ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Assessment of Oncology Nurses Perception Regarding Uterine Cancer

Amira Abd El Nasser [(1)], Shaimaa Hassan Mohamady [(2)], Neama Abd El-Fattah Abd El-Gawad[(3)].

(1) B.Sc. Nursing, Faculty of Nursing, Zagazig University,
(2) Professor of Maternal and Newborn Health Nursing, Faculty of Nursing – Helwan University,
(3) Professor of Maternal and Newborn Health Nursing, Faculty of Nursing – Helwan University.

Abstract

Background: Uterine Cancer is the most common of the female reproductive tract. Aim: The current Study aimed to assess of oncology nurse's perception regarding uterine cancer. **Design:** A descriptive research design was used to conduct the study. **Setting:** The study was conducted in oncology unit at Arab contractors Medical Center. **Sample:** A convenient sample of 86 nurses working at the oncology unit at Arab contractors Medical Center. **Tools of Data Collection: two tools. first tool A** structured Self-Administered Questionnaire, to assess oncology nurses' knowledge regarding uterine cancer**. second tools** Nurses attitude regarding uterine cancer, to assess oncology nurses' attitude regarding uterine cancer. **Results:** About 55.8% of nurses had knowledge regarding causes of uterine cancer in comparison to 55.8% of them had knowledge regarding diagnosis of uterine cancer . About 62.8of studied nurses had disagree attitude regarding hysterectomy as result of cancer loses the women s sense of her femininity and 66.3% of studied nurses had disagree attitude regarding poverty may lead to uterine cancer uterine cancer. **Conclusion:** More than half of the studied oncology nurses had satisfactory knowledge while, less than half of them had unsatisfactory knowledge regarding uterine cancer. Nearly three quarter of the studied oncology nurses had positive attitude regarding uterine cancer while, more than one quarter of them had negative attitude regarding uterine cancer., there was a highly significant positive correlation between total attitude score and total knowledge score regarding uterine cancer. **Recommendations:** Intensive oncology course must be revised and the issues of uterine malignancy must be integrated in the course before starting work at hospital.

Key words: oncology nurses, Perception, Uterine Cancer.

Introduction

Uterine cancer is the most common cancer of the female reproductive tract. It occurs in the inner lining of the uterus, called the endometrium. The disease generally strikes women between the ages of 50 and 65. Cancer of the uterine (fundus or corpus) has increased in incidence, partly because people are living longer and because reporting is more accurate **(Weiderpass et al., 2020).**

Uterine malignancy is the sixth most common cancer among women worldwide and the second most common cancer in women in developing countries. The incidence of endometrial cancer is rising due to largely increased incidence of obesity,

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

which is an important risk factor for this disease **(Koskas et al., 2020).**

Exact causes of uterine cancer are unknown, but some factors seem to increase a woman's risk as obesity, early onset of menstruation & late menopause, older than age 50 years, concurrent disease such as hypertension, diabetes, null parity, taking estrogen hormone replacement without, progesterone, tamoxifen therapy and women with a family history of ovarian, endometrial, breast or bowel cancer **(Katagiri et al., 2023).**

The most common symptoms of uterine malignancy are abnormal uterine bleeding and vaginal discharge **(Boeckstaens et al., 2020).** Women who have advanced disease may have symptoms similar to those seen with advanced ovarian cancer, such as abdominal or pelvic pain, abdominal distension, early satiety, or change in bowel or bladder function **(Esmaeilzadeh and Nasirzadeh, 2023).**

Meanwhile, uterine cancer perception is referred to the way how oncology nurses think about uterine cancer and consequently, how belief **(Burrowes et al., 2022).** Perception is defined as the psychological ability to process or use information received through the sense organs. Perception is the cognitive impression that is formed of ''reality" which in turn influences the individual's actions and behavior towards that object **(Bashkin et al., 2023).**

Moreover, knowledge is a necessary predisposing factor for behavioral change. Knowledge also plays an important role in improvement of health seeking behavior. Not only that knowledge might dramatically improve the attitude, disbelieve, and misconception and consequently enhance screening practice **(Williams et al., 2021).**

Often the practice of oncology nurses 'requires good theoretical understanding of nursing knowledge and competence in technical skills, critical thinking, clinical decision-making, and assessment abilities **(Leake et al., 2022).**

Nursing attitude begin with individual beliefs come from family, culture, social interactions, self-esteem and education. Attitudes to cancer may create a barrier to communication between women and health care professionals and influence decision making about referral to specialist services and the selection of appropriate treatments **(Yeom et al., 2022).**

The oncology nurses' play a vital role in communicating the importance of treatment completion to cancer women and in supporting women across the continuum of care for improving their quality of life nurses fill a number or roles, including counseling women on issues related to treatment completion, providing education about disease, chemotherapy, its side effect, assessing and managing symptoms of the disease and follow up **(Suazo et al., 2023).**

Significance of the Study

Cancer of the uterus is the most common cancer of the female reproductive organs. It is reported that rates of endometrial cancer are increased in a number of countries between the 2000 and 2020. Approximately 320,000 women are diagnosed with endometrial cancer worldwide and 76,000 die each year **(Said et al., 2021).**

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

In Egypt, it represents 2.4 % per 100,000 women and mortality rate is 1.3 % per 100,000 women nearly. This is believed to be due to the increasing number of elderly women's and increasing rates of obesity **(Said et al., 2021).**

Better understanding of uterine cancer allow early screening and detection of uterine cancer will minimize female mortality and morbidity as well as promoting female reproductive health. So, this study was designed to assess knowledge and attitude of oncology nurses' regarding uterine cancer.

Aim of the Study

The current study aimed to assess of oncology nurses perception regarding uterine cancer through the following objectives:

1) Assess oncology nurses' knowledge regarding uterine cancer.
2) Assess oncology nurses' attitude regarding uterine cancer.

Research Questions

1) What are oncology nurses' knowledge regarding uterine cancer?
2) What are oncology nurses' attitude regarding uterine cancer?

