

Are Women of Reproductive Age Aware of Gynecological Cancers?

Aysun Perim Ketenciler¹, Meryem Metinoğlu¹, Sevda Karakaş², Gülin Göncü⁴

¹Department of Nursing, Faculty of Health Sciences, Tekirdağ Namık Kemal University, Tekirdağ, Turkey

²Department of Nursing, Gümüşhane University Faculty of Health Sciences, Gümüşhane, Turkey

³100th Year Family Health Center, Süleymanpaşa, Tekirdağ, Turkey

Received: 2025-02-07.

Accepted: 2025-03-27.



This work is licensed under a
Creative Commons Attribution 4.0
International License

J Clin Med Kaz 2025; 22(2): 24–30

Corresponding author:

Aysun Perim Ketenciler.

Email: aketenciler@nku.edu.tr.

ORCID: 0000-0001-8497-7457.

Abstract

Objective: This descriptive study aimed to determine the awareness levels of women of reproductive age regarding gynecological cancers.

Methods: The study was conducted with 379 women aged between 15 and 49 registered at two separate Family Health Centers in Tekirdağ city center between May 2022 and April 2023. Data were collected using the "Gynecological Cancers Awareness Scale" and an "Introductory Information Form." Descriptive statistics including number, minimum, maximum, percentage, mean, and standard deviation were provided using the SPSS 21 package program. Shapiro-Wilk normality test, Independent Sample T-test, One Way ANOVA, Pearson correlation test, and Bonferroni test were used for data analysis. A statistical significance level of $p < 0.05$ was accepted.

Results: The mean age of the women in the study was 34 ± 11 years, with 61.5% being married. The average Gynecological Cancers Awareness Scale (GCAS) score was 157.1 ± 17.1 (range 106-205). Sub-dimension scores were: "Early Diagnosis and Information Awareness" 17.1 ± 2.3 (range 10-20), "Risk Awareness" 28.4 ± 5.3 (range 13-45), "Prevention Awareness" 22.4 ± 3.4 (range 12-30), and "Routine Checks and Serious Illness Perception" 89.0 ± 11.9 (range 45-110).

In the study, 48.5% of the women knew about early diagnosis methods for gynecological cancers, and 76% were aware of the Cancer Early Diagnosis Screening and Education Center (KETEM). Women who were aware of risky health behaviors and cancer symptoms had higher awareness levels ($p < 0.05$). There was no significant difference between the number of pregnancies and births and awareness levels ($p > 0.05$).

Conclusion: The result shows that women have a moderate level of awareness about gynecological cancers; however, their knowledge of gynecological cancer symptoms and awareness of risky health behaviors is higher. Additionally, more than half of the participants (60.7%) have never had a gynecological examination.

Keywords: Gynecological cancer, reproductive age women, awareness levels, nurse.

Introduction

Cancer stands as one of the most critical health challenges globally in today's world. The high mortality and morbidity rates of cancer cases today, along with the long duration and cost of treatment, emphasize the importance of cancer cases. Among the leading causes of death, lung cancer is the most prevalent among men, whereas breast cancer is the most common among women. When gynecological cancer types are ranked according to the number of new cases, cervical cancer ranks fourth, and corpus uteri cancer ranks sixth. According to the Turkish Public Health Institute

Cancer Statistics for 2018, common cancers in women of all age groups are reported as breast cancer 48.6%, uterine corpus cancer 11.1%, ovarian cancer 6.5%, and cervical cancer 4.2% [1–4]. Cancers have specific risk factors. Generally, the risk factors for gynecological cancers include age, socioeconomic status, and education level, genetic characteristics, having multiple births, unwanted pregnancies, intentionally induced abortions, inadequate health services during prenatal and postnatal periods, adolescent marriages, history of infections, sexually transmitted infections, personal and environmental factors. The most important factor

in reducing the frequency and mortality of cancers is early diagnosis practices considering the risk factors [3–6].

Body image, reproductive ability, and problems in sexual life in women adversely affect both themselves and family members. In this respect, gynecological cancers can lead to negative effects on women's lives in social, physical, psychological, and economic dimensions [7, 8].

