

The Effect of Women's Menstrual Attitudes on Healthy Lifestyle Behaviors

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ABSTRACT

Menstrual attitude includes many healthy lifestyle behaviors, such as hygiene habits, self-protection and nutrition. This cross-sectional study was conducted to determine the effect of women's menstrual attitudes on their healthy lifestyle behaviors. The study population consisted of 196 women between the ages of 19-49 who applied to the gynecology and obstetrics outpatient clinics of a state hospital for examination between March 2022 and July 2022. Data were collected using the Personal Information Form, Menstruation Attitude Questionnaire, and Healthy Life Style Behaviors Scale II. It was determined that 70.9% of the women had regular menstrual cycles, and 44.1% experienced pain on the first day of menstruation. The mean total score of the Menstruation Attitude Questionnaire was 106.71 ± 10.65 , and the mean total score of the Healthy Lifestyle Behaviors Scale II was 118.00 ± 23.59 . Education level, place of residence, number of pregnancies, and duration of pain during menstruation were found to be significant predictors of menstruation attitude ($R=0.523$; $p<0.05$). It was determined that women's attitudes towards menstruation were generally positive, and their healthy lifestyle behaviors were at a moderate level. Healthy lifestyle behaviors increased as positive menstrual attitudes increased, and sociodemographic characteristics such as educational status, place of residence, number of pregnancies, and duration of pain during menstruation were found to influence menstrual attitudes. Reducing the negative impact of menstruation on daily activities or social relationships, and helping to improve or eliminate symptoms, will enhance women's quality of life.

Kadınların Menstrüel Tutumlarının Sağlıklı Yaşam Biçimi Davranışlarına Etkisi

Makale Bilgisi

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ÖZET

Menstrüel tutum, hijyen alışkanlıkları, kendi sağlığını koruma ve beslenme gibi birçok sağlıklı yaşam biçimi davranışını içermektedir. Bu kesitsel çalışma, kadınların menstrüel tutumlarının sağlıklı yaşam biçimi davranışları üzerindeki etkisini belirlemek amacıyla yapılmıştır. Araştırmanın evrenini 08.03.2022-01.07.2022 tarihleri arasında bir devlet hastanesinin kadın hastalıkları ve doğum polikliniklerine muayene için başvuran 19-49 yaş arası 196 kadın oluşturmuştur. Veriler Kişisel Bilgi Formu, Menstrüasyon Tutum Ölçeği ve Sağlıklı Yaşam Biçimi Davranışları Ölçeği II ile toplanmıştır. Kadınların %70.9'unun menstrüel sikluslarının düzenli olduğu ve %44.1'inin menstrüasyonun ilk gününde ağrı yaşadığı belirlenmiştir. Menstrüasyon Tutum Ölçeği toplam puan ortalaması 106.71 ± 10.65 , Sağlıklı Yaşam Biçimi Davranışları Ölçeği II toplam puan ortalaması 118.00 ± 23.59 'dur. Eğitim düzeyi, yerleşim yeri, gebelik sayısı ve menstrüasyon sırasında ağrı süresinin menstrüasyon tutumu üzerinde etkili olduğu bulunmuştur ($R=0.523$; $p<0.05$). Kadınların menstrüasyona ilişkin tutumunun olumsuz, sağlıklı yaşam biçim davranışlarının ise orta düzeyde olduğu belirlenmiş olup menstrüasyon tutumu arttıkça sağlıklı yaşam biçimi davranışının arttığı, menstrüasyon tutumunu belirlemede eğitim durumu, yaşanılan yer gibi sosyodemografik özelliklerin yanı sıra gebelik sayısı ve menstrüasyonda ağrı süresinin de etkili olduğu saptanmıştır. Menstrüasyonun günlük aktiviteler veya sosyal ilişkiler üzerindeki olumsuz etkisini azaltmak ve semptomları iyileştirmeye veya ortadan kaldırmaya yardımcı olmak, kadınların yaşam kalitesini artıracaktır.

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INTRODUCTION

Menstruation is defined as the cyclic bleeding from the uterine corpus between menarche and menopause, which is a normal biological process and an important sign of reproductive health (Critchley et al., 2020; Santra, 2017). The menstrual cycle, a symbol of reproductive age, is a natural process that is perceived differently in each society depending on its social and cultural characteristics (Ali and Rizvi, 2010; Can, 2015). Although it is a natural phenomenon in women's lives, many people assume that it has negative effects. The majority of women see menstruation as a burden and seek ways to avoid it (Singh et al., 2022).

The ability of individuals to apply behaviors and activities that affect their health as positive behaviors appropriate to their own health status is defined as a healthy lifestyle (Ozvaris, 2006). Health-promoting lifestyle behaviors are based on hygiene habits, nutritional values, the ability to express oneself in social settings, taking responsibility for one's own health, regular exercise, interpersonal support and stress management (Bidlack, 1996). These behaviors not only aim to protect the individual from diseases but also help improve their overall health (Gömleksiz et al., 2020). Menstrual behavior encompasses many healthy lifestyle behaviors, including hygiene habits, self-protection and nutrition (Lawal et al., 2020). In Turkish society, menstruation is commonly referred to as "being dirty" or "being sick" (Kırbaş et al., 2022). It is known that reactions to this process can have many positive or negative effects on lifestyle behaviors. Understanding how certain individual factors influence menstrual attitudes has important implications for addressing the challenges that come with it (Lawal et al., 2020). It has been reported that many factor, such as individual knowledge, age, experience, myths, traditions, social learning, and cultural beliefs, affect women's attitudes towards menstruation (Fennie et al., 2022). Taboos surrounding menstruation prevent women from correcting inaccurate and incomplete information about hygiene management during this period (Santra, 2017). This cross-sectional descriptive study was conducted to determine the effect of women's menstrual attitudes on their healthy lifestyle behaviors.

METHOD

Research Design

This cross-sectional study was conducted to determine the effect of women's menstrual attitudes on their healthy lifestyles.

Research Sample

The population of the study consisted of women between the ages of 19 and 49 who applied for examination at the gynecology and obstetrics outpatient clinics of a state hospital in the Central Anatolia region between March 2022 and July 2022, who had experienced their first menstruation, had not entered menopause, and were not in the pregnancy/lactation period. The G*Power 3.1.9.7 program was used to determine the sample size of the study (Faul et al., 2007). Considering Cohen's (1988) small effect size recommendation, the sample size was calculated, and it was determined that 196 women should be reached with an effect size of $f^2 = 0.05$, a power of 80% (Polit and Beck, 2017) and a margin of error of 5%. According to the post hoc power analysis conducted at the end of the study, the planned power ($1-\beta=0.80$) was reached with 196 women. Data were collected using the Personal Information Form, Menstruation Attitude Questionnaire, and Healthy Life Style Behaviors Scale.

