

Original Article

Evaluation of the Academicians' Knowledge and Skills on Vulvar Self-Examination

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The study conducted in Uskudar University, Faculty of Health Sciences. Uskudar University, Istanbul, Turkey.

Abstract

Aim: This study aims to measure the knowledge and skill levels of academicians, who work at the faculty of health sciences of a foundation university, about vulvar self-examination.

Method: This descriptive study was conducted between October 1, 2020 and June 15, 2021 with a total of 78 female academicians. The data was collected using a 36-item introductory information form and the Healthy Lifestyle Behaviors Scale-II (HLBS-II) and evaluated using SPSS package program (version 21.0). In addition to descriptive statistics, both t-test and Kruskal-Wallis test were used to compare the academicians' scale scores. The relationship between the variables was evaluated with Pearson's correlation analysis. A p value less than 0.05 was considered statistically significant. Both an ethics committee approval and relevant institution permissions were obtained for conducting the study.

Results: The mean age of the academicians was 36.73 ± 10.08 years. Of them, 29.5% were married, 30.8% had never heard about vulvar self-examination (VSE) and 47.4% had VSE. Their mean HLBS-II score was 134.99 ± 18.97 . The academicians with VSE training had statistically significantly higher mean scores of health responsibility, spiritual development and interpersonal communication than those who did not receive VSE training ($p \leq 0.05$). In addition, a statistically significant relationship was found between their age and nutrition ($p < 0.03$), menopausal age and stress management ($p < 0.00$), and duration of marriage and stress management ($p < 0.02$).

Conclusion: To increase the frequency of VSE practice among women, it is important to increase the VSE knowledge of health academicians. Since academicians and health workers are role models for positive health behaviors in the society, both deficiencies and shortcomings in vocational training should be determined, and relevant studies to bring solutions to these problems should be emphasized.

Keywords: Academicians, Midwifery, Vulvar Self Examination, Healthy Lifestyle Behaviors, Vulva Ca

Introduction

According to the world population data, there are approximately 4.15 billion women and 3.68 billion men across the world. In Turkey, women constitute 49.9% of the population (41 million 698 thousand 377 people) (TUİK, 2021). Women's health is very important for improving women's positive personal life experiences, continuation of human race, delivering healthy births and creating a society with a high level of well-being. Promoting gynecological early diagnosis and treatment methods underlies as a basis for countries to improve women's health (TUİK, 2016; Ozay et al., 2018; Ozcan, Kocak, Dagli, 2020). Vulvar self-examination (VSE) is one of the gynecological early diagnosis methods that women can easily apply themselves. VSE is a healthy lifestyle behavior that has come to the fore in recent years and is becoming more widespread every passing day, increasing the chance of early diagnosis with its life-long practice. In recent years, vulvar cancer can be diagnosed at an earlier stage with VSE (Dellinger et al., 2017; Ozcan, Kocak, Dagli, 2020). Women's health is affected by several physiological, emotional and sociological factors such as age, race, education level, socioeconomic status, chemical substance use, active sexual life starting at an early age, polygamy, age at first labor, number of childbirths, and genetic history. These factors also affect women's healthy lifestyle behaviors. Studies state that as education level increases, women have more knowledge about vulvar and breast self-examinations, family planning, and vulvar hygiene (Duran & Sumer, 2015). One Turkish study on women's health have reported that the rate of women who have regular gynecological examinations varies between 5.5% and 42.4% (Aref-Adib & Freeman, 2016). This may be because Turkish women do not care about regular health screenings before symptoms appear or do not know the importance of personal self-health controls such as VSE (Aydogdu & Bekar, 2016, Ozcan, Kocak, Dagli, 2020). VSE enables women to know their external genital organs and observe abnormal formations in the early stages. Although it is a new concept in medical fields and preventive public health services, there is no definite information about the date of its first introduction to the literature (Aydogdu & Bekar, 2016). VSE consists of a number of application steps. By following these application steps, any abnormal malignancy, mass or skin changes in vulvar and vaginal regions can

