COMPARISON OF STRESS-COPING LEVELS OF PREGNANT WOMEN WITH AND WITHOUT HIGH-RISK PREGNANCY AND DETERMINATION OF THE AFFECTING FACTORS DURING THE COVID-19 PANDEMIC

COVID-19 SALGINI DÖNEMİNDE GEBELİĞİ RİSKLİ OLAN VE OLMAYAN GEBELERİN STRESLE BAŞA ÇIKMA DÜZEYLERİNİN KARŞILAŞTIRILMASI VE ETKİLEYEN FAKTÖRLERİN BELİRLENMESİ

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ABSTRACT

Objective: The purpose of this study is to compare stress coping levels of pregnant women with and without high-risk pregnancy and determine the affecting factors during the COVID-19 pandemic.

Methods: This descriptive, cross-sectional, and relational screening study was conducted with 203 pregnant women. Data were collected through the descriptive characteristics form and the Stress-Coping Style Scale.

Results: The average age of women with high-risk pregnancy was 30.80±5.46 with a current average of 34.13±5.14 gestational week, and 73.3% of women were found to experience stress due to the COVID-19 pandemic. The average age of women with no high-risk pregnancy was 29.07±5.54 with a current average of 34.56±6.23 gestational week, and 54.9% of women were found to experience stress due to the COVID-19. The comparison of the Stress-Coping Style Scale sub-scale mean scores of women with/without high-risk pregnancy showed that the difference between the groups was statistically significant according to the Seeking Social Support Approach, Desperate Approach, and Submissive Approach sub-scale mean scores (p≤0.001).

Conclusion: Stress-coping approach of women with high-risk pregnancy were found to be affected by delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period. However, stress-coping in women without high-risk pregnancy were found to be affected by factors such as thinking that pregnant women were more at risk during the pandemic, thinking that the COVID-19 would harm the baby, experiencing stress due to the COVID-19, and delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period.

Keywords: Coping, COVID-19, Stress, Risk, Pregnant.

ÖZET

Amaç: Bu çalışmanın amacı COVID-19 salgını döneminde gebeliği riskli olan ve olmayan gebelerin stresle başa çıkma düzeylerini karşılaştırmak ve etkileyen faktörleri belirlemektir.

Gereç ve Yöntem: Tanımlayıcı, kesitsel ve ilişki arayıcı nitelikte olan araştırma, 203 gebe ile yapılmıştır (101 riskli gebe, 102 riskli olmayan gebe). Veriler "Tanıtıcı Özellikler Formu" ve "Stresle Başa Çıkma Tarzı Ölçeği" kullanılarak toplanmıştır.

Bulgular: Gebeliği riskli olan gebelerin yaş ortalamasının 30.80±5.46 olduğu, şu anki gebelik haftası ortalamasının 34.13±5.14 olduğu ve %73.3'ünün COVID-19 salgını nedeniyle stres yaşadığı tespit edilmiştir. Gebeliği riskli olmayan gebelerin yaş ortalamasının 29.07±5.54 olduğu, şu anki gebelik haftası ortalamasının 34.56±6.23 olduğu ve %54.9'unun COVID-19 salgını nedeniyle stres yaşadığı tespit edilmiştir. Gebeliği riskli olan ve olmayan gebelerin Stresle Başa Çıkma Tarzı Ölçeği'nin alt boyutlarından aldıkları puan ortalamaları karşılaştırıldığında; Sosyal desteğe başvurma yaklaşımı, çaresiz yaklaşım ve boyun eğici yaklaşım alt boyut puan ortalamalarına göre gruplar arasındaki farkın istatistiksel olarak anlamlı olduğu belirlenmiştir (p≤0.001).

Sonuç: Yüksek riskli gebeliği olan kadınların pandemi döneminde gebelikte yaşadıkları bir sorun nedeniyle hastaneye gitmeyi ertelemelerinin stresle başa çıkma yaklaşımlarını etkilediği tespit edildi. Ancak yüksek riskli gebeliği olmayan kadınlarda stresle başa çıkmanın pandemi döneminde gebelerin daha fazla risk altında olduğunu düşünme, COVID-19'un bebeğe zarar vereceğini düşünme, COVID-19 nedeniyle stres yaşama, COVID-19 döneminde gebelikte yaşanan bir sorun nedeniyle hastaneye gitmeyi geciktirmek gibi faktörlerin etkilediği tespit edildi.

Anahtar kelimeler: Başa çıkma, COVID-19, Stres, Risk, Gebe.

INTRODUCTION

The new Coronavirus disease (COVID-19), which emerged in Wuhan city of Hubei state in China, spread all over the world and was declared a pandemic on 11th of March, 2020 by the World Health Organization (WHO) (Jiloha, 2020; WHO, 2020).

A pandemic is a process that has a dramatic physical and psychological impact on all humanity. Various studies conducted in this period including particularly pregnant women population focused on the stress, anxiety, and depression outcomes of the COVID-19 pandemic in pregnant women (Ceulemans et al., 2021; Perzow et al., 2021; Berthelot et al., 2020; Colli et al., 2021; Preis et al., 2020).

