

Factors intervening in breastfeeding in the first hour of life on the maternity ward

Amamentação na primeira hora de vida na maternidade: fatores intervenientes

Factores interventores en la lactancia materna en la primera hora de vida en la maternidad

Fernanda Garcia Bezerra Góes¹ ; Ana Carla Silveira de Sá¹ ; Andressa Neto Souza¹ ;
Iasmym Alves de Andrade Soares¹ ; Ingrid Lucchese¹ ; Nathália Oliveira Terra¹ 

¹Universidade Federal Fluminense, Rio das Ostras, Brazil; ²Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro, Brazil

ABSTRACT

Objective: to describe the factors intervening in breastfeeding in the first hour of life in the maternity ward from the perspective of mothers and nursing personnel. **Method:** this qualitative study was conducted semi-structured interviews, in the second half of 2019, in a hospital in the interior of Rio de Janeiro State. The *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ®) and Thematic Analysis were used. The research protocol approved by the research ethics committee. **Results:** it was found that not all newborns are breastfed in the first hour due to factors relating to the mother, the baby's clinical condition, delivery type, health personnel, and institution. The rapid anti-HIV test proved to be a limiting factor, as the result is released only after delivery. Furthermore, the guidelines provided by the nursing team favor this practice, while the lack of that routine harms it. **Conclusion:** multidimensional factors interfere with breastfeeding in the first hour of life on the maternity ward.

Descriptors: Hospitals; Maternity; Delivery Rooms; Rooming-in Care; Infant, Newborn; Breast Feeding.

RESUMO

Objetivo: descrever os fatores intervenientes na amamentação na primeira hora de vida na maternidade na perspectiva de puerperas e profissionais de enfermagem. **Método:** estudo qualitativo, desenvolvido no segundo semestre de 2019, em um hospital do interior do Rio de Janeiro, mediante entrevistas semiestruturadas. Utilizaram-se o *software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ®) e a Análise Temática. Protocolo de pesquisa aprovado pelo Comitê de Ética em Pesquisa. **Resultados:** percebeu-se que nem todos os recém-nascidos são amamentados na primeira hora por fatores ligados à mãe, condições clínicas do bebê, tipo de parto, profissionais ou instituição. O teste rápido anti-HIV se mostrou um fator limitador, pois seu resultado é liberado somente após o parto. Ademais, as orientações pela equipe de enfermagem favorecem essa prática, enquanto a falta de rotina a prejudica. **Conclusão:** fatores multidimensionais interferem na amamentação na primeira hora de vida na maternidade.

Descritores: Maternidades; Salas de Parto; Alojamento Conjunto; Recém-Nascido; Aleitamento Materno.

RESUMEN

Objetivo: describir los factores que intervienen en la lactancia materna en la primera hora de vida en la sala de maternidad en la perspectiva de las madres y profesionales de enfermería. **Método:** estudio cualitativo, desarrollado durante el segundo semestre de 2019, en un hospital del interior de Río de Janeiro, a través de entrevistas semiestructuradas. Se utilizaron los softwares *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires* (IRAMUTEQ®) y el Análisis Temático. El Comité de Ética en Investigación aprobó el protocolo de investigación. **Resultados:** se percibió que no todos los neonatos son amamentados en la primera hora debido a factores relacionados con la madre, condiciones clínicas del bebé, tipo de parto, profesionales o institución. La prueba rápida anti-VIH resultó ser un factor limitante, ya que su resultado se da a conocer sólo después del parto. Además, las orientaciones proporcionadas por el equipo de enfermería favorecen esa práctica, mientras que la falta de rutina la perjudica. **Conclusión:** factores multidimensionales interfieren en la lactancia materna en la primera hora de vida en la sala de maternidad.

Descriptores: Maternidades; Salas de Parto; Alojamiento Conjunto; Recién Nacido; Lactancia Materna.

