

# Exclusive breastfeeding difficulty in rooming-in care: integrative review

## Dificuldade no aleitamento materno exclusivo no alojamento conjunto: revisão integrativa

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### ABSTRACT

**Purpose:** Identify and analyze the studies that evaluated the difficulties faced by the puerperal women to implement exclusive breastfeeding up to 72 hours after delivery during the period in which they stayed in the rooming-in. **Research strategy:** The search for articles was carried out on the PubMed, BVS, and SciELO platforms. **Selection criteria:** Original articles were selected, with an available summary, published between 2010 and 2020 in Portuguese, English or Spanish that investigated the difficulties observed in exclusive breastfeeding during which the mother-baby dyad stayed in the period of Rooming-in Care. **Results:** The final sample of this study consisted of 11 articles published between the years 2010 and 2019, having Brazil being the country with the largest number of publications. The sample sizes in the studies ranged from 40 to 1,691 puerperal women, having ages between 13 and 46 years. It was observed a prevalence of breastfeeding in the first hour after birth between 43.9% and 77.3%. **Conclusion:** Most articles pointed out that the main difficulty in relation to breastfeeding in the postpartum period refers to nipple trauma. Nipple trauma is caused by characteristics of breastfeeding, women, breast, pregnancy, childbirth and the postpartum support network.

**Keywords:** Breastfeeding; Weaning; Rooming-in care; Postpartum period; Public health

### RESUMO

**Objetivos:** Identificar e analisar os estudos que avaliaram as dificuldades enfrentadas pelas puérperas para implementação do aleitamento materno exclusivo até 72 horas após o parto, durante o período em que permaneceram no alojamento conjunto. **Estratégia de pesquisa:** Foi realizada busca de artigos nas plataformas PubMed, BVS e SciELO. **Critérios de seleção:** Foram selecionados artigos originais, com resumo disponível, publicados entre os anos de 2010 e 2020, em português, inglês ou espanhol, que investigaram as dificuldades observadas no aleitamento materno exclusivo durante o período em que a díade mãe/bebê permaneceu no alojamento conjunto. **Resultados:** A amostra final consistiu em 11 artigos publicados entre os anos de 2010 e 2019, sendo o Brasil o país com maior número de publicações. O tamanho das amostras nos estudos variou de 40 a 1.691 puérperas, com faixas etárias entre 13 e 46 anos. Observou-se prevalência de amamentação na primeira hora após o nascimento entre 43,9% e 77,3%. **Conclusão:** A maioria dos artigos indicou que a principal dificuldade no aleitamento materno no período pós-parto se refere aos traumas mamilares. Os traumas mamilares são ocasionados por características do aleitamento, da mulher, da mama, da gestação, do parto e da rede de apoio da puérpera.

**Palavras-chave:** Aleitamento materno; Desmame; Alojamento conjunto; Período pós-parto; Saúde pública

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## INTRODUCTION

Breastfeeding (BF) is an important factor in health promotion because it is a technique of protection, bonding, affection and nutrition for children<sup>(1)</sup>. Breastfeeding is the most economical and effective practice for reducing infant morbidity and mortality, when performed exclusively in the first six months and complemented up to two years of age or older, as recommended by the World Health Organization (WHO)<sup>(2)</sup>.

Breastfeeding is much more than nourishing the child, it is a process that involves deep interaction between mother and child, and promotes numerous benefits for both<sup>(3)</sup>. For the mother, breastfeeding reduces the likelihood of breast cancer, provides more intervals between deliveries, and facilitates uterine involution, with a consequent reduction in postpartum bleeding<sup>(4)</sup>. Human milk contains hundreds of bioactive molecules that protect the newborn against infection and inflammation and contribute to immune maturation, organ development, and healthy microbial colonization. Compared with formula feeding, breastfeeding has been associated with decreased morbidity and mortality in infants and lower incidence of gastrointestinal infections and inflammatory, respiratory and allergic diseases<sup>(5-7)</sup>, favoring cognitive and psychomotor development and the proper development of facial structures, among other benefits for the baby<sup>(8)</sup>. Colostrum, a low-volume milk secreted in the first days, contains epidermal growth factor, which accelerates the maturation of the intestinal mucosa, and bioactive immunological factors that confer immunological protection to the infant, preventing intestinal colonization by pathogenic microorganisms<sup>(9)</sup>. Breastfeeding can influence the development of maternal sensitivity, and a sensitive mother tends to identify, interpret, and respond to her infant's signals promptly and appropriately, leading to a greater likelihood that the infant will develop a secure attachment to the mother. This secure attachment is of paramount importance for the development of emotionally positive, less aggressive, more self-confident, socially competent, and cooperative children<sup>(10)</sup>.

