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Psychosocial Difficulties Experienced By Parents Of Babies Treated In A Neonatal Intensive Care Unit During The Coronavirus Pandemic

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ABSTRACT

Aim: This study had two objectives: (1) to investigate the psychosocial difficulties experienced by parents of babies treated in a neonatal intensive care unit during the coronavirus pandemic and (2) to determine parent-infant attachment.

Materials and Methods: This study adopted phenomenology, a qualitative research design in order to answer the research questions design. The sample consisted of 20 parents of babies treated in the neonatal intensive care unit (NICU) of a City Hospital in Turkey between July and August 2021. Participation was voluntary. Data were collected using a sociodemographic characteristics questionnaire and a semi-structured qualitative interview form. Each participant was interviewed face to face. Each interview was recorded and transcribed. The data were analyzed using content analysis.

Results: Participants had a mean age of 32.2 ± 3.61 years and at least secondary school degrees. Babies were admitted to the NICU for congenital anomalies (n = 3) or preterm birth (n = 7). Participants experienced anxiety, worry, and loneliness and produced less milk because they could not see and touch their babies. Their greatest source of support was their spouses.

Conclusion: Parents of babies treated in the NICU during the COVID-19 pandemic experience anxiety, sadness, unhappiness, and loneliness. The preventive measures against the pandemic affect parents psychosocially. Healthcare professionals should plan and implement care practices and establish effective communication with parents to identify their physiological, psychological, and social needs and help them produce breastmilk and bond with their babies.

Introduction

Being a parent of a baby in a neonatal intensive care unit (NICU) can be a very stressful experience. Parents who experience severe stress are more likely to have disturbed social relationships and mood swings. Parental stress also affects the development of babies (Ganguly et al., 2020). Parents of NICU babies experience high levels of stress, depression, anxiety, and post-traumatic stress disorder (PTSD) (Erdei & Liu, 2020; Lemmon et al., 2020). The COVID-19 pandemic exacerbates the situation, making parents of NICU babies experience higher levels of stress, anxiety, and depression (Fallon et al., 2021; Mollard et al., 2021). NICU babies are a vulnerable group. Before the COVID-19 pandemic, hospitals used to implement developmental care-focused interventions (involving parents in the care, encouraging mothers to breastfeed their babies, and facilitating skin-to-skin contact) to strengthen parent-infant bonding, promote breastmilk production, and support the development of babies. However, since the pandemic, hospitals have introduced restrictive policies to protect babies, parents, and healthcare professionals (Darcy Mahoney et al., 2020; Virani et al., 2020; Muniraman et al., 2020; Kostenzer et al., 2021; Treyvaud et al., 2019; He et al., 2021; Anwar Siani et al., 2017; Garfield et al., 2021). Further longitudinal research is warranted because the limited interaction between parents and their babies to prevent transmission in NICUs negatively affects the cognitive, emotional, and social development of the latter in the long term (Kostenzer et al., 2021; Treyvaud et al., 2019). Pre-pandemic studies have shown that parent-centered care interventions catered to psychosocial needs are essential for NICU infant-parent bonding (Anwar Siani et al., 2017; He et al., 2021; Kostenzer et al., 2021; Treyvaud et al., 2019). Parents experience higher stress levels when they visit their NICU babies because they are worried about transmitting COVID-19 to them

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(Osorio Galeano & Salazar Maya, 2021). Parents of NICU babies feel extra anxiety because not only do they have to deal with the current situation but also go through the pandemic (Darcy Mahoney et al., 2020; Virani et al., 2020; Muniraman et al., 2020; Kostenzer et al., 2021; Treyvaud et al., 2019; He et al., 2021). Therefore, such parents need psychosocial support more than ever.

Materials and Methods

This study adopted phenomenology, which is a qualitative research design. The study population consisted of all parents of babies treated for at least two weeks in the NICU of a City Hospital in Turkey between July and August 2021. The sample consisted of 20 parents (ten fathers and ten mothers). Participation was voluntary.