INTRODUCTION

Breastfeeding (BF) is a natural bonding process between mother and child, and breast milk is the main source of food for newborns and infants because it contains essential nutritional and immunological properties for child growth and development^{1,2}. BF should be exclusive until six months of age and supplemented until the second year of life, considering its potential to annually prevent more than 820,000 deaths of children under five years of age, and 20,000 deaths of women from breast cancer³.

This study was financed in part by the *Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro - Brazil* (FAPERJ) – Financial support to Rio de Janeiro State's *Stricto Sensu* Post Graduation Programs – Call number 12/2019.

Corresponding author: Fernanda Garcia Bezerra Góes. E-mail: ferbezerra@gmail.com

Editor in chief: Cristiane Helena Gallasch; Associate Editor: Juliana Amaral Prata

One of the global strategies to increase BF time is the Baby-Friendly Hospital Initiative (BFHI), which deals with the role of health institutions in promoting, protecting and adhering to Exclusive Breastfeeding (EBF)⁴. In the “Ten Steps to Successful Breastfeeding”, the BFHI recommends that professionals help mothers to start BF in the first hour after birth, providing skin-to-skin contact immediately after delivery^{5,6}.

Early initiation of breastfeeding favors colostrum reception by the newborn, which contains protective immunological factors against pathogenic microorganisms, and influences the total duration of BF^{2,7}. Furthermore, it contributes to better adaptation by the newborn to extrauterine life, including glycemic, cardiorespiratory and thermal regulation, and stimulates the maternal pituitary gland to produce oxytocin and prolactin, which are hormones that increase milk production and ejection⁸.

Despite the importance of BF, only 38% of babies in the Americas are EBF up to six months and only 32% continue to be breastfed up to 24 months. Furthermore, more than 78 million newborns in the world in 2017 had to wait more than an hour to be breastfed⁹.

Considering that adherence to this practice remains insufficient, it is necessary to deepen scientific knowledge about facilitating and hindering factors that interfere with its occurrence. Therefore, it is essential to give voice to nursing professionals and puerperal women, envisioning the strengthening of educational, care and management strategies for improvements in this context. Thus, the guiding question of this study arose: What factors interfere with breastfeeding in the first hour of life in the maternity ward? Therefore, the objective was to describe the intervening factors in breastfeeding in the first hour of life in the maternity ward from the perspective of mothers and nursing professionals.

METHOD

This is a descriptive and exploratory study with a qualitative approach¹⁰, and followed the consolidated criteria for reporting qualitative research (COREQ). The setting was the low- and medium-risk maternity hospital of a general municipal hospital in the city of Rio das Ostras, in the interior of the state of Rio de Janeiro, Brazil. It is a reference in the care of parturient women in the municipality and surrounding cities. Five postpartum women and five nursing professionals participated in the study.

The inclusion criteria for postpartum women were: women over 18 years of age who were hospitalized in the rooming-in from one hour after the birth of the child. Women who were seropositive for HIV, with changes in consciousness level and/or whose newborns had any condition that contraindicated breastfeeding were excluded. The inclusion criteria for professionals were: being a nurse, technician or nursing assistant, who worked in binomial care, excluding professionals who were on vacation or leave.

Data collection took place through semi-structured interviews in the second half of 2019. Participants were personally invited and the interviews took place in a private room at the unit to guarantee privacy and anonymity. The interviews were recorded on a cell phone, which were later transcribed in full.

Characterization data and answers to the following interview questions with the mothers were collected: 1. Tell me about your prenatal care; 2. Tell me about your birth; 3. When did you hold your baby against your skin for the first time? How was that moment? 4. When was your baby breastfed for the first time? How was that moment? 5. Tell me about the things which facilitated breastfeeding and difficulties to breastfeed your child after birth.

The interview with the professionals consisted of characterization questions and the following questions: 1. Tell me about the practice of breastfeeding babies here at the hospital; 2. When do babies start breastfeeding in the hospital? 3. How is the process for babies to be breastfed in the hospital after birth? 4. What factors facilitate breastfeeding in the first hour of life? 5. What factors make breastfeeding difficult in the first hour of life?