Gynecological cancers, like other types of cancer, are preventable diseases with early diagnosis and treatment. Factors such as insufficient knowledge of women about cancer screening programs, financial constraints in accessing services, and low educational levels reduce the chances of early diagnosis and treatment [9,10]. However, significant decreases in mortality and morbidity rates of women are observed with the effective implementation of early diagnosis and treatment methods today [11,12]. Studies investigating the knowledge levels and awareness of women about gynecological cancers report that these rates are quite low [3, 13–16].

Methods

Type of Study: This descriptive cross-sectional study was conducted between May 2022 and April 2023 to assess the awareness of gynecological cancers among women of reproductive age (15-49 years) at the 100th Year Family Health Center and Rüstem Paşa Family Health Center (FHC), which operate under the Tekirdağ Public Health Directorate in the Süleymanpaşa central district. The data were collected by face-to-face interviews with the researchers in the appropriate areas of the planned FHCs' Maternity-Puerperium follow-up rooms or in a different suitable area of the FHC.

Study Population/Sample: The study population included the 100th Year FHC and Rüstem Paşa FHC located in the Süleymanpaşa District of Tekirdağ Province. The sample consisted of 379 voluntary women aged 15-49 who visited the selected FHCs and consented to participate in the study.

Data Collection

Participant Information Form: The questionnaire developed by the researchers includes questions regarding personal characteristics such as occupation, age, education level, income level, and chronic disease status, as well as questions related to the women's gynecological and obstetric history.

Gynecological Cancers Awareness Scale (GCAS): The sub-dimensions of the scale are as follows; "Awareness of Risks in Gynecological Cancers" (items 3-11) with a Cronbach's alpha value of 0.843, "Awareness of Prevention from Gynecological Cancers" (items 14-19) with a Cronbach's alpha value of 0.778. Although the scale is evaluated based on the total score, a minimum of 41 and a maximum of 205 points can be obtained from GCAS [17]. The Cronbach's alpha value of the scale is 0.944, and in this study, it is 0.918.

Ethical Aspect of the Study: Ethical approval for the implementation of the research was obtained from the Ethics Committee. (Date:15.06.2022, Decision: 170617). In addition, compliance with the "Helsinki Declaration" was ensured at every stage of the research.

Data Analysis: Descriptive statistics, including frequency, minimum, maximum, and standard deviation percentages, were provided. The Shapiro-Wilk normality test was used to assess data distribution. For normally distributed data, One-Way ANOVA, Pearson correlation analysis, and Independent Sample T-test were applied.

Findings

The mean age of the women included in the study is 34.4±11.0 years, with 74.4% having a university degree or higher education level, 61.5% being married, 62.0% having income matching their expenses, 84.2% belonging to a nuclear family, 72.3% not smoking, and 85.2% not consuming alcohol. The average duration of smoking among smokers is 14.5±9.4 (min.1-max.38) years, with an average daily cigarette consumption of 12.7±8.0 (min.1-max.40) cigarettes. 78.4% of women do not have any chronic illnesses, and 74.4% do not use regular medication. The participants' BMI average is 24.3±4.8 (min.15.21-max.50.78), the average age of first menstruation is 13.5±2.9 (min.8-max.43) years, the average age of first sexual intercourse is 23.2±4.0 (min.13-max.37) years, the average number of pregnancies is 2.0±1.9), and the average number of births is 1.6±0.7). (Table 1).

Table 1 Distribution of Some Characteristics of Women (n=379)		
Characteristics	Number (n)	Percentage (%)
Average Age	34.4±11.0 (min.16-max.64)	
Education Level		
Primary School	15	4.0
Middle School	11	2.9
High School	70	18.5
University and above	283	74.4
Marital Status		
Married	233	61.5
Single	146	38.5
Occupation		
Homemaker	90	23.7
Worker	40	10.6
Civil Servant	122	32.2
Other	127	33.5
Income Level		
Income less than expenses	87	23.0
Income equal to expenses	237	62.0
Income more than expenses	57	15.0
Family Type		
Nuclear Family	319	84.2
Extended Family	41	10.8
Broken Family	19	5.0
Smoking Status		
Yes	105	27.7
No	274	72.3
Average years of smoking*	14.5±9.4 (min.1-max.38)	
Average number of cigarettes smoked per day*	12.7±8.0 (min.1-max.40)	
Alcohol Consumption Status		
Yes	56	14.8
No	323	85.2
Average years of alcohol consumption**	8.8±6.6 (min.1-max.25)	
BMI Average	24.3±4.8 (min.15.21-max.50.78)	
Having a Chronic Disease		
Yes	80	21.1
No	299	78.9
Regular Use of Medication		
Yes	97	25.6
No	282	74.4
Average age of first menstruation	13.5±2.9 (min.8-max.43)	
Average age of first sexual intercourse***	23.2±4.0 (min.13-max.37)	
Average number of pregnancies****	2.0±1.9 (min.1-max.9)	
Average number of births*****	1.6±0.7 (min.1-max.4)	
Total	379	100

*averages are among smokers. ** averages are among alcohol consumers.*** averages are among those who have had sexual intercourse before, **** among those who have experienced pregnancy, ***** among those who have given birth.

