students through mass media; College of health science has to prepare different campaign on cervical cancer screening program to increase the uptake of screening. We also recommend researchers to do further studies in this area by giving emphasis for factors.

Keywords: Cervical cancer; Screening; Premalignant

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Introduction

Women's reproductive cancer is associated with the different type of cancers caused in the women reproductive system. These include cancer of the cervix, ovaries, vagina, vulva and endometrial. Cases of cervical carcinoma in the African region are found to be increasing with time [1]. Reports show that the cervical cancer survival rate in the sub-Saharan African region was 21% in 2002 in comparison to that of 70% and 66% in the U.S and Western European countries [2]. In general, the preliminary screening for lesions for cervical precancerous and cancerous stages are done through visual inspection, but depending on the economic conditions, in a low cost setting use of acetic acid may aid a lot compared to the enriched cytological and colposcopic screening methods in resourceful rich settings [3]. The major source for HPV infection and cancer of the cervix depends on various issues including early age sexual intercourse, smoking habits for the immune suppressed individuals, having more than one sexual partners and so on [4]. All over the world cervical cancer remains as the most predominant cancer among the reproductive cancers [5]. It has been observed that women having early sexual activity may have HPV infection early too, more often before the age of 25 years. In most of the cases, certain infections do not show any clinical consequences. Approximately in 10% cases, the infection is retained in the patient and in a later stage after 5-10 years lesions appears which may show regression. On the other hand, certain times such cases remain stable or show progression to the next higher grade with invasive cancer [6]. According to the available statistics cervical cancer ranks second among the most common cancers in women worldwide. This disease is having an estimated 493,000 new cases along with 274,000 deaths per year. Developing countries such as Africa, Southeast Asia and Latin America is having about 83% cases which represents 15% of the total female cancer [7]. In Sub-Saharan area cervical cancer is known to be the major cause of cancer among women, maximum number of cases are reported from Zambia, Tanzania and Ethiopia, making this disease a major public health issue [8]. Moreover, it was found that awareness about the cervical cancer among the Sub-Saharan African women population is negligible [9]. The 2009 who report depicts the urgent need of action very clearly. The report suggest that in Ethiopia, rate of age-adjusted cervical cancer is around 35.5% per 100,000 patients, The increment in new cases per year is 7619 and deaths per year is reported as 6081. Unfortunately, despite this tremendous number of reported cases and annual deaths only few women receive the support of screening services in Ethiopia. Followed by breast cancer, cervical cancer remains the most predominant form of cancer among women; this information is support by the biopsy report review where no official cancer registry in the country is available at the moment. Due to lack of awareness and required number of screening programs and concentration on other health issues such as AIDS, TB, malaria, the number of incidences and reports of cervical cancer is exponentially rising in the country [10]. According to WHO study Screening has shown as effectively reduce the incidence of this malignancy in developed countries but in developing countries screening coverage is still low ranging from 2.0% to 20.2% in urban areas and 0.4% to 14.0% in rural areas. Low screening coverage in our country cause most patients to present to hospital with advanced disease [11]. Carcinoma of the cervix is a preventable disease; its prevention is through detection of premalignant stages of the disease by screening. However, in our country the knowledge, attitude and practice towards cervical cancer and its screening of women is not much is known. So this study aimed at to assess the knowledge of female students towards cancer screening. This study could play very crucial role in generating data that are important to fill gaps for policymakers. It could be also the source for those who are interested to conduct any further study on it. The aim of the study was to assess knowledge, attitude and practice towards cervical cancer screening of female students in Mizan-Tepi University, Ethiopia.

Methods

An institution based descriptive cross-sectional survey was conducted from February to May 2016 to assess knowledge, attitude and practice towards cervical cancer screening among female students, in Mizan-Tepi university, Ethiopia, 2016. The university is located in the southwestern Ethiopia, 581 km from Addis Ababa (AA). The university was established in 1999 E.C. and organized in to 7 college and 33 departments. It has two campuses Mizan and Tepi and the study was conducted from Mizan campus only. The total number of students in Mizan campus is 3600. Among this 1200 are females. This study was conducted from February to May, 2016. There is one general hospital, one health center and 5 health posts all run by the government. In the private sector there are 9 clinics (of which 5 are medium clinics), three drug distribution stores, and 5 drug venders. All female students residing in the study area, were included, while, female lady who were severely ill and those who cannot give any information by their own were excluded from the study.

