



ORIGINAL-ARTICLE

Barriers to Early Detection of Cervical Cancer among Iraqi Women in Baghdad

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Abstract

Introduction: The health concern among women worldwide is cervical cancer, which currently ranks as the second to fourth most common type of cancer among women in different parts of the world. The two main causative agents of cervical cancer are human papillomavirus (HPV) 16 and 18. However, prevention is possible through early and regular screening for cervical cancer.

Objectives: Identifying and determining the knowledge and the important barriers to early detection of cervical cancer among Iraqi women in Baghdad.

Methods: In July 2022, at Al-yarmook hospital, Baghdad, a special questionnaire was distributed to 620 women to assess the barriers to early identification of carcinoma of cervix .The collected data were analyzed using SPSS 16.0.

Results: Good knowledge of the risk factors of cervical cancer was evident among most of the participants .Many barriers were reported by high percent of studied women including organization and health services barriers, psychological barriers, and lack of awareness barriers. Surprisingly, the majority of participants, have barriers related accessibility, appropriateness, privacy, and presence of female staff in early detection of cervical cancer units.

Conclusion: Although most of studied women have good knowledge, still there is considerable proportion have poor knowledge .A systematic cervical cancer awareness campaign is required .Expanding the number of cervical screening units and improving the established units and making them more feasible and accessible for all Iraqi women.

Key Words: Barriers, Cervical Cancer, Early Detection, Screening

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1 | INTRODUCTION

Cervical cancer CC is the fourth most common type of cancer in women. In 2018, cervical cancer was diagnosed in about 570,000 people woman around the world, with the death of about 311,000 women from this disease and it was there 471,000 cases of CC in 2000, on the rise steadily over time

to 529,000 in 2008 and 570,000 in 2018 according to Global Cancer Observatory (GLOBOCAN) [1,2].There were 604,127 (3.1%) new cases and 341,831 (3.3%) deaths in 2020 of all deaths from cancer. [3], [4] CC can affect all women, especially those over the age of 30 years and to deal with this

type of cancer, which can be prevented by identifying its main causes in order to adopt effective examination programs for early detection and therefore early treatment. According to the latest data published by the World Health Organization (WHO) in Iraq in 2018, it indicated that there were 155 deaths due to CC. Which is 0.09% of the total deaths which makes Iraq stand ranking 171 in the world [5]. Cervical cancer ranks as the 15th most frequent cancer among women in Iraq and the 12th most frequent cancer among women between 15 and 44 years of age [6]. To date, there is no national program for cervical cancer screening [6]. Iraq is among the West Asian and Middle Eastern Arab Muslim countries (WAMEM) for which it is challenging to estimate the incidence of CC due to the lack of national cancer registries in this region [6], [7]. Significant barriers to establishing and maintaining cervical screening programs are universally acknowledged, especially in low income countries, and there are other barriers to establishing cervical screening in Iraq. Sociocultural factors are pertinent, including lack of knowledge about the disease, shame, and fear of being diagnosed with a disease [8]. There is a need for healthcare providing personnel such as family doctors and gynecologists to upgrade cervical cancer services by educating women about cervical cancer risks, prevention and early detection to increase their participation in screening program. In West Asian and Middle Eastern (WAM) countries, unfortunately, most gynecological cancers are discovered and diagnosed at later stages [9], [10]. Lack of awareness of reproductive health especially among older women combined with the cultural stigma of seeking medical advice for gynecological symptoms has resulted in late onset of all gynecological cancers [11], [12]. And the main cause of this type of cancer is the long-term infection with human papillomavirus (HPV) [13]. HPV is one of the commonest sexually transmitted diseases which is mainly presented without symptoms and can be converted to cancer before being diagnosed and treated. [14]

2 | AIM OF THE STUDY

Identifying and determining the important barriers to early detection and knowledge of cervical cancer among Iraqi women in Baghdad.

3 | MATERIAL & METHODS

A cross-sectional descriptive survey was conducted among Iraqi women in Baghdad city. A total of 620 women were selected randomly. The data were gathered using a special questionnaire which include questions answered by YES or NO.

4 | DATA MANAGEMENT AND STATISTICAL ANALYSIS

The obtained data were wrote down and entered into SPSS 16.0 .The continuous variables (eg. Age) were demonstrated in mean and standard deviation. The categorical variables were looked over by frequency and percentage.

5 | RESULTS

Table 1 indicates the arithmetic mean and standard deviation of the age of the participants, 33.91 ± 8.26 , and this indicates that most of the participants are of young age.

Table (1) Demographic Characteristics n = 620		
variable	N	Means $\pm$ SD
Age (year)	620	33.91 ± 8.26
Age at menarche (year)	620	12.86 ± 1.41
Age at marriage (year)	469	24.85 ± 5.76
SD = Standard Deviation.		

