

# What Hinders Twin Mothers From Breastfeeding - A Qualitative Study of Chinese Women

**Lijie Ren**

Shengjing Hospital of China Medical University

**Yan Yang**

Shengjing Hospital of China Medical University

**Zhichao Yu**

Shengjing Hospital of China Medical University

**Fang Liu**

Shengjing Hospital of China Medical University

**Qinwen Shao**

Wuhan Institute of Bioengineering

**Xianghong Sun** (✉ [750019113@qq.com](mailto:750019113@qq.com))

Shengjing Hospital of China Medical University

---

## Research

**Keywords:** breastfeeding, women, mothers, pregnancy

**Posted Date:** September 21st, 2021

**DOI:** <https://doi.org/10.21203/rs.3.rs-876062/v1>

**License:**  This work is licensed under a Creative Commons Attribution 4.0 International License. [Read Full License](#)

---

## **Abstract**

## **Objective**

To explore the difficulties of twin mothers in breastfeeding and the factors that promote breastfeeding, so as to develop interventions to improve the breastfeeding rate of twin mothers.

## **Methods**

Semi-structured interviews were used to interview women with twin pregnancy experience.

## **Results**

We found that twin pregnancy itself was an obstacle to breastfeeding. Lack of breastfeeding knowledge guidance, separation of mother and newborns, poor maternal and child health conditions and the convenience of breast milk substitutes also hindered the implementation of breastfeeding for women with twin pregnancy. On the other hand, the emotional support of family members, proper breastfeeding guidance, sufficient breast milk production and economic pressure were the main factors that promote the breastfeeding of women with twin pregnancy.

## **Conclusion**

To promote the breastfeeding of women with twin pregnancy needs the support of family, society and policy. Breastfeeding education should be extended to prenatal care and the primary caregiver of the new mother, and timely guidance should be provided after delivery to achieve satisfactory breast milk production.

## **Background**

Breast milk can provide a full range of nutrition for babies. Breastfeeding has unparalleled advantages for babies, mothers, families and society. Breastfeeding can strengthen the infant immune system, improve cognitive development, and reduce the incidence of other chronic diseases such as diabetes, obesity, hypertension, and cardiovascular disease<sup>[1, 2]</sup>. Therefore, the World Health Organization and the United Nations Children's Fund advocated that exclusive breastfeeding for the first six months of infants was the best way to feed. However, the low proportion and short feeding time of breastfeeding are common problems in the world, and the promotion of breastfeeding is also a problem that needs to be solved in all countries<sup>[3, 4]</sup>. Twins face lower birth weight and more perinatal complications, so breastfeeding is more important for twins<sup>[5]</sup>. However, studies have shown that compared with single pregnancy, the breastfeeding rate of twin pregnancy is lower<sup>[6]</sup>, and the exclusive breastfeeding rate of twin pregnancy in 6 months in China is only about 10–15%<sup>[7, 8]</sup>. In response, we need to develop interventions to promote breastfeeding and to increase the rate and duration of breastfeeding. However, breastfeeding support is a complex intervention system that requires individual, social, economic and policy support<sup>[9]</sup>. Therefore, only after we understand the reasons

why women give up breastfeeding, can we provide more targeted solutions. Qualitative research is a research method that describes the life experience of the research objects in a systematic and subjective way so as to understand their emotions and behaviors. Under the patient-centered care model, qualitative research has attracted extensive attention from clinical staff<sup>[10, 11]</sup>. This study intends to use the semi-structured interview method in qualitative research to explore the reasons for the success and failure of twin pregnancy women's breastfeeding and the difficulties encountered during feeding, so as to develop interventions to improve the rate and duration of twin breastfeeding.

## Methods

### Participants

This study was conducted in the obstetrics department of a hospital in China, and has been approved by the ethics review committee of the hospital. The ethics approval number is 2018PS20K. The information of women with twin pregnancy who gave birth in hospital between January 2019 and October 2019 was searched from the hospital database. Researchers contacted these women and explained the purpose of the study to invite them to join the study. We planned to contact 100 women to obtain information about their feeding methods and feeding time, and to negotiate with those women who agree to be interviewed about the exact time of the interview, and then to interview them by phone. All participants signed an electronic informed consent. The inclusion and exclusion criteria of the participants were as follows: twin pregnancy and successful delivery of two live babies; participants did not have contraindications to breastfeeding such as communicable diseases or undergoing chemotherapy; twins did not have contraindications to breastfeeding such as phenylketonuria. Study subjects should be heterogeneous, such as including both natural and assisted reproductive women, and including women with newborns received hospitalization and non-hospitalization.