Research Instruments and Processes

Data were collected using the Personal Information Form, Menstruation Attitude Questionnaire, and Healthy Lifestyle Behaviors Scale.

Personal Information Form

This form, which was developed by the researchers based on the literature (Altintas et al., 2021; Kulakac et al., 2008; Walker and Avant, 2019), consists of a total of 15 questions regarding women's descriptive characteristics (age, age at first menstruation, number of pregnancies, marital status, family structure, place of residence, education level, etc.).

Menstruation Attitude Questionnaire (MAQ)

The scale, developed by Brooks-Gunn and Ruble (1980) and whose validity and reliability were studied by Kulakac et al. (2008), consists of 33 items and five sub-dimensions. The sub-dimensions are: noticing/perceiving changes before and during menstruation (items 3, 4, 9, 23, 24, 25, 26, 27); denying the effects of menstruation (items 28, 29, 30, 31, 32, 33); menstruation as a disempowering phenomenon (items 1, 2, 5, 6, 7, 8, 12); menstruation as a disturbing phenomenon (items 13, 14, 15, 16, 17); and menstruation as a natural phenomenon (items 18, 19, 20, 21, 22). The scale is Likert-type and is evaluated on a scale from 1 (worst) to 7 (best). The reliability coefficient of the original scale is 0.95-0.97. The scale has a minimum score of 33 and a maximum score of 231. Higher mean scores obtained from the items, sub-dimensions, or the whole scale indicate that the attitude towards menstruation is "positive" (Kulakac ve ark., 2008). The Cronbach alpha coefficient of the Turkish validity and reliability study was found to be 0.79, and it was determined that this value varied between 0.42-0.73 in the subscales. In our study, the total Cronbach alpha reliability coefficient of the ITS was 0.80, and the sub-dimension Cronbach alpha values ranged between 0.70-0.86.

Healthy Life Style Behaviors Scale II (HLSBS II):

The scale, developed by Walker et al. in 1987, was reworked and renewed in 1996 and named the Healthy Lifestyle Behaviors Scale II, and it was adapted into Turkish by Bahar et al. (2008). The scale consists of 52 items, six sub-dimensions, and is scored on a 4-point Likert scale (1 = never, 4 = regularly). The Sub-dimensions are: 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 relationships (1,7,13,19,25,31,37,43,49); and Stress management (5,11,17,23,29,35,41,47). The overall score of the scale gives the score of healthy lifestyle behaviors and the lowest score of 52 and the highest score of 208. The total Cronbach's alpha reliability coefficient of the original scale is .922; alpha coefficients for the sub-dimensions ranged between 0.702 and 0.904. In the Turkish validity and reliability study, the Cronbach alpha reliability coefficient of the scale was 0.92 and the Cronbach alpha values of the sub-dimension ranged between 0.79 and 0.87 (Bahar et al., 2008). In our study, the Cronbach alpha reliability coefficient for the total Cronbach alpha of HLSBS II was 0.92 and the Cronbach alpha values of sub-dimension ranged between 0.61 and 0.80.

Data Analysis

The statistical evaluation of the data obtained was performed with the SPSS 23.0 software package on a computer. Descriptive statistical measures (mean, standard deviation, minimum and maximum values, and percentages) were used. Since the parametric test assumptions were fulfilled, an independent sample t-test was used to determine the difference between the averages of two independent groups, one-way analysis of variance for more than two independent groups (Tukey

test if homogeneity was ensured to determine which group mean different from the others, Tamhane's T2 test if homogeneity was not ensured). Pearson correlation analysis was applied to determine the direction and strength of the relationship between variables, and the enter model of multiple linear regression analysis was applied to identify variables thought to affect the scales. The significance level was set at 0.05. While evaluating the normality of the data, the statistical value, p-value, and skewness and kurtosis coefficients were examined to determine the distribution of the data for the total and sub-dimensions of the MAQ and the total and sub-dimensions of the HLSBS II. In line with the recommendation of Tabachnick and Fidell (2013), it was accepted that the distribution of the data was within normal limits if the p-value was greater than 0.05 or the skewness and kurtosis coefficients were within ± 2 .

RESULTS

Among the women who participated in the study, 53.1% were between the ages of 19 and 25, 57.6% were university graduates, 51.0% were single, 84.2% lived in the provincial center, 80.1% had a nuclear family, 54.6% had their first menstrual period between 10 and 13 years, 46.5% had not been pregnant before, and 61.2% experienced pain during menstruation, It was determined that 44.1% of those who experienced pain did so on the first day of menstruation, 70.9% had regular menstrual cycles, 64.8% had cycles between 21 and 28 days, 54.6% had bleeding lasting six days or more, and 62.8% used pain-relief practices during menstruation (Table 1). When some averages of the women were evaluated, the mean age was 26.41 ± 6.42 years; mean age at first menstruation was 13.39 ± 1.47 years; mean number of pregnancies was 1.40 ± 1.64 years; the mean menstrual cycle length was 27.69 ± 3.59 days; and the mean number of bleeding days was 5.74 ± 1.35 days (Table 1).

Table 1

Distribution of Women According to Sociodemographic and Menstrual Characteristics (N = 196)

Features	n	%
Age		
19-25	104	53.1
26-32	61	31.1
33 years and older	31	15.8
Education status		
Primary School	12	6.1
Middle School	17	8.7
High School	54	27.6
University	113	57.6
Marital status		
Married	96	49.0
Single	100	51.0
Place of residence		
Province	165	84.2
District	6	3.1
Village	25	12.7
Family type		
Nuclear family	157	80.1
Extended family	28	14.3
Other	11	5.6
Age at first menstruation		
10-13 age	107	54.6
14 years and older	89	45.4

Number of pregnancies		
1 pregnancy	33	16.8
2-3 pregnancies	43	21.9
4 and above	29	14.8
No pregnancy	91	46.5
Experiencing pain during menstruation		
Yes always	120	61.2
No	26	13.3
Sometimes	50	25.5
Duration of the pain during menstruation (n=170)		
First day of menstruation	75	44.1
2-3 days	72	42.4
Until the end of menstruation	10	5.9
Before menstruation	13	7.6
Regularity of the menstrual cycle		
Yes	139	70.9
No	57	29.1
Menstrual cycle frequency		
21-28 days	127	64.8
29 days or more	69	35.2
Number of bleeding days		
3-5 days	89	45.4
6 days or more	107	54.6
Any application* for menstrual pain		
Yes	123	62.8
No	73	37.2
TOTAL	196	100.0
	$\bar{X} \pm SD$ (min-max)	
Average age	26.41 $\pm$ 6.42 (19-42)	
Average age at first menstruation	13.39 $\pm$ 1.47 (10-17)	
Average number of pregnancies	1.40 $\pm$ 1.64 (0-6)	
Mean frequency of menstrual cycles	27.69 $\pm$ 3.59 (21-50)	
Mean number of bleeding days	5.74 $\pm$ 1.35 (3-9)	

