



Posttraumatic Stress Disorder Symptoms and Related Factors in Women with Early Pregnancy Loss

Erken Gebelik Kaybı Yaşayan Kadınlarda Posttravmatik Stres Bozukluğu Belirtileri ve İlişkili Faktörler

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Abstract

Aim: Women may experience emotions such as fear, anxiety, stress, anger or guilt after pregnancy loss, and it can lead to posttraumatic stress disorder if the women cannot cope with these emotions. This study aimed to identify posttraumatic stress disorder symptoms and related factors in women with early pregnancy loss.

Material and Method: The sample of this descriptive study consisted of 132 women hospitalised with early pregnancy loss in an Obstetrics and Gynecology service of a state hospital (<20 weeks). Data were collected using the Personal Information Form, Posttraumatic Stress Disorder Checklist - Civilian Version, the State-Trait Anxiety Inventory and the the Ways of Coping with Stress Scale.

Results: Posttraumatic stress disorder (PTSD) symptoms were found in 62.9% of the women. As women's PTSD symptoms increased, their state and trait anxiety also increased ($r=0.692-0.752$; $p<0.01$). As the symptoms of PTSD decreased, the scores of self-confidence, optimism, and search for social support approaches increased, and as the symptoms increased, the scores of the desperate and submissive approaches increased ($r=0.246-0.579$; $p<0.01$).

Conclusion: PTSD symptoms are high in women after pregnancy loss. SAI, TAI, desperate, submissive and social support, health status, and wanted pregnancy variables are associated with PTSD.

Keywords: Anxiety, coping, early pregnancy loss, posttraumatic stress disorder.

Öz

Amaç: Gebelik kaybı sonrası kadınlar korku, kaygı, stres, öfke veya suçluluk gibi duygular yaşayabilir ve bu duygularla baş edemezse posttravmatik stres bozukluğuna yol açabilir. Çalışmada erken gebelik kaybı yaşayan kadınlarda posttravmatik stres bozukluğu belirtileri ve ilişkili faktörlerin belirlenmesi amaçlanmıştır.

Gereç ve Yöntem: Tanımlayıcı türdeki araştırmanın örneklemini bir devlet hastanesinin Kadın Hastalıkları ve Doğum Servisi'ne erken gebelik kaybı ile yatan (<20 hafta) 132 kadın oluşturmuştur. Veriler Kişisel Bilgi Formu, Posttravmatik Stres Bozukluğu Soru Listesi-Sivil Versiyonu, Durumluk-Sürekli Kaygı Envanteri ve Stres ile Başa Çıkma Tarzları Ölçeği kullanılarak toplanmıştır.

Bulgular: Kadınlarda posttravmatik stres bozukluğu (PTSB) belirtileri %62.9'dur. PTSB belirtileri arttıkça durumluk ve sürekli kaygı da artmaktadır ($r=0.692-0.752$; $p<0.01$). PTSB belirtileri azaldıkça kendine güvenli, iyimser ve sosyal destek arama yaklaşımı puanları; belirtiler arttıkça da çaresiz ve boyun eğici yaklaşım puanları artmaktadır ($r=0.246-0.579$; $p<0.01$).

Sonuç: Gebelik kaybı sonrası kadınların PTSB belirtileri yüksektir. Durumluk, sürekli kaygı, çaresiz, boyun eğici ve sosyal destek arama yaklaşımı ile sağlık durumu, istenen gebelik durumu PTSB belirtileri ilişkilidir.

Anahtar Kelimeler: Anksiyete, başa çıkma, erken gebelik kaybı, posttravmatik stres bozukluğu.