### Data Collection And Analysis

The semi-structured interview method was used to collect data. The interview was conducted according to the following three topics: 1) whether breastfeeding and the feeding time; 2) Reasons for (not) breastfeeding; 3) The difficulties encountered in breastfeeding and the support they needed (detailed questions see Attachment Table 1).

Table 1  
Basic information of interviewees

Interviewees	Age	Education	Conception method	Gestational weeks of delivery	Children's age(M)	Breastfeeding time(M)
A1	32	Undergraduate	Assisted reproduction	35	20	8
A2	33	Undergraduate	Assisted reproduction	29	16	0
A3	29	Undergraduate	Natural conception	31	17	0
A4	55	Undergraduate	Natural conception	33	17	4
A5	32	Undergraduate	Natural conception	29	15	12
A6	37	Undergraduate	Assisted reproduction	33	21	0
A7	26	GCSE	Natural conception	32	21	0
A8	34	Diploma	Natural conception	34	21	2
A9	29	Undergraduate	Natural conception	28	19	0
A10	26	Undergraduate	Assisted reproduction	32	14	4
A11	38	Undergraduate	Assisted reproduction	35	21	0
A12	32	Undergraduate	Natural conception	35	16	13
A13	35	Undergraduate	Assisted reproduction	30	22	6
A14	33	Diploma	Natural conception	33	22	0
A15	33	Undergraduate	Natural conception	32	22	4
A16	32	Undergraduate	Natural conception	31	21	6
A17	31	Undergraduate	Assisted reproduction	32	19	0
A18	38	Diploma	Assisted reproduction	34	19	5

Interviewees	Age	Education	Conception method	Gestational weeks of delivery	Children's age(M)	Breastfeeding time(M)
A19	31	Undergraduate	Assisted reproduction	31	18	4
A20	29	Undergraduate	Natural conception	33	15	14
A21	34	Undergraduate	Natural conception	34	22	9
A22	29	Undergraduate	Assisted reproduction	32	22	0
A23	35	Undergraduate	Natural conception	34	21	13
A24	38	Diploma	Assisted reproduction	31	20	0
A25	26	Undergraduate	Natural conception	33	19	6
A26	27	GCSE	Natural conception	31	15	2
A27	26	GCSE	Natural conception	34	20	4
A28	30	Diploma	Assisted reproduction	33	17	0
A29	29	Undergraduate	Natural conception	31	21	6
A30	31	Diploma	Natural conception	32	23	0

The speech data was transcribed into words within 24 hours after the interview. Colaizzi method<sup>[12]</sup> was used to analyze the data: Two researchers read the text data repeatedly, extracted the statements related to the research purpose, encoded each meaningful statement and refine the topic, and connect the topic to the research phenomenon for a complete description. Data collection and analysis were carried out at the same time. When there were no new topics in the analysis, we stopped contacting eligible participants.

## Results

### General information of the participants

A total of 169 women in our hospital met the inclusion criteria during the study period. Their mean age was 32 years old, and they were all married. The mean gestational weeks at delivery was 33 weeks. Of these, 76

were conceived through assisted reproduction and 93 were conceived naturally. 134 pairs of twins were treated in the neonatal department.

## Breastfeeding status

We obtained the breastfeeding information of 100 women. Of which, 58 breastfed, but only 25 exclusively breastfed. Breastfeeding lasted from 2 to 14 months, with an average of 7 months. Finally, among the 100 women, 30 participants were included in the interview. The general information of the 30 participants are shown in table 1.

## Qualitative interview results

Two themes emerged from the analysis of the texts: the barriers to breastfeeding and factors that contribute to successful breastfeeding.

### Theme 1 Barriers to breastfeeding

**Twin Pregnancy** We found that twin pregnancy itself was responsible for the low rates and short duration of breastfeeding. During the interview, 80% of the participants firmly believed that twins could not be exclusively breastfed and mixed feeding was intended early in pregnancy. For example, one woman said, "My breast milk is definitely not enough for two babies. My babies have been mixed fed since birth." Some women chose to give up breastfeeding because they could not supply enough breast milk for two babies and they didn't want to mixed feed. As one woman said, "Breast milk can only meet the needs of one baby. I don't know which child to breastfeed. While mixed feeding is too much trouble, so I just gave it up."

