Determination of Gynecologic Cancer Awareness and Attitudes Towards Screening in Women Aged 20–65

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Abstract

Aim: Gynecological cancers are among the top ten cancers in terms of mortality and incidence among women in our country. Enhancing awareness is crucial to reducing the morbidity and mortality of these cancers. Women with increased awareness are more likely to have positive attitudes towards cancer screenings and to undergo such tests, thereby lowering their risk. Study aims to assess gynecological cancer awareness, attitudes towards screenings, and influencing factors among women aged 20–65.

Material and methods: This descriptive and correlation study's population comprised 5,504 female patients in the gynecology and obstetrics, a sample of 272 patients was selected. Data were collected through a patient information form, a gynecological cancer awareness scale, and a cancer screening attitudes scale, and analyzed with SPSS.

Results: The participants had an average age of 29.00 ± 5.942. Of them, 94.5% were married, 96% had not received gynecological cancer education previously, and 90.1% had not undergone cancer screening before. Non-smokers and those who had received gynecologic cancer education before had statistically higher mean total scale scores (p<0,05). Those with higher education, employed individuals, regular exercisers, those who had previously received gynecological cancer education, and those who had previously undergone cancer screenings had statistically higher average scores on the cancer screening attitude scale (p<0,05).

Conclusion: It was found that women's attitudes toward cancer screenings and their awareness of gynecological cancers were above average. There was a statistically significant positive correlation between awareness and attitude. This result shows that women with increased awareness of gynaecological cancers also have positive attitudes towards cancer screening. Therefore, women should be educated on how to prevent gynaecological cancers through not smoking, education, employment and regular exercise.

Keywords: gynecological cancer awareness, women, attitudes towards cancer screenings.

Introduction

Cancer encompasses a variety of diseases characterized by uncontrolled cell growth, varying by bodily location and clinical presentation. As per the 2022 global cancer report by the International Agency for Research on Cancer (IARC) under the World Health Organization (WHO), an estimated 20 million new cancer diagnoses and 9.7 million fatalities occurred globally. Gynecological cancers make up about 15% of all cancer cases and 10% of cancer-related deaths, representing a substantial cause of illness and death in women, second only to breast cancer. Worldwide, the most prevalent cancers in women are breast, lung, colorectal, and cervical cancers; in Turkey, cervical cancer ranks among the top five [1]. Data from the 2020 "Turkey Cancer Statistics" report indicate that among the ten most common cancers in Turkish women are gynecological cancers, including cervical and ovarian cancers [2, 3]. Gynecological cancers are prominent in terms of both mortality and incidence, highlighting the necessity of heightened awareness and proactive screening attitudes to reduce their impact on women's health [4, 5].

In Turkey, national-level screenings are conducted for breast, colorectal, and cervical cancer types, as recommended by the WHO [6]. Among gynecological

cancers, cervical cancer, which is screened at the national level, is the fourth leading cause of death among women worldwide. In Turkey, cervical cancer screening is conducted using Human Papilloma Virus (HPV) and Pap smear tests. The WHO highlights that cervical cancer, despite being a significant risk, is a "preventable cause of death." Therefore, worldwide screening for cervical cancer is recommended [7–9]. Early diagnosis, awareness and taking preventive measures for gynecological cancers are of great importance in reducing mortality rates due to these cancers [10]. Low cancer awareness is a risk factor for late diagnosis, and therefore, women's awareness of gynecological cancers should be increased. Women with heightened awareness are more likely to have a positive attitude toward cancer screening tests and take preventive measures in a timely manner, thereby reducing the risk of cancer occurrence [11, 12].

For cancer screening programs to be effective, there is a need for societal awareness and a positive attitude toward cancer screenings. Continuously raising awareness through education and planning to foster positive attitudes and behaviors toward cancer screenings should be among the primary objectives for community-based screenings [13–15].

The unique aspect of this study is that, while previous research has separately examined gynecological cancer awareness and attitudes toward cancer screenings, no study has simultaneously assessed both aspects.

