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Investigation of the Frequency of Premenstrual Syndrome and Its Effect on Quality of Life in Women Aged 18-45 Years Working in Adana City Training and Research Hospital

Adana Şehir Eğitim ve Araştırma Hastanesi'nde Çalışan 18-45 Yaş Arası Kadınlarda Premenstrual Sendrom Sıklığı ve Yaşam Kalitesine Etkisinin İncelenmesi

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ABSTRACT

Objective: The aim of this study was to investigate the frequency of premenstrual syndrome (PMS) in women between the ages of 18-45 working University of Health Sciences Turkey, Adana City Training and Research Hospital, and to examine its effect on quality of life.

Material and Methods: This research was conducted on 400 women working in, University of Health Sciences Turkey, Adana City Training and Research Hospital, between 15.12.2022 and 15.06.2023. The sociodemographic data form premenstrual syndrome scale (PMSS) and quality of life scale short from-36 prepared by us were applied to the participants by asking our survey questions, which were sent face-to-face or online.

Results: Of the women, 48.3% had PMS. When we looked at the relationship of age with PMS symptoms, PMS symptoms were most common in the 26-29 age range, while the incidence of symptoms decreased over 41 years of age. When the effect of the education level of the participants on PMS was examined; it was observed that the incidence of PMS symptoms increased as the education level increased. When the relationship between menstruation and PMS was evaluated, the PMSS total score was found to be higher for those whose menstruation is not regular, the score for those with regular menstruation was lower.

Conclusion: As a result of our research, an association was found between factors such as age, education level, and regular menstrual frequency and the incidence of PMS in women. It was determined that all these changes affect the quality of life of women negatively. The effect of PMS on quality of life reveals the importance of providing support to women in coping with these symptoms.

Keywords: Premenstrual syndrome, quality of life, health worker, education level

ÖZ

Amaç: Bu araştırmanın amacı Sağlık Bilimleri Üniversitesi Türkiye, Adana Şehir Eğitim ve Araştırma Hastanesi, çalışmakta olan 18-45 yaş arası kadınlarda premenstrual sendrom (PMS) sıklığının araştırılması ve yaşam kalitesine etkisinin incelenmesidir.

Gereç ve Yöntemler: Araştırma, Sağlık Bilimleri Üniversitesi Türkiye, Adana Şehir Eğitim ve Araştırma Hastanesi 15.12.2022-15.06.2023 tarihleri arasında çalışmakta olan 400 kadın üzerinde yapılmıştır. Katılımcılara yüz yüze ya da online iletilen anket sorularımız sorulup, tarafımızca hazırlanan sosyodemografik veri formu, premenstrual sendrom ölçeği (PMSÖ) ve yaşam kalitesi ölçeği kısa form-36 uygulanmıştır.

Bulgular: Araştırmamıza katılan kadınların %48.3'ünde PMS vardı. Yaşın PMS semptomları ile ilişkisine baktığımızda 26-29 yaş aralığında PMS semptomları en sık görülürken, 41 yaş ve üzerinde semptom görülme sıklığı azalmıştır. Katılımcıların eğitim düzeyi arttıkça PMS semptomlarının görülme sıklığının arttığı görülmüştür. Adet düzeni ve PMS arasındaki ilişki değerlendirildiğinde PMSÖ toplam puanı adeti düzenli olmayanların en yüksek iken, adeti düzenli olanların puanı en düşüktür.