The textual data of the transcripts were processed in the *Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (IRAMUTEQ®)* software program. Moreover, three stages were followed for data analysis: 1) preparing and codifying the textual corpus; 2) processing textual data in the program; and 3) interpreting the findings by the researchers. Two analytical methods were used, namely a Word Cloud and Similitude Analysis¹¹. After processing, interpretation took place in light of the assumptions of Thematic Content Analysis¹⁰ in order to identify and analyze the nuclei of meaning produced by the text segments through inferences.

The interviews ended prematurely due to the need to interrupt the collection because of the COVID-19 pandemic in 2020, but the internal validity of the study was guaranteed by using the text in the software program¹¹.

All ethical aspects were contemplated upon approval of the research protocol by the Research Ethics Committee of the institution involved and signing of the Informed Consent Form by the participants, who were designated as “Professional” or “Mother”, followed by the order of research participation.

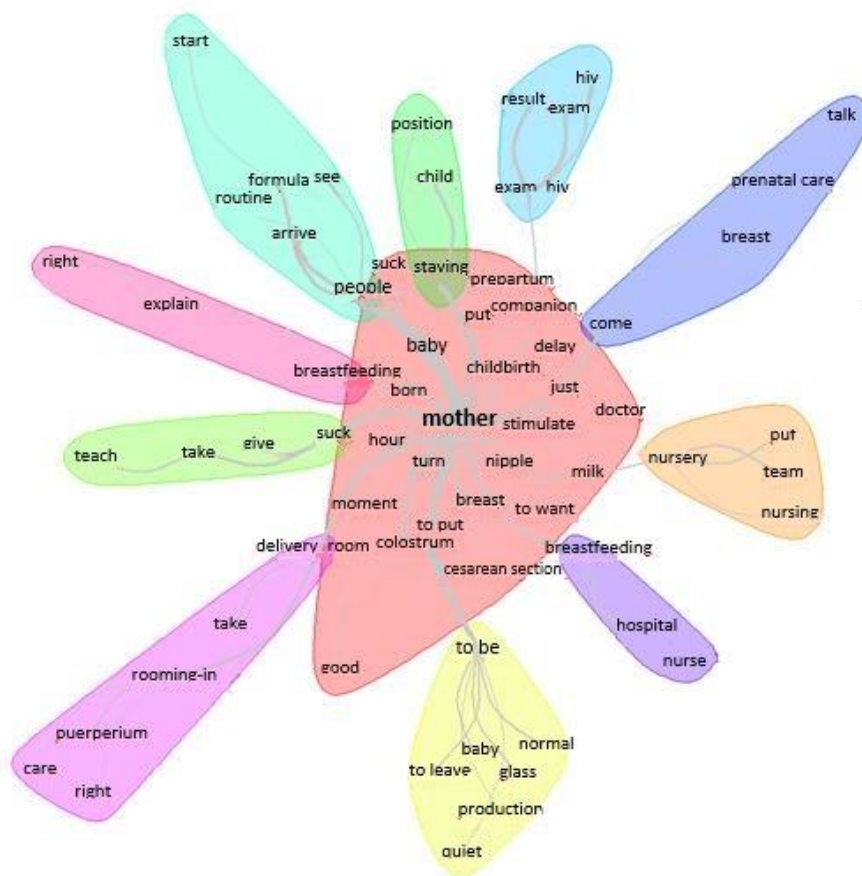


FIGURE 2: Similitude Tree. Rio das Ostras, RJ, Brazil, 2019.

The lexical element “mother” assumed a central and visible position in the tree, connecting with 10 distinct halos that encompass other lexical items which reveal the intervening factors investigated in this study in detail through the text segments.

Then through the connection between the words and the meanings of the answers linked to the lilac halo, which concentrated the terms “delivery room”, “take”, “rooming-in”, “puerperium”, “care” and “right”, it was observed that not all newborns are breastfed in the delivery room or operating room. This finding is reinforced in the testimonies of the mothers themselves, since none of them breastfed their children right after birth in these spaces, despite being babies with good vitality and without complications at birth.