INTRODUCTION

One of the most important complications encountered during pregnancy is the loss of the baby at an early stage.^[1,2] The term early pregnancy loss is used to describe the termination of pregnancy before the twentieth week.^[3] Abortion and ectopic pregnancy are the most common causes of early pregnancy losses, and 25% of the pregnancies in the world result in spontaneous abortion and 1.9% in an ectopic pregnancy.^[2] It is stated in the literature that 12-24% of women have an early pregnancy loss experience,^[4] and 12-20% of all pregnancies end in the first 12 weeks.^[5]

Pregnancy loss is a complex and upsetting life experience for parents.^[3] Women may experience feelings of shock, denial, confusion, fear, anger, sadness, tension, and guilt after pregnancy loss.^[1,6] The most common mental problems after pregnancy loss are anxiety and posttraumatic stress disorder (PTSD).^[6,7] PTSD is an anxiety disorder arising after exposure to a traumatic event in which a person is confronted with death or serious harm and their reaction to the threat involves intense fear, helplessness, or horror.^[4] Of support mechanisms and the woman's inability to cope with anxiety and stress adequately after pregnancy loss may cause posttraumatic stress disorder.^[5] Many studies in the literature have reported that PTSD symptoms and anxiety levels are high after early pregnancy loss.^[8-11] There are methods to reduce these symptoms and anxiety.

Using appropriate and problem-focused stress coping styles in pregnancy loss can prevent negative consequences, reduce stress, and contribute positively to mental health.^[12,13] In particular, health professionals working in the field of mental health should be sensitive to posttraumatic stress to increase the well-being of women and their families and provide them with social and psychological support.^[5,6]

It is important to examine the reactions of women with a pregnancy loss to posttraumatic stress and anxiety, to identify mental problems in the early period, and to define strategies used to cope with the difficulties in terms of protecting the physical and mental health of the woman and the fetus for subsequent pregnancies. Although there are studies examining posttraumatic stress disorder and mental problems in women with pregnancy loss in the international literature,^[7-10,14-16] studies examining this issue are limited in Turkey.^[5,17] This study was conducted to identify posttraumatic stress disorder symptoms and related factors in women with early pregnancy loss. In this context, the study seeks the answers to the following questions:

1. What are the levels of the symptoms of posttraumatic stress disorder in women who have experienced early pregnancy loss?
2. What are the anxiety levels and coping styles of women who have experienced early pregnancy loss?
3. Is there a significant relationship between the symptoms of posttraumatic stress disorder, anxiety levels, and coping styles of women who have experienced early pregnancy loss?
4. What factors are associated with the posttraumatic stress disorder symptoms in women who have experienced early pregnancy loss?

MATERIAL AND METHOD

Ethical Declarations

The study was carried out with the permission of Cumhuriyet University Non-interventional Clinical Researches Ethics Committee (Date: 26.02.2018, Decision No: 2018-01/03). All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Study Design and Participants

The sample of the descriptive study consisted of women hospitalized in an Obstetrics and Gynecology service of a state hospital located in the Central Anatolia region. The women are kept under observation after pregnancy loss, and if no complications develop, they are discharged on the same day. The study included women who experienced early pregnancy loss (<20 weeks), were hospitalized with a diagnosis of ectopic pregnancy and abortion, and were willing to participate in the study. In the power analysis (G*Power 3.1 program) carried out by taking reference to the study of Keten et al.,^[5] the sample size was determined for $\alpha=0.05$, $p=0.95$ power, 0.33 effect size, and an acceptable difference of 0.02. According to the result of the calculation, it was determined that the number of women to be included in the sampling should be 125, considering the possible data loss, 132 women were included in the sample. According to the posthoc power analysis, an effect size of 0.33 and a power of $1-\beta=0.96$ was reached at $\alpha=0.05$ margin of error with 132 samples. Data were collected before women were discharged from the hospital between 1 August 2018 and 30 March 2019.

The purpose and subject of the study were explained to women who met the research criteria and informed consent was obtained. Personal Information Form, PCL-C, SAI, TAI, and WCSS were filled out by the researchers using a face-to-face interview technique. The interviews were held in the patient's room before discharge when the women felt physically and mentally well and the environment was quiet and calm. Filling out the forms took 20-30 minutes.

