Knowledge Attitude and Practices of Elderly Women toward Gynaecological Cancer Prevention at Sohag City

Esteer Ibrahim Ghayth[1], Ola Gouda Mohamed Elshiekh[2], Safaa Ibrahim Ahmed[3], Nermeen Mahmoud Abd-Elaziz[4] & Fatma Ahmed Mohammed Sabry[5]

[1.] Lecturer of Geriatric Nursing Department, Faculty of Nursing, Sohag University, Egypt.
[2.] Lecturer of Gerontological Nursing Department, Faculty of Nursing, Damanhur University, Egypt.
[3.] Assistant Professor of Obstetric and Gynecological Nursing Department, Faculty of Nursing, Sohag University, Egypt
[4.] Professor of Gerontological Nursing Department, Faculty of Nursing, Assiut University, Egypt.
[5.] Lecturer of Obstetric and Gynecological Nursing Department, Faculty of Nursing, Sohag University, Egypt

Abstract
Gynecological cancers, the fourth most prevalent type of cancer overall, are a serious public health issue because they put older women at higher risk for deaths and illness. Gynecological tumors can be prevented and treated when detected early, just like many other cancer kinds. **The study aimed to:** Assessing elderly women's knowledge, practice and attitude toward the prevention of gynecological cancer. **Subjects and Method:** It were conducted using a descriptive research design. This study was carried out at the Gynecological department, cancer department, and outpatient clinics for gynecology at Sohag university hospitals. There were 200 senior people in the entire sample. **Tools:** Four tools were used. **Tool I:** There were three tools employed. Structured interview questionnaire is the first tool. Socio-demographic details, medical history, and obstetric and gynecological details are all included. **Tool II:** Gynecological cancer prevention information scale (GCPIs). **Tool III**: Attitude toward Gynecological cancer prevention. **Tool IV:** Practice toward Gynecological Cancer Prevention. **Results:** The study revealed that further than half (61.5%) of the older women participants had negative attitudes towards GCP, and the majority of them (87.0%, 94.0%) had low knowledge and practice levels respectively. **Conclusion:** There were Pearson correlation coefficients and statistically significant differences between elderly knowledge and practice level, as well as between elderly attitude and practice level (P<0.001**). **Recommendations:** Offering senior women with a health education program about gynecological cancer prevention, management, and rehabilitation is advised

Keywords: Attitude, Elderly, Gynecological cancer, knowledge, Practice &Prevention.

Introduction
Older persons were defined as those aged more than 65 years by many studies from developed countries; others employ the 60-year restriction. The globe faces a significant issue in the 21st century because of population ageing. The number of seniors worldwide is growing at a 2.4% yearly rate. Age change is a result of declining birth rates, improved nutrition and health, and increased longevity. The ageing population has an immediate impact on the provision of health care since it is linked to new disease patterns and changes in economic, social, and even ethical difficulties. **(Sood et al., 2018).**

Globally, an ageing population has made a significant contribution to the rise of new cancer cases. There are predicted to be 28.4 million new cases of cancer worldwide in 2040, up 47% from 2020 **(Sung et al., 2020).** By 2035 (14 million), the number of new cancer diagnoses among older individuals (65 and older) is anticipated to double. Due to the length of carcinogenesis, ageing tissues' susceptibility to external carcinogens, and other physiological alterations that favour the emergence and spread of cancer, age is an indicator of risk for the cancer's development **(Komatsu & Komatsu, 2023).**

After breast cancer, cancer of the female reproductive is the second most common cause of morbidity in women worldwide. Despite receiving aggressive treatment, the majority of gynecologic cancer patients die. **(Uslu-Sahan & Terzioglu, 2017).** Gynecological malignancies, which include tumors of the uterus, ovaries, fallopian tubes, cervix, vulva, and vagina, are among the leading causes of cancer-related deaths worldwide, with variable patterns of distribution and occurrence. These tumors account for 10% of all malignancies identified in women **(Hailu et al., 2020).**

Gynecological malignancies, the fourth most prevalent type of cancer overall, are a serious public health issue because they put women at higher risk for fatality and illness. Gynecological malignancies now make up 10% of all cancer-related fatalities and about 15% of the total number of cancers. The top ten deaths due to cancer in women that are most

frequently observed and causes deaths include gynecologic tumors (#6 ovarian cancer, #4 endometrial cancer, #9 cervical cancer). **(WHO, 2018).**

Because of increases in the incidence of cancer-associated risk factors as nations go through economic transition, the burden of malignancy is also increasing among women in nations with low to medium incomes (LMICs). Smoking, being overweight, being physically inactive, and alterations in reproductive patterns, such as delaying the first pregnancy and having fewer pregnancies, are some of these factors that increase risk. **(Lindsey et al., 2017)** Along with the neglect or complete absence of self-care and preventative practices that are common among senior people **(Silva et al., 2018).** Cervical cancer may develop as a result of the emphasis on early diagnosis in the fight against cancer and the ability to avoid of about one-third of cancer diagnoses. **(Bekar et al., 2021).**

Gynecological cancers have numerous detrimental impacts on the well-being of women. The quality of life of the female, her spouse, and her family is adversely affected by the diagnosis and treatment methods used for gynecological malignances, fear of receiving a malignance diagnosis as well as issues with other organs tumors, complicated prolonged, intrusive treatments, stress resulting from the process of treatment, complications risk, problems with regards to body image, and issues with sexual identity. They have an impact on social and familial interactions and lead to issues with psychosocial health **(Borch et al., 2017& Funston et al., 2018).**

