

ORIGINAL ARTICLE

AWARENESS REGARDING PAP SMEAR AMONG WOMEN IN BAGHDAD CITY, IRAQ

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ABSTRACT

The aim: The aim of this study was to determine the awareness level regarding pap smear in women living in Baghdad city, Iraq.

Materials and methods: A cross-sectional study was done in 265 women living in Baghdad city using internet-based survey. Questionnaire was adopted from a previous study to measure the awareness level among women.

Results: the results showed that only 8(3%) of the respondent had a family history of cervical cancer. Almost (94%) have heard about cervical cancer, while only (38%) knew that HPV virus is the cause of cervical cancer. Majority of the respondents (87%) heard about pap smear while only 67 (25.0 %) had performed pap smear before. A total of 86% agreed that early diagnosis is important in treating of the cervical cancer.

Conclusions: Majority of women heard of cervical cancer and pap smear, but the level of its practice is still low with only 25% of respondents had performed it before. More health promotion is needed especially, at the primary care level regarding the importance of performing regular pap smear especially for women with family history of the cervical cancer.

KEY WORDS: Pap smear, awareness, cervical cancer, women, Iraq

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INTRODUCTION

Cervical cancer ranks fourth among women's types of cancer. Cervical cancer was diagnosed in approximately 570 000 women worldwide in 2018, with about 311 000 women dying from this disease. [1] GLOBOCAN estimates that there were 471 000 cases of cervical cancer in the year 2000 increasing steadily over time to 529 000 in 2008, and 570 000 in 2018. [2] for both sexes and all age groups, there were 604 127 (3.1%) new cervix uteri cancer and 341 831 (3.3%) deaths in 2020 of all cancer-caused deaths. [3, 4] This cancer can affect all women especially those of more than 30 years old and is mainly caused by the long-term infection with human papillomavirus (HPV). [5] HPV is one of the commonest sexually transmitted diseases which is mainly presented without symptoms, [6] so can be converted to cancer before being diagnosed and treated. In most cases, it takes 10 to 15 years or more to progress from HPV infection to chronic infection, precancerous, and then to invasive cervical cancer and rarely it may progress within 5 years only. During the first and second year, the woman with precancerous level and low-grade changes can be treated and the health state can be returned to normal if detected in-time. [7]

The preventable nature of cervical cancer and the effectiveness of early treatment to manage this type of cancer are the main reasons for adopting effective screening programs for early detection. The routine cervical screening is done by safe, simple, somewhat inexpensive, and more perceived

beneficial among women Papanicolaou (Pap) smear. [8, 9, 10] Pap smear should be performed as a part of regular health care for most women aged 21 to 65 even if they are not sexually active, have received the HPV vaccine, or have reached menopause period. According to the expert recommendations, women must compulsorily perform pap smear at least every 3 years starting the age of 21 alone or with the HPV test. [11]

In Iraq, the last World Health Organization (WHO) published data in 2018 reported 155 deaths from cervical cancer, which is 0.09 percent of all deaths making Iraq standing number 171 in the world. [12] Despite the knowledge about significant effect of early diagnosis and treatment of cervical cancer in decreasing morbidity and mortality from this cancer, the pap smear is still not a part of national screening programs in Iraq and previous studies conducted in different places in Iraq showed low level of knowledge and practice of pap smear among Iraqi women. [13, 14] So, it is of great importance to assess women's awareness, and knowledge regarding this test to strengthen their positive attitudes and finally lead to more screening and test achieved by target women, to be added as a national screening program.