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ÖZ

Sonuç: Araştırmamızın sonucunda; yaş, eğitim düzeyi, adet düzenliliği gibi faktörler ile kadınlarda PMS görülme sıklığı arasında bir bağlantı bulunmuştur. Tüm bu değişimlerin kadınların yaşam kalitesini negatif yönde etkilediği tespit edilmiştir. PMS'nin yaşam kalitesi üzerindeki etkisinin bilinmesi bu semptomlarla başa çıkmada kadınlara verilebilecek desteğin önemi ortaya koymaktadır.
Anahtar Kelimeler: Premenstrual sendrom, yaşam kalitesi, sağlık çalışanı, eğitim düzeyi

INTRODUCTION

The menstrual cycle occurs when the ovaries of the reproductive system regularly work every month (1). Emotional, behavioral, and somatic changes occur in the luteal phase (the second half of the menstrual cycle) and disappear with the onset of menstruation and are defined as premenstrual syndrome (PMS) (2,3). The most common somatic symptoms during this period are changes in appetite, breast sensitivity, fatigue, water retention in the body, weight gain, emotional fluctuations, outbreaks of anger, increased anxiety, decay, and sadness (4,5). PMS primarily affects the health of women; however, it generally affects women, their families, and the society in which they live. PMS symptoms negatively affect women's family relationships, working life, and social life, disrupting their daily quality of life (6,7). Women with PMS experience reduced quality of life due to anxiety, depression, reduced productivity at work, and increased accident rates (5-7). Knowledge of the impact of PMS on quality of life highlights the importance of supporting women in dealing with premenopausal syndrome. As a result of our study, we aimed to investigate the frequency of PMS in women working in our hospital and its impact on quality of life.

MATERIALS AND METHODS

From 15.12.2022 to 15.6.2023, 400 women aged 18 to 45 working University of Health Sciences Turkey, Adana City Training and Research Hospital were included in this cross-sectional study. Informed consent was obtained from all participants. Volunteers filled out our questionnaires either face-to-face or online in a working environment. The participants were given the sociodemographic data form and the premenstrual syndrome scale (PMSS) and the the short form (SF-36).

Premenstrual Syndrome Scale

The scale, which was validated in Turkish by Gençdoğan (8), was designed to measure the severity of premenstrual symptoms. The scale, which is widely used in Turkey, contains 44 statements that indicate a person's "state within just one week". The five likert-type PMS consists of nine subdimension (depressive sensation, anxiety, fatigue, nervousness, depressive thoughts, pain, changes in appetite, sleep changes and swelling). The lowest score was 44, and the highest was 220. The lower-dimensional scores are obtained by aggregating substances in these dimensions, and the total PMSS score is the sum of the lower-dimensional scores. High PMSS scores indicate more severe premenstrual symptoms. A total of 132 points are assessed as absent PMS, whereas 132 points and above are considered as having PMS. A score exceeding 50% of the maximum limit of total and subscale scores determines absence or presence of PMS (8).

Short Form-36 Quality of Life Scale

SF-36, one of the most commonly used generic scales for measuring quality of life, was developed by rand corporation in 1992 and conducted by Koçyiğit et al. (9) to evaluate the validity and reliability of the SF-36. The scale covers 36 elements, and these provide measurements of eight dimensions: physical, social, role constraints of physical functions, emotional problems, mental health, energy/vitality, pain, and general perception of health. The lower scale rate health from 0 to 100, with 0 indicating bad health and 100 indicating good health. The positive-rated scale improves health-related quality of life as the score of each health area increases.

The study was approved by the University of Health Sciences Turkey, Adana City Training and Research Hospital Ethics Board (decision number: 2285, date: 01.12.2022).

Statistical Analysis

Parametric test techniques were used in this study because the scores showed a normal distribution. The t-test and analysis of variance (ANOVA) were used to analyze whether the scale scores differed from demographic characteristics. The t-test was used in the analysis of two-group demographic variables, whereas the ANOVA test was used in the analysis of group variables k (k>2). Statistical significance value $p<0.05$ was accepted.

