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# Fathers' needs of breastfeeding support: Perspective of health nurses

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ARTICLE INFO	A B S T R A C T	
<i>Keywords:</i> Breastfeeding Father Nurse	<ul> <li>Purpose: To explore the improvement of health education on father's participation in breastfeeding from the perspective of maternal and child health nurses.</li> <li>Methods: Qualitative phenomenological research was used, and 15 maternal and child health nurses who provided breastfeeding support were invited. With semi-structured deep interviews and on-site recordings, data were analyzed through content analysis.</li> <li>Results: Four main themes were extracted, including 'cultivating fathers' awareness of participation in breastfeeding', 'collaboration of multiple disciplines to improve health education on breastfeeding for fathers in hospital', 'Simulated scenarios to develop fathers' skills in solving breastfeeding problems', and 'establishing a hospital-community interface network to improve breastfeeding continuation care after hospital discharge'.</li> <li>Conclusions: Medical and health care departments should attach importance to guidance on health education for fathers' breastfeeding participation, cultivate fathers' awareness of participation in breastfeeding, provide multidisciplinary collaboration-based health education on breastfeeding for fathers from the prenatal period and improve post-discharge health education on breastfeeding. The additional education being suggested would contribute to fathers being able to play an important role in breastfeeding.</li> </ul>	

## Introduction

Breastfeeding is widely acknowledged as the most advantageous feeding method for infants, playing an indispensable role in improving public health (Abbass-Dick et al., 2015). Breastfeeding offers numerous advantages to infants, including meeting their nutritional needs, reducing the likelihood of gastrointestinal and respiratory infections, promoting cognitive development, among others, while also providing mothers with both immediate and long-term benefits, such as promoting postpartum recovery and lowering the risks of breast and ovarian cancer (Krikitrat et al., 2022). Successful breastfeeding also has vital near-term and long-term socio-economic benefits (Rollins et al., 2016). As a result, various conferences and initiatives have been held by the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) since 1981 to encourage and revise recommendations on breastfeeding, including introducing a code of practice for marketing breast milk substitutes, promoting and establishing baby-friendly hospitals, and encouraging breastfeeding (WHO 2009). Despite these efforts, breastfeeding remains a major issue, with rates

falling below international standards and the WHO stating in 2018 that globally, only 40 % of infants under six months old were exclusively breastfed (Organization). Research has revealed that exclusive breastfeeding rates for infants under six months in China, fluctuated between 18.9 % and 29.2 % from 2010 to 2017, which is far from the country's objective of improving exclusive breastfeeding rates to meet international standards (Qin, 2021). This highlights the critical need for enhancing breastfeeding practices to promote healthy growth and development among infants and young children in China. Therefore, in order to promote the healthy growth of infants and young children in our country, we need to urgently find out the relevant factors of breast-feeding.

A variety of studies have demonstrated that family factors play a crucial role in breastfeeding, with the father's influence on breastfeeding gradually coming to light (Sherriff et al., 2014a, 2014b; Al Namir et al., 2017). The father's influence on breastfeeding is progressively being understood. On the one hand, fathers help to alleviate the mother's physical burden by contributing to household activities and engaging in childcare, as well as learning about breastfeeding, assisting

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with breastfeeding issues, and resolving any problems that arise during the process. On the other hand, fathers' positive attitudes toward breastfeeding encourage mothers to have increased self-efficacy in this process, which leads to prolonged breastfeeding duration and a successful breastfeeding outcome. According to current findings, fathers have many misconceptions about breastfeeding, for example, some fathers saw breastfeeding as a barrier to bonding with their child, and bottle-feeding was viewed as the start of a father's involvement in feeding their infant. These misconceptions prevent fathers from adopting a supportive role in breastfeeding. Health education is a crucial way to educate people about health issues. However, most breastfeeding research focuses on educating mothers, with fathers being included as supporting roles. As such, fathers are less motivated to participate in this process. The promotion and implementation of breastfeeding health education for fathers has similarly not been successful. Therefore, the aim of the study was used qualitative phenomenological research to explore the extent of the breastfeeding information being provided to fathers by health nurses working in hospital.

