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Research Article

**CERVICAL CANCER: KNOWLEDGE AND SELF-EFFICACY
AMONG SAUDI WOMEN AT NAJRAN CITY**¹Heba Abdel-Fatah Ibrahim¹PHD, Assistant prof. in maternal and child health nursing department, Nursing College, Najran University.**Article Received:** July 2019**Accepted:** August 2019**Published:** September 2019**Abstract:**

Background: Cervical cancer remains to be a major global health problem towards women. In 2010 cervical cancer was the fifth most fatal cancer in women. Cervical cancer is a preventable disease and one of the key aspects of its prevention is the early detection of the premalignant lesion through the cervical screening measures.

Aim: evaluate knowledge, and self-efficacy regarding cervical cancer among Saudi women attending Primary Health centers in Najran city.

Methods: A cross-sectional study was carried out at two Primary Health Centers in Najran city. A convenience sample (N= 240) of Saudi women who attend to the selected primary health centers was included in the study. Data were collected by using self-administrated questionnaire involve three main parts; socio-demographic data, cervical cancer knowledge questionnaire, and self-efficacy scale.

Results: The findings revealed that only 14.2% of them had a previous history of Pap smear test. 55.4% of the women had poor knowledge regarding cervical cancer. Only 10.0% of them had good knowledge. Furthermore, 55.8% of them had moderate self-efficacy and 40.4% of them had a high self-efficacy.

Conclusion: It can be concluded that more than half of Saudi women in Najran have poor knowledge and moderate self-efficacy regarding cervical cancer. The majority of Saudi women had not been screened for cervical cancer.

Key words: Cervical cancer, knowledge, self-efficacy, Saudi women.

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INTRODUCTION:

Cervical cancer remains to be a major global health problem towards women. In 2010 cervical cancer was the fifth most fatal cancer in women. [1] It was documented worldwide as the fourth most common cancer in women by the year 2012, with about 528,000 new cases and 266,000 died of cervical cancer. [2]. It considered one of the important causes of gynecological cancer associated mortality and morbidity in the developing countries. [3,4].

In Saudi Arabia, cervical cancer is the eighth most common cancer in females between the ages 14 and 44. [5] According to the GLOBOCAN report in 2012, Saudi women have an estimated cervical cancer incidence of 2.2 per 100,000 age-standardized rate. Of these 241 women, 84 (34.8%) have died due to cervical cancer. [6]

The primary underlying cause for cervical cancer is human Papillomavirus (HPV). Infections with HPV are most commonly seen in young, sexually active females, with the highest prevalence in females under 25 years. Generally females are infected with HPV in their teens and 20s, but cervical cancer can take up to 20 years after the initial HPV infection to develop. [7] The other known risk factors for cervical cancer are the early onset of sexual activities, multiple sex partners, long term use of oral contraceptives, immunosuppressive disease, sexually transmitted diseases, smoking and specific dietary factors. [8]

Fortunately, cervical cancer is considered as one of the rare preventable malignant tumors. The prevention of the cervical cancer is done by screening tests and early detection of precancerous lesions. The cervical cancer screening test is called Papanicolaou (Pap) smear. The Pap smear test is considered proficient, inexpensive and an effective technique in discovering cytological changes in the cervix. The Pap smear shows an important role in screening programs and has an obvious role in reducing both the incidence and mortality of cervical cancers. [9]

According to Centers for Disease Control (CDC) 2013, the vaccine against HPV has been found to be the most effective known method in preventing cervical cancer among women who have not previously been exposed to HPV. [10] However, some studies have reported that early detection practices are affected by poor knowledge, wrong behaviors and beliefs related to cervical cancer screening in females. Such behaviors and beliefs may have a significant impact on the females' decision to take preventive actions against cervical cancer. [11,12]

Perception of self-efficacy has been found to play an important role in encouraging an individual to participate in cancer screening programs. The higher the perception of self-efficacy is the higher the compliance with the disease and management. Studies have shown that individuals with higher self-efficacy have Pap smear screening more [13,14]. In addition, the high level of knowledge about cervical cancer will increase a woman's awareness and enable her to develop positive health behavior. [14]

Aim of the study:

To evaluate knowledge, and self-efficacy regarding cervical cancer among Saudi women attending Primary Health centers in Najran city.