Subject and Methods

Study Design:

A descriptive design was used to conduct the c. Descriptive research is a quantitative research method that attempts to collect quantifiable information for statistical analysis of the population sample. This is a quantitative description technique that seeks to answer questions about real-life situations **(Ebrahim et al., 2021).**

Study Setting: The study was conducted in oncology unit at Arab Contractors Medical Center (ACMC). The hospital established at 1983 with 420 bed. The center certified with ISO: 9001. The unit is located at the fourth floor. The center provides services to the areas around it as El-Dewika and EL Manshia.

Study Subjects: A convenient sample included 86 nurses that working in oncology unit at Arab contractors Medical Center (ACMC), who agreed to participate in the study and enrolled in the work. Data were gathered during six months.

Tools of data collection: Two tools were used as the following:

Tool (I): A structured Self-Administered Questionnaire:

A structure self-administrative questionnaire was developed by the researchers in simple Arabic language based on a review of current and previous national and international literatures and included two parts as the following:

Part I: Demographic characteristics of the studied oncology nurses

This part consists of 7 items. It collected data on (sex, age, level of education, years of experience, marital status, residence, and training courses related to uterine cancer).

Part II: Nurses Knowledge regarding uterine cancer.

Adapted from **Amal et al. (2018)** and modified by the researcher, this part assessed oncology nurses' knowledge about uterine cancer.

It included two parts:

a) Source of knowledge about uterine cancer; it consists of 5 items including (studying nursing, oncology physician, oncology nurse, media, and more than one source).

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

b) Definition of cancer and uterine cancer (2 items), types of reproductive system cancer (6 items), types of uterine cancer (4 items), risk factors (3 items), causes (5 items), symptoms (3 items), diagnosis (3 items), complications (3 items), and treatment (3 items).

Knowledge scoring system:

The total score of knowledge was 37 scores. Each correct answer was given one score and the incorrect and don't know answers were given zero score. It was categorized as follows:

- **Unsatisfactory knowledge:** Less than 60%.
- **Satisfactory knowledge:** 60% or more.

Tool (II): Nurses attitude regarding uterine cancer:

Adapted from **Dang, Lee, and Tran (2019)** and modified by the researchers, this tool assessed the attitudes of oncology nurses regarding uterine cancer.

Attitude scoring system:

It contains 13 items and is rated by the three-point Likert scale; agree, uncertain and disagree. It contains three responses as (2 scores) for agree, (1 score) for uncertain, (0 score) for disagree.

The total score was 26, categorized as follows:

- **Positive Attitude:** Scores of 60% or higher.
- **Negative Attitude:** Scores below 60%.

II- Operational Design:

The operational design for this study consisted of four phases; preparatory phase, content validity, pilot study and field work.

A) Preparatory phase:

This phase began with a review of current and past national and international literature concerning uterine cancer, including textbooks, articles, journals, and websites. This review assisted the researcher in developing the data collection tools. Subsequently, the researcher tested the validity of the tools through a jury of experts.

B) Content Validity and Reliability:

Validity:

Face and content validity of the study tools were assessed by a jury consisting of three experts from the Maternity and New-born Health Nursing Department at the Faculty of Nursing, Helwan University. The tools were evaluated for comprehensiveness, accuracy, and clarity of language.

Reliability:

Reliability was tested using Cronbach's Alpha, yielding a score of (91%) for the oncology nurses' knowledge regarding uterine cancer and (89%) for their attitudes toward uterine cancer.

C) Pilot study:

A pilot study was conducted on 10% of the total sample (9 nurses) to evaluate the tools' applicability, efficiency, and clarity, as well as the feasibility of the fieldwork. The pilot study also aimed to identify potential obstacles that could interfere with data collection. Modifications were made based on the findings, such as omitting some questions to improve simplicity and clarity.

The pilot study sample was excluded from the main study samples.

D) Field work:

- Data collection was conducted over six months, from June 2021 to December 2021.
- The researcher conducted an extensive literature review on uterine cancer and oncology nurses' knowledge and attitudes.
- Data collection tools were developed and modified, including a questionnaire to assess nurses' knowledge and a Likert scale for their attitudes.
- The researcher introduced herself to the oncology nurses, explaining the study's objectives, significance, and expected outcomes.
- Participation was voluntary, with informed consent obtained from each nurse before data collection.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

- The researcher was present at the study site three days per week to distribute the questionnaires and provide clear instructions for them completion. The questionnaires included demographic data, an assessment of nurses' knowledge about uterine cancer that take10 minutes, and an attitude scale take 10 minutes.
- Completed questionnaires were collected for data analysis.

Ethical considerations:

The research approval was obtained from the Scientific Research Ethical Committee of the Faculty of Nursing, Helwan University before starting the study. The researcher clarified the aim of the study to each nurse included in the study before starting, an informed concern approval was obtained from the nurses before inclusion in the study. The researcher assured maintaining anonymity and confidentiality of the study sample data included in the study that it would be used for the research purpose only. Tools of data collection didn't touch moral, religious, ethical and culture aspect of the studied nurses. The nurses informed that they were allowed to choose to participate or not in the study and they had the right to withdraw from the study at any time without giving any reasons.

I- Administrative Design:

An official letter requesting permission to conduct the study was directed from the dean of the faculty of nursing Helwan University to the director of the oncology unit at Arab Contractors Medical Center [ACMC], and the nursing directors to obtain their approval to carry out this study. This letter included the aim of the study and photocopy from data collection tools in order to get their permission and help for collection of data.

II- Statistical Design:

Data collected from the studied sample was revised, coded and entered using PC. Computerized data entry and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 20. Data were presented using descriptive statistics in the form of frequencies and percentages and measured standard deviations for quantitative variables. Chi-square test (X^2) was used for comparison and r. test for correlation between qualitative variables. Statistically significant was considered at p.value ≤ 0.05.

Results

Table (1): Distribution of the studied oncology nurses' regarding their demographic characteristics (No. = 86).