They are not breastfed in the surgical center, they are only breastfed in the puerperium (joint accommodation). (Professional 3)

I went to the room (rooming-in) and they brought her to me. Then I breastfed her. (Mother2)

The word “mother” in the central core and its different connections indicated that several factors related to women directly interfere with the occurrence or not of breastfeeding in the first hour, especially from the perspective of nursing professionals, as these participants mostly used this word. As an example, the fact that some women did not have a protruding nipple emerged as a complicating factor in this process, given the association between the lexical items “mother” and “nipple” in the central halo.

When she's a primiparous mother, she doesn't have a suitable nipple, it's the mothers who suffer the most. (Professional 3)

There are mothers who sometimes don't have a good nipple, they have a flat nipple. (Professional 2)

Still on the mother from the central nucleus, the participants correlated other intervening factors to maternal conditions for the occurrence of early breastfeeding, such as emotional state, presence of pain or nipple trauma, in addition to the woman's own refusal to breastfeed. Thus, the co-occurrence of the lexical item “mother” with the terms “breast”, “to be” and “to want” stands out.

When you have a stressed mother in the postpartum period, you don't want to breastfeed. (Professional 2)

The mother's calm. [...] A mother who is in pain does not do it [...] There are mothers who say right away that she doesn't want to breastfeed. (Professional 5)

Difficulties are that it hurts a little, the baby takes the nipple and it hurts. (Mother 5)

Still in the central halo, the word “mother” maintained an important association with the lexical item “colostrum”, indicating that its presence or absence right after birth is a factor that interferes with breastfeeding in the first hour. Some professionals reported putting the baby to suck regardless of the support in order to stimulate suction, milk let-down and the bond between the binomial. However, in the green halo, which included the terms “people”, “arrive”, “formula”, “routine”, “see” and “start”, the lack of routine for breastfeeding was revealed with the introduction of formula in a cup, a common practice in the research scenario given the recurrence of the words “formula”, “complement” and “little cup”.

It lacks colostrum. [...] Even if the mother has a little colostrum, then she makes formula. (Professional 5)

She took it first from a cup, then from her breast. (Mother 5)

If there is no colostrum, we put them to breastfeed, to suck, to stimulate their suction and her milk. [...] Then follow up with formula. (Professional 2)

Without colostrum it is impossible. [...] Having colostrum or not, it is placed to learn how to suck on the mother's breast. (Professional 1)

Another aspect verified in view of the association of the word “mother” with “delivery” and “cesarean section” (still in the central halo) was that the type of delivery is a factor which directly interferes with early breastfeeding, especially with “cesarean section” as a complicating element due to the effect of anesthesia or position of the bed at degree zero after delivery. It is noteworthy that the lexical item “position” was aligned with “staying” and “child” in a green halo, confirming the limitations imposed by the cesarean section. On the other hand, “normal delivery” emerged with an aspect that facilitates breastfeeding in the first hour due to the ease of mobility and feeding.

The position of the cesarean section, the mother lies down in zero position, [...] and the baby has to breastfeed on its stomach. [...] She stays in that position for 8 hours, she cannot move, she cannot lift her head. [...] this does not happen in normal delivery, because the mother is already sitting down, she is already able to feed. (Professional 5)

The strongest connection in the Similitude Tree occurred between the lexical items “mother” and “baby”. Thus, the baby's clinical conditions also interfere with breastfeeding in the first hour. Therefore, infection, prematurity, respiratory effort, ratio between weight and gestational age below or above expectations and hypoglycemia are situations that limit this practice.

If the baby has an infection, [...] if it's premature, he won't be able to pull it. (Professional 1)

When it's LGA, the doctor starts it, SGA starts it to do a time test (glycemia). [...] When he is born with respiratory effort, [...] he cannot breastfeed. (Professional 2)

If the baby has low blood glucose [...] he has to take a supplement. (Professional 5)

It is noteworthy that one of the halos (light green) concentrated four lexical items that directly refer to the influence of the rapid anti-HIV test result for initiating breastfeeding in the research scenario. In this regard, the availability of the result of this test only after delivery emerged as a limiting factor for breastfeeding in the delivery room.

