ARAŞTIRMA / RESEARCH

Prevalence of Premenstrual Syndrome and Using Traditional and Complementary Medicine Therapies Among Nursing Students

Hemşirelik Öğrencilerinde Premenstrual Sendrom Prevalansı ve Geleneksel ve Tamamlayıcı Tıp Yöntemleri Kullanımı

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Öz

Amaç: Bu çalışmanın amacı hemşirelik öğrencilerinde premenstrual sendrom prevalansı ve geleneksel ve tamamlayıcı tıp yöntemleri kullanımını belirlemektir.

Gereç ve Yöntem: Tanımlayıcı ve kesitsel tipteki bu araştırma, Türkiye'de bir üniversitede 187 hemşirelik öğrencisi ile gerçekleştirildi. Veriler, bilgi formu ve Premenstrual Sendrom Ölçeği kullanılarak elde edildi.

Bulgular: Öğrencilerin yaş ortalaması 21,14 ± 1,74 yıl ve ortalama menarş yaşı 13,01 ± 1,22 yıldı. Ortalama adet döngüsü 29,02 ± 5,86 gün ve ortalama adet süresi 6,04 ± 1,29 gün olarak bulundu. Premenstrual sendrom prevalansının %70,7 olduğu belirlendi. Premenstrual Sendrom Ölçeği ile anne eğitim düzeyi (χ^2 = 24,410; p = 0,000), sigara kullanımı (χ^2 = 15,930; p = 0,001), annede premenstrual sendrom semptomlarının varlığı (χ^2 = 13,579; p = 0,001) ve kız kardeşte premenstrual sendrom semptomlarının varlığı (χ^2 = 11,591; p = 0,009) arasında istatistiksel olarak anlamlı bir ilişki bulundu. Öğrencilerin %97,9'unun geleneksel ve tamamlayıcı tıp yöntemlerini kullandığı belirlendi. Geleneksel ve tamamlayıcı tıp yöntemlerinden en çok kullanılan zihin-beden tekniği ısı tedavisi (%77), en çok kullanılan fitoterapi yöntemi papatya (%9,1) ve en çok kullanılan diyet tedavisi ise sıcak içecekler (% 4,8) idi.

Sonuç: Öğrencilerin çoğunluğunun premenstrual semptom varlığı gösterdiği belirlendi. Öğrencilerin büyük bir kısmının premenstrual sendrom semptomlarıyla başa çıkmak için geleneksel ve tamamlayıcı tıp yöntemlerini kullandığı bulundu. En çok kullanılan geleneksel ve tamamlayıcı tıp yöntemleri zihin-beden teknikleriydi. Ayrıca aile öyküsü, annenin eğitim düzeyi ve sigara kullanımı gibi faktörlerin premenstrual sendrom üzerine etkili olduğu görüldü.

Anahtar sözcükler: Geleneksel ve tamamlayıcı tıp, hemşirelik öğrencisi, menstrual döngü, premenstrual sendrom.

Abstract

Objective: To determine the prevalence of premenstrual syndrome and using traditional and complementary medicine among nursing students.

Material and Method: This descriptive and cross-sectional study was conducted with 187 nursing students in a university, Turkey. The data was collected using the Information form and the Premenstrual Syndrome Scale. Data was evaluated in SPSS (Windows 15.0) program.

Results: The mean age of the students was 21.14±1.74 years, and the mean menarche age was 13.01±1.22 years. The mean menstruation cycle was 29.02±5.86 days, and the mean menstruation duration was 6.04±1.29 days. The prevalence of premenstrual syndrome was found 70.7%. There was a statistically significant relationship between Premenstrual Syndrome Scale mean score and mother education level (χ^2=24.410; p=0.000), smoking (χ^2=15.930; p=0.001), premenstrual syndrome symptoms in mother (χ^2=13.579; p=0.001) and premenstrual syndrome symptoms in sister (χ^2=11.591; p=0.009). The 97.9% of students used traditional and complementary medicine therapies. The most used mind-body practices was heat therapy (77%), the most used phytotherapy was chamomile (9.1%), and the most used dietary therapy was hot drinks (4.8%).

Conclusion: It was determined that the majority of nursing students had premenstrual syndrome. Most of them were used traditional and complementary medicine therapies to cope with premenstrual syndrome symptoms. The most used traditional and complementary medicine therapies were mind-body practices. Besides, family history, education level of mother and smoking were affecting factors for premenstrual syndrome.

