

## COVID-19 PANDEMİ SÜRECİNDE KADINLARIN GEBELİK, DOĞUM VE DOĞUM SONU DÖNEME İLİŞKİN DENEYİMLERİ VE DÜŞÜNCELERİ: NİTEL BİR ÇALIŞMA

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### Öz

Bu çalışmanın amacı COVID-19 pandemisinde gebelerin gebelik, doğum ve doğum sonrası dönemdeki deneyimlerini ve düşüncelerini belirlemektir. Araştırma nitel olup 10 gebe ile yürütüldü ve tanımlayıcı fenomenolojik yöntem kullanılmıştır. Veri toplama aracı olarak, gebeleri tanımlayan "Tanıtıcı Bilgi Formu" ve "Yarı Yapılandırılmış Görüşme Formu" kullanılmıştır. Veriler tematik analiz tekniği kullanılarak analiz edilmiştir. Görüşme sonunda gebelik, doğum ve doğum sonrasına yönelik toplam 13 ana tema ve alt temalar elde edilmiştir. Gebelik döneminde korku, huzursuzluk ve stres, kaygı, takipte zorlanma, önlem/tedbir başlıklarında 5 ana tema elde edilmiştir. Doğuma yönelik de kaygı, yalnızlık, umut, önlem, korku başlıklarında 5 ana tema belirlenmiştir. Doğum sonrası dönem için ise kaygı, hayallerinden vazgeçme ve önlem başlıklarında 3 ana tema ortaya çıkmıştır. Çalışma sonuçları, gebelere bakım veren sağlık profesyonellerinin gebe kadınların sadece fiziksel sağlığı hakkında değil, ruh sağlığı konusunda da farkındalık yaratması açısından faydalı olacaktır. Gebelerin deneyimleri, düşünceleri ve bireysel kaygıları göz önünde bulundurularak bütüncül bakımları planlanmalı, alternatif bakım yöntemleri sunulmalıdır. Kadınlar ihtiyaç duydukları her anda bilgilendirilmeli, yönlendirilmeli ve hizmete erişimleri sağlanmalıdır.

**Anahtar Kelimeler:** COVID -19, Doğum, Doğum Sonu Dönem, Gebelik, Nitel Çalışma

## PREGNANCY, BIRTH AND POSTPARTUM CARE EXPERIENCES AND THOUGHTS OF WOMEN DURING THE COVID-19 PANDEMIC: A QUALITATIVE STUDY

### Abstract

The aim of this study is to determine the experiences and thoughts of pregnant women during pregnancy, delivery, and the postpartum period in the COVID-19 pandemic. The research was qualitative and conducted with 10 pregnant women, and a descriptive phenomenological method was used. The "Descriptive Information Form" and the "Semi-Structured Interview Form" were used as data collection tools. The data was analyzed using a thematic analysis technique. At the end of the interview, a total of 13 main themes and sub-themes for pregnancy, birth, and postpartum were obtained. During pregnancy, five main themes were identified under the headings of fear, restlessness and stress, anxiety, difficulty in follow-up, and precaution. For the birth, five main themes were determined under the headings of anxiety, loneliness, hope, precaution, and fear. For the postpartum period, 3 main themes emerged under the headings of anxiety, giving up on dreams, and precaution. The results of the study will be beneficial in terms of raising awareness of health professionals who care for pregnant women not only about the physical health of pregnant women but also about mental health. Holistic care should be planned and alternative care methods should be offered by considering the experiences, thoughts, and individual concerns of pregnant women. Women should be informed, guided and have access to services whenever they need them.

**Keywords:** COVID -19, Birth, Postpartum, Pregnancy, Qualitative Research

## 1. INTRODUCTION

Coronavirus disease 2019 (COVID-19) emerged as a local public health issue in China in late 2019, and it spread quickly. On March 11th, The World Health Organization (WHO) declared the outbreak an international public health emergency and issued precautionary and treatment instructions (1). The development of infection symptoms (fever, cough, dyspnea, diarrhea) as well as increased virulence and mortality rates linked to COVID-19 have motivated health and social organizations in many countries to take preventative measures such as quarantine. While the literature highlights that COVID-19 has a stronger influence on vulnerable groups, including the elderly, pregnant women, and children, this effect is not just biological, but also psychological. People who have taken precautions against the deadly infection have reported experiencing mental illnesses including anxiety, rage, loneliness, despair, and panic attacks (2-4).