In the cup first, because we were waiting for the HIV test result to come out. (Mother 5)

She only breastfeeds after the results of the HIV test arrive. (Professional 3)

Issues related to the hospital, nursing and teamwork were also cited for the success or failure of early breastfeeding, which was evident in the lilac halo that encompassed the terms “breastfeeding”, “hospital” and “nurse”, in the orange halo with “nursery”, “put”, “team” and “nursing”, in the pink halo with “right”, “explain” and “breastfeeding” and in the green halo with “teach”, “take”, “give” and “suck”.

It is noted that guidance and support provided by the nursing team in the hospital environment favor this practice, especially in rooming-in. However, lack of routine and different actions among professionals were considered as hindering factors. Thus, cohesion between team members, training, routines and protocols on the subject were mentioned as possibilities to improve this practice.

Having a cohesive team, doctors, nurses, from both sectors. [...] Everyone speaking the same language, but here it is not like that. [...] Missing breastfeeding routine. [...] Team training, breastfeeding protocols, because it is not enough for the nursery team to put them on, but [...] not for the maternity ward. (Professional 4)

Sometimes the doctor puts it on (breastfeeding in the delivery room). There are doctors who don't. (Professional 2)

I only had it easy when the nurse explained it to me straight. (Mother 1)

On the other hand, it was observed from the blue halo which included the words “come”, “breast”, “prenatal care” and “talk” that most mothers were not instructed about breastfeeding during pregnancy. For professional 1, this affects women’s understanding of this topic. According to this participant, this preparation takes place when prenatal care is performed by a nurse, which is ratified by Mother 1 who had all prenatal consultations with a nurse and reported that she was advised about breastfeeding, including in the first hour of life.

I had no breastfeeding guidance during prenatal care. (Mother 3)

The patient always comes raw from weak prenatal care, without understanding what breastfeeding is. [...] The units which have a nurse doing prenatal care work. [...] But as it depends on the doctor, they don’t do it. (Professional 1)

DISCUSSION

The study described multidimensional factors involved in breastfeeding in the first hour of life, verifying that not all newborns are breastfed early in this maternity hospital, especially in the delivery room, despite being born with good vitality and without interurrences. However, this care should not be suppressed, as it is essential for the natural stimulation of the newborn’s reflexes and to promote breastfeeding initiation on demand¹².

The absence of this practice favors introducing formulas, a condition observed in this study, and increases the risk of early weaning, reducing the chances of breastfeeding lasting up to six months by half. The use of food supplements in the maternity ward also increases the chances of the mother having problems with the breasts in the puerperium, also making it difficult to maintain breastfeeding¹³.

When the newborn is separated from the mother in the delivery room and joins her a long time later in rooming-in, as reported by the participants, the woman’s right to be with her baby is also violated, and vice versa. Such separation can cause damage to the binomial bond and the neuropsychological development of the baby¹⁴.

The absence of a protruding nipple in some women was a factor which hindered early breastfeeding. A cross-sectional study showed that the nipple anatomy is a determining factor for early weaning, especially in cases of flat or inverted nipples, with the protruding nipple being a facilitating factor for breastfeeding¹⁵, reinforcing the importance of guidance by the team in view of these limitations.

The mother’s emotional state was another element identified as a difficulty. According to the literature, non-breastfeeding has been increasingly influenced by psycho-emotional reasons, such as stress and anxiety¹⁶. In addition, the frustration of not being able to breastfeed brings feelings of impotence, guilt and sadness, and may even be a trigger for postpartum depression¹⁷. Nipple injuries and pain can also make breastfeeding not happen properly. Thus, it is necessary to consider the emotions experienced by the woman, as her emotional state will influence the production, ejection and quality of milk¹⁶.

Another relevant finding was that the presence or absence of colostrum soon after birth is a factor which interferes with breastfeeding in the first hour, which is consistent with the findings of another study that reinforced the importance of stimulating suction for milk production¹⁸. Therefore, there is a need for constant support and encouragement from health professionals with mothers to minimize the abandonment rates of this practice.

