Assessment of Women's Knowledge Regarding Cervical Cancer after Menopause in Mosul Teaching Hospitals

Shukur Abdulkareem Mahmood [1*], Salar Riyadh Jassim [2]
[1] Northern Technical, University/Mosul Medical Technical Institute, Iraq
[2] Southern Technical, University/College of Health & Medical Technology, Basra, Iraq

* Corresponding Author: **Shukur Abdulkareem Mahmood**

Article Info

Abstract

Background: Menopausal women's hypoestrogenic condition makes cervical cytology difficult. Cervical cancer is an international health concern. Increased cervical cancer awareness reduces risks and poor prognoses. Women need cervical cancer detection and prevention information. **The aims of this study** was to evaluate women's knowledge of cervical cancer.

Methods: a descriptive, cross-sectional design. A sample of 150 menopausal women was randomly chosen, and data was gathered from three teaching hospitals in Mosul City using an interview questionnaire.

Results: Study finding shows that (43.3%) of the women who participated had moderate knowledge about cervical cancer, and (56.7%) had inadequate knowledge about cervical cancer.

Conclusion: The highest knowledge rate is in women in the age group (40-49) who live in the city. The research reveals that most women know about cervical cancer from society. The highest knowledge rate was among employees.

DOI: https://doi.org/10.54660/IJMBHR.2024.5.4.57-61

Introduction

Cervical cancer is a worldwide issue. Breast cancer is the second most common malignancy in women under 45 and affects many women beyond 45. Globally, cervical cancer is the most common genital cancer. Menopause after cervical cancer treatment may be difficult owing to physical and mental side effects [1]. Menopause is the specific moment that occurs 12 months after a woman has had her last menstrual period. The period preceding menopause, characterized by potential alterations in women's menstrual cycles, hot flashes, and other symptoms, is referred to as the menopausal transition or perimenopause [2]. Menopause usually begins between 45 and 55. It usually lasts seven years but may last 14 years. Lifestyle variables including smoking, age of onset, and race/ethnicity might affect the condition's duration. Ovarian estrogen and progesterone production fluctuates greatly during perimenopause [3].

Each woman transitions to menopause differently. Metabolic changes affect energy use and fat cell function, making women more susceptible to weight gain. Your bone or heart health, body form, and physical function may change [4]. Cervical cancer is the fourth most frequent malignancy in women and the seventh globally, yet its effects vary. In poor nations, where 85% of the world burden lies, cervical cancer accounts for 12% of female cancers. HPV vaccination reduces the number of women who require follow-up and treatment for cervical cancer and genital warts. Cervix cancer. Upper vaginal extension. Chronic HPV infection causes 70% of cervical cancer globally [5]. Additional hazards encompass Cervical cancer is associated with early sexual initiation, several sexual partners, tobacco use, genetic predisposition, and weakened immune function. The predominant symptoms of cervical cancer were blood-stained vaginal discharge, post-coital bleeding, dyspareunia, post-menopausal hemorrhage, pelvic discomfort, inter-menstrual bleeding, weight loss, fatigue, and lumbar pain. Timely identification,

intervention, and prophylaxis reduce cervical cancer mortality [5]. Screening and early treatment have drastically decreased cervical cancer mortality in numerous nations. The Pap smear has cut US cervical cancer deaths by 90%. HPV is one of the most common pathogens transmitted via sexual contact in the cervix. Cervical cancer requires persistent high-risk HPV infections [5]. The most common cause of cervical cancer is HPV infection, which causes 99% of squamous cell and adenocarcinomas. Despite being common among sexually active women, 90% of HPV infections recover without complications within a few years [6]. Following asymptomatic early stages, cervical cancer patients have atypical vaginal bleeding, pain, foul-smelling discharge, and dysuria. Cervical cancer is widespread in developing nations, where racial, regional, and economic disparities affect mortality [7]. The cervix contributes to 90% of human papillomavirus-related malignancies worldwide, with two-thirds in low- and middle-income countries [8]. The main risk factor for cervical cancer is persistent infection with one of the 15 high-risk HPV strains, with HPV-16 and HPV-18 accounting for 70% of cases. Having many sexual partners, being younger when having the first sexual encounter, getting married young, eating poorly, having a weakened immune system, and smoking are additional risk factors for HPV persistence and malignancy [9].