Data Collection Tools

The Personal Information form has 26 questions relating to factors such as age, educational status, working status, family type, place of residence, perception of income-expense, familial support status, smoking status, pregnancy and number of living children, gestational week, and reason for termination of pregnancy.

Posttraumatic Stress Disorder Checklist-Civilian Version (PCL-C) was developed by Weathers et al.^[18] Its Turkish validity and reliability were established by Kocabasoglu et al.^[19] This 17-item scale is answered on a rating from 'none' to 'extremely' and scored between 0 and 4. The total score that can be

obtained from the scale is between 0-68. A high total score indicates that the symptoms of posttraumatic stress disorder are high. In the Turkish version, the cut-off value was accepted at 23 and the internal consistency coefficient was found to be 0.92.^[19] In our study, the Cronbach alpha coefficient was determined as 0.92.

The State Anxiety Inventory (SAI)-The Trait Anxiety Inventory (TAI) was developed by Spielberger et al.^[20] and its validity and reliability were established by Oner and Lecompte.^[21] The inventory uses a Likert scale and consists of 40 items scored between 0 and 4. SAI is a 4-point scale ranging from 'Not at all' to 'Very much so', and TAI from 'Almost never' to 'Almost always'. High scores indicate high levels of anxiety. In the validity and reliability study of the inventory, the Cronbach alpha coefficient for SAI was between 0.94 and 0.96, and for TAI, between 0.83 and 0.87.^[21] In our study, the Cronbach alpha coefficient was determined as 0.96 for SAI, and 0.91 for TAI.

The Ways of Coping with Stress Scale (WCSS) was developed by Folkman and Lazarus^[22] and a Turkish adaptation was produced by Hisli Sahin and Durak,^[23] (1995). The WCSS consists of 30 items to which responses are given using a 4-point Likert scale (0-3). The Inventory is organized into five sub-dimensions called 'self-confident approach', 'optimistic approach', 'desperate approach', 'submissive approach', and 'search for social support approach'. The WCSS distinguishes between effective strategies for coping with stress (self-confident approach; optimistic approach; search for social support approach) and ineffective strategies (submissive approach; desperate approach). High scores on a sub-dimension indicate a greater tendency to use the coping style concerned. In the validity and reliability study, the internal consistency coefficient of the sub-dimensions was found between 0.47 and 0.80.^[23] In our study, the Cronbach alpha coefficient of the sub-dimensions was determined between 0.51, and 0.82.

Statistical Analysis

Data were analyzed using the Statistical Package for the Social Sciences version 23.0 software (IBM, Chicago, IL). The Shapiro-Wilk test was used to examine whether the data were normally distributed. Number and percentage distribution were used in the evaluation of socio-demographic and obstetric characteristics, and mean and standard deviation values were used when the normal distribution was achieved in the evaluation of scale scores. The relationship between variables was analyzed using Spearman Correlation analysis. The predictive (independent) variables of the multiple regression analysis performed in this study were SAI and TAI total scores, WCSS sub-dimension scores, evaluation of general health status, and the wanted pregnancy status, while the predicted (dependent) variable was PCL-C total score. The significance level was 0.05, and 95% confidence intervals were also calculated.

RESULTS

The mean age of 132 women who completed the study was 30.47 ± 5.90 (range, 18-42) and 52.3% of them were in the 26-35 age range. Of the women, 56.1% were high school graduates, 62.9% did not work, 89.4% had a nuclear family type, and 59.1% lived in the city center. In the sample, 70.5% of the women stated that their income was equal to their expenses, 54.5% of them stated their familial support was partially sufficient, and 71.2% of them did not smoke (**Table 1**).