THE AIM

This study aimed to identify knowledge, attitude, and practice regarding pap smear among women living in the

Table I. Socio-demographic characteristics of the respondents

	Min	Max	Mean	SD
Age	19	55	32.45	7.08
No. of children	0	4	1.76	0.905
	N		%	
Occupation				
Housewife	150		28.3	
Government worker	298		56.2	
Private sector	82		15.5	
Educational level				
Secondary	14		2.6	
University degree	378		71.3	
Postgraduate	138		26.0	
Married				
Yes	476		89.8	
No	54		10.2	

Table II. Knowledge regarding cervical cancer among respondents

	N	%
Have relative with first degree of cervical cancer		
Yes	16	3.0
No	514	97.0
Have you heard of cervical cancer		
Yes	498	94.0
No	32	6.0
Knowledge		
Cervical cancer caused by HPV		
Correct	200	37.7
Wrong	32	6.0
I do not know	298	56.3
Early diagnosis is important		
Correct	456	86.0
I do not know	74	14.0
Did you hear about pap smear		
Yes	460	86.8
No	70	13.2
Do you know the purpose of pap smear		
Yes	402	75.8
No	128	24.2
Woman needs to do pap smear once every 1-3 years		
Correct	270	50.9
I do not know	260	49.1
Pap smear can find changes before it becomes cancer		
Correct	362	68.3
I do not know	168	31.7

Table III. Practice and attitude towards performance of pap smear

	N	%
Did you perform pap smear before		
Yes	134	25.3
No	396	74.7
It is not important for women to do pap smear regularly		
Agree	52	9.8
Not sure	142	26.8
Disagree	194	36.6
Strongly disagree	142	26.8
It is embarrassing to do pap smear		
Agree	104	19.6
Not sure	80	15.1
Disagree	202	38.1
Strongly disagree	144	27.2
Is pap smear painful		
Agree	62	11.7
Not sure	322	60.8
Disagree	84	15.8
Strongly disagree	62	11.7
Doing pap smear makes women nervous		
Agree	86	16.1
Strongly agree	14	2.6
Not sure	232	43.8
Disagree	120	22.6
Strongly disagree	78	14.7
I am in good health so no need to do pap smear		
Agree	110	20.8
Strongly agree	6	1.1
Not sure	166	31.3
Disagree	136	25.7
Strongly disagree	112	21.1

capital city Baghdad, Iraq, and to determine any association between performing the test and selected socio-demographic features.

MATERIALS AND METHODS

The study design used was a cross-sectional study. The sampling method is non-probability convenience sampling. The study was carried out among women living in Baghdad city, Iraq. The sample size was 265 respondents. The questionnaire was distributed to respondents through Google form (online-based) using Facebook and WhatsApp group and they need to agree on participation in the study before they can proceed to answer the questionnaires. Full explanation on the purpose of the study was written at the beginning of the survey.

Questionnaire was adopted from a previous study to measure the awareness level in women. The questionnaire was divided into three parts:

Part A: demographic factors including age, number of children, education level, occupational status and marital status.

Part B: regarding knowledge on cervical cancer such as caused by HPV virus, early diagnostics importance, any knowledge about pap smear before and importance of pap smear.

Part C: regarding practice and attitude on pap smear performance. The respondents were asked whether they had performed the pap smear before, was it embarrassing to do, was it painful or not and about their attitude towards pap smear (e.g. "I am in good health state so no need to do pap smear").

Table IV. Association between socio-demographic variables and performance of pap smear among respondents

Variables	Performed Pap Smear before				P-Value
	NO		YES		
	Mean	SD	Mean	SD	
Age	31.17	6.08	36.24	8.39	<0.001 ^a
No. of children	1.69	0.93	1.95	0.79	0.005 ^a
	N	%	N	%	
Occupation					
Housewife	114	76.0	36	24.0	
Government worker	238	79.9	60	20.1	<0.001 ^b
Private sector	44	53.7	38	46.3	
Educational level					
Secondary	14	100.0	0	0	
University degree	302	79.9	76	20.1	<0.001 ^b
Postgraduate	80	58.0	58	42.0	
Married					
Yes	46	85.2	8	14.8	
No	350	73.5	126	26.5	0.06 ^b

^a Independent t-test was performed, ^b chi-square test was performed, level of significant at $p < 0.05$

The study followed ethics procedures in data collection and reporting. The researcher makes sure the personal information is kept confidentially and used for research purpose only.