Recent systematic reviews and meta-analyses reported that stress, mainly anxiety and depression, was higher mostly in the prenatal period (Hessami et al., 2020; Fan et al., 2021; Sun et al., 2021). During the COVID-19 pandemic, the prevalence of depressive symptoms was reported to range from 25% to 30%, and the prevalence of anxiety was reported to range from 34% to 42% in pregnant women (Fan et al., 2021; Sun et al., 2021). The prevalence of psychological stress was reported to range between 63% and 70 % (Yan et al., 2020). Other studies indicated that these symptoms were more prevalent during the pandemic compared to the pre-pandemic period (Ayaz et al., 2020; Racine et al., 2021).

Pregnancy is a period that involves a number of physical and psychological changes (Lobel and Dunkel Schetter, 2016). However, environmental stressors such as health crises and natural disasters increase stress during pregnancy and affect it negatively (Berthelot et al., 2020). Pandemic-related stress could increase even more due to factors such as stress emerging with pregnancy, fear caused by the risk of transmission due to the COVID-19 pandemic, social distancing and isolation measures, and the decrease in access to health services (Liu et al., 2021; Hamzehgardeshi et al., 2021; Mappa et al., 2020). For this reason, evaluation and monitorization of pregnant women's psychological well-being are of great importance during the COVID-19 pandemic because stress, fear, depression, and anxiety experienced by women in the prenatal period could cause the emergence of many negative effects on perinatal and maternal outcomes and the baby's health (Lobel and Dunkel Schetter, 2016; Weissman et al., 2006; Pearlstein, 2015). Continuing stress throughout the pregnancy period could increase the risk of preterm labor, intrauterine growth restriction, low APGAR score, low birth weight, neonatal jaundice, fetal death, and postpartum depression (Azh et al., 2019). Therefore, it is important to focus on the strategies that could have positive effects on women's psychological well-being and protect against psychological symptom development, particularly by decreasing stress levels. Studies show that coping methods have positive effects on the distress and psychological well-being of pregnant women (Guardino and Dunkel Schetter, 2014; Lau et al., 2016; Ibrahim et al., 2019). The literature includes a limited number of studies that compare stress-coping in pregnant women with and without high-risk pregnancy. The purpose of this study is to compare coping levels of pregnant women with and without high-risk pregnancy and determine the affecting factors during the COVID-19 pandemic.

MATERIALS AND METHODS

Study Sample and Design

This descriptive and cross-sectional study adopted a relational screening design. The sample of the study was 203 pregnant women (101 women with high-risk pregnancy and 102 women without high-risk pregnancy) who sought treatment in the Obstetric Clinic-polyclinics of a university hospital in a city located in eastern Turkey and who agreed to participate in the study. Pregnant women who accepted to participate in the research and who met the research criteria were included in the research between the dates of the research without using the sample selection method.

Data were collected between January and September 2021. Data collection forms included the Descriptive Characteristics Form and the Stress-Coping Style Scale. Inclusion criteria; to be at least primary school graduate, singleton pregnancy, with and without any risk during pregnancy, 18 years and older and volunteering to participate in the research. Exclusion criteria; adolescent pregnant, twin pregnancy, pregnant women who refusing to participate in the research. Due to the COVID-19 restrictions that aimed to prevent transmission, data were collected through Google Forms using a questionnaire form filled in by the pregnant women online. Pregnant women who sought treatment in the related hospital and met the research criteria were called and given information about the study, and

those who agreed to participate in the study were contacted via their mobile phones to fill in the online questionnaire link sent to them through Whatsapp.

Measures

The descriptive characteristics form: The form prepared by the researchers was composed of one part regarding pregnant women's descriptive characteristics (socio-demographic, obstetrics, and pandemic period-related features).

Stress-Coping Style Scale (SCSS; Şahin and Durak 1995): Turkish validity and reliability of the form developed by Folkman and Lazarus (1988) were performed by Şahin and Durak (1995). The scale includes 30 items, two dimensions, and five sub-scales. The first dimension, called Problem-focused/active", is related to solving the problem encountered effectively, and it is composed of the "Seeking Social Support Approach", "Optimistic Approach" and "Self-confident Approach" sub-scales. Another dimension is related to emotional coping, which is regarded as ineffective coping and called "Emotion-focused/passive", and it is composed of "Desperate Approach" and "Submissive Approach" sub-scales. While individuals who cope with stress effectively use an active approach more, those who cannot cope with it use a passive approach more. Higher scores indicate more frequent use of coping styles with higher scores (Şahin and Durak, 1995). The reliability of the scale adapted by Şahin and Durak was tested in three different sample groups, and Cronbach's alpha coefficients were reported to range from .62 to .80 for the Self-Confident Approach, from .49 to .68 for the Optimistic Approach, from .45 to .47 for the Seeking Social Support Approach, from .64 to .73 for the Desperate Approach, and from .47 to .72 for the Submissive Approach. This study found Cronbach's alpha reliability coefficients of the SCSS as 0.77 for the Self-Confident Approach, 0.71 for the Optimistic Approach, 0.70 for the Seeking Social Support Approach, 0.75 for the Desperate Approach, and 0.76 for the Submissive Approach.