Table 1. Socio-demographic characteristics of women

Characteristics	n (%)	
Mean age	30.47 ± 5.90 (range, 18-42)	
Age	18-25	29 (22.0)
	26-35	69 (52.3)
	36-42	34 (25.8)
Education	Primary school	22 (16.7)
	High school	74 (56.1)
	University and above	36 (27.3)
Working status	Not working	83 (62.9)
	Working	49 (37.1)
Family type	Nuclear	118 (89.4)
	Extended	14 (10.6)
Place of residence	City	78 (59.1)
	County	54 (40.9)
Income status	Income less than expense	27 (20.5)
	Equal income and expense	93 (70.5)
	Income more than expense	12 (9.1)
Familial support	Sufficient	60 (45.5)
	Partially sufficient	72 (54.5)
Smoking	Yes	38 (28.8)
	Not smoke	94 (71.2)

The mean number of pregnancies of the participants was 2.80 ± 1.33 (range, 1-7), 80.3% of them had between two and seven pregnancies and 55.3% of them had no living children. The gestational week of 51.5% of the women was between four and eight weeks and the pregnancy of 71.2% of them was terminated due to maternal reasons. During the data collection process, women's mean termination of pregnancy hour was 3.45 ± 1.56 (range, 1-8) and the pregnancies of 53.8% of them were terminated three or four hours ago (**Table 2**).

The mean PCL-C score of women with early pregnancy loss was found to be 29.25 ± 14.35 (min:4; max:60) (**Table 3**). When the cut-off point of PCL-C was considered 23 in women with early pregnancy loss, the PTSD symptom level was 62.9% (**Figure 1**).

Table 2. Obstetric characteristics of women

Characteristics		n (%)
Mean number pregnancies	2.80±1.33 (range, 1-7)	
Number pregnancies	One	26 (19.7)
	Two-seven	106 (80.3)
Number of living children	None at all	73 (55.3)
	One	20 (15.2)
	Two-four	39 (29.5)
Gestational week	Four-eight	68 (51.5)
	Nine-twelve	64 (48.5)
Cause of pregnancy termination	Fatal causes	38 (28.8)
	Maternal causes	94 (71.2)
Mean time of termination of pregnancy	3.45±1.56 (range, 1-8)	
Termination time of pregnancy	One-two hours ago	37 (28.0)
	Three-four hours ago	71 (53.8)
	Five-eight hours ago	24 (18.2)

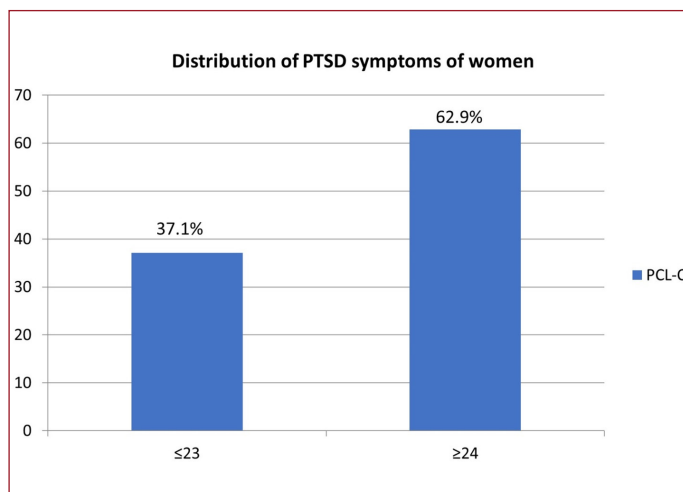


Figure 1. Distribution of PTSD symptoms of women.

The mean SAI score was 55.45±16.39 (min:21; max:78), the mean TAI score was 47.23±12.75 (min:21; max:71). Of WCSS sub-dimensions, self-confident approach mean score was 13.65±4.05 (min:5; max:21), optimistic approach mean score was 9.33±2.96 (min:2; max:15), desperate approach mean score was 12.66 ± 5.11 (min:0; max:23). In addition, the submissive approach mean score was 8.17±2.75 (min:2; max:15) and the search for social support approach mean score was 8.43±2.00 (min:3; max:12) (**Table 3**).

