


Original Article/Araştırma Makalesi

**EXAMINATION OF MEANING AND PURPOSE OF LIFE IN WOMEN WITH
PREMENSTRUAL SYNDROME**

Premenstrual Sendromlu Kadınlarda Hayatın Anlamının ve Amacının İncelenmesi

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ABSTRACT

Women's coping behaviors with premenstrual syndrome symptoms can be affected by various factors. Among these factors, the meaning and purpose of life is an important health factor associated with reducing many negative health outcomes. This study was conducted to examine the life purpose and meaning-making tendencies of women with premenstrual syndrome. The sample of this descriptive-correlational study consisted of 384 participants. The study was conducted in March-September 2021 within a province located in the Southeastern Anatolia Region of Turkey. The data were collected by using the Descriptive Questionnaire, the Premenstrual Syndrome Scale, and the Meaning and Purpose of Life Scale. The mean Premenstrual Syndrome Scale scores of the participants were determined as 135.02 ± 25.02 and the mean Scale of Meaning and Purpose of Life was 46.77 ± 7.40 . The effect of the meaning and purpose of life was found to be effective on decrease of premenstrual syndrome ($p < 0.001$). The total meaning and purpose of life score explained 21.9% of the total variance in the dependent variable of premenstrual syndrome. In order to make the lives of women diagnosed with premenstrual syndrome more meaningful, it is recommended to organize multi-sectoral collaborative programs in which women's health nurses take an active role.

Keywords: Meaning of life, Premenstrual syndrome, Purpose of life, Woman.

ÖZ

Kadınların premenstrual sendrom semptomları ile baş etme davranışları çeşitli faktörlerden etkilenebilmektedir. Bu faktörler arasında yaşamın anlamı ve amacı, birçok olumsuz sağlık sonucunun azaltılmasıyla ilişkili önemli bir sağlık değişkenidir. Bu araştırma, premenstrual sendromu olan kadınların yaşamın amacı ve anlam oluşturma eğilimlerini incelemek amacıyla yapıldı. Tanımlayıcı-ilişkisel bu çalışmanın örneklemini 384 katılımcı oluşturdu. Çalışma, Türkiye'nin Güneydoğu Anadolu Bölgesi'nde yer alan bir ilde, Mart-Eylül 2021 tarihlerinde gerçekleştirildi. Veriler Tanımlayıcı Anket, Premenstrual Sendrom Ölçeği ve Yaşamın Anlamı ve Amacı Ölçeği kullanılarak toplandı. Katılımcıların Premenstrual Sendrom Ölçeği puan ortalaması 135.02 ± 25.02 , Yaşamın Anlamı ve Amacı Ölçeği puan ortalaması 46.77 ± 7.40 'dır. Yaşamın anlamı ve amacının premenstrual sendromun azalmasında etkili olduğu bulundu ($p < 0.001$). Yaşamın anlamı ve amacı toplam puanı premenstrual sendromun bağımlı değişkenindeki toplam varyansın %21.9'unu açıklamaktadır. Premenstrual sendrom tanısı alan kadınların hayatlarını daha anlamlı kılmak için aralarında kadın sağlığı hemşirelerin de aktif rol aldığı multisektörel işbirliğine dayalı programların düzenlenmesi önerilmektedir.

Anahtar kelimeler: Hayatın amacı, Hayatın anlamı, Kadın, Premenstrual sendrom.

INTRODUCTION

Premenstrual syndrome (PMS) is a cyclical disorder characterized by emotional, somatic, cognitive and behavioral symptoms that occurs during the luteal phase of the menstrual cycle and ends with the onset of menstruation, negatively affecting the quality of life of many women. Approximately 7-10 days of each month is a troublesome period for a woman who has an average of 12 menstrual periods every year, and this period covers a total of 3-4 months (approximately 25-30% of the year) a year (Yonkers, O'Brien & Eriksson, 2008). The incidence of PMS has been determined to vary between 5 and 70% in the literature review (Bakır & Kızılkaya Beji, 2021; Chumpalova et al., 2020; Farahmand et al., 2017). The symptoms frequently encountered among women are psychological problems such as anger, irritability, restlessness, feeling of depression and lack of concentration; physical problems such as insomnia, fatigue, increased edema, joint-head-back pain; behavioral problems such as decreased-increased appetite and decreased sexual desire. PMS, which is common among women, not only causes problems in maintaining work, family, and social life but also negatively affects the meaning and purpose of life (Işgın et al., 2018; Saeedian Kia, Amani & Cheraghian, 2015; Şener & Timur Taşhan, 2021).

