



PHYSICIANS' KNOWLEDGE OF CERVICAL CANCER AT PRIMARY HEALTH CARE CENTRES UNDER THE AL-KARKH HEALTH DIRECTORATE IN 2023

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ABSTRACT

Background: Cervical cancer is a prevalent and very consequential kind of malignancy. Over the past five years, cervical cancer has emerged as the second most prevalent form of cancer worldwide, ranking second in frequency among women, behind breast cancer. The objective of this study is to assess the physicians' degree of knowledge on cervical cancer. **Method:** A cross-sectional research was conducted on a sample of 300 physicians working at primary health care centres located in the Al-Karkh health directorate in Baghdad, Iraq. **Results:** The findings indicate that 87% of the physicians who took part in this survey had an excellent level of knowledge on cervical cancer. Furthermore, 10.7% of the participants were deemed to have an acceptable level of knowledge, while 2.3% were found to have poor knowledge. The study findings indicate a noteworthy correlation between the doctors' work description and their knowledge of risk factors and situations that may heighten the risk of cervical cancer ($p < 0.05$). **Conclusion:** Based on the findings, we can infer that 87% of the physicians who took part in this survey have a satisfactory level of awareness on the risk factors associated with cervical cancer.

KEYWORDS: Cervical Cancer, Pap, HPV.

INTRODUCTION

Cervical cancer, second only to breast cancer, is a leading gynecological cancer worldwide. It is responsible for approximately 530,000 new cases and 275,000 deaths annually as of 2017.^[1,2] The prevalence is especially high in developing countries due to inadequate screening, treatment strategies for pre-invasive lesions, and a lack of awareness about prevention.^[3] In Iraq and similar Islamic countries, the incidence is comparatively lower, accounting for about 1.5% of female cancers with mortality and morbidity rates of 1.3% and 1.9% per 100,000 women.^[4] The median age at diagnosis is 47, and it is almost exclusively found in sexually active women.^[5,6,7,8] Cervical cancer generally develops at an earlier age than other gynecologic malignancies, with a median diagnosis age between 40 and 59 years, and is quite rare before the age of 20. It primarily affects women who are or have been sexually active. Several etiological factors and risk factors are associated with cervical cancer.^[9-16]

1. Human Papillomavirus (HPV) infection is a key etiological factor, with the virus being sexually transmitted.

2. Sexual behavior, including multiple sexual partners and early initiation of sexual activity, elevates the risk.
3. Reproductive patterns like multiparity, particularly with short intervals between pregnancies, increase the risk.
4. Both active and passive cigarette smoking are risk factors.
5. Infections such as HIV, gonococcal, and chlamydial infections are linked with higher risks of cervical cancer.
6. Immunosuppression and certain vitamin deficiencies (A, C, and E) are also considered contributory factors.
7. Racial disparities exist, with higher rates observed in black populations compared to whites.
8. Genetic factors may play a role, although the extent to which they are influenced by environmental or genetic factors is unclear.

The objective of this study is to assess the physicians' degree of knowledge on cervical cancer.

METHOD

The study, a descriptive cross-sectional analysis, was conducted from February 1st to July 1st, 2023, in Al-Karkh health directorate, Baghdad. Involving 300 physicians from randomly selected Primary Health Care Centers, the study aimed to assess their knowledge about cervical cancer. Data were analyzed using frequency measures and Pearson Chi-square tests, with significance set at a P-value of ≤ 0.05 . Responses to knowledge questions were scored, and total knowledge scores were categorized as poor (<12), accepted (12-13), or good (≥ 14), based on the median total scores. This approach

enabled a comprehensive evaluation of the physicians' understanding of cervical cancer risk factors.

RESULTS

Table (1) The study group is categorized based on their socio-demographic features. The study included a total of 300 doctors. The largest percentage of participants were in the age range of 30-39 years (68%), with females comprising 65.7% of the sample. Among the doctors, 40% were general practitioners and 50.3% had 5-9 years of experience.

Table 1: The study group is classified according to their socio-demographic characteristics.

		No.	%
Age (years)	<30y	25	8.3
	30---39	204	68.0
	40---49	50	16.7
	=>50y	21	7.0
	Mean±SD (Range)	35.7±6.9 (25-59)	
Gender	Male	103	34.3
	Female	197	65.7
Job description	General practitioner	120	40.0
	Family Medicine specialist	66	22.0
	Family Medicine resident	72	24.0
	Other specialties	42	14.0
Year of practice	<5y	24	8.0
	5---9	151	50.3
	10---14	67	22.3
	=>15y	58	19.3

Table 2: Classification of physicians based on their level of expertise in cervical cancer.