Table 3. PCL-C, SAI, TAI and WCSS mean scores of women

Scales	Min-Max	M ± SD
PCL-C total	4-60	29.25±14.35
SAI total	21-78	55.45±16.39
TAI total	21-71	47.23±12.75
WCSS sub-dimensions		
Self-confident approach	5-21	13.65±4.05
Optimistic approach	2-15	9.33±2.96
Desperate approach	0-23	12.66±5.11
Submissive approach	2-15	8.17±2.75
Social support approach	3-12	8.43±2.00

PCL-C: Posttraumatic Stress Disorder Checklist - Civilian Version; SAI: The State Anxiety Inventory; TAI: The Trait Anxiety Inventory; WCSS: The Ways of Coping with Stress Scale

A positive high and statistically significant relationship was found between PCL-C scores and SAI ($r=0.692$; $p=0.001$) and TAI ($r=0.752$; $p=0.001$) scores in women with early pregnancy loss. As PTSD symptoms increased in women with early pregnancy loss, state and trait anxiety levels also increased (**Table 4**).

Table 4. The relationship between women's PCL-C score and SAI, TAI, WCSS sub-dimension scores

	PCL-C total	
	r	p
SAI total	0.692*	0.001
TAI total	0.752*	0.001
WCSS Sub-dimensions		
Self-confident approach	-0.550*	0.001
Optimistic approach	-0.370*	0.001
Desperate approach	0.579*	0.001
Submissive approach	0.539*	0.001
Social support approach	-0.246*	0.005

*The correlation is significant at the 0.01 level; r: Spearman correlation coefficient; PCL-C: Posttraumatic Stress Disorder Checklist - Civilian Version; SAI: The State Anxiety Inventory; TAI: The Trait Anxiety Inventory; WCSS: The Ways of Coping with Stress Scale

A negative moderate statistically significant relationship was found between women's PCL-C scores and self-confident approach ($r=-0.550$; $p=0.001$) and optimistic approach ($r=-0.370$; $p=0.001$) scores of WCSS sub-dimensions. A negative, weak, and statistically significant relationship was found between women's PCL-C scores and search for social support approach ($r=-0.246$; $p=0.005$) scores of WCSS sub-dimensions. As the PTSD symptoms decreased, more positive coping styles were used in terms of self-confidence, optimism, and search for social support approaches (**Table 4**).

A moderate, positive, and statistically significant relationship was found between the PCL-C scores and the desperate approach ($r=0.579$; $p=0.001$) and submissive approach ($r=0.539$; $p=0.001$) scores of WCSS sub-dimensions. As PTSD symptoms increased, more negative coping styles were used in terms of desperate and submissive approaches (**Table 4**).

Multiple Regression analysis was performed to reveal how the WCSS sub-dimensions, which were thought to affect the PCL-C scale total scores, and the total score obtained from the SAI and TAI scales, the evaluation of general health status, and wanted pregnancy variable predicted the scores obtained from the PCL-C scale. As a result of the analysis, it was determined that there was a significant relationship ($R=0.732$; $R^2=0.513$) between these predictor variables and the total score obtained from the PCL-C scale ($F=24.113$; $p<0.01$). These predictor variables explained 51.3% of the scores obtained from the PCL-C scale ($p<0.01$; **Table 5**).

Table 5. Stepwise multiple regression analysis of predictors of the PCL-C

Independent Variables	Standardized regression coefficients	t	p
SAI total	0.320	4.574	0.001*
TAI total	0.360	4.950	0.001*
Desperate approach	0.116	2.205	0.028*
Submissive approach	0.305	5.484	0.001*
Social support approach	-0.119	-2.656	0.008*
Assessment of general health status	0.332	5.706	0.001*
Wanted pregnancy	-0.205	-2.385	0.018*

R = 0.732; R² = 0.513; F = 24.113; p = 0.000
 *p < 0.01; PCL-C: Posttraumatic Stress Disorder Checklist - Civilian Version; SAI: The State Anxiety Inventory; TAI: The Trait Anxiety Inventory

