


Breastfeeding a Premature Baby During the Covid-19 Pandemic in Perinatology: An Exploration of Mothers' Experiences

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Abstract

This study was conducted to explore the meaning of mothers' experiences of breastfeeding premature babies while being treated in the perinatology room during the COVID-19 pandemic. A descriptive phenomenological design was used in this study to describe the meaning of mothers' experiences. In-depth interviews were conducted with 11 mothers. The analysis of transcribed data resulted in three themes: (1) The pandemic has made it difficult for me to meet my baby, (2) Breastfeeding is not easy, and (3) I am a breast milk pumper. The breastfeeding experience of having a premature baby and being cared for by perinatology during a pandemic is full of challenges and limited support. The results of this study suggest that a review of the current regulations be carried out, and the staff be given continuing lactation education to strengthen breastfeeding support to mothers with premature babies.

Keywords

premature, breastfeeding, experience, COVID-19, Indonesia

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Background

The latest guidelines for the implementation of breastfeeding from the World Health Organization (2017) state that all infants, including a baby with special conditions, such as low birth weight/ill babies and premature babies, should be breastfed for the first 6 months of life. Premature babies, who number 15 million annually (UNICEF, 2020; World Health Organization, 2017), sometimes require intensive care at home. Premature conditions experienced by babies, such as disproportionate head size, possible congenital malformations, poor oromotor skill (the movements of the muscles in the mouth, jaw, tongue, lips, and chick), and inability to balance sucking and swallowing often make breastfeeding soon after birth difficult. Although, this premature condition occur, it is still possible to provide direct breastfeeding to babies. However, the baby's physiological condition, the mother's psychology, and the environment are challenges in breastfeeding premature babies who are treated in perinatology.

The World Health Organization (WHO), on March 11th 2020, declared Coronavirus Disease 2019 (COVID-19) as a global pandemic. This pandemic is one of the newest problems and obstacles in breastfeeding, especially for premature babies in that it has disrupted access to essential services,

including breastfeeding counseling through hospitals and the Baby Friendly Hospital Initiative (BFHI). As many as 13.5% of mothers in the UK decided to stop breastfeeding their babies during COVID-19. In terms of how COVID-19 influenced their decision to discontinue breastfeeding, 70.3% ascribed it to lack of face to face support, 20.9% were caused by their concern about the safety, and 6.5% to COVID-19 symptoms (Brown & Shenker, 2021). The biggest obstacle resulting from COVID-19 is the changing regulations of hospitals as a preventive and protective measure for ill babies. In Indonesian hospitals, new policies were developed to void the exposure and risk of spreading COVID-19 infection. These policies included restricting visits to perinatology units during the pandemic to only biological fathers and mothers who tested negative for COVID-19, based on anti-gen/PCR (Polymerase Chain Reaction) swab examination results.

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Before the pandemic, mothers were allowed to continue to visit their babies without having to be accompanied by restrictions on visiting hours and also allowed to breastfeed the baby directly. During the pandemic, mothers experienced significant obstacles in breastfeeding their babies who being treated in the perinatology room. Women who are infected with COVID-19 are separated from their babies and not allowed to breastfeed directly due to the requirement for organizational simplification during a novel emergency (Perrone & Giordano, 2020). In actual circumstances, this also applied to mothers who are not infected. As a result, mothers only expressed breast milk for their babies. However, in two Hospitals in Pekanbaru, Riau Province, Indonesia, only mothers not infected with COVID-19 were allowed to give the expressed breast milk to premature babies. Most mothers felt that expressed breast milk was not enough for the baby. Mothers and their babies also drastically reduced skin-to-skin and direct breastfeeding practices with the inability to breastfeed directly when their baby was at home as the effect of COVID-19. Thomson et al. (2020) stated that it is vital for parents, especially mothers, to feel valued and recognized as essential caregivers in their babies' lives, such as providing care and advocacy for their baby's needs. The importance of being valued and recognized as a mother of the baby, the differences in breastfeeding regulations, and limited access to premature babies during the COVID-19 pandemic could affect the breastfeeding process of premature babies. This condition of breastfeeding premature babies during the COVID-19 pandemic needs to be described and explored, to understand the deeper meaning of mothers' experiences.