Rooming-in is defined as a hospital system in which the newborn, soon after birth, remains at the mother's side 24 hours a day, in the same environment, until hospital discharge. This system is important because it allows the multi-professional team to provide direct care, control of the environment and articulation with other sectors, enabling the prevention of infections and contributing to the health of the mother-child binomial<sup>(11)</sup>.

The study of the dimensions that may interfere in the maintenance of exclusive breastfeeding from the first hours of life can help in devising strategies that aim to encourage and support this practice. The data obtained can help professionals and trainees target more specific orientations and interventions in these early days. Many studies are concerned with investigating the reasons for early weaning, but little attention has been paid

to identifying the problems that occur specifically at this time. Only then will it be possible to achieve a more humanized and individualized assistance.

## OBJECTIVE

The present study aimed to identify and analyze the studies that evaluated the difficulties faced by puerperal women to implement exclusive breastfeeding up to 72 hours after birth, during the period they stayed in the rooming-in.

## METHODS

### Research strategy

This is an integrative literature review, which involved the following steps: elaboration of the guiding question; establishment of key words and criteria for inclusion and exclusion of articles; search, selection, and critical analysis of the articles.

The following guiding question for this study was established: "What is the main difficulty in breastfeeding faced by puerperal women accompanied in the rooming-in unit up to 72 hours after delivery?" The keywords used in the search were: breastfeeding and rooming-in, in addition to their English and Spanish equivalents. We opted for a broader search so as not to lose relevant studies.

Search strategies were carried out in the platforms PubMed (Medline), BVS (Lilacs, IBECs, Cumed, BBO, MedCaribe) and SciELO (Chart 1).

### Selection criteria

The inclusion criteria for the articles were: to be original; to have an abstract available; to have been published from 2010 to 2020, in Portuguese, English, or Spanish; to have investigated the difficulties faced by puerperae in implementing exclusive breastfeeding during the period of rooming-in. Exclusion criteria were: the articles that evaluated the mother-baby binomial 72 hours after birth, even if in a rooming-in setting.

Two researchers carried out the selection of articles independently, after reading the titles and abstracts. Data management was done using an Excel spreadsheet, which allowed the evaluators two responses for inclusion of the studies: yes or no. The articles that received "yes" from both evaluators were included for reading in full, and those that received "no" answers from both were excluded from the study. It was established that if there were divergences in the answers between the two evaluators, a

**Chart 1.** Data Search Strategy

Database	Search Terms
BVS and SciELO	(tw:(("Aleitamento Materno" OR "Breast Feeding" OR "Lactancia Materna"))) AND (tw:(("Alojamento Conjunto" OR "Alojamiento Conjunto" OR "Rooming-in Care")))
PubMed	("Breast Feeding"[Mesh]) AND "Rooming-in Care"[Mesh]

consensus meeting would be held, and if the impasse remained, a third evaluator would be consulted.

### Data analysis

The analysis of the material was performed in two stages. In the first, the duplicate references in the consulted databases were eliminated and, by reading the titles and abstracts, the articles that did not meet the established objectives were excluded. In the second stage, the articles were obtained and read in full (Figure 1).

Of the articles selected for analysis of the results and discussion of the findings, the author, year of publication, country of origin, objectives, sample characteristics, results, and conclusion were recorded.

### RESULTS

Initially, 232 articles were found. After consensus of the two evaluators, 43 articles were included for full reading, of which 32 were excluded for not meeting the established inclusion criteria, resulting in 11 selected articles (Chart 2).