Samples of 217 female students were recruited. Single population proportion method based formula was adopted to measure the sample size and the computation was done considering proportion 19%; margin of error of 5%, and 95% confidence level. And it was adjuted by adjusting formula, then, a 10% non-response rate was considered to obtain the total sample size of 217. Out of the total 5 colleges, 7 departments were selected by lottery methods. Probability proportional to size (PPS) was used for allocation of the total sample size of the female students in the selected department. Study participants were selected from each selected department by using systematic random sampling technique. The sampling interval was obtained by dividing the total female stunts in each department by the allocated sample. The first respondents was then chosen by lottery method as a starting point, and then data collectors were interviewed until the required sample size was obtained operational/term/definite.

Knowledge: It was operational zed based on their response for knowledge question - so who answer above 67%, 33-67%, and 33% of knowledge question was levelled as good satisfactory, and poor knowledgeable respectively.

Attitude: Students who answered attitude question above the

median have positive attitude. While, those who answered below median said to be negative attitude.

Practice: Refers to students who had history of cervical cancer screening at the time of data collection.

Related studies were followed to prepare the questionnaire.

Considering the patient population and their academic and social background, data collection system was initially prepared in English and later on translated into Amharic. Consistency of the translation and its meaningfulness was confirmed through back translation by other person. Considering the same population opted for this study, 5% of the sampled population was used for the questionnaire pre-test. Questions were modified depending on the outcome of the pre-test. Data were collected using a structured questionnaire. Data collectors were five public heath graduate students. Training on interview techniques were given to data collectors for two consecutive days.

Epi Info version 3.5.1.software was used for entering the data and pre-processing of the entered data. The final pre-processed and clean data were taken into SPSS Version 21 for analysis. Statistical analyses were done by bivariate method and the result finally presented by graph, table and summery note. Ethical clearance was obtained from the Research Ethics Committee College of Health Sciences in Mizan-Tepi University [12]. Oral informed consent was obtained from each study participant prior to data collection. Following the standard ethical practices, data confidentiality and privacy of the participants were maintained throughout the exercise.

Results

Socio demographic characteristics of the study Population A total of 209 female students were included in the study making the response rate 96%. Among the total participants (209), 167(79.90%) were between 20-24 years of age with a mean age of 21(SD ± 1.60) years. more than half of the respondents were orthodox (53.59%) and 118 (56.46%) were Amhara in ethnicity. Regarding to marital status the majority 187(89.47%) was single. Most of the respondent, (59.33%) had monthly income of 200-500 birr **(Table 1).**

Knowledge of students on cervical cancer screening about 111 (53.11%) participants were aware about cervical cancer. While investigating their source of information about cancer, among all respondents 53(25.36%) have good knowledge and 71 (33.97%) had poor knowledge regarding screening **(Table 2)**. About 91(43.54%) participants did not have any information pertaining to the risk factors associated with the cervical cancer. In general, 118(56.46%) of the total respondents successfully identified at least a single risk factor associated to cervical cancer. Having multiple sexual partners, early sexual intercourse, acquiring HPV and cigarette smoking were risk factors listed by majority of the respondents **(Figure 1)**. About 85 (40.67%) and 40(19.14%) of them mentioned vaginal bleeding and foul smelling vaginal discharge respectively when asked about the symptoms of cervical cancer. However, 106 (50.72%) of the respondents did not know any symptom. One hundred twenty eight (61.24%) of

Table 1 Socio demographic characteristics of the study population (N=209).

