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RESEARCH ARTICLE

THE DETERMINATION OF KNOWLEDGE LEVELS OF WOMEN ABOUT THE PREVENTION OF GYNECOLOGICAL CANCERS

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ABSTRACT

Purpose: The aim of this research was to determine the knowledge level of women in the prevention of gynecological cancers.
Material and Methods: This descriptive research was conducted with 420 women from May to June 2022. Introductory Information Form and Gynecological Cancer Prevention Information Scale were used to collect of data.
Results: The total mean score of the Gynecological Cancer Prevention Information Scale was 14.84±7.90 (min:0, max:35). As a result of this research, it was determined that women's knowledge of protection from gynecological cancers was close to the middle level. This situation was affected by variables such as age, education level, employment status, income level, alcohol use, age of first pregnancy, age of first sexual intercourse, thinking that female cancer is preventable, having regular gynecological examinations, and knowing about cancer screenings.
Conclusion: Women's knowledge of prevention from gynecological cancer was not at the expected level**.** It is essential to emphasize the importance of cancer prevention and early diagnosis in order to reduce cancer-related death rates in the society.

Keywords: Gynecological cancer, cancer prevention, level of knowledge

INTRODUCTION

Cancer, which is an important health problem all over the world, is one of the leading causes of death. Cancer (CA) is the second leading cause of death in the world and is estimated to be responsible for approximately 9.6 million deaths in 2018. According to the 2018 report of the World Health Organization, approximately one in six people in the world dies from cancer, and 70% of these deaths occur in low- and middle-income countries (1). The importance of early diagnosis in the fight against cancer and the preventability of approximately one third of cancer diagnoses are emphasized. Cervical cancer, one of the gynecological cancers, is the fourth most common cancer type in the world and is an important public health problem that increases the risk of morbidity and mortality among women (2-4). Today, gynecological cancers constitute approximately 15% of all cancers and 10% of cancer-related deaths (1,4,5).

Among the top ten cancers seen in women in Turkey, endometrium CA is the 5th, ovarian ca is the 7th, and cervical ca is the 9th. However, the majority of endometrial and cervical cancers are caught at an

early stage (4). The symptoms of gynecological cancers differ according to the organ and their negative effects on women's health are multidimensional. Diagnosis and treatment procedures applied in gynecological cancers negatively affect the quality of life of the woman and her family, body image, sexual life and reproductive ability. Gynecological cancers are preventable and treatable if they are detected early. However, women cannot benefit from early diagnosis methods due to lack of information, inability to access health centers, fear of suffering, their beliefs such as shame and violation of privacy. In this context, the care approach that focuses on individual needs by health professionals plays an important role in raising awareness in the prevention of gynecological cancers and gaining healthy lifestyle behaviors (6-10).

Health professionals have some responsibilities to protect and improve health, and to reach women who form the broad mass of society (11-13). Determining the knowledge level of women contributes to the creation of training plans and the structuring of training content according to needs. Thus, these trainings are important in terms of cancer prevention and early diagnosis. Therefore, this study was conducted to determine the knowledge level of women about protection from gynecological cancers.

MATERIAL AND METHODS

Type of Study

The research was conducted in a descriptive type with the aim of determining the knowledge level of women in the prevention of gynecological cancers.

Study Design and Sample

The research was conducted with all women who agreed to participate in the study through an online survey due to the Covid-19 pandemic. The research consisted of women living in Turkey who could be reached through social media platforms during the research dates. Sample selection was not made, and 420 Turkish women aged 18 and over who agreed to participate in the study between 9 May and 22 June 2022 and who were able to use computer or smart phone, when the data were collected, were included.

Data Collection Instruments

During the collection of data; “Introductory Information Form” and “Gynecological Cancer Prevention Information Scale (GCPIS)” were used.

Introductory information form: It consists of 34 questions to evaluate the sociodemographic, obstetric and gynecological characteristics of women, prepared by the researchers (14-16).

Gynecological Cancer Prevention Information Scale: The scale developed by Bekar et al. was created to measure the knowledge level of women on gynecological cancer prevention. The scale has 35 items and 5 sub-dimensions. The lowest score that can be obtained from the scale is 0, and the highest score is 35. The scale has no cutoff score. It is accepted that the higher the score is, the higher the level of knowledge of women about protection from gynecological cancers is. The reliability coefficient of the scale was 0.95.(17). The Cronbach alpha coefficients were 0.91 in the present study as well.