Gynecological malignancies can be prevented and treated when detected early, just like many other cancer forms. The available research on gynecological cancers, however, demonstrates that women do not always benefit from receiving a diagnosis early because of a variety of consideration (economic issues, limited access to medical services, fear of experiencing pain, embarrassment and convictions that will attack privacy **(Lopez et al., 2017& Linkov et al., 2018).**

In order to increase knowledge and encourage healthy lifestyle behaviors for the prevention of gynecologic cancer, a care approach that focuses on individual requirements is crucial **(Okumus et al., 2015).** The duty of reaching out to women, who make up a significant portion of the population, and safeguarding and enhancing health rests with health professionals (such as nurses, midwives, doctors, etc.). Additionally, they are essential in raising women's awareness of gynecological cancers and convincing their patients to adhere to the advised screening recommendations and course of treatment **(Saridi et al., 2017; Weston et al., 2018; Makhubo & Naidoo, 2020).**

When it comes to treating cancer patients, nurses are on the front lines. Beyond clinical duties and procedures, an efficient nurse-woman connection necessitates personality traits, interpersonal interaction, and a holistic approach to providing nursing services **(Feo et al., 2017).** In order to do this effectively, meaningfully, and dynamically, nurses must have an equitable mix of knowledge, abilities, and a positive attitude **(Achora & Labrague, 2019).**

Finding out how much women currently know about cancer will aid any educational strategies to be realized in a meaningful and real way, and it will assist in structuring the material for education in accordance with the real demands of the women dealing with cancer issues. Raising awareness and removing danger factors are both benefits of increasing knowledge. Women's health as well as society's health generally can be enhanced in this way **(Okumus et al., 2015).**

Significance of the study:

When comparing to women under 60, geriatric women have the highest chance of having gynecologic tumors. Uterine, ovarian, and cervical cancers are more likely to occur in people over 65 (by a factor of 2, 3, and 10%, respectively). In addition, senior women are at a higher risk of dying from cancer, which appears to be unrelated to a rising prevalence **(Sood et al., 2018).**

Around the world in 2012, an estimated of 3.5 million female deaths from cancer and 6.7 million new cancer diagnoses. 64% of deaths and 56% of the cases among them occurred in nations that are less developed. By 2030, the global population is projected to have grown and gotten older, resulting in 9.9 million cases and an additional 5.5 million mortalities annually **(Lindsey et al., 2017).**

In Egypt, there is no accurate estimate of gynecological cancer. Ovarian cancer was estimated to have a 13.54 percent occurrence and death rate per 100,000 females in Egypt over the previous five years, followed by corpus uteri (9.96 percent), cervix uteri (6.30 percent), vulva (1.13 percent), and vagina (0.13 percent), in accordance to the Global Cancer Observatory (GLOBOCAN) 2020 the database **(International Agency for Research on Cancer, 2021).** Gynecologic malignancy is being identified in extra women overall, and the anticipated increase in incidence will call for more resources as well as services for survivability care **(Beesley et al., 2018).** Therefore, to assess the causative factors, the magnitude of the problem, and the applicable nursing

intervention, gynecological cancer prevention should be a great significance for investigation in Egypt.

The study's objective
Assessing the knowledge, attitudes, and practices of older women in relation to gynecological cancer prevention.
Research questions:
▪ Did the elderly women have satisfactory level of gynecological cancer prevention knowledge?
▪ Did the elderly women have positive attitude toward gynecological cancer prevention?
▪ Did the elderly women have adequate practice level toward gynecological cancer prevention?

Subjects and Method
Research methodology:
Descriptive research methodology was employed in the study. Which aims to accurately and systematically describe a population, situation or phenomenon. It can answer what, where, when and how questions, but not why questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them **(McCombes, 2023).**
Study Location:
The study was conducted in the gynecological department, oncology out-patient clinics, and the gynecological out-patient clinics of Sohag University Hospitals. Sohag University Hospital suited in Naser city in Sohag city beside Sohag University in the western direction of the governorate. It provides health care services for all Sohag city inhabitants and all other cities of Sohag governorate at acceptable price compared to the private clinics or hospitals, the clinics included in the study were as follows; gynecology and oncology out-patients' clinics. The clinics are open six days a week from 8 am to 2 pm.
Sample:
▪ 200 elderly female patients were selected as a convenient sample and treated in the aforementioned settings. The sample size was calculated using 200 old people and EPInfo version 4.5 with a 94% confidence interval.
▪ According to Steven K. Thompson (2012: 132 patients), the sample was chosen using the following equation:

$$n = \frac{N \times p(1-p)}{[[N-1 \times (d^2 \div z^2)] + p(1-p)]}$$

N= Is the total number of patients (200).
Z = Confidence levels equals 0.95 and 1.96
D = Error ratio equals 0.05