The coping behavior of women with PMS symptoms can be affected by various factors (Erbil & Yücesoy, 2021). Among these factors, the situation of not having a purpose and the ability to make sense of life are important issues and they should be handled carefully. Because when individuals encounter events such as life-threatening illnesses, they can enter into existential questioning by finding meaning from these experiences. This process of making sense affects the individual's reactions and ability to cope with the disease. Making sense of life motivates people to overcome negative experiences and live a healthy, positive life. The inability to make sense of life is associated with hopelessness, depression, lack of will to living, and distress (Shin & Steger, 2014). Although PMS is a problem that affects women's lives significantly, the fact that more than half of them do not want to be treated to cope with these problems shows the necessity of clarifying the awareness of the meaning and purpose of life. Because the main thing that affects the individual to make a behavior is the meaning of life and the purpose of life. Determining the meaning and purpose of life is important for preparing more comprehensive and efficient programs for women with PMS. Nurses working in the field of obstetrics and women's health are also in an important position due to their training and consultancy roles in defining PMS symptoms, directing them to relevant units and strengthening coping methods since they communicate more frequently and easily with women.

Nurses working in the field of obstetrics and women's health also have a very important position due to their training and consultancy roles in defining PMS symptoms, directing them to relevant units, and strengthening coping methods, since they communicate more frequently and easily with women (Park et al., 2022).

Compared to previous studies, this study was conducted with women living in the Southeastern Anatolia region, where sociocultural factors are effective the accessing health services. Since original measurement tools were used in the study, the importance of the relationship between PMS and the meaning and purpose of life has emerged. This study was conducted to examine the life purpose and meaning-making tendencies of women with PMS.

Research Questions

- What is the level of life purpose and meaning in women with PMS?
- What are the factors affecting the life purpose and meaning in women with PMS?

MATERIALS AND METHODS

Design

This study was carried out in a descriptive-correlational manner.

Setting and Participants

The population of the study consisted of women aged 18-49 who applied to the gynecology outpatient clinic of a training and research hospital in a province located in the Southeastern Anatolia region of Turkiye. This hospital is the only hospital serving an average of 172.824 individuals living here under the Ministry of Health. According to the information obtained from the hospital records, it was determined that 625 thousand 150 people received outpatient healthcare treatment and 18 thousand 207 people received inpatient treatment in 2021. The number of individuals to be sampled is as follows: The margin of error was 5%, the unknown prevalence was accepted as 50%, and it was calculated as 384 at the 95% confidence interval. Women who were not pregnant or not postpartum, who had PMS, who had regular menstruation, who could communicate, who could read and write, who did not have a psychiatric disease, who did not use drugs continuously, who did not have a chronic disease, and who agreed to participate in the study were included in the study. Exclusion criteria were the presence of known hormonal disorders, the use of oral contraceptives, a history of cancer, and incomplete filling of data collection forms. Ten participants filled out the data collection forms incompletely. To determine the acceptance rate, the number of refusals was recorded:

A total of 30 individuals (7.2%) refused to answer the questionnaire. A total of 384 participants took part in the study.

Data Collection Tools

The data were collected by using the Descriptive Form, the Premenstrual Syndrome Scale (PMSS), and the Meaning and Purpose of Life Scale.

Descriptive Form

This form, prepared by the researchers in line with the literature (Farahmand et al., 2017; Işgın et al., 2018; Şener & Timur Taşhan, 2021), aims to obtain information on the socio-demographic characteristics of the participants and some lifestyle characteristics that may affect PMS. It consists of 12 questions in total.