Keywords: Traditional and complementary medicine, menstrual cycle, nursing student, premenstrual syndrome.

1. Introduction

Menarche is a turning point for women's lives, expressing the transition of women to a fertile age. Although menstruation is a physiological phenomenon, it includes psychosocial factors that vary from culture to culture (1). In some cultures, while menstruation is perceived positively as the transition to femininity and the beginning of fertility, in some cultures including Turkey, it is perceived as an unfavourable situation that creates pain and stress, and it is even perceived as a disease. Such perceptions of menstruation play an important role in the attitude towards menstruation. The presence of negative attitudes towards menstruation can cause menstrual distress and psychosocial changes (1,2). Premenstrual syndrome (PMS) is a combined syndrome in which different moods and physical, behavioural, and psychological symptoms are seen together. It usually starts in the luteal phase of the menstrual cycle and continues until the first day of menstruation. Although various disciplines have tried to explain the physical, psychological, emotional, and behavioural changes in premenstrual syndrome, there is no proven reason for this yet (2). Hypotheses about PMS causes include hypoglycaemia, hyperprolactinemia, fluctuations in circulating oestradiol and progesterone levels, and endocrine factors such as excessive amounts of aldosterone or antidiuretic hormone or low concentrations of nocturnal melatonin (3). Other etiological factors that are thought to cause PMS are abnormal neurotransmitter reactions, hormonal imbalances, sodium retention and nutritional deficiencies (4). The most common symptoms of premenstrual syndrome are irritability, depression, mood swings, anxiety and tension, sleep disorders, swelling in breasts, tenderness, and oedema (5).

PMS, seen in 20% -50% of women (6,7), starts at any time after menarche and is generally more common in the 20s (5). Although some women can handle PMS symptoms very easily, PMS, for others, causes serious medical and psychological problems (4). According to Oksuz and Guvenç (2018), PMS significantly affects the social, business, and mental lives of young women. It has been stated in the studies conducted in university students that the academic success of women with PMS is significantly affected (5,8).

Treatment of premenstrual syndrome varies according to symptoms and severity of symptoms. Treatment options mostly include lifestyle changes, psychotherapies, and pharmacological treatments (9). Since the underlying factors of PMS are not understood adequately, there is no satisfactory and definitive treatment option. Therefore, women are observed to seek different treatment methods. As a result, the use of traditional and complementary medicine methods is increasing in women with PMS. Traditional and complementary medicine (TCM) emerges as an area outside the medical profession that includes conventional medicine methods and health strategies. TCM is increasingly used especially among women worldwide (10). The most commonly used TCM methods for the premenstrual syndrome are Chinese medicine, herbal products, vitamin D, aromatherapy, yoga, transcutaneous electrical nerve stimulation (TENS), acupuncture and acupressure (9). TCM methods are thought to act by providing symptom control (10). Although studies that investigate the effects of traditional and complementary medicine on dysmenorrhea are present in the literature, number of studies evaluating its effect on premenstrual syndrome is not enough. Moreover, although it is known that premenstrual syndrome is quite common especially in women in their 20s, there are not many studies about the prevalence of premenstrual syndrome in Turkey. This study was planned to determine the prevalence of premenstrual syndrome and the use of TCM methods in nursing students. Additionally, the factors affecting premenstrual syndrome were evaluated in the present study.

2. Material and Methods

2.1. Research Design and Sample

The study was conducted as a descriptive cross-sectional design. The universe of study consisted of 348 nursing students in a university in Turkey and the study was performed between October and December 2019. Considering a confidence interval of 95%, margin of error of 5%, effect size of 0.5, and power of 80%, sample size was determined as 180 students and 187 others who also volunteered were included in the study. (11). Simple random sampling method was used in the selection of the sample.

The inclusion criteria were as follows: willingness to participate, age from 18-30 years, having not an obstacle to reading and writing. The study was applied in a classroom setting. It took the participants about 15 minutes to fill in the data collection tools.

2.2. Data Collection Tools

The Information Form: The form consists of 30 questions about socio-demographic data (age, class, parental education level etc.), menstrual cycle characteristics (menarche age, day of menstrual cycle, day of menstrual bleeding, PMS symptoms on mother and sister) and using TCM therapies. The information form was conducted by the researchers in line with the literature (1,3,6,7,10).