The type of delivery was also cited as an intervening factor, especially cesarean delivery as a difficulty due to anesthesia and the position of the head of the bed at degree zero. In addition, according to the literature, women who undergo cesarean sections immediately release less oxytocin, an essential hormone for support¹⁷, in addition to feeling more pain and discomfort arising from the surgery¹⁹.

In agreement with the testimonies, a study pointed out that vaginal delivery had a protective effect against the delay in starting breastfeeding compared to cesarean section, and it was verified that almost 80.0% of mothers in the vaginal delivery group breastfed in the first hour, while only 69.5% breastfed in the first hour in the cesarean group deliveries²⁰.

The baby’s clinical conditions also interfere with the success of early breastfeeding, according to the findings. Evidence indicates that newborns with adequate weight, good vitality and good Apgar scores should be breastfed immediately in the delivery room, including because it is easier to locate the nipple through smell and because it sucks more easily²¹, which is not always recurrent in the investigated scenario.

Still regarding the clinical conditions of the baby, infection, prematurity, respiratory effort, relationship between weight and gestational age below or above the expected and hypoglycemia emerged as complicating factors in this process, corroborating the scientific evidence²¹. This is because these babies may actually have greater difficulty in sucking at the breast and are often taken immediately for special care after delivery.

The rapid anti-HIV test for early initiation of breastfeeding proved to be an important limiting factor, as the result is only released after delivery. However, this test should be performed during prenatal care and used occasionally during hospitalization, and only in women with unknown serological status^{22,23}. Its indiscriminate use generates delays in returning the results, jeopardizing actions to prevent vertical transmission and postponing BF beyond the first hour²³, as happened with the mothers interviewed, whose results were all negative.

Guidance and support from the hospital's nursing team also emerged as facilitators of this practice. A study showed that most puerperal women were guided by the nurse in rooming-in about breastfeeding²⁴, reinforcing the social role of educator in this context. However, such guidelines should be initiated during prenatal care, which was not evidenced among the mothers in the current study.

Finally, there is no established breastfeeding routine in the investigated institution, with divergent practices among professionals, making the introduction of infant formula common. However, the World Health Organization (WHO) recommends that newborns capable of breastfeeding should not be given liquid foods other than breast milk, unless medically indicated¹³. Another study reinforces that there are still obstacles to the occurrence of this practice, such as intense demand from the sector and the unwillingness of some pediatricians²⁵.

Study limitations

The number of participants stands out among the study limitations, which became restricted due to collection being interrupted because of the COVID-19 pandemic, preventing an expansion of knowledge about other intervening factors. New research with other methodological formats and a larger number of participants is considered important to advance scientific knowledge on the subject.

CONCLUSION

Multiple factors related to the mother, the baby, the professionals, the type of delivery and the institution interfere with breastfeeding in the first hour of life in the maternity ward. However, there is a preponderance of factors which limit this practice in the investigated scenario.

As an implication for the health area, recognizing these factors serves as a subsidy for strengthening management, care and educational policies and strategies at the institutional level with the objective of overcoming the hindering factors, and thereby raising the rates of breastfeeding in the first hour.