The mean score of the GCAS scale for women is 157.1±17.1 (min.106-max.205), with a mean score of 17.1±2.3 for the "Early Diagnosis and Knowledge Awareness in Gynecological Cancers" subscale, a mean score of 28.4±5.3 for the "Awareness of Gynecological Cancer Risks" subscale, a mean score of 22.4±3.4 for the "Awareness of Preventing Gynecological Cancers" subscale, and a mean score of 89.0±11.9 for the "Awareness of Routine Checks and Perception of Serious Illness in Gynecological Cancers" subscale.

There is a statistically significant difference between the use of birth control pills and the total score of GCAS, as well as the awareness of prevention and awareness of routine checks and perception of serious illness sub-dimension scores ($p<0.05$). There were no statistically significant differences between the use of birth control pills and the subscale scores of early diagnosis and knowledge awareness, and awareness of cancer risks ($p>0.05$), as well as similar total and subscale scores of GCAS concerning menopausal status, hormone therapy, family history of gynecological cancer and HPV vaccination status ($p>0.05$).

Having a regular sexual life does not show statistically significant differences between the awareness of prevention, early diagnosis and knowledge, and awareness of cancer risks sub-dimensions concerning barriers to testing or examination, previous knowledge of gynecological cancer, knowledge of screening at FHC and Cancer Early Diagnosis Screening and Education Unit (CEDSEU) and the most recent PAP smear ($p>0.05$).

There is a statistically significant relationship between having a regular sexual life and the total score of GCAS, as well as the awareness of routine checks and perception of serious illness sub-dimensions concerning barriers to testing or examination, previous knowledge of gynecological cancer, knowledge of screening at FHC and CEDSEU and the most recent PAP smear test ($p<0.05$) ($p<0.001$). There is also a statistically significant relationship between knowing the factors affecting gynecological cancer and the total score of GCAS, as well as all sub-dimensions, and knowing the symptoms of gynecological cancer and the total score of GCAS, and all sub-dimension scores ($p<0.001$) (Table 2).