PMSS

The scale, developed by Gençdoğan in 2006, consists of 44 items, a 5-point Likert type, and nine sub-dimensions. “One point” was given to the “none” option and “five points” to the continuous option. The lowest and highest total scores that the participants can get from each of the sub-dimensions are respectively; 7-35 for “depressive feelings”, 7-35 for “anxiety”, 6-30 for “fatigue”, 5-25 for “irritability”, 7-35 for “depressive thoughts”, 3-15 for “pain”, 3-15 for “change in appetite”, 3- for “change in sleeping habits”, 15 and 3-15 for “bloating”. The lowest score that can be obtained from the entire scale is 44, and the highest score is 220. It is evaluated that as the scale score increases, the intensity of PMS symptoms also increases. In addition, it has been evaluated that PMS is present if 50% of the highest score that can be obtained from the total scale and sub-dimensions is exceeded. The Cronbach's alpha coefficients for the sub-dimensions of the scale were found to be between 0.75 and 0.91, and the Cronbach's alpha coefficient for the total score was 0.75 (Gençdoğan, 2006). In this study, Cronbach's alpha coefficient for the sub-dimensions of the scale was found to be between 0.81 and 0.90, and Cronbach's alpha coefficient for the total score was 0.90.

The Meaning and Purpose of Life Scale

This scale was developed by Aydın, Kaya, and Peker (2015) in order to measure how individuals make sense of events from their perspectives while responding to the events they experienced (Aydın et al., 2015). The first sub-dimension of the scale, “the meaning and purpose of life”, includes factors that can make human life meaningful such as having a meaning and purpose in life, producing, being hopeful, struggling, and reaching goals. The second sub-dimension of the scale, “the meaninglessness of life and lack of purpose”,

emphasizes situations such as meaninglessness, boredom, pessimism, and hopelessness that can lead people to an existential void by leaving them aimless. The scale, which consists of 17 items, is a 5-point Likert type. The Cronbach alpha reliability coefficient of the scale was found to be 0.91 (Aydın et al., 2015). The Cronbach's alpha coefficient for the scale's score was determined as 0.91 in this study.

Data Collection Process

The data were collected from March to September 2022. To evaluate the clarity and usefulness of the questions, a pre-test was conducted among 38 (10% of the sample group) participants and the necessary corrections were made. The data from the pre-test participants were not included in the study. The researcher interviewed the participants face to face and gave information about the purpose of the study before starting the data collection process. Data collection forms were given to the participants to fill out after their approval for participation. Participants filled out the data collection forms themselves in an environment where they could fill in to ensure confidentiality and then handed them over to the researcher. Participants stated that the average time for filling out data collection forms was 15-20 min.

Ethical Approval

The ethics committee approval was obtained from Siirt University Non-Interventional Clinical Research Ethics Committee (Application date: 03/09/2021 and Approval number: E.15) and necessary institutional permission was obtained from the hospital where the study was conducted. The participants were informed about the study would be used only for scientific purposes and that they could leave out the study whenever they wanted. Later, participants were received their written and verbal informed consent.

Data Analysis

The Statistical Package for Social Science (SPSS) 22 package programme was used for the analysis of the data (IBM, Armonk, NY, USA). Number, percentile, mean (\bar{X}) and standard deviation (SD) were used in the analysis of data. The effects of the independent variables on PMSS and The Meaning and Purpose of Life Scale were analyzed by independent samples t-test, one-way analysis of variance (ANOVA) in more than two groups, while Bonferroni, Tamhane test were performed in the groups that were found to show significant differences as a result of these analyses. Also, linear regression and Cronbach's alpha reliability analysis were used to evaluate the data. The results were evaluated at the 95% confidence interval level and the significance level was $p\text{-value} < 0.05$.

RESULTS

The average age of the participants was 29 ± 5.6 (min=18, max=40) years. 39.0% of the participants are primary school graduates, 73.5% are not working, 55.9% have a medium income and 50.7% live in the city center. 65.6% of the participants are married, 51.9% have an extended family structure, and the language most spoken by 38.6% of the participants at home is Turkish. 36.8% of the participants smoke, 88.1% do not exercise regularly, and 62.0% have a family history of PMS (Table 1).