The Premenstrual Syndrome Scale (PMSS): The PMSS was developed and validated by Gencdogan (12). The PMSS consists of 44 items. All items are scored on a 5-point Likert scale. The scale items are scored as 1 "never", 2 "rarely", 3 "sometimes", 4 "often", and 5 "always". The scale instructs the respondent to "please consider this condition one week before menstruation". The PMSS has 9 subscales. These are: depressive feelings, anxiety, fatigue, irritability, depressive thinking, pain, changed appetite, changed sleep, and bloating. The total PMSS score is obtained by summing the scores of subscales. The lowest score that can be obtained on the scale is 44, and the highest score is 220. The evaluation of whether PMS exists or not depends on the total score received. A total score that is more than 50% of the highest score of the original PMSS indicates the existence of PMS. Higher scores indicate increased severity of PMS symptoms (12). In the original study, the internal consistency reliability coefficient was reported as 0.75.

2.3. Data Analysis

SPSS (Windows 15.0) software was used for data analysis. Descriptive statistical methods (mean, standard deviation, mode, median, frequency, minimum and maximum) were used for statistical analysis and Chi-Square tests were calculated for determining the relationship between the descriptive tests and scale. According to the normality test (Kolmogorov Smirnov test), it was determined that data was not normally distributed. All tests were conducted with using $p \leq 0.05$.

3. Results

The mean age of the students was 21.14±1.74 years. Most of the students (74.9%) were in normal body-mass index range (18-24.9 kg / m^2). Only 1.6% of the students had exercise regularly, and 76.5% of them never smoked. The other data related to demographics and health are presented in Table 1.

Table 1. Characteristics of Demographic and Health Status

Characteristics		x̄± (SD)	Min-Max
Age		21.14±1.74	19-28
		n	**%**
Class	1st Class/Year	25	13.4
	2nd Class/Year	38	20.3
	3rd Class/Year	51	27.3
	4th Class/Year	73	39.0
Education Level of Mother	Illiterate	9	4.8
	Primary School	99	52.9
	High School	73	39.1
	University and Postgraduate	6	3.2
Education Level of Father	Illiterate	0	0
	Primary School	69	36.9
	High School	89	53.1
	University and Postgraduate	29	10.0
Chronic Disease	Yes	18	9.6
	No	169	90.4
Body Mass Index	Underweight (<18 kg / m^2)	29	15.5
	Normal weight (18-24.9 kg / m^2)	140	74.9
	Overweight (25-30 kg / m^2)	12	6.4
	Obese (> 30 kg / m^2)	6	3.2
Exercise	Regular	3	1.6
	Irregular	111	59.4
	Never done	73	39.0
Smoking	Still smoking	12	6.3
	Quit smoking	16	8.6
	Smoking occasionally	16	8.6
	Never smoked	143	76.5

The mean menarche age of the students was 13.01±1.22 years. The mean menstruation cycle was 29.02±5.86 days, and the mean menstruation duration was 6.04±1.29 days. Most of the students (75.9%) had regular menstrual cycle (every 28-30 days). While 53.5% of the students thought menstruation was a physiological event, 34.8% of them believed menstruation was a debilitating event. The 85% of students felt tension, 48.7% of them felt tendency to cry easily, 76.8% of them had pain, and 82.8% of the students had fatigue. The 22.5% of students reported their mother had also premenstrual syndrome symptoms, and 30.5% of them reported their sister had also premenstrual syndrome symptoms. The 43.3% of them used nonpharmacological methods to cope with premenstrual syndrome symptoms. The 97.9% of students used TCM, and the 96.8% of them believed TCM was effective (Table 2).

In this study, it was found that 77% of the students used heat therapy to cope with PMS symptoms as a TCM therapy. Most of them used mind-body practices of TCM therapies. 76.5% slept and rest, 77% used heat therapy, and 50.8% of them showered. The most used phytotherapy was chamomile (9.1%). The most used dietary therapy was hot drinks (4.8%). The other TCM therapies are presented in Table 2.