Table 2 Comparison of total and subscale scores of GCAS scale according to some gynecological-obstetric characteristics of the participants. (n=379)							
Characteristics	Number (n)	Percentage (%)	GCAS Ort.±SS	Early Diagnosis and Knowledge AwarenessOrt.±SS	Cancer Risk AwarenessOrt.±SS	Awareness of Prevention Ort.±SS	Awareness of Routine Checkups and Perception of Serious Illness Ort.±SS
Usage of Birth Control Pills							
Yes	107	28.2	160.4±15.1	17.5±2.1	28.4±5.5	24.0±3.1	91.5±10.0
No	272	71.8	155.7±17.7	17.0±2.3	28.4±5.3	22.2±3.5	88.0±12.5
Test1/p			t=2.409 p=0.016	t=1.769 p=0.078	t=-0.118 p=906	t=2.026 p=0.044	t=2.621 p=0.009
Entering Menopause							
Yes	50	13.8	159.2±17.3	17.4±2.4	28.4±5.4	22.9±3.3	90.4±11.8
No	329	86.8	156.8±17.1	17.1±2.2	28.4±5.3	22.3±3.4	88.7±11.9
Test1/p			t=0.925 p=0.356	t=0.690 p=0.480	t=-0.076 p=0.940	t=1.077 p=0.282	t=0.919 p=0.359
Receiving Hormone Therapy							
Yes	46	12.1	160.3±20.5	17.7±2.2	28.0±6.4	22.4±4.0	92.1±12.1
No	333	87.9	156.6±16.6	17.1±2.3	28.5±5.2	22.4±3.3	88.5±11.9
Test1/p			t=1.358 p=0.175	t=1.865 p=0.063	t=-0.609 p=0.543	t=-0.027 p=0.978	t=1.878 p=0.061
History of Sexually Transmitted Infections							
Yes	10	2.6	153.9±12.2	16.8±2.9	26.9±4.5	22.2±2.6	88.0±9.9
No	369	97.4	157.2±17.3	17.2±2.2	28.4±5.4	22.4±3.4	89.0±12.0
Test1/p			t=-0.600 p=549	t=-0.541 p=0.589	t=-0.925 p=0.356	t=-0.250 p=0.803	t=-0.270 p=0.787
Having a Regular Sexual Life							
Yes	220	58.0	159.0±16.8	17.0±2.3	28.5±5.4	22.7±3.4	90.6±11.1
No	159	42.0	154.4±17.3	17.3±2.2	28.3±5.3	22.0±3.4	86.7±17.7
Test1/p			t=2.578 p=0.011	t=-0.938 p=0.349	t=0.466 p=0.641	t=1.863 p=0.063	t=3.146 p=0.002
Attending Gynecological Examinations							
Never attended	230	60.7	157.6±16.1	17.0±2.3	28.2±5.2	22.5±3.3	89.8±10.8
Once a year or more frequently	132	34.8	155.7±17.7	17.4±2.1	28.4±5.3	22.2±3.5	87.3±13.0
Less often than once a year	17	4.5	162.2±24.5	17.3±2.4	31.0±7.5	23.0±4.0	90.9±16.2
Test2/p			t=1.479 p=0.229	t=1.662 p=0.191	t=2.083 p=0.126	t=0.679 p=0.508	t=2.067 p=0.128
Barriers to Undergoing Gynecological Testing or Examination							
Disregard/ Perceived Unimportance (a)	140	36.9	151.3±16.9	17.1±2.3	28.3±5.6	21.5±3.5	84.2±11.9

Fear of Examination (b)	72	19.0	163.2±17.5	17.2±2.4	28.1±6.0	23.3±3.4	94.4±11.3
Sense of Privacy/ Embarrassment (c)	101	26.6	160.3±15.8	17.2±2.3	28.6±4.9	23.1±3.1	91.2±10.8
Physician's Gender (d)	31	8.2	157.0±15.4	17.1±1.6	28.3±4.4	22.4±2.9	89.0±10.4
Lack of Knowledge (e)	35	9.2	158.5±16.1	17.0±2.2	28.9±5.1	22.2±3.7	90.3±10.9
Test2/p			t=7.728 p=0.000	t=0.90 p=0.986	t=0.161 p=0.958	t=4.780 p=0.001	t=11.374 p=0.000
Difference			a<b, a<c			a<b, a<c	a<b, a<c, a<e
Awareness of Gynecological Cancer Information							
Yes	160	42.5	154.2±12.8	17.0±2.1	28.5±5.2	21.9±3.5	86.6±12.6
No	219	57.5	159.2±16.0	17.2±2.3	28.3±5.4	28.8±3.3	90.7±11.2
Test1/p			t=-2.795 p=0.005	t=-0.807 p=0.401	t=0.335 p=0.738	t=-2.457 p=0.014	t=-3.306 p=0.001
Sources of Information Regarding Gynecological Cancer							
Healthcare Personnel	10	2.6	±	±	±	±	±
Television	8	2.1	±	±	±	±	±
Internet	9	2.4	±	±	±	±	±
Family/Friends	7	1.8	±	±	±	±	±
Other	5	1.3	±	±	±	±	±
Test2/p			t= p=	t= p=	t= p=	t= p=	t= p=
Family History of Gynecological Cancer							
Yes	33	8.7	156.7±16.8	17.2±2.1	29.0±6.0	22.1±3.9	88.2±12.9
No	346	91.3	157.1±17.2	17.1±2.3	28.3±5.3	22.5±3.4	89.0±11.8
Test1/p			t=-0.139 p=0.890	t=0.136 p=0.892	t=0.711 p=0.478	t=-0.605 p=0.545	t=-0.370 p=0.712
Awareness of Factors Affecting Gynecological Cancer							
Yes	190	50.1	163.5±17.0	17.7±2.2	29.8±5.7	23.4±3.3	92.5±11.6
No	189	49.9	156.0±14.7	16.6±2.2	27.0±4.6	21.5±3.2	85.4±11.2
Test1/p			t=7.879 p=0.000	t=5.050 p=0.000	t=5.287 p=0.000	t=5.581 p=0.000	t=5.961 p=0.000
Awareness of Symptoms of Gynecological Cancer							
Yes	183	48.5	163.2±17.0	17.6±2.3	29.8±5.9	23.4±3.2	92.2±12.1
No	195	51.5	151.3±15.2	16.7±2.2	27.1±4.3	21.5±3.4	85.9±11.0
Test1/p			t=7.161 p=0.000	t=4.151 p=0.000	t=5.189 p=0.000	t=5.428 p=0.000	t=5.288 p=0.000
Awareness of Cancer Screening Services Offered at Family Health Centers							
Yes	288	76.0	159.4±17.3	17.2±2.3	28.8±5.4	22.8±3.4	90.4±11.8
No	91	24.0	149.6±14.3	16.8±2.2	27.0±4.7	21.1±3.3	84.5±11.3
Test1/p			t=4.893 p=0.000	t=1.634 p=103	t=2.801 p=0.005	t=4.184 p=0.000	t=4.164 p=0.000
Time Since Last PAP Smear Test							
Never undergone (a)	185	48.8	153.5±17.5	17.0±2.3	28.2±5.3	21.8±3.6	86.2±15.5
Less than 1 year ago (b)	75	19.8	162.1±17.2	17.0±2.5	28.8±5.7	23.6±3.3	92.6±11.3
1-3 years ago (c)	53	14.0	160.8±15.2	17.5±2.0	28.1±5.2	22.8±2.8	92.2±10.5
3-5 years ago (d)	32	8.4	158.4±14.6	17.3±2.0	28.4±4.9	22.7±3.2	89.8±10.5
More than 5 years ago (e)	34	9.0	159.2±16.5	17.6±2.1	29.1±5.4	22.2±3.1	90.3±10.2
Test2/p			t=4.772 p=0.001	t=0.864 p=0.486	t=0.341 p=0.851	t=3.765 p=0.005	t=5.697 p=0.000
Difference			a<b, a<c			a<b	a<b, a<c
Status of Receiving HPV Vaccination							
Yes	22	5.8	155.9±16.4	17.0±2.0	28.8±5.3	21.6±2.9	88.4±11.4
No	357	94.2	157.1±17.2	17.2±2.3	28.4±5.3	22.5±3.4	89.0±12.0
Test1/p			t=-0.328 p=0.743	t=-0.397p=0.691	t=0.327 p=0.744	t=-1.102 p=0.271	t=-0.224 p=0.823