Table 1. Descriptive Characteristics of Participants (n=384)

Characteristics	n	%
Age (years)		
18-24	123	32.0
25-31	156	40.6
32-40	105	27.4
Education level		
Literate	95	24.7
Primary school	105	39.0
High school	110	28.6
University degrees	74	7.7
Employment status		
Working	102	26.5
Not working	282	73.5
Perceived income level		
Poor	110	28.6
Moderate	215	55.9
Good	59	15.5
Place of residence		
City center	195	50.7
Town	122	31.7
Village	67	17.6
Marital status		
Married	252	65.6
Single	134	34.4
Family type		
Nuclear family	185	48.1
Extended family	199	51.9
Most spoken language		
Turkish	148	38.6
Kurdish	111	28.9
Arabic	125	32.5
Tobacco smoking		
Yes	134	36.8
No	246	65.2
*Regular physical exercise		
Yes	46	11.9
No	338	88.1
**Family history of PMS		
Yes	238	62.0
No	146	38.0

*At least 3 days a week and at least 30 minutes; ** First degree relatives taken

The total PMSS scores of the participants were determined as 135.02 ± 25.02 . The average scores of the sub-dimensions were found as 19.86 ± 5.35 for depressive feelings, 19.23 ± 4.79 for anxiety, 20.07 ± 6.42 for fatigue, 15.61 ± 3.48 for irritability, 20.14 ± 6.35 for depressive thoughts, 12.72 ± 4.12 for pain, 9.23 ± 4.28 for changes in appetite, 9.23 ± 3.21 for changes in sleeping habits and 8.93 ± 3.56 for bloating. The total Meaning and Purpose of Life Scale scores of the participants were found as 46.77 ± 7.40 . The mean scores of the sub-dimensions were found 22.35 ± 6.41 as meaning, and purpose of life, and 24.42 ± 8.39 as meaninglessness of life and lack of purpose (Table 2).

Table 2. The Distribution of the Mean PMSS, The Meaning and Purpose of Life Scale Scores of Participants (n=384)

Scales	Min-Max Score	$\bar{X} \pm SD$
PMSS Sub-dimensions		
Depressive Feelings	7-35	19.86 ± 5.35
Anxiety	7-35	19.23 ± 4.78
Fatigue	6-30	20.07 ± 6.42
Irritability	5-25	15.61 ± 3.48
Depressive Thought	7-35	20.14 ± 6.35
Pain	3-15	12.72 ± 4.12
Changes in Appetite	3-15	9.23 ± 4.28
Changes in Sleeping Habits	3-15	9.23 ± 3.21
Bloating	3-15	8.93 ± 3.56
Total PMSS	110-205	135.02 ± 25.02
The Meaning and Purpose of Life Scale Sub-dimensions		
Meaning and Purpose of Life	5-44	22.35 ± 6.41
The Meaninglessness and Lack of Purpose of Life	6-30	24.42 ± 8.39
The Total Meaning and Purpose of Life Scale	17-74	46.77 ± 7.40

\bar{X} = Mean; SD: Standard deviation; Min: Minimum; Max: Maximum

PMSS and the meaning and purpose of life scale scores were compared according to the descriptive characteristics of participants (Table 3). Young ($p < 0.001$), high school educated ($p = 0.016$), employee ($p = 0.006$), perceiving poorly ($p = 0.041$), single ($p = 0.008$), smoking ($p < 0.001$), unable to exercise regularly ($p < 0.001$) and those with a family history of PMS had higher PMSS scores. Older ($p < 0.001$), university educated ($p = 0.032$), employee ($p = 0.034$), perceiving good-income ($p = 0.035$), and non-smokers ($p = 0.031$) had higher Meaning and Purpose of Life Scale scores than other participants (Table 3).

Table 3. Comparison of the Mean PMSS and The Meaning and Purpose of Life Scale Scores According to the Descriptive Characteristics of Participants (n=384)

Descriptive characteristics	PMSS $\bar{X} \pm SD$	The Meaning and Purpose of Life Scale $\bar{X} \pm SD$
Age (years)		
18-24	158.73 ± 13.42^a	38.27 ± 5.79^a
25-31	129.21 ± 18.28^b	41.33 ± 6.67^a
32-40	118.32 ± 7.35^b	59.82 ± 4.54^b
<i>Test and Statistical Significance</i>	F= 6.532 p<0.001 *a>b	F=1.643 p<0.001 *b>a