* Pharmacological or nanopharmacological applications, $\bar{X}$: Mean value, SD: Standard Deviation

The total score of the MAQ used in the study was 106.71 $\pm$ 10.65, and the mean scores of the sub-dimensions were as follows: menstruation as a debilitating phenomenon 36.81 $\pm$ 5.70; menstruation as a disturbing phenomenon 9.39 $\pm$ 4.03; menstruation as a natural phenomenon 17.41 $\pm$ 2.61; noticing/predicting menstruation in advance 17.63 $\pm$ 2.46; denying the effects of menstruation 20.94 $\pm$ 4.32. According to these averages, it was determined that the participants exhibited negative attitudes, as their scores were below the midpoint of the scale. The total score of the HLSBS-II was 118.00 $\pm$ 23.59, and it was determined that the participants' healthy lifestyle behaviors were above the average score. When the mean scores of the sub-dimensions of the HLSBS-II were evaluated, it was found that the mean scores were as follows: Health responsibility 19.42 $\pm$ 5.79; Physical activity 15.48 $\pm$ 4.52; Nutrition 18.56 $\pm$ 4.18; Spiritual development 24.58 $\pm$ 4.82; Interpersonal relationships 21.85 $\pm$ 5.97; and Stress management 18.09 $\pm$ 3.90. According to these averages, it was determined that women's healthy lifestyle behaviors were at a moderate level (Table 2). When the reliability levels of the internal consistency coefficients of the total and sub-dimensions of the MAQ and the HLSBS-II used in the study were examined, it was determined that the overall reliability of the MAQ total was acceptable to high (0.61 $<\alpha$ $<$ 0.80), and the reliability of the total score of the HLSBS-II was high (0.81 $<\alpha$ $<$ 1.00). (Table 2).

Table 2

Distribution of Internal Validity Coefficients and Mean Values of Menstruation Attitude Questionnaire and Healthy Life Style Behaviors Scale II Semantic Difference Scale and Scales

	$\bar{X} \pm SD$ (min-max)	Cronbach's Alpha
Menstruation Attitude Questionnaire (MAQ)	106.71 $\pm$ 10.65 (53-133)	0.80
Menstruation as a debilitating phenomenon	36.81 $\pm$ 5.70 (15-48)	0.72
Menstruation as a disturbing phenomenon	19.39 $\pm$ 4.03 (9-30)	0.81
Menstruation as a natural phenomenon	17.41 $\pm$ 2.61 (7-22)	0.70
Recognizing/predicting menstruation in advance	17.63 $\pm$ 2.46 (9-23)	0.86
Deny the effects of menstruation	20.94 $\pm$ 4.32 (13-31)	0.85
Healthy Life Style Behaviors Scale II (HLSBS-II)	118.00 $\pm$ 23.59 (83-171)	0.92
Health responsibility	19.42 $\pm$ 5.79 (11-33)	0.80
Physical activity	15.48 $\pm$ 4.52 (8-30)	0.76
Nutrition	18.56 $\pm$ 4.18 (12-33)	0.61
Spiritual development	24.58 $\pm$ 4.82 (17-34)	0.65
Interpersonal relationships	21.85 $\pm$ 5.97 (12-41)	0.75
Stress management	18.09 $\pm$ 3.90 (12-29)	0.61

MAQ: Menstruation Attitude Questionnaire, HLSBS-II: Healthy Life Style Behaviors Scale-II, $\bar{X}$: Mean value, SD: Standard Deviation

When the total and sub-dimensions of the MAQ were compared with sociodemographic characteristics, the total score of the MAQ was correlated with the variables of education, marital status, place of residence, family type, number of pregnancies, experiencing pain during menstruation, and duration of pain; the sub-dimension of menstruation as a disempowering phenomenon was correlated with the variables of education, place of residence, family type, experiencing pain during menstruation, duration of pain, number of bleeding days, and the use of any practices for menstrual pain; the sub-dimension of menstruation as a disturbing phenomenon was correlated with the variables of education, marital status, place of residence, number of pregnancies, experiencing pain during menstruation, duration of pain, frequency of menstrual cycles, and number of bleeding days; the sub-dimension of menstruation as a natural phenomenon was correlated with age, education, marital status, place of residence, family type, number of pregnancies, experiencing pain during menstruation, duration of pain, menstrual cycle frequency, and regularity; the sub-dimension of anticipating/predicting menstruation was correlated with age, education, marital status, age at first menstruation, number of pregnancies, experiencing pain during menstruation, duration of pain, cycle regularity, frequency, number of bleeding days, and the use of any practice for menstrual pain; and the sub-dimension of denying the effects of menstruation and educational status, family type, age at first menstruation, number of pregnancies, duration of pain during menstruation, and the use of any practice for menstrual pain ($p < 0.05$) (Table 3).

Table 3
Comparison of Sociodemographic Characteristics of Women and Total and Subscales of Menstruation Attitude Questionnaire