RESULTS

15.8% of the women who participated in our study were between the ages of 18-25 years, 36.5% between 26-29 years, 30.4% between 30-35 years, 10.3% between 36-40 years, and 7.0% who were 41 years of age or older. According to education level, 13.5% of women were high school or high school graduates, and 63.7% were university graduates. Additionally, 22.8 had a master's or doctoral degree (Table 1). There was a significant difference in the presence of PMS according to age groups ($p=0.009$). In terms of education level, the highest prevalence of PMS was found in the group of those with a master's or doctoral degree (60.4%), whereas the lowest rate was observed in those with secondary school or high school graduates (37.0%) ($p=0.014$) between educational degrees. A total of 56.4% of non-child participants had PMS, whereas only 36.7% of those with a

child had it. This finding suggests that having children can affect the prevalence of PMS. 59.5% of women with irregular periods experience PMS, whereas 45.5% of those with regular periods have PMS, and PMS was more frequently seen in women with irregular periods (p=0.026). The prevalence of PMS (56.5%) among participants who experienced pain during menstrual periods and received medical treatment for the condition was significantly higher (p=0.002). Contrary to these data, chronic disease, smoking and alcohol use, regular exercise, menstrual age, and

Table 1. Distribute to demographic attributes

		n	%
What is your age?	18-25	63	15.8
	26-29	146	36.5
	30-35	122	30.4
	36-40	41	10.3
	41 years and older	28	7
What is your educational status?	Middle school or high school	54	13.5
	University	255	63.7
	Master/Ph.D.	91	22.8
What is your job?	Doctor	123	30.8
	Nurse	109	27.2
	Security officer	44	11
	Secretary	63	15.7
	Medical personnel	61	15.3
Do you have a child?	Yes	166	41.5
	No	234	58.5
Do you have chronic illnesses?	Yes	88	22
	No	312	78
Can you describe your chronic disease?	Cardiovascular disease	7	7.8
	Thyroid gland disease	34	37.8
	Diabetes mellitus	4	4.4
	Cerebrovascular disease	0	0
	Rheumatic disease	21	23.3
	Other	24	26.7
Do you have a diagnosed psychiatric illness?	Yes	44	11
	No	356	89
Do you smoke?	Yes	96	24
	No	304	76
Do you drink alcohol?	Yes	109	27.3
	No	291	72.7
Are you exercising?	Yes, I exercise at least half an hour 3 times a week.	58	14.5
	I occasionally exercise, once a week.	151	37.7
	No	191	47.8
What is your first period's age?	10-12	120	30
	13-14	209	52.2
	15 years and older	71	17.8
Are your periods regular?	Yes	321	80.2
	No	79	19.8
Are your periods painful?	Yes	281	70.3
	No	119	29.7
Do you receive medical treatment for painful periods?	Yes	191	47.8
	No	209	52.2
PMSS density	PMS none	207	51.8
	PMS exists	193	48.2

n: Number, Ph.D: Doctor of philosophy, PMSS: Premenstrual syndrome scale

dysmenorrhea were not associated with PMS (Table 2). The average scores were highest for those between the ages of 26-29 with fatigue, depressive thoughts, changes in appetite, pain, swelling, and premenstrual syndrome scores, while the lowest scores were for those aged 41 and over (p=0.0009).

A regression analysis was conducted to study the effect of depressive thoughts, appetite changes, sleep changes, and bloating variables on qualityof life SF-36, and the established model was found to be meaningful (p=0.003; p=0.022; p=0.004; p=0.023). When the scores were studied, the negative influence of depressive thoughts (βeta=-0.254) was found to