STATISTICAL ANALYSIS

Data analysis were done using SPSS software version 23. Descriptive statistics was done using frequency and percentage for categorical variables, mean and standard deviation for numerical variables. Independent t-test and chi-square test were used to test the association between variables.

RESULTS

Table I shows the socio-demographic factors of the respondents. The mean age was 32.45 ± 7.08 and average number of children was 1.76 ± 0.905 . The maximum number of children were 4 per respondents. Majority were government workers (56.2%) followed by housewives (28.3%). Regarding educational level, majority had university degree (71.3%) followed by postgraduates (26.0%). For marital status, 89.8% of respondents were married.

Majority of respondents had no relatives with first-degree cervical cancer (97%). About (94%) heard about cervical cancer as shown in table II. Regarding knowledge, only 37.7% identified the correct cause of cervical cancer which is HPV, majority (86%) answered that early diagnosis is important, (86.8%) have heard about pap smear, and (75.85) know the purpose of it. Only half of respondents (50.9%) knew that pap smear should be done once every 1-3 years and (68.3%) correctly answered that pap smear can find

changes before it becomes cancer.

Table III represents practice and attitude regarding pap smear. Around quarter of the respondents (25.3%) had performed pap smear before. About (36.6%) disagree about the importance of pap smear for women and that it should be done regularly. Only (19.6%) said that it is embarrassing to do pap smear, while 60.8% were not sure whether pap smear is painful or not. Also, (43.8%) were not sure whether doing pap smear makes women more nervous. About (20.8%) answered that they are in good health and no need for them to do pap smear but, 25.7% disagreed with them.

The association between socio-demographic factors and practice of pap smear was shown in table IV. There is a significant association of age, number of children, occupation, educational level and practice of performing of pap smear before. ($p = <0.001, 0.005, <0.001, <0.001$ respectively).

DISCUSSION

The main findings of our current study is that majority of women heard of cervical cancer and pap smear, but the level of practice is still low with only 25% having performed it before. Our results are similar to a study conducted in Kerman, Iran, where 81.1 percent of women were aware of Pap smear [15], while just 44.3 percent of women in Rasht-Iran [16] were aware of this procedure. This study discovered an association between women's working status and their awareness of Pap smear, with working women having a higher frequency of performing pap smear compared to housewives. The findings match those of a Sudanese study [17].

In the current study, majority of the women had knowledge and attitudes concerning cervical cancer and pap

smear. While a study in Iran revealed 53.9 percent [18] and a research in Taiwan's northern region revealed 53.9 percent only [19].

Around two-thirds of the respondents in our study did not know the cause of cervical cancer, which is similar to a previous report from Jordan, which found that nearly three-quarters of the respondents did not know the causes of cervical cancer and that knowledge of the Pap smear test was significantly inadequate among the less-educated and older patients [20]. According to a survey conducted in Kuwait, just 52% of women were aware of the importance of cervical screening [21].

In our study, 86.8% heard about pap smear and this consistent with previous study done in Baghdad, Iraq among university students where 85% of the students have heard about the Pap screening test [22]. Only 25.3 percent of people had previously performed a pap smear. This finding was not surprising, given Iraqi women's lack of information about the disease and the relevance of Pap smear in cervical cancer prevention. Pap smear and cervical screening uptake in our setting continues to be quite poor, as multiple studies have shown embarrassingly low uptake levels. In one Nigerian study, 3.2 percent of women had a Pap smear in recent five years [23], while only 8.5 percent of women who were aware of cervical cancer had done so [24].

CONCLUSIONS

Majority of women heard of cervical cancer and pap smear, but the level of practice is still low with only 25% of respondents had performed it before. More health promotion is needed especially, at the primary care level regarding the importance of performing regular pap smear especially for women with family history of cervical cancer.

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Conflict of interest:

The Authors declare no conflict of interest.

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