P = Property availability ratio, and N = neutral is equal to 0.50

Inclusion criteria:
▪ Senior of female sex who equal and above 60 years
▪ Elderly alert and capable to communicate.
▪ Elderly willing to participate the study.
Tools for Collecting Data:
Four tools are used in this study to collect data.
Tool I: Structured interview questionnaire form to evaluate the personal and medical information of the elderly. It consists of two parts:
(Part 1): It contains demographic information such as age, sex, residence, marital status, degree of education, occupation, and living situation.
(Part 2): It contains: An elderly female's obstetric history (e.g. The researchers developed an obstetric history form that asks questions about menarche age, first marriage age, regular menstruation, number of pregnancies, number of labors, number of children, nursing habits, and vaginal hygiene habits.
Tool II: The GCPIS stands for Gynecological Cancer Prevention Information Scale. This evaluation instrument has been modified to gauge one's familiarity with gynecological cancer prevention. Bekar et al. created the GCPIS in 2021. The scale comprised five JHR 5 elements (ranging from (0) to (1)) and had 35 items. **(Bekar et al., 2020)** "Prevention from cancer" is factor number 1, "cancer symptoms" is factor number 2, "observations on related diagnosis" is factor number 3, "early diagnosis and physiological factors" is factor number 4, and "birth-related risks" is factor number 5.
Validity and Reliability of GCPIS:
CPIS's validity and dependability: The validity analysis looked at the agreement between the scores as well as the scale's content validity using the content validity index. Using both exploratory and confirmatory factor analyses, the scale's construct validity was evaluated.
Reliability Analysis: Item analysis, Cronbach's alpha coefficient calculation, and test-retest technique were used to assess the scale's reliability. The scale's total Cronbach's alpha coefficient was found to be 0.95, and it was determined to be of high reliability **(Bekar et al. 2021).**
Scoring System:
The responders were asked to thoroughly read each item as part of the scoring process. Each accurate response was worth one point towards the final score. Items with no response or an invalid response received a score of 0. The scale had a range from 0 to 35, with 35 being the lowest and highest conceivable scores. The likelihood that participants already know

how to prevent gynecological cancer increases with score **(Bekar et al., 2020).**

Tool III: Elderly women practices toward gynecological cancer prevention, it is adopted by the researcher. It include three items of elderly women response to gynecological cancer screening procedures during the previous three years was used to evaluate practice. The practice of screening responses within the previous three years is referred to as "regular practice," "irregular practice," and "no practice" refers to individuals who have never been screened. (**Narayana, et al., 2017).**

Tool IV: Attitude toward gynecological cancer prevention was adopted by the researchers; it consists of 9 items. The patients were asked to answer each question by using Likert scale. (Strongly agree to strongly disagree). it was revised by Jory by two professors of Obstetrics and gynecological nursing and two professors of geriatric nursing. (**Leyva & tarwater, 2006)**

Scoring System:
Eight statements about cancer screening and risk reasons were put on a Likert scale, with responses ranging from strongly agree to strongly disagree. Strongly agree is rated as 5, agree is rated as 4, neither agree nor disagree is rated as 3, and strongly disagree is rated as 1. All statements should receive a minimum of 8 and a maximum score of 40. Scores of 20 or higher indicate a positive attitude towards cervical cancer screening, whereas scores of 20 or more indicate a negative attitude (**Leyva & tarwater, 2006**).

Validity and reliability:
A panel of two experts in the field of obstetric and women's health nursing and two experts in the field of gerontological nursing examined the proposed instruments for content validity. The necessary adjustments have been made in accordance with the experts' assessments of the contents' appropriateness, comprehensiveness, and sentence clarity.

Cronbach's alpha was used to examine the instruments' dependability; the results showed that senior women's knowledge, attitudes, and practices on the prevention of gynecologic cancer were all acceptable at 0.91, 0.78, and 0.91 respectively.

Method
Administrative design:
The director of the Sohag University Hospital received an official letter from the Dean of the Nursing Faculty at Sohag University approving the study in order to perform it. This letter includes authorization to gather the required data as well as an explanation of the aim and scope of the investigation.

Pilot study:

Before conducting the main study, a pilot study including 10% of the patients who visited the gynecological out-patient clinics, oncology out-patient clinics, and the gynecological department was conducted to assess the questionnaire's clarity and make any necessary modifications. A time estimate is also necessary. The study sample did not contain any participants in the pilot trial.

Ethical Consideration:
The research proposal was approved by the Scientific Research and Ethical Committee in the Faculty of Nursing at Sohag University, Egypt. During the application of the research, there was no risk to the study subject. Clinical research was conducted in accordance with ethical standards. Anonymity and confidentiality were guaranteed. Participants had the right to decline the study at any point and/or to leave the trial without giving a reason.

Field work:
The researchers spoke with senior citizens, discussed the study's goals, and solicited their involvement. They began a face-to-face, one-on-one interview with seniors and finished the forms for everyone. From the beginning of March 2021 to the end of September 2021, the study was underway. All 200 older participants in the study sample underwent the examination;

Data was gathered twice every week, from 9 am- 12 pm. The researchers completed a systematic questionnaire, and each interview lasted 20 to 25 minutes. The researchers were on hand in the clinic to provide clarifications and to answer any inquiries. The researcher usually meets and complete 4-5 patients' questionnaire per day.

Statistical analysis:
The terms **"number" and "percent"** were used to describe categorical variables, while **"mean" and "standard deviation"** were used to describe continuous variables When comparing categorical variables, **the chi-square** test is employed, and the **t-test** and T test ANOVA are used to analyze continuous variables. Statistical significance was defined as a two-tailed p 0.05. To demonstrate the relationship between the variables, we used Pearson correlation. The IBM SPSS 26.0 program was used for all analyses.

