

COVID-19 PHOBIA AND ITS DETERMINANTS IN PREGNANT WOMEN<sup>(1)</sup>

## GEBELERDE COVID-19 FOBİSİ VE BELİRLEYİCİLERİ

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**Öz:** **Amaç:** Çalışmanın amacı gebelerin COVID-19 fobisini ve belirleyicilerini incelemektir. Yöntem: Araştırma verileri; bireylerin kişisel özelliklerini belirlemeye ilişkin “Kişisel Bilgi Formu” ve “COVID-19 fobisi ölçeği” kullanılarak toplandı. Bulgular: Gebelerin covid-19 fobisi ölçeği puan ortalaması 66,30±9,603 olarak tespit edilmiştir. Sosyo-demografik özelliklerle COVID-19 fobisi ölçeği karşılaştırıldığında; eğitim durumu, aşı durumu, Covid-19 geçiren ve ailesi veya yakınlarından Covid-19 geçirenler ile COVID-19 fobisi ölçeği arasında istatistiksel olarak anlamlılık tespit edilmiştir (p=,000). **Sonuç:** Covid-19 salgınının gebeler üzerinde olumsuz duygusal etkisi kaygı, fobi, anksiyete ve korku yaratma konusunda önemli bir potansiyele sahip olduğunu göstermektedir. Gebeler ile ilgili olarak görsel ve yazılı medyadan bilgilendirici çalışmaların yapılması, hastaneler içinde bulunan gebe sınıfı ve gebe okulları aracılığı ile pandemi kurallarına riayet ederek eğitimlerin sürekliliğinin sağlanması gebelerin endişelerini gidereceği düşünülmektedir.

**Anahtar Kelimeler:** COVID-19, COVID-19 Fobisi, Gebelik, Belirleyici

**Abstract:** **Aim:** The study aimed at investigating the COVID-19 phobia of pregnant women and its determinants. **Methods:** The study is of cross-sectional type. The study data were collected using the “Personal Information Form” administered to question the personal characteristics of the participants and “COVID-19 Phobia Scale. Results: The mean score they obtained from the COVID-19 Phobia Scale was 66.30±9.603. The comparison of the relationship between socio-demographic characteristics and the COVID-19 phobia scale scores demonstrated a statistically significant difference between the participants in terms of the variables such as education status, vaccination status, having COVID-19 and having a family member or relative who had COVID-19 (p=.000). **Conclusion:** The negative emotional impact of the COVID-19 pandemic on pregnant women indicates that it has a significant potential to create anxiety, phobia, anxiety and fear. It is expected that providing accurate information for pregnant women through visual and written media, and ensuring the continuity of education by complying with the pandemic rules in the pregnant classes and pregnant schools in hospitals will relieve the COVID-19-related concerns of pregnant women.

**Keywords:** COVID-19, COVID-19 Phobia, Pregnant, Pregnant Women, Determinants

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## INTRODUCTION

Corona virus disease (COVID-19) which emerged in Wuhan, China in December 2019 was declared a pandemic by the World Health Organization on March 11, 2020, due to its rapid spread. The COVID-19 pandemic, which is a major public health problem, not only poses a great threat to human life, but also significantly affects public mental health. Among the psychosocial stress factors likely to be faced with during the pandemic are stress threats to ourselves and our loved ones, changes in daily life routines, separation from family and friends, loss of income due to the economic effects of the country and the world, and disruption in the delivery of health services (Taylor, 2019). During the pandemic, people are faced not only with the risk of being infected; but also with the problem of coping with the illness or death of their relatives. Fear of and worry about contracting the disease, or family members' contracting the disease, worries about how the disease will progress, and uncertainty in the process are among the sources of intense anxiety. Factors such as previous experiences, personality traits, sex, age, and medical history lead to various mental reactions in such periods. There are several sources of stress having a potential to impact mental health during the current COVID-19 pandemic. Besides these stressors, during the pandemic, it has been ob-

served that people have suffered from anxiety, depression, fear, psychological trauma, post-traumatic stress disorder and sleep problems (Talevi et al., 2020; Demir et al., 2021). COVID-19, which has widespread negative effects on public mental health, also has a greater number of negative effects on groups that can be considered special. Among these groups are the disabled, those with chronic diseases, individuals over the age of 65, health workers and refugees. Pregnant women can also be considered as one of these special groups (Brooks et al., 2020).