DISCUSSION

Early pregnancy loss has drawn increasing attention, but the situation of persons experiencing another pregnancy after such a loss is rarely considered in clinical practice.^[24] Although early pregnancy loss occurs quite frequently during pregnancy, the mental consequences can be ignored.^[7,13] The results obtained in the present investigation are expected to highlight this problem. Studies have found that mental problems increase with pregnancy loss.^[10,14,15,25-28] In the literature, it is reported that the PTSD symptom score of women with pregnancy loss is significantly higher than the group without pregnancy loss.^[5,7,29] Coleman et al. found that PTSD symptoms were found in 52.5% of the sample in their study carried out with women experiencing early pregnancy loss.^[8] Farren et al. detected posttraumatic stress disorder in 28% of women in the first month and 38% in the third month after early pregnancy loss, and Horesh et al. found posttraumatic stress disorder in one third (33.3%) of women who had a loss in the second trimester.^[3,16] In another study conducted after miscarriage and ectopic pregnancy, women met the PTSD criteria at a rate of 34% in the first month, 26% in the third month, and 21% in the ninth month.^[9] In a study conducted in Turkey, more than half of women (62.5%) were found to experience posttraumatic stress disorder six months after the termination of pregnancy.^[17] In our study, in line with the results in the literature, the PTSD symptoms in women with early pregnancy loss were found to be 62.9%. This result explains the answer to the 1st question of the study. The low level (21.7%) of PTSD symptoms in another study differed from our findings.^[30] This difference is explained by the fact that the sample groups are different.

The most common mental problem after pregnancy loss is anxiety.^[2,9,29,31] In our study, the state and trait anxiety scores of women were above average. This result explains the answer to the 2nd question of the study. In a study conducted by Farren et al. on women who experienced early pregnancy loss, moderate/severe anxiety was found in 32% of the in the first month and 20% in the third month after the loss.^[16] In another study, moderate/severe anxiety was reported in 24% of the sample in the first month, 23% in the third month, and 17% in the ninth month.^[7] Cumming et al. found that more than one in four (28.3%) women experienced anxiety after abortion.^[32] Besides, in a study conducted with women at risk of abortion

in the first trimester, the anxiety level (48.8%) in women with risk was reported to be higher than in the group without risk.^[11] Another study showed that women experienced anxiety after miscarriage and ectopic pregnancy.^[9] The findings obtained from these studies support our finding of anxiety experienced after early pregnancy loss.

Many problems such as mood disorders, anxiety, and stress can be experienced after pregnancy loss and these can have lasting impacts on women.^[3,32] In our study, it was determined that women who experienced early pregnancy loss used positive coping styles above the average in terms of self-confidence, optimism, and search for social support approaches. This result explains the answer to the 2nd question of the study. It has been reported that obtaining positive feedback from family members regarding the loss of pregnancy is an important factor in coping with stress. In a study evaluating the care provided, it was concluded that women in both the care and control groups used more positive coping styles before performing any application, which supports our findings.^[33] Also, the women in our study used moderately ineffective coping styles in terms of desperate and submissive approaches. This result explains the answer to the 2nd question of the study. In a study conducted by Bergner et al., the coping styles of women after pregnancy loss were examined and it was reported that women who used the depressive coping style experienced more stress during pregnancy and felt a certain level of guilt towards their situation.^[34]