be determined in an early stage (Ozkan, Turfan, Toksoy, 2016). Women can do this examination using a mirror as they feel comfortable. Here, the aim is to detect color changes and masses in both vulvar and vaginal regions before having complaints and to refer to a health institution as early as possible (Akca & Turk, 2021). A sufficiently large mirror in good condition and a flashlight, if the room is not bright enough, should be readily available prior to VSE. VSE should be done regularly once a month between two menstrual cycles and immediately after the bath to make the tissues soft. Before starting VSE, hands are washed thoroughly, a semi-sitting position with the back supported is taken, and legs are spread to the sides. First, the entire vulvar area is observed using the mirror to check abnormal formations such as swelling, redness, discoloration, and foul-smelling discharge. The index finger is inserted 1-2 cm through the vaginal opening and the tissue is checked between the index finger and the thumb. This process should be repeated around the entire opening. Then, both right and left inguinal regions are palpated using three fingers of left and right hands, respectively and checked for stiffness or pain (Buyukkayaci, 2015; Aydin et.al., 2018; Beji, 2019). It is extremely important doing VSE from inside out to prevent vaginal infection. After VSE is completed, both hands are washed with plenty of soap and water (Dikmen et.al., 2012; Ozkan, Turfan, Toksoy, 2016; Beji, 2019). In order for women to be protected from vulvar cancer, they should be informed and encouraged to do VSE. In addition, women with vulvar cancer need to know how to perform VSE in order to observe possible changes in their vulvar and vaginal regions (Belhadj et.al., 2014; Kobleder et.al., 2016). The incidence of vulvar cancer among all genital cancers is around 4%. Although it is more common in postmenopausal women, it is also observed among younger women. In recent years, the incidence of vulvar cancer has increased rapidly along with the increased HPV infection (Dikmen et.al., 2012; Aydogdu & Ozsoy U, 2018). Today, it is necessary to prioritize both measures and studies to reduce these rates. Midwives and women's health nurses have an important place in providing VSE training to young women. Therefore, midwives should be able to answer the questions of "What is VSE? How and why is it done?" and provide effective training on this subject (Ozkan, Turfan, Toksoy, 2016; Beji, 2019; Keskin & Tahta, 2021). Health professionals should make VSE widespread in the

society by providing training and consultancy, but it is also important for them to actively apply VSE to their own bodies, increasing social awareness. VSE should be known and applied primarily by academicians who train health professionals. Thus, they can increase the level of VSE awareness in their students, which eventually contributes to the awareness of the society by showing a snowball effect. Both VSE awareness and skills that health academicians, who have a significant impact on public health, reflect on health professionals and midwives, can ensure the VSE to become widespread in the society. Because midwives, in particular, are among significant health professionals who reach and influence different communities by providing information and counseling to the society and exhibiting health behaviors. This study aimed to evaluate the knowledge and skill levels of academicians, who work at the faculty of health sciences of a foundation university, about vulvar self-examination.

Material and Method

Type and place of research: This descriptive study was conducted at a foundation university located on the Anatolian side of Istanbul, Turkey between October 2020 and June 2021.

Study Population and Sample: The study population consisted of a total of 122 female academicians in the faculty of health sciences of a foundation university in Istanbul, Turkey. A power analysis was performed using the G*Power (v3.1.9.4) program to determine the sample size of the study. The power of a study is expressed as $1-\beta$ (β = probability of type II error), and in general studies should have 80% power. According to our calculation, the critical sample size was found to include 71 people to represent the population. It was planned to reach the entire population, but those who were on leave and those who did not want to participate in the study were not included in the study. Therefore, the study was completed with a total of 78 participants.

Study Inclusion Criteria: Working in the faculty of health sciences at the university where the study was conducted, being a woman, being an academician, agreeing to participate in the study, and completing the data collection questionnaires.

Research Questions:

1. What are the factors affecting the knowledge and skills of academicians about VSE?
2. Are the knowledge and skills of academicians about VSE related to healthy lifestyle behaviors?

Data Collection Tools: The data were collected using an introductory information form and the Healthy Lifestyle Behaviors Scale-2.

Introductory Information Form: This form was prepared by the researchers in line with the literature (Esencan, Dogan, Cirpi, 2009, Cangol & Tokuc, 2013; Duran & Sumer, 2015; Sen et.al.,2017; Kreklau et.al.,2018), and consists of a total of 36 questions, including 13 about socio-demographics, 5 about VSE knowledge, 7 about VSE skills and 11 about gynecological practices.

