

# Examination of the effects of primary dysmenorrhea on daily life of young women and treatment approaches

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## Abstract

**Aim:** Dysmenorrhea is a condition characterized by pain during or before menstruation. This study aims to investigate how dysmenorrhea affects the quality of life of young women and explore effective treatment approaches.

**Methods:** The research data in descriptive and cross-sectional types were collected using a personal information form containing students' socio-demographic characteristics and a Visual Analog Scale (VAS). A total of 336 students diagnosed with dysmenorrhea and willing to participate in the study were included.

**Results:** The mean VAS scale score used to determine the severity of dysmenorrhea in the participants was  $6.51 \pm 2.10$ . Among the participants who chose Complementary and Alternative Treatment (CAT), 81.8% preferred lying down for rest, and 72.9% opted for applying heat to the abdomen. A statistically significant difference was found in the use of analgesics and CAT methods for dysmenorrhea control based on a family history of dysmenorrhea and the impact of dysmenorrhea on daily life ( $p < 0.05$ ). When the relationship between some categorical characteristics of the students and their belief in and use of CAT methods was examined, a statistically significant relationship was found between nationality (Turkish and foreign) and belief in CAT methods ( $p < 0.05$ ).

**Conclusion:** This study demonstrates that dysmenorrhea can impact the daily lives of young women and highlights the utilization of various treatment methods. Analgesic medication and TAT methods are commonly preferred for managing this condition. Future research could provide further insights into dysmenorrhea management and aid in developing more effective strategies to improve the quality of life for young women.

**Keywords:** Dysmenorrhea, menstrual cycle, student, complementary and alternative therapy, quality of life.

## Introduction

Dysmenorrhea is a significant issue that affects women's health, characterized by pain during menstruation, typically accompanied by typical symptoms such as abdominal pain or stomach cramps that can radiate to the lower back, along with problems like fatigue, nausea, vomiting, headaches, and diarrhea [1, 2]. The prevalence of dysmenorrhea in adolescents worldwide varies between 41.7% and 94%. This variation is attributed to factors such as the age of menarche, genetics, Body Mass Index (BMI), diet, duration of menstrual bleeding, smoking, coffee consumption, and physical activity [3]. In our country, according to data from the Ministry of Health, dysmenorrhea is observed in adolescents at a rate of 60% and in adults at a rate of 45% [4]. Dysmenorrhea can be primarily categorized into two types: primary and secondary. Primary dysmenorrhea is defined as painful menstruation that occurs without pelvic pathology and typically begins with the onset of the ovulatory cycle,

often 6 to 12 months after menarche. In this type of dysmenorrhea, there is no underlying pathology.

On the other hand, secondary dysmenorrhea arises due to an organic pathological condition or pain symptoms associated with menstruation [5]. For young women, dysmenorrhea can emerge as a problem that negatively impacts their learning activities and may require serious treatment [1]. Research indicates that the consequences of dysmenorrhea can lead to school absenteeism, lower academic performance, significant limitations in daily activities, decreased participation in sports activities, and weakening of peer relationships [6, 7].

Dysmenorrhea can be addressed through both pharmacological and non-pharmacological methods. In this context, pharmacological and non-pharmacological approaches can be utilized to treat dysmenorrhea [1]. Complementary and Alternative Treatment (CAT) methods are widely preferred to reduce the side effects of medications, promote healthy behaviors, support

traditional treatments, enhance the immune system, improve quality of life, reduce pain, and support both physical and mental healing[8].

**Aim:** In Turkey, although there are various CAT methods available, there is a lack of sufficient research regarding the types of these methods, their prevalence in dysmenorrhea treatment, and their effectiveness at the national level. This study aims to investigate how dysmenorrhea affects the quality of life of young women and to examine effective treatment approaches. By doing so, we aim to contribute to a better understanding of dysmenorrhea and the development of improved treatment strategies.

## Research Questions

1. What are the effects of primary dysmenorrhea on the quality of life of young women?
2. How is the impact of dysmenorrhea on daily life assessed among young women?
3. What are the preferences and effects of Complementary and Alternative Treatment (CAT) methods in managing dysmenorrhea among young women?
4. What is the relationship between the use of analgesic drugs and CAT methods in treating dysmenorrhea?