Ethics

Ethics committee approval was obtained from Atatürk University Medical Faculty Clinical Research Ethics Committee (B.30.2.ATA.0.01.00/2020), and written permission was obtained from the related institution. Verbal consent was obtained from the pregnant women who participated in the study.

Data Analysis

The data obtained from the research were analyzed using SPSS 18.0 package program. Data analysis included numbers and percentages, means, standard deviations, min-max, correlation, independent samples t-test, one-way ANOVA, Mann Whitney U test, and Kruskal Wallis-H test.

RESULTS

When Table 1 is analyzed according to the descriptive characteristics of women with and without high-risk pregnancy, it can be seen that the average age of women with high-risk pregnancy was 30.80±5.46 with a current average of 34.13±5.14 gestational week, and 39.6% of women were primary school graduates. Of the women with high-risk pregnancy, 73.3% experienced stress due to the COVID-19 pandemic, 53.5% delayed their pregnancy follow-ups due to the pandemic, and 24.8% delayed going to the hospital due to a problem experienced during pregnancy in the pandemic period (Table 1).

       The average age of women with no high-risk pregnancy was 29.07±5.54 with a current average of 34.56±6.23 gestational week, and 40.2% were secondary school graduates. Of the women with no high-risk pregnancy, 54.9% were found to experience stress due to the COVID-19 pandemic, 35.3% delayed their pregnancy follow-ups due to the pandemic, and 27.5% delayed going to the hospital due to a problem experienced during pregnancy in the pandemic period (Table 1).

       The comparison of the Stress-Coping Style Scale sub-scale mean scores of women with and without high-risk pregnancy showed that the difference between the groups was statistically significant according to the Seeking Social Support Approach, Desperate Approach, and Submissive Approach sub-scale mean scores (p≤0.001) (Table 2).

Table 1. Distribution of Women with and without High-Risk Pregnancy According to Their Descriptive Characteristics

Descriptive Characteristics	Women with high-risk pregnancy (n=101)		Women without high-risk pregnancy (n=102)		All pregnant women	
Average age	30.80±5.46 (Min-max=20-44)		29.07±5.54 (Min-max=18-41)		29.93±5.56 (Min-max=18-44)	
Mean for the total number of pregnancies	3.26±1.76 (Min-max=1-9)		2.80±1.57 (Min-max=1-6)		3.05±1.66 (Min-max=1-9)	
Mean for the number of living children	2.69±1.70 (Min-max=0-8)		2.43±1.23 (Min-max=1-5)		2.57±1.51 (Min-max=0-9)	
Average gestational week	34.13±5.14 (Min-max=4-41)		34.56±6.23 (Min-max=6-40)		34.35±5.70 (Min-max=4-41)	
	n	**%**	**n**	**%**	**n**	**%**
Income Level						
Income less than expenses	37	36.6	34	33.4	71	35.0
Income more than expenses	11	10.9	14	17.7	25	12.3
Income equal to expenses	53	52.5	54	52.9	107	52.7
Education Level						
Primary school	40	39.6	32	31.4	72	35.5
Secondary school	32	31.7	41	40.2	73	36.0
Undergraduate and Postgraduate	29	28.7	29	28.4	58	28.5
History of miscarriage*						
Yes	27	31.4	27	37.5	54	34.2
No	59	68.6	45	62.5	104	65.8
Stillbirth*						
Yes	6	7.0	2	2.8	8	5.1
No	80	93.0	70	97.2	150	94.9
Curettage*						
Yes	15	17.4	4	5.6	19	12.0
No	71	82.6	68	94.4	139	88.0
Experience of hospitalization in the last pregnancy						
Once	86	85.2	-	-	-	-
Twice	9	8.9	-	-	-	-
3 times and more	6	5.9	-	-	-	-
Duration of hospital stay in the last hospitalization						
1 day	36	35.7	-	-	-	-
2 days	28	27.7	-	-	-	-
3 days or more	37	36.6	-	-	-	-
Thinking that pregnant women are more at risk during the pandemic						
Yes	81	80.2	77	75.5	158	77.8
No	20	19.8	25	24.5	45	22.2
Thinking that the Covid-19 virus would harm them						
Yes	79	78.2	75	73.5	154	75.9
No	22	21.8	27	26.5	49	24.1
Thinking that the Covid-19 virus would harm their baby						
Yes	79	78.2	76	74.5	155	76.4
No	22	21.8	26	25.5	48	23.6
Experiencing stress due to the Covid-19 pandemic						
Yes	74	73.3	56	54.9	130	64.0
No	27	26.7	46	45.1	73	36.0
Delaying pregnancy follow-ups due to the pandemic						
Yes	54	53.5	36	35.3	90	44.3
No	47	46.5	66	64.7	113	55.7

Delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period						
Yes	25	24.8	28	27.5	53	26.1
No	76	75.2	74	72.5	150	73.9

*Those who have their first pregnancy were excluded

Table 2. Comparison of the Stress-Coping Style Scale Mean Scores and The Mean Scores Between the Groups in Women with and without High-Risk Pregnancy

Stress-Coping Style Scale		Women with high-risk pregnancy (n=101)	Women without high-risk pregnancy (n=102)	Test and P value
		M±SD	M±SD	
Problem-focused / active	Self-confident Approach	3.04±0.30	3.06±0.31	*t*=0.279 p=0.781
	Optimistic Approach	2.96±0.41	3.15±0.99	*t*=1.855 p=0.065
	Seeking Social Support Approach	2.80±0.38	3.01±0.48	*t*=3.495 p=0.001*
Emotion-focused /passive	Desperate Approach	2.44±0.40	2.10±0.46	t=5.612 p=0.000*
	Submissive Approach	2.34±0.40	2.13±0.43	t=3.501 p=0.001*

* $p \leq 0.001$

When the Stress-Coping Style Scale sub-scale mean scores of women with high-risk pregnancy were compared according to their descriptive characteristics, it was found that those who had high-risk pregnancy demonstrated a statistically significant difference in the Desperate Approach sub-scale mean scores according to delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period (p<0.05, Table 3).

Table 3. Comparison of Stress-Coping Style Scale Sub-Scale Mean Scores of Women with High-Risk Pregnancy According to Their Descriptive Characteristics

Descriptive Characteristics	Problem-focused/ active			Emotion-focused /passive	
	Self-confident Approach	Optimistic Approach	Seeking Social Support Approach	Desperate Approach	Submissive Approach
	M±SD	M±SD	M±SD	M±SD	M±SD
Education level					
Primary school	3.03±0.26	2.92±0.36	2.75±0.36	2.55±0.34	2.45±0.44
Secondary school	3.02±0.33	2.97±0.49	2.80±0.45	2.38±0.38	2.28±0.40
Undergraduate and Postgraduate	3.08±0.33	2.98±0.40	2.87±0.33	2.36±0.47	2.25±0.31
Test and p value	F=0.324 P=0.724	F=0.167 P=0.847	F=0.923 P=0.401	F=2.544 P=0.084	F=2.804 P=0.065
Income level					
Income less than expenses	2.97±0.42	2.81±0.48	2.70±0.44	2.48±0.36	2.42±0.43
Income more than expenses	3.07±0.32	2.98±0.36	2.88±0.17	2.37±0.30	2.21±0.40
Income equal to expenses	3.03±0.24	2.97±0.44	2.85±0.37	2.43±0.45	2.31±0.38
Test and p value	KW=5.149 P=0.076	KW=1.739 P=0.419	KW=1.996 P=0.369	KW=0.969 P=0.616	KW=1.757 P=0.415
History of miscarriage					
Yes	3.00±0.24	2.90±0.36	2.76±0.43	2.48±0.36	2.43±0.42
No	3.12±0.39	3.00±0.42	2.78±0.21	2.44±0.42	2.31±0.42