Based on these reasons, the aim of this research is to determine the gynecological cancer awareness and attitudes toward cancer screenings among women aged 20–65.

Research Questions
The research questions in our study were as follows:
1. What is the awareness of gynaecological cancer and attitudes towards screening among women aged 20-65?
2. What is the awareness of gynaecological cancer and attitudes towards screening among women aged 20-65 according to their socio-demographic characteristics?
3. Is there an association between cervical cancer awareness and attitudes towards screening among women aged 20-65?

Materials and Methods

Study Design and Sample
This research was designed as descriptive and correlational.

Study Location and Duration
The study took place from May 2024 to July 2024 in the gynecology and obstetrics department of a teaching and research hospital in a provincial center.

Study Population and Sample
The study population included female patients admitted to the gynecology and obstetrics department of the specified hospital (N=5504). In determining the sample, 95% confidence interval was used. The sample size was calculated using the formula for a known population, and the stratified random sampling method, specifically "Neyman Allocation," was utilized. This resulted in a final sample of 272 patients.

Women were included in the study if they voluntarily consented, were hospitalized in the gynecology and obstetrics unit, were married, aged between 20 and 65, were at least literate, had no gynecological cancer diagnosis, and had no cognitive, visual, or orthopedic limitations that would hinder completion of the data collection forms.

Data Collection Instruments
Data were gathered using the "Patient Information Form," the "Gynecological Cancer Awareness Scale" (GCAS), and the "Attitude Towards Cancer Screenings Scale".

Patient Information Form
This form, crafted by the researchers with reference to existing literature [11,13,16-18], consists of 14 questions that capture sociodemographic data (age, marital status, residence, education level, occupation, income, exercise habits) and health-related details (smoking and alcohol use, history of cancer diagnosis, and family history of cancer).

Gynecological Cancer Awareness Scale (GCAS)
Developed by Dal and Ertem, this scale measures gynecological cancer awareness among married women aged 20-65 [17]. The scale's Turkish version was validated and found reliable by the original authors. Comprising 41 items across four subscales, it utilizes a five-point Likert scale, with scores ranging from 41 to 205. Items 20-41 of the GCAS constitute the sub-dimension of 'Awareness of Routine Control and Serious Disease Perception in Gynaecological Cancers'; items 3-11 constitute the sub-dimension of 'Awareness of Gynaecological Cancer Risks'; items 14-19 constitute the sub-dimension of 'Awareness of Gynaecological Cancer Prevention'; and items 1-2, 12-13 constitute the sub-dimension of 'Awareness of Early Diagnosis and Information in Gynaecological Cancers'. Higher scores reflect greater awareness levels. The scale's Cronbach's alpha was calculated at 0.944, while in this study, it was found to be 0.845.

Attitude Towards Cancer Screenings Scale
This scale was created by Yıldırım Öztürk and colleagues [18], with validation and reliability confirmed in Turkish by the original team. The scale contains 24 items in a single dimension, also using a five-point Likert scale, yielding scores from 24 to 120. Scores closer to 24 suggest a negative attitude toward cancer screenings, whereas scores nearer to 120 indicate a positive outlook. Its Cronbach's alpha was calculated at 0.957, and in this study, it was found to be 0.953.

Data Collection
The researcher administered the forms face-to-face, explaining the study's objectives and detailing the forms. Each session lasted about 20 minutes per participant.

Data Analysis
Data analysis was performed using IBM SPSS Statistics 23. The normality of the data distribution was examined, and parametric tests were employed accordingly. The conformity of the data to a normal distribution was assessed on the basis of skewness and kurtosis values. The presence of skewness and kurtosis values within certain limits indicates that the data follow a normal distribution. In this context, the ranges of -1.5 to +1.5 suggested by Tabachnick and Fidell (2007) are commonly used reference intervals. In this study, these criteria were also used to assess the normal distribution. Frequency distributions were used for categorical variables, and descriptive statistics (mean, standard deviation, minimum, and maximum) were calculated for numerical variables. To assess differences in two-category variables, the "independent t-test" was applied, while "one-way analysis of variance" (ANOVA) was used for variables with more than two categories. Homogeneity of variances was checked with Levene's test, and post-hoc tests (Bonferroni or Tamhane's T2) were applied to explore group differences. Pearson correlation

analysis assessed relationships between numerical variables, and reliability of the scales was evaluated using Cronbach's alpha.