Healthy Lifestyle Behaviors Scale II (HLBS-II): The scale was developed by Walker and Hill-Polerecky (1996) to measure the personal health promotion behaviors of academicians. The Cronbach's alpha coefficient, which is the reliability coefficient of the scale, was found to be 0.93 and 0.86 in recurrent tests performed in a two-week interval, indicating that the scale was a suitable for this study (Walker & Hill-Polerecky, 1996). Its Turkish validity and reliability study was performed by Bahar et al. (2008). The scale measures participants' lifestyles and habits. This is a four-point Likert type scale, scoring as never (1), sometimes (2), often (3), and regularly (4). It has six subscales, including health responsibility (3,9,15,21,27,33,39,45,51), physical activity (4,10,16,22,28,34,40,46), nutrition (2, 8, 14, 20, 26, 32, 38, 44, 50), spiritual development (6, 12, 18, 24, 30, 36, 42, 48, 52), interpersonal communication (1,7,13,19,25,31,37,43,49), and stress management (5,11,17,23,29,35,41,47). The lowest and highest scale scores are 52 and 208, respectively. A higher score indicates a better personal health behavior (Bahar et.al.,2008). The Cronbach's alpha value for this study was determined as 0.922.

Research Application Steps: The data was collected online due to the Covid 19 pandemic. The data collection tools were sent to academicians who agreed to participate in the study and met study inclusion criteria via e-mail and received back online.

Statistical Analysis: The data were analyzed using the IBM SPSS Statistics 21 program. Kolmogorov Smirnov test was used to evaluate whether the data had normal distribution. Descriptive statistics (number, percentage, mean and standard deviation) were used to assess the academicians' socio-demographic data, VSE knowledge and skills and gynecological practices. Parametric and non-parametric tests were used to compare the variables. Both t test (paired sample t-test) and Kruskal-Wallis test were used to compare the academicians' scale scores.

Pearson's correlation analysis was made to assess the relationship between the variables. A p value less than 0.05 was considered statistically significant.

Ethical Principles: A permission to use the original version of the scale was obtained via e-mail. An ethics committee approval (dated 31/12/2020 and numbered 61351342/2020-670) was obtained from Üsküdar University Observational Research Ethics Committee. Before applying the data collection tools, the purpose of the study and research application steps were explained to all participants and their verbal and written consents were obtained.

Results

The mean age of the academicians was 36.73 ± 10.08 years old. Their mean age at menarche was 13.04 ± 1.22 years old. Of them, 62.8% (n= 49) were single, 53.8% (n= 42) had children, and 60.3% (n= 47) used contraceptive methods. Of those using contraceptives, 48.93%

(n= 23) used condoms, 31.91% (n= 15) used COCs, 17.02% used IUDs (n= 8) and 2.12% used withdrawal method. In addition, 88.5% (n=69) of the academicians did not enter menopause, and 11.5% (n=9) went through menopause. Regarding their history of gynecological cancer, 98.7% (n=77) reported to have no gynecological cancer history and 1.3% (n=1) to have at least one gynecological cancer history (Table 1). Regarding their VSE knowledge and skill levels, 30.8% (n= 24) of the academicians did not hear about VSE before, and 60.3% (n= 47) did not receive any VSE training. On the other hand, 47.4% (n= 37) of them had VSE and 35.9% (n= 28) used palpation and inspection methods during VSE (Table 2).

In addition, 96.2% (n= 75) of the academicians performed a correct perineal cleansing from front to back, 79.5% (n= 62) performed genital cleansing with water and toilet paper, and only 2.6% (n = 2) had HPV vaccine (Table 3).

Table 1. Socio-demographic characteristics of academicians (N=78)

Variables	N	\bar{X}	\pm Sd.	min-max	
Age	78	36.73	10.08	24	69
Age at menarche	78	13.04	1.22	11	16
Age at first sexual intercourse	57	25.11	4.44	19	42
Duration of marriage (year)	55	12.88	8.92	1	41
Duration of having regular sexual intercourse	53	12.71	9.03	1	41
Age at first child	45	29.89	3.43	24	40
Age at menopause	9	44.33	15.27	42	53
Variables	%	N	Variables	%	N
Marital status			State of entering menopause		
Married	29.5	23	Yes	88.5	69
Single	62.8	49	No	11.5	9
Divorced	7.7	6			
Status of having children			Chronic disease		
No	46.26	36	No	80.8	63
Yes	53.84	42	Yes	19.2	15
Number of children^a			History of gynecological cancer		
I have one child	61.91	26	No	98.7	77
I have two children	33.33	14	Yes	1.3	1
I have three children	4.76	2	Contraceptive use		
			Yes	60.3	47
			No	39.7	31

^aThose with children

The average score of the academicians on HLBS-II was 134.99±18.97. They obtained the highest and lowest mean scores on the subscales of interpersonal communication and physical activity, respectively (Table 4).