### Methods

The research method of phenomenology means to describe the consciousness and experience of one or more individuals to a phenomenon. The goal of phenomenology is to understand the research life of the object of study, and to construct personal meaning by understanding their "Experienced experience". Objective sampling method was used to invite health nurses from a third-level general hospital in Guangdong province to participate in interviews from August 2022 to December 2022. Semi-structured interviews has been found to be successful in making the interviewers and participants mutually beneficial, enabling the interviewer to improvise follow-up questions based on participant's responses and allowing space for participants' individual verbal expressions.

Participants were invited based upon meeting inclusion criteria such as having intermediate level of education or above, and having five or more years of experience in obstetrics. Exclusion criteria included being on leave or further training within the last six months and not completing the interview for any reason. The Research Ethics Committee of the hospital granted ethical approval for this study.

Based on the analysis of the literature and the discussion of the research group, the outline of the semi-structured interview was determined, which included the following four core questions: ① how is the existing breastfeeding health education for the parturient's spouse implemented? ② what do you think are the shortcomings of the current health education on breastfeeding aimed at mothers and spouses? ③ How do you think the health education for the parturient's spouse can be improved? ④ What are the unmet needs of the maternal spouse in your opinion? The research team consisted of an associate professor of Nursing, a chief nurse, a chief physician, a head nurse and two nursing graduate students.

Make an appointment in advance to determine the time and place of the interview, and ask for a quiet environment with no other people present to ensure privacy and confidentiality. Finally, semi-structured interviews were conducted with the participants in the ward health education room or on-duty room. The researchers explained to the participants that their information would not be shared with anyone and told them that they would not be forced to answer questions if they felt they violated their right to confidentiality. To protect their privacy, participants' real names were hidden and replaced with initials. Written informed consent was obtained from all participants who give their consent to their comments being anonymised and included in journals. The interview is conducted according to the outline of the interview, and the important points of the interviewees are questioned. The interview lasted from 40 to 60 min and was recorded.

#### Analysis

Semi-structured individual interviews were conducted to collect data from 15 participants until data saturation was reached. Within 24 h of each interview, the data was collected and entered into Nvivo 12Plus software. The researcher analyzed the transcribed data by repeatedly reading it with the goal of identifying and extracting recurring themes. Thematic analysis was used to classify recurring issues, and the main thematic findings were identified through discussion amongst several authors, who worked together to classify and reach a consensus on the themes and subthemes.

# Results

Fifteen participants were included in the study, including three International Board Certified Lactation Consultants (IBCLCs), with ages ranging from 31 to 52 years and experience ranging from 10 to 33 years. The study identified four themes: 'cultivating fathers' awareness of participation in breastfeeding', 'collaboration of multiple disciplines to improve health education on breastfeeding for fathers in hospital', 'Simulated scenarios to develop fathers' skills in solving breastfeeding problems', and 'establishing a hospital-community interface network to improve breastfeeding continuation care after hospital discharge'. Table 1 for a thematic map on these themes and theme clusters. Each theme is elaborated upon below and illustrated with quotes from the interviewees.

### Table 1

Thematic map of emerged fundamental themes and theme clusters.