Table 2. Investigation of the presence of PMS according to sociodemographic data

		PMS none		PMS exists		Chi-square test	
		n	%	n	%	x^2	p
What is your age?	18-25	35	55.6	28	44.4	13.495	0.009
	26-29	62	42.5	84	57.5		
	30-35	70	57.4	52	42.6		
	36-40	19	46.3	22	53.7		
	41 years and older	21	75.0	7	25.0		
What is your educational status?	Middle or high school	34	63.0	20	37.0	8.533	0.014
	University	137	53.7	118	46.3		
	Master's/Ph. D.	36	39.6	55	60.4		
What is your job?	Doctor	58	47.2	65	52.8	8.987	0.061
	Nurse	53	48.6	56	51.4		
	Security Officer	30	68.2	14	31.8		
	Secretary	29	46.0	34	54.0		
	Medical Personnel	37	60.7	24	39.3		
Do you have a child?	Yes	105	63.3	61	36.7	15,037	<0.001
	No	102	43.6	132	56.4		
Do you have chronic illnesses?	Yes	41	46.6	47	53.4	1.203	0.273
	No	166	53.2	146	46.8		
Can you describe your chronic disease?	Cardiovascular Disease	2	28.6	5	71.4	6.854	0.144
	Thyroid Gland Disease	18	52.9	16	47.1		
	Diabetes Mellitus	3	75.0	1	25.0		
	Cerebrovascular Disease	0	0.0	0	0.0		
	Rheumatic Disease	5	23.8	16	76.2		
	Other	11	45.8	13	54.2		
Do you have a diagnosed mental illness?	Yes	19	43.2	25	56.8	1.454	0.228
	No	188	52.8	168	47.2		
Do you smoke?	Yes	46	47.9	50	52.1	0.743	0.389
	No	161	53.0	143	47.0		
Do you drink alcohol?	Yes	51	46.8	58	53.2	1.477	0.224
	No	156	53.6	135	46.4		
Are you exercising?	Yes	29	50.0	29	50.0	2.820	0.244
	Occasionaly	71	47.0	80	53.0		
	No	107	56.0	84	44.0		
What is your first period's age?	10-12	63	52.5	57	47.5	0.506	0.777
	13-14	105	50.2	104	49.8		
	15 years	39	54.9	32	45.1		
Are your periods regular?	Yes	175	54.5	146	45.5	4.984	0.026
	No	32	40.5	47	59.5		
Are your periods painful?	Yes	140	49.8	141	50.2	1.406	0.236
	No	67	56.3	52	43.7		
Do you receive medical treatment for painful periods?	Yes	83	43.5	108	56.5	10.072	0.002
	No	124	59.3	85	40.7		

PMS=Premenstrual syndrome, X^2= Chi-square test, *p<0.05,

be significant in the positive direction of appetite change (βeta=0.132), sleep change in the negative direction (βeta=-0.198), and obesity in the positive direction (βeta=0.129). The effects of fatigue, depression, anxiety, nervousness, and pain on quality of life were not significant (p>0.05) (Table 3).

Physical power, emotional power, energy/vitality, mental health, social functioning, pain, general health, and quality of life total SF-36 scores varied depending on the presence of PMS (p=0.021; p<0.001; p<0.001; p<0.001; p<0.001; p<0.001; p<0.001; p<0.001). The average scores for physical role strength, emotional role power, energy/vitality, mental health, social functioning, pain, general health, and quality of life SF-36 were highest for non-PMS patients and lowest for those with PMS (Table 4).

In terms of the relationship between the PMS subdimensions and the SF-36 scale, there was a negative, weak relationship between fatigue and physical role strength, emotional role force, vitality, mental health, social functionality, pain, general health, and overall quality of life SF-36 (r=-0.189, p<0.001; r=-0.276, p<0.001; r=-0.337, p<0.001; r=-0.305 p<0.001; r=-0.288, p<0.001; r=-0.257, p<0.001; r=-0.201, p<0.001; r=-0.283, p<0.001). There was a negative, weak correlation between depressive emotion and physical role strength, emotional role strength, social functioning, pain, general health, and overall quality of life SF-36 (r=-0.138, p=0.006; r=-0.252; p<0.001; r=-0.212, p<0.001; r=-0.240, p<0.001; r=-0.254, p<0.001) There was a negative, weak, strong relationship between depressive thoughts and emotional role strength, mental health, social functioning, pain, general health, and overall quality of life SF-36 (r=-0.319, p<0.001; r=-0.445; p<0.001); r=-0.321, p<0.001; r=-0.334, p<0.001 r=-0.308, p<0.001; r=-0.375, p<0.001). There was a negative, weak-strong relationship between anxiety and mental health, social functionality, and quality of life overall SF-36 (r=-0.410, p<0.001; r=-0.369, p<0.001; r=0.336, p<0.001) There was a negative weak-strong relationship between nervousness and physical role strength, emotional role power, energy/ vitality, social functioning, pain, general health, and overall quality of life SF-36 (r=-0.157, p<0.001; r=-0.195, p<0.001; r=-0.203, p<0.001; r=-0.234, p<0.001; r=-0.151, p<0.03; r=-0.246, p<0.001) (Table 5).