1Independent Sample T testi, 2One Way Anova

Table 3

Comparison of mean age, age at menarche, BMI, mean age of first sexual intercourse, mean number of pregnancies, mean number of births, and mean total score and subscale score of GCAS. (n=379)

	GCAS	Early Detection and Knowledge Awareness	Cancer Risk Awareness	Prevention Awareness	Awareness of Routine Checkups and Perception of Serious Illness
Age	r=0.147 p=0.004	r=0.019 p=0.719	r=0.000 p=0.995	r=0.124 p=0.016	r=0.172 p=0.001
Age at Menarche	r=-0.057 p=0.272	r=-0.062 p=0.227	r=0.008 p=0.876	r=0.012 p=0.817	r=-0.076 p=0.138
BMI	r=-0.003 p=0.951	r=-0.076 p=0.139	r=0.000 p=0.993	r=-0.021 p=0.677	r=-0.016 p=0.724
Mean Age of First Sexual Intercourse	r=0.099 p=0.105	r=0.087 p=0.155	r=0.092 p=0.134	r=0.207 p=0.001	r=0.207 p=0.241
Mean Number of Pregnancies	r=-0.086 p=0.179	r=-0.030 p=0.643	r=-0.003 p=0.969	r=-0.103 p=0.107	r=-0.092 p=0.151
Mean Number of Births	r=-0.076 p=0.243	r=-0.186 p=0.185	r=0.046 p=0.485	r=-0.085 p=0.191	r=-0.090 p=0.166

r=Pearson Korelasyon Katsay

Age and GCAS total score, awareness of prevention, and awareness of routine checks and perception of serious illness sub-dimension score averages showed a weak level of statistically significant correlation ($p<0.005$, $p<0.001$). With the exception of the awareness of prevention sub-dimension, no statistically significant correlation was found between the age at first sexual intercourse and the total GCAS score, as well as the averages of all other sub-dimension scores. ($p>0.005$). A weak but statistically significant positive correlation was found between the age at first sexual intercourse and the awareness of prevention sub-dimension score averages ($p<0.001$). However, no statistically significant relationship was observed between age at menarche, BMI, average number of pregnancies, average number of births, and the GCAS total score or sub-dimension score averages. ($p>0.005$) (Table 3).