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Table 2, the results showed the socio- demographic information of the sample, which illustrates that 452 (70.90%) were married, 536 (86.45%) higher education and above, 480 (77.42%) were employee

and had a monthly income, and that 596 (96.13%) were from urban areas. number of pregnancies (1-12 times) 429 (69.19%), number of children (1-10 child) 410 (66.13%), number of miscarriages (1-6 times) 175 (28.22%), type of contraceptive that participants use, Don't use 330 (53.22%), Occp 55 (8.87%) Injection 2 (0.32%) Iud 64 (10.32%) others 169 (27.25%), as shown in the table.

Table (2) Socio- demographic characteristic of sample n = 620

Area	Characteristics	Frequency (%)
Marital status:	Single	151 (24.35)
	Married	452 (70.90)
	Widow	6 (0.96)
	Divorced	11 (1.77)
Level of Education:	Illiterate	5 (0.80)
	Can read & write	15 (4.42)
	Primary school	25 (4.03)
	Secondary school	27 (4.35)
	Institute	12 (1.93)
	Under Graduate & above	536 (86.45)
Occupation:	Housewife	84 (13.54)
	Student	47 (7.58)
	Employee	480 (77.42)
	Retired	9 (1.45)
Residency:	Urban	596 (96.1)
	rural	24 (3.87)
Number of pregnancies	Zero	191 (30.80)
	1-12	429 (69.19)
Number of children	Zero	210 (33.87)
	1-10	410 (66.13)
Number of miscarriages	Zero	445 (71.77)
	1-6	175 (28.22)
Type of contraceptive	Don't use	330 (53.22)
	Occp	55 (8.87)
	Injection	2 (0.32)
	Iud	64 (10.32)
	others	169 (27.25)
Occp = oral contraceptive pills, iud= intrauterine device		

Table (3) Distribution of level of knowledge for participants related with risk factors, that increased of probability of cervical cancer, (n=620)		
Details		Frequency (%)
If intercourse was at an early age?	Yes	321 (51.77)
	No	299 (48.22)
Taking, Occp for more than 5 years	Yes	403 (65)
	No	217 (35)
Is it effected If there is more than one Sexual partner?	Yes	483 (61.23)
	No	137(22.09)
Infection with sexually Transmitted diseases?	Yes	513 (82.74)
	No	107 (17.25)
Infection with human Papilloma virus?	Yes	503 (81.13)
	No	117 (18.87)
Early onset of menstruation	Yes	298 (48.06)
	No	322 (51.93)
Late menopause	Yes	261 (42.09)
	No	359 (57.90)
If the age ≥ 35 years	Yes	467 (75.32)
	No	153 (24.67)
If the first child after the age of 30 years	Yes	321 (51.77)
	No	299 (48.22)
Hormonal therapy after menopause	Yes	369 (59.51)
	No	251 (40.48)
Habits: (smoking):	Yes	336 (54.19)
	No	284 (45.80)
Occp= oral contraceptive pills,		

The results of table 3 is the qualitative information related to level of knowledge about risk factors that may increase probability infection in cervical cancer, which showed that 483 (61.23%) said yes, one sexual partner had an effect in cervical cancer as a risk factor, 513 (82.74%) said yes, infected with sexually transmitted diseases effected, and 503 (81.13%) infected with the human papilloma virus said yes, effected in cervical cancer. In table 4, we will see that the lack of awareness of the need for early detection of cancer was evident among the participants, between some of them said yes, or said no, that indicated of their knowledge and awareness about more important of cognition of these objectives will improving screening and early detection of cancer, so only 330 (53.22%) said yes, if people have knowledge or reputation of cervical cancer early detection clinics, 37 (5.96%) said yes, visited the clinic for early detection of cervical cancer, 451 (72.74%) said yes, do not know the location of the clinics is effect as barrier to screening, and 174 (28.06%) of them said yes, people have to see cancer Specialized in early detection of cancer, while 339 (54.67%) said yes,

if the people have a cervical problem that requires a visit to the doctor, first visit will be to an obstetrics and gynecology specialist. 182 (29.35%) of them said yes if psychological inhibitions related to fear of radiation exposure, and 203 (32.74%) said yes, if the people afraid of discovering that they had cancer.

Table 4: Distribution of individual specific and socioeconomic barriers for early detection of cervical carcinoma (n=620)

Barriers	(Yes) Frequency (%)
<u>Lack of awareness:</u>	
Do you have knowledge or reputation of cervical cancer early detection clinics?	330 (53.22)
Have you visited the clinic for early detection of cervical cancer?	37 (5.96)
Lack of knowledge of location of clinics for early detection of cancer.	451 (72.74)
Lack of knowledge of the priority of the visit when an early examination is desired or symptoms appear:	74 (11.93)
Radiologist & U/S:	30 (4.84)
General surgeon:	174 (28.06)
Specialized in early detection of cancer:	339 (54.67)
Obstetrics & Gynecology specialist:	3 (0.48)
Laboratory specialist:	
<u>Psychological barriers:</u>	
Fear of being diagnosed with cancer:	203 (32.74)
	80 (12.90)
Fear of pain during the examination:	182 (29.35)
Fear of exposure to radiation:	121 (19.51)
Shamed of the examination:	
<u>Organization and health services barriers:</u>	562 (90.64)
If there is females staff for the examination:	521 (84.03)
If there is concern for patient's privacy:	507 (81.77)
If the place of examination is appropriate:	325 (52.43)
If services are available in one place in institution:	323(52.09)
Long time waiting for examination:	
If health staff are not cooperative:	100 (16.13)
<u>Economic barriers:</u>	
The cost of examination is high:	51 (8.22)
The cost of going to health institution is high:	71 (11.45)
There is no financial possibility to commit to multiple visits to the cancer early detection center:	195 (31.45)
<u>Sociocultural barriers:</u>	
The family does not agree to go for the examination:	27 (4.35)