The NICU in question consists of three blocks, each of which beds 40 babies. Due to the pandemic, parents can only see their babies at birth and once a week on tablets (FaceTime) provided by the hospital. On weekdays, doctors give parents detailed information about their babies. On weekends, nurses inform them about the general conditions of their babies. Parents cannot meet with their babies face-to-face to reduce the risk of transmission. However, they FaceTime with them once a week. Parents of babies with poor general conditions are encouraged to see them. The study was approved by the Clinical Research Ethics Committee of the City Hospital (No: E2-21-740). Verbal and written consent was obtained from parents who agreed to participate and have the interviews recorded. All participants were briefed about the research purpose, procedure, and confidentiality. The interviews were held in the NICU training room, which was quiet and comfortable. During the interviews, preventive measures (mask, hygiene, social distance, etc.) were followed. Parents were called to get appointments for the interviews. They were called the days they would show up at the hospital to FaceTime with their babies or drop off milk for them. Each interview lasted 30–45 minutes. The interviews were conducted by a clinical nurse with a master's degree in psychiatric nursing and seven years of NICU experience. The inclusion criteria were (1) having a baby treated in the NICU for at least two weeks and (2) speaking and understanding Turkish. The data were collected using a sociodemographic characteristics questionnaire and a semi-structured qualitative interview form. The interview form consisted of the following questions:

- What kind of family relationships did you have during pregnancy, and what are your feelings and thoughts about pregnancy?
- What are the pregnancy and isolation precautions during the COVID 19 pandemic?
- How did you feel, and what did you think when your baby was placed in the NICU?
- Has any of your children been placed in a NICU before?
- What are your feelings and thoughts about the “no visitors” policy at the NICU?
- What are your feelings and thoughts about FaceTiming with your babies once a week?
- What has been your source of support since the COVID-19 pandemic?

All interviews were recorded and transcribed. Afterward, participants' responses were coded. Two experts were consulted about the codes to ensure consistency.

Results

Demographic results

Participants had a mean age of 32.2 + 36.1 years and at least middle school degrees. Their babies were admitted to the NICU for congenital anomalies (n = 3) or preterm birth (n = 7). The mean NICU admission duration was 18 days. The analysis revealed five themes: long-distance parenting, sources of stress, sources of support, coping mechanisms, and expectations.

Themes

Long-distance parenting

Since March 2020, the NICU has had a “no visitors” policy to reduce the risk of COVID-19 transmission. Parents can visit their babies only once after birth and FaceTime with them once a week. On weekdays, doctors give parents detailed information about their babies. On weekends, nurses inform them about the general conditions of their babies. All participants expressed what it made them feel not to be able to see and touch their babies during the COVID-19 pandemic. All participants stated that they experienced anxiety, helplessness, and symptoms of depression (sadness, hopelessness, crying, feeling empty, worthlessness, guilt, self-blame, and problems concentrating and making decisions). They also had difficulty thinking, speaking, and moving.

Participant (1-F): “I was feeling bad, I forced myself to go and see my baby, but I couldn’t touch her or hug her.”

Participant (5-M): “Being a mother of a baby placed in a NICU…I feel like it’s my baby…but I also feel like it’s not…I feel like it’s theirs. I can’t touch him, see him, or hug him. I’d lost a baby in another hospital. I used to take her on my lap. I used to show up every day and give her kangaroo care. I even tried to breastfeed her. But now, it’s not the case.” (Both mother and father started crying. Therefore, we had a break.)

Participant (6-F): “They used to let us see our other baby. We could touch him and talk to him. But this time, I saw my baby only during birth. We've parted since then. I see her when I FaceTime with her, I feel like I can touch her, but I just can’t.”

Participant (9-M): “I hear it from others, and I read about it. Mothers could do kangaroo care in the past; I wish we had that now. Being separated and not being able to touch him, it's so hard. He's four months old now, and I haven't even breastfed him.”

Participant (12-M): “*I just imagine how she smells.”* (The mother started crying, and her husband consoled her.)

Participant (15-M): “I take a picture of him on the tablet. I pump my milk looking at him.”

Sources of stress

The greatest sources of stress for participants were the thought of “not being able to see their babies again” and “infecting them with the virus.” Two in five participants were out of breastmilk, while one in five participants reported reduced breastmilk levels.

Participant (5-M): “I had another baby. They called me and told me she was dead. I’d answered that phone. When they called me, I was like, ‘Are they gonna tell me she’s dead. Has something bad happened to her?’ That’s all I could think of. So, I can’t answer the phone when they call from the hospital.” (The mother was leaning forward and avoiding making eye contact. She cried many times throughout the interview. She was afraid that she might lose her baby because she had lost another baby treated in a NICU.)

Participant (6-F): "I saw my baby only during birth. But we've never pressed them to let us see her. We don't visit her, although we're sometimes allowed to because we don't wanna infect her. Maybe, we can take some tests and then see her."