## Methods

**Design:** This descriptive and cross-sectional study, conducted between February and June at a University's Faculty of Health Sciences, aims to examine how dysmenorrhea affects the quality of life of young women and investigate effective treatment approaches.

**Population and Sample of the Study:** The study population comprises female students in a University's Faculty of Health Sciences. The sample size for the study was calculated using the formula for situations where the frequency of the event in the population is unknown, utilizing the OpenEpi software. With a 95% confidence level and a 5% margin of error, the sample size was determined to be 310 individuals. A total of 336 students who had dysmenorrhea and agreed to participate were included in the research.

**Data Collection Tools:** The data for the research were collected through a "Personal Information Form", consisting of 33 questions that inquired about students' socio-demographic characteristics and their knowledge of coping methods for dysmenorrhea, and by using the Visual Analog Scale (VAS), administered online.

**Personal Information Form:** The form, prepared by the researchers after conducting a literature review, consists of three sections: The first section contains questions (1-14) about students' demographic information. The second section includes questions (15-31) related to menstruation and dysmenorrhea experiences. The third section contains questions about students' knowledge of CAT methods for coping with dysmenorrhea.

**Visual Analog Scale (VAS):** The research measured the severity of dysmenorrhea in students using the VAS. VAS is a scale used to measure subjective perceived pain intensity. It consists of numerical values ranging from 0 to 10 cm or 0 to 100 to determine the intensity of pain numerically. "0" represents no pain, while "10" or "100" represents the most severe pain. VAS has been widely used in many studies to assess the severity of dysmenorrhea in women[9-12].

**Data Collection:** The data for the research were collected online between February and June 2023. Research forms were distributed to students diagnosed with dysmenorrhea studying in the Faculty of Health Sciences through WhatsApp® groups.

**Data Analysis:** The data were analyzed using the SPSS 26 program. Descriptive statistics such as mean, standard deviation, median, minimum-maximum values, percentages, and frequency values were calculated for the obtained data. For the data analysis, the chi-square ( $\chi^2$ ) test was used to compare categorical characteristics related to students' demographic features, menstruation and dysmenorrhea experiences, and CAT methods. The normality of continuous variables was assessed using histogram graphic testing, Skewness, and Kurtosis values. Kurtosis and Skewness values within the range of -2.0 to +2.0 are generally considered to indicate a normal distribution. Independent variables showing a normal distribution were analyzed using the t-test, and the One-Way Analysis of Variance (ANOVA) Test was used for multiple comparisons. A significance level of  $p < 0.05$  was considered statistically significant.

**Ethical Aspects of the Research:** Ethical approval was obtained from the Karabük University Non-Interventional Clinical Research Ethics Committee (Number: E-77192459-050.99-223775, Decision: 2023/1259). After obtaining ethical approval, the researchers obtained informed consent from the participants.

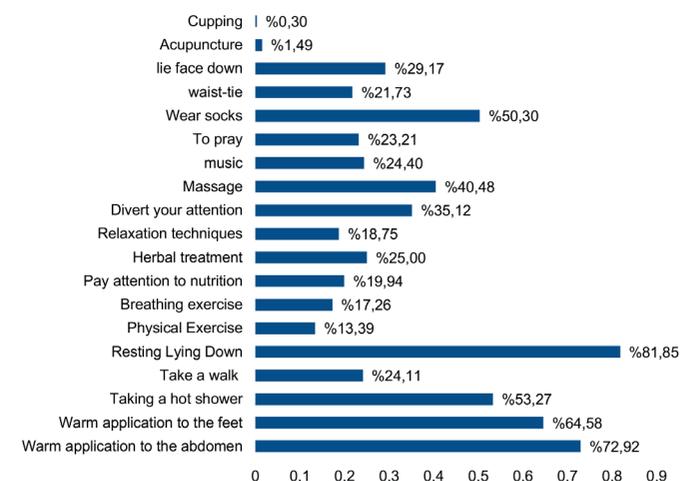
## Results

When the distribution of students' socio-demographic characteristics was examined, it was found that the average age was  $20.88 \pm 1.96$  years, the average body mass index (BMI) was  $22.13 \pm 3.59$ , 47.9% were enrolled in the midwifery department, 44.6% were in the first year, 78.3% were Turkish citizens, 3% were married, 85.7% did not smoke, and 11.9% used hormonal medication. Among those using hormonal medication, it was determined that 42.5% used it primarily for irregular menstruation.