Research questions:

- (1) What is the cervical cancer knowledge of Saudi women?
- (2) What is the cervical cancer self-efficacy perception of Saudi women?

SUBJECTS AND METHODS:

A cross-sectional study was conducted between January 2019 and April 2019. The study was carried out at two Primary Health Centers in Najran city (Alkhalidia and Al Faisalia government Primary Health centers)

A convenience sample of Saudi women who attending to the selected primary health centers were selected and included in the study according to the following inclusion criteria: being married, widowed or divorced, being between 20 and 65 years of age, being at least literate and not having been diagnosed with cervical cancer, having no cognitive and/or mental problems, and willing to participate in the study. The study sample included 240 Saudi women who are attending and registered in the previously mentioned settings for a period of three months. It was calculated according to the following equation

$$n = \frac{N}{1+N(e)2}$$

DATA COLLECTION:

A self-administrated questionnaire, it was developed by the researchers in the Arabic language after reviewing related literature. It involved three main parts:

Part I: Socio-demographic data as Socio-demographic data as (age, residence, monthly income, level of education... etc.).

Part II: Cervical cancer knowledge questionnaire. The questionnaire was aimed at determining the level of knowledge about cervical cancer and the importance of Pap smear. It involved 5 questions

regarding (definition, signs and symptoms, risk factors, diagnostic measures and prevention....,etc). The scoring system for knowledge was calculated for each item as follows: the correct answer was scored (two points), the incomplete answer was scored (one point), while the unknown or incorrect answer was scored (zero). The total score for all questions related to knowledge was considered good if $\geq 75\%$, average if the score $50 < 75\%$ and poor if less than 50.0% .

Part III: Self-Efficacy Scale (SES). The scale is a Likert-type self-assessment scale that measures the overall self-efficacy perception [13]. The scale consists of 8 items. The items were rated on a five point Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree). The total self-efficacy score ranged from 8 to 40. The participant is considered to have low self-efficacy perception if her score ranged from 8-13, moderate self-efficacy perception if her score ranged from 14-27 and high self-efficacy if her score is more than 27.

Reliability was done by using Cronbach's Alpha coefficient test which revealed that each of the tool consisted of relatively homogenous items as indicated by the high reliability. Internal consistency of part II = 0.82 and part III = 0.78.

RESULTS:

Table (1) Socio-demographic characteristics of the study subjects (n=240).

Socio-demographic characteristics	No	%
Age		
≤ 30	32	13.3
31-40	121	50.4
41-50	72	30.0
≥51	15	6.3
mean ± SD	39.12±7.66	
Level of education		
Read and write	9	3.7
Secondary education	209	87.1
University education	22	9.2
Marital status		
Married	218	90.8
Divorced	16	6.7
Widow	6	2.5
Residence		
Rural	12	5.0
Urban	228	95.0
Mother education		

Data Collection Process: The data were collected from those who met the sampling inclusion criteria. The data were collected two days/week (from 10:00 am to 2:00 pm). The data were collected from the participants while they were waiting for their medical examination or after the medical examination in the waiting areas. The completion of the questionnaire took about 10–15 min.

Ethical Considerations: Permission was obtained orally from each woman before conducting the interview and after giving a brief orientation to the purpose of the study. The participants were reassured that all gathered information is confidential and used only for the purpose of the study.

A pilot study The self-administrated questionnaire was pilot tested with (24) women. Some minor modifications were done to help understanding.

Statistical Analysis: The data were analyzed with the SPSS 23 (Statistical Package for the Social Sciences). Descriptive statistics were used to describe characteristics of the study subjects (e. g. frequency, percentages, mean, and standard deviation).