REFERENCES

1. Lima APC, Nascimento DS, Martins MMF. The practice of breastfeeding and the factors that take to early weaning: an integrating review. *J Health Biol Sci.* 2018 [cited 2021 May 18]; 6(2):189-96. DOI: <http://dx.doi.org/10.12662/2317-3076jhbs.v6i2.1633.p189-196.2018>.
2. Silva CPV, Fettermann FA, Assumpção PK, Rosa AB, Fernandes MNS, Donaduzzi DSS. Exclusive breastfeeding in the first time of life of the newborn. *Rev Saúde (Santa Maria).* 2020 [cited 2021 May 18]; 46(1):1-14. DOI: <http://dx.doi.org/10.5902/2236583441745>.
3. Boccolini CS, Boccolini PMM, Monteiro FR, Venâncio SI, Giugliani ERJ. Breastfeeding indicators trends in Brazil for three decades. *Rev Saúde Pública.* 2017 [cited 2021 May 18]; 51:108. DOI: <http://dx.doi.org/10.11606/S1518-8787.2017051000029>.
4. Dias LMO, Batista AS, Brandão IM, Carvalho FLO, Martins FL, Costa DM et al. Breast-feeding: family influence and the importance of public policies on breastfeeding. *Rev Saúde em Foco.* 2019 [cited 2021 May 26]; 11:634-48. Available from: https://portal.unisepe.com.br/unifia/wp-content/uploads/sites/10001/2019/06/057_Amamenta%C3%A7%C3%A3o-Influ%C3%Aancia-familiar-e-a-import%C3%A2ncia-das-pol%C3%ADticas-p%C3%ABlicas-de-aleitamento-materno_634_a_648.pdf.
5. Silva CM, Pellegrinelli ALR, Pereira SCL, Passos IR, Santos LC. Educational practices in accordance with the "Ten steps to successful breastfeeding" in a Human Milk Bank. *Ciênc Saúde Colet.* 2017 [cited 2021 May 27]; 22(5):1661-71. DOI: <http://dx.doi.org/10.1590/1413-81232017225.14442015>.
6. Campos PM, Gouveia HG, Strada JKR, Moraes BA. Skin-to-skin contact and breastfeeding of newborns in a university hospital. *Rev Gaúcha Enferm.* 2020 [cited 2021 May 26]; 41(esp):e20190154. DOI: <https://doi.org/10.1590/1983-1447.2020.20190154>.
7. Sousa PKS, Novaes TG, Magalhães EIS, Gomes AT, Bezerra VM, Netto MP et al. Prevalence and factors associated with maternal breastfeeding in the first hour of life in full-term live births in southwest Bahia, Brazil, 2017. *Epidemiol Serv Saúde.* 2020 [cited 2021 May 27]; 29(2): e2019384. DOI: <https://doi.org/10.5123/S1679-49742020000200016>.
8. Silva JLP, Linhares FMP, Barros AA, Souza AG, Alves DS, Andrade PON. Factors associated with breastfeeding in the first hour of life in a baby-friendly hospital. *Texto Contexto Enferm.* 2018 [cited 2021 May 27]; 27(4):e4190017. DOI: <https://doi.org/10.1590/0104-07072018004190017>.
9. Silva MA, Travaini MCR, Nogueira LDP, Oliveira KCS. Breastfeeding and factors that may influence weaning: a challenge for nursing. *Rev Enferm em Evidência.* 2019 [cited 2021 May 27]; 3(1):74-91. Available from: <https://www.unifafibe.com.br/revistasonline/arquivos/enfermagemem evidencia/sumario/83/18112019170807.pdf>.
10. Minayo MCS. Qualitative analysis: theory, steps and reliability. *Ciênc Saúde Colet.* 2012 [cited 2021 May 31]; 17(3):621-26. DOI: <https://doi.org/10.1590/S1413-81232012000300007>.