Sociodemographic Characteristics	Menstruation Attitude Questionnaire					
	Menstruation as a debilitating phenomenon $\bar{X}\pm SD$	Menstruation as a disturbing phenomenon $\bar{X}\pm SD$	Menstruation as a natural phenomenon $\bar{X}\pm SD$	Recognizing/ predicting menstruation in advance $\bar{X}\pm SD$	Deny the effects of menstruation $\bar{X}\pm SD$	Questionnaire Total $\bar{X}\pm SD$
Age						
19-25	37.69±6.32	19.10±3.70	17.42±2.50	17.36±2.56	21.20±3.56	107.32±11.39
26-32	35.85±4.37	20.05±4.56	17.92±1.69	18.57±1.95	20.10±5.45	107.33±8.17
33 years and older	35.77±5.48	19.11±3.99	16.42±3.93	16.71±2.50	21.77±4.01	103.48±12.06
F/p*	2.658/0.073	1.171/0.312	3.471/0.033	7.790/0.001	1.939/0.147	1.705/0.184
Significant difference	-	-	2-3	1-2, 2-3	-	-
Education status						
Primary School (1)	28.33±6.22	15.67±3.11	12.67±0.77	13.17±1.94	19.50±1.16	83.83±14.40
Middle School (2)	37.29±3.63	20.18±3.72	19.35±1.86	18.82±1.70	26.47±3.02	113.35±8.76
High School (3)	38.67±3.62	20.46±3.00	17.87±2.86	17.93±1.09	22.59±4.03	111.70±7.45
University (4)	36.76±5.94	19.16±4.36	17.42±2.08	17.79±2.60	19.49±3.88	105.76±8.01
F/p*	12.724/0.000	5.342/0.001	22.476/0.000	18.989/0.000	21.918/0.000	39.738/0.000
Significant difference	1-2, 1-3, 1-4	1-2, 1-3, 1-4	1-2, 1-3, 1-4	1-2, 1-3, 1-4	1-2, 2-3, 2-4	1-2, 1-3, 1-4
Marital status						
Married	36.30±5.99	19.99±4.40	17.01±2.89	17.22±2.63	20.47±4.48	105.04±12.35
Single	37.31±5.39	18.82±3.57	17.81±2.25	18.03±2.22	21.41±4.14	108.32±8.47
t/p**	-1.238/0.217	2.035/0.043	-2.163/0.032	-2.331/0.021	-1.528/0.128	-2.158/0.032
Place of residence						
Province (1)	35.85±5.58	18.95±4.03	17.07±2.43	17.65±2.63	20.82±4.55	105.08±10.34
District (2)	39.00±4.42	23.17±4.99	18.33±2.65	17.17±2.22	22.67±3.07	111.83±14.52
Village (3)	42.68±1.88	21.44±2.63	19.52±2.78	17.64±0.86	21.36±2.73	116.24±5.24
F/p*	18.969/0.000	7.284/0.001	10.981/0.000	0.110/0.896	0.652/0.522	14.341/0.000
Significant difference	1-3	1-2, 1-3	1-3	-	-	1-3
Family type						
Nuclear family (1)	37.10±5.68	19.38±4.23	17.34±2.49	17.75±2.34	20.38±3.93	102.83±9.65
Extended family (2)	34.39±6.32	19.25±3.77	16.82±3.19	16.86±3.35	21.00±4.14	106.00±14.64
Other (3)	36.10±4.39	19.23±3.36	14.23±3.52	16.83±3.62	18.72±3.12	100.11±10.23
F/p*	3.614/0.029	0.142/0.868	6.520/0.002	1.685/0.188	25.579/0.000	8.482/0.000
Significant difference	1-2	-	1-3, 2-3	-	1-3, 2-3	1-3, 2-3
Age at first menstruation						
10-13 years old	36.48±5.45	19.57±4.07	17.71±2.58	18.10±2.24	19.45±3.55	106.34±10.33
14 years and older	37.22±5.99	19.18±4.00	17.07±2.61	17.07±2.60	22.75±4.49	107.17±11.06
t/p**	-0.914/0.362	0.673/0.502	1.725/0.086	2.949/0.004	-5.623/0.000	-0.540/0.590
Number of pregnancies						
1 pregnancy (1)	36.88±7.24	19.94±4.54	18.00±3.48	16.97±2.97	22.79±6.52	107.42±17.86
2-3 pregnancies (2)	37.88±3.99	20.79±2.66	17.91±2.12	18.60±2.12	22.58±4.21	110.81±7.23
4 and above (3)	35.07±5.41	18.55±3.90	15.76±2.76	16.31±2.70	20.17±2.94	101.03±10.50
No pregnancy (4)	36.85±5.80	18.80±4.28	17.51±2.20	17.84±2.09	19.76±3.20	106.33±7.41
F/p*	1.420/0.238	3.082/0.029	5.318/0.002	6.529/0.000	7.279/0.000	5.285/0.002
Significant difference	-	2-4	1-3, 2-3, 3-4	1-2, 2-3, 3-4	1-4, 2-4	2-3

Experiencing pain during menstruation						
Yes always (1)	37.68±5.88	19.67±3.23	17.86±2.25	17.97±2.42	20.58±3.95	108.69±8.58
No (2)	34.50±3.92	15.35±4.34	14.31±1.69	16.12±1.79	21.85±2.83	97.15±7.59
Sometimes (3)	35.96±5.67	20.84±4.33	17.98±2.72	17.62±2.59	21.36±5.60	106.94±13.60
F/p*	4.198/0.016	19.710/0.000	26.986/0.000	6.366/0.002	1.216/0.299	14.252/0.000
Significant difference	1-2	1-2, 2-3	1-2, 2-3	1-2, 2-3	-	1-2, 2-3
Duration of pain during menstruation (n=170)						
First day of menstruation (1)	36.49±5.64	19.75±3.24	18.15±1.96	18.05±2.83	20.51±4.99	107.99±9.34
2-3 days (2)	38.72±6.25	19.74±3.91	17.31±2.69	17.47±2.18	21.18±3.96	108.72±12.31
Until the end of menstruation (3)	36.89±3.10	23.22±3.93	17.56±2.06	17.00±2.00	17.78±3.19	105.33±8.86
Before menstruation (4)	31.64±2.11	19.27±0.90	20.55±1.50	19.82±0.60	24.55±1.50	109.33±9.83
F/p*	5.685/0.000	6.911/0.000	19.180/0.000	5.487/0.000	3.547/0.008	5.975/0.000
Significant difference	1-4, 2-4	3-4	1-4, 2-4, 3-4	2-4	1-4, 3-4	2-4
Regularity of the menstrual cycle						
Yes	37.36±5.04	19.22±4.36	16.83±2.59	17.91±2.19	20.89±4.33	107.01±9.20
No	35.49±6.93	19.81±3.10	18.84±2.06	16.95±2.93	21.09±4.35	106.00±13.62
t/p**	1.844/0.069	-1.055/0.293	-5.715/0.000	2.242/0.028	-0.287/0.775	0.512/0.610
Menstrual cycle frequency						
21-28 days	36.76±5.05	18.82±4.51	16.99±2.72	17.94±2.35	20.62±4.19	106.07±11.10
29 days or more	36.91±6.78	20.45±2.69	18.20±2.20	17.07±2.58	21.55±4.53	107.90±9.73
t/p**	-0.160/0.873	-3.162/0.002	-3.171/0.002	2.310/0.022	-1.439/0.152	-1.148/0.252
Number of bleeding days						
3-5 days	38.02±6.29	18.24±4.28	17.70±2.95	18.01±2.23	21.27±4.01	108.13±11.22
6 days or more	35.81±4.97	20.36±3.56	17.19±2.27	17.32±2.60	20.68±4.56	105.53±10.05
t/p**	2.744/0.007	-3.780/0.000	1.332/0.185	2.005/0.046	0.946/0.345	1.711/0.089
Any application* for menstrual pain						
Yes	37.49±6.13	19.54±4.34	17.56±2.49	17.11±2.26	20.20±3.99	106.46±10.70
No	35.68±4.72	19.15±3.47	17.18±2.80	18.51±2.55	22.21±4.59	107.15±10.62
t/p**	2.159/0.032	0.646/0.519	0.992/0.322	-3.848/0.000	-3.206/0.002	0.512/0.610