Table 2. Characteristics of Menstruation, Premenstrual Syndrome and Traditional and Complementary Medicine Therapies

Characteristics		x̄ ± (SD)	Min-Max
Menarche Age		13.01±1.22	9-17
Menstruation Cycle (Day)		29.02±5.86	15-60
Duration of Menstruation (Day)		6.04±1.29	3-10
		n	**%**
Regularly Menstruation Period	Yes	142	75.9
	No	45	24.1
Menstrual Attitude	A bothersome event	18	9.6
	A debilitating event	65	34.8
	An unimportant event	4	2.1
	A physiological event	100	53.5
Menstruation-Associated Symptoms *	Tension	159	85.0
	Anxiety	30	16.2
	Tendency to cry easily	91	48.7
	Pain	135	76.8
	Fatigue	155	82.8
	Appetite changes	101	54.0
PMS Symptoms in Mother	Yes	42	22.4
	No	68	36.4
	Not known	77	41.2
PMS Symptoms in Sister	Yes	57	30.5
	No	38	20.3
	Not known	21	11.2
	Not have sister	71	38.0
Methods to Cope with PMS Symptoms	Nonpharmacological	81	43.3
	Pharmacological	42	22.5
	Nothing	64	34.2
Using TCM Therapies	Yes	183	97.9
	No	4	2.1
TCM Therapies	Mind–Body Practices		
	Manipulation of Attention	93	49.7
	Sleep and Rest	143	76.5
	Heat Therapy	144	77.0
	Shower	95	50.8
	Phytotherapy		
	Melissa Officinalis	8	4.3
	Chamomile	17	9.1
	Sage	10	5.3
	Dietary Therapies		
	Hot drinks	9	4.8
	Chocolate	8	4.3
	Vitamin	8	4.3
TCM Effectiveness	Effective	181	96.8
	Non-Effective	6	3.2

PMS: Premenstrual Syndrome
TCM: Traditional and Complementary Medicine
*: Multiple options are marked.

The mean PMSS and subscale scores are presented in Table 3. The internal consistency reliability coefficient was 0.96 in the present study. According to PMSS 70.7% of the students had PMS symptoms.

Relationships between scores of scale and characteristics of students is shown in Table 4. According to the PMSS score > 50% of total score or ≤ 50% of total score, there was a significant relationship between PMSS score and mother education level (χ^2=24.410; p=0.000). Smokers were significantly more frequent in students with PMSS score > 50% of total score compared to students with PMSS score ≤ 50% of total score (χ^2=15.930; p=0.001). According to the results there was a significant relationship between PMSS score and presence of PMS symptoms in mother (χ^2=13.579; p=0.001) and presence of PMS symptoms in sister (χ^2=11.591; p=0.009). Additionally, a significant relationship between using TCM therapies and PMSS score was found (χ^2=9.562; p=0.002). All students that had PMSS score > 50% of total score used TCM therapies.

Table 3. Premenstrual Syndrome Scale Scores

Scale	X̄±(SD)	Min-Max	PMSS Score > 50% of Total Score	
			n	%
PMSS	128.61±33.68	44-220	131	70.7
Depressive Feelings	21.78±6.28	7-35	140	74.9
Anxiety	13.39±5.31	7-35	35	18.7
Fatigue	21.48±6.76	7-35	147	78.6
Irritability	16.38±5.36	5-25	149	79.7
Depressive Thought	17.81±7.29	7-35	91	48.7
Pain	8.96±3.00	3-15	140	74.9
Changes in Appetite	9.95±3.18	3-15	138	73.8
Changes in Sleeping Habits	8.74±3.52	3-15	125	66.8
Bloating	10.09±3.36	3-15	141	75.4

PMSS: Premenstrual Syndrome Scale

Table 4. Relationship Between Premenstrual Syndrome Scale and Characteristics of the Students

	PMSS Score> 50% of Total Score	PMSS Score≤ 50% of Total Score			
	n (%)	n (%)	*χ^2	**p	***t
Education Level of Mother			**24.410**	**0.000**	**0.130**
Not Literate	8 (%6.1)	1 (%1.8)			
Primary School	98 (%74.8)	53 (%94.7)			
High School	21 (%16.0)	0 (0)			
University and Postgraduate	4 (%3.1)	2 (%3.6)			
Smoking			**15.930**	**0.001**	**0.080**
Still smoking	12 (%9.2)	0 (0)			
Quit smoking	16 (%12.2)	0 (0)			
Smoking occasionally	8 (%6.1)	8 (%14.3)			
Never smoked	95 (%72.5)	48 (85.7)			
PMS Symptoms in Mother			**13.579**	**0.001**	**0.070**
Yes	38 (%29.0)	4 (%7.1)			
No	39 (%29.8)	29 (%51.8)			
Not know	54 (%41.2)	23 (%41.1)			
PMS Symptoms in Sister			**11.591**	**0.009**	**0.060**
Yes	46 (%35.1)	11 (%19.6)			
No	19 (%14.5)	19 (%33.9)			
Not Know	17 (%13.0)	4 (%7.1)			
Not Have Sister	49 (%37.4)	22 (%39.3)			
Using TCM Therapies			**9.562**	**0.002**	**0.050**
Yes	131 (%100)	52 (%92.9)			
No	0 (0)	4 (%7.1)			