Over 30 years, cervical cancer screening has cut incidence by 50%. HPV misinformation and vaccination misinterpretation impact cervical cancer participation. Health education for cervical cancer primary prevention is routinely disregarded. Most cervical cancer is caused by one of 15 chronic HPV genotypes. HPV, duration of infection, host immunological response, environmental factors, and lack of annual cytology screening are connected to cervical cancer [10].

Multiple sexual partners, early sexual activity, and sex steroid hormone therapy are the biggest risks for cervical neoplasia, but earlier studies have shown that smoking, immunosuppression, and the human immunodeficiency virus may also contribute [11]. Lack of confidence in medical services, discrimination, Pap test anxiety or humiliation, and FGM are further difficulties. Higher education, marital status, work, children, and family size increase women's screening program participation [12]. The USPSTF updated its screening guidelines in 2018. The task force recommends Papanicolaou tests every three years for women 21–29, and triennial cytology or high-risk HPV testing every five years for women 30–65. The task force recommended triennial cytology for women 30–65 [13]. Over 70% of sexually active women and men will acquire the condition, and some may repeat it. At the onset of sexual activity, HPV infection rates are highest. Most infections resolve on their own within a few months, with 90% vanishing within two years [14]. The increased frequency of HPV-associated cervical dysplasia in immunosuppressed patients supports the hypothesis that local immune responses modify epithelial cells [15].

Methodology
Study Design
This hospital-based, descriptive cross-sectional, analytical Study was carried out to accomplish the research objectives for the period from the period (from the 1st. of October 2023 to the 30 March 2024).

Study Setting
The data was collected from the outpatient departments or consulting clinics. The three hospitals and one health center in Mosul city (Al-Batool Teaching Hospital, Al-Khansa Teaching Hospital, Al-Salam Teaching Hospital, and primary health care center) the Nineveh Governorate, the second most important city in Iraq is in the northwest region of Iraq.

Study sample
Simple random sampling was used for selecting the sample of the study from the outpatient departments, a total number of (150) women were divided into (52) from Al-Batool teaching hospital, (45) from Al-Khansa Teaching Hospital, and (39) from Al-Salam Teaching Hospital, and (14) from primary health care center (PHCC).

Tool of the Study
Data were collected depending on an interviewing questionnaire composed of three parts. The first one focused on the socio-demographic characteristics. of study participants (woman's age, place of birth, marital status, residence, academic achievement, function, husband's profession, family history of cancer, whether or not the woman has cancer, Educational programs about cancer, source of medical information), the second part composed of 10 questions which focused on participants profile (menarche, Regularity of the cycle, Duration of period, Length of the process, family history of cancer, educational programs, source of information, number of births, number of children) and the third part composed of 11 questions which focused on the general information of post-menopausal about cervical cancer.

Data analysis
To describe and analyze the study's findings, the SPSS version (26) was used to analyze the data.

Results

Table 1: Socio-demographic characteristics of women for knowledge about cervical cancer

Variable	Category	N	Percent
Age Group	40-49	65	43.3%
	50-59	62	41.3%
	60-69	14	9.3%
	70-80	9	6.0%
Place of birth	Home	94	62.7%
	Hospital	47	31.3%
	Other	9	6.0%
Marital Status	Married	112	74.7%
	Single	9	6.0%
	Widow	23	15.3%
	Divorced	6	4.0%
Academic achievement	Do not read or write	57	38%
	Elementary stage	59	39.3%
	Secondary stage	15	10.0%
	Graduate and postgraduate	19	12.6%
Place of residence	City	101	67.3
	Village	49	32.7
Job	Employee	20	13.3%
	Housewife	130	86.7%
Husband's job	Employee	54	36%
	Worker	60	40%
	No husband	36	24%

The present study included 150 menopausal women. The

mean age of the patients was 55.72 ± 13.2 years. The demographic and clinical characteristics of the woman are given in (Table 1-4).