Fundamental themes	Theme clusters	Examples of formulated meanings
Cultivating fathers' awareness of participation in breastfeeding	<ul> <li>A sense of participation is important</li> <li>Lack of awareness of fathers' involvement in breastfeeding</li> <li>Insufficient involvement of fathers in</li> </ul>	<ul> <li>Knowledge can only be learned with a sense of participation</li> <li>Fathers recognize that it is a woman's duty to take care of her children</li> <li>Fathers are less involved in health education</li> </ul>
Collaboration of multiple disciplines to improve health education on breastfeeding for fathers in hospital	<ul> <li>breastfeeding</li> <li>Multi-disciplinary collaboration</li> <li>father's misperception</li> <li>In-hospital education</li> </ul>	<ul> <li>Assemble a team to help</li> <li>Professionals from different disciplines can provide targeted guidance</li> <li>Because of the misconception, fathers do not support breastfeeding</li> <li>Breast-feeding education should be carried out during pregnancy and postpartum</li> </ul>
Simulated scenarios to develop fathers' skills in solving breastfeeding problems	<ul> <li>Practical problems with breastfeeding</li> <li>Simulated prenatal education</li> </ul>	<ul> <li>There are many problems with breastfeeding after childbirth</li> <li>Prenatal simulation of the father after childbirth may encounter problems, provide solutions</li> </ul>
establishing a hospital- community interface network to improve breastfeeding continuation care after hospital discharge	<ul> <li>Post-discharge education is important</li> <li>Insufficient continuing education on community breastfeeding</li> </ul>	<ul> <li>Less hospital stay after delivery</li> <li>Breastfeeding takes place mainly at home</li> <li>Community nurses lack of knowledge of breast- feeding health education</li> <li>The community health education is insufficient and the hospital is the couple receives the education the last stop</li> </ul>

# Cultivating fathers' awareness of participation in breastfeeding

The participants suggested that due to traditional cultural beliefs, most fathers believe that mothers should be solely responsible for breastfeeding and nurturing their children. Consequently, fathers should be assisted in developing an awareness of their role in breastfeeding by encouraging them to participate in family caretaking activities that are typically viewed as the mother's duties. They suggested that this would require challenging the traditional belief that parenting is solely the mother's responsibility. This approach would enable fathers to actively participate in the practical daily care and interaction of breastfeeding, value their role in fatherhood, and have a positive influence on their partner's breastfeeding experience. By promoting this approach, they believed that it would lead to an enhanced positive attitude of mothers towards breastfeeding and improve the rate of exclusive breastfeeding.

'Sometimes, I think dads believe that bringing up children is solely women's responsibility. Awareness is key, and most dads lack this. They tend to think once the baby is born, they don't need to worry about it.'(Nurse ME)

'Firstly dads need to have that awareness, then they need to take the initiative to learn.' (Nurse JY)

'Raising awareness is crucial because family support is low nowadays, and people need to be more aware of supporting breastfeeding.'(Nurse YY)

# Collaboration of multiple disciplines to improve health education on breastfeeding for fathers in hospital

Most participants highlighted that the limited time frame for providing comprehensive breastfeeding education made it challenging to educate mothers during their short hospital stays, which typically last between 24 and 48 h after delivery. Additionally, fathers had limited knowledge of breastfeeding during the educational process because most of the information came from mothers or female family members, including mothers or mothers-in-law. This resulted in some misconceptions, which became a barrier to breastfeeding.

'Pregnancy health education is not comprehensive. We lack awareness of providing knowledge about breastfeeding. It's too late to address this issue after delivery.' (Nurse AF)

'There are also misconceptions, and these can prevent fathers from participating in breastfeeding. For instance, if the mother has hepatitis B, then a coordinated group approach is needed to provide information to the father since one role alone may not work.' (Nurse MM)

'The first thing a father needs to learn how to do is to soothe a newborn. Frequently, fathers do not know how to comfort or hold their baby, meet the baby's needs or support the mother during breastfeeding.' (Nurse JY)

# Simulated scenarios to develop fathers' skills in solving breastfeeding problems

The participants suggested it was vital to instruct fathers on how to support breastfeeding and to overcome potential issues that may arise during the process. Most issues encountered in the establishment and continuation of breastfeeding are physical, such as cracked nipples, mastitis, or breast engorgement. Simulated scenarios could be used to allow fathers to develop their ability to solve such breastfeeding problems.