Although most women perceive pregnancy as the most enjoyable period of their lives, some women suffer some mental problems even in the normal course of their pregnancy. Mental disorders likely to occur during pregnancy pose risks not only for the physical, cognitive and psychological development of babies; but also for the general health of the mother. Results of several meta-analyses conducted on mental disorders that may occur during pregnancy indicate that the prevalence of depression and anxiety disorder in the perinatal period is 11.9% and 15.2% respectively (Woody et al., 2017; Dennis et al., 2017). In a systematic review conducted to investigate the perinatal outcomes of anxiety and depression in pregnancy, it was demonstrated that anxiety and depression during pregnancy increased the risk of preterm birth, low birth weight,



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and low head circumference (Grigoriadis et al., 2018). In another systematic review, a relationship was revealed between preterm birth and maternal depression (Grigoriadis et al., 2013).

In studies conducted during epidemics such as severe acute respiratory syndrome (SARS) and Middle East Respiratory Syndrome (MERS) both of which affected the world, it was demonstrated that pregnant women were more likely to be affected by such diseases (Hessami et al., 2020; Schwartz et al., 2020; Juan et al., 2020). During these periods, the weakening of social support systems, decreases in income, quarantine and isolation measures, disruptions in daily routine, news about the epidemic and restrictions on access to health services adversely affect pregnant women's mental health. Similarly, during the COVID-19 pandemic, the same practices and restrictions have increased risk factors for pregnant women (Caparros-Gonzalez et al., 2020; Thapa et al., 2020). In their study conducted with 100 pregnant women (2020), Saccone et al., determined that the psychological effects of COVID-19 on pregnant women were moderate and two-thirds of the pregnant women had higher levels of anxiety than normal (Saccone et al., 2020). In another cross-sectional study, the prevalence of anxiety and depression in pregnant women was determined as 34.4% and 39.2%, respective-

ly (Farrell et al., 2020). In their study, Wu et al. investigated the pre- and post-pandemic depressive symptoms and anxiety levels of pregnant women and found that their post-pandemic mean depressive symptoms and anxiety levels were higher than were the pre-pandemic levels (Wu et al., 2020). While in some studies, pregnant women suffered from anxiety and depressive symptoms caused by the COVID-19 pandemic, in a study conducted to investigate the symptoms of post-traumatic stress disorder in 1123 pregnant women, 10.3% of them were determined to have post-traumatic stress disorder (Liu et al., 2020; Berthelot et al., 2020). It was reported that the pandemic not only had mental health effects on women during pregnancy, but also increased depression and anxiety rates in them in the early postpartum period during the pandemic (Akpınar et al., 2020; Zanardo et al., 2020; Güler et al., 2020).

The negative effects of the COVID-19 pandemic on the mental health of pregnant women also pose a risk for the physical, cognitive and psychological development of babies. However, the number of studies on COVID-19 and pregnant women is limited. Therefore, in the present study, it was aimed to investigate COVID-19 phobia in pregnant women and the demographic factors affecting their phobia and thus to contribute to the relevant literature.



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## METHOD

### Location and Characteristics of the Study:

The study was conducted with pregnant women who applied to the Obstetrics and Gynecology Outpatient Clinic of a Public Hospital in Samsun, a province on the Black Sea coast of Turkey. Pregnant women who previously underwent psychiatric treatment were excluded from the study.