Test and p value	U=705.000 P=0.362	U=677.500 P=0.251	U=784.000 P=0.904	U=767.000 P=0.782	U=626.500 P=0.109
History of stillbirth					
Yes	3.03±0.28	2.86±0.45	2.66±0.86	2.46±0.39	2.37±0.41
No	3.09±0.54	2.94±0.38	2.78±0.32	2.33±0.50	2.08±0.48
Test and p value	U=192.500 P=0.388	U=205.500 P=0.544	U=208.500 P=0.581	U=220.500 P=0.739	U=153.000 P=0.135
History of curettage					
Yes	3.03±0.30	2.92±0.39	2.76±0.40	2.45±0.36	2.51±0.20
No	3.07±0.28	2.97±0.33	2.83±0.22	2.45±0.41	2.31±0.45
Test and p value	U=483.500 P=0.550	U=437.000 P=0.483	U=467.500 P=0.444	U=526.500 P=0.945	U=362.000 P=0.059
Experience of hospitalization in the last pregnancy					
Once	3.04±0.27	2.97±0.42	2.78±0.35	2.44±0.42	2.33±0.42
Twice	3.17±0.43	2.97±0.47	3.02±0.26	2.47±0.34	2.37±0.20
3 or more times	2.95±0.51	2.76±0.23	2.70±0.84	2.41±0.35	2.36±0.30
Test and p value	KW=2.909 P=0.234	KW=2.357 P=0.308	KW=6.300 P=0.043	KW=0.029 P=0.986	KW=0.031 P=0.985
Duration of hospital stay in the last hospitalization					
1 day	2.97±0.28	2.93±0.50	2.76±0.41	2.38±0.34	2.34±0.29
2 days	3.09±0.31	2.98±0.39	2.73±0.34	2.48±0.37	2.33±0.50
3 days or more	3.08±0.31	2.96±0.34	2.89±0.38	2.46±0.48	2.34±0.42
Test and p value	KW=3.012 P=0.222	KW=0.660 P=0.719	KW=4.221 P=0.121	KW=1.567 P=0.457	KW=0.178 P=0.915
Thinking that pregnant women are more at risk during pregnancy					
Yes	3.04±0.31	2.92±0.38	2.76±0.55	2.48±0.36	2.35±0.41
No	3.07±0.28	3.09±0.51	2.81±0.34	2.26±0.51	2.28±0.38
Test and p value	U=672.000 P=0.209	U=662.500 P=0.193	U=795.500 P=0.899	U=604.000 P=0.077	U=737.500 P=0.531
Thinking that the Covid-19 virus would harm them					
Yes	3.02±0.30	2.92±0.40	2.79±0.41	2.46±0.40	2.36±0.38
No	3.12±0.29	3.10±0.43	2.82±0.31	2.35±0.42	2.25±0.46
Test and p value	U=685.500 P=0.107	U=661.500 P=0.077	U=859.500 P=0.936	U=787.000 P=0.497	U=806.000 P=0.600
Thinking that the Covid-19 virus would harm their baby					
Yes	3.03±0.29	2.95±0.39	2.77±0.39	2.46±0.38	2.36±0.41
No	3.09±0.34	2.97±0.51	2.89±0.35	2.36±0.47	2.28±0.37
Test and p value	U=849.500 P=0.864	U=843.000 P=0.825	U=735.500 P=0.257	U=770.500 P=0.415	U=791.500 P=0.518
Experiencing stress due to the Covid-19 pandemic					
Yes	3.03±0.33	2.92±0.46	2.75±0.42	2.50±0.37	2.37±0.40
No	3.06±0.26	3.00±0.35	2.86±0.33	2.36±0.43	2.32±0.41
Test and p value	t=0.501 P=0.617	t=0.849 P=0.398	t=1.445 P=0.152	t=1.700 P=0.092	t=0.601 P=0.549
Delaying pregnancy follow-ups due to the pandemic					
Yes	3.04±0.31	2.94±0.36	2.78±0.42	2.50±0.38	2.35±0.41
No	3.05±0.30	2.97±0.47	2.82±0.36	2.37±0.42	2.33±0.40
Test and p value	t=0.158 P=0.875	t=0.408 P=0.684	t=0.540 P=0.590	t=1.638 P=0.105	t=0.228 P=0.820
Delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period					
Yes	3.01±0.25	2.93±0.40	2.79±0.40	2.50±0.37	2.37±0.40

No		3.16±0.41	3.03±0.46	2.82±0.36	2.36±0.43	2.32±0.41
Test and p value		U=838.000 P=0.346	U=860.500 P=0.466	U=933.500 P=0.893	U=571.000 P=0.003**	U=828.000 P=0.331

**p<0.05

When Stress-Coping Style Scale sub-scale mean scores of women with no high-risk pregnancy were compared according to their descriptive characteristics, it was found that the difference between all sub-scale mean scores were significant according to their education level; the difference in Self-Confident Approach, Desperate Approach, and Submissive Approach sub-scale mean scores was significant according to income level; the difference between the Optimistic Approach sub-scale mean scores was significant according to the history of miscarriage; and the difference between Seeking Social Support Approach sub-scale mean score was significant according to thinking that pregnant women were more at risk during the pandemic (p<0.05) (Table 4).

The difference between Seeking Social Support and Submissive Approach sub-scale mean scores was significant in pregnant women with no high-risk pregnancy according to thinking that the Covid-19 virus would harm their baby; the difference between Seeking Social Support and Desperate Approach sub-scale mean scores was significant according to experiencing stress due to the Covid-19 pandemic; and the difference between the Optimistic Approach sub-scale mean scores was significant according to delaying going to hospital due to a problem experienced during pregnancy in the pandemic period (p<0.05) (Table 4).

Table 4. Comparison of Stress-Coping Style Scale Sub-Scale Mean Scores of Women without High-Risk Pregnancy According to Their Descriptive Characteristics

