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Gynecological cancer awareness and socio-demographic determinants among female academic physicians: a cross-sectional study

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ABSTRACT

Aims: Gynecological cancers are among the most common malignancies in women, and awareness, early diagnosis, and prevention are essential to reducing morbidity and mortality. While studies largely focus on the general population, little is known about awareness among female academic physicians who serve as both clinicians and educators. This study evaluated gynecological cancer awareness among female academic physicians at Necmettin Erbakan University Training and Research Hospital and examined differences by socio-demographic and professional factors.

Methods: A descriptive, cross-sectional study was conducted between July 12 and August 1, 2025. Data were collected online using a Personal Information Form and the 41-item Gynecological Cancers Awareness Scale (GCAS). Of 110 distributed forms, 76 were complete and eligible. Data were analyzed using SPSS 25.0 with descriptive statistics, t-test, and ANOVA. Tukey's post-hoc test identified group differences. Statistical significance was set at p<0.05.

Results: The mean age of participants was 48.87 ± 8.00 years; 75.0% were married, 44.7% were professors, and 53.9% had prior education on gynecological cancers. The mean GCAS total score was 121.79 ± 13.80 , indicating moderate-to-high awareness. Awareness was significantly associated with being younger (35-44 years), holding an assistant professorship, having 1-5 years of academic experience, as well as reporting a family history, prior education, or regular screening habits (p<0.05). No significant differences were observed by marital or childbearing status (p>0.05).

Conclusion: Gynecological cancer awareness among female academic physicians is moderate but uneven across groups. Educational interventions, continuing professional development, and encouragement of regular screenings are needed to strengthen awareness in this cohort, which could enhance both personal preventive practices and community health advocacy.

Keywords: Gynecological cancer, awareness, female physicians, academic staff, prevention

INTRODUCTION

Gynecological cancers rank among the most frequent cancers affecting female patients and continue to pose significant challenges to public health on a global scale. The reduction of mortality and morbidity associated with these cancers hinges on the early diagnosis, prevention, and awareness of these malignancies. Different studies done on different populations indicate that awareness levels of gynecological cancers is inadequate, and risk factors, symptoms, and preventive measures are poorly understood by women. The lack of understanding coupled with inadequate knowledge is likely to result in a multitude of negative health outcomes, including seeking attention early; late diagnosis (both in the patient's health and in the healthcare system); and poor prognosis. There is a strong body of evidence documenting the lack of help-seeking behavior and healthcare professional absences

as being among the most significant reasons for delays in the diagnosis.⁴

The literature has further noted that awareness levels are facilitated by multiple determinants, such as a person's age, education, marital status, and even health literacy, self-care agency, and family history of cancer. The While Turkiye and other countries have studied women in the general population, fewer have focused on healthcare professionals, including specialists and general practitioners. It is assumed that female physicians, especially in the primary care, have better awareness; however, even among professionals, awareness is often much more personal and professional experience dependent, which may negate the assumption. Furthermore, academic physicians have a unique role in which their clinical practice integrates teaching, and as such, they tend

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to practice much of what they teach, extending the influence beyond their personal health to their patients, students, and the community. That said, there is a scarcity of literature on female academic physicians that specifically looks into their awareness of the risk factors of gynecological cancers, which is a significant gap in research.^{2,8,9}

This study aimed to assess the knowledge of gynecological cancers among the female academic physicians in the Training and Research Hospital of Necmettin Erbakan University, as well as to explore whether socio-demographic characteristics influenced awareness levels. Using a cross-sectional descriptive approach, the study aimed to evaluate awareness in-depth with the previously validated instrument, the Gynecological Cancers Awareness Scale (GCAS). This study also analyzed the impact of the following variables on awareness levels: age, academic title, years of professional experience, prior education in gynecological cancers, family cancer history, and cancer screening behaviors.

The significance of this study stems from its attention to a cohort that is occupationally savvy and socially significant. Unlike broader population studies conducted on women, 2,8,9 this study focused on women academic physicians, who can aspire to be health advocates. Understanding the awareness gaps in this group is important from the perspective of professional awareness and also creates windows of opportunity to strengthen educational and institutional awareness programs. The findings from this study can help design specific awareness raising initiatives that promote preventive health behaviors among the physicians themselves, and in turn, elevate community awareness through their professional and social influence. As such, the study not only responded to a critical gap in literature, but also has the $potential \ to \ impact \ individual \ behaviors \ and \ population \ health.$ Female academic physicians warrant focused examination because they simultaneously function as clinicians, educators, and opinion leaders within healthcare institutions. Their awareness has multiplier effects-informing their personal preventive behaviors, shaping trainees' practices through formal teaching and mentorship, and influencing patient and community attitudes via advocacy. Accordingly, mapping awareness in this group offers actionable targets for institutional continuing professional development (CPD).