Characteristics	Frequency	Percentage (%)
Age		
15-19	40	19.14
20-24	167	79.9
25-30	2	0.96
Religion		
Orthodox	112	53.59
Muslim	61	29.19
Protestant	32	15.31
Others	4	1.91
Ethnicity		
Amhara	118	56.46
Oromo	33	15.79
Tigray	18	8.61
Others	40	19.14
Marital status		
Married	22	10.53
Single	187	89.47
Sexual partner		
Yes	35	16.75
No	174	83.25
Sexual intercourse		
Yes	25	11.96
No	184	88.04
Monthly income		
<200	29	13.88
200-500	124	59.33
500-800	50	23.92
>800	6	2.87

the respondents knew that as cervical cancer could be prevented. avoid multiple sexual partners and avoiding early intercourse were mostly mentioned prevention methods by the respondents 41.62 and 35.40% respectively. 54 (25.84%) of the respondents also knew that cervical cancer can be treated and 59, 37 40 of the respondents mentioned surgery, drug and radiotherapy respectively as treatment option **(Table 2)**.

Attitude of respondents towards screening for cervical cancer Majority of the respondents 128(61.24%) had positive attitude towards screening. Only 98(48.89%) of participants perceive carcinoma of the cervix is to be a problem in our country. Susceptibility perception was high as 49.28% of them agreed that they can acquire cervical carcinoma and 44.98% agreed that screening is important and 32.06% were ready to screen. And 26.31% of the participants agree that cervical carcinoma cannot be transmitted from person to person while 39.72% of them agreed it can be transmitted from person to person and the rest have neutral attitude on transmission. Only 44.96% of the respondents agreed that screening helps to prevent cervical cancer. Less than one third of respondents (27.29%) agreed that screening causes no harm to the client, whereas, 44.49% agrees as it is harmful. In general 61.24% of the respondents have positive attitude towards screening on cervical cancer, while the rest (38.76%) have negative attitude for screening. Practice

Table 2 Knowledge of respondents (N=209).

Variable	Frequency (n)	Percent(%)
Heard about cervical Ca		
Yes	111	53.11
No	98	46.89
Knowledge on screening		
good knowledge	53	25.36
satisfactory knowledge	85	40.67
poor knowledge	71	33.97
prevention		
avoid multiple sexual partners	87	41.62
avoiding early sexual intercourse	74	35.4
avoid/quit cigarette smoking	46	22
vaccination for HPV	47	22.3
don't know	81	38.75
Can Ca of the cervix have treatment?		
Yes	54	25.84
No	97	46.41
Don't know	58	27.75
Is there screening for cervical carcinoma		
Yes	141	67.46
No	68	32.54
At what interval is screening done?		
every year	98	46.89
every 3 years	43	20.57
every 5 years	23	11
don't know	45	21.54
Who should be screened?		
women of 25 years and above	102	48.8
Prostitutes	62	29.67
elderly women	41	19.62
Other	25	11.96

of respondents towards screening for cervical cancer from the total study population only 31(14.83%) have been screened for Cervical Cancer. The rest had not been screened for Cervical Cancer because of different reasons **(Figure 2)**.

Discussion

The findings of this study showed that 111 (53.11%) of the respondents had heard about cervical cancer. This is lower, when compared with the study done in Gondar, North West Ethiopia which was 78.7% and Ghana, Accra (93.0%), but higher than the study findings of Nigeria (40.8%). The discrepancy may be due to time variation and the differences of study setting. Those society who are in great access have better knowledge, so to fill this gap the government should promote the about cervical cancer and its screening. This study also revealed that 71 (33.97%) of the study population had poor knowledge pertaining to screening for cervical cancer. This is finding is line with the study done in Malaysia that showed as there is a lack of knowledge on the Pap smear test (screening test) on women aged 21-56 years who never experienced the Pap smear test [13]. The participants had the assumption that Pap smear test was used to identify existing cervical cancer and they were further convinced that this test was not required for them as they do not have any apparent symptom. Similar report is available for Malaysia too [14-21].

This showed as a lot of things have to be done regarding cervical cancer. The study demonstrated that 128 (61.24%) of the respondents had positive attitude towards screening for cervical cancer.