Descriptive Characteristics	Problem-focused/ active			Emotion-focused /passive	
	Self-confident Approach	Optimistic Approach	Seeking Social Support Approach	Desperate Approach	Submissive Approach
	M±SD	M±SD	M±SD	M±SD	M±SD
Education Level					
Primary school	2.98±0.31	2.94±0.35	2.84±0.36	2.28±0.50	2.28±0.40
Secondary school	3.02±0.31	2.95±0.45	2.98±0.45	2.03±0.42	2.19±0.40
Undergraduate and Postgraduate	3.20±0.26	3.68±0.64	3.17±0.53	2.00±0.42	1.88±0.42
Test and p value	F=4.819 P=0.010**	F=6.449 P=0.002**	F=4.267 P=0.017**	F=3.898 P=0.023**	F=7.968 P=0.001*
Income level					
Income less than expenses	2.88±0.16	2.97±0.38	3.05±0.40	2.33±0.40	2.23±0.39
Income more than expenses	3.10±0.33	4.07±0.35	3.08±0.45	1.93±0.51	1.97±0.38
Income equal to expenses	3.07±0.31	3.03±0.40	2.98±0.53	2.14±0.41	2.15±0.61
Test and p value	KW=13.104 P=0.001*	KW=1.599 P=0.450	KW=0.216 P=0.898	KW=7.645 P=0.022**	KW=7.105 P=0.025**
History of miscarriage					
Yes	2.99±0.50	2.79±0.49	3.03±0.56	2.16±0.43	2.20±0.40
No	3.03±0.20	3.14±0.85	3.14±0.39	2.05±0.54	2.09±0.48
Test and p value	U=580.500 P=0.744	U=429.000 P=0.024**	U=524.500 P=0.326	U=544.000 P=0.458	U=548.500 P=0.488
History of stillbirth					
Yes	3.00±0.32	3.00±0.76	3.06±0.49	2.13±0.46	2.17±0.42
No	3.50±0.70	3.10±0.42	3.37±0.88	1.68±0.97	1.91±1.06
Test and p value	U=39.000 P=0.270	U=64.000 P=0.824	U=53.000 P=0.553	U=50.000 P=0.491	U=63.500 P=0.822
History of curettage					
Yes	2.64±0.58	2.50±0.60	3.07±0.51	2.46±0.18	2.37±0.36
No	3.04±0.31	3.04±0.75	3.12±0.43	2.10±0.48	2.15±0.43
Test and p value	U=89.000	U=71.000	U=126.000	U=60.500	U=97.000

	P=0.597	P=0.083	P=0.802	P=0.062	P=0.332
Thinking that pregnant women are more at risk during pregnancy					
Yes	3.02±0.41	2.94±0.50	2.94±0.41	2.10±0.43	2.25±0.52
No	3.07±0.27	3.22±1.09	3.25±0.59	2.08±0.55	2.09±0.40
Test and p value	U=803.500	U=882.000	U=619.500	U=961.500	U=667.000
	P=0.196	P=0.507	P=0.007**	P=0.994	P=0.020
Thinking that the Covid-19 virus would harm them					
Yes	3.02±0.40	3.04±0.30	2.97±0.44	2.15±0.44	2.22±0.50
No	3.07±0.27	3.20±1.14	3.13±0.55	1.95±0.48	2.10±0.41
Test and p value	U=856.000	U=975.500	U=811.000	U=797.000	U=757.500
	P=0.215	P=0.766	P=0.119	P=0.100	P=0.051
Thinking that the Covid-19 virus would harm their baby					
Yes	3.02±0.39	3.00±0.24	2.92±0.44	2.14±0.45	2.27±0.52
No	3.07±0.27	3.21±1.13	3.28±0.48	1.97±0.47	2.08±0.39
Test and p value	U=818.500	U=846.000	U=595.000	U=830.000	U=643.000
	P=0.174	P=0.248	P=0.002**	P=0.223	P=0.008**
Experiencing stress due to the Covid-19 pandemic					
Yes	3.04±0.26	3.02±0.25	2.90±0.43	2.16±0.41	2.14±0.39
No	3.09±0.42	3.20±1.15	3.33±0.46	1.92±0.53	2.10±0.54
Test and p value	t=0.700	t=0.816	t=4.346	t=2.373	t=0.486
	P=0.485	P=0.417	P=0.000*	P=0.020**	P=0.628
Delaying pregnancy follow-ups due to the pandemic					
Yes	3.05±0.35	2.97±0.30	2.95±0.33	2.16±0.42	2.19±0.38
No	3.07±0.22	3.25±1.20	3.05±0.54	2.06±0.48	2.10±0.46
Test and p value	t=0.327	t=1.369	t=0.948	t=0.989	t=1.000
	P=0.744	P=0.174	P=0.346	P=0.325	P=0.320
Delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period					
Yes	3.05±0.33	2.94±0.33	3.00±0.39	2.17±0.49	2.20±0.41
No	3.07±0.25	3.24±1.13	3.02±0.51	2.07±0.45	2.11±0.44
Test and p value	U=1017.500	U=744.500	U=967.500	U=915.000	U=944.500
	P=0.885	P=0.021**	P=0.601	P=0.362	P=0.489

*p≤0.001, **p<0.05

Table 5 demonstrates the relationship between some descriptive characteristics and the Stress-Coping Style Scale mean scores of women with high-risk pregnancy. A positive, weak, and significant relationship was detected between the total number of pregnancies and the number of living children averages and Submissive Approach mean scores in women with high-risk pregnancy (p<0.05) (Table 5).