Results:
Table (1): Frequency and percentage distribution of the studied elderly' socio-demographic characteristics (N=200)

Some socio-demographic data	N=200	
	No.	**%**
Age		
Range	60 – 80	
Mean + SD	67.98 + 4.69	
60-70	123	61.5
71-80	52	26.5
81-90	23	11.5
>90	2	1.0
Residence		
Rural	110	55.0
Urban	90	45.0
Marital status		
Married	116	58.0
Divorced	16	8.0
Widowed	50	25.0
Single	18	9.0
Education level		
Illiterate or able to read and write	60	30.0
Primary education	25	12.5
Preparatory education	59	29.5
Secondary education	36	18.0
University education	20	10.0
Occupation		
House wife /Don't work	141	70.5
Technical work	15	7.5
On retirement	44	22.0

Table (2): Frequency and percentage distribution of the studied elderly according to their obstetric history (N=200)

Obstetric history	No.	%
Age of menarche		
8-10	30	15.0
11-13	112	56.0
14-16	58	29.0
Age of first marriage		
14-16	50	25.0
17-20	129	64.5
21-24	21	10.5
Regular menstruation		
Yes	138	69.0
No	62	31.0
No of Pregnancy		
1-3	70	35.0
4-6	80	40.0
7-10	50	25.0
No. of labor		
1-3	76	38.0
4-6	79	39.5
7-11	45	22.5
No. of children		
1-3	76	38.0

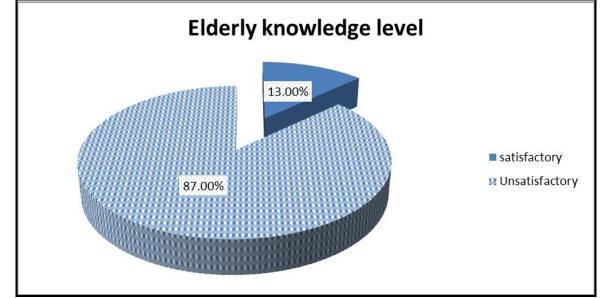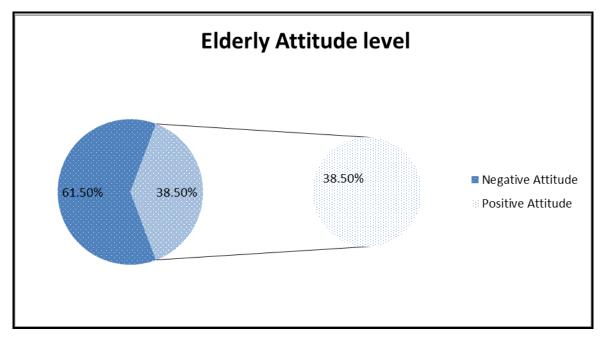| Obstetric history	No.	%
4-6	79	39.5
7-10	45	22.5
Breastfeeding practice		
Yes	158	79.0
No	42	21.0
Cleaning practices for vaginal area		
Yes	145	72.5
No	55	27.5
If yes,		
Vaginal wash as a part of personal hygiene	140	96.5
Vaginal wash because of previous sexually transmitted diseases	5	3.5

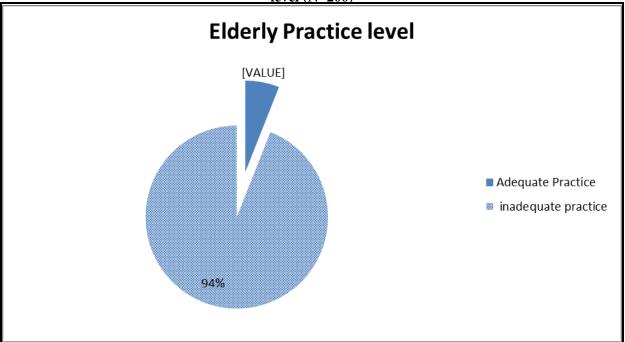**Figure (1): Percentage Distribution of the studied elderly according to their total score of knowledge level (N=200)**

Figure (2): Percentage Distribution of the studied elderly according to their total score of Attitude level (N=200)

Elderly Practice level

[VALUE]

94%

■ Adequate Practice

▩ inadequate practice

Figure (3): Percentage Distribution of the studied elderly according to their total score of Practice level (N=200)

Table (3): The relation between the studied elderly's some Scio-demographic characteristics and knowledge level.   (N= 200).

	Satisfactory N=26		Unsatisfactory N=174		P. value
	No.	%	No.	%	
Age					
60-70	15	57.69	114	65.52	
71-80	9	34.6	42	24.13	**<0.001****
81-90	0	0.0	18	10.3	
>90	2	7.7	0	0.00	
Residence					
Rural	20	76.9	90	51.72	**0.016***
Urban	6	23.1	84	48.28	
Marital status					
Married	14	53.8	102	58.62	
Divorced	4	15.4	12	6.90	
Widowed	6	23.1	44	25.29	0.527
Single	2	7.7	16	9.20	
Education level					
Illiterate	11	42.3	27	15.52	
Able to read and write	1	3.8	21	12.07	
Primary education	4	15.4	21	12.07	**0.022***
Preparatory education	7	26.9	52	29.89	
Secondary education	2	7.7	34	19.54	
University education	1	3.8	19	10.92	
Occupation					
House wife	16	61.5	95	54.60	
Technical work	4	15.4	11	6.32	
On retirement	2	7.7	42	24.14	0.141
Don't work	4	15.4	26	14.94	