**Separation of mother and newborns** Twin pregnancy is associated with a higher risk of neonatal hospitalization, and the neonatal department in most Chinese hospitals currently prohibit visitation. Of the 30 women interviewed, 21 experienced neonatal hospitalization. During the separation period, they were particularly concerned about the health of their babies, and lack of identity as mothers, so they did not want to use breast pumps. As one woman said, "The babies were receiving treatment in the hospital. I was so worried about their safety that I was not in the mood to pump breast milk, and even if I did pump, the babies would not be able to eat immediately."

**Lack of breastfeeding knowledge** Postpartum regular and frequent nipple sucking has a great impact on the breast milk production. If the early milk production is less, it will directly lead to mixed feeding or give up breastfeeding. In China, there is a special custom of confinement and some traditional concepts that are not conducive to breastfeeding. For example, elders would think that sucking with a breast pump will cause great damage to the body. Women who were taken care of by their mother-in-law or mother during the confinement period were greatly affected by incorrect concepts of breastfeeding. Due to a lack of knowledge about proper breastfeeding, 83 percent of the women interviewed did not start sucking until 2 to 3 days after delivery and did not do so regularly. As one woman said, "No doctor told me to suckle right after delivery. My mother told me to suckle after I left the hospital. And for the first few days after delivery, I couldn't feel anything in my breasts and couldn't pump milk. After I left the hospital, I inhaled once when I felt it was swollen."

**Convenience of breast milk substitutes.** Caring for two newborns takes a lot of effort, and even with the help of family, mothers are still the primary caregivers, especially when it comes to breastfeeding two babies. Too much fatigue and the convenience of milk powder may directly discourage women from breastfeeding. One woman said: "I would be so tired if I breastfed. The two babies were not fed at the same time, and I felt like I was breastfeeding all the time. And my family couldn't help with breastfeeding. If I feed milk powder, my family can help. I also have my own rest time." In addition, due to the weak sucking ability of premature infants, they often needed to continue bottle feeding after discharge. It was unnecessary and intolerable work for women to suck milk into the bottle to feed, which might lead to failure of breastfeeding. As one woman said: "It's troublesome to suck breast milk into the bottle to feed babies. It's better to feed milk powder directly."

**Poor maternal and infant health conditions** Health issues include two aspects, one is the health of the newborn and the other is the health of the mother. Twin mothers generally believe that their babies are more vulnerable, so they are particularly concerned about the health of their newborns. So, if breastfeeding poses any threat to their child's health, they will consider stopping breastfeeding even if their doctor tells them they can continue. For example, some non-contraindications of neonatal breast milk intolerance, maternal pregnancy hypertension, etc. As a woman said, "My babies were bloated after breastfeeding. I stopped breastfeeding because I was worried that it would affect my babies' health."

**Work reasons** Maternity leave in China is six months. During maternity leave, women will not stop breastfeeding, but returning to work is the reason for women to stop breastfeeding. The interviewees expressed that although their work units did not oppose breastfeeding, they did not provide conditions for breastfeeding, such as the place and time of breastfeeding. In order to adapt to work faster, they chose to give up breastfeeding, and they believed that 6 months of breastfeeding time was enough for their children. As one woman said, "I knew I would have to return to work after six months, so I tried to stop breastfeeding at five months." Another woman said: "It took a lot of energy to get used to my job, I didn't have time to breastfeed or pump at work, and it was embarrassing for me to breastfeed in the workplace."

## Theme 2: Factors that contribute to successful breastfeeding

**Family emotional support** After delivery, a mother may face the loss caused by the shift of family focus, or the grief of a mother and babies separated. If family members pay attention to maternal emotional changes and provide psychological and behavioral support, mothers would be more likely to breastfeed. Family support does not force mothers to breastfeed, but makes them feel that the family is working together to breastfeed. Other family members could help with auxiliary work such as preparing nutritious food, helping with breastfeeding or feeding the baby. For example, a woman said, "When my babies were in the hospital, my husband was always helping me suck breast milk and comforting me constantly. I could feel the happiness of his participation and I was more willing to breastfeed."

**Proper breastfeeding guidance** Approximately 90% of the women interviewed said they were aware of the advantages of breastfeeding and would like to breastfeed, and would continue breastfeeding if they were given professional breastfeeding guidance. Especially for women who had been separated from their babies. If the doctor recommended breastfeeding and told them how to suck properly, they would actively cooperate

with the doctor. Among the women who participated in the interview, 6 of them started breastfeeding early under the guidance of medical personnel and galactagogue professionals, and 5 of them successfully breastfed. For example, a woman said: "After delivery, the galactagogue professional began to teach me how to pump milk, and I kept breastfeeding since breast milk came." Another woman said: "I felt like I needed to do something for my babies. I started pumping regularly under the guidance of nurses and doctors, and then I started delivering breast milk to my babies when they were in hospital."