Data Analysis

The evaluation of data was made with the statistical program called SPSS SPSS (IBM SPSS Statistics 24). The personal characteristics of the participants in the study were examined with descriptive statistics such as mean, standard deviation, number and percentage. Non-parametric methods were used for the measurement values that did not conform to the normal distribution. In accordance with non-parametric methods, the "Mann-Whitney U" test (Z-table value) was used to compare the measurement values of two independent groups, and the "Kruskal-Wallis H" test (χ2-table value) method was used to compare the measurement values of three or more independent groups. Bonferroni correction was applied for pairwise comparisons of variables with significant differences for three or more groups. “Spearman” correlation coefficient was used to examine the relationships of two quantitative variables that do not have a normal distribution. The significance level was taken as $p<0.05$.

Ethical Dimension of the Study

We obtained permission from the Ethics Committee (Date: 25.04.2022 and Protocol No: 2022/02-06) and permission to use the scale in order to conduct the study. On the first page of the online questionnaire, the participants were informed electronically that their participation in the study was voluntary and that they could withdraw from the study at any time. It was announced that the research data obtained will be used for scientific purposes without using the names of the participants. In accordance with the Declaration of Helsinki, electronic informed consent

Table 1. Distribution of women's introductory characteristics

Variables (n=420)	**n**	**%**
Age Groups [$\bar{X} \pm$ S.D.→32,59±9,78 (years)]		
18-29	176	42,4
30-49	211	50,2
≥50	31	7,4
Level of education		
Illiterate	1	0,2
Literate	10	2,4
Primary education	43	10,2
High school	80	19,0
College/university	241	57,4
Master's/PhD	45	10,8
Occupational status		
Active worker	244	58,1
Housewife	176	41,9
Social Insurance		
Yes	331	78,8
No	89	21,2
Income rate		
Income less than expenses	158	37,6
Income equals expense	197	46,9
Income more than expenses	65	15,5
Marital Status		
Single	149	35,5
Married	271	64,5
Family Type		
Elementary family	377	89,8
Extended family	31	7,3
Broken family	12	2,9
BMI [$\bar{X} \pm$ S.S.→24,75±4,74 (kg/m^2)]		
Weak	21	5,0
Normal	231	55,0
Overweight	109	26,0
1st degree obese	44	10,4
2-3. degree obese	15	3,6
Smoking		
Yes	89	21,2
No	331	78,8
Drinking alcohol		
Yes	21	5,0
No	399	95,0
Having a chronic illness		
Yes	68	16,2
No	352	83,8
Name of chronic disease **		
Asthma	13	18,1
Allergy	4	5,6
Diabetes	5	6,9
Hypertension	9	12,5
Epilepsy	4	5,6
Thyroid	15	20,7
Kidney failure	2	2,8
KVS	3	4,2
Migraine	3	4,2
Other	14	19,4

Table 1. Continue

Drug use		
Yes	94	22,4
No	326	77,6
Doing sports regularly		
Yes	70	16,7
No	350	83,3
Paying attention to healthy eating		
Yes	243	57,9
No	177	42,1

**More than one answer was given to the question and the percentages were determined according to the increasing number of samples.

was provided on the first page of the online questionnaire and online consent was obtained.

RESULTS

It was determined that the mean age of the women was 32.59±9.78 (years) and 50.2% of them were in the 30-49 age group. It was determined that 57.4% of them were college/university graduates and 58.1% of them were actively working. The distribution of other data on the introductory characteristics of women is given in Table 1.

The distribution of data on the gynecological-obstetric characteristics of women is given in Table 2. 89.8% of the women do not have any gynecological disease, 88.1% of them do not have any female cancer in their family, mothers/grandmothers (46%) were the most common women with female cancer in the family, 56.4% of them stated that they thought it was preventable, and 73.8% of them do not have regular gynecological examinations. It was determined that 57.9% of the women did not have a pap smear test, 53.3% did not know about cancer screening, and 93.8% did not get HPV vaccination.

The distribution of the mean scores of the scale total and sub-dimensions is given in Table 3. The total mean score of the gynecological cancer prevention information scale is 14.84±7.90. In addition, when the reliability coefficients of the answers given to the scales were examined, it was determined that the sub-dimensions and the total score were at a reliable level.