Illiterate	56	23.3
Read and write	41	17.1
Secondary education	112	46.7
University education	31	12.9
Family income		
Enough	24	10.0
Not enough	216	90.0
History of Pap smear test at least once during the lifetime		
Yes	34	14.2
No	206	85.8

Table (1) shows socio-demographic characteristics of the studied women. It was clear that 50.4% of the women were aged from 31- 40 years, with a mean of 39.12 ± 7.66 years. Furthermore, 87.1% of them had secondary education. The majority (90.8%) were

married. As regard their residence the majority 95.0% of them were resident in urban areas. Furthermore, 90% of them had sufficient monthly income. Only 14.2% of them had a previous history of Pap smear test.

Table (2) Saudi women' knowledge regarding cervical cancer and its screening measures (n=240).

Saudi women knowledge	No	%
Ever heard of cervical cancer		
yes	182	75.8
No	58	24.2
Definition of cervical cancer		
Incorrect	134	55.8
Incomplete answer		
Correct and complete answer	106	44.2
Signs and symptoms of cervical cancer		
Incorrect	54	22.5
Incomplete answer	127	52.9
Correct and complete answer	59	24.6
Risk factors associated with cervical cancer		
Incorrect	135	56.3
Incomplete answer	65	27.1
Correct and complete answer	40	16.7
Diagnostic measures		
Incorrect	110	45.8
Incomplete answer	103	42.9
Correct and complete answer	27	11.3
HPV vaccine for protection of cervical cancer		
Incorrect	153	63.7
Correct answer`	87	36.3

Table (2) illustrates Saudi women' knowledge regarding cervical cancer and its screening measures. It was found that 55.8%, 22.5%, 56.3%, 45.8% and 63.7% of the women had an incorrect answer

regarding definition, signs, and symptoms, risk factors, diagnostic measures and HPV vaccine for protection of cervical cancer respectively. In addition, 24.2% of them ever heard of cervical cancer.

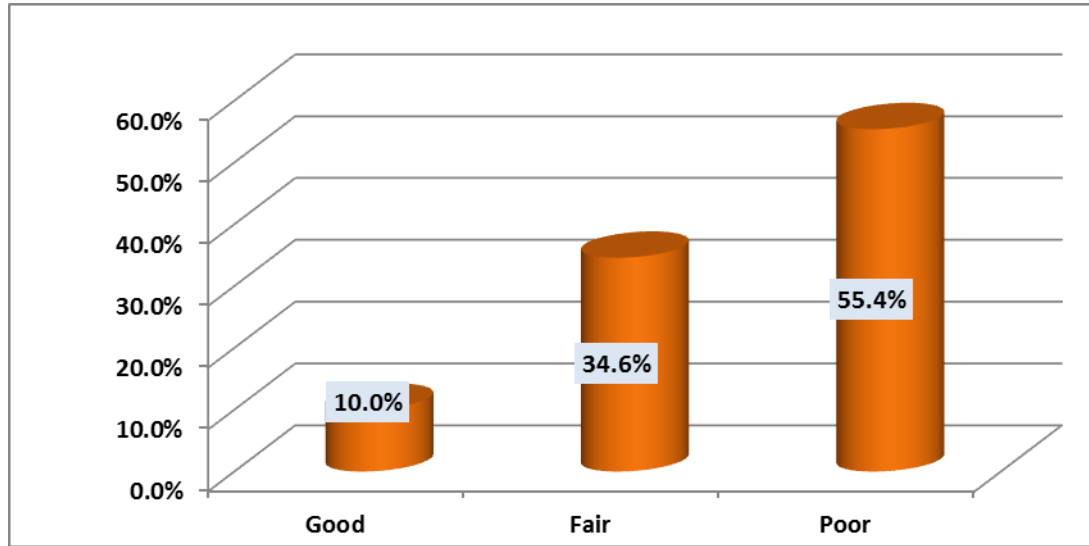


Fig. 1 Saudi women' total knowledge score (n=240).

Fig. 1 clarifies total knowledge score among Saudi women. It was clear that, 55.4% of the women had poor knowledge regarding cervical cancer. Only 10.0% of them had good knowledge.

Table (3) Saudi women' perception of self-efficacy regarding cervical cancer screening measures (n=240).