Due to physiological and hormonal changes, pregnant women are more susceptible to viral respiratory tract infections. Although data on pregnant and puerperal women's biological and clinical outcomes is few and inconsistent, surveillance studies undertaken by the Centers for Disease Control and Prevention (CDC) show that pregnant women are at higher risk for COVID-19 than non-pregnant women (5). It's also been reported that pregnant women are more susceptible to worry and anxiety about their babies' wellbeing (2,4). Pregnant women and puerperal women are particularly concerned about potential complications such as abortion, preterm labor, intrauterine death, and infections that occur during pregnancy, as well as the measures taken, such as limiting antenatal controls to the greatest extent possible, performing home follow-up, restricting birth and postpartum visits, and social isolation (6,7). According to existing research, the COVID-19 epidemic has a significant impact on women's depression and anxiety levels. Comparative studies have found that pregnant women have greater anxiety and depression symptoms than non-pregnant women (2,4). In a systematic review study spanning 29 studies, nine topics (COVID-19 symptoms in pregnancy, pregnancy management, delivery management, delivery method, advice to healthcare professionals in delivery management, newborn outcomes, newborn care, transmission to the baby, and breastfeeding) were analyzed.

Accordingly, it was emphasized that COVID-19 has a harmful physical and emotional impact on mother and infant health, making it critical to educate and assist women (8). As a result, recognizing pregnant women's experiences, defining their feelings, learning their thoughts about birth and postpartum, and identifying and resolving problems is critical during this period when the virus develops and the process is prolonged.

The objective of this qualitative study was to determine the experiences and thoughts of pregnant women in the COVID-19 pandemic during the pregnancy, birth, and postpartum period.

## 2. METHODS

### 2.1. Study design

In this research, a descriptive phenomenological method was used to obtain a better understanding of the experiences of pregnant women during the COVID 19 pandemic regarding pregnancy, birth, and the postpartum period.

### 2.2. Study participants

The study was conducted on 10 pregnant women who were over 18 years old, living in Turkey, willing to complete an online survey, and using web applications (Facebook, Instagram or Whatsapp), are able to use the online Zoom platform, and volunteered to participate in the study. Samples were taken from ten mothers until data saturation was reached. Pregnant women from the Facebook, Instagram or Whatsapp pregnancy groups were invited to participate in the study via an online survey link. They were informed about the study on the first page of the online survey.

### 2.3.Data collection

In-depth individual interviews were conducted after verbal consent was obtained from participants through the platform. During the interview, women were asked to explain how it felt to be pregnant during the pandemic, how they were affected, the follow-up process, and what kind of initiatives they took. They were then asked to share their thoughts, feelings, and preferences about how the pandemic would affect their birth and postpartum processes. The interviews were recorded on the online Zoom platform, both visually and vocally. Researchers were trained and competent in qualitative research methods. The duration of the interviews ranged from 30 to 40 minutes for each participant.

### 2.4.Data analysis

The interviews were transcribed verbatim and translated into English. Data collection and analysis were carried out simultaneously until data saturation was achieved. The data was analyzed manually using a thematic approach. The researchers read through the transcripts several times to get a sense of the data. Codes were generated from the transcribed interviews and grouped into subthemes and themes. Direct quotations from participants were used to support the themes. Member checking of transcripts and peer checking of themes were undertaken as a method of ensuring the credibility and confirmability of the generated themes. Dependability and transferability were achieved through detailed field notes and descriptions of study processes.

### 2.5.Ethical consideration

Ethical approval for the study was obtained from the Committee on Human Research Publication and Ethics (CHRPE) (Ref; 2020/11-534) before the commencement of the study. Participants were assured of anonymity and confidentiality of information shared. Numbers were assigned to participants to avoid linkage of the responses to the respondents.

## 3.RESULTS

As a result of the content analysis of the interviews, 13 main themes were identified. Five themes for pregnancy period, five themes for birth and three themes for postpartum period (Table 1). The number "n" denotes the number of pregnant women who experienced the emotion.

The age of the participants ranges between 28-36 years, and the average age is 32.5 years. The average gestational week is 24.4, the number of pregnancies is 2, and the average number of live births is 1. Seven of the pregnant women became pregnant voluntarily. Six of the participants are from affluent backgrounds. All of the participants were married, and they were living with their husbands.