Chi-square test,

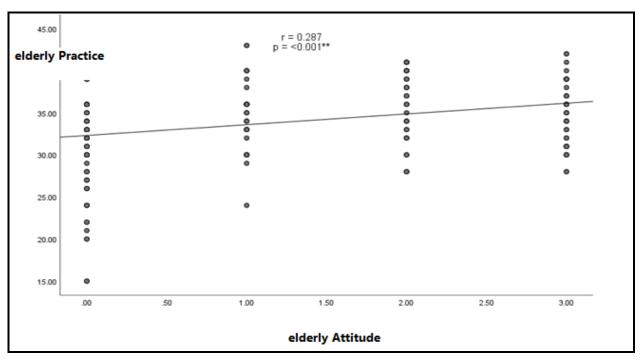** Statistically significant difference (p<0.05),*
** Highly statistically significant difference (p<0.01).

Table (4): The relation between the studied elderly's some Scio-demographic characteristics and level of practice   (N= 200).

	Adequate N=12		In adequate N=188		P. value
	No.	%	No.	%	
Age					
60-70	7	58.3	122	64.89	
71-80	1	8.3	50	26.59	
81-90	2	16.7	16	8.51	**<0.001****
>=90	2	16.7	0	0.00	
Residence					
Rural	8	66.7	102	54.26	
Urban	4	33.3	86	45.74	0.402
Marital status					
Married	7	58.3	109	57.98	
Divorced	2	16.7	14	7.45	
Widow	3	25.0	47	25.00	0.503
Single	0	0.0	18	9.57	
Education level					
Illiterate	7	58.3	31	16.49	
Able to read and write	1	8.3	21	11.17	
Primary education	0	0.0	25	13.30	
Preparatory education	4	33.3	55	29.26	**0.008****
Secondary education	0	0.0	36	19.15	
University education	0	0.0	20	10.64	
Occupation					
House wife	8	66.7	103	54.79	
Technical work	2	16.7	13	6.91	
On retirement	0	0.0	44	23.40	0.208
Don't work	2	16.7	28	14.89	

Chi-square test,
* Statistically significant difference (p<0.05),
** Highly statistically significant difference (p<0.01).

Figure (4): Pearson correlation coefficient between the studied elderly Attitude level and Practice level (N= 200).
Table (5): Pearson correlation coefficient between the studied elderly knowledge level, Attitude level and Practice level

		Knowledge level	Attitude level
Attitude level	R	.295[**]	-
	P	0.000	-
Practice level	R	.414[**]	.287[**]
	P	0.000	0.000

Table (1): Showed that the mean and standard deviation age of the seniors was analyzed 67.78 ±4.69 and that 61.5% of the sample studied was between the ages of 60 and 70. In the study, rural residents made up (55%) and married subjects made up (58%) of the elderly sample.
Table (2): Showed that (56%) had menarche at age (11-13) and (64.5%) of the age of first marriage were (17-20). While (40.0, 39.5%) of the participant had 4-6 pregnancy and 4-6 children respectively.
Figure (1): Demonstrates that, of the older people evaluated, 87.0% had unsatisfactory knowledge levels, while just 13.0% had satisfactory knowledge level.
Figure (2): Demonstrates that whereas 38.5% of the senior participants in the study had positive attitudes, 61.5% of them had a negative attitude.
Figure (3): Demonstrates that whereas (6.0%) of the seniors surveyed had adequate practice, (94.0%) of them had insufficient practice.
Table (3): Revealed statistically significant differences between age, place of residence, and educational attainment and knowledge level (0.001, 0.016, 0.022, respectively).
Table (4): Revealed statistically significant differences between practice level and age, as well as between practice level and education level (P0.001, P0.008, respectively).
Figure (4): Illustrates that there was Pearson correlation coefficient and statistically significant differences between elderly attitude and practice level r= 0.287 P<0.001**.
Table (5): Shows that there were statistically significant variations as well as a Pearson correlation coefficient in elderly women's knowledge, attitude and practice level P<0.001**.

Discussion
There is a great deal of potential to lessen cancer-related suffering as well as the financial burden it places on people, families, and societies. In both high- and low-resource settings, a variety of preventative and early detection programs have been shown to reduce cancer cases and fatalities. Despite possible low screening resources in LMICs, there are a number of common malignancies in women that can