Additionally, the average age of menarche for the students was  $13.30 \pm 1.39$  years, and the average severity of dysmenorrhea was  $6.51 \pm 2.10$ .

### CAT: Complementary and Alternative Treatment

It was observed that 80.1% of the students had their daily lives affected due to dysmenorrhea complaints, and as a result, 25.9% of them had absenteeism from school. Furthermore, 64.9% of the students used any analgesic for dysmenorrhea complaints, and 35.8% obtained the medication from the pharmacy themselves. Among them, 66.1% used analgesic medication when the pain was very severe, and 45.2% used CAT methods along with analgesics.



**Figure 1** - Findings regarding alternative methods used by students to cope with dysmenorrhea (n=336)

**Table 1** Findings Regarding Students' Menstrual Periods (n=336)

Features	n (%)
<b>Menstrual Cycle Pattern</b>	
Regular	258 (76,8)
Irregular	78 (23,2)
<b>Menstrual Cycle Interval</b>	
21 days or less	27 (8)
Every 22- 35 days	290 (86,3)
36 days or more	19 (5,7)
<b>Menstrual Cycle Duration</b>	
less than 3 days	10 (3,0)
Between 3-5 days	234 (69,6)
Between 6-8 days	76 (22,6)
More than 8 days	16 (4,8)
<b>Time of onset of dysmenorrhea</b>	
Before menstruation	89 (26,5)
First day of menstruation	127 (37,8)
2nd and 3rd day of menstruation	101 (30,1)
During menstruation	19 (5,7)
<b>Family history of dysmenorrhea</b>	
Yes	223 (66,4)
No	113 (33,6)
<b>The Effect of Dysmenorrhea on Daily Life</b>	
Affecting	272 (80,1)
Does not affect	64 (19,9)
<b>The level of its impact on daily life</b>	
Absenteeism from school	87 (25,9)
Absenteeism from work	23 (6,8)
Difficulty communicating with people	60 (17,9)
<b>Information about menstrual period</b>	
Yes	305 (90,8)
No	31 (9,2)
<b>Time of Receiving Information</b>	
Before first menstruation	218 (64,9)
After menstruation	118 (35,1)
<b>Use of analgesics in dysmenorrhea control</b>	
Yes	218 (64,9)
No	118 (35,1)
<b>Her situation regarding the procurement of the medication (n=218)</b>	
I buy it myself from the pharmacy	78 (35,8)
I buy it with a doctor's prescription	67 (30,7)
I get it from members of my family	65 (29,8)
I get it from my friends	8 (3,7)
<b>Analgesic use time (n=218)</b>	
When the pain is very severe	144 (66,1)
On the first day of my period	74 (33,9)
<b>Use of other methods together with analgesic drugs (CAT)</b>	
Analgesic drugs	66 (19,6)
Analgesic drugs+ CAT	152 (45,2)
Only CAT	118 (35,1)
<b>Belief in the CAT Method</b>	
Believes a little	139 (41,4)
Believes	160 (47,6)
Does not believe	37 (11,0)

When the findings regarding the CAT methods used by students were evaluated, it was observed that they mostly used methods such as resting in a lying position (81.8%), applying warmth to the abdomen (72.9%), and applying warmth to the feet (64.6%). Additionally, it was determined that students used acupuncture (1.49%) and cupping therapy (0.3%) the least among CAT methods.

The analysis results indicated that the VAS (pain scale) score average for Turkish students was  $6.37 \pm 2.007$ , while for foreign national students, it