Knowledge about cervical cancer		No.	%
At what age you believe cervical cancer developed	<20y	3	1.0
	20---29	17	5.7
	30---39	47	15.7
	40---49	172	57.3
	=>50y	61	20.3
There is effect of patient's family history of cervical cancer to develop cervical cancer.		278	92.7
Cervical cancer is curable		286	95.3
You would recommend HPV vaccine to female		284	94.7
Age of HPV vaccine to be recommended	11---12	178	59.3
	13---18	76	25.3
	19---24	29	9.7
	=>25y	17	5.7

Table 3: Dissemination of the acquired medical expertise on the risk factors associated with cervical cancer by the participating physicians.

Knowledge about risk factors;	No.	%
1-Early age of intercourse	282	94.0
2-Multiple partners	292	97.3
3-Human papilloma virus	295	98.3
4-Frequent sexually transmitted infections	277	92.3
5-Herpes simplex virus	120	40.0
6-Abnormal PAP smear	283	94.3
7-Smoking	170	56.7
8-Sexually active.	270	90.0



Figure 1: displays the knowledge of the risk factors associated with cervical cancer.

Table (4): Relation between knowledge score risk factors and sociodemographic characters.

Distribution of physicians according to their risk factors knowledge with sociodemographic characters, the results show there is significant association between risk factors score and sociodemographic characters. (p<0.05).

Table 4: Correlation between knowledge scores, risk factors, and sociodemographic characteristics.

		Risk factors knowledge score						P value
		Poor (<12)		Fair (12-13)		Good (>=14)		
		No	%	No	%	No	%	
Age (years)	<30y	-	-	3	9.4	22	8.4	0.004*
	30---39	3	42.9	17	53.1	184	70.5	
	40---49	1	14.3	9	28.1	40	15.3	
	=>50y	3	42.9	3	9.4	15	5.7	
Gender	Male	5	71.4	14	43.8	84	32.2	0.048*
	Female	2	28.6	18	56.3	177	67.8	
Job description	General practitioner	1	14.3	14	43.8	105	40.2	0.009*
	Family Medicine specialist	3	42.9	5	15.6	58	22.2	
	Family Medicine resident	-	-	4	12.5	68	26.1	
	Other specialists	3	42.9	9	28.1	30	11.5	
Years of practice	<5y	-	-	3	9.4	21	8.0	0.007*
	5---9	-	-	11	34.4	140	53.6	
	10---14	3	42.9	7	21.9	57	21.8	
	Other specialists	4	57.1	11	34.4	43	16.5	

*A statistically significant difference in proportions was observed using the Pearson Chi-square test at a significance level of 0.05.

DISCUSSION

The study found that the participating physicians had a high level of knowledge on risk factors, with 87% demonstrating good knowledge, 10.7% showing acceptable knowledge, and 2.3% displaying poor knowledge. This finding is consistent with a study conducted by Ruffin MT 4th.^[13] This study presents the distribution of physicians' knowledge of the most likely

age for the development of cervical cancer. Out of the overall sample, 57.3% said that the age range of 40-49 years is the most common for the onset of the illness.

The findings of this study indicate that 92.7% of the participating physicians have demonstrated the influence of a family history of cervical cancer on the development of the illness. Furthermore, the American study has

endorsed this relationship for the early identification of cervical cancer.^[14] The survey found that 95.3% of participating physicians believe that cervical cancer is treatable.

This study found that 94.7% of the participating physicians recommended the HPV vaccine to females. Additionally, 59.3% of these physicians suggested administering the vaccine between the ages of 11 and 12. This conclusion is consistent with prior studies conducted by Padmanabhan B., Saad G., Nawal O. et al. in the United Arab Emirates in 2015.^[15] This study demonstrates that the primary risk factors for cervical cancer are HPV (98.3%) and engaging in sexual activity with numerous partners (97.3%). These findings are supported by Cervical Cancer Causes, Risk Factors, and Prevention - NCI. (2023).^[16]

CONCLUSION

The distribution of knowledge concerning risk factors was as follows: a majority (87%) had good knowledge, a minority (10.7%) had accepted information, and a small percentage (2.3%) had bad knowledge. There were notable correlations seen between the demographic characteristics of the patients' physicians and their level of awareness on the risk factors associated with cervical cancer. Physicians educate patients about cervical cancer and its effects via early identification, management, and treatment of comorbidities, which reduces incidence and progression. Future, bigger research should assess primary care providers' cervical cancer awareness.

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