'When people have difficulty with breastfeeding, they may choose to watch videos instead of seeking help from professionals. And many people will encounter a lot of difficulties in this process of breastfeeding, including me. Then when they encounter difficulties, they may choose to watch some videos, instead of choosing to go to some professional for a favor... In the early stages, fathers can be informed about possible difficulties that may occur during breastfeeding, such as engorgement or how to care for sore nipples...' (Nurse JJ) 'For example, We could have a garden party where we used models to show dads how breastfeeding works, like...and how to deal with problems encountered." (Nurse SY)

## Establishing a hospital-community interface network to improve breastfeeding continuation care after hospital discharge

Participants of the study have reported the decreased length of hospital stay after delivery. Moreover, breastfeeding health education sessions post-discharge are primarily conducted at community hospitals. Therefore, the promotion of breastfeeding education and support in the community setting is crucial in lengthening the duration of breastfeeding.

'It would be best if there provide fathers with a continuation of care program beyond hospital discharge, and then there would be a course on, for example, the details of breastfeeding after 1–3 months or 6 months post-discharge.'(Nurse MM)

'Some parents may face various breastfeeding difficulties postdischarge, and the hospital must inform them about the available resources. This includes informing them about the breastfeeding clinic and the availability of a breastfeeding day line. Through such resources, fathers can contact a health professional 24/7 to address their breastfeeding issues.' (Nurse XY)

'Breastfeeding health education often stops when mothers are discharged from the hospital. In several instances, follow-up visits from medical care providers lack comprehensive breastfeeding guidance. Therefore, there is a need for the provision of proper training and support for community health workers. The community health workers can provide an essential avenue for breastfeeding education. Contacting the local community for training programs on breastfeeding education and support can mitigate misinformation on breastfeeding.'(Nurse XY)

### Discussion

Mothers' decision to breastfeed or use formula is influenced by a complex range of personal, family, and social factors, including the important role of fathers in breastfeeding and the positive impact of fathers' access to breastfeeding health education (Ng et al., 2019; Ogbo et al., 2020). Although fathers are willing to assist with breastfeeding, research has found that fathers are generally unaware of the support their wives need and the help they can provide, resulting in mothers' needs for support during breastfeeding often going unmet and causing frustration and disappointment (Sherriff et al., 2014,2009). Moreover, the agreement between mother's support needs and father's support consciousness was not high. A survey showed that 64.9 percent of mothers wanted their partner to help with housework and child care, but only 37.2 percent of fathers saw it as a way to support breastfeeding (Rosane Odeh Susin and Regina Justo Giugliani, 2008). And sometimes fathers have misconceptions about breastfeeding. Bennett et al. (2016) reported that fathers believed that breastfeeding would reduce their chances of bonding with their babies. Since the father can not feed the baby directly, bottle feeding is used as an alternative method to participate in the infant feeding process. Some fathers have negative attitudes towards breastfeeding due to misconceptions (Scott et al., 2001). For example, some men are prone to sexually sensitive stereotypes about breasts and are unable to see the natural role of breasts in breastfeeding. Therefore, they oppose and discourage their wives from breastfeeding (Henderson et al., 2011). Even though breastfeeding is a normal breastfeeding practice, most fathers have concerns about their wives' exposure when breastfeeding (Sherriff et al., 2009). Chang et al. (2012) investigated men's and women's attitudes towards breastfeeding knowledge and found that men preferred formula feeding (72.9% vs 61.4 %). They believed that breastfeeding does not determine the infant's intake, causes problems such as cracked nipples and mastitis, and increases the mother's emotional stress (Tohotoa et al., 2009), which may be the reason why men are more supportive of formula feeding.

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Misconceptions about breastfeeding among fathers can also impact mothers' attitudes and behaviors towards breastfeeding and contribute to their decision to formula feed. This is caused by the father's lack of knowledge of breastfeeding (Freed et al., 1992).

