Knowledge , Attitude and Reasons for Nonparticipation in Cervical Cancer Screening Programme Among Female Nurses Medical Staff in Zawia Teaching Hospital, Libya

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Abstract:

Cervical cancer is a malignant neoplasm arising from cells originating in the cervix. One of the most common symptoms of cervical cancer is abnormal vaginal bleeding, but in some cases there may be no obvious symptoms until the cancer has progressed to an advanced (GLOBOCAN, 2008). Among all malignant tumours, cervical cancer is the one which can be most effectively controlled by organized screening programmes(Arbyan M,2009). The aim of the present study is to examine women's awareness of cervical cancer, to investigate women's perception of screening programmes , Finally To determine factors influencing utilization of services. This is a descriptive and cross sectional study was conducted in Zawia teaching hospital, from August 2015 to September 2015with total of 200 respondents. With self-administered questionnaire was used to obtained information on the socio-demographic characteristics of the respondents, Knowledge, perception about cervical cancer screening, as well as barriers against screening services. Fifty-three point five percent(107) of the women were aged 30–39 years and 63 (31.5%) were aged 40–49 years. Ten percent (20) of the respondents were aged 50 years and above. This means that the majority of the respondents were still within the reproductive age group 90% of the respondents were heard of cervical cancer and 51% heard of cervical cancer screening programmed . 91(45.5%) and 88(44%) of staff heard about cervical cancer from a physician and TV/Radio respectively.While 89(44.5%) and 56(28%) of staff heard about cervical cancer screening from TV/Radio and physicianrespectively.

Key words: Knowledge, attitude, barriers, cervical cancer, screening , Libya

INTRODUCTION

Cervical cancer is well recognized as the third most leading diagnosed in overall women'scancer disease in the world. Most cases were detected in the developingcountries in comparison to the developed countrieswithan estimated 529,409 new cases and 274,883 deaths in 2008. About 86% of the cases occur in developing countries, representing 13% of female cancers(WHO/ICO 2010).

A literature search identified studies that examine factors influencing women's in screening program, their psychological reaction to the receipt of an abnormal cervical smear result, and experiences of colposcopy(Oboma YI and Onyije FM , 2012) .Reasons given for nonparticipation included administrative failures, inconvenient clinic times, unavailability of a female screener, lack of awareness of the test's indications and benefits,considering oneself not to be at risk of developing cervical cancer, and fear of embarrassment, pain, or the detection of cancer.The receipt of an abnormal result and referral for colposcopy cause high levels of distress owing to limited, many women believe the test aims to detect existing cervical cancer(Al Sairafi and Mohamed, 2009).Inadequate knowledge and lack of awareness can become abarrier to cervical cancer prevention (Al-Naggar, 2012). Many participants in previousscreening participation

studies revealed that they have little knowledge of cervical cancer (Oon et al2011) and early screening using the Pap test can save their lives . Respondents also reportedthat they perceive that cervical cancer ultimately leads to death and can never be cured (Saslow D et al., 2012; Virtanen Aet al., 2010).Some respondents also feel that insufficient information is made available about the centers providing the screening facilities (Abotchieand Shokar, 2009; Al-Naggar et al., 2010; andAnttila A, 2010).

Other respondents expressed concern that they would lose their virginity if they undertook the cervical screeningtest. This may relate in part to lack of knowledge regarding Pap smear screening process andtest also associated with the socio-background of their familys (Arbyn M, Anttila A et al., 2010).

Materials and Methods

Study design:

This is a descriptive and cross sectional studywas conducted in Zawia teaching hospital, the study view point was conducted over a 9 month period from November 2014 to August 2015with total of 200 respondents. aimed at assessing and documenting the perception and utilization of cervical cancer screening services among female medical staff. It sought to understand the perception of this population about cervical cancer, its risk factors, severity and prevention. With self-administered questionnaire will be designed to assess the view, knowledge, level of perception and the attitude of female medical staff towards cervical cancer screening based upon similar studies conducted elsewhere and literature review. The questionnaire was used to obtained information on the socio-demographic characteristics of the respondents, Knowledge, perception about

cervical cancer screening, as well as barriersagainst screening services.The questionnaire included 19 questions and wasdivided into three sections: awarenessabout cervical cancer screening andrisk factors for cervicalcancer;reasons for non-participation in thenational cervical cancer screening programme; A face to face interview technique according to a form translated into simple Arabic language to ens-ure its comprehensibility. Respondents were given a free hand in response to questions and were only guided in their responses when they voluntarily called for assistance. They were also assured that the information provided would be kept confidential .