Table 2: Description of the study participants' profile

Variables	Categories	N	Percent
Have you ever had cancer?	Yes	3	2.0%
	No	147	98%
Do you have a previous family history of cancer?	Yes	45	30%
	No	105	70%
Have you entered any educational programs about cervical cancer and its prevention?	Yes	6	4%
	No	144	96%
What is the source of medical information?	Social media	18	12%
	Television	27	18%
	Medical staffs	31	20.7%
	Society	74	49.3%
What is the history of premature birth?	No one	13	8.7%
	More than one birth	6	4.0%
	2-4 births	58	38.7%
	Five births, more	73	48.7%
How many children are at home?	No one	12	8%
	1-2 child	31	20.7%
	3-5 child	45	36%
	> five children	53	35.3%
Is the menstrual cycle regular or not?	Yes, regular	99	66%
	No, it is not a regular	51	34%
How long is the menstrual cycle?	15-20 days	20	13.3%
	21-25 days	44	29.3%
	26-30 days	68	45.3%
	More than 30 days	18	12%
When did the menstrual cycle start?	10-12 year	42	28%
	13-15 year	90	60%
	More than 15year	18	12%
What is the number of days of the menstrual cycle?	1-3 days	39	26%
	4-5 days	73	48.7%
	6-8 days	38	25.3%

As shown in Table No (8), out of 150 samples, 98% of these women do not have cancer, and 2.0% of women have cancer.

Table 3: Women's information regarding cervical cancer

Knowledge Question	Answer	N.	%
What is cervical cancer?	It is the uncontrolled growth of cells in the cervical region and other organs of the body	44	29.3%
	It is the growth of cells generally in the cervical region only	28	18.7%
	Uncontrolled cell growth in the cervical region and reproductive system only	46	30.7%
	Average growth of cells in the lower abdomen	9	6.0%
	Do not know	23	15.3%
What is the prevalence of cervical cancer in the world?	Cervical cancer ranks first in the spread among women in the world	13	8.7%
	The ranks second in spread among women of the world	41	27.3%
	The ranks third in spread among women in the world	45	30%
	The ranks fourth in spread among women in the world	18	12%
	Do not know	33	22%
Why does this age group (40-80) affect more than others?	Lack of immunity	31	20.7%
	Change of hormones	44	29.3%
	Heredity	33	22%
	All of them	42	28%
Which of the following knows is one of the symptoms of cervical cancer?	Irregular menstrual cycle	25	16.7%
	Increase vaginal discharge	15	10%
	Bleeding after intercourse	12	8%
	Difficulty urinating	9	6%
	Pelvic pain	34	22.7%
	Weight loss	6	4%
	Sleep disorder	1	0.7%
	All of them	36	24%
	Do not know	12	8%
What are the stages of cervical cancer?	Single stage and includes only cervix	26	17.3%
	Two stages include cervical cancer and bladder wall	40	26.7%
	Four stages start in the cervix and transport to include parts of the reproductive	43	28.7%

	and bladder wall and rectum		
	Three stages include cervix only	20	13.3%
	Do not know	21	14%
What is the importance of clinical examination?	Early detection of the disease helps with treatment and increases the chance of recovery	92	61.3%
	Detection of stages of the disease does not help with healing	29	19.3%
	To avoid severe complications of a possible disease but does not help with recovery	14	9.3%
	All of them	9	6%
	Do not know	6	4%
What are the methods of diagnosing cervical cancer?	Pap smear &HPV test	63	42%
	Radiology and MRI only	43	28.7%
	When symptoms appear, only the doctor makes the diagnosis	20	13.3%
	the patient's feeling specific symptoms, he expects to be cancer	12	8%
	Do not know	12	8%
What are the symptoms that should see a doctor?	When unfamiliar symptoms of bleeding or pain appear	82	54.7%
	The visit is periodic to maintain health	32	21%
	Weight loss	19	12.7%
	Feeling uncomfortable	17	11.3%
When is the periodic examination?	Every year	98	65.3%
	Every three years	31	20.7%
	Every five years	5	3.3%
	Every six years	6	4%
	Do not know	10	6.7%
Which of the following knows is one of the right ways to prevent cervical cancer?	Take the vaccine	17	11.3%
	Follow-up of tests	65	43.3%
	Avoid smoking	23	15.3%
	All of them	42	28%
	Do not know	3	2%
What factors contribute to cervical cancer	Sexually transmitted disease	32	21.3%
	HPV virus	37	24.7%
	Family history of cancer	39	26%
	Obesity	4	2.7%
	All of them	33	22%
	Do not know	5	3.%

This table shows that question (9) was 65.3% yearly and question (4) 0.7% was sleep disorder.