Participant (10-F): “I’m afraid of infecting my baby with the virus.”

Participant (13-M): “My home is too busy, so I’m always on edge, like what if I get infected with the virus. I drop off milk at the NICU, and I'm like, what if my milk has the virus.”

Participant (14-M): “I don’t have enough breastmilk. I’m like, what if it’s not enough for my baby. All I can do is drop off milk at the hospital. I’m like, what if I can’t even do that.”

Participant (18-M): “I FaceTimed with my baby. She had a hard time breathing. I can’t get it out of my head. And now, I’m out of breastmilk.”

Participant (20-M): "I'm OK not touching my baby, as long as she's fine. What if I can never see my baby. What if I can't touch her or hug her. I don't even know how she smells."

Sources of support

Participants reported that their spouses were the greatest source of support that helped them get through tough times. They also got support from their families and friends.

Participant (10-F): "My husband and family have always been there for me."

Participant (12-M): "My husband has been a tremendous source of support. We feel like we're on our own. I don't wanna see and talk to anyone. Our families and friends are also there for us, but I don't wanna talk to them."

Participant (14-M): "I sometimes feel lonely. I know that everybody is there for me, but I can't help but feel that way."

Participant (17-F): "I wish I could leave the hospital with my baby on my lap. But it just didn't work out. We get back home empty-handed every week. My wife cries a lot. We support each other. There's nothing we can do about it."

Coping mechanisms

Participants stated that they cried and prayed a lot. They added that FaceTiming with their babies, receiving support from their spouses, and talking to friends and relatives made them feel good. They were also happy when they had enough breastmilk.

Participant (7-M): "All I can do for my baby is pray and pump milk."

Participant (11-F): "We need to be strong, so we wiped our tears and showed up hoping that we're gonna see our baby. We always pray."

Participant (15-M): "My husband and I have argued a lot during this period. But he's the one who understands me the most. I feel good when I talk to him."

Participant (16-M): There is nothing else I can do but pray. I cry, and I pray, I cry, and I pray. What else can I do?

Participant (19-F): "I feel good when I talk to my mom and my sister."

Expectations

Participants noted that they needed much psychosocial support during this period. They stated that they expected healthcare professionals to provide them with more information and allow them to visit their babies more often.

Participant (8-F): "Talking to you and pouring out my heart made me feel so good. So, it turns out that even talking to a complete stranger makes one feel good. Bless your heart!"

Participant (16-M): "I wish healthcare professionals let us know more."

Participant (20-M): "We're so happy that we got to talk to someone who works here and knows our baby."

Discussion

This study investigated the psychosocial problems experienced by parents of babies placed in a NICU during the COVID-19 pandemic. The study also focused on parents' coping mechanisms and expectations.

Being a parent of a baby in a NICU can be a very stressful experience, which is exacerbated by the COVID-19 pandemic (Bua et al., 2021; McCulloch et al., 2021).

"Long-distance parenting" was the most prominent theme participants addressed during the interviews. They often cried as they talked about their feelings and thoughts. The "no visitors" policy in NICUs during the COVID-19 pandemic causes a great deal of stress and anxiety. Many neonatal clinics around the world have introduced restrictive policies to prevent the spread of the coronavirus, causing parents to experience a great deal of stress, anxiety, and depression (Bembich et al., 2021; Bua et al., 2021; Cameron et al., 2020; Giuseppe et al., 2021; Manuela et al., 2021; McCulloch et al., 2021; Van Veenendaal et al., 2021). Our participants also reported sadness, unhappiness, and loneliness. NICU healthcare professionals used to provide family-centered care before the pandemic. For example, they used to encourage parents to participate in care and promote breastfeeding and skin-to-skin contact. However, they have stopped involving parents in care since the onset of the pandemic, which is likely to put parents in a stressful position (Giuseppe et al., 2021; Konukbay & Arslan, 2011; Küçükoğlu et al., 2015; Mannering et al., 2021; Verderber et al., 2021). More research is warranted to better understand the impact of restrictive policies on parent-baby attachment.

"Fear of hurting" was another theme that emerged from the interviews. Our participants stated that although they wanted to see, touch, and hug their babies, they were afraid that they might infect them with the coronavirus, causing extra stress and anxiety. Three participants were worried that their breast milk might contain the coronavirus. Those participants were informed that current evidence suggested that breast milk was not likely to spread the virus to babies (Baldoni et al., 2021; Cavicchiolo, Lolli, et al., 2020; Cavicchiolo, Trevisanuto, et al., 2020; Manuela et al., 2021; Waddington et al., 2021).