Ethical Considerations

Institutional approval was obtained from the training and research hospital before the study commenced. Ethical approval was also secured from the affiliated university's Non-Interventional Clinical Research Ethics Committee (24.05.2024-E-71522473-050.04-364032-145). Permissions were granted by the original authors for the scales used in data collection. Participants were informed about the study's aims, assured of data confidentiality, and provided with an "Informed Voluntary Consent Form" to document their consent. The research adhered to ethical principles, including "Informed Voluntary Consent, Confidentiality, Respect for Privacy and Autonomy," and followed the Declaration of Helsinki.

Results

The participants' mean age was 29.00±5.942. Findings revealed that 94.5% were married, 79.4% were housewives, 58.5% did not exercise regularly, 96% had no prior education on gynecological cancers, and 90.1% had not undergone cancer screenings (Table 1).

Table 1	Distribution of Sociodemographic Characteristics of Women (n=272)		
Variables		**Min.-Max.**	**Mean.±SD**
Age (years)		20-51	29.00±5.942
		n	**%**
Marital status	Married	257	94,5
	Single	15	5,5
Place of residence	Village	53	19,5
	Town	108	39,7
	County	111	40,8
Educational background	Illiterate	6	2,2
	Primary	28	10,3
	Secondary	145	53,3
	Higher education	70	25,7
	Graduate	23	8,5
Employment status	Civil servant	15	5,5
	Worker	22	8,1
	Retired	3	1,1
	Housewife	216	79,4
	Unemployed	4	1,5
	Other	12	4,4
Exercise regularly	Doing	113	41,5
	It doesn't	159	58,5
Income level	Income is lower than expense	63	23,2
	Income equals expense	169	62,1
	Income is higher than expense	40	14,7
Alcohol	Using	3	1,1
	Doesn't use	269	98,9
Cigarette	Using	49	18,0
	Doesn't use	223	82,0
The presence of cancer	Yes	2	0,7
	No	270	99,3
Presence of cancer in the family or environment	Yes	105	38,6
	No	167	61,4
Previous gynecological cancer education	Yes	11	4,0
	No	261	96,0
Previous cancer screening	Yes	27	9,9
	No	245	90,1
Total		272	100

*Participants selected more than one option

The Cronbach's alpha value for the Attitude Towards Cancer Screenings Scale was calculated as 0.845, with a mean score of 93.18±15.151. For the Gynecological Cancer Awareness Scale (GCAS), the Cronbach's alpha values and mean scores for each subscale were as follows: the "Awareness of Routine Check-ups and Perception of Serious Illness in Gynecological Cancers" subscale had a mean score of 80.92±17.266; "Awareness of Gynecological Cancer Risks" scored 26.31±5.984; "Awareness of Prevention in Gynecological Cancers" scored 20.33±5.276; and "Awareness of Early Diagnosis and Knowledge in Gynecological Cancers" scored 14.99±4.191. The total scale mean was 142.56±26.912 (Table 2).

The mean scores of the Attitude Towards Cancer Screenings Scale were compared based on the participants' sociodemographic characteristics. The analysis revealed that the mean scores of those with higher education (undergraduate and graduate degrees), those who were employed, those who exercised regularly, those who had previously received gynecological cancer education, and those who had undergone cancer screenings were statistically significantly higher ($p<0.05$) (Table 3).

The Gynecological Cancer Awareness Scale (GCAS) mean scores were compared across participants' sociodemographic factors. Analysis indicated that non-smokers scored significantly higher in the subscales "awareness of prevention in gynecological cancers" and "awareness of early diagnosis and knowledge in gynecological cancers," as well as in the overall scale score, compared to smokers ($p<0.05$). Likewise, women who had prior education on gynecological cancers scored significantly higher in the subscales "awareness of routine check-ups and perception of serious illness in gynecological cancers," "awareness of prevention in gynecological cancers," and "awareness of early diagnosis and knowledge in gynecological cancers," along with the total scale score, compared to those without such education ($p<0.05$).