Study setting :

The data will be collected from Service departments in researcher area are grouped into clinical and non-clinical departments. The clinical department consisted of 8 departments (Anaesthesia, Obstetrics & Gynaecology, Dialysis , Radiology, General Surgery, Medicine, Theatre, Paediatrics) and the non-clinical comprised 3 departments (Pharmacy, NursingRecords, and Administrative/Finance Departments).

Sampling Procedure :

Stratified, proportionate and simple random sampling techniques will adopted for the selection of participated from all department.

Data Collection Process

Each interview started with an introduction and overview of the research including the objectives of the study. The respondents will told not to write any name on the self-administered questionnaire. Respondents were encouraged to ask questions on what they do not understand in the questionnaire. Explanations were given to respondents as required to aid their understanding of unfamiliar terms. The questionnaires were retrieved back from each respondent immediately after completion and they were reviewed for completeness.

Statistical Analysis:

Data entry and analysis were performed with using statistical package for social sciences (SPSS) version 14.Demographic data were summarizedusing descriptive statistic. Descriptive and inferential statistics such as percentages, Chi-square test, and factor analysis were used to determine the nature of the problem.The test of significance was considered when $p < 0.05$.

RESULTS

The study was successfully conducted in the selected hospital. With a good response rate.Table 1 illustrates the background characteristics of the respondents.**A** total of **200**female nurse were recruited for this study , Females aged 20–60 years participated in the study. Fifty-three point fivepercent(107) of the women were aged 30–39 years and 63 (31.5%) were aged 40–49 years. Ten percent (20) of the respondents were aged 50 years and above.This means that the majority of the respondents were still within the reproductive age group. In terms of their marital status, 53% of the respondents were single, 44% married, 1% widowed, and 2% divorced.Most of the respondents resided at rural area within 49% and 64% o f respondents were Libyan nationality and 36% were non Libyan , most of them were

Filipino (30%) , 2% from Bangladesh ,1.5% from Indian and Sudan and about 1% were from Egyptian. Fifty one percent 0f population study had 3 children.

Variable	Frequency	Percentage(%)
Age group		
20-29	5	2.5%
30-39	107	53.5%
40-49	63	31.5%
50-59	20	10%
>=60	5	2.5%
Marital Status		
Single	106	53%
Married	88	44%
Widowed	2	1%
Divorced	4	2%
Nationality		
Libyan	128	64%
Non Libyan	72	36%
(Filipino	60	30%
Indian	3	1.5%
Bangladesh	4	2%
Sudan	3	1.5%
Egyptian)	2	1%
Place of residence		
Big town	70	35%
Small town	32	16%
Country side	98	49%
Number of children		
0	69	34.5%
1	10	5%
2	8	4%
3	102	51%
>=4	11	5.5%

Table 1 Socio demographic data of respondents (n=200)

Table 2 shows the awareness of cervical cancer and cervical cancer screening. 90% of the respondents were heard of cervical cancer and 51% heard of cervical cancer screening programme .91(45.5%) and 88(44%) of staff heard about cervical cancer from a physician and

TV/Radio respectively.While 89(44.5%) and 56(28%) of staff heard about cervical cancer screening programme from TV/Radioand physicianrespectively.

Variable	Frequency	Percentage(%)
HEARD OF CERVICAL CANCER Yes No	 180 20	 90% 10%
HEARD OF CERVICAL CANCER screening Yes No	 102 98	 51% 49%
Source of information for Cervical Cancer (For those that demonstrated awareness)		
Physician/Health worker	91	45.5%
Family/ Friends	10	5%
Newspaper	6	3%
TV/Radio	88	44%
Internet	2	1%
No response	3	1.5%
Source of information for Cervical Cancer screening(For those that demonstrated awareness)		
Physician/Health worker	56	28%
Family/ Friends	8	4%
Newspaper	0	0
TV/Radio	89	44.5%
Internet	12	6%
No response	35	17.5%

Table 2: Awareness of cervical cancer and cervical cancer screening

In theadjusted model screening awareness depended on nationality - Non Libyan -speaking women were better aware of the programme than the others 95% CI: 6.72-7.78 and ***P*** value 0.03 those were explained in **table 3** below.