**Table 1. Themes and sub-themes related to the experiences and thoughts of pregnant women**

Period	Themes	Sub-themes
Pregnancy Period	Fear	Fear of catching the virus (n: 4)
		Fear of harming the baby (n: 2)
		Uncertainty (n:1)
	Restlessness and stress	Psychological strain (n:3)
		Feeling bad (n:2)
	Anxiety	Virus transmission from the hospital (n: 4)
Difficulty in follow-up (n: 5)		
Precaution		Avoiding the crowd (n:5)
		Staying at home (n:5)
		Meeting the needs on the internet (n:2)
		Healthy eating, paying attention to hygiene rules (n:4)
Birth	Anxiety	Giving birth alone (n:1)
	Loneliness	Sad (n:1)

Postpartum period	Hope	Not getting infected during the birth (n:3) Stress-free delivery (n:1) Decrease of the virus and a clean hospital (n:2)
	Prevention	Staying away from people (n:5) Hygiene (n:2) Choosing a clean hospital (n:1)
	Fear	Virus transmission (n:4)
	Anxiety	Difficulty in the postpartum period (n:4) Visitors (n:1)
	Giving up dreams	Inability to do mawlid (n:1)
	Precaution	Following doctor's advice (n:2) Hygiene (n:8) Getting discharged in a short time (n:3) No visitors (n:6) Not going to the hospital (n:4) Staying at home (n:7)

### 3.1. Themes of Pregnancy:

#### 3.1.1. Fear

- Fear of catching the virus

*"Students and teachers are intimate at the school. I'm afraid of catching the virus while working" (Participant:1).*

- Fear of harming the baby

*"I'm scared of my baby getting harmed" (Participant:3).*

- Uncertainty

*"The uncertainty of the pandemic scares me just like all pregnant women" (Participant:5).*

#### 3.1.2. Restlessness and stress

- Psychological strain

*"Getting pregnant during this period is very stressful psychologically. I am stressed" (Participant:2).*

- Feeling bad

*"After learning the impact of the virus, I was very emotionally worn out during this process" (Participant: 7).*

*"I am stressed and restless during my pregnancy. Unfortunately, the pandemic spoiled the joy of it. Everything we experience has to be limited" (Participant: 9).*

#### 3.1.3. Anxiety

- Virus transmission from the hospital

*"Going to the hospital for a check-up and sitting in the waiting room, I worry about catching the virus" (Participant: 6).*

*"Going to the hospital does not sound like a good idea because I am worried about being affected by the the virus" (Participant: 8).*

#### 3.1.4. Difficulty in follow-up

*"I was able to go to my follow-ups every 3 months" (Participant: 3).*

*"We are in constant communication with my doctor. I did not go to the doctor, but we spoke often on the phone. We postponed everything, so..." (Participant:9).*

### 3.1.5.Precaution

- Avoiding the crowd

*"I'm trying to stay away from the crowd, If I have to, I'm interviewing in the open air" (K:7).*

- Staying at home

*"I haven't left the house since I learned about my pregnancy. I did not even eat outside although I had cravings" (Participant:9).*

- Healthy eating, paying attention to hygiene rules

*"For precautionary purposes, I switched to a healthy diet. All family members paid attention to their personal hygiene" (Participant:5).*

## 3.2. Themes of Birth:

### 3.2.1.Anxiety

- Giving birth alone

*"Right now, all I want is to have my remote family with me at birth. The fact that the situation gets worse and the thought of giving birth alone without my family worries me" (Participant: 10).*

### 3.2.2. Loneliness

*"The fact that the situation gets worse and the thought of giving birth alone without my family... these make me sad" (Participant: 10).*

### 3.2.3.Hope

- Not getting infected during the birth

*"I hope I have a birth without risks" (Participant:8).*

- Stress-free delivery

*"I hope to give birth without being under stress during this situation" (Participant:2).*

- Decrease of the virus and a clean hospital

*"I dream of the virus decreasing and the hospital being healthier for birth" (Participant:4).*

### 3.2.4.Prevention

- Staying away from people

*"I want to be together with my mother, father and husband during birth. I don't want visitors to see the baby" (Participant:6).*

- Hygiene

*"I prepared my maternity bag and put more disinfectants, colognes, masks in it than children's supplies" (Participant:7).*

- Choosing a clean hospital

*"For delivery, I will choose a clean hospital that complies with hygiene rules" (Participant:8).*

### 3.2.5.Fear

- Virus transmission

*"You go to the hospital and there are risky patients. I am scared of giving birth in this situation. You don't know who has the virus, you assume everyone has it. I am worried that people with whom I will share the same environment in the hospital will not follow the rules" (Participant:7).*

### 3.3. Themes of Postpartum:

#### 3.3.1. Anxiety

- Difficulty in the postpartum period

*Postpartum period is the process of getting used to a new child... sleeplessness... it's all a difficult process. My puerperium could be 5 times worse due to COVID-19" (Participant:1).*

- Visitors

*"What to do regarding those who will come to see the baby...I do not know" (Participant:4).*