Prior cancer screening was also a significant factor. Women who had undergone cancer screenings had significantly higher scores across all GCAS subscales and the total scale score compared to those who had not ($p<0.05$) (Table 4).

The relationship between the scales was analyzed, revealing a statistically significant positive correlation between the Attitude Towards Cancer Screenings Scale and the Gynecological Cancer Awareness Scale (GCAS), including its subscale and overall scores (Table 5).

Discussion

In this study, which assessed gynecological cancer awareness and attitudes toward cancer screenings among women hospitalized in the obstetrics and gynecology departments of a provincial training and research hospital, the mean Gynecological Cancer Awareness Scale (GCAS) score was 142.56±26.912 (As the score approaches 120, it reflects a positive attitude towards cancer screenings. Therefore, participants' attitudes towards cancer screenings were found to be positive) and the Attitude Towards Cancer Screenings Scale mean score was 93.18±15.151 (Since higher scores on the scale indicate greater awareness, participants' overall gynecological cancer awareness was above average) (Table 2). Given that the possible GCAS scores range from 41 to 205 and Attitude Towards Cancer Screenings scores range from 24 to 120, the participants demonstrated above-average awareness of gynecological cancers and positive attitudes toward cancer screenings.

The literature supports these findings. Gözüyeşil et al. (2020) observed similar results among women registered at a

Table 2   The Descriptive Statistics of the Scales

Scale	Bottom dimension	Cronbach's alfa	Min-Max	Mean±SD
Attitude Scale Towards Cancer Screening		0,845	24-120	93.18±15.151
Gynecologic Cancers Awareness Scale	1st Sub-Dimension: Routine control and awareness of serious disease perception in gynecologic cancers	0,957	22-110	80.92±17.266
	Sub-Dimension 2: Awareness of gynecological cancer risks	0,835	9-45	26.31±5.984
	3rd Sub-Dimension: Awareness of prevention of gynecological cancers	0,805	6-30	20,33±5,276
	Sub-Dimension 4: Early diagnosis and information awareness in gynecologic cancers	0,853	4-20	14.99±4.191
	Total	0,953	41-205	142,56±26,912

Table 3   Comparison of mean scores of the Attitude Scale towards Cancer Screening according to sociodemographic characteristics

Variable		n	Mean	SD	t/F	p
Marital status	Married	257	93,33	15,253	0,694	0,488
	Single	15	90,53	13,479		
Place of residence	Village	53	92,57	16,402	0,353	0,703
	Town	108	94,13	14,184		
	County	111	92,54	15,530		
Educational background	Primary+illiterate	34	90,26	14,714	4,940	**0,008***
	Secondary	145	91,34	14,764		
	Higher education+graduate	93	97,10	15,278		
Employment status	Working	49	98,71	15,028	2,863	**0,005***
	Not working	223	91,96	14,938		
Exercise regularly	Doing	113	95,76	14,396	2,392	**0,017***
	It doesn't	159	91,34	15,448		
Income level	Income is lower than expense	63	91,92	15,597	0,316	0,729
	Income equals expense	169	93,69	14,428		
	Income is higher than expense	40	92,98	17,548		
Alcohol	Using	3	102,67	6,429	1,091	0,276
	Doesn't use	269	93,07	15,192		
Cigarette	Using	49	89,78	15,594	-1,742	0,083
	Doesn't use	223	93,92	14,985		
The presence of cancer	Yes	2	98,50	19,092	0,498	0,619
	No	270	93,14	15,156		
Presence of cancer in the family or environment	Yes	105	93,35	15,507	0,152	0,880
	No	167	93,07	14,970		
Previous gynecological cancer education	Yes	11	105,64	11,066	3,748	**0,003***
	No	261	92,65	15,090		
Previous cancer screening	Yes	27	101,26	12,439	2,962	**0,003***
	No	245	92,29	15,181		