Nurses Characteristics	No = 86	%
Sex:		
Male	25	29%
Female	61	**71%**
Age (years):		
20-25 years	18	21%
26-30 years	45	**52%**

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

31-35 years	19	22%
More than 35 years	4	5%
Level of education:		
Nursing Diploma	28	33%
Nursing technical institute	33	**38%**
Bachelor of Nursing	18	21%
Postgraduate	7	8%
Years of experience:		
Less than one year	8	9%
From 1 year to less than 5 years	53	**62%**
From 5 years to less than 10	16	19%
More than 10 years	9	10%
Marital status:		
Single	24	28%
Married	37	**43%**
Divorced	17	20%
Widow	8	9%
Residence:		
Urban	45	**52%**
Rural	41	48%
Training courses about cancer (n=18):		
Private	2	**11%**
Government	16	**89%**

Table (1) showed that more than two thirds (71%) of the studied oncology nurses' were female and more than half (52%) of them their age range between 26 to 30 years. More than one third (38%) of the studied oncology nurses' had nursing technical institute. Regarding to duration of experience, (62%) of the studied oncology nurses' had from 1 to less than 5 years of experience. As regards to marital status, less than half of the studied oncology nurses' (43%) were married as well as, (52%) of them were from urban area.

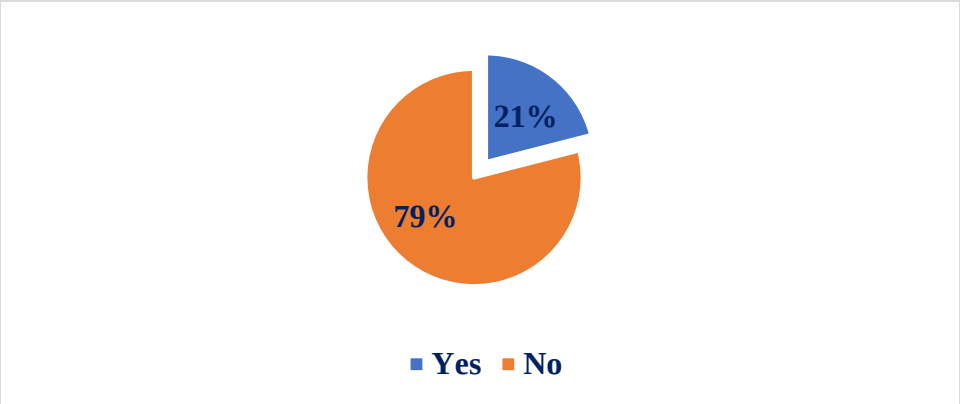

Figure (1): Frequency distribution of the studied oncology nurses' regarding previous training courses (86).

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Regarding training course, **Figure (1)** showed that, more than three quarter (79%) of the studied oncology nurses did not attended any training courses about cancer. While less than one quarter (21%) attended training courses about cancer. From this result, **table (1)** showed that only 11% (2 nurses) had private training meanwhile 89% (16 nurse) of them had governmental training regarding uterine cancer.

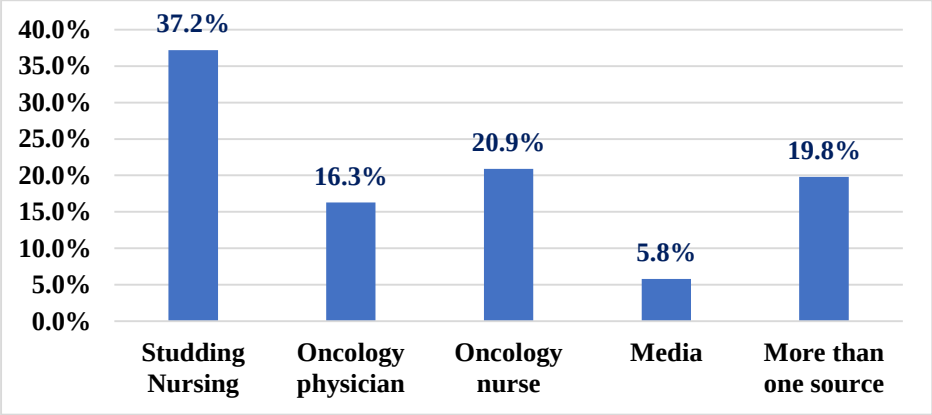

Figure (2): Distribution of the studied oncology nurses' regarding their source of knowledge about uterine cancer (N=86).

Figure (2) showed that, the studied oncology nurses' were reported that their source of knowledge regarding uterine cancer were from studding nursing in their schools, institutes or faculty of nursing, oncology nurse, oncology physician (37.2%, 20.9%, 16.3%) respectively, while reminder (5.8%) of the studied oncology nurses' were reported that their source of knowledge from media (Internet and TV) and (19.8%) of the studied oncology nurses' were reported their source of knowledge were from more than one source.

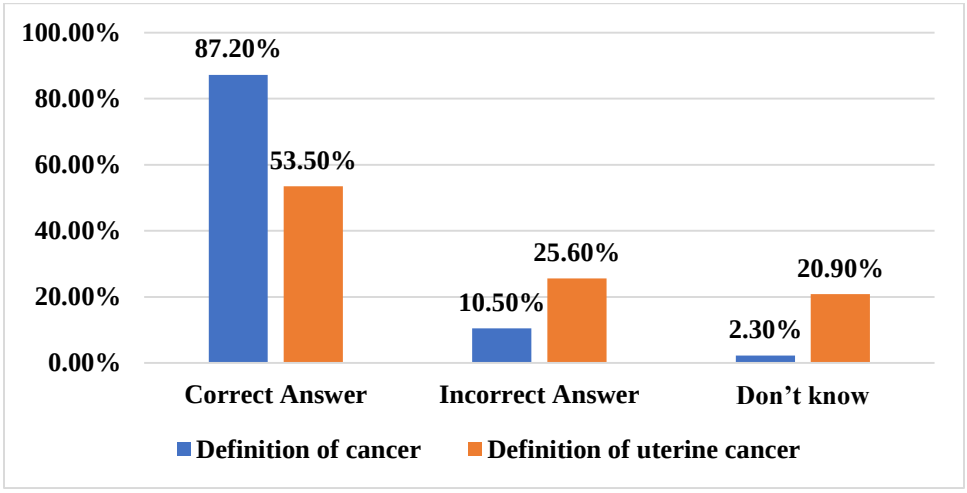

Figure (3): Distribution of the studied oncology nurses' regarding their knowledge about definition of cancer and uterine cancer (N=86).