The GCPIS scores of women aged 30-49 and above 50 age group are significantly higher than those aged 18-29 ($\chi2=6.724$; p=0.025). The GCPIS scores of those who graduated from college/university and master's degree/doctorate were significantly higher than those who graduated from primary school. Likewise, a significant difference was found between those who graduated from high school and those who graduated from college/university and master's degree/doctorate. The GCPIS scores of those who graduated from college/university and master's degree/doctorate were significantly higher than those who graduated from high school. In addition to these, the GCPIS scores of master's degrees/doctorate graduates are significantly higher than those of college/university graduates ($\chi2=42,147$; p=0,000) the GCPIS scores of active workers are significantly higher than housewives (Z=-2.392; p=0.017). The median scale score of the women whose income is more than their expenses was found to be significantly higher than those whose income is less than their expenses ($\chi2=6,996$; p=0.030). The GCPIS scores of alcohol users are significantly higher than those who do not use alcohol (Z=-2.332; p=0.020).

The median score of the women whose first gestational age was 25-29 years old and 30 years old and above was found to be significantly higher than those between 19 years and younger and 20-24 years old ($\chi2=23,755$; p=0.000). It was determined that the median scale scores of those who had their first sexual intercourse at the age of 18 and above were significantly higher than those who had their first sexual intercourse under the age of 18 (Z=-2.145; p=0.032).

It was determined that the median scores of those who thought that female cancers were preventable were significantly higher than those who stated that they had no information about this issue, and that the median scores of those who thought that cancer could not be prevented were significantly higher than those who thought that it was preventable ($\chi2=45.077$; p=0.000). The median scores of those who had regular gynecological examinations were found to be significantly higher than those who did not (Z=-3.048; p=0.002). The median scores of the women who stated that they knew about cancer screenings were found to be significantly higher than those who did not (Z=-8.564; p=0.000) (Table 4).

Table 2. Distribution of women's gynecological-obstetric characteristics

Variables (n=420)	n	%
Gynecological disease		
Yes	43	10,8
No	377	89,8
First menstrual age (menarche)		
12 years and under	118	28,0
13-15 years	277	66,0
16 years and older	25	6,0
First gestational age		
19 years and under	41	16,2
20-24 years	101	39,9
25-29 years	78	30,8
30 years and older	33	13,0
Age at first sexual intercourse (n=301)		
Under 18 years old	25	8,3
18 years and older	276	91,7
Number of pregnancies		
No previous pregnancy	167	39,8
1-2	159	37,9
≥3	94	22,3
Number of children		
No child	175	41,7
1-2	192	45,7
≥3	53	12,6
Number of curettage		
No previous curettage	364	86,7
1-2	52	12,3
≥3	4	1,0
Number of abortion		
No previous abortion	348	82,9
1-2	65	15,4
≥3	7	1,7
Regular sex life		
Yes	253	60,2
No	167	39,8
Family planning method		
Does not use any method	196	46,7
Retraction	68	16,2
Condom (condom)	103	24,5
Oral contraceptive (pill)	14	3,3
RIA - intrauterine device (spiral)	29	6,9
Tubligation (connection of tubes)	10	2,4
The state of menopause		
Yes	38	9,0
No	382	91,0
Sexually transmitted infection		
Yes	9	2,1
No	411	97,9
Female cancer in the family		
Yes	50	11,9
No	370	88,1
A relative with cancer in the family (n=50)		
Mother/grandmother	23	46,0
Sister	5	10,0
Aunt	20	40,0
Herself	2	4,0

Table 2. Continue

Thinking that female cancer is preventable		
Yes	237	56,4
No	12	2,9
I do not know	171	40,7
Regular gynecological examination		
Yes	110	26,2
No	310	73,8
Pap smear		
Yes	177	42,1
No	243	57,9
Information about cancer screenings		
Yes	196	46,7
No	224	53,3
Getting the HPV vaccine		
Yes	26	6,2
No	394	93,8