*χ^2= Chi Square **p<0.05 ***t= Goodman and Kruskal tau

PMS: Premenstrual Syndrome

TCM: Traditional and Complementary Medicine

PMSS: Premenstrual Syndrome Scale

4. Discussion

In this study, the attitudes towards menstruation, the data about menstrual cycles, frequency of premenstrual syndrome symptoms of the university students at the nursing department, and the TCM methods they use to cope with the symptoms of the premenstrual syndrome were investigated.

When the students' data regarding menstruation are examined, the average age of menstruation was determined as 13.01±1.22; and the average menstrual cycle time as 29.02±5.86 days. In the study of Guvenc et al with students (5), the average age of menarche was found to be 13.33 years; menstrual cycle time to be 29.42 days. The study conducted by Marvan et al. in Mexico (13) the average menarche age was found 11.4 years; Lundblad et al. (14), found it as 13.21 years. Chen et al. (15), reported that the menstrual cycle of 69.4% of the participants was between 28-34 days.

According to the other data obtained from this study, most of the students perceived menstruation as a physiological phenomenon; others were found to perceive it as an insignificant, dissatisfying and weakening phenomenon. It has been shown in the literature that young women have positive and negative thoughts on menstruation (13,16-18). Although menstruation is an experience shared by many women, the way it is perceived and attitude towards menstruation differ according to the society they live in, their culture and experiences. In societies where women are trivialized and which regard menstruation as a disease that should be ashamed of and kept secret, menstruation is perceived as a situation that causes a disturbance, makes one feel worthless and negatively affects daily life (17). Likewise, people who have menstrual problems such as dysmenorrhea and premenstrual syndrome perceive menstruation as an unpleasant situation (5). However, it is determined that young people who have sufficient knowledge about menstruation and raised in societies that value women and where women are not commodified see menstruation as a natural physiological event (19).

When the symptoms experienced by the students in the luteal phase were examined, it was determined that most of them felt nervous and tearful. The number of students who felt tired and experienced pain was also quite high. Symptoms such as tension, pain, fatigue, and emotional changes are among the emotional and physical symptoms of premenstrual syndrome (20). Although the exact cause of the emotional changes is not totally understood, the absence of PMS before puberty, during pregnancy and after menopause supports the importance of the cyclic ovarian activity. In addition to cyclic ovarian activity, oestradiol and progesterone have a significant effect on serotonin. Rapidly changing oestradiol and progesterone levels in the premenstrual period cause emotional changes and depressive disorders and affect women (21).

The most common method used by students to deal with premenstrual symptoms is non-pharmacological methods, and the vast majority stated that they use TCM therapies. The vast majority of TCM users also reported that the methods were effective. TCM therapies that students use the most included heat application and sleep-rest as a mind-body technique. The most commonly used phytotherapy method was chamomille, melissa officinalis, and sage. The most used diet methods were hot drinks, chocolate, and vitamins. There are many theories that are thought to cause the premenstrual syndrome. For this reason, different methods are used in PMS treatment. TCM therapies constitute an important part of treatment methods (22). There are studies in the literature in which different TCM methods were used. In the study of Choi (23), it was reported that heat application reduced the symptoms of premenstrual syndrome. According to the meta-analysis study conducted by Jo and Lee (24) on the heat application, it was stated that heat application was effective on pain, which is one of the symptoms of premenstrual syndrome. Heat therapy is thought to be effective through muscular relaxation, the effect of increased vascular circulation, removing metabolic waste that causes pain and temporarily raising the pain threshold. It also contributes to the regulation of the autonomic nervous system (23). According to the meta-analysis of Hasanpour et al. (25), reflexology massage reduces PMS symptoms. Reflexology is based on the fact that the stimulation of reflex points on palms, legs, and ears matches each part of the body including muscle, nerve, gland, and bone (25). In the systematic review by Miraj and Alesaeidi (26), it was determined that the chamomille plant was effective on PMS symptoms through its antidepressant and anti-inflammatory effect. Maleki-Saghooni et al. (4) reported that the melissa officinalis plant relieved PMS symptoms.