METHODS

Ethics

The research was conducted in accordance with the principles of the Declaration of Helsinki. The study protocol was reviewed and approved by the Non-interventional Researches Ethics Committee of Necmettin Erbakan University, Faculty of Medicine (Date: 11.07.2025, Decision No: 2025/5918). Before participation, informed consent was obtained electronically from all female physicians via an online consent form.

Study Design

This research was conducted within the scope of a quantitative research approach, adopting a descriptive and cross-sectional design. Cross-sectional studies are quantitative research designs that allow the description of the current situation

within a sample selected from the population at a specific point in time.^{10,11} Descriptive studies, on the other hand, systematically examine a phenomenon or condition and serve to reveal the existing circumstances.¹²

Population and Sample

The study population consisted of female physicians working at Necmettin Erbakan University Training and Research Hospital. A total of 110 scale forms were initially collected during the data collection process. However, after excluding incomplete or incorrectly filled forms, 76 forms were deemed suitable for analysis. Since the study aimed to reach the entire population, no sampling method was employed. Participation in the study was based on voluntariness, and only those who agreed to participate, had no communication problems, and completed the data collection tool in full were included in the study.

Data Collection Tools

The study data were collected using a "Personal Information Form" and the "GCAS."

- Personal Information Form: This form was prepared by the researchers in line with the literature and consisted of 24 items. It included questions to determine the sociodemographic characteristics of the participants (age, marital status, academic title, etc.), professional experiences, and their knowledge and attitudes related to gynecological cancers
- Gynecological Cancers Awareness Scale (GCAS):

 Developed by Dal and Ertem in 2017 to evaluate the awareness of gynecological cancers among women aged 20–65, the scale consists of 41 items organized on a 5-point Likert scale (1=strongly disagree, 5=Strongly agree) and is divided into four sub-dimensions: "awareness of gynecological cancer risks," "awareness of early diagnosis and knowledge," "awareness of protection from gynecological cancers," and "awareness of routine control and serious disease perception." The total score ranges between 41 and 205, with higher scores indicating greater awareness. In the original study, the Cronbach's alpha coefficient was reported as 0.94, while in the present study, it was calculated as 0.86.

Data Collection Procedure

Data collection was carried out between July 12 and August 1, 2025, through an online survey created via Google Forms. At the beginning of the form, participants were provided with information about the purpose and scope of the study, and only those who approved the online informed consent form were included. Both the Personal Information Form and GCAS were embedded within the online questionnaire, and participants were asked to complete the scale through self-reporting.

Statistical Analysis

The data obtained from the study were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows version 25.0. Descriptive statistics such as frequency, percentage, mean, and standard deviation were calculated. The normality of data distribution was assessed using skewness and kurtosis coefficients. Values between ±1.5 were considered indicative of normal distribution. Accordingly, parametric tests, including the Independent Samples t-test and one-way analysis of variance (ANOVA), were used for comparative analyses. Tukey's post-hoc test was applied to determine the source of significant differences. A p-value of <0.05 was considered statistically significant. Given the exploratory nature of this single-center study, no formal correction for multiple comparisons was applied; findings should be interpreted cautiously with respect to type I error. To enhance transparency, we report exact p-values and effect sizes alongside group comparisons.

RESULTS

Table 1 presents the detailed socio-demographic characteristics of the participants. These findings provide a basic framework for interpreting the data by revealing the demographic structure of the study group.