be prevented or detected early in settings with adequate resources (**Lindsey et al., 2017**)
According to age, the results of the current study showed that the mean age of the studied elderly women was 67.78 + 4.69 and that less than two thirds (61.5%) of them were between (60-70) yrs. These outcomes are in a line with those of **Silva et al., (2018),** who studied "Practices and Knowledge on the Prevention of Cervical Cancer in Elderly Women" and discovered that a greater proportion of the studied elderly women were between 60 and 69 years old. Additionally, these findings are consistent with research by **Arajo, et al. (2014),** who examined "Prevention of Cervical Cancer in the View of the Nurse of the Basic Health Unit" and found that almost two thirds (65%) of the analyzed sample were between (60-70) years old.
A third (30%) of the older women in this survey had no formal education, whereas around two thirds had completed elementary, middle, and high school. This may be because the study sample was drawn from the highly literate Sohag city urban region. These findings are in line with a study by **Ghosh, et al., 2020,** which examined "Knowledge, Attitude and Practices Towards Cervical Cancer and its Screening Among Women from Tribal Population" and found that about one-third of the participants were illiterate. These findings were also supported by a study by **Narayana et al.,(2017**) which examined "Knowledge, Attitude, and Practice towards Cervical Cancer
On the other hand, the findings of the current study conflict with those of **Bekar, (2020)** who investigated "Prevention of gynecological cancers: the affecting factors and knowledge levels of Turkish women" and found that more than a third (35.7%) of women had at least a high school diploma.
According the marital status, the outcomes of the current study revealed that extra than half (58 %) of aged women were married, these results are confirmed by **Narayana et al., (2017)** who publicized that the largely of women were married (89.0%). Also these results are reinforced by the study of **Ghosh et al., (2020)** who informed the majority of elderly sample being currently married (89.3%). In addition to **Bekar, et al., (2020)** who studied " A Scale Development Study: Gynecologic Cancer Prevention

Information Scale " and cleared that the vast majority (96.6%) of participants were married.

As regard the residence, the outcome of the existing study showed that further than half (55%) of the studied elderly women were from rural areas. these results are consistence with the study of **Ghosh et al., (2020)** who reported that a majority of the study participants belonged to rural communities, also these results similar with the study of **Narayana et al., (2017)** who shown that the majority (77.9%) of the sample are belonging to rural areas.

According to age of first marriage, the outcome of the current study found that added than half (60.10%) of the aged women married at age (17-20 yrs), this may be due to Egyptian culture especially for upper Egypt governorates as Sohag of marriage young females at early age. these results contracted by the study of **Bekar, et al., (2020)** who cleared that the first marriage age of the majority of the participants were. (21.17± 4.24), also these findings similar with the study of **(Bekar, 2020)** who reported that the mean age of marriage was 21.1 ± 4.22.

As regard total of pregnancy and children, in our study, more than two fifth (44.2%) of the participant had 4-6 pregnancy and 4-6 children, this may be also contributed to Egyptian culture especially for upper Egypt governorates as Sohag of having a lot of children. this outcome is different with the study done by **Bekar et al., (2020)** who cleared extra than third (38.8) of the participant had 2 children, also our result is contracted with the study of **Narayana et al., (2017)** who revealed the majority (71.96%) of participants given birth to one or two children, also different with the study done by **(Bekar, 2020)** who reported that the mean number of children was 2.25 ± 0.39.

According level of knowledge, our study exhibited that the mainstream (87.0%) of the studied senior women had unsatisfactory knowledge level, while (13.0%) had satisfactory knowledge, this may be because of health illiteracy and lack of health education services especially for elderly. These findings are corroborated by **Lyimo & Beran, (2012),** who investigated "Demographic, knowledge, attitudinal, and accessibility factors associated with uptake of cervical cancer screening among women in a rural district of Tanzania." They found that extra than half (59.6%) of the sample had a little knowledge level about cervical tumor prevention, and only about one fifth (19.2%) had a level of knowledge high sufficient to prevent the disease. These findings concur with those **of Narayana et al., (2017)** who found that among all respondents; only 37.7% had good knowledge. Additionally, **Bekar, (2020)** found that just 15.3% of women knew how to prevent gynecological malignances.

According attitude level toward GCP, our study shows that fewer than two third (61.5%) of the studied senior had negative attitude, while about two fifth (38.5%) had positive attitude. This may be contributed to lack of available health education toward gynecological cancer prevention and the desire of good percent to learn and acquire knowledge and skills toward gynecological cancer prevention. This result agrees with **Lyimo & Beran, (2012)** who specified that fewer than one-fourth (22.6%) of applicants had positive attitude cervical cancer screening. In contrast, these outcomes differ with **Narayana et al., (2017)** who reported that less than two thirds of the respondents (62.5%) have positive attitude concerning cervical cancer prevention.

According the practice level toward GCP, the existing study shows that the vast majority (94.0%) of the studied aged women had inadequate practice, while a small percent (6.0%) had adequate practice. In my point of view, this may be due to poor perception of the importance of periodic checkup or early screening, or lack of and expensiveness of cancer screening diagnostic procedures. The result of the existing study are in agreement with the study of **Narayana et al., (2017)** who found that majority of the participants (86.6%) were never screened for cervical cancer.

The existing study explored that there were statistical significant differences between knowledge level and age, residence, and education level (0.001, 0.016, 0.022) respectively. The results of the current study were compared to those of **Ramaiah et al., (2018)** study, "Knowledge, Attitude, and Practice towards Cervical Cancer among Women Attending Obstetrics and Gynecology Department," which found that adequate knowledge and positive attitude were associated with some socio-demographic characteristics: age, residing area, marital status, level of education, and occupation. (0.003, 0.0007, 0.002, 0.0007, & 0.0001), respectively.

These findings are consistent with the research of **Narayana et al., (2017),** which showed that adequate knowledge and a positive attitude were associated with seven socio- demographic characteristics: age, residence area, marital status, parity, level of education, occupation, and monthly income. The results of this study also suggested that those with a high school education or above had a higher mean knowledge point than those with a secondary or lower education level.