Therefore, it is necessary to correct the father's wrong cognition through health education to reduce its negative impact on breastfeeding. Multidisciplinary cooperation can effectively combine different disciplines to evaluate and guide lactating couples from multiple perspectives. This avoid the limitation of professional and clinical thinking and provide the best quality comprehensive and integrated health education program for lactating couples. Therefore, it is necessary to build a multidisciplinary team in the hospital assembling together the roles of maternal and child care professionals such as midwives, obstetricians, neonatologists, postpartum care nurses and so on. Health education for fathers involved in breastfeeding can be carried out from pre-natal to post-natal and updated continuously. Thus the father can master the method of supporting breast-feeding, to maximize the father's role in supporting breast-feeding.

Participants in the study highlighted the need for comprehensive health education to include not only the knowledge but also the skills involved in breastfeeding, as well as how to address common breastfeeding-related problems. A systematic review by Ngoenthon et al. found that fathers had both positive and negative attitudes towards breastfeeding, with most fathers acknowledging breastfeeding as a natural and the best option for their baby; however, they experienced feelings of helplessness, anxiety, and guilt when confronted with breastfeeding problems (Ngoenthong et al., 2020). Fathers' sense of unpreparedness to support breastfeeding was reported by Hansen et al., who noted that fathers' initial shock when faced with breastfeeding problems could compromise their supportive role (Hansen et al., 2018). Using the interview method, Sherriff and Hall (2011) conducted an initial exploration of the views of fathers on breastfeeding and found that fathers were interested in breastfeeding and wanted to be involved in the preparation and support of breastfeeding. They also indicated that they needed more accessible information on the benefits of breastfeeding and detailed information on the practical issues of supporting their partners in breastfeeding. This is consistent with research by Bennett et al. (2016), in which fathers wanted to know how to address practical issues encountered in breastfeeding, such as blocked milk duct and management of mastitis, to better support their partners. To improve fathers' knowledge and skills, it is necessary to implement breastfeeding education that prepares fathers for normal breastfeeding scenarios, addresses common breastfeeding-related problems, and simulates specific breastfeeding situations. Studies have shown that when fathers have the necessary knowledge and skills to support the breastfeeding decision-making process, they can help mothers breastfeed effectively, solve breastfeeding-related problems, and contribute significantly to the stability of breastfeeding (Maycock et al., 2013; Pisacane et al., 2005). Therefore, it is essential to develop comprehensive breastfeeding health education for fathers to improve the quality and continuity of breastfeeding support.

A study conducted semi-structured interviews with 20 mothers to explore their experiences of trying to maintain exclusive breastfeeding at home after discharge from the hospital. The study found that, despite most mothers aiming to breastfeed exclusively for six months, numerous challenges related to the home environment were reported, which were not easily overcome despite previous breastfeeding education received during hospitalization. The lack of support from community healthcare was found to be a significant factor in adversely affecting the success of breastfeeding (Van Ryneveld et al., 2020). Therefore, to successfully address the transition to home breastfeeding for fathers and mothers, there is a need to refine post-discharge breastfeeding health education that can be facilitated by community healthcare workers. Establishing a hospital-community network can also lead to more standardised breastfeeding health education and promotion messages that can improve the quality of care for breastfeeding mothers post-discharge.

### Strengths and limitations of the study

As the main role of breastfeeding health education, obstetrical nurses clearly understand its defects. This study, based on the interviews with health nurses, clarifies the current lack of involvement of fathers in breast-feeding health education and the areas that can be improved in the future. In this study, the participants were qualified experts of breast-feeding health education, familiar with the methods and contents of health education, and the suggestions were persuasive. However, this study only included the nurses in the hospital, not the community. It is suggested that in future studies, health education nurses in hospitals and communities could be included to understand their recommendations on fathers' involvement in breastfeeding health education, the standardized health education of fathers' participation in breast-feeding and its influence on the practice of pure breast-feeding were carried out.