Table 1. Socio-demographic characteristics of the participants					
Mean age (X±SD)			48.87± 8.00		
Demographic variables		n	%		
	35-44 years	29	38.2		
Age	45-54 years	29	38.2		
	55-65 years	18	23.7		
Marital status	Single	19	25.0		
Marital status	Married	57	75.0		
Akademic title	Assistant professor	15	19.7		
	Associate professor	27	35.5		
	Professor	34	44.7		
	1-5 years	12	15.8		
Years of academic experience	6-10 years	29	38.2		
	11 years and above	35	46.1		
	Yes	41	53.9		
Training on gynecological cancers	No	35	46.1		
	Yes	13	17.1		
Family history of gynecological cancer	No	63	82.9		
	Yes	21	27.6		
Perceived awareness of gynecological cancer	No	19	25.0		
Carreer	Partly	36	47.4		
Having children	Yes	50	65.8		
	No	26	34.2		
Gynecological screening habits	Regular	24	31.6		
	Irregular	52	68.4		
SD: Standard deviation					

When **Table 1** is examined, it is seen that the mean age of the academicians participating in the study was 48.87±8.00. Regarding age distribution, 38.2% of the participants were in the 35–44 age group, 38.2% were in the 45–54 age group, and 23.7% were in the 55–65 age group. This shows that participation was provided from different age groups and that the sample was concentrated in the middle age group.

In terms of marital status, 75.0% of the participants were married, while 25.0% were single. The distribution of academic titles revealed that 19.7% were assistant professors, 35.5% were associate professors, and 44.7% were full professors. This finding indicates that the sample exhibited a balanced distribution in terms of academic seniority.

When the duration of work as an academician was examined, 15.8% had 1–5 years, 38.2% had 6–10 years, and 46.1% had 11 years or more of professional experience. This distribution demonstrates that a significant proportion of the participants had long-term professional experience.

Regarding education on gynecological cancers, 53.9% of the participants had received education, while 46.1% had not. Evaluation of family history showed that only 17.1% of the participants reported a family history of gynecological cancer, whereas 82.9% did not.

In terms of perceived awareness, 27.6% of the participants stated that they felt aware, 25.0% felt unaware, and 47.4% felt partially aware. This finding indicates that a considerable proportion of participants did not consider their awareness of gynecological cancers sufficient.

With respect to having children, 65.8% of the participants had children, while 34.2% did not. Considering gynecological screening habits, 31.6% reported undergoing regular screenings, whereas 68.4% had irregular screening habits. This finding suggests that screening practices remained at a low level and that there is a need for awareness-raising activities on this issue.

The minimum, maximum, mean, and standard deviation values of the participants' total and sub-dimension scores on the GCAS are presented in **Table 2**.

Table 2. Mean and standard deviation dimension scores	on values of GCAS	total and sub-
Variables	Min-max values	<u>X</u> ±SD
Awareness of routine control and serious disease perception	43-66	60.16±6.05
Awareness of risk	18-30	25.54±3.06
Awareness of protection	13-27	21.74±4.56
Awareness of early diagnosis and knowledge	7-18	14.35±2.43
Total	85-137	121.79±13.80
Min: Minimum, Max: Maximum, SD: Standard devi	iation	

When **Table 2** is examined, it is observed that the scores in the "Awareness of routine control and serious disease perception" sub-dimension ranged between 43 and 66, with a mean of 60.16 (SD=6.05). In the "awareness of risk" sub-dimension, values ranged between 18 and 30, with a mean of 25.54 (SD=3.06). In the "awareness of protection" sub-dimension, scores ranged between 13 and 27, with a mean of 21.74 (SD=4.56). In the "awareness of early diagnosis and knowledge" sub-dimension, values ranged between 7 and 18, with a mean of 14.35 (SD=2.43). For the total scale, scores ranged between 85 and 137, with a mean of 121.79 (SD=13.80).

When **Table 3** is examined, significant differences were observed in terms of age. Participants in the 35–44 age group had higher mean scores in both the total scale and all subdimensions compared to other age groups, indicating that their awareness levels were higher (p<0.05). This finding suggests that younger academicians had stronger awareness

and consciousness regarding gynecological cancers and gave greater importance to early diagnosis, risk perception, and preventive behaviors. On the other hand, lower awareness levels among participants aged 45 and over indicate that interest and knowledge regarding the subject decreased with age.