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Figure (3), represents the studied oncology nurses' knowledge regarding definition of cancer. It showed that (87.2%) of the studied nurses had correct answer about definition of cancer and (10.5%) had incorrect answer, while (2.3%) don't know. In addition, It showed that (53.5%) of the studied nurses' had correct answer about definition of uterine cancer and (25.6%) had incorrect answer, while (20.9%) don't know.

Table (2): Distribution of the studied nurses' knowledge regarding uterine cancer (No. = 86).

Items	Correct Answer		Incorrect Answers and Don't Know	
	No.	%	No.	%
Definition of cancer and uterine cancer	46	53.5%	40	46.5%
Types of reproductive system cancer	57	**66.3%**	29	33.7%
Types of uterine cancer	59	**68.6%**	27	31.3%
Risk factors of uterine cancer	49	**57.0%**	37	43.0%
Causes of uterine cancer	38	44.2%	48	**55.8%**
Symptoms of uterine cancer	49	**57.0%**	37	43.0%
Diagnosis of uterine cancer	38	44.2%	48	**55.8%**
Complications of uterine cancer	21	24.4%	65	**75.6%**
Treatment of uterine cancer	57	**66.3%**	29	33.7%

Table (2) clarified that, more than half (55.8%) of studied nurses' had unsatisfactory knowledge about causes and diagnosis of uterine cancer, Meanwhile (68.6%, 66.3%, 57.0%, 57.0% & 66.3%) of studied nurses had satisfactory knowledge about types uterine cancer, types of reproductive system cancer, risk factors of uterine cancer, symptoms of uterine cancer and treatment of uterine cancer, respectively.

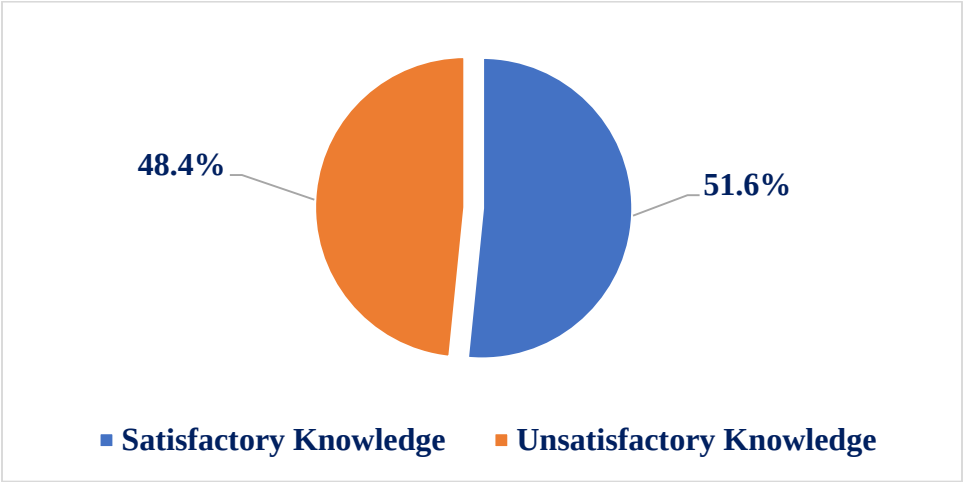

Figure (4): Total nurses' knowledge about uterine cancer (No. = 86).

Figure (4): illustrated that total nurse's knowledge about uterine cancer, only (51.6%) of the studied oncology nurses had satisfactory knowledge in comparison to 48.4% of them had

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

unsatisfactory knowledge about uterine cancer. This means that the studied oncology nurses' in need to raise their awareness and knowledge regarding uterine cancer which meet the study aim.

Table (3): Distribution of the studied nurses' attitude regarding uterine cancer (No. = 86).

Items	Agree (Score 2)		Uncertain Score (1)		Disagree Score (0)	
	No.	%	No.	%	No.	%
Women is more likely to get uterine cancer if women eat high fat in diet	37	43.0	24	**27.9**	25	29.1
Poverty may lead to uterine cancer	23	26.7	6	7.0	57	**66.3**
Early detection of uterine cancer helps in complete care	79	**91.9**	5	5.8	2	2.3
The medical team should inform the women by the disease (uterine cancer)	63	**73.3**	5	5.8	18	20.9
Uterine cancer treatment would enhance women chance of living long	73	**84.9**	6	7.0	7	8.1
Surgical treatment is an essential treatment of uterine cancer	53	61.6	10	11.6	23	26.8
Uterine cancer was a preventable disease	63	**73.3**	9	10.5	14	16.2
Advanced women age become susceptible to uterine cancer	35	40.7	13	**15.1**	38	44.2
Hysterectomy affects the marital relationship	45	52.3	16	**18.6**	25	29.1
Support and provide women with knowledge help them take a decision regarding the type of treatment	78	90.7	5	5.8	3	3.5
Support and provide women with knowledge about the disease and treatment help them to reduce stress and cope with women condition	79	**91.9**	5	5.8	2	2.3
Hysterectomy as a result of cancer loses the women's sense of her femininity	27	31.4	5	5.8	54	**62.8**
Hysterectomy leads to lack of women's psychological & social adjustment	20	23.3	8	9.3	58	**67.4**

Table (3) showed that; (91.9%) of studied nurses agreed that early detection of uterine cancer help in complete care and support and provide women with knowledge about the disease and treatment help them to reduce stress and cope with women condition. In addition, about (73.3%) of studied nurses agreed that the medical team should inform the women by the disease (uterine cancer), (84.9%) of studied nurses agreed that uterine cancer treatment would enhance women chance of living long.

Moreover, (27.9%) of studied nurses' uncertain that women is more likely to get uterine cancer if women eats high fat in diet and (15.1%) of studied nurses' uncertain that advanced women age become susceptible to uterine cancer as well as, (18.6%) of studied nurses' uncertain that hysterectomy affects the marital relationship.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

However, (66.3%) of studied nurses disagreed that poverty may lead to uterine cancer and (62.8%) of studied nurses disagreed that hysterectomy as a result of cancer loses the women's sense of her femininity and (67.4%) of studied nurses disagreed that hysterectomy leads to lack of women's psychological & social adjustment.