DISCUSSION

In this study, which was carried out with the aim of determining the knowledge level of women in the prevention of gynecological cancers, the total mean score of the GCPIS was found to be 14.84±7.90. (min: 0, max: 35). Similarly, in the study of Evcili and Bekar, it was determined that the mean score of women's GCPIS was below the average (16.22±8.21; min: 0, max: 35) (6). In the study conducted by Akkoyun and Bekar with 866 women, it was found that the average of knowledge scores on prevention of cancers of female reproductive organs was 25.27±13.155 (min: 0, max: 50) (18). According to study of Teşkereci et al. the mean score of Gynecologic Cancer Awareness Scale (GCAS) was 151.08±3.84 (19). In Özcan and Doğan's study, womens's GCAS score was 150.53±18.26 (20). In the sudy of Öztürk et al. the average GCAS score was 147.42±22.31 (21). In the sudy of Kaya Şenol et al. (2021), it was determined that the mean score was 150.7±20.6 in women at reproductive age and 144.4±18.5 in postmenopausal women (16). In a study conducted in Poland, where the same scale was used, the mean score was found to be 154.79±17.85 (22). Our research results are similar to other research findings in the literature.

In Turkey, within the scope of the Cervical Cancer Screening Program of the Ministry of Health, population-based screening is performed with HPV or Pap-smear tests in the age group of 30-65 years (23). In the study, it was determined that 57.9% of the women did not have pap smear test and 93.8% did not get HPV vaccine (Table 2). According to study of Yilmaz et al. it was found that 74.5% of women and men between the ages of 18-45 did not have pap smear test and 99.0% did not get HPV vaccine (24). Akin et al. reported that 67.0% of women did not have a pap smear test (25). Teskereci et al. found that 51.3% of women did not have a pap smear test (26). In line with these results, it is seen that there is a need for studies to increase the level of knowledge and awareness of individuals on cancer screening and HPV vaccine. In addition, it is thought that women need to be encouraged to increase their participation in screening programs and vaccination.

In the study, the GCPIS scores of women between the ages of 30 and 49 and women above 50 years were significantly higher than those between the ages of 18 and 29. Similarly, in the study of Evcili and Bekar, it was found that women between the ages of 35 and 49 had a higher knowledge score average than those between the ages of 18 and 34 (6). In the study of Akkoyun and Bekar (2020), it was determined that as the age of women increases, the female reproductive organs cancer prevention information scores increase (18). In the study conducted by Gözüyesil et al. to evaluate women's awareness of gynecological cancer, it was reported that the gynecological cancer awareness of women between the ages of 30 and 39 was higher than those between the ages of 20 and 29 and those over 40 years old (15). In the study of Öztürk et al., it was determined that the level of awareness increased in direct proportion with age (21). It can be thought that this situation is due to the increase in knowledge and the risk of gynecological cancer as age increases in women. Unlike other studies, in the study of Şahin and Sayın, it was reported that the total gynecological cancer information score was higher in women in the younger age group (27). It is thought that this difference may be due to the educational status of the women in the study group.

Table 3. Distribution of sub-dimensions, total average score and reliability coefficients of the Gynecological Cancer Prevention Information Scale

Scale (n=420)	Number of items	X ±SD	Median	Min.-Max	Cronbach-α coefficient
Gynecological Cancer Prevention Information Scale–Total	35	14,84±7,90	15,0	0 -35	0,915
Cancer prevention	12	6,51±3,56	7,0	0-12	0,860
Cancer symptoms	10	2,45±2,84	1,0	0-10	0,866
Diagnostic observations	6	2,43±1,82	2,0	0-6	0,756
Early diagnosis and physiological factors	4	2,77±1,26	3,0	0-4	0,714
Risks related to childbirth	3	0,66±0,91	0,0	0-3	0,701

Factors such as age, economic status, and occupation of the individual may pose a risk in the formation of gynecological cancer (14,15). In the study, GCPIS scores of those who graduated from college/university and master's degree/doctorate were significantly higher than those who graduated from high school and primary school. In addition to these, the GCPIS scores of those with a master's degree/doctorate degree are significantly higher than those with a college/university graduate. Similarly, there are studies in the literature showing that knowledge and awareness of cancer increase as the level of education increases (6,14,27). Our study is in parallel with other studies in the literature, and it is seen that the level of education has a significant contribution to awareness and prevention of gynecological cancer. In the study, GCPIS scores of active workers were significantly higher than housewives. In the study conducted by Atlas and Güneri on women's awareness of gynecological cancers, it was reported that housewives had the lowest score in the gynecological cancers awareness scale when they are compared to other occupational groups (14). In the study, the gynecological cancer prevention information scale scores of the women whose income is more than their expenses were found to be significantly higher than those whose income is less than their expenses. Similarly, in a study conducted on women using social media, it was found that women with low income levels had lower gynecological cancer awareness levels (28). Similarly, in the study of Atlas and Güneri, the gynecological cancer awareness scale score of women who use alcohol was found to be significantly higher (14). It is thought that this significance may be due to the knowledge of the negative effects of alcohol on health.