"Sources of stress" was the third theme that emerged from the interviews. Participants noted that the greatest source of stress was "not being able to see their babies again" (Bua et al., 2021; Campbell-Yeo et al., 2021; Cavicchiolo, Lolli, et al., 2020; Cavicchiolo, Trevisanuto, et al., 2020; Griffin et al., 2020; Mannering et al., 2021; Verma et al., 2020). Participants were also worried that they might infect their babies with the virus and not produce enough breast milk. Participants wanted to see, touch, and hug their babies but were worried that they might infect them with the virus, causing them to experience stress and anxiety. Three participants had gaps in their knowledge of transmission through breast milk. They were provided with examples from current studies and clinical experiences to reduce their fear (Baldoni et al., 2021; Cavicchiolo, Lolli, et al., 2020; Cavicchiolo, Trevisanuto, et al., 2020; Manuela et al., 2021; Waddington et al., 2021).

Parents of NICU babies are gripped by uncertainty and fear and experience psychosocial problems as they cannot see their babies because of the COVID-19 pandemic. For our participants, the greatest source of support was their spouses. Research also shows that spousal support helps parents of NICU babies adapt to the situation (Meesters et al., 2022; Ozawa et al., 2021; Van Veenendaal et al., 2021; Bembich et al., 2021). Participants added that they also received support from their families and friends.

Parents of NICU babies have high expectations of healthcare professionals (Duran et al., 2020; Kynø et al., 2021; Musabirema et al., 2015). Our participants wanted to FaceTime with their babies more often. They also stated that they expected healthcare professionals to communicate more with them and inform them more about the current state of their babies. Our participants added that they coped with negative emotions and thoughts by crying and praying.

Parents of NICU babies faced with preventive measures against the pandemic feel sad and angry (Bembich et al., 2021). Our participants also reported that they felt sad. Mothers (n = 6) cried more than fathers (n = 1) during the interviews.

The COVID-19 pandemic has introduced various preventive measures, such as social isolation, hygiene practices, social distancing, etc. Research shows that parents and their children experience anger, anxiety, and PTSD during disasters (Jeong et al., 2016; Mihashi et al., 2009; Sprang & Silman, 2013).

The COVID-19 pandemic has affected every sphere of life, including healthcare practices in NICUs. Our participants noted that the restrictive policies introduced by the NICU caused stress, anxiety, depression (one mother), and PTSD. Some participants stated that they were ill-informed about the impact of the pandemic on child-rearing practices. Those

participants were provided with examples from available resources and clinical experiences. Our results show that having a NICU baby during the COVID-19 pandemic has adverse psychosocial repercussions. Participants reported that they needed emotional and social support during this period. Therefore, healthcare professionals should contact parents face-to-face to meet their psychosocial needs and help them adapt to the situation. Those interventions will help parents develop a healthy bond with their babies.

Conclusion and recommendations

Having a baby in a NICU causes parents to experience psychosocial problems. Some of this burden rests on the shoulders of nurses. NICU nurses must be prepared for global crises, such as the COVID-19 pandemic. Nurses are primarily responsible for developing psychosocial support programs and taking measures to provide family-centered care and protect the psychosocial adjustment and mental health of newborns and their parents. Nurses spend a long time with parents and babies during and after birth. Therefore, they have the opportunity to identify psychosocial difficulties (fear, stress, depression, anxiety, etc.) experienced by parents at an early stage. They should also identify risks and provide parents with counseling and support.

Nurses should inform parents in detail about the care and treatment of their NICU babies. They should address parents' anxiety about being good parents. They should develop new strategies to coach parents and encourage them to participate in care wherever possible. They should increase parental satisfaction, reduce parental distress, and create opportunities to strengthen parent-infant bonding.

Nurses should be psychologically resilient, have strong communication and psychosocial relationship skills, have an ability to cope with negative emotions, have a high potential for self-development, have an ability to work in coordination with parents and teams, and identify and meet parents' emotional needs. They should also have effective conflict resolution and empathetic skills to overcome these problems.

This study highlights the importance of psychosocial problems experienced by parents due to being away from their NICU babies during the pandemic. This study also draws attention to the importance of nurse-parent interaction in identifying parents' needs and providing the necessary psychological-emotional-social support and counseling services during the care provided to their NICU babies.

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