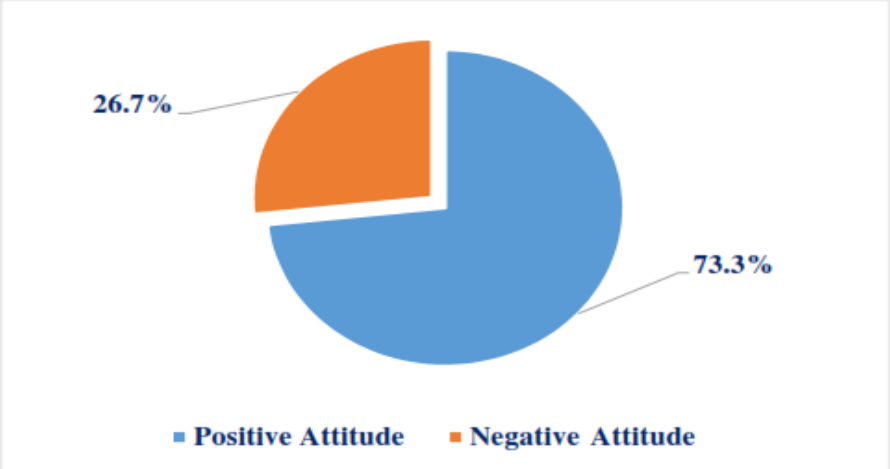

Figure (5): Total attitude score of the studied nurses (No. = 86).

Figure (5) shows that; (73.3%) of studied nurses had positive attitude and (26.7%) of studied nurses had negative attitude regarding uterine cancer.

Table (4): Relation between studied oncology nurses' knowledge and their demographic characteristics (n=86).

General characteristics	Satisfactory (n=44)		Unsatisfactory (n=42)		Significant test	
	No.	%	No.	%	x2	p-value
Sex						
Male	18	20.9%	15	17.4%	14.036	<0.001**
Female	26	30.2%	27	31.4%		
Age (years)						
20-25 years	6	7.0%	5	5.8%	3.394	0.065
26-30 years	9	10.5%	7	8.1%		
31-35 years	16	18.6%	19	22.1%		
More than 35 years	13	15.1%	11	12.8%		
Level of education:						
Nursing Diploma	7	8.1%	18	20.9%	15.662	<0.001**
Nursing technical institute	12	14.0%	12	14.0%		

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Bachelor of Nursing	14	16.3%	9	10.5%		
Postgraduate	11	12.8%	3	3.5%		
Years of experience:						
< 1	5	5.8%	20	23.3%	8.460	0.04*
1 < 5	8	9.3%	13	15.1%		
5 < 10	13	15.1%	7	8.1%		
> 15	18	20.9%	2	2.3%		
Marital status						
Single	1	1.2%	23	26.7%	8.860	0.031*
Married	24	27.9%	15	17.4%		
Divorced	10	11.6%	3	3.5%		
Widow	9	10.5%	1	1.2%		
Residence						
Urban	12	14.0%	17	19.8%	1.704	0.192
Rural	32	37.2%	25	29.1%		

Table (4) shows that there is highly statistically significant relation between studied nurses' knowledge about uterine cancer and the nurses' gender and nurses' level of education (<0.001**). It also shows that there is a statistically significant relation between studied nurses' knowledge about uterine cancer and the nurses' years of experience (0.04*) and marital status (0.031*). It also shows that there is no statistically significant relation between studied nurses' knowledge about uterine cancer and the nurses' age (0.065) and residence (0.192).

Table (5): Relation between studied oncology nurses' attitude and their demographic characteristics (n=86).

General characteristics	**Positive (n=63)**		**Negative (n=23)**		**Significant test**	
	No.	**%**	**No.**	**%**	**x2**	**p-value**
Sex						
Male	24	38.1%	7	30.4%	0.009	0.989
Female	39	61.9%	16	69.6%		
Age (years)						
20-25 years	12	19.0%	7	30.4%	0.225	0.635
26-30 years	15	23.8%	2	8.7%		
31-35 years	19	30.2%	3	13.0%		
More than 35 years	17	27.0%	11	47.8%		
Level of education:						
Nursing Diploma	11	17.5%	6	26.1%	17.19	0.004**

ISSN 2786-0183
Helwan International Journal for Nursing Research and Practice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Nursing technical institute	23	36.5%	2	8.7%		
Bachelor of Nursing	28	44.4%	5	21.7%		
Postgraduate	1	1.6%	10	43.5%		
Years of experience:						
< 1	1	1.6%	9	39.1%	0.077	0.781
1 < 5	6	9.5%	6	26.1%		
5 < 10	24	38.1%	5	21.7%		
> 15	32	50.8%	3	13.0%		
Marital status						
Single	12	19.0%	7	30.4%	8.606	0.035*
Married	30	47.6%	3	13.0%		
Divorced	18	28.6%	8	34.8%		
Widow	3	4.8%	5	21.7%		
Residence						
Urban	15	23.8%	5	21.7%	0.260	0.610
Rural	48	76.2%	18	78.3%		

*Significant (P<0.05)

Table (5) shows that there is highly statistically significant relation between studied nurses' attitude about uterine cancer and the nurses' level of education 0.004**). There is a statistically significant relation between studied nurses' attitude about uterine cancer and the nurses' marital status (0.035*). It also shows that there is no statistically significant relation between studied nurses' attitude about uterine cancer and the rest of demographic characteristics.

Table (6): Correlation between knowledge and attitude regarding uterine cancer (n=86).

Attitude	**Knowledge**			
	Satisfactory		**Unsatisfactory**	
	No.	**%**	**No.**	**%**
Positive	21	72%	42	74%
Negative	8	28%	15	26%
Pearson Correlation	**0.189**			
P-value	**0.007****			

Table (6) indicates that, a highly significant positive correlation was discovered between total attitude score and total knowledge score regarding uterine cancer at (p-value 0.007**).

Discussion

Knowledge is an essential first step in the development of perception. Although knowledge is considered to be a precursor of perception. Uterine cancer is the easiest gynecologic cancer to prevent with regular screening tests and follow-up. It also is

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

highly curable when found and treated early. Worldwide uterine cancer stays a chief public health issue and it is one of the most common gynecological cancer among women **(Eghbal et al, 2021) and (Bashkin et al., 2023).**

The present study aimed to assess of oncology nurse' s perception regarding uterine cancer.