According to the PMSS, 70.7% of the students had premenstrual syndrome symptoms. According to the sub-dimensions of the scale, 78.6% of the students had symptoms of fatigue, 75.4% had swelling in their body and 74.9% had pain (Table 4). Guvenc et al. (5), in their study using the same PMSS, found the PMS prevalence as 36.4%. In the study of Acikgoz et al. (27) performed in university students, the PMS prevalence was found to be 58.1%. The reason for the high rate of premenstrual syndrome can be explained by the fact that nursing students have knowledge and awareness about premenstrual syndrome. Because most of the students are 3rd and 4th grade students, and they had knowledge about premenstrual syndrome within the scope of women health and diseases nursing class.

When the characteristics of the students were examined with the PMSS, it was determined that there was a significant relationship with the education level of the mother. The mothers of the students with PMS symptoms were more inclined to be illiterate. Temel et al. (19) also found a statistically significant relationship between the mother's education level and the PMSS. Shiferaw et al. (28) determined that the daughters of mothers with higher education levels had fewer PMS symptoms. Educated mothers may have more knowledge about menstruation and premenstrual syndrome symptoms. Therefore, they can realize their daughter's problems and guide them. Additionally, young women with educated mothers can share their problems with their mothers more easily. In this study, a significant relationship was found between the presence of PMS symptoms in mother and sister and PMSS score. Hereditary factors are also among the etiology of PMS (28). Similar to the results of this study, there are studies in the literature that indicate that the presence of PMS symptoms in the mother and sister increases the likelihood of PMS (29-31).

Smoking cigarettes and other tobacco products affect the regulation of sex hormones and gonadotropic hormones, such as oestrogen, progesterone, and androgens. It is stated that the increase in oestrogen and progesterone concentrations experienced in the luteal phase trigger PMS symptoms (32). Smoking can also change the menstrual function by increasing the risk of dysmenorrhea, amenorrhea, and irregular menstrual bleeding (33). Del Mar Fernandez et al. (34), determined in their case-control study that smokers had higher PMS scale scores. Also in this study, a statistically significant relationship was found between smoking and PMSS score, which is similar to the findings in the literature.

It was also determined in this study that there was a significant relationship between the use of TCM therapies and the PMSS. Accordingly, all students with high PMSS scores use TCM therapies. It is thought that students use TCM therapies to deal with PMS symptoms.

5. Conclusion and Recommendations

According to the results obtained from this study, it was seen that the students had a high rate of PMS symptoms. It was determined that most of the students perceived menstruation as a natural phenomenon; however, many of them felt nervous before menstruation. Having positive attitude towards menstruation is important for women to be satisfied with their image and bodies. Factors affecting PMS were determined as family history, smoking, mother's education level, and TCM therapies. It was also determined that almost all of the students applied various TCM therapies to cope with PMS symptoms, among which mind-body practices were the most frequently used ones.

This study has a few limitations that need to be considered. First, it is a descriptive cross-sectional study, which means that it is not possible to establish a true cause and effect relationship. Second, as this study was conducted at only one nursing department of a university, one must be careful about how the result can be generalized. Third, the data analysis was based on self-reporting data which could have an impact of the outcome of the study.

6. Implications for Health Professionals

The results of this study are important for health professions to have knowledge about PMS, factors affecting PMS and TCM therapies. PMS is an important syndrome that affects the daily lives and quality of life of women, especially at an early age. By determining the factors affecting PMS, symptoms can be reduced or brought to a tolerable level. Furthermore, awareness of TCM therapies and their mechanisms of action that in treatment of PMS can contribute to improving symptom control and developing coping methods.

Ethical Approval

Ethics committee approval was obtained from the Non-invasive Clinic Ethical Committee of a university hospital. To use PMSS, permission was obtained from the original developer. Verbal and written consent was obtained from the participants who met the criteria for being included in the research sample and agreed to participate in the research. The study was conducted in accordance with the Declaration of Helsinki.

Conflict of Interest

This article did not receive any financial fund. There is no conflict of interest regarding any person and / or institution.

Authorship Contribution

Concept: MÇ, ÜYO; **Design:** MÇ, ÜYO; **Supervision:** MÇ, ÜYO; **Funding:** MÇ, ÜYO; **Materials:** MÇ, ÜYO; **Data Collection/Processing:** MÇ, ÜYO; **Analysis / Interpretation:** MÇ, ÜYO; **Literature Review:** MÇ, ÜYO; **Manuscript Writing:** MÇ, ÜYO; **Critical Review:** MÇ, ÜYO

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