Variables	Awareness of routine control and serious disease perception	Awareness of risk	Awareness of protection	Awareness of early diagnosis and knowledge	Total scale
Age					
35-44 years	63.66±3.03	27.24±1.74	24.27±2.97	15.65±1.85	130.82±6.05
45-54 years	58.79±5.75	24.79±3.03	20.03±4.46	13.47±2.48	117.10±13.1
55–65 years	56.71±7.42	24.00±3.54	20.38±5.13	13.66±2.35	114.77±16.3
f value	10.697	9.341	8.847	7.999	13.683
p value	.000*	.000*	.000*	.001*	.000*
Between-group comparison	1>2.3	1>2.3	1>2.3	1>2.3	1>2.3
Marital status					
Single	60.52±5.59	25.73±2.64	21.68±4.59	13.62±2.52	121.57±12.6
Married	60.036.23	25.47±3.20	21.75±4.58	14.59±2.37	121.85±14.2
t value	.306	.323	058	-1.518	077
p value	.761	.748	.954	.133	.939
Akademic title					
Assistant professor	64.13±2.26	27.73±1.48	24.93±1.70	15.53±2.06	132.33±4.87
Associate professor	59.03±6.57	24.81±3.22	20.14±4.86	14.36±2.63	118.36±14.2
Professor	59.29±6.15	25.14±3.05	21.58±4.53	13.82±2.28	119.85±14.0
f value	4.423	5.488	6.076	2.687	6.336
p value	.015*	.006*	.004*	.075	.003*
Between-group comparison	1>2.3	1>2.3	1>2.3	-	1>2.3
Years of academic experience	2				
1-5 years	65.08±1.16	28.16±1.40	24.83±1.58	15.83±2.85	133.91±4.4
6-10 years	59.34±6.26	25.10±3.06	20.89±4.71	14.75±2.30	120.10±14.0
11 years and above	59.14±6.14	25.00±3.05	21.37±4.74	13.51±2.09	119.02±13.7
f value	5.277	5.970	3.613	5.254	6.348
p value	.007*	.004*	.032*	.007*	.003*
Between-group comparison	1>2.3	1>2.3	1>2	1>3	1>2.3
Education on gynecological	cancers				
Yes	62.48±3.92	26.68±2.24	23.04±3.91	15.00±2.32	127.21±9.3
No	57.42±6.95	24.20±3.35	20.20±4.81	13.59±2.36	115.42±15.4
t value	3.980	3.839	2.842	2.600	4.085
p value	.000*	.000*	.006*	.011**	.000*
- Family history of gynecologi	cal cancer				
Yes	64.68±1.20	28.00±1.35	25.46±.96	16.23±1.23	134.37±3.09
No	59.22±6.22	25.03±3.06	20.96±4.62	13.96±2.44	119.18±13.7
t value	3.134	3.405	3.467	3.243	3.950
p value	.002*	.001*	.001*	.002*	.000*
Perceived awareness of gyneo	cological cancer				
Aware	63.52±2.78	27.00±2.04	24.28±2.77	15.38±2.45	130.19±5.3
Unaware	59.78±5.54	25.47±3.02	20.36±4.36	13.68±2.31	119.31±13.3
Partly aware	58.38±6.93	24.72±3.30	20.97±4.97	14.10±2.35	118.18±15.5
f value	5.398	3.981	5.167	2.916	6.172
p value	.007*	.023*	.008*	.060	.003*

Table 3. Mean scores of GCAS tot continues)	tal and sub-dimensions by p	participants' socio-demog	raphic characteristics w	vith t-test and ANOVA resu	lts (n=76) (The table
Between-group comparison	1>3	1>2	1>2.3	-	1>2.3
Childbearing status					
Yes	60.46±5.88	25.64±3.06	21.92±4.54	14.52±2.47	122.54±13.64
No	59.57±6.43	25.34±3.09	21.38±4.63	14.03±2.36	120.33 ± 14.24
t value	.604	.395	.484	.823	.657
p value	.548	.694	.630	.413	.513
Gynecological screening habits					
Regular	63.12±3.34	27.08±1.99	23.75±3.63	15.45±1.86	129.41±8.37
Irregular	58.78±6.53	24.82±3.20	20.80±4.66	13.84±2.50	118.26±14.43
t value	3.060	3.166	2.727	2.809	3.512
p value	.003*	.002*	.008*	.006*	.001*

Regarding marital status, no statistically significant differences were found between single and married participants in total scale scores or sub-dimension means (p>0.05). This result shows that gynecological cancer awareness develops independently of marital status, and being married or single does not have a determining effect on awareness levels.