The academicians who received VSE training had statistically significantly higher mean scores on total HLBS-II (t=-2.020, p= .047), health responsibility (t=-3.294, p= .002), spiritual development (t=-2.171, p= .033) and interpersonal communication (t=-2.686, p= .009) than those who did not (p≤0.05). In addition, those who had VSE had statistically significantly higher mean scores on interpersonal communication (t=-2.207, p= .030) than those who did not (p≤0.05) (Table 5). There was no statistically significant

difference between the academicians' mean scores on HLBS – II and its subscales according to marital status ($\chi^2 = .079$; p=.961) (p>0.05).

Table 6 presents the relationship between the academicians' mean scores on HLBS – II and its subscales, age at menarche, age at menopause and duration of marriage. Accordingly, a statistically significant relationship was found between their age and nutrition (r=.240, p= .034), age at menopause and stress management (r=.809, p= .008), and duration of marriage and stress management (r=.295, p= .029) (p≤0.05). As their age increased, their nutrition habits developed positively, and as their age of entering menopause and duration of marriage increased, their stress management also developed positively (Table 6).

Table 2. Results on academicians' VSE skill and knowledge levels (N=78)

Questions	%	N	Questions	%	N
VSE Knowledge Level			VSE Skill Level		
State of hearing about VSE before			State of having VSE		
No	30.8	24	No	52.6	41
Yes	69.2	54	Yes	47.4	37
State of having VSE training			State of using mirror, light etc. during VSE		
No	60.3	47	No	33.3	26
Yes	39.7	31	Yes	35.9	28
State of considering VSE beneficial			No idea	30.7	24
No	2.6	2	VSE application		
Yes	69.2	54	Palpation	10.3	8
No idea	28.2	22	Inspection	2.6	2
State of consulting a doctor in an abnormal finding			Palpation/ inspection	35.9	28
No	3.8	3	No idea	51.3	40
Yes	73.1	57	State of recommending VSE		
No idea	23.1	18	No	2.6	2
			Yes	69.2	54
			No idea	28.2	22

Table 3. Results on academicians' gynecological practices (N= 78)

Variables	N	%
Route of a correct perineal cleansing		
Front to back	75	96.1
Back to front	2	2.6

No idea	1	1.3
Proper materials for genital cleansing		
Just water	10	12.8
Water and toilet paper	62	79.5
Water and fabric	1	1.3
Other	5	6.4
Frequency of changing underwear		
Daily	64	82.1
Every other day	14	17.9
Daily pad usage		
No	42	53.8
Yes	36	46.2
Frequency of changing pads during menstrual period		
1-2 times a day	7	9.0
3-4 times a day	60	76.9
5 or more times a day	11	14.1
Method for shaving genital area		
Razor blade	34	43.6
Wax	18	23.1
Depilatory cream	3	3.8
Hair removal device	15	19.2
Other	8	10.3
Status of using genital cleansing products		
No	72	92.3
Yes	6	7.7
History of gynecological infection		
No	49	62.8
Yes	29	37.2
Gynecological examination experience		
No	28	35.9
Yes	50	64.1
HPV vaccination status		
No	76	97.4
Yes	2	2.6

Table 4. Academicians' mean scores on HLBS – II and its subscales (N= 78)

Scale and subscales	\bar{X}	$\pm Sd.$	Min - max	
Health responsibility	22.88	4.22	12	32
Physical activity	16.86	4.63	8	30
Nutrition	22.18	4.14	13	30
Spiritual development	26.97	4.45	15	35
Interpersonal communication	26.40	3.82	15	35
Stress management	19.69	4.04	11	29
HLBS – II	134.99	18.97	88	176