Methods

Design

This study used a qualitative design with a descriptive phenomenological approach based on the methodology described by Moustakas (1994). Phenomenology is based on questions that provide a sense of purpose of meaning, stimulate additional curiosity and attention, and explain our intense engagement with whatever is being perceived. In phenomenological studies, researchers maintain a personal interest in whatever they aim to understand in order to stay closely linked to the phenomenon (Moustakas, 1994). Researchers focus on describing the meaning of a person's experience by being concerned with wholeness, and work to examine lived aspects of particular experiences from many sides, angles, and perspectives until a unified vision of the essences of a phenomenon or experience is achieved (Moustakas, 1994). The phenomenological methods used in this study is expected to reveal the "essence" of breastfeeding experiences for premature babies during the COVID-19 pandemic by helping researchers describe the "what" questions that mothers experience and "how" mothers go through it. This research passed

the ethical review of the Research Ethics Committee of the Faculty of Nursing with No: (KET-35/UN2.F12.D1.2.1/PPM.00.02/2022).

Setting

This research was conducted in the perinatology rooms of two hospitals in Pekanbaru, Riau Province, Indonesia, where COVID-19 prevention and control policies have been implemented in all inpatient rooms since March 2020. This research was conducted from December 2021 to July 2022. During this time period, the perinatology rooms restricted visiting hours for sick babies being treated. Parents are allowed to visit the baby on condition that they have done an antigen swab, and they are required to stay in the hospital area and carry out health protocols. The practice of direct breastfeeding was not allowed while the baby remained in hospital, although encouraged following discharge.

Participants

The selection of participants was based on a purposive sampling technique. The criteria for the participants in this study were as follows: the mothers were at least 18 years old, the mothers gave birth to babies with a gestational age <37 weeks, the babies were cared for in non-COVID perinatology rooms and COVID-specific perinatology rooms, the mothers planned to breastfeed their babies, there were no contraindications in breastfeeding their babies related to medical problems/drug use, the mother could communicate in Bahasa Indonesia, and the mother was willing to be a participant. A total of 11 mothers participated in this study.

Data Collection

The researcher collaborated with the head and the nurses of the perinatology room to establish trust with potential participants and ask for informed consent at least day 2 (D-2) before the baby was scheduled to return home and for babies who had returned home a maximum of 1 month after hospitalization. One of the researchers conducted a pilot interview with one participant, and this was reviewed by members of the research team, who were experts in qualitative research, to refine the interview guide. Consenting participants were then contacted via telephone or WhatsApp to determine the location and time of the interview. All participants in this study chose to conduct interviews at their respective homes. Interviews began with a general statement about the participant experience, in line with the phenomenological study: "Explain your (mother's) experience in breastfeeding while your baby is cared for in this perinatology room." Throughout the interview, mothers were given the opportunity to talk about their memories, opinions, feelings, or anything that could help the researcher understand the experience of breastfeeding their premature baby. In order to understand

the participant's experiences, more probing questions were posed. Mothers could expound on what was most significant about their experiences due to these open-ended questions. In this interview process, most participants and researcher were alone in one room, while other family members accompanied some. The participants remained comfortable and unaffected during the interview process. Interviews were conducted until participants had finished describing their lived experience about breastfeeding a premature baby during the COVID-19 pandemic, and no new information surfaced. The interview ended with a fast playback of the voice-recording content to ensure clarity of information from participants and to provide a further time contract for things to be confirmed to participants.

Data Management and Analysis

Data gathering and processing were conducted concurrently and continued until the information was considered sufficient for answering research questions, where participants' experiences revealed deep meaning. This is consistent with gathering qualitative data, updated by some researchers who emphasize the "information power" (Braun & Clarke, 2019; Varpio et al., 2017). Audio recordings were transcribed in verbatim form. The data analysis approach was guided by processes described by Moustakas (1994). First, the researcher read the transcripts multiple times, setting aside prior assumptions and judgments, to stay open to participant experiences evident in the data. Next, the research identified statements that were directly related to the experiences of breastfeeding premature babies. Then the researcher created meaning units and grouped them into themes that appeared in all of the participants' transcripts, synthesizing the findings into a comprehensive explanation of the phenomena, and validated the findings with participants. The themes of this study were generated from 166 significant participants' statements.