In terms of academic title, significant differences were identified. Assistant professors had higher scores in both the total scale and the sub-dimensions compared to associate and full professors (p<0.05). This may be associated with the increased interest and sensitivity toward professional development processes and current health issues among those at the early stages of their academic careers.

When academic working years were analyzed, participants with 1–5 years of experience had significantly higher awareness levels compared to other groups (p<0.05). This finding reveals that health awareness is higher in the early years of the profession, while it relatively decreases as professional experience increases.

In terms of education on gynecological cancers, participants who had received education scored significantly higher in both the total scale and all sub-dimensions compared to those who had not (p<0.05). This result emphasizes the effectiveness of education in increasing awareness and highlights the importance of informational programs.

Participants with a family history of gynecological cancer had higher awareness levels in both the total scale and all sub-dimensions compared to those without such a history (p<0.05). This finding indicates that family history has a strong effect on individual awareness and that the perception of being at risk increases awareness levels.

When the perceived awareness of gynecological cancers was evaluated, the group defining themselves as aware had higher scores in both the total scale and all sub-dimensions compared to other groups (p<0.05). In contrast, participants who defined themselves as partially aware or unaware had lower scores, showing that subjective perception of awareness reflects actual awareness levels.

No significant differences were found regarding childbearing status (p>0.05). This result reveals that having children

does not have a determining effect on gynecological cancer awareness.

Finally, when gynecological screening habits were evaluated, participants with regular screening practices had significantly higher scores in both the total scale and all sub-dimensions compared to those with irregular screening habits (p<0.05). This indicates that regular screenings play an important role not only in early diagnosis but also in increasing awareness levels.

DISCUSSION

From the results of the study, it is clear that the average female academic physician held a moderate to high level of awareness concerning gynecological cancers. We, however, note that their awareness was not uniform and was greatly influenced by socio-demographic and professional factors. The most significant awareness was recorded from participants aged 35 to 44 years, those in the early phases of their academic careers, participants who had previously learned about gynecological cancers, and those with a familial history of the disease. On the other hand, a decline in awareness was documented in senior faculty members and older age groups, indicating professional experience over time does not always improve a person's awareness level. This finding is consistent with prior studies highlighting the importance of awareness initiatives and professional education in enhancing knowledge about gynecologic cancers. 16,17

Younger academicians exhibiting greater awareness and a declining trend over age is now shown to be consistent with findings from previously conducted studies. Toptaş Acar et al.¹ and Ozturk et al.² both reported a greater likelihood of awareness among younger women as compared to older women, positively correlated to their education level. The phenomena is likely to be in response to the prevalence of awareness campaigns and widespread access to health information. The same trend is seen in the current researchthere seems to be a decline in awareness with an increase in age among female physicians. While the pattern is compatible with potential generational influences, we cannot infer mechanisms; alternative explanations such as more recent medical training, differential exposure to awareness

campaigns, or career-stage pressures may also account for higher scores among younger academicians.

The absence of marked differences in awareness levels between the married and single participants in this study follows the conclusions of Uslu-Sahan et al.³ and Kaya,⁶ who demonstrated that the degree of awareness of cancer in the Turkish population did not vary with the marital status of the individual. This suggests that the awareness among professionals in the health sector is shaped more by individual and educational backgrounds rather than by family influences. Conversely, family history of cancer surfaced as a strong predictor of heightened awareness, which is in agreement with Dal et al.,⁷ who noted that women with a family history of cancer tended to be more motivated to engage in preventative health actions. This finding is consistent with theargument that heightened perception of personal risk increases proactive monitoring for early warning signs.

The professional experience and academic title were additionally revealing of important patterns. Overall awareness was higher among assistant professors and those with fewer years of experience compared to associate and full professors. Other studies within cancer care have noted similar patterns. Seah and Tan¹⁸ and Hadi¹⁹ showed that younger or early-career healthcare professionals were more knowledgeable about breast cancer compared to their older or more senior counterparts.

These results may indicate the difference in the design of medical school education and the frameworks of professional development for practicing physicians, where more recent cohorts may receive more systematic training in awareness of cancer. This indicates the need to design targeted professional development frameworks for senior faculty to address disparities of awareness among academic ranks.