**Adequate breast milk** The ability to produce sufficient milk in an intervention or non-intervention state is an important factor for new mothers to initiate and continue breastfeeding. The women interviewed felt that if they had plenty of breast milk, there was no reason not to breastfeed and no reason to stop. As one woman said, "I had a lot of breast milk at the beginning, so naturally I breastfed, exclusively until 11 months."

**Economic pressure** Bringing up twins means a heavier economic burden. Breastfeeding is a more economical way for twin mothers, so the high cost of twins is also a factor that promotes breastfeeding. As one woman said: "Raising twins is costly. Breastfeeding can save a lot of money."

## Discussion

### Main findings

Through the analysis of the interview data, we found that conceived insufficient breast milk for twins, reduced production of breast milk because of lack of correct breastfeeding knowledge, maternal depression because of mother-child separation, poor maternal and child health conditions and the convenience of breast milk substitutes would hinder the implementation of breastfeeding for women with twin-pregnancy. On the other hand, the emotional support of family members, proper breastfeeding guidance, adequate breast milk and economic pressure were the main factors that promote the breastfeeding of women with twin pregnancy.

Although new mothers and their families were aware of the importance of breastfeeding, breastfeeding was not important enough to motivate them to breastfeed. Previous studies have shown that the main reason for single pregnancy women to stop breastfeeding is insufficient breast milk production<sup>[13,14]</sup>, which is similar to the results of our study. Conceived insufficient breast milk had a more serious impact on the breastfeeding of twin mothers, who generally believed that breast milk could not meet the needs of twins and adopted mixed feeding, or gave up breastfeeding or stopped breastfeeding prematurely. In contrast, if women were able to produce enough milk after childbirth, they will naturally breastfeed. Therefore, we could improve the breastfeeding rate of women with twin pregnancy by helping them obtain more satisfactory milk production and enhancing their confidence in breastfeeding. Factors that affect postpartum lactation include individual physical constitution, time of initiation of sucking, and frequency of sucking. The timing and frequency of sucking can be improved through health education. However, studies have found that clinical workers such as outpatient pediatricians, midwives or practice nurses who mastered the knowledge of breastfeeding do not play a proper role in promoting breastfeeding<sup>[15-17]</sup>. In addition, simple one-time prenatal education or the provision of printed or audio-visual educational materials was not enough to improve the breastfeeding rate in the long term, especially for twin mothers, simple prenatal breastfeeding counseling had no significant

effect on the breastfeeding rate<sup>[18, 19]</sup>. In order to improve the breastfeeding rate and feeding time of twin-pregnant women, we believe that it is necessary to understand women's confusion about breastfeeding, provide continuous breastfeeding knowledge guidance before and after the birth, and correct their wrong cognition, such as telling women the sucking frequency and time that is most beneficial to increase the production of breast milk. For mothers separated from newborns, in addition to providing guidance on breastfeeding, we should also pay attention to their psychological problems, to prevent women from giving up breastfeeding due to excessive sadness.

Breastfeeding requires the joint efforts of the puerpera and their families, so the objects of health education should not only include the puerpera but also their families, such as the objects that have a great influence on the puerpera: mother, mother-in-law and husband<sup>[20]</sup>. However, at present, when the puerpera herself has not received enough advice on breastfeeding, their families are even less knowledgeable about breastfeeding<sup>[21]</sup>. In China, due to the existence of the custom of confinement, for women who are difficult to obtain breastfeeding guidance, the thoughts of the elders will have a greater impact on them, so it is more meaningful to educate the family members about breastfeeding knowledge. Family members should have a correct understanding of breastfeeding, and then give puerpera spiritual support and care, and help them with role transition. Family members should not pay too much attention to the babies, and make the puerpera feel neglected.

Multi-level cooperation can better improve the breastfeeding rate and feeding time<sup>[22]</sup>. In addition to family and medical levels, social and policy levels should also provide support for the promotion of breastfeeding. Studies have shown that the length of maternity leave is positively correlated with the duration of breastfeeding<sup>[23, 24]</sup>. This study also showed that the time conflict associated with returning to work was the objective reason for women to stop breastfeeding. And the reality is that many companies do not consider the needs of breastfeeding women, which leads many women to stop breastfeeding in order to fit in at work. Therefore, in order to extend the duration of breastfeeding, relevant institutions should establish corresponding policies to promote companies to provide support for women's breastfeeding, such as setting up mother-infant room and allowing women to take breastfeeding breaks during work time to provide convenience for breastfeeding women.