Some gynecological and obstetrical characteristics such as the first gestational age of 20 and below, coitus at an early age, first birth at 20 and below, three or more births, and the history of sexually transmitted infections constitute risk factors especially for cervical cancer (29,30). In the study, GCPIS scores of women with first gestational age of 25-29 years and 30 years and over were found to be significantly higher than those aged 19 and younger and 20-24 years old. In addition, in the study, it was determined that GCPIS scores of those who had their first sexual intercourse at the age of 18 and over were significantly higher than those who had their first sexual intercourse under the age of 18. In the study of Özcan and Doğan, it was determined that when women's first gestational age and first sexual intercourse age increase, women's awareness of gynecological cancer increases in parallel (21). In this context, delaying the first sexual intercourse and gestational age is especially important for the prevention of cervical cancer.

In the study, it was determined that GCPIS scores of those who think that female cancers are preventable are significantly higher than those who state that they have no information on this subject, and those who think that cancer cannot be prevented have a significantly higher GCPIS scores than those who think that it is preventable. In the study of Kaya Şenol et al., it was found that the mean scores of the gynecological cancer awareness scale of women who thought that cancers could be prevented were significantly higher (16). It is thought that the difference in the results of the study is due to factors such as the socio-demographic characteristics of the women or the region they live in. In addition, in the study, GCPIS scores of those who had regular gynecological examinations were found to be significantly higher than those who did not. GCPIS scores of women who stated that they knew about cancer screenings were found to be significantly higher than those who did not. In the study of Özcan

Table 4. Comparison of Median Scores of Gynecological Cancer Prevention Information Scale according to Descriptive Characteristics of Women

Variables (n=420)	n	Information on gynecological cancer prevention Medyan [IQR]	Statistical analysis* possibility
Age groups			
18-29(1)	176	14,0 [15,0]	χ^2=6,724
30-49(2)	211	16,0 [11,0]	p=0,025
≥50(3)	31	16,0 [11,0]	[1-2,3]
Level of education			
Literate(1)	10	12,5 [19,8]	
Primary school(2)	43	11,0 [8,0]	χ^2=42,147
High school(3)	80	10,5 [14,0]	p=0,000
College/university (4)	241	16,0 [10,0]	[2-4,5] [3-4,5] [4-5]
Master's/PhD (5)	45	19,0 [9,0]	
Occupational status			
Active Worker	244	16,0 [11,0]	Z=-2,392
Housewife	176	14,0 [12,0]	p=0,017
Income rate			
Income less than expenses(1)	158	14,0 [12,3]	χ^2=6,996
Income equals expense(2)	197	16,0 [11,0]	p=0,030
Income more than expenses(3)	65	18,0 [12,5]	[1-3]
Marital Status			
Single	149	15,0 [14,0]	Z=-0,880
Married	271	15,0 [11,0]	p=0,379
Family Type			
Elementary family	377	15,0 [12,0]	χ^2=1,445
Extended family	31	15,0 [9,0]	p=0,486
Broken Family	12	11,0 [8,5]	
Smoking			
Yes	89	15,0 [11,5]	Z=-0,302
No	331	15,0 [12,0]	p=0,762
Drinking alcohol			
Yes	21	21,0 [14,0]	Z=-2,332
No	399	15,0 [12,0]	p=0,020
BMI			
Weak	21	15,0 [13,0]	
Normal	231	16,0 [14,0]	χ^2=5,599
Overweight	109	15,0 [10,5]	p=0,231
1st degree obese	44	16,5 [12,8]	
2-3. degree obese	15	11,0 [14,0]	
Having a chronic illness			
Yes	68	16,0 [14,0]	Z=-1,930
No	352	15,0 [12,0]	p=0,054
Regular medication use			
Yes	94	15,0 [13,0]	Z=-1,158
No	326	15,0 [12,0]	p=0,247
Gynecological disease			
Yes	43	16,0 [11,0]	Z=-0,969
No	377	15,0 [12,0]	p=0,332
First menstrual age (menarche)			
12 years and under	118	14,5 [13,0]	χ^2=1,064
13-15 years	277	15,0 [11,0]	p=0,587
16 years and older	25	15,0 [11,5]	
First gestational age			
19 years and under	41	11,0 [10,0]	
20-24 years	101	14,0 [13,0]	χ^2=23,755
25-29 years	78	15,0 [7,0]	p=0,000
30 years and older	33	19,0 [9,5]	[1-3,4] [2,3-4]