**Population and Sample of the Study:** Pregnant women who presented to the Obstetrics and Gynecology outpatient clinic of a Public Hospital in Samsun constituted the population of the study. (Average: 750 pregnant women per year). The sample size of the study was determined as 254 (confidence level: 95%, prevalence: 50%, margin of error: 0.05) (Gürbüz & Şahin, 2018).

**Data collection tools:** The study data were collected using the “Personal Information Form” administered to question the personal characteristics of the participants and “COVID-19 Phobia Scale”.

**Personal Information Form:** The form developed by the authors of the study consists of 26 items questioning the socio-demographic and obstetric characteristics of the pregnant women.

**COVID-19 Phobia Scale (C19P-S):** The C19P-S is a self-assessment scale developed

to measure corona virus-related phobia. It contains 20 items whose responses are rated on a 5-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), and 4 sub-dimensions. While the Psychological Sub-Dimension includes the items 1, 5, 9, 13, 17 and 20, the Somatic Sub-Dimension includes the items 2, 6, 10, 14 and 18, the Social Sub-Dimension includes the items 3, 7, 11, 15 and 19, and the Economic Sub-Dimension includes the items 4, 8, 12 and 16. To calculate the score of each sub-dimension, the scores of the items in the sub-dimension are summed. The overall C19P-S score is the sum of the scores of the four sub-dimensions. The minimum and maximum possible scores to be obtained from the C19P-S are 20 and 200 respectively. High scores obtained from the C19P-S and its sub-dimensions indicate that the level of phobia is high (Arpacı et al., 2020). In a study in which the C19P-S used in our study was compared with another scale developed in Turkey, it was determined that the factorial structure of the C19P-S consisted of psychological, somatic, social and economic dimensions, The Cronbach’s Alpha value of the C19P-S was 0.92 in that study and 0.896 in our study.

**Data collection:** The data of this cross-sectional study were collected by the authors of the present study between January 01, 2022 and February 28, 2022 using the face-to-face



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survey technique. The C19P-S was administered to all the pregnant women who agreed to participate in the study. It took the participants about 2 minutes to fill in the form. Of the forms, 259 which were filled in correctly and completely were analyzed.

**Analysis of the data:** The analysis of the data was performed with the SPSS 25.0 package program. In the analysis of the data, numbers and percentages were used to define demographic characteristics whereas the t test and ANOVA test were used to determine the relationship between demographic factors and the scores obtained from the Covid-19 Phobia Scale. COVID-19 phobia and influencing factors were analyzed with the Multiple Regression Analysis.

**Ethical Issues:** Before the study was conducted, the approval was obtained from the

Ethics Committee of University of Health Sciences Samsun Training and Research Hospital (decision date: January 01, 2022, decision number: 20/2).

**Limitations of the Study:** The results obtained from the present study are applicable only to the pregnant women surveyed in a public hospital in Samsun and cannot be generalized to all pregnant women.

## RESULTS

Sociodemographic characteristics of the 259 pregnant women who participated in the study are shown in Table 1. As is seen in Table 1, the mean age of the participating pregnant women was  $27.33 \pm 4.899$  years. Of them, 39.8% were high school graduates, 90.35% were in the low income group, 83% had nuclear families (Table 1).

Table 2. Pregnancy Characteristics and COVID-19 Status Characteristics of Pregnant Women

Table 1. Sociodemographic Characteristics of the Pregnant Women

Characteristics	n	%
Age	259	27.33±4.899
Educational status		
Primary school	84	32.5
High school	103	39.8
Higher education	72	27.70
Do you have a job where you work regularly?		