Saudi women' self-efficacy	Strongly disagree		disagree		Not sure		Agree		strongly agree	
	No	%	No	%	No	%	No	%	No	%
How sure are you that you can discuss having a pap test with your health care provider even if (s)he does not bring it up	11	4.6	23	9.6	11	47.9	57	23.8	34	14.2
How sure are you that you can schedule a pap test appointment and keep it	9	3.8	40	16.7	90	37.5	62	25.8	39	16.3
How sure are you that you can keep having a pap tests, even if you had to go to a new office in order to get one	13	5.4	50	20.8	94	39.2	46	19.2	37	15.4
How sure are you that you can ask your primary care physician for a referral to get a pap test	10	4.2	45	18.8	87	36.3	55	22.9	43	17.9
How sure are you that you can go to get your next pap test	13	5.4	44	18.3	92	38.3	59	24.6	32	13.3
How sure are you that you can get a pap test even if you are worried that it will be painful	11	4.6	42	17.5	94	39.2	59	24.6	34	14.2
How sure are you that you can get a pap test even if a friend discouraged you from having one	9	3.8	37	15.4	93	38.8	64	26.7	37	15.4
How sure are you that you can get a pap test even if you had to pay for it	11	4.6	40	16.7	80	33.3	67	27.9	42	17.5

Table (3) shows the distribution of Saudi women according their perception of self-efficacy regarding cervical cancer screening measures. It was found that 47.9% not sure that she can discuss having a pap test with her health care provider even if she does not bring it up. Also, 36.3% not sure that she can ask her

primary care physician for a referral to get a pap test. In addition, 15.4 and 17.5% of them strongly disagree with the statements " How sure are you that you can get a pap test even if a friend discouraged you from having one, and how sure are you that you can get a pap test even if you had to pay for it" respectively.

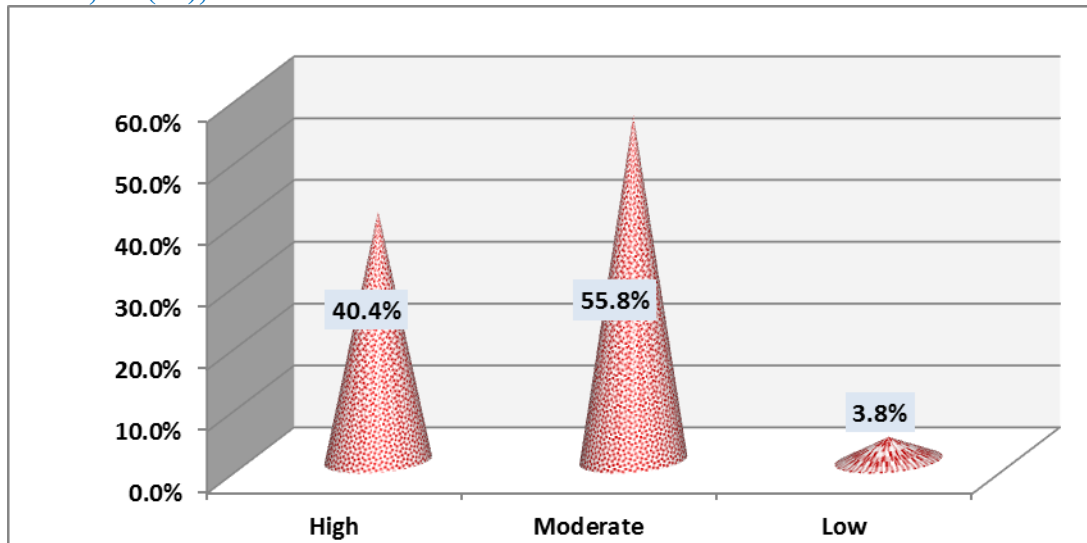


Fig. 2 Saudi women' total self-efficacy score (n=240).

Fig. 3 illustrates the distribution of the women according to their total self-efficacy score. It was evident that 55.8% of them had moderate self-efficacy, 40.4% of them had a high self-efficacy. Only 3.8% of them had a low self-efficacy regarding cervical cancer.