6 | DISCUSSION

Although republic of Iraq is regarded as a high-to-middle-income country, however, cancer health systems are not well organized and mainly concentrated in capital, with basic equipment and human resources in place [15], [16]. The majority of medical services are obtained through private sector and the ministry of health did not keep pace with the development of the appropriate policy. The government is still highly centralized [15] [16]. The Iraqi people have gone through great fighting, disputes, and sociodemographic changes, and the cycle of violence continues. Primary health care facilities, where preventive health care such as Pap smears, are still finite. Cancer diagnosis, treatment, and palliative care services are little [15], [17]. The Iraqi healthcare delivery system and most other Arabian states emphasis on treating symptoms rather than preventing disease [18], [9]. Table 1 indicates the mean and standard deviation of the age of the participants, 33.91 ± 8.26 , and this indicates that most of the participants are of young age, in contrast to the study conducted by Fatima et al, where the average age of their sample was over 40 years [19]. So in Table 2, the results showed the demographic information of the participants, which illustrates that 452 (70.90%) were married, 536 (86.45%) higher education and above, 480 (77.42%) were employed and had a monthly income, and that 596 (96.13%) were from urban areas, but when comparing the level of awareness with what was published in previous studies, as Neha Tripathi et al, found that one of the biggest barriers to early detection of cancer is poverty and living in rural [20]. The result here is different, this is probably due to the deteriorating service and social reality experienced by the participants in Iraq [21]. And what is noticeable in the results of table 3 is the qualitative information related to level of knowledge about risk factors that may increase probability of cervical cancer, which showed that 483 (61.23%) said yes, multi sexual partners had an effect in cervical cancer as a risk factor, 513 (82.74%) said yes, infected with sexually transmitted diseases effected, and 503 (81.13%) said yes, infection with the human papilloma virus effected in cervical cancer, the answers indicate a high level of knowledge and awareness that the

factors affect the occurrence of cancer, as the percentage of the answer is yes with regard to the effect of multiple sexual partners, infection with human papilloma virus, and infection with sexually transmitted diseases were very high, based on what is found in the current sample of demographic information in Table 2, as most of the participants live in the city, most of them are employees, and the vast majority of them have completed college or above. In table 4 the lack of awareness of the need for early detection of cancer was evident among the participants, so only 330 (53.22%) said yes, if people have knowledge or reputation of cervical cancer early detection clinics, 37 (5.96%) said yes, visited the clinic for early detection of cervical cancer, 451 (72.74%) said yes, do not know the location of the clinics is effect as barrier to screening, and 174 (28.06%) of them said yes, have to people see cancer Specialized in early detection of cancer, while 339 (54.67%) said yes, if the people have a cervical problem that requires a visit to the doctor, first visit will be to an obstetrics and gynecology specialist. 182 (29.35%) of them said yes if psychological inhibitions related to fear of radiation exposure, and 203 (32.74%) said yes, if the people frightened of finding that they had cancer. All these facts correlated with lack of healthcare awareness, and this is a lot in Iraq due to, inadequate performance of health institutions and lack of government interest in the health sector, especially with regard to cancer research [16] [15]. Also, 182 (29.35%) of them had psychological inhibitions related to fear of radiation exposure, and 203 (32.74%) were afraid of discovering that they had cancer, so other research has found negative psychological reactions that surround Pap test application, encompassing shame, fear, and pain [23], [24], [25], [26]. As such, the economic and social status has a major role and one of the obstacles to the success of the health survey and the early detection of cancer, as shown by the results of table 4, as proven by studies around the world, and barriers tend to be similar in Latin America and in the U.S. among women of low socioeconomic status [27], [28], [29], [30] when asked to define cervical cancer, women in Guatemala referred to it as “cancer of the womb”. [27]. These Guatemalan

women were not able to define or describe cervical cancer accurately [27].

7 | CONCLUSION AND RECOMMENDATIONS

There are many barriers to screening and early detection of cervical cancer in vulnerable populations. There is a need to understand the knowledge gaps, attitudes, beliefs, and educational and cultural barriers between these populations in Iraq. Therefore, we recommend that health institutions take their actual and effective role and spare no effort, knowledge or money in order to identify the most challenging barriers and develop appropriate solutions for them. In addition a national campaign to increase the level of awareness.

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