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Yes	34	13.10
No	225	86.9
Work group		
Upper income group	25	9.65
Lower income group	234	90.35
The longest place of residence until 12 years old		
City center	15	5.8
District	94	36.3
Town or village	149	57.6
Abroad	1	0.3
Economic status of the family		
Up to the Minimum Wage	234	90.35
More than the Minimum Wage	25	9.65
Whom do you live with at home?		
My spouse, children and I	215	83
My spouse, children, mother in law/father in law and I	44	17
Do you have social security?		
Yes	259	100
Spouse's education status		
Primary school	115	44.4
High school	78	30.1
Higher education	66	25.5
Total	259	100.0

Pregnancy characteristics and COVID-19 status characteristics of pregnant women who participated in the study are shown in Table 2. Of them, 74.1% were in the third trimester, 71.8% did not have COVID-19,

and 51.35% were not vaccinated against COVID. The mean number of pregnancies was  $2.10 \pm 1.291$ . The mean number of vaccines was  $1.13 \pm 0.407$  (Table 2).

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**Table 2. Pregnancy Characteristics and COVID-19 Status Characteristics of Pregnant Women**

Characteristics	n	%
<b>Gestational age</b>		
First Trimester	21	8.1
Second Trimester	46	17.8
Third Trimester	192	74.1
<b>Is the current pregnancy a planned one?</b>		
Yes	213	82.2
No	46	17.8
<b>Have you had any problems during your pregnancy?</b>		
Yes	34	13.1
No	225	86.9
<b>If “yes”, what problems have you experienced?</b>		
Threatened miscarriage	16	43.2
Risk of premature birth	9	24.3
Preeclampsia / eclampsia	3	8.1
Diabetes	9	24.3
<b>Is your current pregnancy a wanted pregnancy?</b>		
My husband and I both wanted this baby.	222	85.7
I wanted, but my husband did not want it.	7	2.7
My husband wanted, but I did not want it.	30	11.6
<b>What is your way of conceiving?</b>		
Natural pregnancy	248	95.8
In vitro fertilization	11	4.2
<b>Do you have any chronic disease?</b>		
No	259	100
<b>Have you had COVID?</b>		
Yes	73	28.2
No	186	71.8
<b>Has anyone in your family or one of your first-degree relatives had COVID?</b>		

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Yes	156	60.3
No	103	39.8
If “yes”, who?		
My mother	44	28.2
My father	79	50.6
My sibling	33	21.2
Have you been vaccinated against COVID?		
Yes	126	48.65
No	133	51.35
Do you have any chronic disease?		
No	259	100.0
Total	259	100.0

In Table 3, the mean scores obtained from the COVID-19 Phobia Scale and its sub-dimensions are given.

**Table 3. Mean Scores Obtained From the COVID-19 Phobia Scale and its Sub-dimensions**

Sub-dimensions	Mean±SD
Psychological Sub-Dimension	23.39±4.003
Somatic Sub-Dimension	13.15±2.676
Social Sub-Dimension	18.63±2.990
Economic Sub-Dimension	11.12±2.454
COVID-19 Phobia Scale	66.30±9.603

**Table 4. COVID-19 Phobia and Affecting Factors, Results of the Multiple Regression Analysis**

Variable	B	SE	β	t	p
Constant	3.752	0.337		11.475	0.000
Age	0.004	0.008	0.025	0.480	0.763
Education	-0.092	0.041	-0.126	-2.223	0.027*



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Income	-0.005	0.071	-0.004	-0.076	0.940
Gestational age	0.004	0.056	0.004	0.074	0.941
Having a family member who had COVID-19	0.202	0.081	0.149	2.485	0.014*
Having COVID-19	0.706	0.096	0.478	7.365	0.000*
Having vaccination	-0.602	0.096	-0.360	-6.244	0.000*