The results of the current study showed that there were statistically significant differences between practice level and age and education level (P <0.001, P< 0.008, respectively). These findings were supported by **(Bekar, 2020)** who reported that there were statistically significant differences between the

total mean score according to the participants' age group, education level, perception of their economic status, and regular pap tests and vulva examinations to confirm that the utilization of screening services is increased by raising the women educational level. In addition to **Costa et al., (2015),** who discovered that women who visited medical facilities for prenatal care more frequently had better information and care in terms of screening and the means to protect themselves against sexually transmitted diseases such as HPV.

The study's findings showed a correlation coefficient and statistically significant differences between elderly knowledge and elderly attitude level, P<0.001**, These findings are consistent with the study by **Crespi et al., (2014),** which suggested that the elderly received information and encouragement from their doctors to have a positive attitude. Additionally, **Narayana et al., (2017)** showed that there were connection coefficients and statistically significant differences between having sufficient knowledge and having a positive attitude that were also connected with seven socio-demographic traits.

This study showed a Pearson correlation coefficient and statistically significant differences between elderly knowledge, practice level, and P<0.001**. these findings concur with the study of (**Bekar, 2020),** which suggested that there were statistically significant differences between routine pap smear testing, routine vulva examination, and learning about the prevention of gynecologic cancers in the study.

Conclusion:

Based on the findings of this investigation. The majority of the older people tested lacked enough knowledge about preventing gynecological cancer and lacked adequate practice. While more than half of the elderly had a disapproving attitude towards the prevention of gynecological cancer.

Between elderly knowledge and practice level, as well as between elderly attitude and practice level, there were Pearson correlation coefficients and statistically significant differences (P<0.001**).

Recommendations:

In light of the findings of the study, the following ideas were put forth:
1. Providing senior women citizens with regular cancer screenings in all healthcare facilities.
2. Offering elderly women health education about the origins, prevention, treatment, and complications of gynecological cancer.
3. Establishing a rehabilitation program that focuses on fostering adaptability and improving functioning for elderly women who have gynecological cancer.

4. Further studies are needed in relation to health education program for elderly women's or staff nurses regarding knowledge and practices of gynecological cancer prevention.

References:
- **Achora S, & Labrague LJ., (2019):** An integrative review on knowledge and attitudes of nurses toward palliative care: implications for practice. Journal of Hospice and Palliative Nursing. 2019; 21(1):29–37
- **Araújo, (2014):** Prevention of Cervical Cancer in the View of the Nurse of the Basic Health Unit. Web Magazine of UNIVAR, Vale do Araguaia/MT, 1, 170-175.
- **Beesley V, Alemayehu C, & Webb P. (2018):** A systematic literature review of the prevalence of and risk factors for supportive care needs among women with gynecological cancer and their caregivers. Supportive Care in Cancer, 2018; 26, 701- 710.
- **Bekar M, Demirel G, Evcili F, & Doganer A., (2021):** A scale development study: gynecologic cancer prevention information scale. Clinical and Experimental Health Sciences, Clin Exp Health Sci 2021; 11: 1-8 ISSN: 2459-1459.
- **Bekar., (2020):** Prevention of gynecological cancers: The affecting factors and knowledge levels of Turkish women, Journal of Health Research Vol. 34 No. 5, 2020 pp. 431-441 e-ISSN: 2586-940X p-ISSN: 0857-4421 DOI 10.1108/JHR-07-2019-0171
- **Borch KB, Weiderpass E, Braaten T, Jareid M, Gavrilyuk OA, & Licaj I., (2017):** Physical activity and risk of endometrial cancer in the Norwegian Women and Cancer (NOWAC) study. Int J Cancer. 2017; 140(8): 1809-18. doi: 10.1002/ijc.30610.
- **Costa, R.B., (2015):** Sexuality in Elderly Participants of a Coexistence Group. Health and Research Journal, 8, 239-245
- **Crespi, T.D., (2014):** Relation between the Degree of Fragility of the Elderly and the Performance of Preventive Examinations. Revista Brasileira de Ciências do Envelhecimento Humano, 11, 276-287
- **Feo R, Rasmussen P, Wiechula R, Conroy T, & Kitson A. (2017):** Developing effective and caring nurse-patient relationships. Nursing Standers. 2017; 31(28),54-63
- **Funston G, O'Flynn H, Ryan NAJ, Hamilton W, & Crosbie EJ., (2018):** Recognizing gynecological cancer in primary care: risk factors, red flags, and referrals. Adv Ther; 35(4): 577-89. doi: 10.1007/s12325-018-0683-3.
- **Ghosh S, Shetty RS, Pattanshetty SM, Mallya SD, Pandey D, & Kabekkodu SP, (2020):** Knowledge, Attitude and Practices Towards Cervical Cancer and its Screening Among Women from Tribal Population: a Community-Based Study from Southern India. 2019;14: e0219173
- **Hailu HE, Mondul AM, Rozek LS, & Geleta T., (2020):** Descriptive Epidemiology of breast and

gynecological cancers among patients attending Saint Paul's Hospital Millennium Medical College, Ethiopia. PLOS ONE 2020; 15(3): e023062.

- **International Agency for Research on Cancer, (2015):** IARC handbooks of cancer prevention-Vol. 15: Breast cancer screening. Lyon, France: IARC Press; 2015.