Table 4. Continue

Age at first sexual intercourse			
18 years and under	25	11,0 [7,0]	Z=-2,145
18 years and older	276	16,0 [11,0]	p=0,032
Number of pregnancies			
No previous pregnancy	167	16,0 [13,0]	χ^2=1,393
1-2	159	15,0 [12,0]	p=0,498
≥3	94	14,0 [8,3]	
Number of children			
No child	175	16,0 [14,0]	χ^2=4,038
1-2	192	15,0 [11,0]	p=0,133
≥3	53	13,0 [9,5]	
Curettage			
No previous curettage	364	15,0 [12,8]	Z=-0,809
Yes	56	15,0 [10,8]	p=0,419
Number of abortion			
No previous abortion	348	15,0 [13,0]	Z=-0,709
Yes	72	14,5 [10,8]	p=0,478
Regular sex life			
Yes	253	16,0 [11,0]	Z=-1,337
No	167	14,0 [14,0]	p=0,181
Family planning method			
Does not use any method	196	15,0 [13,0]	
Retraction	68	15,5 [10,8]	
Condom (condom)	103	14,0 [11,0]	χ^2=0,807
Oral contraceptive (pill)	14	13,0 [11,3]	p=0,977
RIA - intrauterine device	29	16,0 [14,5]	
Tubligation	10	16,0 [8,3]	
The state of menopause			
Yes	38	15,0 [9,3]	Z=-0,414
No	382	15,0 [12,0]	p=0,679
Sexually transmitted infection			
Yes	9	11,0 [12,5]	Z=-0,142
No	411	15,0 [12,0]	p=0,887
Female cancer in the family			
Yes	50	15,0 [8,5]	Z=-0,061
No	370	15,0 [12,0]	p=0,952
Thinking that female cancer is preventable			
Yes	237	17,0 [11,5]	χ^2=45,077
No	12	20,0 [11,8]	p=0,000
I do not know	171	11,0 [11,0]	[1,2-3]
Regular gynecological examination			
Yes	110	17,0 [13,0]	Z=-3,048
No	310	14,0 [12,0]	p=0,002
Pap smear			
Yes	177	16,0 [11,0]	Z=-1,839
No	243	15,0 [14,0]	p=0,066
Information about cancer screenings			
Yes	196	19,0 [10,0]	Z=-8,564
No	224	11,0 [11,0]	p=0,000
Getting the HPV vaccine			
Yes	26	14,5 [11,8]	Z=-0,221
No	394	15,0 [12,0]	p=0,825

*The “Mann-Whitney U” test (Z-table value) was used to compare the measurement values of two independent groups in the data not having normal distribution. “Kruskall-Wallis H” test statistics (χ2-table value) were used to compare three or more independent groups.

women who had information about gynecological cancers was also high (21). In line with these results, it is important to ensure that women participate in education and screening programs in order to increase the level of knowledge, awareness and early diagnosis of cancers.

CONCLUSION

As a result of this research, it was found that women's knowledge of prevention from gynecological cancers is close to medium and this includes age, education level, employment status, income level, alcohol use, first pregnancy age, first sexual intercourse age, thinking that female cancer is preventable, having regular gynecological examinations. It has been determined that the variables of knowledge of cancer screening affect the status of cancer screening. It is of great importance to emphasize the importance of cancer prevention and early diagnosis in order to reduce cancer-related death rates in the society. In this context, in order to protect and improve women's health, it is necessary to plan and implement training programs for the prevention of gynecological cancers, as well as to support women's participation in gynecological examinations and screening programs. However, women cannot benefit from early diagnosis methods and regular gynecological examination due to their negative beliefs and feelings. Therefore, it is important to update the knowledge of all health workers, especially nurses, who are at the forefront of raising the awareness of the society, and to support them with in-service trainings. It is recommended to conduct more comprehensive and comparative studies on this subject.

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