Similar to our study positive responses from the participants have been found in other study such as the study conducted in Songea urban, Ruvuma where 172(55.7%) of the samples did show positive attitude for screening [22]. Greater percentage (44.96%) of the participants was positive that in preventing cervical carcinoma screening could be an important step. Similar to this study previous study outcome was observed for the study in Ghana with the agreement of 87% of the participants for acceptance of the importance of screening [22]. Susceptibility perception became a hindrance while considering screening as it is well established fact that screening behaviour may alter due to the susceptibility towards cervical cancer. More than half (50.72%) of the participants reported related to their possible lack of personal susceptibility to cervical cancer and showed disinterest to go for screening. This is in line with the analysis performed in Ghana that displayed 48% of women expressed lack of susceptibility to cervical carcinoma which coincides with our current result [22]. About 32.15% participants in this study agreed to be screened for the cervical cancer with the condition of free and harmless health check-up, which means elimination of certain barriers will aid in increasing the number of women participants for screening. So the government has to make access and fee free service for cervical cancer screening.

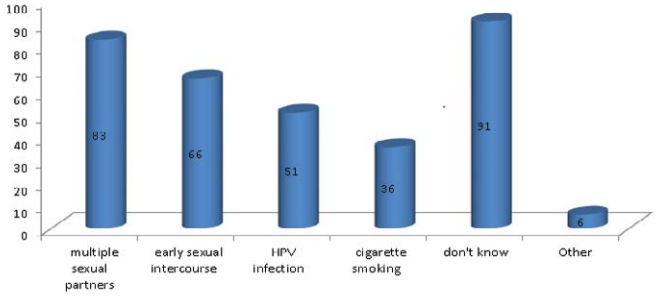

Figure 1 Showed the perception of study participants who are at risk for cervical cancer.

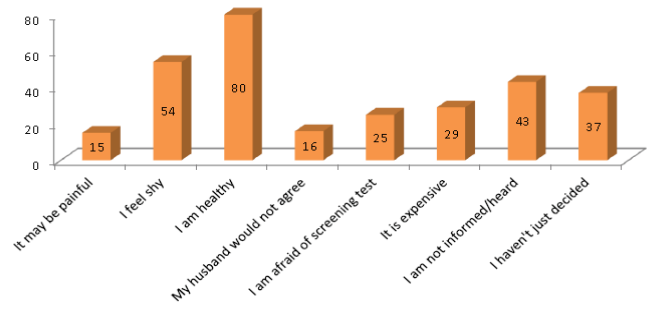

Figure 2 Showing reasons of the respondents for not screened for cervical cancer.

This study moreover showed that only 14.83% of the respondents have been screened for Cervical Cancer and 85.17% of the respondents had not screened for Cervical Cancer because of different reasons [17]. Among this 36.84% believe as they are healthy and 17.7% not yet decided to be screened. When compared with survey done in Kuwait it is relatively low, proving that cervical cancer screening among Kuwaitian women was 52.3%. This variation might be due to the common knowledge and understanding difference with relation to cervical cancer [15,20].

The number of participants for screening is more in developed countries compared to the developing countries. A cross sectional study of 650 women of 15-78 years of age in two hospitals in London revealed 80.5% participants had undergone at least 1 Pap smear. Moreover, 71.5% participants reported that they went through regular smears (every 3-5 years) [12]. Similarly, a study conducted in South Africa depicted poor rate of participants inclined for screening like other developing countries even after having knowledge of the related issues and availability of the required services. It was reported that majority of the women (87%) having higher social and academic background did not avail the test even after residing within 12 kilometer radius of the screening facility [19]. According to our study; willingness of participants for the cervical cancer screening was found poor even after having knowledge of the disease and its importance which was consistent with the study done in other African countries.

Conclusion and Recommendation

Majority of the study population had poor knowledge concerning screening for cervical cancer but most of them showed a positive attitude towards screening for premalignant cervical lesion. But still the practice of study participants towards cervical cancer screening was very low. As the respondent stated being healthy, thinking that screening is costly, and perception that the procedure is painful and other were their reason for did not undergo screening for cervical cancer. Based on this we recommend the government has to increase awareness of female on cervical cancer screening through HE and mass media. College of health science, Mizan-Tepi university has to prepare different campaign on cervical cancer and screening program, distribute leaflet and poster to increase the uptake of cervical cancer screening. Researchers have to do further studies in this area by giving emphasis to factors that influence utilization [18].