#### 3.3.2. Giving up dreams

- Inability to do mawlid

*"I have always dreamed of holding a mawlid ceremony for my baby, but we will not be able to do it" (Participant:9).*

#### 3.3.3. Precaution (n: 10)

- Following doctor's advice

*"I will try to handle the follow-up of the baby in a way that would cause the least amount of risk according to my doctor's instructions" (Participant: 5).*

- Hygiene

*"The only measure we will take will be to comply with mask, distance and cleaning rules" (Participant:7).*

- Getting discharged in a short time

*"I want to stay in the hospital as little as possible. I am planning to leave shortly" (Participant: 6).*

- No visitors

*"I will prevent my relatives from baby visits by politely warning them" (Participant:3).*

- Not going to the hospital

*"I will not go to the hospital unless I have complications. After the birth, I will ask my questions to my doctor on the phone and inform her" (Participant:9).*

- Staying at home

*"I will try my best not to go to the market. The best solution is to stay at home" (Participant:10).*

## 4. DISCUSSION

This study examined the experiences and thoughts of pregnant women in the birth and postpartum period. Women emphasized fear, stress, anxiety, and precautions at every stage. This is a life-threatening public health event. On March 19, 2020, Turkey's Ministry of Health announced that COVID-19 is transmitted from human to human. The deadliness of the virus increased the uncertainty



that was felt. The inevitable consequence of such a major life event is its psychological impact on vulnerable populations, such as pregnant women (1).

#### 4.1.Pregnancy

The participants expressed their concerns about contracting the virus, the baby being injured, and the unknown scenario. Having to leave home to work full-time may increase anxiety regarding the disease (1,9). It has been shown that the greatest risk of contracting COVID-19 is for pregnant women and mothers with small children (10). According to Yassa et al. (2020), 45% of pregnant women are always concerned about being infected (4). Infections contracted during pregnancy can have serious consequences for both the mother and the fetus, including maternal fatalities, abortions, and intrauterine fetal deaths (11). Women are more susceptible to viral illnesses such as respiratory tract infections as a result of physiological changes that occur during pregnancy and a rise in progesterone, both of which weaken the immune system (12). Furthermore, COVID-19 may be harmful to the health of the mother or the mother-fetus (13). As a result, the participants in this study may have experienced psychological distress and negative feelings.

The participants in this research expressed fear about the virus spreading throughout their stay in the hospital for treatment. The anxiety levels of pregnant women during the COVID-19 pandemic were greater than normal, according to Yassa et al. (2020), Güler and Arnaz (2020), and Durankuş and Aksu (2020) (4,6,7). Women who visit a health facility for a pregnancy check-up should be encouraged to arrive on time to avoid creating a crowded situation, and to maintain social distance while waiting (14). It's possible that the current study's participants were not provided enough information about their checkups or the pandemic's impact on pregnancy. Prenatal anxiety, depression, and stress are common public health issues in pregnant women, and COVID-19 has increased mothers' concerns and stress about their own health and the health of their babies (15,16). Therefore, pregnant women should be provided with regular and up-to-date information on the epidemic in order to maintain their mental health (1). The pregnant women studied stated that they reduced their follow-up visits and spoke with their doctors over the phone. It was emphasized in the studies that strategies such as limiting antenatal controls as much as possible or doing follow-up from home should be used. It has been argued that limiting pregnant follow-ups to six controls is adequate (17).

As a precaution, the participants avoided busy areas, kept secluded in their homes, met their requirements via the internet, and followed diet and hygiene guidelines. In a research, 87.2% of pregnant women said they would follow the isolation regulations and take preventative measures, and one-third of them said their vitamin or food/food supplement intake had changed as a result of the pandemic (4). Furthermore, in a research done by Durankuş and Aksu (2020), pregnant women stated that social isolation is a concern for them (7). Pregnant women should also take precautions, such as not going to school, not using public transit, staying in a well-ventilated room at home, and even keeping their personal belongings away from the rest of their family (17).

#### 4.2.Birth

Because of the intensity of the epidemic, one of the participants voiced concern about giving birth alone, while another expressed grief about having to give birth alone. During childbirth, every woman has the right to be supported by the person she chooses. Getting support facilitates the birth, shortens the delivery time, reduces negative emotions such as stress and medical intervention rates. Therefore, a supporter who has no symptoms of COVID-19 disease should be allowed and encouraged to stay with the woman during the birth (14).