Adjusted R<sup>2</sup> = 0.300

F=14.766

\*p= 0.000

The dependent variable: COVID-19 phobia

As is seen in Table 3, the regression model was significant,  $F(8.249) = 14.766$ ,  $p < 0.001$ , and independent variables accounted for 30% of the variance in the dependent variable ( $R^2_{\text{adjusted}} = .300$ ). Accordingly, education level predicted COVID-19 phobia negatively and significantly ( $\beta = -.126$ ,  $t(249) = -2.223$ ,  $p = .027$ ,  $pr^2 = .019$ ). Having a family member with COVID-19 predicted COVID-19 phobia positively and significantly ( $\beta = .149$ ,  $t(249) = 2.485$ ,  $p = .014$ ,  $pr^2 = .024$ ). Having COVID-19 positively and significantly predicted COVID-19 phobia ( $\beta = .478$ ,  $t(249) = 7.365$ ,  $p = .000$ ,  $pr^2 = .17$ ). Vaccination status predicted COVID-19 phobia negatively and significantly ( $\beta = -.360$ ,  $t(249) = -6.2444$ ,  $p = .000$ ,  $pr^2 = .13$ ). No statistically significant relationship was found between age, income status and gestational age, and COVID-19 phobia.

## DISCUSSION

Although the COVID-19 pandemic affects each individual in the society at different lev-

els, it especially affects older adults, children, those with a chronic disease and pregnant women more. Pregnant women experience various virus-related problems both during pregnancy and during birth and postnatal periods. However, although COVID-19 studies are conducted on pregnant women, fetuses and newborns, the data available are limited (Yücel & Gülten, 2020)

Many countries in the world have made changes in their prenatal care procedures due to the pandemic. Antenatal care services are provided via telemedicine applications, except for urgent situations (Walton, 2020; Furuta, 2020). Especially during the pandemic, differences between countries in terms of COVID-19-related practices and different statements in the written and visual media caused fear, depression, anxiety and phobia both in pregnant women and in the whole population (Mızrak & Kabakçı, 2021; Asmundson & Taylor, 2020).



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In the present study, the level of COVID-19 phobia was high in the pregnant women. The mean values obtained from the psychological and social sub-dimensions were higher than were those obtained from the somatic and economic sub-dimensions. Consistent with the results of the present study, in Karkin et al.,'s study (2021) in which the levels of COVID-19 phobia in pregnant and non-pregnant women were compared, the mean values obtained from the psychological and social sub-dimensions were high. According to this result, it can be said that pregnant women are affected by COVID-19 more both socially and psychologically.

In his study conducted with 177 pregnant women (2020), Türen determined that their levels of anxiety and the fear of death due to COVID-19 were higher. This result is consistent with our result indicating that the phobia levels were higher in those who had COVID-19 and those who had a family member or one of their relatives who had COVID-19 (Türen, 2020). Similarly, Mızrak & Kabakçı (2020) found that COVID-19 had a strong potential to cause anxiety, distress and fear in pregnant women and that pregnant women experienced deterioration in their antenatal care expectations (Mızrak & Kabakçı, 2020). Another result of our study is that the score the participants obtained from the social sub-dimension scale was high. Due to social dis-

tancing and isolation measures during the pandemic, pregnant women may experience changes in their daily routines, social lives and leisure activities. In their study (2021), Mızrak & Kabakçı also determined that pregnant women who could not participate in social life due to isolation did household chores more and suffered higher levels of anxiety due to social isolation. Restricted social life and increases in domestic routines, restriction of meeting with parents, and travel ban may cause an increase in social phobia levels of pregnant women and a decrease in their ability to cope with negative situations (Brooks, et al., 2020; Lohm, et al., 2014; Fakari & Simbar, 2020).

The analysis of the factors affecting COVID-19 phobia in pregnant women demonstrated that of the variables, education status, vaccination status, having COVID-19 and having a relative or a family member who had COVID-19 affected their COVID-19 phobia levels adversely. In a study conducted by Karkin et al. (2021), educational status did not affect the participants' COVID-19 phobia levels, contrary to the findings of the study (Karkin, et al., 2021). In their study (2021), Eroğlu et al. determined that the stress arising from the search for a safe process related to pregnancy and birth affected the participants' COVID-19 phobia levels (Eroğlu, et al., 2021). In addition, it is thought that the news



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about the effects of COVID-19 on pregnant women increases their stress levels. It is also believed that the news in the written and visual media about pregnant women who died because they did not have a vaccine also increased the phobia levels of pregnant women.