Table 5. Academicians' mean scores on HLBS-II and its subscales according to some variables
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		Health responsibility		Physical activity		Nutrition		Spiritual development		Interpersonal communication		Stress management		HLBS – II			
		Groups	N	MR	SR	MR	SR	MR	SR	MR	SR	MR	SR	MR	SR		
Status of children having	No		36	39.54	1423.50	44.14	1589.00	39.19	1411.00	39.61	1426.00	39.81	1433.00	40.26	1449.50	41.79	1504.50
	Yes		42	39.46	1657.50	35.52	1492.00	39.76	1670.00	39.40	1655.00	39.24	1648.00	38.85	1631.50	37.54	1576.50
	Statistics	Z															
		p															
Chronic disease	No		63	38.32	2414.00	40.10	2526.50	38.83	2446.00	37.99	2393.50	39.25	2472.50	39.21	2470.50	38.79	2444.00
	Yes		15	44.47	667.00	36.97	554.50	42.33	635.00	45.83	687.50	40.57	608.50	40.70	610.50	42.47	637.00
	Statistics	Z															
		p															
Contraceptive use	Yes		47	39.31	1847.50	36.13	1698.00	39.46	1854.50	39.33	1848.50	37.76	1774.50	40.28	1893.00	38.00	1786.00
	No		31	39.79	1233.50	44.61	1383.00	39.56	1226.50	39.76	1232.50	42.15	1306.50	38.32	1188.00	41.77	1295.00
	Statistics	Z															
		p															
Status of knowing about VSE	No		24	37.71	905.00	44.81	1075.50	43.88	1053.00	39.35	944.50	36.77	882.50	44.02	1056.50	42.63	1023.00
	Yes		54	40.30	2176.00	37.14	2005.50	37.56	2028.00	39.56	2136.50	40.71	2198.50	37.49	2024.50	38.11	2058.00
	Statistics	Z															
		p															
VSE training	Yes		47	21.68	4.15	16.51	5.42	21.94	3.80	26.11	4.92	25.49	4.08	19.81	4.17	131.53	20.43
	No		31	24.71	3.69	17.39	3.07	22.55	4.65	28.29	3.28	27.77	2.95	19.52	3.89	140.23	15.38
	Statistics	t															
		p															
Status of having VSE	No		41	22.20	4.41	17.10	4.86	22.51	4.29	26.27	5.21	25.51	4.12	19.93	4.08	133.51	21.17
	Yes		37	23.65	3.92	16.59	4.41	21.81	3.99	27.76	3.32	27.38	3.24	19.43	4.03	136.62	16.31
	Statistics	t															
		p															

*p<.05; † Kruskal–Wallis test; MR= Mean Rank

Table 6. The relationship between the academicians' mean scores on HLBS-II and its subscales, age, age at menarche, age at menopause and duration of marriage

		Health responsibility	Physical activity	Nutrition	Spiritual development	Interpersonal communication	Stress management	HLBS – II
Age	R	.095	.093	.240	.135	-.062	.149	.147
	P	.406	.417	.034*	.238	.590	.192	.198
Age at menarche	R	-.120	.118	.065	.005	-.103	.058	.009
	P	.295	.303	.569	.966	.367	.616	.938
Age at menopause	R	-.383	.486	.548	.508	-.151	.809	.585
	P	.308	.185	.126	.163	.697	.008**	.098
Duration of marriage (year)	R	.106	.150	.018	.077	-.048	.295	.138
	P	.440	.275	.898	.577	.727	.029*	.315

r Pearson's correlation (2-tailed) *

Discussion

Today, most of the female deaths are due to gynecological cancers. Early diagnosis of gynecological cancers is possible through routine examinations. However, this examination is rarely applied both in Turkey and across the world (Topuz, Buyukkayaci, Gunes, 2015; Yasar, Karadag, Ozsezer, 2018; Ozcan, Kocak, Dagli, 2020). Although VSE is an easy-to-apply technique, it is vital for early diagnosis of gynecological cancers (Esencan, Dogan, Cirpi, 2009). However, there is a limited number of studies on VSE. Personal health perception has an important place in raising awareness about gynecological cancers. Socio-demographic characteristics such as age, marital status, substance use, physical activity, number of children and genetic history are among the factors affecting personal health perception (Kaya et al., 2008; Kayaoglu, 2016; Asilar et al., 2020).