Discussion

Early diagnosis in gynecological cancers is among the most crucial criteria for improving women's quality of life and ensuring a successful treatment process. High levels of awareness among women regarding gynecological cancers play a significant role in regularly attending screenings and not overlooking potential symptoms. In our study, the mean age of women was found to be 34 ± 11 years, and the average total score obtained from the GCAS scale was 157.1 ± 17.1 . Given that the GCAS scale allows for a minimum score of 41 and a maximum score of 205, the results of our study suggest that women’s awareness of gynecological cancers is above the moderate level. In a study by Atlas and Güneri (2022) with 400 women, the mean GCAS score was 160.3 ± 22.4 , while Öztürk et al. (2021) reported an average score of 147.4 ± 22.31 from a sample of 554 women. Similarly, Burucu and Kıyak (2022) found a median total score of 154, and Gözüyeşil et al. (2020) reported an average GCAS score of 153 in a large-scale study involving 2000 women [4, 10, 18, 19].

Upon reviewing the current literature, it is observed that, similar to our study, although the average score on the GCAS scale is above the average value, it is not at the desired level [4, 10, 18, 19].

In our study, it was found that 48.5% of women were knowledgeable about early diagnosis methods in gynecological cancers, and 76% of women knew about the CEDSCS. In a study by Alp Dal et al. (2020), it was reported that 74.5% of women knew about CEDSCS, and 87.3% were knowledgeable about early diagnosis methods in gynecological cancers [16]. Despite being married and having an active sexual life, only

51.2% of women in our study underwent Pap smear tests. When examining the rates of undergoing Pap smear tests in Turkey, Uysal and Toprak (2022) reported a rate of 37.9%, Akyüz et al. (2006) reported 51.3%, Uğur et al. (2019) reported 42.3%, and Pehlivanoglu et al. (2019) reported 38.6% [20–23]. Similar to our study, it can be observed that the rates of undergoing Pap smear tests are not at the desired level. The low rates of Pap smear testing among the women in the study may be attributed to a lack of knowledge and education on the subject. It is important to instill healthy lifestyle behaviors to increase awareness of gynecological cancers. In our study, it was found that 60.7% of the women had never undergone a gynecological examination. When the reasons for women not undergoing gynecological examinations were examined, it was found that neglect (36.9%), embarrassment (26.6%), and fear of examination (19.0%) were the main reasons. In the literature, reasons for not undergoing gynecological examinations include embarrassment due to the examination position, the genital area being exposed, and fear and pain. Regular health check-ups and screenings play an important role in maintaining and improving women's health. Gynecological examination is important in the prevention and early diagnosis of gynecological cancers. Health professionals' facilitating and supportive attitudes will have a significant impact on women's habit of undergoing regular gynecological examinations [24–27].

One of the most important steps in preventing gynecological cancers is knowing risky health behaviors that could lead to gynecological cancers and creating awareness of healthy living [28].

In our study, it was found that married women with active sexual lives had higher awareness of risky behaviors that could lead to gynecological cancers and gynecological cancer symptoms, indicating that their awareness of gynecological cancers was higher. In studies by Kaya Şenol et al. (2021), and Kızılırmak & Kocaöz (2018), it was reported that women who were knowledgeable about gynecological cancers and were married had statistically higher GCAS scores and sub-scale scores. It can be said that the awareness of married women positively affects their awareness of cancer [3, 29]. In our study, no significant relationship was found between the number of pregnancies and births and the level of awareness of gynecological cancers.

In contrast to our study, Atlas and Güneri (2022) and Baltacı et al. (2023) reported that as the number of pregnancies, births, and children increased, women's awareness of gynecological cancers decreased [10, 28]. Conversely, Kaya Şenol et al.

(2021) found that the awareness of women who had given birth was higher than that of women who had not given birth [3]. It is thought that the differences in the study results in the literature may be due to factors such as the regions where the studies were conducted, access to health services, and socio-cultural factors.