Table 3. Results regarding the impact of premenstrual syndrome subdimensions on quality of life

Dependent variable	Independent variable	Beta	t	p	R^2	F
Quality of life (SF-36)	Fatigue	0.053	0.565	0.572	0.196	10.564
	Depressive mood	-0.006	-0.071	0.944		
	Depressive thoughts	-0.254	-3.036	0.003		
	Anxiety	-0.091	-1.233	0.218		
	Nervousness	-0.020	-.262	0.793		
	Appetite changes	0.132	2.295	0.022		
	Pain	-0.103	-1.638	0.102		
	Sleep changes	-0.198	-2.927	0.004		
	Bloating	0.129	2.279	0.023		

*p<0.05: Linear regression test, SF-36: Short form 36

Table 4. Differentiating quality of life scores according to PMS presence

PMSS density		n	x	SD	p
Physical function	PMS none	207	76.06	23.38	0.957
	PMS exists	193	76.19	24.14	
Physical power	PMS none	207	73.07	39.13	0.02*
	PMS exists	193	63.73	41.05	
Emotional power	PMS none	207	66.99	40.76	<0.00*
	PMS exists	193	46.11	43.68	
Energy/vitality	PMS none	207	52.37	17.52	<0.00*
	PMS exists	193	44.95	12.90	
Mental health	PMS none	207	64.71	15.64	<0.00*
	PMS exists	193	55.19	13.97	
Social functioning	PMS none	207	63.47	25.49	<0.00*
	PMS exists	193	52.66	23.80	
Pain	PMS none	207	68.18	20.86	<0.001*
	PMS exists	193	60.31	18.37	
General health	PMS none	207	61.88	17.32	<0.001*
	PMS exists	193	55.21	14.57	
Sf-36 total	PMS none	207	67.00	15.79	<0.001*
	PMS exists	193	60.14	13.81	

PMSS: Premenstrual syndrome scale, x: Mean, SD: Standard deviation *p<0.05: t-test, PMS: Premenstrual syndrome

Table 5. Relationship between premenstrual syndrome sub-dimensions and quality of life sub-dimensions