Socio-demographic characteristics	Categories	(CI 95%)	Test statistic P-value
Age group, yrs	20-29 30-39 40-49 50-59 >=60	1.43-1.57 6.48-7.98 5.82-8.04 3.95-8.94 2.52-7.48	0.87
Marital status	Single Married Divorced Widowed	6.90-8.75 6.11-7.29 6.61-8.28 5.48-8.52	0.11
Nationality	Libyan Non Libyan (Filipino Indian Bangladesh Sudan Egyptian)	4.81-6.99 6.72-7.78	0.06 0.03
Place of residence	Big town Small town Country side	6.12-7.78 6.61-8.28 5.08-8.04	0.55

Table 3: demographic characteristics of women awareness of cervical cancer screening programme

In the questionnaire all the cervical cancer risk factorswere given without stating this and women were askedwhether they think that these are risk factors or not.About 93% of the respondents had no knowledge of the common cause of this disease. In general Women did not have a good overview about cervical cancer risk factors ,for example, Respondents did not have any idea about the impact ofsmoking as a cause of cervical cancer and HPV was betterknown as a risk factor .

86.6% from the non Libyan women and 75.7% of the Libyan women responded that they were planningto participate in a cervical cancer screening programme.The overwhelming majority (97.7%) of the respondents had never heard about the Pap smear test. On the other hand, eight (2%) of the respondents had a correct

understanding of Pap smears. Of the respondents(non Libyan) who had undergone the Pap smear test in the study, only three (0.8%) had been screened.The three respondents who had had a Pap smear test reported that they were referred by their health care providers .

The main barriers identified by respondents for not seeking Pap smear tests were institutional and personal, as shown in **Table 4**. These were lack of screening sites, screening sites being too far away, limited information on cervical cancer, and absence of health education programs. The personal factors were lack of knowledge about the Pap smear test and the facilities where it can be carried out. This is because these two barriers had accounted for 16.25% and 12.73% of the total variation in the data, respectively. This means that these are the most devastating barriers. Specifically, items such as "the screening sites are too far from where I live" and "there is limited information on cervical cancer in the community" were dominant in the institutional barriers to the Pap smear test among the respondents. With regard to the personal barriers, the respondents lacked adequate knowledge about the test and where it could be done. Similarly, negative beliefs, and negative misconception barriers collectively explained about less than 47% of the total variation.The negative beliefs identified by the majority of the respondents were that the Pap smear test was embarrassing and painful. the negative misconceptions identified were that women did not feel at risk and therefore felt no need for Pap screening.

Scale	Loadings(MBS)*	Barrier factors
There are no screening sites in the community	**0.849**	Institutional barriers
There is limited information on cervical cancer in the community		Institutional barriers
The screening sites are too far from where I live		Institutional barriers
There are no health education programs to promote screening	**0.873**	Institutional barriers
I do not know what the test is all about	**0.939**	Personal barriers
I do not know of any screening sites	**0.376**	Personal barriers
Pap smear test is painful	**0.944**	Negative belief barriers
Recent visit to gynaecologist	**0.948**	Negative belief barriers
Appointment times not suitable	**0.885**	Negative belief barriers
It is not necessary for me	**0.188**	Negative misconceptions
	0.580	Negative misconceptions
	0.775	Negative misconceptions

Table 4 Barriers for non-attendance in the cervical cancer screening programme

*(MBS)= Mean barrier score calculated by totalling the subject responses for each question in order to get the mean barrier score. Higher scores indicate a greater perceived barrier scale.

The study revealed that not having Pap smear tests had significant associations with all seven barriers at the 5% significance level as shown in **Table 5**. This confirmed thenegative implications of these barriers on respondents' decision not to undergo a Pap smear test for cervical cancer. Confirming the results from the factor analysis, theChi-square test also revealed that institutional barriers were the main barriers to seeking a Pap smear test, followed by personal barriers, since they had the highest Chi-square values of 28.965 (*df* =4; *P*=0.000) and 26.055 (*df* =5; *P*=0.000), respectively.