Study Rigor

A number of strategies were used to support methodological rigor and trustworthiness of the findings. The credibility of study findings was supported by the development of a trusting relationship with the participants before the interview, thereby allowing participants to openly share their experiences. In addition, findings were shared with eight participants in follow-up interviews (by phone and WhatsApp) to verify if the core themes reflected their experiences. Experts on the research team in qualitative research assessed and guided the research process and checked to ensure that descriptions were consistent with interview data. To support transferability of findings, participant variation was maximized with respect to the inclusion criteria and the study setting described. Confirmability of study findings was supported by use of an audit trail and the provision of sufficient information, so that other researchers are able to

Table 1. Characteristics of Participant ($n = 11$).

Characteristics of mothers	<i>n</i>
Age, years; Mean \pm SD	30.82 \pm 6.6
Education	
Junior high school	1
Senior high school	4
Diploma	2
Undergraduate	4
Gravida	
Primiparae	2
Multiparae	9
Confirmed COVID-19	
Yes	2
No	9
Characteristics of baby	<i>n</i>
Type of birth	
C-Section	8
Vaginal	3
Birth weight, grams; Mean \pm SD	1,916 \pm 360.3
Gestational age, weeks; Mean \pm SD	34 \pm 2
Infant age at interview, days; Mean \pm SD	22 \pm 6.3

Note. SD = standard deviation.

understand how results were obtained. Finally, the research included a reflection process. During the research process, it was recognized that the researcher's motivation, previous experience and knowledge about breastfeeding premature babies may influence the research. For this reason, the researcher documented assumptions and beliefs to set them aside (i.e., bracketing preconceptions) and collaborated with team members to maintain a neutral attitude during the research process.

Results

The participants in this study were 11 mothers with premature babies who were treated in non-COVID and COVID-specific perinatology rooms, with characteristics that can be seen in Table 1. Women's lived experiences of breastfeeding a premature baby during a pandemic where underlined by depleted feelings and emotions. Their experiences are captured in three core themes: (a) the pandemic makes it hard for me to meet my baby, (b) breastfeeding is not easy; and (c) I am a breast milk pumper. Experiences related to each of these themes are detailed below.

The Pandemic Makes It Hard for Me to Meet My Baby

Regulations restricting visits to the perinatology room during the pandemic made it difficult for mothers to meet their babies, as explained by Participant 2.

It's hard to see the baby due to the pandemic, isn't it? It was possible in the past; it was more accessible, and we could just come there. Now we cannot do it; we must be tested with antigen, and the visiting should be quick.

During the pandemic, the parents could only see their babies from behind a glass wall outside the room. One of the hospitals allowed limited visiting hours with the condition that mothers have a negative test for COVID-19. Parents were also not allowed to take photographs of their infants.

There were times when I insisted on asking my husband to take a photo of our baby. [For example] I haven't seen my baby in the operating room [had caesarian section]. But he couldn't, they [those in charge] didn't give permission. (Participant 7)

The rule of not being able to take photos of their infants made mothers very unhappy. One participant stated, "I am [very] unfortunate. I can only look at it [infant] in the window and cannot take photos. I do not have any memories to look at at home; it is sad" (Participant 5). Participants who tested positive for COVID-19 are not allowed to meet the baby and breastfeed directly because of the risk of transmitting the virus to premature babies who are being treated. The condition of the baby's prematurity and the limitations imposed on visiting the baby increased women's concerns about the wellbeing of her infant. Mothers worried about how their baby will breastfeed while in the perinatology room and whether the baby will die if she does not give direct breastfeeding immediately: "because all I can do is keep an eye on things from the outside of perinatology room and wondered if my son would die, that is what I always thought, I have been crying" (Participant 3).

Being separated from their baby was particularly difficult for mothers. One mother stated: "It feels sad. Someone[']s baby is crying next door, but you do not have a child beside [you] and [are] just pumping breast milk" (Participant 8). They could not rest because they were thinking about their babies and were disappointed with the restrictions, as quoted by the following participant: "as a mother who has never met my baby since I gave birth to her, I feel very disappointed. Why should there be restrictions on visits for mothers, is not that my baby?!" (Participant 8). Even though mothers were allowed to go home, they had to show negative antigen test results to be able to see their babies.