Table 6 demonstrates the relationship between some descriptive characteristics of women with no high-risk pregnancy and their Stress-Coping Style Scale sub-scale mean scores. It was found that there was a negative, weak, and significant relationship between the average age of pregnant women with no high-risk pregnancy and their Submissive Approach sub-scale mean scores; a negative, weak, and significant relationship between the number of curettages and the number of stillbirths and Self-Confident Approach sub-scale mean scores; a positive relationship between the average gestational week and Self-Confident Approach sub-scale mean scores; and a negative, weak, and significant relationship between Desperate Approach sub-scale mean scores (p<0.05) (Table 6).

Table 5. Relationship between some descriptive characteristics and Stress-Coping Style Scale sub-scale mean scores in women with high-risk pregnancy

Descriptive Characteristics		Problem-focused/ active			Emotion-focused /passive	
		Self-Confident Approach	Optimistic Approach	Seeking Social Support Approach	Desperate Approach	Submissive Approach
Age	r	0.005	-0.042	-0.145	0.157	0.186
	p	0.960	0.678	0.148	0.116	0.063
Pregnancies	r	-0.009	-0.029	-0.127	0.068	0.251
	p	0.930	0.775	0.205	0.502	0.011**
Living children	r	0.040	0.060	-0.071	0.039	0.219
	p	0.717	0.583	0.517	0.721	0.043**
Miscarriages	r	0.068	0.038	0.035	0.045	0.140
	p	0.533	0.731	0.750	0.681	0.199
Curettages	r	-0.007	-0.009	0.068	0.049	0.151
	p	0.949	0.933	0.535	0.654	0.164
Stillbirths	r	0.050	-0.050	-0.077	-0.082	-0.175
	p	0.647	0.645	0.478	0.453	0.108
Gestational week	r	0.090	0.095	-0.177	0.006	0.094
	p	0.373	0.343	0.076	0.952	0.351

**p<0.05

Table 6. Relationship Between Some Descriptive Characteristics and Stress-Coping Style Scale Sub-Scales Scores of Women without High-Risk Pregnancy

Descriptive Characteristics		Problem-focused/ active			Emotion-focused /passive	
		Self-confident Approach	Optimistic Approach	Seeking Social Support Approach	Desperate Approach	Submissive Approach
Age	r	-0.063	0.127	-0.089	-0.108	-0.211
	p	0.528	0.203	0.371	0.282	0.034**
Total number of pregnancies	r	-0.152	-0.151	0.154	0.025	0.074
	p	0.128	0.130	0.122	0.806	0.460
Number of living children	r	0.006	0.129	-0.088	0.064	-0.035
	p	0.963	0.285	0.464	0.597	0.774
Number of miscarriages	r	-0.162	-0.221	0.031	0.022	0.014
	p	0.183	0.068	0.799	0.859	0.908
Number of curettages	r	-0.266	-0.263	0.018	0.180	0.120
	p	0.027**	0.029	0.880	0.139	0.327
Number of stillbirths	r	-0.238	0.072	0.097	-0.155	-0.104
	p	0.049**	0.555	0.425	0.203	0.393
Gestational week	r	0.258	-0.095	0.090	-0.278	-0.086
	p	0.009**	0.344	0.368	0.005**	0.388

**p<0.05

DISCUSSION

Restrictions implemented throughout the COVID-19 pandemic as well as the diseases and deaths happening in this process affected pregnant women both physically and emotionally. In this regard, this study aimed to determine stress-coping levels in women with and without high-risk pregnancy and found that while individuals who could cope with stress effectively used a problem-focused active approach more, those who could not cope with stress effectively used an emotion-focused passive approach more.

Pregnant women with no high-risk pregnancy were found to significantly use Seeking Social Support from active approaches for coping with stress; those with high-risk pregnancy were found to significantly use Desperate and Submissive Approaches, which are mainly passive approaches. In addition, women with high-risk pregnancy were found to have higher levels of stress caused by the COVID-19 pandemic. Pregnant women who are negatively affected by many factors throughout their pregnancy have to develop coping strategies to eliminate these effects. A study that aimed to determine

hospitalized pregnant women's psychological condition and stress-coping reported that depression and hostility symptoms were experienced mildly and they utilized mixed (solution-oriented, emotional, avoidant) coping styles for emotional changes experienced during pregnancy (Yan et al., 2020). Similarly, a study on the increasing psychological symptoms in high-risk pregnancies reported that pregnant women preferred mixed (solution-oriented and emotional) coping styles (Cincioğlu et al., 2020).

Pope et al., (2021) reported that stress-reducing and support-focused strategies used by women for managing stress during the pandemic were compatible with the strategies reported before the pandemic. Gourounti et al., (2013) reported that women's coping skills were negatively associated with anxiety, stress, and depression. Some restrictions during the COVID-19 pandemic process caused mandatory changes in the pregnancy, labor, and postpartum period plans, which might have caused women to try different coping methods.