# Conclusion

Participants affirmed the supportive role of fathers in the breastfeeding process. However, the study reveals that there is a lack of awareness among fathers regarding their participation in breastfeeding, indicating the need for continuous encouragement and support. To address this issue, participants recommend implementing health education by a multidisciplinary team from prenatal care, due to less hospitalization time and more emphasis on health education. The lack of established systems for transitioning from hospital to community-based breastfeeding services is a significant inconvenience, and the authors suggest further research to explore ways to establish a complete hospital discharge. Importantly, active and continuous improvement of health education on breastfeeding for fathers could help increase their recognition and support for breastfeeding. Therefore, fathers need to be the focus of interventions in breastfeeding promotion activities.

### CRediT authorship contribution statement

Meijiao Qin: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing. Guangting Chang: Data curation, Formal analysis, Methodology, Writing – original draft. Xiaoyu Zhou: Data curation, Formal analysis, Investigation. Lixia Wang: Formal analysis, Investigation. Yuzhen Liang: Data curation, Formal analysis. Yiyi Xu: Formal analysis. Siqi Liu: Formal analysis. Shu Cai: Conceptualization, Data curation, Formal analysis, Methodology, Supervision, Writing – original draft, Writing – review & editing. Meifen Dai: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing.

### Declaration of competing interest

The authors declare no conflicts of interest.

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# References

Abbass-Dick, J., Stern, S.B., Nelson, L.E., Watson, W., Dennis, C.L., 2015. Coparenting breastfeeding support and exclusive breastfeeding: a randomized controlled trial. Pediatrics, 135 (1), 102–110. https://doi.org/10.1542/peds.2014-1416.

Al Namir, H.M.A., B. A. M, Gallagher, L., 2017. Fathers and breastfeeding: attitudes, involvement and support. Br. J. Midwifery 25 (7), 426–440.

- Bennett, A.E., McCartney, D., Kearney, J.M., 2016. Views of fathers in Ireland on the experience and challenges of having a breast-feeding partner. Midwifery 40, 169–176. https://doi.org/10.1016/j.midw.2016.07.004.
- Chang, Y., Valliant, M., Bomba, A.K, 2012. Gender differences in knowledge and attitude regarding breastfeeding. Int. J Consum. Stud 36 (3), 342–351.
- Freed, G.L., Fraley, J.K., Schanler, R.J.J.P., 1992. Attitudes of expectant fathers regarding breast-feeding. Pediatrics 90 (2), 224–227.
- Hansen, E., Tesch, L., Ayton, J., 2018. They're born to get breastfed'- how fathers view breastfeeding: a mixed method study. BMC Pregn. Childbirth 18 (1), 238. https:// doi.org/10.1186/s12884-018-1827-9.
- Henderson, L., McMillan, B., Green, J.M., Renfrew, M.J., 2011. Men and infant feeding: perceptions of embarrassment, sexuality, and social conduct in white low-income British men. Birth 38 (1), 61–70. https://doi.org/10.1111/j.1523-536X.2010.00442.
- Krikitrat, P., Park, C.G., McCreary, L.L., Koenig, M.D., Abboud, S., Sansiriphun, N., Patil, C.L., 2022. Relationships between Thai fathers' self-efficacy to support breastfeeding and exclusive breastfeeding duration. Midwifery 106. https://doi.org/ 10.1016/j.midw.2022.103261.
- Maycock, B., Binns, C.W., Dhaliwal, S., Tohotoa, J., Hauck, Y., Burns, S., Howat, P., 2013. Education and support for fathers improves breastfeeding rates: a randomized controlled trial. J. Hum. Lact. 29 (4), 484–490. https://doi.org/10.1177/ 08900334413484387.
- Ng, R.W.L., Shorey, S., He, H.G., 2019. Integrative review of the factors that influence fathers' involvement in the breastfeeding of their infants. J. Obstet. Gynecol. Neonatal. Nurs. 48 (1), 16–26. https://doi.org/10.1016/j.jogn.2018.10.005.
- Ngoenthong, P., Sansiriphun, N., Fongkaew, W., Chaloumsuk, N., 2020. Integrative review of fathers' perspectives on breastfeeding support. J. Obstet. Gynecol. Neonatal. Nurs. 49 (1), 16–26. https://doi.org/10.1016/j.jogn.2019.09.005.
- Ogbo, F.A., Akombi, B.J., Ahmed, K.Y., Rwabilimbo, A.G., Ogbo, A.O., Uwaibi, N.E., Child Health Research Collaboration GloMACH, 2020. Breastfeeding in the community-how can partners/fathers help? a systematic review. Int. J. Environ. Res. Public Health 17 (2). https://doi.org/10.3390/ijerph17020413.
- Organization, W.H. 10 facts on breastfeeding. Retrieved from http://www.who.int/fe atures/factfiles/breastfeeding/en/.