The mother's anxiety and concern for the baby made some mothers contemplate bringing their children home immediately, as the following quote shows: "the problem is that when we go home, he does not come home; it feels different; I feel like I should take him home with me" (Participant 2). Some mothers really want to breastfeed directly and no longer pump: "I want to focus on breastfeeding him immediately. It is not like this, just pump your breast" (Participant 2). Some mothers' constant anxiety resulted in resistance to interacting with their infants. One mother did not want to see her infant because she was afraid she would become more

distressed: "I do not sleep [as it is]. I do not want to see my child, because I am afraid of being [even more] sad" (Participant 4). In contrast, other mothers chose to undergo whatever procedures the hospital prescribed and tried to remain happy, even if separated from their babies.

Breastfeeding is Not Easy

The mothers who had not seen their babies since birth due to pandemic restrictions found the breastfeeding process very difficult. Being required to pump their breasts and finding little milk produced on the first day of life, mothers became distressed. One participant recalled:

When I used the machine, it did not come out while my breasts [are] getting swollen. I am stressed; I am upset; I am stressed; I am angry because my body is not feeling well, while the milk does not come out. (Participant 4)

This experience made mothers think breastfeeding was difficult, and this was especially so for mothers with confirmed COVID-19 diagnosis. The mothers revealed that support for those with COVID-19 was very limited. They did not get information about feeding their babies. At the end of the treatment, one mother decided to look for information independently, as seen in the following quote from Participant 3:

No one told me how to breastfeed my baby when we were apart. None of the nurses asked me whether [I wanted] my baby to be breastfed or [to use] infant formula. I could not get any information, so I looked it up myself.

The difficulties associated with not being able to breastfeed directly and the lack of support led some mothers to question the likelihood of bonding effectively with their infants. One mother stated: "The bond between mother and child can be gained when we breastfeed them. Now that is what I am sad about. [Because I] can't breastfeed her perfectly (lower tone)" (Participant 1). Despite recognizing the importance of providing breast milk for their infants, not all did this. Some did not express their breasts because they didn't have a breast pump or a refrigerator; others were afraid of transmitting COVID-19 to their infants. Some did not express breast milk because they found it too difficult. No one, including staff, told mothers how to give breast milk to their babies, and no one explained baby's nutrition needs. Mothers' focused on the importance of breastfeeding their infants directly, and without this they considered that the bond between mother and baby was incomplete. Mothers also worried that their infants might have not received any breast milk while in treatment. These concerns led some mothers to take their infants home before they were officially discharged. For example, one mother explained:

I was not allowed to take my baby home because of the baby's weight. Then I said I just forced it. Because as I have been told

about the baby's weight, it broke my heart. Our children are Amanah [God's gift]. Then I think if I give him breast milk after this, his body will get bigger. That is what I think. Breast milk was created for children, right? (Participant 3).

I Am a Breast Milk Pumper

Participants who were separated from their babies and could not give breast milk directly labeled themselves as "breast milk pumper." Their days were focused on expressing breast milk, as aptly described by one mother: "So I just go home, all I do is a pump; I wake up in the middle of the night [to pump]. Basically I just pump" (Participant 4). During the COVID-19 pandemic, the participants carried out hand washing and breast-cleaning activities before the milk expression process began. Participants were also tasked with ensuring that the bottles or milk media were clean and sterile, and yet for all this effort they often found they expressed little milk. One participant said she was unsure she could produce more milk for her baby. Mothers found that pumping repeatedly in one day to meet the needs of the baby, and then delivering the breast milk to the door of the perinatology room prevented them from getting sufficient rest. One mother explained: "So it is like I fell asleep [and] my husband just woke up [to remind me]. Here we are delivering milk again for the child. I was like, 'Can I do it later, I am tired'" (Participant 4). Although the average milk expression process takes 20 to 30 min, others pumped for longer durations. One participant pumped for up to 3 hr: "Yes, at least 2 hours, 3 hours. That is the longest [time I pumped]" (Participant 11). The participants repeated the process of pumping every 2 hr to once every 24 hr: "Only every morning. Every morning I pumped" (Participant 11). Although mothers anticipated updates on their infant's health when they delivered breast milk to the door of the perinatology room, they were not provided with any information.

Discussion

The study findings detail the deep feelings of sadness and disappointment experienced by mothers who were separated from their premature infants, sometimes without even seeing their babies after delivery. The regulations put in place to prevent horizontal transmission had a profound effect on mothers. Their overwhelming desires to look at, touch, and breastfeed their infants could not be realized in this context. Without being allowed to see their babies, even in photos, mothers' anxieties increased. They worried about whether their baby would die, how the baby's nutrition needs would be fulfilled, and how the baby would grow and develop in the care of others in the perinatology room. Providing sufficient breast milk for a premature baby during a pandemic turned out to be very difficult despite mothers' best efforts. The staff did not provide enough explanation and support for the successful breastfeeding of premature babies.