Education level		
Literate	122.3 ± 8.10 ^{ab}	32.04±3.83 ^a
Primary school	130.38 ± 12.97 ^b	34.25±6.83 ^a
High school	153.67 ± 14.54 ^a	56.96±12.34 ^b
University degrees	135.33 ± 8.81 ^b	62.75±6.98 ^b
<i>Test and Statistical Significance</i>	F = 2.852 p=0.016 **a>b	F=1.723 p=0.032 *b>a
Employment status		
Working	148.52±8.46	50.16±4.62
Not working	122.53±6.45	43.59±8.87
<i>Test and Statistical Significance</i>	t =-2.352 p = 0.006	t=-3.65 p=0.034
Perceived income level		
Poor	126.23±7.38 ^a	54.29±6.21 ^a
Moderate	138.63±8.41 ^{ab}	44.76±6.18 ^b
Good	141.02±6.29 ^b	40.72±9.39 ^b
<i>Test and Statistical Significance</i>	F =1.081 p = 0.041 *b>a	F=1.247 p=0.035 *a>b
Place of residence		
City center	132.27±8.83	46.81±6.86
Town	139.50±4.91	45.23±7.83
Village	134.97±6.36	47.22±5.69
<i>Test and Statistical Significance</i>	F = 2.718 p = 0.066	F=2.933 p=0.533
Marital status		
Married	130.53±6.46	46.69±7.17
Single	140.52±8.46	45.99±6.52
<i>Test and Statistical Significance</i>	t =2.612 p=0.008	t=1.035 p=0.216
Family type		
Nuclear family	139.52±9.07	44.12±5.62
Extended family	131.24±7.35	47.32±7.79
<i>Test and Statistical Significance</i>	t = 5.316 p =0.138	t=0.313 p=0.058
Most spoken language		
Turkish	136.07±9.96	45.31±6.28
Kurdish	142.04±5.58	47.23±6.47
Arabic	127.47±9.64	46.15±6.04
<i>Test and Statistical Significance</i>	F = 2.450 p = 0.124	F=2.746 p=0.065
Tobacco smoking		
Yes	155.52±9.17	41.90±5.45
No	114.24±3.35	50.51±4.92
<i>Test and Statistical Significance</i>	t = 4.301 p<0.001	t=0.381 p=0.031
Regular physical exercise		
Yes	124.52±9.17	44.18±6.28
No	145.24±7.35	48.29±6.34
<i>Test and Statistical Significance</i>	t = 5.301 p<0.001	t=-0.156 p=0.327
Family history of PMS		
Yes	148.94±4.24	47.13±8.81
No	122.06±6.10	45.95±6.75
<i>Test and Statistical Significance</i>	t = -0.118 p = 0.006	t=-0.116 p=0.417

\bar{X} = Mean; SD: Standard deviation; F= One way ANOVA; T: Independent sample t-test. * Bonferoni; **Tamhane

Linear regression was used to evaluate the effect of the meaning and purpose of life on premenstrual syndrome. The effect of the meaning and purpose of life was found to be effective on decrease premenstrual syndrome ($p < 0.001$). The total meaning and purpose of life score explained 21.9% of the total variance in the dependent variable of the premenstrual syndrome, and this result was found to be statistically significant. The meaning and purpose of life score had a positive effect ($B = -.316$) on the decrease in premenstrual syndrome (Table 4).

Table 4. The Effect of the Meaning and Purpose of life on the Premenstrual Syndrome

Scale	Total PMSS				95% CI	
	B	SD	β	p	Lower limit	Upper limit
Total Meaning and Purpose of Life Scale	-.316	1.67 0	-1.92	<0.001	-13.722	-5.678
R: 0.472 R²: 0.222 Adj. R²: 0.219 p<0.001						

B: Coefficient B; SD: Standard deviation; β : Standardized beta coefficient; 95% CI: confidence interval of 95%; R²: R-squared; AdjR²: Adjusted R-squared