## Limitations

This study is the first to use semi-structured interview method to explore the factors that hinder or promote the breastfeeding of women with twin pregnancy. The research results can truly and profoundly reflect their true thoughts on breastfeeding, and can also put forward solutions to promote breastfeeding in a more targeted way. At the same time, this study also has some limitations. First of all, telephone interviews were used instead of face-to-face interviews. Compared with face-to-face interviews, telephone interviews might loss some important information such as physical gestures and expressions, which is not conducive to the analysis of the non-verbal information provided by the interviewees. Secondly, this study only included twin-pregnancy women with twins survived, and the results of the study did not include the breastfeeding situation of women who lost a child and their attitude towards breastfeeding, which may be significantly different from the results of our study.

# **Conclusion**

The breastfeeding rates of twin mothers is low. Improving the breastfeeding rate needs the support of families, society and policies. Health care workers should provide long-term breastfeeding information support to women with twin pregnancy during the perinatal period, solve the difficulties they encounter at different stages, and improve their confidence of breastfeeding and compliance with breastfeeding. Moreover, breastfeeding education should extend to the primary caregivers and provide puerpera with timely guidance to help them achieve a satisfactory milk output after delivery. In addition, the government should formulate policies to promote breastfeeding, such as appropriate maternity leave time and urging companies to provide convenient breastfeeding conditions.

# **Declarations**

## **Acknowledgements**

Not applicable.

## **Authors' contributions**

LJR conceptualized the study, searched literatures, analyzed data and drafted this manuscript.

YY contributed the data analysis and manuscript drafting. ZCY\FL contributed to literature retrieval and data analysis. QWS improved the English expression during the revision. XHS conceptualized the study and provided critical comments on this manuscript. All authors have read and approved the final manuscript.

## **Availability of data and materials**

The datasets generated and analysed during the current study are not publicly available due the data analyzed is research participants'words, which is private, but are available from the corresponding author on reasonable request.

## **Competing interests**

The authors declare that they have no competing interests.

## **Funding**

This study was not funded by any organization.

## **Authors' information**

LJR

Intensive care unit, Shengjing Hospital of China Medical University, China

Email: renlijie0623@163.com

YY

Nursing Department, Shengjing Hospital of China Medical University, China

ZCY

Intensive care unit, Shengjing Hospital of China Medical University, China

FL

Intensive care unit, Shengjing Hospital of China Medical University, China

QWS

Department of Basic Medical Science, Wuhan University of Bioengineering, China

XHS

Intensive care unit, Shengjing Hospital of China Medical University, China

Email:750019113@qq.com

## References

1. Binns C, Lee M, Low WY. The Long-Term Public Health Benefits of Breastfeeding. Asia-Pacific journal of public health. 2016. doi:10.1177/1010539515624964.
2. O'Rourke MP, Spatz DL. Women's Experiences with Tandem Breastfeeding. MCN The American journal of maternal child nursing. 2019. doi:10.1097/NMC.0000000000000534.
3. Rm MS, Rn EW, Rn JL, Rm AB. The supporting role of the midwife during the first 14 days of breastfeeding: A descriptive qualitative study in maternity wards and primary healthcare. Midwifery. 2019. doi:10.1016/j.midw.2019.07.016.
4. Ramani S, Shaikh N, Das S, Pantvaidya S, Fernandez A, Jayaraman A. "Everybody breastfeeds if they have milk": factors that shape exclusive breastfeeding practices in informal settlements of Mumbai, India. International breastfeeding journal. 2019. doi:10.1186/s13006-019-0204-2.
5. Congiu M, Reali A, Deidda F, Dessi A, Bardanzellu F, Fanos V. Breast Milk for Preterm Multiples: More Proteins, Less Lactose. Twin Res Hum Genet. 2019. doi:10.1017/thg.2019.42.
6. Porta R, Capdevila E, Botet F, Ginovart G, Moliner E, Nicolas M, Gutierrez A, Ponce-Taylor J, Verd S. Breastfeeding Disparities between Multiples and Singletons by NICU Discharge. Nutrients. 2019. doi:10.3390/nu11092191.
7. Zhao MH, Liu JF, Wang Q. A survey of breastfeeding of twin babies. Journal of Nursing Science. 2015. doi:10.3870/hlxzz.2015.22.029.
8. Yang HJ, Wang T, Liu XY, Zheng WF, Yi XY. The current situation investigation and analysis about breastfeeding of twins. Hebei Medical Journal. 2019. doi:10.3969/j.issn.1002-7386.2019.03.036.