- **Komatsu, H., & Komatsu, Y., (2023**): The Role of Nurse on the Treatment Decision Support for Older People with Cancer: A Systematic Review 2 Healthcare 2023, 11, 546. https://doi.org/10.3390/healthcare11040546 https://www.mdpi.com/journal/healthcare

- **Leyva M, Byrd T, & Tarwater P. (2006):** Attitude towards cervical cancer screening: A study of beliefs among women in Mexico. Calif J Health Promot 2006; 4:13-24.

- **Lindsey A. Torre, Farhad Islami, Rebecca L. Siegel, Elizabeth M. Ward, & Ahmedin Jema (2017):** Global Cancer in Women: Burden and Trends Intramural Research, American Cancer Society, Atlanta, Georgia. Corresponding Author: Lindsey A. Torre, American Cancer Society, 250 Williams Street, Atlanta, GA 30303. Phone: 404-327-6591; Fax: 404-321-4669.

- **Linkov F, Goughnour SL, Adambekov S, Edwards RP, Donnellan N, & Bovbjerg DH., (2018):** Lifestyle interventions to reduce the risk of obesity-associated gynecologic malignancies: a focus on endometrial cancer. Cham: Springer; 2018; 137-65. Prevention of gynecological cancer 439

- **Lopez MS, Baker ES, Maza M, Fontes-Cintra G, Lopez A, & Carvajal JM, (2017):** Cervical cancer prevention and treatment in Latin America, J Surg Oncol. 2017; 115(5): 615-8. doi: 10.1002/jso.24544.

- **Lyimo, FS, & Beran, TN**. (**2012):** Demographic, knowledge, attitudinal, and accessibility factors associated with uptake of cervical cancer screening among women in a rural district of Tanzania: three public policy implications, BMC Public Health; 12: 22. doi: 10.1186/1471-2458-12-22.

- **Makhubo, M., & Naidoo, T, D., (2020):** Health care worker compaliance with cervical cancer screening guidelines. An adult at distrect and region level of care in the Pietermaritzburg metropolitan area of Kwazulu-Natal. S. Afr. J.

- **McCombes, S. (2023):** Descriptive Research Definition, Types, Methods & Examples. Scribbr. Retrieved July 7, 2023, from https://www.scribbr.com/methodology/descriptive-research/

- **Mbamara SU, Ikepeze OC, Okonkwo JE, Onyiaorah IV, & Ukah CO. (2011):** Knowledge, Attitude and Practice of cervical cancer screening among women attending gynecology clinics in a teriary level medical care center in southeastern

Nigeria. J Reported Med. 2011 Nov-Dec; 56(11-12):491-6. PPMID: 22195332.

- **Narayana G, Suchitra MJ, Sunanda G, Ramaiah JD, Kumar BP, & Veerabhadrappa KV. (2017**): Knowledge, attitude, and practice toward cervical cancer among women attending Obstetrics and Gynecology Department: a cross-sectional, hospital-based survey in South India, Indian J Cancer. 2017; 54(2): 481-7. doi: 10.4103/ijc.IJC_251_17.

- **Okumus H, Cicek O, & Tokat MA, (2015):** Current status in gynecologic oncology nursing. J Women's Health Nursing. 2015; 2(2): 1-12. Open Journal of Epidemiology, 2018, 8, 29-42 http://www.scirp.org/journal/ojepi ISSN Online: 2165-7467 ISSN Print: 2165-7459

- **Ramaiah R, & Jayarama S., (2018):** Knowledge, attitude and practices about cervical cancer among rural married women: a cross sectional study. Int J Commun Med Public Heal. 2018; 5:1466

- **Saridi M, Kapogeorgou E, Rekleiti M, Geitona M, & Souliotis K., (2017):** Knowledge and attitudes of women regarding gynaecological cancer prevention in an urban area of Greece in financial crisis. Scandinavian Journal of Caring Sciences. 2017; 31:710−717. . doi: 10.1111/scs.12385.

- **Silva, C.S.M.M., Ribeiro, C.M.B., da Silva, E., da Silva, J.G., Filho, E.M.T. & Mousinho, K.C. (2018):** Practices and Knowledge on the Prevention of Cervical Cancer in Elderly Women. Open Journal of Epidemiology, 8, 29-42. http://www.scirp.org/journal/ojepi ISSN Online: 2165-7467 ISSN Print: 2165-7459

- **Sood N., Chandra P., & Dhiman B., (2018):** Gynecological disorders in geriatric women regarding their frequency, diagnosis and management in the state of Himachal Pradesh, India International Journal of Reproduction, Contraception, Obstetrics and Gynecology. Jan;7(1):297-302 www.ijrcog.org

- **Sung, H., Ferlay, J., Siegel, R.L., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2020):** Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J. Clin. 2021, 71, 209–249.

- **Uslu-Sahan F, & Terzioglu F., (2017):** Nurses' knowledge and practice toward gynecologic oncology palliative care J Palliative Care Med, 2017; 7:4.

- **Weston C, Page R, Jones-Schubart K, & Akinlotan M., (2018):** Improving cancer screening for underserved women through an FNP student-led clinic, J Nurse Pract. 2018; 14(5): e101-e4. doi: 10.1016/j. nurpra.2018.01.013.

▪ **World Health Organization (WHO), 2018**):
Cancer prevention. Cancer; 2018: Available at:
http://www.who.int/cancer/prevention/ en