- Pisacane, A., Continisio, G.I., Aldinucci, M., D'Amora, S., Continisio, P., 2005. A controlled trial of the father's role in breastfeeding promotion. Pediatrics 116 (4), e494–e498. https://doi.org/10.1542/peds.2005-0479.
- Qin, Zhu, 2021. Study On the Effect of Interventions Based On Co-Parenting Theory On Breastfeeding in Primiparous Mothers. Peking Union Medical College.
- Rollins, N.C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C.K., Martines, J.C., Victora, C.G., 2016. Why invest, and what it will take to improve breastfeeding practices? Lancet 387 (10017), 491–504. https://doi.org/10.1016/s0140-6736(15) 01044-2.
- Rosane Odeh Susin, L., & Regina Justo Giugliani, E. (2008). Inclusion of fathers in an intervention to promote breastfeeding: impact on breastfeeding rates. J. Hum. Lact. 24(4), 386–392.
- Scott, J.A., Landers, M.C., Hughes, R.M., Binns, C.W., 2001. Factors associated with breastfeeding at discharge and duration of breastfeeding. J. Paediatr. Child Health 37 (3), 254–261. https://doi.org/10.1046/j.1440-1754.2001.00646.x.
- Sherriff, N., Hall, V., 2011. Engaging and supporting fathers to promote breastfeeding: a new role for Health Visitors? Scand. J. Caring Sci. 25 (3), 467–475. https://doi.org/ 10.1111/j.1471-6712.2010.00850.x.
- Sherriff, N., Hall, V., Panton, C., 2014a. Engaging and supporting fathers to promote breast feeding: a concept analysis. Midwifery 30 (6), 667–677. https://doi.org/ 10.1016/j.midw.2013.07.014.
- Sherriff, N., Hall, V., Pickin, M., 2009. Fathers' perspectives on breastfeeding: ideas for intervention. Br. J. Midwifery 17 (4), 223–227.
- Sherriff, N., Panton, C., Hall, V., 2014b. A new model of father support to promote breastfeeding. Commun. Pract. 87 (5), 20–24.
- Tohotoa, J., Maycock, B., Hauck, Y.L., Howat, P., Burns, S., Binns, C.W., 2009. Dads make a difference: an exploratory study of paternal support for breastfeeding in Perth, Western Australia. Int. Breastfeed J. 4, 15. https://doi.org/10.1186/1746-4358-4-15.
- Van Ryneveld, M., Mwangome, M., Kahindi, J., Jones, C., 2020. Mothers' experiences of exclusive breastfeeding in a postdischarge home setting. Matern. Child Nutr. 16 (4), e13016. https://doi.org/10.1111/mcn.13016.
- WHO, 2009. Infant and Young Child feeding. Model Chapter For Textbooks For Medical Students and Allied Health Professionals. World Health Organization, Geneva.