One study conducted with health personnel and women who referred to hospital has found that 15.2% of the outpatients and 51% of the health personnel had knowledge about VSE (Sahin, 2009). The present study determined that 69.2% of the academicians heard about VSE and 39.7% received VSE training. This result suggests both the awareness of academicians about VSE and the rate of those who received VSE training were low (Table 2). These data show that it is not enough to just hear about VSE, and that VSE training is of great importance for the regular implementation of VSE. In one experimental study consisting of pre- and post-tests before VSE training and conducted with a total of 45 women over the age of 18; 98% of the participants reported to not have VSE in the pre-test conducted before VSE training. The study determined a statistically significant difference between their levels of knowledge about VSE before and after the training, because their level of knowledge about VSE increased after the training. In addition, 93.3% of the participants reported to have regular VSE after the training (Karaman, 2020). In the light of the study data, it is seen that it is important to provide women with education about the benefits of VSE application, that VSE is vital importance of early diagnosis for genital diseases, and that the rates of VSE increase with education (Gok & Aydin 2015; Alp, Akkuzu, Cetinkaya, 2020; Vaccines et al., 2020; Karaman, 2020).

Similar to our study, one study found that only 30.7% of the participants had VSE (Kockanat,

2017). Another study has determined that the rate of having VSE is higher in individuals who have sexual intercourse (60%) than those who do not (21.06%) (Aydogdu & Bekar, 2016). These results suggest that sexually active women have more VSE. This may be because of the process of developing their own bodily awareness.

One study on health academicians determined that they got the highest score on interpersonal communication (25.59 ± 3.66) in the HLBS-II (Akcakanat, Toraman, Carikci, 2015). Our study found that the academicians obtained the highest and lowest mean scores on interpersonal communication and physical activity, respectively (Table 4). Another study has examined the factors related to academicians' healthy lifestyle behaviors, and found a statistically significant difference between their HLBS -II scores according to marital status, age, academic status and number of children (Guler et al., 2008; Kaya et al., 2008; Alp, Akkuzu, Cetinkaya, 2020). In a study on faculty members of a medical school, their HLBS-II subscales mean scores varied according to marital status and substance use (Akcakanat, Toraman, Carikci, 2015). In the present study, the difference between the academicians' health responsibility mean scores was not significant according to their status of hearing about VSE, but those who received VSE training had statistically significantly higher HLBS-II total mean score than those who did not ($p < 0.05$) (Table 5). One study about women who referred to a cancer screening center found that the difference between their health responsibility mean scores according to their status of considering early diagnosis as important for cancer treatment was statistically significant ($p < 0.05$) (Gok & Aydin 2015). Another study conducted with academic staff has reported that age, marital status and smoking are effective on healthy lifestyle behaviors (Asilar et al., 2020). All of the results in above mentioned studies about health responsibility, activity, nutrition, spiritual development, interpersonal communication and stress management are similar to those in our study (Table 5) (Guler et al., 2008; Kaya et al., 2008; Akcakanat, Toraman, Carikci, 2015; Asilar et al., 2020; Alp, Akkuzu, Cetinkaya, 2020).

Several studies of nurses found a significant relationship between their work schedule, health responsibility, exercise, stress management and total HLBS-II score (Curcani, Tan, Ozdelikara, 2010; Bostan & Beser, 2017). When their results are compared with those of our study, stress

management and health responsibility mean scores of academicians and nurses are observed to be very close to each other (Table 5).

In the present study, no statistically significant difference was found between the academicians' marital status and mean scores on HLBS II and its subscales ($p > 0.05$). Contrary to our study, one study of nurses and midwife students found a statistically significant difference between marital status and HLBS-II scale ($p < 0.05$) (Duran & Sumer, 2015; Bostan & Beser, 2017).

Conclusion: Personal health perceptions and practices of health academicians, who are health promoters and educators, train undergraduate and graduate students and have an ability to directly reach and influence the society, is a phenomenon worth examining. The way for academicians to raise competent and conscious individuals and thus create a healthy society primarily passes through developing and maintaining their own healthy lifestyle behaviors and being role models by reflecting these behaviors to their students. In fact, healthy lifestyle behaviors of academicians, especially physical activity and stress management, should be taught to all academic staff, especially single and young instructors.

All health professionals, especially midwives, should be able to use their professional roles as trainers in the VSE training given to women and be supported in this regard. It is recommended to organize various training programs in universities to improve the knowledge, skills and awareness levels of health academicians about VSE. Social teaching models should be created for academicians to improve women's knowledge and skills about gynecological cancers and VSE, and these teaching models should aim to reach as many women as possible.

Limitations of the Study: This study was applied to academicians working in the faculty of health sciences of a foundation university located in the Anatolian side of Istanbul, Turkey. Therefore, one of the limitations of this study is that the data were collected in a specific region.

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