**Table 2** Comparison of VAS Scale Average Scores According to Students' Socio-demographic Characteristics

Variables	Groups	Number(n)	$\bar{X} \pm SS$	Statistical significance	P
Marital Status	Single	326	$6,52 \pm 2,102$	t = ,480	0,631
	Married	10	$6,20 \pm 2,201$		
Nationality	T.C	263	$6,37 \pm 2,007$	t = -2,436	<b>0,015*</b>
	Foreign	73	$7,04 \pm 2,354$		
Presence of smoking status	No	288	$6,45 \pm 2,106$	t = 1,283	0,200
	Yes	48	$6,88 \pm 2,059$		
Alcohol consumption status"	No	274	$6,51 \pm 2,123$	t = -0,139	0,890
	Yes	62	$6,55 \pm 2,022$		
Chronic disease	No	303	$6,45 \pm 2,058$	t = -1,662	0,097
	Yes	33	$7,09 \pm 2,429$		
Menstrual Cycle Pattern	Irregular	78	$6,79 \pm 2,140$	t = 1,344	0,180
	Regular	258	$6,43 \pm 2,087$		
History of Dysmenorrhea in the Family	No	113	$6,07 \pm 2,215$	t = -2,785	<b>0,006*</b>
	Yes	223	$6,74 \pm 2,010$		
Information about the menstrual period	No	31	$6,87 \pm 2,217$	t = 0,990	0,323
	Yes	305	$6,48 \pm 2,090$		
Use of analgesics in dysmenorrhea control	No	118	$5,64 \pm 2,130$	t = -5,859	<b>0,001*</b>
	Yes	218	$6,99 \pm 1,933$		
The Effect of Dysmenorrhea on Daily Life	Does not affect	64	$4,11 \pm 1,605$	t = -12,225	<b>0,001*</b>
	Affecting	272	$7,08 \pm 1,782$		
Type of residence	Lalone at home	25	$6,56 \pm 2,256$	F = 1,255	0,290
	Stays in dormitory	84	$6,86 \pm 1,877$		
	Lives at home with her family	195	$6,34 \pm 2,127$		
	Lives at home with friends	32	$6,66 \pm 2,350$		
Menstrual Cycle Interval	21 days or less1	27	$7,48 \pm 1,649$	F =5,018***	<b>0,007*</b>
	Every 22- 35 days2	290	$6,37 \pm 2,114$		
	36 days or more3	19	$7,32 \pm 2,029$		
Analgesic use time	Not taking1	118	$5,64 \pm 2,130$	F= 22,441****	<b>0,001*</b>
	When the pain is very severe2	144	$6,69 \pm 1,803$		
	On the first day of my period3	74	$7,57 \pm 2,055$		
Use of other methods together with analgesic drugs (CAM)	Analgesic + CAM1	152	$7,10 \pm 1,826$	F= 17,984*****	<b>0,001*</b>
	Only Analgesic drugs2	66	$6,64 \pm 2,130$		
	Only CAM3	118	$6,51 \pm 2,102$		
Belief in the CAM Method	Believes	160	$6,48 \pm 2,071$	F= ,052	0,950
	Does not believes	37	$6,59 \pm 2,166$		
	Blieves a little	139	$6,53 \pm 2,134$		

p < 0,05, t = t test in independent groups, F = One-way analysis of variance = \* Games-Howell, Posthoc Benferroni Alpha=,016, CAT: Complementary and \*\* Alternative Treatment

3<2 ,3<1 = \*\*\*\* ,2<3 ,1<3 ,1<2 = \*\*\*\* ,2<1 = \*\*\*

Table 3

Comparison of VAS Scale Average Scores According to the CAT Methods Used by Students