Post-delivery, mothers are separated from their premature infants because of the need for intensive care. It is a traditional procedure to separate the mother and the infant immediately. While very preterm infants are transferred to the NICU immediately following birth, mothers remain in the delivery room or postoperative care unit (Føreland et al., 2022). Mothers in this phase are prone to acute emotional reactions. The reactions commonly displayed include shock, sadness, confusion, anxiety, guilt, and hopelessness. Mothers also often feel like failures because of premature birth and the abandonment of their primary parenting duties as mothers to health professionals. Several strategies have been developed to reduce these effects and impacts, including providing information platforms for mothers, skin-to-skin care, supporting engagement in direct care for infants, and breastfeeding (Maleki et al., 2022). At the heart of all these strategies is encouraging mothers to fulfill their roles and be advocates for themselves and their babies. However, some of these strategies are challenging to implement in the conditions of the COVID-19 pandemic with restrictions in place to avoid the spread of infection. For example, when mothers are not allowed to enter the neonatal intensive care unit to see their infants, they could only look through the window. Some mothers do not even know the faces of their babies. In Turkey and China, the highest rates of access restrictions due to the pandemic were reported where no one was permitted to visit newborns (Kostenzer et al., 2022). Strict access policies create challenges for parents and health professionals. The absence of parents in planning, parenting, and participation in infant care affects their competence and development of healthy relationships (Kostenzer et al., 2022). Nurses and other health professionals also have less opportunity to address parent stress and anxiety associated with a premature birth when they are not permitted to visit. When mothers are unable to touch their babies directly, the baby's neurodevelopment and behavior can also be affected. The development of strong emotional bonds between mothers and their infants are at risk with these restrictions, as well as children's behavioral and emotional development into adulthood.

In this study, the pandemic related access restrictions resulted in significant emotional concerns for mothers focused on how their premature infant was breastfeeding, their sadness and distress at being separated from their infant and, for two mothers, worry about whether their child could die in the perinatology ward. It has been suggested that mother's inability to compensate for the baby's difficulties produces these fears (Lau, 2018). In this study, fears led some mothers to want to immediately take their children home to care for them and breastfeed directly, even though, in the end, they had no other choice but to accept the existing rules and try to stay calm. The non-pandemic situation faced by mothers with premature babies is already traumatic and stressful (Sabnis, 2019), and then it is coupled with the COVID-19 pandemic. Restrictions during the pandemic have been shown to influence mothers' moods, self-esteem,

self-confidence, and ability to care for their babies (Cena et al., 2021). Mothers are known to feel guilty and ashamed for not being able to provide care in the way they want because they feel responsible for the premature birth of their babies (Cena et al., 2021). One mother decided to take her baby home forcibly because she could not direct breastfeed with the access restrictions that were in place. She felt it was better for her baby to care for and treat her infant at home, than to leave the infant in the hospital.

The emotional problems faced by new mothers have been related to a decrease in prolactin and oxytocin secretion and a decrease in the breast milk supply (Jalal et al., 2017). The impact of stress can pose a challenge in maintaining sufficient nutrition of breastfeeding for infants (Latorre et al., 2021; Tomori et al., 2020). Mothers who cannot give breast milk to their babies because of a confirmed COVID-19 diagnosis, miss the close physical contact and interaction with their infants that breastfeeding provides. These mothers in this study worried that they were not bonding “perfectly” with their infants and the consequences this might have. Lau (2018) draws on research in the field to suggest that mothers and babies have a “give and take” style of interaction. These interactions are often balanced between a mother and healthy infant. However, when difficulties are faced by one or both, such as interruptions in normal maternal caregiving or immaturity on the part of the infant, this can lead to imbalanced exchanges in the dyad. Mercer’s theory of role achievement states that to achieve the role of a mother, there must be interaction and reciprocal relationships between the mother, baby, and partner, who are also influenced by the surrounding environment (Alligood, 2014).