## CONCLUSION

In conclusion, the results of studies demonstrated that the negative emotional impact of the COVID-19 pandemic on pregnant women had a significant potential to create anxiety, phobia, anxiety and fear in them. Pregnant women's concerns about their own health and the health of their baby, deterioration of prenatal care, inability to access reliable prenatal information and decrease in social interaction affected pregnant women adversely. Therefore, it is thought that providing pregnant women with accurate information through visual and written media, and ensuring the continuity of education by complying with the pandemic rules through the pregnant classes and pregnant schools in hospitals will relieve pregnant women's COVID-19-related concerns.

## REFERENCES

**AKPINAR, F., USTUN, Y., (2020).** Kadın Hastalıkları ve Doğum Pratiğinde SARS-COV-2 (COVID-19) Enfeksiyonu ile İlgili Güncel Bilgiler. Türk Kadın Sağlığı ve Neonatoloji Dergisi, 2(1):13-16

**ARPACI, I., KARATAŞ, K., BALOĞLU, M., (2020).** The Development and Initial Tests for the Psychometric Properties of the COVID-19 Phobia Scale (C19P-S). Personality and Individual Differences, In Press

**ASMUNDSON, G.J., TAYLOR, S., (2020).** Coronaphobia: Fear and the 2019-Ncov Outbreak, Journal Of Anxiety Disorders, 70, 102196

**BERTHELOT, N., LEMIEUX, R., GARON-BISSONNETTE, J., DROUIN-MAZIADE, C., MARTEL, É., MAZIADE, M., (2020).** Uptrend In Distress and Psychiatric Symptomatology in Pregnant Women During the Coronavirus Disease 2019 Pandemic, Acta Obstetrica Et Gynecologica Scandinavica, 99(7):848-855, <https://doi.org/10.1111/aogs.13925>

**BROOKS, S.K., GREENBERG, N., WESSELY, S., RUBIN, G.J., (2020).** Factors Affecting Healthcare Workers' Compliance with Social and Behavioural Infection Control Measures During Emerging Infectious Disease Outbreaks: Rapid Evidence Review, Medrxiv

**CAPARROS-GONZALEZ, R.A., ALDERDICE, F., (2020).** The COVID-19 Pandemic and Perinatal Mental Health, Journal of Reproductive and Infant Psychol-



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www.sstbdergisi.com

International Refereed Academic Journal of Sports, Health and Medical Sciences

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ogy, 38(3):223–225 <https://doi.org/10.1080/02646838.2020.1786910>

**DEMİR, Y., ORUÇ, P., DÜNDER, E., ÖZ-PINAR, S., (2021).** Vaccine Attitude of Healthcare Professionals Towards Covid-19: Samsun Turkey Example, *Int J Acad Med Pharm*, 3(2):006

**DENNIS, C.L., FALAH-HASSANI, K., SHIRI, R., (2017).** Prevalence of Antenatal and Postnatal Anxiety: Systematic Review and Meta-Analysis, *Br J Psychiatry*, 2017 May;210(5):315-323, doi: 10.1192/bjp.bp.116.187179

**EROĞLU, M., ÇITAK-TUNÇ, G., KILINÇ, F.E., (2021).** Gebelik Stresi ile Covid-19 Korkusu Arasındaki İlişkinin İncelenmesi, *Toplum ve Sosyal Hizmet*, 125-139

**FAKARI, F.R., SIMBAR, M., (2020).** Coronavirus Pandemic and Worries During Pregnancy; A Letter to Editor. *Archives of Academic Emergency Medicine*, 8(1):e21-e21