*One-way ANOVA, **Independent sample t test, *** Pharmacological or nanopharmacological applications, $\bar{X}$: mean value, SD: Standard Deviation

When the total and sub-dimensions of the HLSBS-II were compared with sociodemographic characteristics, it was found that the total score of the HLSBS-II was significantly associated with age, education, marital status, place of residence, number of pregnancies, experiencing pain during menstruation, duration, cycle pattern, frequency, number of bleeding days, and the use of any practice for menstrual pain ($p<0.05$). Health responsibility was a significantly associated with age, education, marital status, place of residence, age at first menstruation, number of pregnancies, experiencing pain during menstruation, duration, number of bleeding days, and the use of any practice for menstrual pain ($p<0.05$). Physical activity was significantly associated with age, education, marital status, place of residence, family type, age at first menstruation, number of pregnancies, experiencing pain during menstruation, duration, cycle pattern, frequency, number of bleeding days, and the use of any practice for menstrual pain ($p<0.05$).

It was found that the Nutrition sub-dimension was significantly associated with age, education, marital status, place of residence, family type, number of pregnancies, experiencing pain during menstruation, duration, cycle pattern, frequency, number of bleeding days, and the use of any practice for menstrual pain ($p<0.05$). The Spiritual development sub-dimension was significantly associated with age, education, marital status, number of pregnancies, experiencing pain during menstruation, duration,

number of bleeding days, and the use of any practice for menstrual pain. The Interpersonal relations sub-dimension was significantly associated with age, education, marital status, place of residence, number of pregnancies, experiencing pain during menstruation, duration of pain, cycle pattern, frequency, number of bleeding days. The Stress management sub-dimension was significantly associated with age, education, marital status, place of residence, age at first menstruation, number of pregnancies, menstrual pain, duration, cycle pattern, frequency, number of bleeding days, and the use of any practice for menstrual pain ($p < 0.05$) (Table 4).

Table 4

Comparison of the Sociodemographic Characteristics of Women and the Total of the Subscales of the Healthy Life Style Behaviors Scale II

	Healthy Life Style Behaviors Scale II						
	Health	Physical		Spiritual	Interpersonal	Stress	
Sociodemographic	responsibility	activity	Nutrition	development	relationships	management	Scale Total
Characteristics	$\bar{X}\pm SD$	$\bar{X}\pm SD$	$\bar{X}\pm SD$	$\bar{X}\pm SD$	$\bar{X}\pm SD$	$\bar{X}\pm SD$	$\bar{X}\pm SD$
Age							
19-25 (1)	17.76 $\pm$ 5.88	14.58 $\pm$ 4.36	17.38 $\pm$ 4.08	22.75 $\pm$ 3.82	18.95 $\pm$ 3.83	17.10 $\pm$ 3.56	108.55 $\pm$ 21.03
26-32 (2)	20.57 $\pm$ 4.42	16.14 $\pm$ 4.60	20.91 $\pm$ 3.77	26.50 $\pm$ 5.22	25.40 $\pm$ 6.78	18.98 $\pm$ 4.13	128.54 $\pm$ 23.39
33 years and older (3)	22.70 $\pm$ 6.07	17.19 $\pm$ 4.33	17.90 $\pm$ 3.35	26.90 $\pm$ 4.67	24.61 $\pm$ 5.13	19.64 $\pm$ 3.73	128.96 $\pm$ 18.62
F/p*	11.549/0.000	5.110/0.007	16.422/0.000	18.756/0.000	35.822/0.000	7.876/0.001	21.493/0.000
Significant difference	1-2, 1-3	1-3	1-2, 2-3	1-2, 1-3	1-2, 1-3	1-2, 1-3	1-2, 1-3
Education status							
Primary School (1)	27.16 $\pm$ 4.28	20.00 $\pm$ 2.33	17.00 $\pm$ 2.33	28.83 $\pm$ 5.06	25.16 $\pm$ 1.94	21.83 $\pm$ 2.72	140.00 $\pm$ 14.01
Middle School (2)	16.29 $\pm$ 6.79	10.94 $\pm$ 4.86	16.76 $\pm$ 6.39	22.35 $\pm$ 3.87	19.05 $\pm$ 6.07	16.58 $\pm$ 3.22	102.00 $\pm$ 28.87
High School (3)	18.14 $\pm$ 4.89	14.35 $\pm$ 4.78	20.75 $\pm$ 4.29	23.42 $\pm$ 2.64	21.18 $\pm$ 6.57	16.62 $\pm$ 3.48	114.50 $\pm$ 20.08
University (4)	19.68 $\pm$ 5.47	16.23 $\pm$ 3.80	17.95 $\pm$ 3.45	25.01 $\pm$ 5.38	22.24 $\pm$ 5.77	18.61 $\pm$ 3.92	119.75 $\pm$ 23.25
F/p*	11.278/0.000	14.228/0.000	8.174/0.000	6.099/0.001	2.947/0.034	8.628/0.000	7.337/0.000
Significant difference	1-2, 1-3, 1-4	1-2, 1-3, 1-4	1-3, 2-3, 3-4	1-2, 1-3, 1-4	1-2	1-2, 1-3, 1-4	1-2, 1-3, 1-4
Marital status							
Married	20.75 $\pm$ 5.51	16.52 $\pm$ 4.51	19.18 $\pm$ 4.08	25.91 $\pm$ 5.10	24.04 $\pm$ 6.10	18.92 $\pm$ 3.82	125.34 $\pm$ 22.70
Single	18.15 $\pm$ 5.80	14.49 $\pm$ 4.33	17.97 $\pm$ 4.20	23.30 $\pm$ 4.18	19.76 $\pm$ 5.04	17.29 $\pm$ 3.82	110.96 $\pm$ 22.35
t/p**	3.214/0.002	3.212/0.002	2.054/0.041	3.918/0.000	5.362/0.000	2.993/0.003	4.469/0.000
Place of residence							
Province (1)	20.07 $\pm$ 5.63	16.01 $\pm$ 4.54	18.99 $\pm$ 3.80	24.77 $\pm$ 5.06	21.83 $\pm$ 6.23	18.70 $\pm$ 3.55	120.39 $\pm$ 23.08
District (2)	22.00 $\pm$ 6.51	15.50 $\pm$ 4.03	23.00 $\pm$ 3.68	27.00 $\pm$ 3.89	26.00 $\pm$ 3.34	22.00 $\pm$ 2.82	135.50 $\pm$ 20.33
Village (3)	14.52 $\pm$ 4.20	12.00 $\pm$ 2.79	14.68 $\pm$ 4.32	22.72 $\pm$ 2.26	21.00 $\pm$ 4.08	13.12 $\pm$ 1.92	98.04 $\pm$ 16.34
F/p*	11.741/0.000	9.236/0.000	17.575/0.000	2.799/0.063	1.714/0.183	33.783/0.000	12.831/0.000
Significant difference	1-3, 2-3	1-3	1-2, 1-3, 2-3	-	-	1-3, 2-3	1-3, 2-3
Family type							
Nuclear family (1)	19.15 $\pm$ 5.83	15.78 $\pm$ 4.32	18.14 $\pm$ 3.96	24.36 $\pm$ 4.98	21.40 $\pm$ 6.03	18.15 $\pm$ 4.01	117.02 $\pm$ 24.10
Extended family (2)	20.28 $\pm$ 6.60	15.92 $\pm$ 5.20	18.39 $\pm$ 4.17	25.21 $\pm$ 4.79	21.57 $\pm$ 4.98	18.57 $\pm$ 3.86	119.96 $\pm$ 24.91
Other (3)	21.12 $\pm$ 5.34	17.74 $\pm$ 4.82	17.96 $\pm$ 4.93	24.93 $\pm$ 4.52	22.62 $\pm$ 5.47	19.32 $\pm$ 4.83	120.45 $\pm$ 23.74
F/p*	0.879/0.417	9.281/0.000	15.944/0.000	0.867/0.422	9.030/0.000	1.823/0.164	1.031/0.359
Significant difference	-	1-3, 2-3	1-3, 2-3	-	1-3, 2-3	-	-
Age at first menstruation							
10-13 years old	18.42 $\pm$ 5.21	16.16 $\pm$ 4.46	18.17 $\pm$ 4.02	24.78 $\pm$ 4.66	21.94 $\pm$ 6.59	17.42 $\pm$ 4.30	116.91 $\pm$ 24.60
14 years and older	20.62 $\pm$ 6.24	14.66 $\pm$ 4.49	19.03 $\pm$ 4.34	24.33 $\pm$ 5.02	21.75 $\pm$ 5.15	18.89 $\pm$ 3.20	119.31 $\pm$ 22.39
t/p**	-2.699/0.008	2.343/0.020	-1.430/0.154	0.646/0.519	0.228/0.820	-2.752/0.006	-0.714/0.476