Concerning demographic characteristics of the studied oncology nurses, the current study results revealed that; more than two thirds of the studied oncology nurses were female and more than half of them their age range between 26 to 30 years. More than one third of the studied oncology nurses had nursing technical institute. Nearly two thirds of the studied oncology nurses had from 1 to less than 5 years of experience. Less than half of the studied oncology nurses were married as well as, more than half of them were from urban area. Moreover, more than three quarter of studied nurses did not attend any training courses about cancer.

The current study results are consistent with **Mutambara et al., (2020)** who concluded that the majority of nurses were in the age range 25–35, and most of the oncology nurse were nursing technical institute. On the other hand, the current study findings were inconsistent with **Eghbal et al., (2020)** who studied evaluating the effect of an educational program on increasing uterine cancer screening behavior among rural women in Guilan, Iran, and found that; the majority of the nurses were bachelor of nursing and more than half of them attended previous training courses about different secessions types of cancer.

Regarding type's reproductive system cancer. It showed that more than half of the studied oncology nurses had correct answer about definition of uterine cancer and one quarter of them had incorrect answer, while less than half of them don't know. In addition, this table illustrated nurses' knowledge about types of reproductive system cancer, the most commonly known type was uterine cancer, uterine cancer and vaginal cancer. In addition, less than one quarter of the studied oncology nurses had incorrect answer about fallopian tube cancer and the lowest were about external genitalia cancer. While, the studied oncology nurses didn't know about fallopian tube cancer and external genitalia cancer.

The current study results are agreed with **Said et al., (2021)** who studied the effect of an educational intervention on women's knowledge and attitude regarding uterine cancer, illustrated that; Among women, 43.5 % were diagnosed with breast cancer, 41.5 % with ovarian cancer, 7.3 % with uterine cancer and 6.7 % with uterine cancer; 11.9 % of female respondents were diagnosed with some other type of cancer. ***From the researcher point of view,*** the most commonly known types were uterine cancer, uterine cancer, and vaginal cancer, with high percentages of nurses correctly identifying them. However, there were some gaps in knowledge, with incorrect answers and a lack of knowledge about fallopian tube cancer and external genitalia cancer.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Regarding risk factors of uterine cancer. It showed that about less than one quarter of the nurses had incorrect knowledge that women above 40 years is one of the risk factors of uterine cancer. In addition, more than two thirds of the nurses had correct answer that heavy smoked women and using contraceptive pills (Lactevenor) for a long time were risk factors. However, approximately one quarter did not know that heavy smoked women, old age women (Above 40) and using contraceptive pills for a long time were risk factors of uterine cancer.

The current study findings are consistent with **Thahirabanuibrahim and Logaraj, (2021),** who studied the impact of health education intervention in promoting uterine cancer screening among rural women of Chengalpattu district, who found that; hormonal factors like prolonged exposure to estrogen without adequate progesterone, obesity, diabetes, a family history of uterine or colorectal cancer, hereditary conditions like Lynch syndrome, late menopause, and certain hormonal therapies. ***From the researcher point of view,*** these factors increase the risk, it's essential to be aware that not everyone with these risk factors will develop uterine cancer, and uterine cancer can also occur in the absence of these risk factors. Regular medical check-ups and lifestyle management, including maintaining a healthy weight and blood sugar control, can help reduce the risk.

Regarding causes of uterine cancer. It was observed that more than half of the nurses reported correct answer that the onset of menstruation and contraceptive pills with estrogen & without progesterone in combination were not causes of uterine cancer. While, about more than one third reported incorrect answer toward obesity is one of the causes of uterine cancer. However, more than one quarter of the nurses did not know that infertility and Early or late menopause were causes of uterine cancer.

The current study results are disagreed with **El-Sayed et al., (2022)** who studied impact of an educational intervention on deaf and hard hearing females' knowledge and health beliefs regarding uterine cancer in Tabuk, Saudi Arabia: found that; imbalance in the female sex hormones, particularly an excess of estrogen relative to progesterone. This hormonal imbalance can stimulate the overgrowth of the endometrial lining in the uterus, increasing the risk of cancer. Other contributing factors include obesity, as fat tissue can produce additional estrogen, as well as conditions like diabetes and polycystic ovary syndrome (PCOS), which are associated with hormonal irregularities. ***From the researcher point of view,*** these factors are known to elevate the risk, the exact cause of uterine cancer may involve a combination of genetic, environmental, and lifestyle factors, and research in this area is ongoing.

Regarding symptoms of uterine cancer. It was observed that more than two thirds of the studied oncology nurses had correct answer that abnormal uterine bleeding and vaginal discharge abdominal swelling / tumor were symptoms of uterine cancer. While, less than one quarter had

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

incorrect answer that it may be with no symptoms. However, less than one quarter of them did not know that abnormal uterine bleeding and vaginal discharge were symptoms of uterine cancer.

The current study results are incongruent with **(Osman et al., 2021),** who studied women's knowledge, attitude, and practice toward uterine cancer and its screening tests in a teaching hospital in Khartoum, Sudan and concluded that; the most common sign is abnormal vaginal bleeding, particularly post-menopause or irregular menstrual bleeding. Women may experience pelvic pain or pressure, pain during intercourse, or an enlarged uterus. ***From the researcher point of view,*** while these symptoms can be indicative of uterine cancer, they can also be caused by other conditions. It's important to consult a healthcare provider if you experience any of these signs, as early detection and treatment can greatly improve the prognosis for uterine cancer.

Regarding diagnosis of uterine cancer, the studied oncology nurses reported that more than half had correct answer that ultrasound and hysteroscopy can diagnose uterine cancer while, less than one quarter of them had incorrect answer that endometrial biopsy can diagnose uterine cancer. However, more than one third of them did not know that ultrasound can diagnose uterine cancer.