Variables	Groups	Number(n)	$\bar{X} \pm SS$	Statistical significance	P
Warm application to the abdomen.	Yes	245	6,66 ± 2,076	t = -2,045	<b>0,042*</b>
	No	91	6,13 ± 2,135		
Warm application to the feet	Yes	217	6,63 ± 2,100	t = -1,319	0,188
	No	119	6,63 ± 2,098		
Taking a hot shower	Yes	179	6,45 ± 1,983	t = 0,632	0,528
	No	157	6,59 ± 2,233		
Take a walk	Yes	81	6,35 ± 2,157	t = 0,831	0,406
	No	255	6,57 ± 2,085		
Resting Lying Down	Yes	275	6,42 ± 2,069	t = 1,797	0,073
	No	61	6,95 ± 2,209		
Physical Exercise	Yes	45	6,31 ± 2,162	t = 0,698	0,485
	No	291	6,55 ± 2,094		
Breathing exercise	Yes	58	6,76 ± 1,895	t = -0,971	0,332
	No	278	6,46 ± 2,142		
Pay attention to nutrition	Yes	67	6,12 ± 2,121	t = 1,726	0,085
	No	269	6,61 ± 2,089		
Herbal treatment	Yes	84	6,71 ± 2,086	t = -1,004	0,316
	No	252	6,45 ± 2,107		
Relaxation techniques	Yes	63	6,63 ± 2,058	t = -0,502	0,616
	No	273	6,49 ± 2,115		
Divert your attention	Yes	118	6,50 ± 1,977	t = 0,095	0,924
	No	218	6,52 ± 2,171		
Massage	Yes	136	6,31 ± 2,152	t = 1,485	0,139
	No	200	6,66 ± 2,061		
Music	Yes	82	6,27 ± 2,103	t = 1,223	0,222
	No	254	6,59 ± 2,100		
To pray	Yes	78	6,49 ± 2,266	t = 0,133	0,895
	No	258	6,52 ± 2,054		
Wear socks	Yes	169	6,53 ± 2,107	t = -0,155	0,877
	No	167	6,50 ± 2,102		
waist-tie	Yes	73	6,82 ± 2,213	t = -1,413	0,159
	No	263	6,43 ± 2,066		
lie face down	Yes	98	6,88 ± 1,912	t = -2,039	<b>0,042*</b>
	No	238	6,37 ± 2,161		
Acupuncture	Yes	5	5,80 ± 1,789	t = ,766	0,444
	No	331	6,53 ± 2,107		
Cupping	Yes	1	7,00	t = -0,231	0,818
	No	335	6,51 ± 2,105		

was  $7.04 \pm 2.354$ . The difference between the VAS score averages of Turkish and foreign national students was statistically significant ( $p < 0.05$ ) (Table 2).

Among students with a family history of dysmenorrhea, those who used pain relievers, and those whose daily lives were affected by dysmenorrhea, the VAS scale score averages were higher compared to other students, and this difference was statistically significant ( $p < 0.05$ ) (Table 2).

It was found that the VAS scale scores of students varied statistically significantly among groups based on menstrual cycle intervals,  $F(2,333) = 5.018$ ,  $p = 0.007$ ,  $\eta^2 = 0.29$ . Accordingly, the VAS scale score averages of students with menstrual cycle intervals of 21 days and below ( $7.48 \pm 1.649$ ) were higher than the VAS scale score averages of students with menstrual cycle intervals of 22-35 days ( $6.37 \pm 2.114$ ). This difference was statistically significant ( $p < 0.05$ ) (Table 2).

The comparison of VAS scale scores among groups based on students' use of Analgesic and CAT methods for dysmenorrhea control showed statistically significant differences between groups,

$F(2,333) = 5.018$ ,  $p = 0.007$ ,  $\eta^2 = 0.29$ . Accordingly, the VAS scale score averages were higher in students who used both analgesics and CAT methods ( $7.10 \pm 1.826$ ) and in students who used only analgesic medication ( $6.73 \pm 2.152$ ) compared to students who used only CAT methods ( $5.64 \pm 2.130$ ), and this difference was statistically significant ( $p < 0.001$ ). Post-hoc analysis revealed no statistically significant differences among other group comparisons (Table 2).

When the VAS scale score averages were compared according to the CAT methods used by students, statistically significant differences were found between those who used warm abdominal application and those who used the supine lying method ( $p < 0.05$ ). The other methods had no statistically significant difference in VAS scale score averages.

When the relationship between some categorical characteristics of the students and their belief in and use of CAT methods was examined, a statistically significant relationship was found between nationality (Turkish and foreign) and belief in CAT methods ( $p < 0.05$ ). Additionally, a statistically significant relationship was found between having a family history of dysmenorrhea and the use of both Analgesic and CAT methods ( $p < 0.001$ ) (Table 4).

## Discussion

In this study, we aimed to examine the impact of primary dysmenorrhea on the daily lives of young women and their treatment approaches. According to the research results, the average severity of dysmenorrhea in the students was determined to be  $6.51 \pm 2.10$ . 64.9% of the participants used analgesics to cope with dysmenorrhea, while 35.1% preferred CAT methods. Among them, 81.8% stated that they rested lying down, and 72.9% applied heat to the abdomen.

Primary dysmenorrhea, without pelvic pathology, is one of the most common complaints related to women's health [14-15].