This study found that stress-coping was not generally affected by descriptive characteristics in women with high-risk pregnancy; only delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period was found to have an effect. Pregnant women who delayed going to the hospital during the pandemic were found to significantly use the Desperate Approach for coping with stress during the pandemic. As for the pregnant women with no high-risk pregnancy, they were found to be affected by factors such as education level, income level, history of miscarriage, thinking that pregnant women were more at risk during the pandemic, thinking that COVID-19 virus would harm their baby, experiencing stress due to the COVID-19 pandemic, and delaying going to hospital due to a problem experienced during pregnancy in the pandemic period. Pregnant women with a postgraduate degree generally used active approaches for coping with stress, while those who had primary school education used a passive approach. Pregnant women who had income more than expenses mainly used the Self-Confident Approach while those who had income less than expenses mainly used the Desperate and Submissive Approaches. Pregnant women who did not have a history of miscarriage mainly used the Optimistic Approach for coping with stress. Pregnant women who thought that they were not at risk during the pandemic were found to use mainly the Seeking Social Support Approach for coping with stress. Those who thought that the COVID-19 pandemic would not harm their baby mainly used the Seeking Social Support Approach for coping with stress, and those who thought that the COVID-19 virus would harm their baby mainly used the Submissive Approach. Pregnant women who did not experience stress mainly used the Seeking Social Support Approach and those who experienced stress used Desperate Approach. Pregnant women who did not delay going to the hospital were found to mainly use the Optimistic Approach for coping with stress. In their study conducted with pregnant women and women in the postpartum period, Wyszynski et al. (2021) found that the decrease in women's stress levels was associated with factors such as being over 35 years old, being married or having a partner, having graduated from university, having social security, and having social support (Wyszynski et al., 2021). When the demographic variables were analyzed in the study conducted by Barbosa-Leiker et al., (2021), it was found that pregnant women demonstrated less healthy coping behaviors compared to women in the postpartum period. Yılmaz and Beji (2010) reported that education level had a positive effect on coping with stress, and pregnant women moved away from the Submissive and Desperate Approach as their education level increased. The same study indicated that the Submissive and Desperate Approach mean scores of pregnant women with income less than expenses were significantly higher compared to women who had income equal to expenses and income more than expenses. The self-confident Approach, Optimistic Approach, and Seeking Social Support dimension levels of the groups were found to be similar according to economic condition. The study conducted by Dağlar and Nur (2014) found that pregnant women with an education level of high school and above had lower Desperate and Submissive Approach scores, and pregnant women with an education level of high school and above had higher Seeking Social Support Approach scores. The same study also determined that pregnant women who had income less than expenses used Submissive and Desperate Approaches while coping with stress. In the study that investigated factors affecting pregnant women's ways of coping with stress, Elkin (2015) indicated that pregnant women's education level, income level, number of pregnancies, gestational week, and the number of living children did not affect their ways of coping with stress (Elkin, 2015).

This study found that pregnant women with high-risk pregnancy tended to use the Submissive Approach more as the number of pregnancies and the number of living children increased. Women with

no high-risk pregnancy seem to use the Submissive Approach significantly less in coping with stress as their age increases. Similarly, women with no high-risk pregnancy were found to decrease the use of the Self-Confident Approach for coping as the number of miscarriages and stillbirths increased, and the use of the Self-Confident Approach increased significantly and the use of the Desperate Approach decreased with the increase in the gestational week. Dağlar and Nur (2014) reported that while the Optimistic Approach level was significantly higher in women with no children, the Submissive Approach level was significantly higher in women who had two and more children. The literature reported a significant relationship between using active coping methods and fewer children and higher education levels in pregnant women (Werchan et al., 2022). As the literature indicates, some sociodemographic characteristics affect women's coping strategies. Depending on the pregnancy status, supporting passive coping strategies with active coping strategies could contribute to women's experiencing less stress in this process.

CONCLUSION

Pregnant women with no high-risk pregnancy used the Seeking Social Support Approach from active approaches while women with high-risk pregnancy used Desperate Approach and Submissive Approach from passive approaches. Generally, the stress-coping approach of pregnant women with high-risk pregnancy was not affected by their descriptive characteristics; it was affected only by delaying going to the hospital due to a problem experienced during pregnancy in the pandemic period. On the other hand, stress-coping style in pregnant women with no high-risk pregnancy were found to be affected by factors such as education level, income level, history of miscarriage, thinking that pregnant women were more at risk during the pandemic, thinking that COVID-19 virus would harm their baby, experiencing stress due to the COVID-19 pandemic, and delaying going to hospital due to a problem experienced during the pandemic. As it is seen, there are negative effects of the COVID-19 process on developing effective stress-coping strategies. Health professionals should inform pregnant women, provide them with consultancy, determine affecting factors, and support them with effective stress-coping behaviors particularly in a process like the pandemic.

Author Contributions
Plan, design: TS, ASÇ; Materials, methods, and data collection: ASÇ; Analysis and interpretation: TS, ASÇ; Writing and critical assessment: TS, ASÇ.

Conflict of interest
There is no conflict of interest to declare in this study.

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