Conclusion

It was determined that awareness levels of risky health behaviors that could lead to gynecological cancers and knowledge of gynecological cancer symptoms are higher. It is important to promote healthy lifestyle behaviors and increase knowledge about gynecological cancers to enhance awareness regarding gynecological cancers. Nurses, as key healthcare professionals, play a crucial role in enhancing women's knowledge and awareness of gynecological cancers through education and counseling. Studies assessing women's awareness of gynecological cancers remain limited, highlighting the need for broader, community-based, and comprehensive research on this topic.

References

1. Cancer Today. https://gco.iarc.who.int/today/en/dataviz/pie?mode=population&group_populations=0&types=0&sexes=2 Access Date: 03.07.2024.
2. Turkey Cancer Statistics, 2018. https://hsgm.saglik.gov.tr/depo/birimler/kanser-db/Dokumanlar/Istatistikler/Kanser_Rapor_2018.pdf Access Date: 12.12.2023.
3. Kaya Şenol D, Polat F, Doğan M. Gynecological Cancer Awareness: Reproductive Age and Postmenopausal Women. *Turk J Fam Med Prim Care*. 2021; 15(1): 56–62. <https://doi.org/10.21763/tjfmpe.805231>
4. Gözüyeşil E, Arıöz Düzgün A, Taş F. Assessment of Gynecological Cancer Awareness Among Women Presenting to a Family Health Center. *Turk J Fam Med Prim Care*. 2020; 14(2): 177–185. <https://doi.org/10.21763/tjfmpe.730022>
5. Kıyak S, Burucu R. Awareness of Gynecological Cancer Among University Students and Associated Factors. *Continuing Med Educ J*. 2022; 31(3): 172–182. <https://doi.org/10.17942/sted.883678>
6. Karabaş M. Factors Affecting Women's Awareness of Gynecological Cancers: A Case Study in Denizli Province. *Aydın Adnan Menderes University, Institute of Health Sciences, Master's Thesis in Midwifery Program*; 2023.
7. Kanbur A, Çapık C. Cervical Cancer Prevention, Early Diagnosis-Screening Methods, and the Role of Midwives/Nurses. *Hacettepe Univ Fac Health Sci Nurs J*. 2011;61–72.
8. Köse Tuncer S, Karakurt P. A Study on the Effect of Health Literacy on Increasing Women's Awareness of Gynecological Cancers. *Mersin Univ Fac Med Lokman Hekim Med Hist Folkloric Med J*. 2023; 13(1): 196–206. <https://doi.org/10.31020/mutftd.1175176>
9. Teskereci G, Öncel S, Arslan ÜÖ. Evaluation of the Women Attending Vocational Courses in Terms of Risk Factors and Early Warning Signs Related to Gynecological Cancers. *Continuing Med Educ J*. 2020; 29(04): 229–238. <https://doi.org/10.17942/sted.713748>
10. Atlas B, Er Güneri S. Women's Awareness of Gynecological Cancers and Factors Influencing Awareness. *J Izmir Katip Celebi Univ Fac Health Sci*. 2022; 7(1): 77–85.
11. Yılmaz Esencan T. Assessment of Women's Attitudes and Behaviors in the Use of Gynecological Early Detection Methods. *Zeynep Kamil Med Bull*. 40(2): 63–66. <https://doi.org/10.16948/zktb.75989>.
12. Durmaz S, Özurmaz S, Adana F, Kurt F. Cross-Sectional Evaluation of Relation Between Women's Attitudes Towards the Diagnosis of Cervical Cancer and Regular Gynecological Examination. *J Adnan Menderes Univ Health Sci Fac*. 2021; 5(1): 26–36. <https://doi.org/10.46237/amusbfd.727999>
13. Kolutek R, Avcı İA. The Impact of Education and Home Monitoring on the Knowledge Levels and Practices of Married Women Regarding Breast and Cervical Cancer. *J Breast Health*. 2015; 11: 155–162. <https://doi.org/10.5152/tjbh.2015.2647>
14. Al Qadire M. Awareness of Cancer Signs and Barriers to Help Seeking: a National Survey. *J Cancer Educ*. 2017; 33(6): 1206–1212. <https://doi.org/10.1007/s13187-017-1232-5>
15. Husain RSA, Ramya D, Pradeep MA, Govindaraju S, Ramakrishnan V. Knowledge on Human Papillomavirus and Cervical Cancer Awareness Among Women in South India. *Saudi J Health Sci*. 2019; 8(2): 81–87. https://doi.org/10.4103/sjhs.sjhs_69_18
16. Alp Dal N, Akkuzu G, Çetinkaya Şen Y. Investigation of Gynecological Cancer Awareness of Ufuk University Women's Employees. *J Midwifery Health Sci*. 2020; 3(2): 91–99.
17. Alp Dal N, Ertem G. Gynecological Cancer Awareness Scale Development Study. *J Hum Soc Sci Res*. 2017; 6(5): 2351–2367. <https://doi.org/10.15869/itobiad.314332>
18. Öztürk R, Bakır S, Kazankaya F, Paker S, Ertem G. Awareness About Gynecologic Cancers and Related Factors Among Healthy Women: A Cross-Sectional Study. *Soc Work Public Health*. 2021; 36(7–8): 847–56. <https://doi.org/10.1080/19371918.2021.1965936>
19. Burucu R, Kıyak S. University Students' Awareness of Gynecological Cancer and Associated Factors. *Continuing Med Educ J*. 2022; 31(3): 172–182. <https://doi.org/10.17942/sted.883678>
20. Uysal N, Toprak FÜ. Determination of Women's Health Perceptions, Attitudes Towards Cancer Screenings, and Identifying Influencing Factors. *Adnan Menderes Univ Fac Health Sci J*. 2022; 6(1): 65–76. <https://doi.org/10.46237/amusbfd.926839>