Although various pain measurement methods exist in the literature, VAS is commonly preferred to assess dysmenorrhea pain. In the current study, VAS was also used, and the average pain severity according to VAS in women with dysmenorrhea was determined to be  $6.51 \pm 2.10$  (on a scale of 0-10). When looking at studies in the literature, Yılmaz et al. [16] found an average pain severity of  $6.35 \pm 1.97$  in women with dysmenorrhea; Helwa et al. [17] found an average pain severity of  $6.79 \pm 2.64$  in women with dysmenorrhea; Yılmaz and Başer [18] reported  $6.3 \pm 2.02$ . The study findings are consistent with the literature.

The overall dysmenorrhea severity in young women can vary, but it is generally moderate. However, this can vary for each individual, and the severity of pain can change depending on personal experiences and the factors involved.

Our research observed that 64.9% of young women with dysmenorrhea used analgesic medication to cope with pain, and an increase in pain severity led to a higher utilization of pharmacological methods. However, different results have been obtained on this topic when reviewing the literature. Yılmaz et al. [16] found that 51% of the participants used analgesic medication, and medication use significantly increased with the severity of pain. Ataş et al. [7] found that 81.6% of students used

Table 4

Comparison of Some Socio-Demographic Characteristics of Students with their Belief in and Use of CAT Methods

Socio-Demographic Characteristics			The Belief in the CAT Method			Total	x2	p
			Believes	Does not believe	Partially believes			
			n					
Grade level	1.	n	56	20	74	150	17,107	<b>0,009*</b>
		%	37,3	13,3	49,3	100,0		
	2.	n	34	3	26	63		
		%	54,0	4,8	41,3	100,0		
	3.	n	27	6	22	55		
		%	49,1	10,9	40,0	100,0		
	4.	n	43	8	17	68		
		%	63,2	11,8	25,0	100,0		
Nationality	T.C	n	138	27	27	263	11,532	<b>0,003*</b>
		%	52,5	10,3	37,3	100,0		
	Foreign	n	22	10	41	73		
		%	30,1	13,7	56,2	100,0		
Marital status	Single	n	154	37	135	326	1,475	0,479
		%	47,2	11,3	41,4	100,0		
	Married	n	6	0	4	10		
		%	60,0	0,0	40,0	100,0		
		%	47,5	11,9	40,6	100,0		
		%	47,5	11,9	40,6	100,0		
Status of Receiving Menstruation Information	No	n	11	3	17	31	2,609	0,271
		%	35,5	9,7	54,8	100,0		
	Yes	n	149	34	122	305		
		%	48,9	11,1	40,0	100,0		
<b>Use of Analgesic and CAT methods</b>								
			Analgesic +CAT	Analgesic	CAT	Total		
Nationality	T.C	n	121	47	95	263	2,440	0,295
		%	46,0	17,9	36,1	100,0		
	Foreign	n	31	19	23	73		
		%	42,5	26,0	31,5	100,0		
History of Dysmenorrhea in the Family	Yes	n	117	40	66	223	14,399	<b>0,001*</b>
		%	52,5	17,9	29,6	100,0		
	No	n	35	26	52	113		
		%	31,0	23,0	46,0	100,0		
The Effect of Dysmenorrhea on Daily Life	Affecting	n	140	50	82	272	23,469	<b>0,001*</b>
		%	51,5	18,4	30,1	100,0		
	Does not affect	n	12	16	36	64		
		%	18,8	25,0	56,3	100,0		

analgesics. Lete et al.[19] reported a medical treatment method utilization rate of 60.1%, while Kuşaslan Avcı and Sarı<sup>20</sup> found that 34.4% resorted to medical methods. This indicates different approaches to managing dysmenorrhea; individual differences play a significant role.

According to the results of our research, 47.6% of the students believed in Traditional and Complementary Treatment (CAT) methods, while 41.4% partially believed in them. However, it was observed that only 35.1% used exclusively CAT methods to cope with dysmenorrhea. The most commonly preferred CAT methods were as follows: lying down and resting (81.8%), applying heat to the abdomen (72%), applying heat to the feet (64.6%), and taking a hot shower (53.2%). These results are similar to the study conducted by Ataş et al.[7] In this study when looking at pain coping methods, the most frequently used methods were lying down and resting (72%) and lying in the prone/fetal position (57.9%), followed by applying heat to the lower abdomen (49%, 52.2%, 67.2%). In Oyardı and Karakaş's study[21], it was found that 57% of the students partially believed in traditional and complementary treatment methods, and the most commonly preferred methods were drinking herbal tea (37%), massage (32%), and applying heat (22.4%).