		Fatigue	Depressive affect	Depressive thoughts	Anxiety	Irritability	Appetite changes	Pain	
Fatigue	r	1							
	p								
Depressive affect	r	**0,774****	1						
	p	0,000							
Depressive thoughts	r	0,741**	**0,695****	1					
	p	0,000	0,000						
Anxiety	r	**0,656****	0,668**	**0,741****	1				
	p	0,000	0,000	0,000					
Irritability	r	**0,765****	**0,659****	**0,697****	**0,549****	1			
	p	0,000	0,000	0,000	0,000				
Appetite changes	r	**0,485****	**0,495****	**0,413****	**0,346****	**0,481****	1		
	p	0,000	0,000	0,000	0,000	0,000			
Pain	r	**0,627****	**0,506****	**0,579****	**0,548****	**0,558****	**0,429****	1	
	p	0,000	0,000	0,000	0,000	0,000	0,000		
Sleep changes	r	**0,677****	**0,585****	**0,644****	**0,605****	**0,543****	**0,462****	**0,569****	
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
Bloating	r	**0,513****	**0,494****	**0,449****	**0,413****	**0,512****	**0,477****	**0,388****	
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
Total premenstrual syndrome scale scores	r	**0,900****	**0,860****	**0,877****	**0,812****	**0,826****	**0,609****	**0,715****	
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
Physical function	r	-0,010	0,025	-0,085	-0,083	-0,092	**0,129****	**-0,130****	
	p	0,848	0,618	0,089	0,098	0,067	0,010	0,009	
Physical role strength	r	**-0,189****	**-0,138****	**-0,212****	**-0,157****	**-0,122***	**-0,115***	**-0,202****	
	p	0,000	0,006	0,000	0,002	0,015	0,021	0,000	
Emotional role strength	r	**-0,276****	**-0,252****	**-0,319****	**-0,260****	**-0,195****	**-0,178****	**-0,257****	
	p	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
Energy/vitality	r	**-0,337****	**-0,327****	**-0,299****	**-0,279****	**-0,203****	-0,065	**-0,104***	
	p	0,000	0,000	0,000	0,000	0,000	0,192	0,037	
Mental Health	r	**-0,305****	**-0,348****	**-0,445****	**-0,410****	**-0,309****	-0,062	**-0,207****	
	p	0,000	0,000	0,000	0,000	0,000	0,213	0,000	
Social functioning	r	**-0,288****	**-0,212****	**-0,321****	**-0,369****	**-0,203****	**-0,140****	**-0,193****	
	p	0,000	0,000	0,000	0,000	0,000	0,005	0,000	
Pain	r	-0,257**	-0,258**	-0,334**	-0,287**	-0,234**	-0,106*	-0,241**	
	p	0,000	0,000	0,000	0,000	0,000	0,034	0,000	
General health	r	-0,201**	-0,240**	-0,308**	-0,290**	-0,151**	-0,046	-0,211**	
	p	0,000	0,000	0,000	0,000	0,003	0,354	0,000	
Quality of life total (SF- 36)	r	-0,283**	-0,254**	-0,375**	-0,336**	-0,246**	-0,065	-0,286**	
	p	0,000	0,000	0,000	0,000	0,000	0,193	0,000	

Table 5. Continued

	Sleep changes	Bloating	Total premenstrual syndrome scale scores	Physical function	physical role strength	Emotional role strength	Energy/vitality	Mental health	Social functioning	Pain	General health	Quality of life total (SF- 36)
Fatigue												
Depressive affect												
Depressive thoughts												
Anxiety												
Irritability												
Appetite changes												
Pain												
Sleep changes	1											
Bloating	**0,427****	1										
	0,000											
Total premenstrual syndrome scale scores	**0,765****	**0,626****	1									
	0,000	0,000										
Physical function	**-0,119***	0,074	-0,045	1								
	0,017	0,138	0,366									
Physical role strength	**-0,237****	-0,036	**-0,200****	**0,328****	1							
	0,000	0,468	0,000	0,000								
Emotional role strength	**-0,261****	**-0,196****	**-0,314****	**0,175****	**0,397****	1						
	0,000	0,000	0,000	0,000	0,000							
Energy/vitality	-**0,230****	-0,072	**-0,299****	**0,227****	**0,178****	**0,172****	1					
	0,000	0,152	0,000	0,000	0,000	0,001						
Mental Health	**-0,321****	-0,091	**-0,384****	**0,294****	**0,201****	**0,199****	**0,584****	1				
	0,000	0,069	0,000	0,000	0,000	0,000	0,000					
Social functioning	**-0,331****	**-0,138****	**-0,320****	**0,326****	**0,384****	**0,400****	**0,336****	**0,357****	1			
	0,000	0,006	0,000	0,000	0,000	0,000	0,000	0,000				
Pain	-0,231**	-0,117*	-0,306**	0,288**	0,449**	0,362**	0,313**	0,325**	0,498**	1		
	0,000	0,020	0,000	0,000	0,000	0,000	0,000	0,000	0,000			
General health	-0,241**	-0,017	-0,260**	0,282**	0,277**	0,207**	0,345**	0,525**	0,357**	0,421**	1	
	0,000	0,727	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		
Quality of life total (SF- 36)	-0,338**	-0,070	-0,334**	0,737**	0,693**	0,571**	0,506**	0,586**	0,627**	0,610**	0,590**	1
	0,000	0,164	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	

r: Spearman's rho value, *p<0.05

Table 6: The premenstrual syndrome on quality of life

Dependent Variable	Independent variable	Beta	t	p	R^2	F
Total qulaity of life (SF-36)	Premenstrual syndrome	-0.334	-7.07	<0.001	0.112	49.989

*p<0,05: Linear regression test

A regression analysis was carried out to study the effect of the PMS variable on quality of life SF-36, and it was found to be significant that PMS had a negative effect (p<0.001) (Table 6).