Author Contributions: Conceptualization, A. P. K., M. M.; methodology, A. P. K., M. M., S. K.; validation, A. P. K.; formal analysis, A. P. K., S. K.; investigation, A. P. K., M. M.; resources, S. K., M. M.; data curation, A. P. K., S. K., G. G.; writing – original draft preparation, A. P. K., S. K.; writing – review and editing, M. M.; visualization, A. P. K., G. G.; supervision, A. P. K.; project administration, A. P. K. All authors have read and agreed to the published version of the manuscript.

Disclosures: There is no conflict of interest for all authors.

Acknowledgements: None.

Funding: None.

21. Akyüz A, Güvenç G, Yavan T, Çetintürk A, Kök G. Determination of Women's Pap Smear Attendance Status and Factors Influencing It. *Gülhane Med J*. 2006; 48(1): 25–29.
22. Uğur HG, Derya YA, Yavuz AY, Şilbir MF, Öner A. Knowledge, Attitudes, and Behaviors of Women Aged 30-70 Visiting Family Health Centers Regarding National Cancer Screenings: A Case Study in a Province in the Black Sea Region. *Continuing Med Educ J*. 2019; 28(5): 340–48. <https://doi.org/10.17942/sted.529150>
23. Pehlivanoğlu EFÖ, Sarı HB, Balcıoğlu H, Ünlüoğlu İ. Evaluation of Knowledge, Attitudes, and Behaviors Regarding Human Papilloma Virus Vaccination and Cervical Cancer Among Female Patients Presenting to Family Medicine Outpatient Clinics. *Middle East J Med*. 2019; 11(4): 456–460. <https://doi.org/10.21601/ortadogutipdergisi.529515>
24. Szymoniak K, Cwiek D, Berezowska E. Women's Opinions Regarding Gynecological Examination in a Hospital. *Ginekol Pol*. 2009; 80(7): 498–502.
25. Daşkan Z, Sevil Ü. Psychosocial Factors Hindering Gynecological Examination in Women. *Continuing Med Educ J*. 2017; 26(2): 75–83.
26. Demir S, Oskay ÜY. Experiences of Women Undergoing Gynecological Examination and Their Expectations from Healthcare Professionals. *J Women's Health Nurs*. 2014; 1(1): 68.
27. Taşkın L. Gynecological cancers: Taşkın L, Editor. Handbook of Women's Health and Diseases Nursing. *Ankara: Academician Publishing*; 2022: 671.
28. Baltacı N, Atilla R, Gürel R. Knowledge Levels and Associated Factors of Reproductive-Age Women Regarding Prevention of Gynecological Cancer. *J Acad Res Nurs*. 2023; 9(3): 179–187.
29. Kızılırmak A, Kocaöz S. Factors Influencing Health Beliefs Regarding Cervical Cancer and Pap Smear Test Among Women in a University Setting. *Continuing Med Educ J*. 2018; 27(3): 16575.