The participants expressed their desire for a stress-free birth in a clean facility without contracting the virus. During the pandemic, it is recommended that the contact surfaces at the hospital are cleaned with 0.5% sodium hypochlorite (bleach) and wiped with a clean cloth. In addition,

pregnant women also have the right to be treated with respect and compassion, to receive assistance while maintaining their dignity, to acquire information, consent, refuse, choose, and be supported (14).

The participants answered that they would avoid people during birth as a precaution, follow hygiene laws, and choose a clean hospital. After each usage, all maternity rooms should be cleaned according to the hospital sterilization guide (17).

The participants expressed concern about virus transmission in the hospital. Unlike the present study, Yassa et al. (2020) determined that approximately half of the pregnant women do not know about the possibility of infection during or immediately after birth (4). Women suspected of carrying the COVID-19 virus should be cared for in a single room until discharge. In cases where a single room is not possible, women in the same condition should be given care in a room and isolated from healthy women (14). In addition to providing psychological support to mothers who give birth, providing effective and timely information can contribute to the success of preventive measures (18).

### 4.3. Postpartum

The participants report that because of COVID-19, they will have greater difficulty throughout the puerperium period and that they are concerned about visits during this time. Midwifery care should be provided at least three times in this period on the 1st, 5th, and 10th days. Controls could be done remotely or with protective equipment for mothers and newborns who are considered to be at low risk. In addition to baby care, nursing, and psychological health, new moms should also be assessed. The phone numbers of midwives/nurses/healthcare staff, as well as emergency services that offer delivery care, should be supplied (19). Women commonly experience anxiety and depression during the postpartum period. According to a research, pregnant women who were mentally impacted by COVID-19 and had limited understanding of the virus had greater rates of postpartum depression (7,20). Other studies have found that women who were pregnant or in the postpartum period during COVID-19 had higher levels of depression and anxiety (21-23). Because of the quarantine precautions in place, the fear of being exposed to COVID-19 caused depression symptoms in new moms by negatively impacting their thoughts and feelings (24,25).

Respiratory viruses can be passed on to the baby through close contact with healthcare personnel and family members other than the mother (26). The thought of potential exposure to COVID-19 brings about social isolation (27). Individual health should be considered at all stages of the pandemic, and social isolation norms should be followed, particularly in areas where a new mother and infant are present. Individuals in the local area should also be made aware of the prohibition on visiting. Furthermore, such situations may force women to cancel scheduled festivities for their children, such as the mawlid ritual.

Pregnant women are afraid of spreading the virus to their families, themselves, and their babies during the pandemic, and they are unhappy with the outbreak's development (10).

The expectant moms responded that they would take steps such as being discharged from the hospital as soon as possible, not going to the hospital, maintaining hygiene, and staying at home after birth.

According to Davenport et al. (2020), 93% of pregnant and postpartum women took physical distance measures, and 83% quarantined themselves at home (21). The consequences of outbreaks in healthcare settings can be complex, erratic, and difficult to control (26). If the mother and newborn are in good health, discharge is recommended one day after vaginal delivery and two days after cesarean delivery. It is suggested that telehealth systems can be used for follow-up in situations that do not require procedures such as testing and examination to prevent risks and detect potential problems early in the postpartum period. In cases where physical examination is required, it is recommended that they be performed as quickly as possible from a distance of one meter (28).



## Limitations

The sample consisted of pregnant women who are able to use the online Zoom platform and have internet. Women were also in different trimesters. The study conducted on a small group due to the nature of its qualitative research.

## 5. CONCLUSION

The present study found that pregnant women have similar feelings such as fear, restlessness, stress, anxiety, loneliness, and giving up dreams. These negative feelings (anxiety, stress, etc.) can manifest in a variety of ways. It has been linked to preterm birth, low birth weight babies, and postpartum depression in women. As a result, nurses and midwives who give one-on-one care to pregnant women should learn about the pregnant woman's beliefs, attitudes, actions, and experiences and intervene individually. Given the fact that the epidemic is still ongoing, caution should be used and emotional assistance offered to pregnant women who are experiencing difficulties.

As a result, a more comfortable pregnancy, birth, and postpartum period should be the goal. Furthermore, pregnant women's mental health should be examined, and required psychiatric care offered, in order to identify and diminish pregnant women's anxieties about the safety of their unborn offspring. If necessary, they should be directed to experts for support. Different communication mechanisms, like helplines and online counseling, should be used to satisfy the requirements of pregnant women in circumstances when social distance and isolation restrictions must be followed. Nurses and midwives should remain up-to-date on the latest research and inform pregnant women and their families in order to protect and enhance the mother's, baby's, family's, and society's health.

## Declaration of competing interest

No conflict of interest has been declared by the authors.

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