DISCUSSION

This study aimed to determine the PMS and quality of life of hospitalized women. In the study, 57.5% of the 26-29 year-olds and 25% of those under 41 years of age and older suffer from PMS. Similarly, in the study conducted by Demir et al. (10), the majority of women were in the 24-28 age group (44.1%), while the group aged 39 years and over (4.3%) constituted the lowest proportion. According to the literature, PMS symptoms have been shown to decrease with age because women are more able to tolerate and develop ways to cope with PMS over time.

When the impact of the level of education of participants on the prevalence of PMS was studied, the highest rate was found in those with a master's or doctoral degree (60.4%), whereas the lowest rate was found in those with secondary school or high school graduates (37.0%). In support of our study, Khella (11) showed that PMS symptoms are more common and more severe among highly educated women with possible stress associations with PMS than among women with lower educational levels.

In our study, 56.4% of non-child participants experienced PMS, whereas only 36.7% of those with children had PMS. Contrary to the relationship between fertility and PMS violence we found in this study, Önal (12) found that 73.2% of women with PMS have children. When evaluating the relationship between the age of first menstruation and the presence of PMS, the lower dimensions of the PMS included appetite changes that differed from those of the first menstrual age (p<0.05). According to the mean scores, appetite changes were higher in those aged 13-14 years at menarche and lower in those aged 15 years and older.

Duster, adera, and south-paul found that women aged 12 years or younger were 1.6 times more likely to develop PMS during menopause. (13). In support of this finding, a study by Öztürk (14) found that women diagnosed with PMS had a shorter time to first menstruation than those who did not have PMS.

In this study, the prevalence of PMS in women aged 18-45 years was 48.3%. The prevalence of PMS was 57.4% in a 2012 study of college students with short and close colleagues (15). While PMS symptoms pose a threat to a person's health when assessed individually, it should not be forgotten that they also affect family, friends, and the working environment, thereby imposing socioeconomic burdens on society. PMS is a major health problem for women suffering from symptoms such as impotence, anxiety, depression, and suicide. PMS leads to physical and psychological changes in women. These changes have a negative impact on women's family life, social relations, school life, and work. It has been found to affect women's mental health, including loss of capacity, anxiety, depression, and suicide, and negatively affects their quality of life. Understanding the impact of PMS on quality of life highlights the importance of providing support for women in dealing with these symptoms.

Study Limitation

The study is cross-sectional in nature and does not report cause and effect. The fact that the study was conducted in a single center is one of the limitations of the study.

CONCLUSION

It is one of the tasks of general practitioners to tell women that these symptoms are seen by many, to tell them that this is a health problem that reduces their quality of life, and to guide them to manage these symptoms.

Ethics

Ethics Committee Approval: The study was approved by the University of Health Sciences Turkey, Adana City Training and Research Hospital Ethics Board (decision number: 2285, date: 01.12.2022).

Informed Consent: Informed consent was obtained from all participants.

Author Contributions

Surgical and Medical Practices: Z.K.K., A.İ.Ç., M.E.Y., Concept: Z.K.K., A.İ.Ç., M.E.Y., Design: A.İ.Ç., M.E.Y., Data Collection or Processing: Z.K.K., A.İ.Ç., Analysis or Interpretation: Z.K.K., A.İ.Ç., M.E.Y., Literature Search: Z.K.K., A.İ.Ç., Writing: Z.K.K., A.İ.Ç., M.E.Y.

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