Reference

1 American Cancer Society (2011) Cancer Facts & Figures. American Cancer Society, Atlanta.

2 Hamad HM (2006) Cancer initiatives in Sudan. Ann Oncol 8: 32-36.

3 Parkin DM, Freddie B, Ferlay J, Paola P (2005) Global Cancer Statistics 2002. CA Cancer J Clin 55: 74-108.

4 Mandelblatt JS, Lawrence WF, Gaffikin L, Limpahayom KK, Lumbiganon P, et al. (2002) Costs and benefits of different strategies to screen for cervical cancer in less-developed countries. J Natl Cancer Inst 94: 1469-1483.

5 Anorlu RI (2008) Cervical cancer: The sub-Saharan African perspective. Reprod Health Matters 16: 41-9.

6 WHO/ICO (2009) Human papilloma virus and related cancers in Ethiopia.

7 Waktola EA, Mihret W, Bekele L (2005) HPV and burden of cervical cancer in east Africa. Gynecol Oncol 99: S201–S202.

8 Bekele L (2005) Evaluation of serological response to oncoproteins of human papilloma virus type 16 And 18 as potential seromarkers for cervical cancer screening. Addis Abeba University, Ethiopia.

9 http://www.waltainfo.com

10 Gichangi P, Estambale B, Bwayo J, Rogo K, Ojwang S, et al. (2003) Knowledge and practice about cervical cancer and Pap smear testing among patients at Kenyatta National Hospital, Nairobi, Kenya. Int J Gynecol Cancer 13: 827-833.

11 Karly L, Silvia S, Philippe M (2009) Epidemiology and prevention of Human Papillomavirus and cervical cancer in sub-Saharan Africa: A comprehensive review. Trop Med Int Health 4: 1287-1302.

12 Yu CK, Rymer J (1998) Women's attitudes to and awareness of smear testing and cervical Cancer. Br J Family Planning 23: 127-133.

13 Wong LP, Wong YL, Low WY, Khoo EM, Shuib R (2009) Knowledge and awareness of cervical cancer and screening among Malaysian women who have never had a Pap smear: A qualitative study. Singapore Med J 50: 49-53.

14 Sairaf M, Mohamed FA (2009) Knowledge, attitudes, and practice related to cervical cancer screening among Kuwaiti women. Med Princ Pract 18: 35-42.

15 Tebeu PM, Major AL, Rapiti E, Petignat P, Bouchardy C, et al. (2008) The attitude and knowledge of cervical cancer by Cameroonian women; a clinical survey conducted in Maroua, the capital of Far North Province of Cameroon. Int J Gynecol Cancer 8: 761-765.

16 Abotchie PN, Shokar NK (2009) Cervical cancer screening among college students in Ghana: Knowledge and health beliefs. Int J Gynecol Cancer 19: 41.

17 Adanu RM (2002) Cervical cancer knowledge and screening in Accra, Ghana. J Wom Health Gend Base Med 11: 487–488.

18 Ezem BU (2007) Awareness and uptake of cervical cancer screening in Owerri, South- Eastern Nigeria. Ann Afr Med 6: 94-98.

19 Kidanto HL, Kilewo CD, Moshiro C (2002) Cancer of the cervix: Knowledge and attitudes of female patients admitted at Muhimbili National Hospital, Dar es Salaam**.** East African Medical Journal 79: 467-69.

20 Mutyaba T, Mmiro FA, Weiderpass E (2006) Knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda. BMC Med Educ 6: 13.

21 James J (2011) Knowledge, attitude, practice and perceived barriers towards screening for premalignant cervical lesions among women aged 18 years and above, in Songea urban, Ruvuma.

22 Peter N, Navkiran KS (2009) Cervical cancer screening among college students in Ghana: Knowledge and health beliefs. Int J Gynecol Cancer 19: 412-416.