**FARRELL, T., REAGU, S., MOHAN, S., ELMIDANY, R., QADDOURA, F., AHMED, E., E., CORBETT, G., LINDOW, S., ABUYAQOUB, S.M., ALABDULLA, M.A., (2020).** The Impact of the COVID-19 Pandemic on the Perinatal Mental Health of Women. *Journal*

of Perinatal Medicine, 48(9):971–976, <https://doi.org/10.1515/jpm-2020-0415>

**FURUTA, M., (2020).** 2020 International Year of Midwifery—In the Midst of a Pandemic, *Midwifery*, 87, 102739

**GRIGORIADIS, S., GRAVES, L., PEER, M., MAMISASHVILI, L., TOMLINSON, G., VIGOD, S.N., RICHTER, M., (2018).** Maternal Anxiety During Pregnancy and the Association With Adverse Perinatal Outcomes: Systematic Review And Meta-Analysis, *The Journal of Clinical Psychiatry*, 79(5):813

**GRIGORIADIS, S., VONDERPORTEN, E.H., MAMISASHVILI, L., TOMLINSON, G., DENNIS, C. L., KOREN, G., ROSS, L.E., (2013).** The Impact of Maternal Depression During Pregnancy on Perinatal Outcomes: A Systematic Review and Meta-Analysis, *The Journal of Clinical Psychiatry*, 74(4):8615

**GÜLER, O., HATIRNAZ, Ş., (2020).** Türkiye’de COVID-19 Salgınından Önce ve Sonra Doğum İçin Başvuran Gebelerde Antenatal Kaygı Seviyelerinin Karşılaştırılması, *Perinatoloji Dergisi*, 28(2):108-112

**GÜRBÜZ, S., ŞAHİN, F., (2018).** Sosyal Bilimlerde Araştırma Yöntemleri, Şeçkin Yayınevi, Ankara



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www.sstbdergisi.com

International Refereed Academic Journal of Sports, Health and Medical Sciences

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(TRADEMARK)

(2015/04315- 2015-GE-18972)

- HESSAMI, K., ROMANELLI, C., CHIU-RAZZI, M., COZZOLINO, M., (2020).** COVID-19 Pandemic and Maternal Mental Health: A Systematic Review and Meta-Analysis, The Journal of Maternal-Fetal & Neonatal Medicine: The Official Journal of the European Association of Perinatal Medicine, The Federation of Asia and Oceania Perinatal Societies, The International Society of Perinatal Obstetricians, 1–8. Advance Online Publication, <https://doi.org/10.1080/14767058.2020.1843155>
- JUAN, J., GIL, M.M., RONG, Z., ZHANG, Y., YANG, H., POON, L.C., (2020).** Effect of Coronavirus Disease 2019 (COVID-19) on Maternal, Perinatal and Neonatal Outcome: Systematic Review, Ultrasound in Obstetrics & Gynecology, 56(1):15-27
- KARKIN, P.Ö., SEZER, G., SELMA, Ş.E.N., DURAN, M., (2021).** Sağlık Alanında Çalışan Kadınlar ile Sağlık Alanı Dışındaki Kadınların Coronavirus-19 Fobisinin Karşılaştırılması, Batı Karadeniz Tıp Dergisi, 5(2):198-203
- KARKIN, P.Ö., SEZER, G., ŞEN, S., DURAN, M., (2021).** Gebe Olan ve Olmayan Kadınlarda Koronavirüs-19 Fobisinin Karşılaştırılması, Kocaeli Tıp Dergisi, 10(Supp: 2):176-180
- LIU, C.H., ERDEI, C., MITTAL, L., (2021).** Risk Factors for Depression, Anxiety, and PTSD Symptoms in Perinatal Women During the COVID-19 Pandemic, Psychiatry Research, 295, 113552, <https://doi.org/10.1016/j.psychres.2020.113552>
- LOHM, D., FLOWERS, P., STEPHENSON, N., WALLER, E., DAVIS, M.D., (2014).** Biography, Pandemic Time and Risk: Pregnant Women Reflecting on Their Experiences of The 2009 Influenza Pandemic, Health, 18(5):493-508
- MIZRAK SAHİN, B., KABAKCI, E.N., (2021).** The Experiences of Pregnant Women During The COVID-19 Pandemic in Turkey: A Qualitative Study, Women And Birth, 34(2):162–169
- SACCONE, G., FLORIO, A., AIELLO, E., VENTURELLA, R., DE ANGELIS, M.C., LOCCI, M., BIFULCO, G., ZULLO, F., DI SPIEZIO SARDO, A., (2020).** Psychological Impact of Coronavirus Disease 2019 In Pregnant Women, American Journal of Obstetrics and Gynecology, 223(2):293–295, <https://doi.org/10.1016/j.ajog.2020.05.003>
- SCHWARTZ, D.A., GRAHAM, A.L., (2020).** Potential Maternal and Infant Outcomes From Coronavirus 2019-Ncov (SARS-Cov-2) Infecting Pregnant Women: Lessons From SARS, MERS, and Other