Emotional problems such as anxiety can lead to other mental problems.^[3] In our study, as PTSD symptoms increased in women with early pregnancy loss, their state and trait anxiety levels also increased and state and trait anxiety variables were significant predictors of PCL-C scores. This result explains the answer to the 3rd and 4th questions of the study. It is thought that the state and trait anxiety levels of women who have experienced pregnancy loss are also increased due to their anxiety about their next pregnancy, their negative emotional state, and the fact that more than half of them have PTSD symptoms. A study has shown that the higher the pregnancy loss, the higher the probability of exposure to PTSD.^[30] It has been reported in the literature that there is a significant relationship between post-traumatic stress symptoms and anxiety. This condition, if left untreated during the early period, can lead to a variety of disorders, including maternal depression, prematurity, breastfeeding problems, and lack of attachment.^[24] Another study showing that there is a significant relationship between PTSD symptoms and anxiety six weeks after abortion also supports our findings.^[10] In our study, it was found that women who experienced early pregnancy loss used more positive coping styles in terms of self-confidence, optimism, and search for social support approaches as the symptoms of PTSD decreased, and as the symptoms increased, they used negative coping styles in terms of desperate and submissive approaches. In addition, the variables of the helpless approach, submissive approach,

and seeking social support approach were significant predictors of PCL-C scores. This result explains the answer to the 3rd and 4th questions of the study. It can be said that women who are desperate and think that there is nothing they can do about a loss, use the submissive approach more, and their self-confidence decreases due to the feeling of guilt. In a study conducted with 255 women diagnosed with preterm labor, it was concluded that increasing anxiety levels decreased the self-confidence approach in coping with stress.^[35] As a result of a systematic review, it was found that social support after stillbirth affects the levels of the symptoms.^[29] This finding also supports the findings of our study.

In our study, the general health status of women was correlated with the total score obtained from the PCL-C scale. This result shows the answer to the 4th question of the study. The use of moderate coping styles in terms of a helpless and submissive approach to coping with stress and the detection of PTSD symptoms in more than half of the women in our study (62.9%) may have adversely affected their health. Quality of life is an important indicator of an individual's general health status,^[36] and people's physical, psychological and social health affect their perception of quality of life.^[37] In a study, the trait anxiety scores of women who had health problems during pregnancy were found to be higher than women who did not have any health problems, which also supports our research findings.^[38]

In our study, the variable of "wanted pregnancy" was associated with the total score obtained from the PCL-C scale. This result explains the 4th question of the study. Pregnancy loss is a tragic event for parents and is not limited to the death of the baby, but also brings negative consequences for the future.^[1] It is thought that these negative feelings will be more severe if the baby is not a wanted baby. A study has emphasized the importance of activating women's coping mechanisms in this period and reducing their anxiety.^[39] These findings support the findings of our study.

Limitations

This study has some limitations. First, the findings obtained from this study cover only women with early pregnancy loss, and the results obtained cannot be generalized to all women with pregnancy loss. Second, the study is only descriptive and obtained findings show a post-pregnancy loss.

CONCLUSION

Posttraumatic stress symptoms are high in women with early pregnancy loss, and anxiety and coping styles are associated with posttraumatic stress symptoms. In addition, SAI, TAI, desperate, submissive, and social support approach, general health status, and wanted pregnancy variables predict the scores obtained from the PCL-C scale. Health professionals should use measurement tools after a pregnancy loss to identify women in terms of traumatic stress, anxiety, and negative coping skills in the early period, and identify groups

at risk. They should provide training and counseling that can strengthen positive coping mechanisms with anxiety and stress. They should ensure that women with severe mental health problems and at risk are referred to specialists or clinics working in the field of mental health, and then they should make the necessary follow-ups. Since unwanted pregnancies and how women perceived their health status were found to be important factors for posttraumatic stress symptoms in our study, counseling should be provided about the use of family planning methods and they should be given help to develop behaviors to protect their health (nutrition, exercise, sleep, etc.). Women who experience early pregnancy loss should be provided with social support by both their family members and health professionals.

ETHICAL DECLARATIONS

Ethics Committee Approval: The study was carried out with the permission of Cumhuriyet University Non-interventional Clinical Researches Ethics Committee (Date: 26.02.2018, Decision No: 2018-01/03).

Informed Consent: Because the study was designed the descriptive, no written informed consent form was obtained from patients.

Referee Evaluation Process: Externally peer-reviewed.

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