Discussion

Cancer is progressively emerging as the predominant illness of the century, particularly cervical cancer, which has now become the fourth most prevalent gynecologic malignancy globally, following breast cancer, in terms of mortality among women. This illness arises at the squamocolumnar junction of the cervical canal. It often occurs in a region recognized for significant alterations throughout late fetal development, puberty, and the initial pregnancy (16). The current study sought to evaluate women's understanding about cervical cancer. The present research. The majority of women tested exhibited inadequate understanding regarding cervical cancer. The study on "knowledge regarding cervical cancer prevention" in India concluded that most of the surveyed females had a deficient understanding of cervical cancer (17). The research "Knowledge, Attitude Regarding Cervical Cancer and Early Detection by Pap Test" conducted at King Saud University revealed that, during the pre-program period, 88% of the women surveyed possessed inadequate understanding concerning the Pap test. This can be ascribed to the lack of a structured cervical cancer program (18).

Table 1: This table shows that most women who participated in this Study are from the age group (40-49), and most of the women birth at the home. Regarding marital status, most of them are married and live in a city. The high rate of academic achievement is in the elementary stage. Most women are housewives and their husband's jobs are workers, also most of the women who participate in the Study do not have cancer

or a history of cancer in their families, and do not enter any educational program. Society is a source of information that takes the high rate of women participating in the Study. Of the women's information about their menstrual cycle most of them answered that the menstrual cycle regular; begins at 13-15 years, last 4-5 days, and every 26-30 days. The high rate of birth by women is 5 births or more with 3-5 child in home.

Table 2: description of the study participants' profile that include cancer, previous family history of cancer, enrolled in educational programs about cervical cancer and its prevention, source of medical information, previous birth, number of children are at home, menstrual cycle regular or not, long is the menstrual cycle, menstrual cycle start, and number of days of the menstrual cycle.

Table 3: The percentage of women that replied with a correct answer for the first question (what cervical cancer?) is 30.7% and considering the high rate among other answers for this question. The percentage of women that answer the question (what is the prevalence of cervical cancer in the world?) is 12% and does not consider the high rate between other answers. The percentage of women that answer the question (why does this age group (40-80) affect more than others?) is 28% and does not have a high rate among other answers. The percentage of women that answer the question (which of the following knows is one of the symptoms of cervical cancer?) is 24% and does not have a high rate among other answers. The percentage of women that answer the question (what are the stages of cervical cancer?) is 28.7% and considers a high rate among other answers. The percentage of women that

answer the question (what is the importance of clinical examination?) is 61.3% and considers a high rate among other answers. The percentage of women that answer the question (what are the methods of diagnosing cervical cancer?) is 42% and considers a high rate among other answers. The percentage of women that answer the question (what are the methods of diagnosing cervical cancer?) is 42% and considers a high rate among other answers. The percentage of women that answer the question (what are the symptoms that should see a doctor?) is 54.7% and considers a high rate among other answers. The percentage of women that answer the question (when is the periodic examination?) is 3.3% and considers the lowest rate among other answers. The percentage of women that answer the question (which of the following knows is one of the right ways to prevent cervical cancer?) is 28% and does not have a high rate among other answers. The percentage of women that answer the question (what factors contribute to cervical cancer?) is 22% does not have a high rate among other answers.

Conclusions
Based on the discussion of results and their interpretations, the present study concluded that:
1. The highest knowledge rate is in women in the age group (40-49) who live in the city.
2. The majority of woman dose not enrolled in educational programs about cervical cancer and its prevention
3. The research reveals that most women know about cervical cancer from society.
4. The highest knowledge rate was among employees.
5. High academic achievement (graduate and postgraduate) have a high knowledge rate about cervical cancer.
6. Women who live in the city have a high knowledge rate about cervical cancer
7. The Study has shown that women who have a family history of cervical cancer have a high knowledge rate about cervical cancer.

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