DISCUSSION

This study was carried out to reveal the life purpose and meaning-making tendencies of women with PMS. Because PMS affects women's quality of life, mental health, and activities of daily living negatively (Saeedian Kia et al., 2015). It is seen that women experience PMS symptoms at a moderate level considering the PMSS total score averages in this study. When the studies were examined, it was determined that the total PMSS score average of the participants in Küçükkeleşçe et al.'s study with women with PMS varied between 144.74±26.7 and 150.72±14.72 (Simsek Kucukkeleşçe et al., 2021). In the study of Uçak and Süzer Özkan, it was determined that the prevalence of PMS was 82.7% and the total PMSS score average was 122±19.17 (Uçak & Süzer Özkan, 2021). It is thought that the difference in PMS rates depends on the characteristics of the population in which the study was conducted. When PMSS sub-dimensions are examined, participants stated the problems they complained about mostly as fatigue and irritability. Keskin et al.'s study reported that the most common PMS symptoms were found to be abdominal pain, irritability and fatigue (89.3%) (Keskin et al., 2016). PMS complaints are quite common in women as can be seen in the study. The situation reveals the importance of having information about attempts to cope with PMS.

There are some factors affecting PMS symptoms in the literature (Farahmand et al., 2017; Gürkan & Bilgili, 2022; Şener & Timur Taşhan, 2021). These factors are education, income, and employment status. It is stated that PMS is more common in people who work and have a higher education level (Hussein Shehadeh & Hamdan-Mansour, 2018; Temel, Terzioğlu & Işık Koç, 2018). A similar relationship was also found in this study between education level, income, employment and marital status and PMS. It was determined in this study that single people experienced more severe PMS symptoms. It was determined in the study of Farahmand et al. that single women are more likely to experience PMS symptoms compared to married ones (Farahmand et al., 2017). However, some studies report that the severity of PMS symptoms is lower in unmarried women (Halbreich et al., 2003; Hamaideh, Al-Ashram & Al-

Modallal, 2014). This difference can be partially explained by the fact that married women's responsibilities vary in different societies. However, some studies report that the severity of PMS symptoms is lower in unmarried women. This difference can be partially explained by the fact that married women's responsibilities vary in different societies. In addition, it was determined in this study that smoking and not exercising significantly increased PMS symptoms. It was determined that smoking in the study of Arslantaş, Abacıgil and Çınaklı and not doing regular exercise in the study of Nam and Cha significantly increased PMS symptoms (Arslantaş et al., 2018; Nam & Cha, 2020). It is recommended to reduce/quit smoking and to do regular exercise to reduce the complaints of PMS. In this study, PMS symptoms were found to be higher in participants with a family history of PMS symptoms. Similarly, it was determined in a study conducted in Turkey that people whose mothers or a close relatives had PMS were affected negatively by PMS symptoms (Akmalı, Özerdoğan & Gürsoy, 2020). This finding is important to emphasize once again that genetic factors are effective in PMS.

Because ascribing meaning to life and living with a purpose affects the psychological health of individuals, it also affects positively general health conditions (Shin & Steger, 2014). It was determined in this study that participants with high purpose in life experienced less PMS symptoms. There are studies in the literature that look at the relationship between the meaning and purpose of life and various groups (adolescents, the elderly, Alzheimer's patients, etc.) (Blau, Goldberg & Benolol, 2019; Dewitte, Vandenbulck & Dezutter 2019; Sutin, Luchetti, & Terracciano, 2021). Meaning and purpose of life are important health factors associated with reducing many negative health outcomes. This study contributes to the literature in terms of examining the relationship between PMS and the meaning and purpose of life.

Limitations

This study has some limitations. First, only women living in one province were included in the study regarding sampling. Because the participants are culturally homogeneous, the results cannot be generalized to people living in other cultures. Only literate individuals were included in the study. In addition, the data is limited to measurements obtained using PMSS developed by Gençdoğan (2006) and the meaning and purpose of life scale developed by Aydın (2015).

CONCLUSION AND RECOMMENDATIONS

It was determined that women experienced moderate PMS symptoms and among these symptoms, fatigue and irritability were the most common symptoms. Also, women had

moderate meaning and purpose of life. It was observed that the participants who had a high purpose in life and a tendency to make sense of life experienced less PMS symptoms. In light of these results, it is recommended that women who experience severe PMS symptoms should be given psychosocial education to make their lives more meaningful. In this regard, psychosocial support programs based on cooperation between schools, universities, youth centers, and health institutions should be established. Women's health nurses are in an important position in the screening and intervention processes for individuals experiencing PMS in these programs. In addition, it is recommended to conduct mixed method research in order to reveal the problems about the meaning and purpose of life and their interactions more comprehensively.

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