Number of pregnancies							
1 pregnancy (1)	20.96±4.19	15.30±5.53	22.42±3.90	25.72±4.82	26.00±5.83	18.63±4.38	129.06±21.74
2-3 pregnancies (2)	17.23±5.20	13.58±4.34	17.39±3.67	23.25±3.78	20.48±6.52	17.34±2.68	109.30±22.02
4 and above (3)	23.20±6.83	17.31±4.18	18.34±4.32	27.10±4.79	23.31±3.94	20.17±3.94	129.44±21.74
No pregnancy (4)	18.69±5.57	15.86±4.04	17.79±3.69	23.98±4.96	20.53±5.55	17.58±3.99	114.46±22.99
F/p*	8.264/0.000	4.574/0.004	13.827/0.000	5.104/0.002	9.106/0.000	4.188/0.007	8.123/0.000
Significant difference	1-2, 2-3, 3-4	2-3, 2-4	1-2, 1-3, 1-4	2-3, 3-4	1-4, 1-4	2-3, 3-4	1-2, 1-4, 2-3
Experiencing pain during menstruation							
Yes always (1)	17.72±6.18	14.33±4.56	17.64±4.63	23.27±4.38	19.31±5.26	16.98±4.03	109.27±24.94
No (2)	22.61±5.39	18.88±2.59	18.07±1.80	24.76±5.37	23.96±4.29	21.23±1.81	129.53±13.70
Sometimes (3)	21.84±2.72	16.48±4.14	21.04±2.68	27.62±4.19	26.86±4.63	19.12±3.17	132.96±11.09
F/p*	15.433/0.000	14.071/0.000	13.354/0.000	16.631/0.000	42.910/0.000	17.495/0.000	27.069/0.000
Significant difference	1-2, 1-3	1-2, 1-3	1-3, 2-3	1-3, 2-3	1-2, 1-3, 2-3	1-2, 1-3, 2-3	1-2, 1-3
Duration of pain during menstruation (n=170)							
First day of menstruation (1)	20.70±6.51	15.29±3.93	19.32±4.52	25.74±4.54	22.32±5.55	18.48±4.33	107.99±9.34
2-3 days (2)	17.15±5.08	14.41±5.51	18.25±4.50	22.34±4.37	19.65±6.16	16.68±3.65	108.72±12.31
Until the end of menstruation (3)	18.77±2.68	15.55±3.32	20.88±2.61	28.66±3.96	28.22±4.57	19.88±2.57	105.33±8.86
Before menstruation (4)	18.09±0.30	14.72±0.90	14.36±1.20	25.45±1.50	19.90±3.01	15.81±0.60	109.33±9.83
F/p*	6.487/0.000	4.520/0.002	7.911/0.000	8.396/0.000	8.933/0.000	3.547/0.008	7.804/0.000
Significant difference	1-2	2-3	1-2, 3-4	1-2, 1-3, 2-3	1-2, 2-3	1-4, 3-4	1-2, 2-3, 2-4
Regularity of the menstrual cycle							
Yes	19.77±4.92	16.23±4.31	19.41±3.93	24.51±4.88	22.44±6.56	18.51±3.43	120.91±21.69
No	18.56±7.48	13.64±4.54	16.49±4.08	24.73±4.72	20.42±3.87	17.05±4.73	110.91±26.59
t/p**	1.129/0.262	3.753/0.000	4.680/0.000	-0.288/0.774	2.674/0.008	2.119/0.037	2.517/0.014
Menstrual cycle frequency							
21-28 days	19.14±5.21	16.05±4.06	18.85±4.21	24.77±4.42	22.53±6.34	18.14±3.58	119.50±21.12
29 days or more	19.94±6.74	14.43±5.14	18.04±4.09	24.21±5.50	20.60±5.02	18.00±4.45	115.24±27.52
t/p**	1.129/0.262	3.753/0.000	4.680/0.000	-0.288/0.774	2.674/0.008	2.119/0.037	2.517/0.014
Number of bleeding days							
3-5 days	17.30±4.31	14.56±4.68	17.38±3.94	21.39±3.73	19.08±4.22	16.84±3.56	106.57±20.42
6 days or more	21.18±6.27	16.25±4.26	19.55±4.13	27.23±3.95	24.15±6.24	19.13±3.89	127.51±21.83
t/p**	-5.109/0.000	-2.641/0.009	-3.733/0.000	-10.618/0.000	-6.514/0.000	-4.260/0.000	-6.882/0.000
Any application* for menstrual pain							
Yes	18.52±5.80	15.22±4.77	17.83±4.24	24.02±4.91	21.38±6.01	17.47±3.94	114.47±24.86
No	20.93±5.49	15.91±4.07	19.79±3.79	25.52±4.55	22.65±5.85	19.12±3.63	123.94±20.08
t/p**	-2.858/0.005	-1.031/0.304	-3.243/0.001	-2.117/0.035	-1.449/0.149	-2.902/0.004	-2.914/0.004