In this study, prior education on gynecological cancers was a strong determinant of higher awareness and training received significantly improved scores on all sub-dimensions of the scale. McCarey et al.²⁰ report HPV and cervical cancer training increased the preventive awareness and action among Cameroonian healthcare workers. The data presented by Benito et al.²¹ supports the notion of training, as primary care professionals educated on colorectal cancer screening became more proactive in applying screening measures. Considered collectively, these studies demonstrate that the impact of training and education extends into diverse cultures and professional disciplines.

As noted in the preceding section, participation in regular gynecological screenings aligned with higher recognition levels, most notably in the Irregular practitioners' group. This finding is consistent with Osei-Afriyie et al.,²² which indicated that health practitioners with higher levels of awareness actively participated in preventive screenings for breast cancer. This study, therefore, reinforces the vicious cycle hypothesis of awareness and practice: awareness leads to regular screening; regular screening, in turn, strengthens awareness.

Another fundamental aspect of the study is the impact of academic physicians in the context of public health awareness and their advocacy role as health advocates. Uwins et al. 16 in the context of Twitter as a health promotion tool, demonstrated that physicians do not only sit back and wait for awareness initiatives; they actively participate in disseminating information beyond their immediate circles. Academic physicians, in particular, straddle the divide between practice and teaching, which makes them critical in the advocacy of preventive healthcare. The fact that within this group there is not such a uniformly high level of awareness is a strong reminder that institutions need to do more by way of awareness campaigns, such as the organized awareness campaigns and the design of preventive oncology workshops within continuing professional education.

This research focuses on a markedly neglected group: female physician academics. While most of the literature has focused on women's populations broadly, 1,2,8,9 this research shows that holding a professional title does not ensure adequate awareness. The gaps noted with regard to age, academic rank, and education highlight the need for lifelong learning and targeted strategies. Additionally, the physician's role as a health advocate and role model makes improving awareness critical because it has the potential to change perceptions among patients, students, and the general public.

The findings also provide and suggest some important strategies from a public health perspective. First, women's health, and specifically gynecological cancer awareness, should be taught as part of the continuing medical education offered to senior faculty members who may not be as exposed to the revised teaching. Second, institutional policies that promote regular screening among healthcare workers could enhance both awareness and health promoting behaviors simultaneously. Lastly, awareness programs would benefit from the significant societal influence of academic physicians who often spearhead health promotion campaigns.

Limitations

This study has several limitations. First, it was conducted in a single center with a modest sample size, which limits the generalizability of the findings. Second, the cross-sectional design does not allow for causal inference, and the self-reported nature of the data may introduce recall or social desirability bias. Third, the response rate (~69%) may have introduced non-response bias, potentially affecting external validity. Fourth, multiple subgroup comparisons were performed; no formal adjustment for multiple testing was applied, so the risk of type I error must be considered, particularly for smaller strata (e.g., family history, n=13), where estimates should be viewed as exploratory. Finally, the focus exclusively on female academic physicians means the results cannot be directly extrapolated to other healthcare professionals or to the broader female population. Despite these limitations, the findings are hypothesis-generating and highlight concrete targets (e.g., CPD and screening promotion) for future multicenter and mixed-methods research.

CONCLUSION

This study reveals the level of awareness of gynecological cancers paid by female academic physicians to be moderate and significantly influenced by socio-demographic and professional factors. Those who were younger, earlier in their careers, had educational exposure to gynecological cancers, had a family history of the disease, and regular screening were more likely to be aware of it. The study findings show the need for continuous professional education and awareness targeted to senior faculty members to ensure knowledge and practice consistency. Increasing awareness among academic physicians not only enhances their preventive health behaviors, but also their ability to act as health advocates, thereby improving community awareness and early diagnosis.

ETHICAL DECLARATIONS

Ethics Committee Approval

The study protocol was reviewed and approved by the Non-interventional Researches Ethics Committee of Necmettin Erbakan University, Faculty of Medicine (Date: 11.07.2025, Decision No: 2025/5918).

Informed Consent

All female physicians signed the informed consent form.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

The authors declared that this study has received no financial support.

Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

REFERENCES

- Toptaş Acar B, Gerçek Öter E, Şanli Çolakoğlu H. Awareness of gynaecological cancer and factors affecting in women: a cross-sectional study. J Obstet Gynaecol. 2022;42(7):3193-3198. doi:10.1080/01443615.2022. 2109140
- Öztürk R, Bakir S, Kazankaya F, Paker S, Ertem G. Awareness about gynecologic cancers and related factors among healthy women: a crosssectional study. Soc Work Public Health. 2021;36(7-8):847-856. doi:10.1080/ 19371918.2021.1965936
- 3. Uslu-Sahan F, Mert-Karadas M, Yıldız T, Koc G. Effect of health literacy on the awareness of gynecological cancer among women in Turkey. *Indian J Gynecol Oncol.* 2023;21(1):15.
- Balasubramaniam K, Rasmussen S, Haastrup PF, Suadicani K, Søndergaard J, Jarbøl DE. Women's barriers for contacting general practice when experiencing gynecological cancer symptoms: a population-based study. BMC Fam Pract. 2021;22(1):167. doi:10.1186/ s12875-021-01518-5
- Ekinci N, Karaman ST, Basat O. Women's knowledge levels in protection from gynecological cancers and affecting factors. Eur Arch Med Res. 2023;39(4):262-268. doi:10.4274/eamr.galenos.2023.43765

- Kaya D. Examination of women's health perceptions and gynecological cancer awareness status. *Turk J Sci Health*. 2023;4(3):221-231. doi:10. 51972/tfsd.1289997
- Dal NA, Beydağ KD, Öner ÖI. The relationship between gynecological cancer awareness and self-care agency in married women. South Asian J Cancer. 2023;12(1):30-35. doi:10.1055/s-0042-1754344
- Özcan H, Demir Doğan M. Gynecological cancer awareness among women. *Indian J Gynecol Oncol.* 2021;19(1):13. doi:10.1007/s40944-020-00481-w
- Jha N, Panot AH, Singh U. Awareness about gynecological cancers amongst tribal females. Asian Pac J Cancer Care. 2020;5(2):113-118. doi: 10.31557/apjcc.2020.5.2.113-118
- Creswell JW. Research design: qualitative, quantitative, and mixed methods approaches. 4th ed. SAGE Publications; 2014.
- 11. Fraenkel JR, Wallen NE, Hyun HH. How to design and evaluate research in education. $10^{\rm th}$ ed. McGraw-Hill Education; 2019.
- 12. Büyüköztürk Ş, Kılıç Çakmak E, Akgün ÖE, Karadeniz Ş, Demirel F. Bilimsel araştırma yöntemleri. 28th ed. Pegem Akademi; 2020.
- 13. George D, Mallery P. SPSS for Windows step by step: a simple guide and reference. $10^{\rm th}$ ed. Pearson; 2010.
- 14. Tabachnick BG, Fidell LS. Using multivariate statistics. $6^{\rm th}$ ed. Pearson; 2013.
- 15. Kline RB. Principles and practice of structural equation modeling. $3^{\rm rd}$ ed. Guilford Press; 2011.
- Uwins C, Yilmaz Y, Bilir E, Bhandoria GP. World Gynecologic Oncology Day: the use of Twitter to raise awareness of gynecologic cancers. AJOG Glob Rep. 2022;2(3):100079. doi:10.1016/j.xagr.2022.100079
- 17. Matthews BA, Baker F, Spillers RL. Healthcare professionals' awareness of cancer support services. *Cancer Pract.* 2002;10(1):36-44. doi:10.1046/j. 1523-5394.2002.101010.x
- Seah M, Tan SM. Am I breast cancer smart? Assessing breast cancer knowledge among healthcare professionals. Singapore Med J. 2007;48(2): 158-162.
- 19. Hadi MA. Breast cancer awareness among healthcare professionals: 2 decades later. *Health Educ Behav.* 2018;1(2):51-56.
- McCarey C, Pirek D, Tebeu PM, Boulvain M, Doh AS, Petignat P. Awareness of HPV and cervical cancer prevention among Cameroonian healthcare workers. BMC Womens Health. 2011;11(1):45. doi:10.1186/ 1472-6874-11-45
- 21. Benito L, García M, Binefa G, et al. Cross-sectional survey on awareness of colorectal cancer and a screening programme for primary health care professionals in Catalonia, Spain. *Eur J Cancer Care*. 2016;25(6):992-1004. doi:10.1111/ecc.12450
- Osei-Afriyie S, Addae AK, Oppong S, Amu H, Ampofo E, Osei E. Breast cancer awareness, risk factors and screening practices among future health professionals in Ghana: a cross-sectional study. *PLoS One.* 2021; 16(6):e0253373. doi:10.1371/journal.pone.0253373