Barriers	**Chi-square values**	***Df***	***P*-value**
Personal barriers	**26.055**	**5**	**0.000**
Institutional barriers	**28.965**	**4**	**0.000**
Negative belief barriers	**21.915**	**4**	**0.000**
Negative misconception barriers	**20.965**	**4**	**0.000**

Table 5 : Association between Pap smear test and the barriers to Pap smear test

Discussion

Libya has a population of 2.21 millionswomen ages 15 years andolder who are at risk of developingcervical cancer. Current estimatesindicate that every year 241
women are diagnosed with cervicalcancer and 95 die from the disease.Cervical cancer ranks as the 3rd most frequent canceramong women in Libya and the 7th most frequent canceramong women between 15 and 44 years of age. Data is notyet available on the HPV burden in the general population ofLibya. However, in Northern Africa, the region Libya belongsto, about 3.0% of women in the general population are estimatedto harbor cervical HPV-16/18 infection at a given time
and 81.2% of invasive cervical cancers are attributed to HPVs16 or 18.(ICO -HPV Cancer Libya 2014). This study had three principal aims. First, to estimate

which socio-economic characteristics are associated with female nursing awareness about cervical cancer. Secondly, to investigate women's perception of screening programmes and risk factors for cervical cancer. And finally, to study reasons why so many Libyan women do not participate in the cervical cancer screening programme. An important outcome of my study was that approximately a half of the respondents were not at all or were only partially aware proportion (49%) of the sampled population had never heard of cervical cancer screening. This finding is consistent with other research, which reported a lack of knowledge about cervical cancer among women in neighbourhood countries (Getahun F, 2013).Education on cervical screening through the mass media and health talks in delivering health care are imperative to informing women about cervical cancer and the facilities available for them. Opportunistic screening in health facilities could be encouraged to improve screening uptake, especially in women in rural area .It is evident that information about cervical cancer needs to be made available to women through mass campaigns about the disease, especially specific preventive measures and the screening facilities available.According to the WHO, cervical cancer is caused by HPV, which is a sexually transmitted

of cervical cancer screening. According toLibya Human Papilloma virus and Related Cancers, Fact Sheet 2014 (Dec 15, 2014) ,No data available onCervical screening practices andrecommendations. The study results revealed that there is a strong needto improve women's knowledge about cervical cancerrisk factors. Knowledge of women on cervical cancer and the Pap smear test are critical in cervical cancer prevention strategies. The results of this study shows that a great infection and mostly affects sexually active men and women.However, in the current study, only few respondent (non Libyan)knew that cancer of the cervix could be transmitted sexually. This implies that a greater proportion of sexually active women might acquire HPV through sex without them knowing the source of the infection.Awareness of the Pap smear test was low of the respondents had never heard about the Pap smear test. This is consistent with the findings of previous studies, in underdeveloped countries.In the present study, only 2% had correct understanding of Pap smears, ie, they could describe the test and identify facilities where one can obtain such services. This affirmed the findings of Kumar V(2011),in which a significant proportion (49%) of those who had been screened had inadequate knowledge about Pap smears.In Libya and other developing

countries, there is poor institutional framework to promote screening.This is different from industrialized nations, which have largely succeeded in implementing successful programs. A possible explanation is that women will engage in cervical screening if they are well-informed about it and the enabling factors are present to facilitate effective screening uptake. In the present study, institutional and personal factors were the main barriers regarding seeking Pap smear tests in Zawia ,Libya. Thesebarriers could impact the health-seeking behaviors of women at the mostimportant of this study was the response rate, probably concerning especially womenwho are not planning to participate in screening. This isa common problem in studies among non-attenders orin a population with a very low attendance rate inscreening. In the early stage of planning the study, I had to consider the fact that women who are most likelyto respond to the questionnaire are the ones who wishto participate in the community level. Evidence suggests that inadequate information on cervical cancer screening at the community level could be an important barrier in low–middle income countries in sub-Saharan Africa.Women could lack knowledge about where to access screening services.The personal barriers identified were that respondents lacked knowledge of screening sites and what the Pap test was about. Several studies have documented a low level of awareness of cervical cancer screening in developing countries.mystudyhad some limitations. One of the screening or have already been to agynaecologist - because they have more interest in thesubject. This tendency has been noted in several studiesbefore. Another problem was that women often didnot respond to the question about reasons of nonattendance.Also, the education level was not asked from respondents,but earlier studies have shown important associationbetween health behavior and educational level.

Conclusion

Cervical cancer is a problem of global health concern. Cervical cancer screening services such as the Pap smear test might be effective in detecting early precancerous lesions. A greater proportion of the staffrespondents had little or no knowledge of cervical cancer screening. There is a need for the authorities of tertiary educational institutions and particularly those of Zawia teaching hospital to incorporate regular cervical cancer screening into the health care of their staff. Adoption of alternative screening techniques, such as visual inspection with

acetic acid (VIA) may be necessary to widen patients' coverage. Pap smears should be accorded priority like other Maternal and Child Health Programs.The state government needs to put in place a policy on screening for cervical cancer with appropriate screening guidelines.

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