*One-Way ANOVA, **Independent sample t test, *** Pharmacological and nonpharmacological applications, $\bar{X}$: Mean value, SD: Standard Deviation

In the evaluation of the relationship between the scales used in the study, it was determined that there was a weak, positive, and significant relationship ($r=0.249$; $p<0.05$) between the MAQ total score and the HLSBS-II total score, indicating that as menstrual attitudes became more positive, healthy lifestyle behaviors increased ($p<0.05$) (Table 5).

Tablo 5

The Relationship Between Menstruation Attitude Questionnaire and Healthy Life Style Behaviors Scale-II Total and Subscales

		1	2	3	4	5	6	7	8	9	10	11	12	13
Menstruation as a debilitating phenomenon (1)	r p*	1	0.274 0.000	0.119 0.095	0.200 0.005	0.195 0.006	0.760 0.000	-0.285 0.000	-0.256 0.000	-0.096 0.181	-0.284 0.000	0.021 0.773	-0.306 0.000	-0.240 0.001
Menstruation as a disturbing phenomenon (2)	r p*		1	0.391 0.000	-0.019 0.792	0.037 0.604	0.525 0.000	0.287 0.000	0.114 0.112	0.300 0.000	0.436 0.000	0.433 0.000	0.072 0.315	0.356 0.000
Menstruation as a natural phenomenon (3)	r p*			1	0.411 0.000	0.317 0.000	0.560 0.000	-0.204 0.004	-0.361 0.000	-0.120 0.093	0.017 0.811	0.055 0.443	-0.243 0.001	-0.163 0.022
Recognizing/predicting menstruation in advance (4)	r p*				1	0.362 0.000	0.579 0.000	-0.484 0.000	-0.303 0.000	-0.212 0.003	-0.210 0.003	-0.270 0.000	-0.319 0.000	-0.379 0.000
Deny the effects of menstruation (5)	r p*					1	0.492 0.000	-0.272 0.000	-0.467 0.000	-0.126 0.077	-0.242 0.001	-0.139 0.051	-0.259 0.000	-0.306 0.000
MQA Total (6)	r p*						1	-0.298 0.000	-0.370 0.000	-0.059 0.409	-0.163 0.022	-0.004 0.954	-0.360 0.000	0.249 0.000
Health responsibility (7)	r p*							1	0.725 0.000	0.601 0.000	0.687 0.000	0.580 0.000	0.774 0.000	0.907 0.000
Physical activity (8)	r p*								1	0.484 0.000	0.512 0.000	0.394 0.000	0.814 0.000	0.795 0.000
Nutrition (9)	r p*									1	0.378 0.000	0.492 0.000	0.544 0.000	0.710 0.000
Spiritual development (10)	r p*										1	0.663 0.000	0.593 0.000	0.804 0.000
Interpersonal relationships	r p*											1	0.457 0.000	0.769 0.000
Stress management (12)	r p*												1	0.845 0.000
HLSBS-II Total (13)	r p*													1

*Pearson correlation analysis, MAQ: Menstruation Attitude Questionnaire, HLSBS-II: Healthy Life Style Behaviors Scale-II

As a result of the regression analysis conducted to examine how variables thought to affect menstrual attitudes predicted the MAQ scores, it was seen that these predictor variables exhibited a significant relationship with the level of menstruation attitude ($F=8.809$; $p<0.01$). These independent variables explain 24.3% of the variance in menstruation attitude ($R^2=0.243$). When the order of importance of these variables on the dependent variable was evaluated according to the standardized regression coefficients, it was determined that educational status ($\beta=2.736$) had the highest influence, and number of pregnancies ($\beta=-1.418$) had the lowest. Considering the significance tests of the regression coefficients, it was found that the independent variables of education level, place of residence, number of pregnancies, and duration of pain during menstruation were significant predictors of menstrual attitude ($p<0.01$) (Table 6).

Table 6*Total Score of Menstruation Attitude Questionnaire Regression Analysis*

Independent Variables	β	SE	p*	95% CI	
				Lower	Upper
Education status	2.736	0.798	0.001	1.161	4.310
Marital status	2.291	1.532	0.137	-0.732	5.314
Place of residence	1.795	0.703	0.011	0.408	3.181
Family type	2.281	1.427	0.112	-0.534	5.095
Number of pregnancies	-1.418	0.642	0.028	-2.686	-0.151
Experiencing pain during menstruation	-0.295	0.941	0.754	-2.152	1.562
Duration of pain during menstruation	1.632	0.767	0.035	0.120	3.144
Healthy Life Style Behaviors Scale-II total	-0.045	0.034	0.187	-0.112	0.022
R= 0.523 R ² = 0.243 F=8.809 p=0.000*					