The findings of this study highlighted the difficulties that mothers encountered with breastfeeding when they were separated from their infants because of visiting restrictions and due to the influence of a COVID-19 diagnosis. The Breastfeeding Friendly Hospital Initiative guidelines for small, sick, and premature infants outline that mothers should be provided with assistance in expressing breast milk within 3 hr of delivery or as soon as possible, and mothers should be encouraged to breastfeed or express seven to eight times every 24 hr to maintain their milk production (UNICEF, 2020; World Health Organization, 2017). It is recommended that mothers with COVID-19 continue to breastfeed based on evidence that the benefits of breastfeeding far outweigh the possible disadvantages. The staff in perinatology should strive for this by continuing to facilitate the provision of breast milk from mothers with COVID-19 to premature babies being treated. In particular, the breast milk of mothers with a history of COVID-19 infection contains a specific Immunoglobulin A (IgA) against COVID-19 (Cheema et al., 2023). If the mother is not allowed to breastfeed directly, then the mother is recommended to continue to express by doing proper hand and breast hygiene (Saiman et al., 2020).

The emotional stress experienced by mothers with very-low-birth-weight infants due to the time pressures related to

expressing breast milk are described in a qualitative study by Bower et al. (2017). Mothers were forced to choose between spending time with their infant and expressing milk; the resulting stress contributed to low milk production. This situation differs from mothers with premature babies treated in perinatology during the pandemic. The pandemic made it impossible for mothers to see their babies at all, and consequently breast pumping was not viewed as optional by most mothers. They viewed pumping breast milk as the only way to feel connected to their infants, and as such identified themselves as “breast milk pumpers.” Participants in this study did not receive information from health professionals on how to pump their breasts to obtain an adequate breast milk supply for their infants. Mothers were left to try to get more information about breast expression on their own. As such variations in mothers’ knowledge and attitudes towards milk expression were evident in this study and point to the need for assistance from hospital staff to support successful breastfeeding. During the first 2 weeks, the perinatology staff should assess any problems with breast pumping including the volume of milk produced with each expression, and work together with mothers to find solutions. Mothers should also be encouraged to record the milk produced routinely to determine whether milk production is increasing or decreasing (UNICEF, 2020). Some procedures and strategies could be given to the mother, for supporting a successful breastfeeding for premature babies such as providing lactation education through videos, showing peer support on WhatsApp, monitoring breast milk pumping diary, and offering short messages reminder to pump breast milk (Natalia et al., 2022). Delivering breast milk to the door of perinatology and leaving without receiving any information about their infant’s health was disappointing and distressing for mothers. This was compounded by the fact that during the pandemic, mothers no longer had ongoing sources of information because they could not visit their infants in person. This experience of receiving limited information about their infants for mothers in this study is contrary to research conducted by Kostenzer et al. (2022) in 12 countries (Australia, Brazil, Canada, China, France, Italy, Mexico, New Zealand, Poland, Sweden, Turkey, and Ukraine), which revealed that, even though mothers were in the COVID-19 pandemic, most mothers could still meet face-to-face with staff to be given general health information, or receive phone calls to receive this information. In addition, programs that provide education about feeding, skin-to-skin contact, holding, and talking to the infant through video and face-to-face formats have been found important in reducing stress and increasing maternal confidence, and for mothers to feel actively involved in infant care and emotionally supported (Hunter et al., 2019).

Conclusion

Breastfeeding premature babies who are treated in the perinatology room during a pandemic was not easy. Mothers

were faced with visiting regulations to avoid the transmission of COVID-19 that separated them from their infants and normal maternal caregiving. They were not allowed to see or touch their infants, and limited to viewing their infant through a glass window. Restrictions that extended to direct breastfeeding reinforced the need to provide expressed breast milk and created a situation where mothers defined their maternal role as revolving around expressing milk to feel connected to their infants. This, along with a lack of information about their infant's wellbeing and inadequate knowledge to support breastfeeding, created additional emotional stress for mothers. Nursing services in the perinatology room are expected to be able to provide information and education on an ongoing basis, starting from the birth of premature infants and continuing to their discharge home. The information provided must include updates on the infants wellbeing, and address information needs related to breastfeeding to minimize the stress and worry that mothers experience. Technology-based education delivery methods will be particularly important in reaching mothers in pandemic contexts. The results of this study suggest that a review of the current regulations in hospitals providing intensive care for premature infants be carried out, and the staff be given continuing lactation education to strengthen breastfeeding support to mothers with premature babies.

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