DISCUSSION:

Cervical cancer is a preventable disease and one of the key aspects of its prevention is the early detection of the premalignant lesion through the cervical screening measures or by the anti-HPV vaccine prior to any sexual relationships. [16] Cervical cancer screening awareness can enhance a woman's approach leading to an increased rate of early detection and treatment of cervical cancer. Treatment started at an early stage of cervical cancer is more cost-effective which can help in decreasing the total morbidity and mortality associated with cervical cancer. [17]

Although the Pap smear test is recognized as one of the effective methods to detect cervical cancer, the findings of the present study reported that only 14.2% of Saudi women at Najran had already received the Pap smear test at least once during their lifetime. This finding indicated a lack of awareness and cultural constraints for effective screening measures for cervical cancer among Saudi women. These results are consistent with other studies conducted in Saudi Arabia and others. *The first* Salem et al. 2017 had reported that only 17.2% of secondary school female teachers in Al Hassa, Saudi Arabia being previously examined for cervical cancer. [18] *The second*, Al Khudairi et al., 2017. who had stated that more than three-quarters of Saudi women in Riyadh City did not do a single Pap smear test previously. [19] *The third* Mutambara et al., 2017 confirmed that the

majority of their studied participants in Zimbabwe had not been screened for cervical cancer. [20] *The fourth* Dulla et al., 2018 had stated that only 11.4% of female health care workers in southern Ethiopia were screened for cervical cancer. [21]

The current study revealed that, more than three-quarters of women answered to have heard about cervical cancer. In the same line Ali-Risasi et al., 2014 and Getahun et al., 2013. [22,23]

Moreover, our results of this study demonstrate that more than half of the women had poor knowledge regarding cervical cancer and only 10% of them had good knowledge. This low level of knowledge is also observed in many studies across the world. A recent cross-sectional study conducted in Lake Zone Tanzania by Mabelele et al., 2018. Had reported that only 17.3% of their participants had adequate knowledge about cervical cancer. [24] Another study conducted in Nigeria by Okunowo et al., 2018 stated that a majority of their study participants had poor knowledge of cervical cancer and only 15.6% of the participants having good knowledge about cervical cancer risk factors. [25] Moreover, Darj et al., 2019 had reported that their respondents had limited knowledge and lots of misconceptions about cervical cancer screening. [26]

On the other hand, Malibari, 2018 and Mitiku & Tefera 2016 reported different findings. *The former* stated that the level of knowledge about cervical cancer was good among their studied participants (78.6%). *The latter* had confirmed that more than half of the studied women in Dessie Town, Northeast Ethiopia had satisfactory knowledge about cervical cancer. [27,28] Differences in the data collection tools and scoring systems of knowledge about

cervical cancer make the comparison difficult.

Although cervical cancer screening was acceptable amongst Saudi women at Najran, very few women had been screened. It was evident from our study findings that more than half of Saudi women had moderate self-efficacy, 40.4% of them had a high self-efficacy. Only 3.8% of them had a low self-efficacy regarding cervical cancer. In this regard Tiraki & Yilmaz 2018 who had studied "cervical cancer knowledge, self-efficacy of married women". Found that the majority of Mexican-American women had moderate self-efficacy regarding cervical cancer screening. [15] Furthermore, Touch & Oh, 2018 had confirmed that their study participants had high willingness to undergo a Pap test (74%).[29]

Therefore, to increase the awareness and self-efficacy in receiving Pap smear test, educational intervention should be provided to these women with the aim of increasing their knowledge and understanding of cervical cancer screening measures and overcoming the access and psychosocial/cultural barriers.

CONCLUSION:

Based on the results of the present study, it can be concluded that more than half of Saudi women in Najran have poor knowledge and moderate self-efficacy regarding cervical cancer. The majority of Saudi women had not been screened for cervical cancer.

Recommendations:

Health education programs are important for Saudi women to improve their knowledge, self-efficacy and practices toward early detection and prevention of cervical cancer. Replication of the present study on larger sample, and different settings.

Conflict of interest

The authors declare that they have no competing interests.

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