Additionally, in another study, it was observed that 93.2%

of students followed a low-fat diet, 81.8% engaged in exercise, 41.8% applied abdominal massage, and 34.5% applied heat to the abdomen to alleviate dysmenorrhea symptoms[22]. These findings indicate that young women commonly prefer CAT methods to cope with dysmenorrhea, and these methods play a significant role in overall health practices. A study conducted with midwifery students in Turkey found that all students had knowledge about the menstrual cycle. When looking at the time of initial knowledge acquisition, 66.4% had acquired this knowledge before they started menstruating[20]. In our study, we observed that 90.8% of the students were informed about the menstrual cycle, and 64.9% acquired this knowledge before their first menstruation. Our research also revealed that 25.9% of students did not attend school due to complaints of dysmenorrhea, and 17.9% had difficulty communicating with others. In the study by Yılmaz and Başer[18], 11.8% of those who experienced dysmenorrhea at a disturbing level and 56.1% of those who experienced it severely reported that it affected their school performance and attendance. In another study, 15.5% of students mentioned that they could not attend classes and school due to dysmenorrhea[21].

In our study, those with a family history of dysmenorrhea had higher VAS scale mean scores, and the difference was

statistically significant. In the study by Habibi et al.[23], 58.8% of the participants reported a family history of dysmenorrhea (27.8% mother, 18.4% sister), and family history was reported as the most important factor affecting the severity of dysmenorrhea ( $\beta=-0.294$ ,  $p<0.05$ ).

Our study observed that students affected by dysmenorrhea in their daily lives had higher VAS scale mean scores compared to other students, and the difference was statistically significant. Therefore, it can be said that students with severe dysmenorrhea have higher pain intensity, which can more significantly affect their daily lives.

In conclusion, dysmenorrhea can affect the quality of life of young women. Especially, the severity of dysmenorrhea can impact students' daily activities and lead to the preference of different coping methods.

Our study observed that the use of analgesic drugs was common, and with the increase in pain intensity, pharmacological methods were more frequently used. Traditional and Complementary Treatment methods were also preferred in coping with dysmenorrhea. Additionally, students with a family history of dysmenorrhea had higher pain intensity.

The results of this study indicate that dysmenorrhea can affect the daily lives of young women and that different coping strategies are used. It should be noted that the methods individuals prefer and the severity of pain can vary according to personal experiences. Future studies may provide further insights into the management of dysmenorrhea and help us develop more effective strategies to improve the quality of life of young women.

Particularly, it is essential to investigate alternative and effective approaches to the treatment of dysmenorrhea. Furthermore, further research is needed to understand young women's coping strategies with dysmenorrhea and provide them with more support. The results of this study can serve as a foundation for healthcare professionals and researchers, offering a better understanding to enhance the quality of life for young women.

## Conclusion

In conclusion, it was observed that various coping methods are employed for the management of dysmenorrhea, significantly impacting the lives of young women. Our research revealed that analgesic medications are commonly used, and as the severity of pain increases, pharmacological methods are more frequently

preferred. Traditional and Complementary Treatment methods are also chosen for coping with dysmenorrhea. Additionally, students with a family history of dysmenorrhea were observed to experience higher pain intensity.

The findings of this study can provide a foundation for healthcare professionals and researchers to develop more effective strategies in understanding and managing the issue of dysmenorrhea, which greatly affects the daily lives of young women. It is especially essential to explore alternative and effective approaches to the treatment of dysmenorrhea. Furthermore, more research is needed to comprehend the coping strategies of young women with dysmenorrhea and to offer them additional support.

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**Limitations of the Study:** This study has two significant limitations. Firstly, the data was obtained based on the students' self-reports, which may introduce a potential source of bias. Secondly, the scope of the study is limited to students enrolled in a single university, which restricts the generalizability of the findings to broader populations.

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