11. Góes FGB, Santos AST, Campos BL, Silva ACSS, Silva LF, França LCM. Use of IRAMUTEQ software in qualitative research: an experience report. *Rev Enferm UFSM*. 2021 [cited 2021 May 31]; 11(e63):1-22. DOI: <https://doi.org/10.5902/2179769264425>.
12. Antunes MCFB, Teixeira JDBM, Costa IMMSSR. Skin-to-skin contact in breastfeeding success: a scoping review. *Rev Recien*. 2022 [cited 2022 Aug 09]; 12(38):362-74. DOI: <https://doi.org/10.24276/rrecien2022.12.38.362-374>.
13. Silva OLO, Rea MF, Sarti FM, Silva MO. Association between infant formula and pacifier supply in maternity and breastfeeding in the first six months of life. *Demetra*. 2019 [cited 2022 Aug 17]; 14(supl1):e43555. DOI: <https://doi.org/10.12957/DEMETRA.2019.43555>.
14. Lansky S, Souza KV, Peixoto ERM, Oliveira BJ, Diniz CSG, Vieira NF et al. Obstetric violence: influences of the senses of birth exhibition in pregnant women childbirth experience. *Ciênc Saúde Colet*. 2019 [cited 2022 Aug 17]; 24(8):2811-23. DOI: <https://doi.org/10.1590/1413-81232018248.30102017>.
15. Pitilin EB, Polleto M, Gasparin VA, Oliveira PP, Sbardelotto T, Schirmer J. Factors associated with breastfeeding self-efficacy according to nipple types. *Rev Rene*. 2019 [cited 2022 Aug 18]; 20:e41351. DOI: <https://doi.org/10.15253/2175-6783.20192041351>.
16. Lima ECA, Almeida EJR. Breastfeeding: challenges faced by the mother in the breastfeeding process. *Braz J of Develop*. 2020 [cited 2022 Aug 18]; 6(11):87188-218. DOI: <https://doi.org/10.34117/bjdv6n11-225>.
17. Jardim TS, Viana GP, Cruz WO, Assis TO, Lemos GD, Almeida KJS. Principles related factors to impossibility of breastfeeding in assisted puerperas. *Braz J Hea Rev*. 2019 [cited 2022 Aug 18]; 2(6):5024-46. Available from: <https://www.brazilianjournals.com/ojs/index.php/BJHR/article/view/4415/5557>.
18. Palheta QAF, Aguiar MFR. Importance of nursing assistance for the promotion of breastfeeding. *Rev Eletr Acervo Enferm*. 2021 [cited 2022 Aug 09]; 8:e5926. DOI: <https://doi.org/10.25248/reaenf.e5926.2021>.
19. Silva MFFS, Pereira LB, Ferreira TN, Souza AAM. Breastfeeding self-efficacy and interrelated factors. *Rev Rene*. 2018c [cited 2022 Aug 09]; 19:e3175. DOI: <https://doi.org/10.15253/2175-6783.2018193175>.
20. Arruda GT, Barreto SC, Morin VL, Petter GN, Braz MM, Pivetta HMF. Is there a relation between mode of delivery and breastfeeding in the first hour of life?. *Rev Bras Promoc Saúde*. 2018 [cited 2022 Aug 09]; 31(2). DOI: <https://doi.org/10.5020/18061230.2018.7321>.
21. Terra NO, Góes FG, Souza NA, Ledo BC, Campos BL, Barcellos TMT. Intervening factors in adherence to breastfeeding within the first hour of life: integrative review. *Rev Eletr Enferm*. 2020 [cited 2022 Aug 08]; 22:62254. DOI: <https://doi.org/10.5216/ree.v22.62254>.
22. Domingues R, Saraceni V, Leal MDC. Mother to child transmission of HIV in Brazil: Data from the "Birth in Brazil study", a national hospital-based study. *Public Library of Science One*. 2018 [cited 2022 Aug 18]; 13(2):e0192985. DOI: <https://dx.doi.org/10.1371/10.1371/journal.pone.0192985>.
23. Oliveira MIC, Silva KSD, Gomes DM. Factors associated with submission to HIV rapid test in childbirth care. *Ciênc Saúde Colet*. 2018 [cited 2022 Aug 18]; 23(2):575-84. DOI: <https://dx.doi.org/10.1590/1413-81232018232.11612016>.
24. Mercado NC, Souza GDS, Silva MMJ, Anseloni MG. Nursing care and guidelines for puerperae in rooming-in. *Rev Enferm UFPE*. 2017 [cited 2022 Aug 17]; 11(supl9):3508-15. Available from: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/234480/27670>.
25. Souza HLR e, Fernandes FECV, Pereira RCL de F, Melo RA de. Understanding of nursing about skin-to-skin contact between mother/baby in the delivery room. *Rev Enferm UFSM*. 2020 [cited 2022 Aug 09]; 10:e93. DOI: <https://dx.doi.org/10.5902/2179769242729>.