Table 5   Correlation between scales

Parameters			Attitude Scale Towards Cancer Screenings	GCAS				
				Sub-Dimension 1	Sub-Dimension 2	Sub-Dimension 3	Sub Dimension 4	Sum
Attitude Scale Towards Cancer Screenings		r	1	,344*	,169*	,252*	,305*	,356*
		p		,001	0,005	,001	,001	,001
GCAS	Sub-Dimension 1	r		1	,311*	,656*	,671*	,944*
		p			,001	,001	,001	,001
	Sub-Dimension 2	r			1	,302*	,312*	,529*
		p				,001	,001	,001
	Sub-Dimension 3	r				1	,665*	,787*
		p					,001	,001
	Sub Dimension 4	r						,786*
		p						,001
*p<0.05	Total	r						1
		p						

| Table 4 | | Comparison of Gynecological Cancer Awareness Scale score and sub-dimension score averages according to sociodemographic characteristics |

Variables		n	Gynecologic Cancers Awareness Scale									
			Sub-Dimension 1		Sub-Dimension 2		Sub-Dimension 3		Sub Dimension 4		Sum	
			Place.	SD	Place.	SD	Place.	SD	Place.	SD	Place.	SD
Marital status	Married	257	**81,20**	17,183	**26,45**	5,921	**20,46**	5,277	**15,05**	4,120	**143,15**	26,673
	Single	15	76,20	18,621	24,00	6,772	18,13	4,912	14,07	5,351	132,40	29,890
t/p			1,090/0,277		1,544/0,124		1,665/0,097		0,880/0,380		1,508/0,133	
Place of residence	To the village	53	79,66	17,967	28,17	5,320	19,89	5,105	14,70	3,714	142,42	24,401
	Town	108	80,35	15,369	25,62	5,853	20,45	4,992	14,96	3,924	141,39	24,376
	District	111	82,08	18,700	26,10	6,271	20,42	5,648	15,16	4,658	143,77	30,366
t/p			0,213/0,808		0,223/0,800		0,233/0,793		3,406/0,035*		0,449/0,639	
Difference									a<b			
Educational background	Primary education+illiterate	34	77,03	19,847	26,44	6,421	19,32	4,903	14,32	3,983	137,12	30,430
	Secondary educationb	145	**81,97**	15,047	26,01	5,718	20,32	4,918	14,88	3,841	143,19	23,715
	Higher education+graduatec	93	80,71	19,368	**26,73**	6,259	**20,72**	5,915	**15,41**	4,753	**143,57**	30,140
F/p			1,141/0,321		0,414/0,661		0,873/0,419		0,941/0,392		0,799/0,451	
Employment status	Running	49	**81,43**	21,534	**27,73**	6,197	**20,84**	6,209	**15,88**	5,247	**145,88**	32,194
	Nonoperating	223	80,81	16,236	26,00	5,904	20,22	5,057	14,80	3,909	141,83	25,633
t/p			0,226/0,821		1,846/0,066		0,741/0,460		1,637/0,103		0,953/0,341	
Exercise regularly	Doing	113	**82,34**	17,465	**26,36**	5,435	**21,05**	5,158	**15,49**	4,147	**145,24**	26,537
	It doesn't	159	79,92	17,108	26,28	6,361	19,82	5,315	14,64	4,200	140,65	27,098
t/p			1,139/0,256		0,117/0,907		1,912/0,057		1,644/0,101		1,387/0,167	
Income level	Income is lower than expense	63	82,05	16,376	26,56	5,769	19,75	5,013	14,89	3,806	143,24	25,343
	Income equals expense	169	81,41	16,458	26,17	5,887	20,51	5,218	15,22	4,204	143,30	25,648
	Income is higher than expense	40	77,10	21,458	26,55	6,809	20,50	5,957	14,20	4,692	138,35	34,010
F/p			1,182/0,308		0,134/0,875		0,502/0,606		0,981/,376		0,572/0,565	
Alcohol	Using	3	82,67	22,301	26,33	6,110	21,33	6,110	14,67	1,155	145,00	35,553
	Doesn't use	269	80,90	17,255	26,31	5,994	20,32	5,278	15,00	4,213	142,53	26,886
t/p			0,176/0,861		0,006/0,995		0,330/0,741		-0,135/0,893		0,158/0,875	
Cigarette	Using	49	77,20	18,576	25,02	5,750	17,78	4,870	13,35	4,381	133,35	27,449
	Doesn't use	223	**81,74**	16,900	**26,60**	6,009	**20,89**	5,205	**15,35**	4,070	**144,58**	26,427
t/p			-1,671/0,096		-1,675/0,095		-3,838/0,001*		-3,083/0,002*		-2,676/0,008*	
The presence of cancer	Yes	2	**105,00**	2,828	**30,00**	1,414	**24,50**	0,707	**20,00**	0,000	**179,50**	4,950
	No	270	80,74	17,204	26,29	5,997	20,30	5,283	14,96	4,184	142,29	26,821
t/p			1,990/0,048*		0,874/0,383		1,122/0,263		1,702/0,090		1,959/0,051	
Presence of cancer in the family or environment	Yes	105	**81,59**	15,935	**27,12**	5,513	**20,44**	4,622	**15,38**	4,063	**144,53**	23,498
	No	167	80,50	18,088	25,80	6,223	20,26	5,661	14,75	4,263	141,32	28,852
t/p			0,505/0,614		1,780/0,076		0,278/0,781		1,213/0,226		0,959/0,338	
Previous gynecological cancer education	Yes	11	**92,91**	17,260	**29,27**	9,034	**24,45**	4,698	**17,64**	3,107	**164,27**	28,513
	No	261	80,42	17,116	26,19	5,813	20,16	5,236	14,88	4,199	141,64	26,511
t/p	Yes		**2,370/0,018***		1,681/0,094		**2,676/0,008***		**2,150/0,032***		**2,765/0,006***	
Previous cancer screening	No	27	**85,81**	14,537	**29,11**	6,589	**20,78**	5,079	**16,33**	4,715	**152,04**	21,887
	Yes	245	80,38	17,483	26,00	5,846	20,28	5,305	14,84	4,113	141,51	27,246
t/p			1,555/0,121		**2,588/0,010***		0,463/0,644		1,758/0,080		1,938/0,054	