The current study results are supported by **El-Sayed et al., (2022)** who studied impact of an educational intervention on deaf and hard hearing females' knowledge and health beliefs regarding uterine cancer in Tabuk, Saudi Arabia: the most common diagnostic procedure is a transvaginal ultrasound, which can help visualize the uterus and detect any abnormalities. Additionally, a biopsy of the uterine tissue, often obtained through a dilation and curettage (D&C) or hysteroscopy, is crucial for definitively diagnosing uterine cancer and determining its type and stage. ***From the researcher point of view,*** further tests such as imaging studies like MRI or CT scans may be conducted to assess the extent of the cancer. Once diagnosed, a healthcare team can formulate a suitable treatment plan tailored to the specific characteristics of the cancer.

Regarding complications of uterine cancer, more than half of the studied oncology nurses had correct answer that that cancer can spread to other parts of the body while, less than half of them had incorrect answer that Infertility was a complication of uterine cancer.

The current study result is incongruent with **Said et al., (2021)** who studied the effect of an educational intervention on women's knowledge and attitude regarding uterine cancer showed that; One of the primary complications is the spread of cancer to nearby organs and tissues, which can make treatment more challenging. If the cancer is not detected early, it may require more aggressive treatments, such as extensive surgery, radiation therapy, or chemotherapy, leading to potential side effects and reduced quality of life. Additionally, uterine cancer may affect a woman's fertility and reproductive health,

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

often necessitating a hysterectomy, which can have emotional and psychological consequences. ***From the researcher point of view,*** it's essential to address uterine cancer promptly to minimize these complications and improve the chances of successful treatment and recovery.

Regarding treatment of uterine cancer, the majority of the studied oncology nurses reported that chemotherapy and radiology were used to treatment uterine cancer, respectively. However, less than one quarter of them did not know that through removing the uterus completely with the use of chemotherapy or radiotherapy were treatment of uterine cancer.

The study results are congruent with **Kovacevic, (2021)** who studied increasing uterine cancer awareness and screening in Jamaica, and concluded that; the most common approach is surgery, often involving a hysterectomy to remove the uterus and possibly the ovaries and fallopian tubes. In some cases, lymph nodes may also be removed. Depending on the cancer's stage, radiation therapy, and chemotherapy may be used before or after surgery to target any remaining cancer cells or reduce the risk of recurrence. Hormone therapy, like progesterone, can be an option for certain types of uterine cancer. ***From the researcher point of view,*** treatment plans are highly individualized, and the goal is to effectively remove or destroy the cancer while preserving the patient's quality of life and reproductive function when possible. Regular follow-up care and surveillance are crucial to monitor for any potential recurrence.

Regarding total nurses' knowledge about uterine cancer. More than half of nurses had satisfactory knowledge in comparison to less than half of them had unsatisfactory knowledge about uterine cancer. The current study result is consistent with **Getaneh et al., (2021)** who studied the effect of an educational intervention on women's knowledge regarding uterine cancer showed that; they had poor knowledge about uterine cancer and its screening. Meanwhile, regarding definition of uterine cancer, it is ranged from more than half to the most, risk factors of uterine cancer is ranged from more than two thirds to the majority, the diagnosis of uterine cancer is ranged from more than half to more than three quarters, development of uterine cancer takes years is ranged from more than two fifth to the majority and uterine cancer be treated is ranged from three quarters to the majority respectively.

This is consistent with the study conducted in Dar es-salaam which showed fifty three percent of the participants had inadequate knowledge of uterine cancer and CCS **(Mboineki et al., 2020).** However, the study in Magu District Tanzania, showed more than four fifths of the women scored less than half, this is significantly higher magnitude compared to the study **(Mabelele et al., 2020).** ***From the researcher point of view,*** This can be due to the fact that this study has comprised women from different hospital settings across the entire Mbeya region while the study by Mabelele, had only been conducted in one setting.

Regarding total attitude score of the studied nurses. Upon investigating the

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

studied nurses, attitude toward uterine cancer, the results of the present study showed that more than two thirds of studied nurses' had positive attitude and less than one third of studied nurses' had negative attitude regarding uterine cancer. This study's findings are slightly higher than the study done in Ethiopia where forty five percent of the participant had positive attitude **(Tekle et al., 2020).**

Furthermore, the current finding is relative in harmony with that of Getaneh which concluded that more than two thirds had a favorable attitude, towards uterine cancer and its screening. More interesting, the study found that more than half had positive attitude regarding uterine cancer screening even though they had poor knowledge about uterine cancer and its screening **(Getaneh et al., 2021).** In general, the uptake of uterine cancer screening is affected to a great extent by the attitude of the health care provider.

Several studies documented that nurses play a major role in enlightening the public on the availability and the need for uterine cancer screening services. ***From the researcher point of view,*** so that their attitude is often crucial in gaining women's confidence as they are the persons who conduct tests. More importantly, the attitude and approach of the person performing the test might greatly influence the woman future willingness to attend. If a woman dislikes the persons who will perform the screen, this might prevent from attending.

Concerning the relation between studied nurses' knowledge and their demographic characteristics, the current study results showed that; there is highly statistically significant relation between studied nurses' knowledge about uterine cancer and the nurses' gender and nurses' level of education (<0.001**). It also shows that there is a statistically significant relation between studied nurses' knowledge about uterine cancer and the nurses' years of experience (0.04*) and marital status (0.031*). It also shows that there is no statistically significant relation between studied nurses' knowledge about uterine cancer and the nurses' age (0.065) and residence (0.192).

The current study result is consistent with **Said et al., (2021)** who studied the effect of an educational intervention on women's knowledge and attitude regarding uterine cancer showed that; there was a significant relation between knowledge and educational qualification pre-intervention phase. Moreover, a highly statistically significant relationship existed between total knowledge score and education. ***From the researcher point of view,*** this attributes the difference of results to different of the studied sample. The present study results are in agreement with **Bansal et al., (2021)** who studied knowledge, attitude, and practices related to uterine cancer among adult women: A hospital-based cross-sectional study and found that age, level of education, and income were significantly associated with the highest knowledge score among women with higher education were more likely to have adequate

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

knowledge. ***From the researcher point of view,*** these findings may be because a highly educated woman pays more attention to health and has more opportunities to obtain relevant information, increasing knowledge.