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www.sstbdergisi.com

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(TRADEMARK)

(2015/04315- 2015-GE-18972)

Human Coronavirus Infections, Viruses, 12(2):194

**TALEVI, D., PACITTI, F., SOCCI, V., RENZI, G., ALESSANDRINI, M.C., TREBBI, E., ROSSI, R., (2020).** The COVID-19 Outbreak: Impact on Mental Health and Intervention Strategies, J Psychopathol, 26, 162-170

**TAYLOR, S., (2019).** The Psychology of Pandemics: Preparing for the Next Global Outbreak of Infectious Disease, Cambridge Scholars Publishing

**THAPA, S.B., MAINALI, A., SCHWANK, S. E., ACHARYA, G., (2020).** Maternal Mental Health in the Time of the COVID-19 Pandemic, Acta Obstetrica Et Gynecologica Scandinavica, 99(7):817–818, <https://doi.org/10.1111/aogs.13894>

**TÜREN, E., (2020).** Covid-19 Pandemisi Döneminde Kadın Doğum Kliniğine Başvuran Gebelerde Anksiyete Düzeyinin Belirlenmesi, Selçuk Tıp Dergisi, 36(4):352-356

**WALTON, G., (2020).** Covid-19. The New Normal for Midwives, Women and Families, Midwifery, 87, 102736

**WOODY, C.A., FERRARI, A.J., SISKIND, D.J., WHITEFORD, H.A., HARRIS, M.G., (2017).** A Systematic Review and Meta-Regression of the Prevalence and

Incidence of Perinatal Depression, J Affect Disord, 2017 Sep; (219):86-92, doi: 10.1016/j.jad.2017.05.003

**WU, Y., ZHANG, C., LIU, H., DUAN, C., LI, C., FAN, J., LI, H., CHEN, L., XU, H., LI, X., GUO, Y., WANG, Y., LI, X., LI, J., ZHANG, T., YOU, Y., LI, H., YANG, S., TAO, X., XU, Y., HUANG, H.F., (2020).** Perinatal Depressive and Anxiety Symptoms of Pregnant Women During the Coronavirus Disease 2019 Outbreak in China, American Journal of Obstetrics and Gynecology, 223(2):240.e1–240.e9, <https://doi.org/10.1016/j.ajog.2020.05.009>

**YÜCEL, Ç., GÜLTEN, K.O.Ç., (2020).** Perinatal Dönemde Covid-19 Enfeksiyonu Yönetimi: Sağlık Çalışanlarına Öneriler, Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi, 7(Özel Sayı), 25-33

**ZANARDO, V., MANGHINA, V., GILIBERTI, L., VETTORE, M., SEVERINO, L., STRAFACE, G., (2020).** Psychological Impact Of COVID-19 Quarantine Measures in Northeastern Italy on Mothers in the Immediate Postpartum Period, International Journal of Gynaecology and Obstetrics: The Official Organ of the International Federation of Gynaecology and Obstetrics, 150(2):184–188, <https://doi.org/10.1002/ijgo.13249>