Sub-Dimension 1 = "Awareness of routine control and serious disease perception in gynecologic cancers", Sub-Dimension 2 = "Awareness of gynecological cancer risks", Sub-Dimension 3 = "Awareness of prevention of gynecological cancers", Sub-Dimension 4 = "Early diagnosis and information awareness in gynecological cancers"
*t=Independent sample t-test, F=Oneway ANOVA, *=p<0.05*

family health center, reporting above-average gynecological cancer awareness [16]. Tekbaş (2023) found moderate awareness among postmenopausal women aged 45-50 [19], while Şenol et al. (2021) reported higher awareness levels among reproductive-age women than among postmenopausal women [20]. The present study also suggests that high awareness among participants could relate to their predominantly reproductive-age status. Similarly, Atlas et al. (2022) found slightly above-average awareness scores in a sample of 400 women attending a regional training hospital, observing that factors such as age, education, occupation, family structure, residence, and alcohol use influenced awareness levels [21]. In contrast, this study found no significant effect of marital status, education level, employment, regular exercise, income, alcohol use, or personal/family cancer diagnosis on awareness.

However, non-smoking, prior gynecological cancer education, and undergoing cancer screenings were associated with significantly higher awareness levels (p<0.05). Prior education on gynecological cancers has been shown to increase screening awareness; Al-Amro et al. (2020) also found that education increased the likelihood of cervical cancer screening [22]. The limited availability of screening tests for gynecological cancers outside of cervical cancer emphasizes the need to raise awareness about early detection and treatment [23]. Promoting awareness will encourage healthy habits, increase interest in educational resources, and support participation in appropriate age-related screening tests.