*Multiple Linear regression analysis was used. CI: Güven aralığı

DISCUSSION

In this study, the effect of menstruation attitude on healthy life style behaviors was examined. Significant findings indicated that menstrual attitudes were influenced by factors related to menstrual pain, place of residence, number of pregnancies and educational status. The results obtained were consistent and were discussed in relation to the relevant literature. Women's attitudes towards menstruation play a critical role in shaping their physical and psychosocial well-being. According to the results of the total score of the MAQ, which has been validated and shown to be reliable in different countries around the world, it was determined that women's menstrual attitudes are generally positive. (Bargiota et al., 2016; Ghiasi et al., 2018; Lawal et al., 2020). In a study conducted by Altintas et al. (2021) on nursing students, the total MAQ score was reported as 93.31 ± 10.27 . In our study, the average MAQ total score was 106.71 ± 10.65 , indicating that women have positive attitudes towards menstruation, which is consistent with the literature. Education level is an important factor in the perception and attitude towards menstruation. In the study conducted by Padmanabhanunni and Fennie (2017) to evaluate menstrual attitudes, it was concluded that women's menstruation attitudes and perceptions improved as the level of education increased. In our study, it was determined that participants with only a primary school education had the lowest mean MAQ score. This suggests that a low level of education negatively affect menstrual attitudes. A woman's marital status can also influence her perception of menstruation and the role it plays in her life. Jadav et al. (2022) found that married women exhibited negative attitudes compared to single women, were not sufficiently prepared or knowledgeable about menstruation, and viewed menstruation as a source of concealment and disability. In our study, a similar result was obtained, with the mean MAQ score of single women being higher than that of married women. This may be explained by the theory that negative sexism practiced by men in marriage can distort a woman's understanding of her own physiological functioning.

Socio-cultural factors may contribute to the development of cultural beliefs and practices that influence the menstruation process. This approach emphasizes understanding the interrelationship between the individual and their environment in promoting health practices. Common menstruation beliefs and practices represent a society's perceptions and attitudes toward menstruation and women (Thapa and Aro, 2021). In our study, it was determined that women living in villages and extended families had higher mean MAQ scores. This supports the view that individuals raised in a traditional structure have more positive attitudes towards menstruation.

Studies have shown that women's attitudes towards menstruation are related to individual knowledge, age, experiences, myths, traditions, social learning, cultural beliefs, menstrual pain, duration and amount of bleeding, and psychological distress such as depression, anxiety and stress. (Kamini et al., 2022; Larki et al., 2022; Sánchez-Borrego and García-Calvo, 2010). In our study, it was found that experiencing pain during menstruation and experiencing this pain before menstruation had a positive effect on menstrual attitude. Similar to our study, it has been reported that place of residence, premenstrual symptoms, and menstrual pain positively affect menstrual attitude (Ghiasi et al., 2018; Jain et al., 2018; Yilmaz and Sahin, 2019). In the focus group interviews conducted by Uskul (2014) with women in different countries, it was stated that the mother's reaction was important in the first menstruation experience and that cultural and religious factors influenced women's menarche reactions.

It has been observed that women's attitudes towards menstruation are important in coping with the difficulties that associated with it and in developing healthy life behaviors. In our study, the mean total score of the HLSBS-II was 118.00 ± 23.59 , indicating that women exhibited healthy lifestyle behaviors at a moderate level. Akin et al. (2022) evaluated the relationship between having a Pap smear test and the HLSBS-II and found that the mean total score of women's HLSBS-II was 128.38 ± 21.8 . This suggests that women develop similar healthy lifestyle behaviors based on their awareness of and attitudes toward their own bodies.

An individual's health behaviors affect their health status and play an important role in acquiring healthy lifestyle behaviors. It was determined that age, education, marital status, place of residence, number of pregnancies, experiencing pain during menstruation, duration, cycle pattern, frequency, number of bleeding days, and the use of any practice for menstrual pain positively affected healthy life style behaviors. Uzunur and Kocak (2019) found that positive healthy lifestyle behaviors can be effective in reducing the frequency and severity of premenstrual syndrome. Gözüyesil et al. (2019) found that age, educational status, contraceptive methods used, menopausal status, knowing of and performance of breast self-examination, and having mammography positively affected healthy life style behaviors.

It was determined that there was a weak, positive, and significant relationship between the MAQ total score and the HLSBS-II total score. This finding indicates that individuals tend to reduce their healthy lifestyle behaviors as when they exhibit negative attitudes toward menstruation. A similar result was reported in the study by Walker and Avant (2019), suggesting that the physical and psychological effects of menstruation may also negatively affect general health behaviors. In addition, it can be argued that negative perceptions and attitudes towards menstruation may reduce individuals' motivation to maintain a healthy lifestyle, which may, in turn, negatively affect their quality of life in the long term. The findings emphasize the importance of awareness and education programs in this area and indicate that promoting positive attitudes towards menstruation, especially among young women, may support general health behaviors.

CONCLUSION AND SUGGESTIONS

As a result of our study; 54.6% of women were 10-13 years old at the time of their first menstruation, 46.5% had not had a pregnancy before, 61.2% experienced pain during menstruation, 44.1% of those who experienced pain had pain on the first day of menstruation, 70, 9% had regular menstrual cycles, 64.8% had menstrual cycles between 21-28 days, 54.6% had bleeding lasting six days or more, and 62.8% used pain reduction practices during menstruation. It was determined that menstrual attitudes of women were positively affected by factors such as level of education, experiencing pain during menstruation, and duration of pain, while healthy lifestyle behaviors were affected by age, education, marital status, place of residence, number of pregnancies, experiencing pain during menstruation, duration of pain, cycle pattern, frequency, number of bleeding days, and the use of any practice for menstrual pain. Menstrual attitudes and healthy lifestyle behaviors were found to be weakly but positively correlated with each other. In our study, it was concluded that the level of education, place of residence, number of pregnancies, and duration of pain during menstruation affect menstrual attitude. This situation should help midwives promote positive health behaviors in women by planning trainings on the menstruation process, especially for women of reproductive age, according to their level of education, place of residence, and number of pregnancies. Since low attitudes among women experiencing pain during menstruation may reduce their tendency towards healthy lifestyle behaviors, midwives should provide information on practices aimed at reducing pain. Reducing the negative impact of menstruation on daily activities and social relationships, and helping to improve or eliminate symptoms, will increase women's quality of life.

LIMITATIONS

The findings obtained in this study include only the women who participated and cannot be generalized to all women. The findings can be expanded upon by further research using different scales and larger groups sample groups.

Ethics Approval

Permission for the research was obtained from the Yozgat Bozok University Ethics Committee on February 16, 2022, with decision number 30/29. After ethical approval for the study was obtained, institutional permission numbered E-76728045-044 was obtained from a state hospital on 07.03.2022. Before the start of the study, both verbal consent and written informed consent were obtained from the participants to participate in the study.

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Conflict of Interest

The authors declare that there is no conflict of interest.

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Author Contributions

Concept and Design: Ö.N., D.Ç. Data Collection and/or Data Processing: Ö.N., D.Ç. Analysis and Interpretation: D.Ç. Literature Review: Ö.N. Manuscript Writing: Ö.N., D.Ç.

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