Concerning the relation between studied nurses' attitude and their demographic characteristics. The current study results illustrated that; there is highly statistically significant relation between studied nurses' attitude about uterine cancer and the nurses' level of education (0.004**). There is a statistically significant relation between studied nurses' attitude about uterine cancer and the nurses' marital status (0.035*). It also shows that there is no statistically significant relation between studied nurses' attitude about uterine cancer and the rest of demographic characteristics.

The results of the current study are congruent with **Ebrahim et al., (2021),** who studied the effect of the educational package based on the health belief model on nursing students' knowledge and attitude regarding human papillomavirus and uterine cancer, and found that; one-fifth, three-quarters, and slightly less than three-quarters of the studied sample had positive total attitude scores at pre-intervention, immediate post-intervention, and four weeks post-intervention phases, respectively.

On the other hand, it revealed that the majority, one-quarter, and slightly more than one-quarter of the studied sample had negative total attitude scores in pre-intervention, immediate post-intervention, and four weeks post-intervention phases, respectively. Moreover, there was a marked improvement in all items of the studied sample attitude regarding all items of students' attitudes regarding uterine cancer, human papillomavirus infection, and human papilloma virus vaccination post implementation of the educational package based on the health belief model with a highly statistically significant difference (p.001) between pre, immediate post, and four weeks post-intervention. ***From the researcher point of view,*** this attributes the present results to the educational sessions providing the participants with exemplified and concluded information accompanied with feedback that can positively affect their knowledge level which in turn positively affect their attitudes.

Conclusion:

The present study concluded that, more than half of the studied oncology nurses had satisfactory knowledge while, less than half of them had unsatisfactory knowledge regarding uterine cancer. Nearly three quarter of the studied oncology nurses had positive attitude regarding uterine cancer while, more than one quarter of them had negative attitude regarding uterine cancer. In addition, there is highly statistically significant relation between studied nurses' knowledge and attitude about uterine cancer and the nurses' gender and nurses' level of education. Moreover, there is a highly significant positive correlation between total attitude score and total knowledge score regarding uterine cancer.

Recommendations:

The following recommendations were suggested from the present study finding:

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

- Intensive oncology course must be revised and the issues of uterine malignancy must be integrated in the course before starting work at hospital.
- Further researches are needed to investigate oncology nurse's practical skills regarding care of women with uterine cancer at gynecological oncology department.
- Further researches are needed to investigate women satisfaction related to oncology nurse care at gynecological oncology department.

References:

Mabelele MM, Materu J, Ng'ida FD, Mahande MJ. (2020). Knowledge towards cervical cancer prevention and screening practices among women who attended reproductive and child health clinic at Magu district hospital, Lake Zone Tanzania: a cross-sectional study. BMC Cancer. 16;18(1):565. doi: 10.1186/s12885-018-4490-7. PMID: 29769124; PMCID: PMC5956852.

Mathur, P., Sathishkumar, K., Chaturvedi, M., Das, P., Sudarshan, K. L., Santhappan, S.et al. Cancer statistics, 2020: report from national cancer Registry Programme, India. JCO global oncology,2020 ;6, 1063-75 - PMC-PubMed.

Mboineki, J. F., Wang, P., Dhakal, K., Getu, M. A., Millanzi, W. C., & Chen, C. (2020). Predictors of uptake of cervical cancer screening among women in Urban Tanzania: community-based cross-sectional study. International Journal of Public Health, 65(9), 1593– 1602. https://doi.org/10.1007/s00038- 020-01515-y

Mutambara, J., Mutandwa, P., Mahapa, M., Chirasha, V., Nkiwane, S., & Shangahaidonhi, T. (2020). Knowledge, attitudes and practices of cervical cancer screening among women who attend traditional churches in Zimbabwe. Journal of Cancer Research and Practice, 4(2), 53-58.

Nasreen, S. Z. A., Mahjabeen, N., & Shahreen, S. (2021). Postmenopausal Bleeding: An Update. European Journal of Medical and Health Sciences, 3(1), 28-33.

Osman A, M, A., Ali E, E, A., Hassan B, A. B., & Rayis, D. A. (2021). Knowledge, attitude, and practice of women towards cervical cancer and its screening tests in a teaching hospital, Khartoum-Sudan. *Journal of Women's Health and Development*, *04*(03). https://doi.org/10.26502/fjwhd.2644-28840064

Said, S. A. E., Hassan, H. E. & Sarhan, A. E. M. (2021). Effect of an Educational Intervention on Women's Knowledge and Attitude Regarding Cervical Cancer. *American Journal of Nursing Research*, *6*(2), 59-66.

Said, S., Hassan, H., & Sarhan, A. (2021). Effect of an educational intervention on women's knowledge and attitude regarding cervical cancer. American Journal of Nursing Research, 6(2), 59-66.

Suazo, J. M., Mendoza, G., Canaynay, A., & Narvaez, R. A. (2023). Role of Oncology Nurse Navigators: An Integrative Review. World Journal of Cancer and Oncology Research, 66-84.

ISSN 2786-0183
Helwan International Journal for Nursing Research and Pratctice
Vol. 4, Issue 11, Month: September 2025, Available at: https://hijnrp.journals.ekb.eg/

Thahirabanuibrahim, I., & Logaraj, M. (2021). Impact of health education intervention in promoting cervical cancer screening among rural women of Chengalpattu district - The community based interventional study. *Clinical Epidemiology and Global Health*, *12*(100895), 100895. https://doi.org/10.1016/j.cegh.2021.100895

Uddin, S. S. B., Akther, F., & Shahriar, S. M. (2023). Correlation of cancer types with stages and symptoms: analysis-based descriptive cross-sectional study (Doctoral dissertation, Brac University).

Weiderpass, E., Hashim, D., & Labrèche, F. (2020). Malignant tumors of the female reproductive system. Occupational Cancers, 439-453.

Williams, L. B., Looney, S. W., Joshua, T., McCall, A., & Tingen, M. S. (2021). Promoting community awareness of lung cancer screening among disparate populations: results of the cancer-community awareness access research and education project. Cancer Nursing, 44(2), 89-97.

Yeom, J. W., Yeom, I. S., Park, H. Y., & Lim, S. H. (2022). Cultural factors affecting the self-care of cancer survivors: An integrative review. European Journal of Oncology Nursing, 59, 102165.