When participants' screening attitudes were analyzed by sociodemographic characteristics (Table 3), women with higher education levels (undergraduate or graduate), those employed, those who exercised regularly, and those who had undergone prior gynecological cancer education or screening showed both statistically significant (p<0.05) and higher mean scores, reflecting more positive attitudes. A higher education level was linked to a more positive attitude toward cancer screenings, consistent with other studies indicating that both higher education (at least a bachelor's degree) and specific cancer education positively influence awareness and attitudes [16, 17, 24]. Studies frequently show that higher education correlates with positive screening attitudes [15, 25–27]. In line with these findings, Chali et al. (2021) observed that those with low or no literacy had less positive attitudes and lower screening participation [28]. Some research, however, suggests that education level does not significantly impact attitudes toward screenings [29, 30].

These findings indicate that individuals with higher education levels approach screening with greater awareness, demonstrating positive attitudes and a better understanding of early cancer diagnosis's importance as education increases. Studies show that individuals with higher physical activity levels are more likely to participate in various cancer screenings [31]. In this study, women who exercised regularly also showed more positive screening attitudes, with significant results (p<0.05). While some studies confirm that exercise positively affects attitudes and awareness of cancer [32], others suggest no significant impact of regular exercise on screening attitudes [18].

A significant association was also found between women's screening attitudes and their screening history (p<0.05). Among the participants, 27 had undergone cancer screening, while 245 had not. Those with a screening history scored higher (101.26±12.43) compared to those without (92.29±15.18) (Table 3). Although most participants (n=245) had not been screened, they generally had positive attitudes toward screenings. Common reasons for not undergoing screenings included fear, lack of information on screening locations, insufficient knowledge, and perceived irrelevance due to a mean participant age of 29.00±5.942. Koç et al. (2023) reported a positive correlation between attitudes towards cervical cancer screening and willingness to receive the HPV vaccine, suggesting that positive attitudes promote healthy lifestyle behaviors [33]. The correlation analysis also demonstrated a positive association between the Attitude Towards Cancer Screening Scale and the GCAS, including all subscale scores (p<0.05) (Table 5). Thus, women with greater awareness of gynecological cancers tend to have more favorable screening attitudes. Positive attitudes toward screenings are crucial for early diagnosis and treatment, emphasizing the importance of healthcare providers reaching target groups and promoting active participation in screenings. Accurate, reliable information can enhance women's awareness, foster positive attitudes, and increase screening participation.

This study's findings show that education, regular exercise, prior information, and screening history positively impact gynecological cancer awareness and screening attitudes. Actively planned early diagnosis and screening programs, community-wide engagement, and timely healthcare referrals are vital to reducing cancer incidence and mortality. Addressing the community's information needs and providing reliable, comprehensive information on early cancer screening programs through healthcare providers can positively impact women's awareness and attitudes toward early gynecological cancer detection and treatment.

Limitations of the Study

This study has certain limitations. Conducted in a single center, its findings are not generalizable to the wider population. Future research could involve larger sample sizes and multiple centers for broader applicability.

Conclusion

Participants exhibited positive attitudes toward cancer screenings and above-average awareness of gynecological cancers. Higher scores in attitudes were associated with higher education, employment, regular exercise, previous gynecological cancer education, and past cancer screenings. Additionally, non-smoking and prior education on gynecological cancers were linked to increased awareness of cancer prevention, early diagnosis, and knowledge. Participants who had undergone cancer screenings displayed a greater awareness of gynecological cancer risks, and a statistically significant positive correlation was identified between attitudes and awareness.

Educational programs should aim to increase women's knowledge of risk factors, symptoms, and screening tests for gynecological cancers. These programs should be accessible and easy to understand, aligned with women's health needs and literacy levels, and conducted regularly. Furthermore, integrating technology, such as artificial intelligence and mobile applications, into these educational efforts can enhance remote learning, supporting improved awareness and attitudes.

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