9. Bellù R, Condò M. Breastfeeding promotion: evidence and problems. *Medical surgical pediatrics*. 2017. doi:10.4081/pmc.2017.156.
10. Series AM,KI. Practical guidance to qualitative research. Part 1: Introduction. *European Journal of General Practice*. 2017. doi:10.1080/13814788.2017.1375093.
11. Granero-Molina J, Fernández Medina I, Fernández-Sola C, Hernández-Padilla JM, Jiménez Lasserotte MDM, López Rodríguez M D M. Experiences of Mothers of Extremely Preterm Infants after Hospital Discharge. *J Pediatr Nurs*. 2019. doi:10.1016/j.pedn.2018.12.003.
12. Moser A, Korstjens I, Series. Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*. 2018. doi: 10.1080/13814788.2017.1375091.
13. Yamada R, Rasmussen K M, Felice JP "What Is 'Enough,' and How Do I Make It?": A Qualitative Examination of Questions Mothers Ask on Social Media About Pumping and Providing an Adequate Amount of Milk for Their Infants. *Breastfeeding medicine*. 2019; doi: 10.1089/bfm.2018.0154.
14. Mikami F, Francisco R, Rodrigues A, Hernandez WR, Zugaib M, de Lourdes Brizot M. Breastfeeding Twins: Factors Related to Weaning. *Journal of human lactation*. 2018. doi:10.1177/0890334418767382.
15. Pemo K, Phillips D, Hutchinson AM. Midwives' perceptions of barriers to exclusive breastfeeding in Bhutan: A qualitative study. *Women birth*. 2020. doi:10.1016/j.wombi.2019.07.003.
16. Moukarzel S, Mamas C, Farhat A, Abboud AA, Daly AJ. A qualitative examination of barriers against effective medical education and practices related to breastfeeding promotion and support in Lebanon. *Medical education online*. 2020. doi:10.1080/10872981.2020.1723950.
17. Ramos MM, Sebastian RA, Sebesta E, McConnell AE, McKinney CR. Missed Opportunities in the Outpatient Pediatric Setting to Support Breastfeeding: Results From a Mixed-Methods Study. *Journal of pediatric health care*. 2019. doi:10.1016/j.jpedhc.2018.06.004.
18. Mikami FC, F, de Lourdes Brizot M, Tase TH, Saccuman E, Francisco RPV, Zugaib M. Effect of Prenatal Counseling on Breastfeeding Rates in Mothers of Twins. *Journal of obstetric gynecologic neonatal nursing*. 2017. doi:10.1016/j.jogn.2016.10.005.
19. Mattar CN, Chong YS, Chan YS, Chew A, Tan P, Chan YH, Rauff M H J. Simple antenatal preparation to improve breastfeeding practice: a randomized controlled trial. *Obstetrics gynecology*. 2007. doi:10.1097/01.AOG.0000249613.15466.26.
20. Angelo BH, B, Pontes CM, Sette GCS, Leal LP. Knowledge, attitudes and practices of grandmothers related to breastfeeding: a meta-synthesis. *Rev Latinoam Enferm*. 2020. doi:10.1590/1518-8345.3097.3214.
21. Merritt R, Vogel M, Ladbury P, Johnson S. A qualitative study to explore fathers' attitudes towards breastfeeding in South West England. *Primary health care research development*. 2019. doi:10.1017/S1463423618000877.
22. Quinn EM, Gallagher L, de Vries J. A qualitative exploration of breastfeeding support groups in Ireland from the women's perspectives. *Midwifery*. 2019. 10.1016/j.midw.2019.08.001.
23. Navarro-Rosenblatt D, Garmendia ML. Maternity Leave and Its Impact on Breastfeeding: A Review of the Literature. *Breastfeeding medicine*. 2018. doi:10.1089/bfm.2018.0132.

24. Riaz S, Condon L. The experiences of breastfeeding mothers returning to work as hospital nurses in Pakistan: A qualitative study. Women birth. 2019. doi:10.1016/j.wombi.2018.06.019.

## Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Attachmenttable1.docx](#)