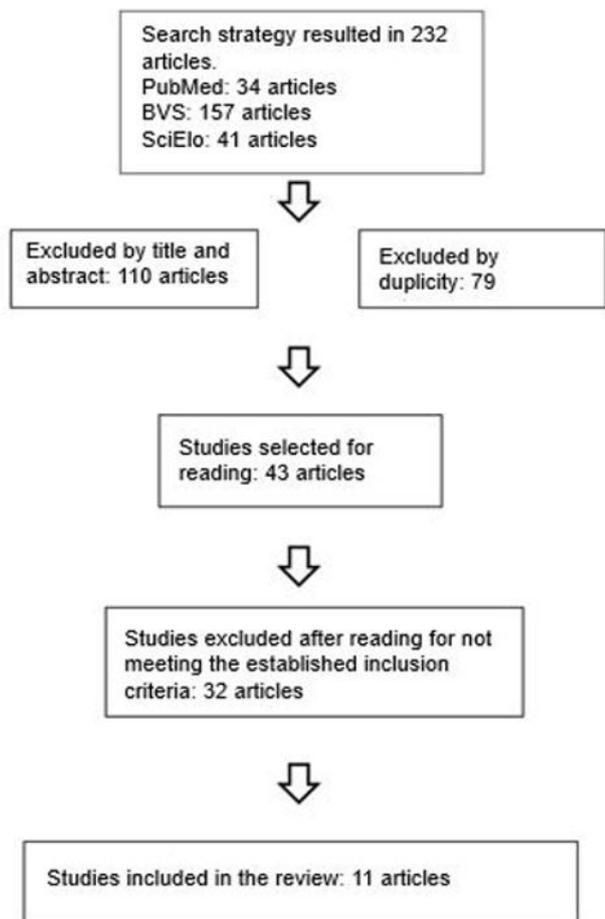


Figure 1. Flowchart of the study selection process

The sample of this study therefore consisted of 11 articles published in the years 2010<sup>(12)</sup>, 2011<sup>(13)</sup>, 2013<sup>(14)</sup>, 2014<sup>(15)</sup>, 2016<sup>(16,17)</sup>, 2017<sup>(18)</sup>, 2018<sup>(19,20)</sup> and 2019<sup>(21,22)</sup>, showing stability over the years. Sample sizes in the studies ranged from 40<sup>(16)</sup> to 1.691<sup>(15)</sup> puerperae with age range of 13<sup>(14)</sup> to 46<sup>(14)</sup> years.

With regard to the results found by the studies, difficulties in establishing emotional ties were indicated as a negative factor influencing exclusive BF (EBF) in rooming-in in 1 (9,1%) study<sup>(18)</sup>. These difficulties were characterized as mothers hardly touching their babies, holding the baby nervously, and mothers not maintaining eye contact with their babies. These factors were explained by the fact that in the postpartum period mothers are more sensitive and susceptible in their ability to breastfeed.<sup>(18)</sup>

Breast problems such as engorgement, blocked ducts or mastitis were also cited in only 1 (9,1%) article<sup>(20)</sup>. The causes of nipple lesions are multifactorial and studies have pointed out that the position of the child during breastfeeding and the breastfeeding technique are factors with great influence on the appearance of nipple trauma<sup>(13,20)</sup>.

The importance of knowledge about the correct breastfeeding technique was also pointed out in the studies, since the adequate positioning of the pair and the baby's effective grip favor the prevention of pain while breastfeeding and breast trauma, reducing the probability of interrupting breastfeeding due to complications<sup>(18,20)</sup>.

Complaints regarding the presence of pain<sup>(13,20)</sup>, infant refusal<sup>(12,20)</sup> and the belief that milk is weak or insufficient<sup>(12,20)</sup> were quoted in 2 (18,2%) papers each. According to the papers, women's understanding of breastfeeding directly influences their attitude towards breastfeeding<sup>(12)</sup>, the mother interprets the child's crying as a lack of satiation or hunger and waits for the child to sleep after feeding, considering her milk insufficient and of low quality to meet the nutritional demands of her child<sup>(20)</sup>.

The type of nipple of the lactating women appeared as a hindrance to the practice of breastfeeding in rooming-in in 3 (27,3%) articles<sup>(18,20,22)</sup>. Although successful breastfeeding does not depend solely on nipple type, the anatomical prevalence of nipple protrusion has been shown to be a contributing factor<sup>(20,22)</sup>. Positive practices positively affect breastfeeding and increase confidence, motivation, self-efficacy, and willingness to breastfeed<sup>(22)</sup>.

The main difficulties encountered in breastfeeding by puerperal women are related to breast trauma<sup>(13,15,17-21)</sup>, quoted in 7 (63,6%) studies, whereby, in 2<sup>(15,19)</sup>, there was an association with the presence of pain and, in 4<sup>(13,15,17,18)</sup>, with the incorrect grip.

It was also found that the prevalence of breastfeeding in the first hour after birth was surveyed in 2 (18,2%) works and ranged from 43,9%<sup>(14)</sup> and 77,3%<sup>(16)</sup>.

### DISCUSSION

Despite the numerous beneficial effects of EBF<sup>(5,6)</sup>, the early interruption of this practice continues to be one of the most important public health problems in Brazil<sup>(23)</sup>. The prevalence of EBF in children under 6 months of age is 54% in all Brazilian capitals<sup>(24)</sup>. The highest percentages of EBF were identified in the Midwest Regions (59%) and North (58%), followed by the Southern Regions (56%) and Southeast (55%). On the other hand, the Northeast Region (39%) had the lowest prevalence of EBF compared to other regions<sup>(24)</sup>. In China, the largest population in the world and Asia, studies reported that the

**Chart 2.** Main findings in the literature on the difficulties faced by puerperae in maintaining exclusive breastfeeding during the period of rooming-in

Authors, year of publication, country of origin	Objective	Sample characteristics	Results	Conclusion
Oliveira et al. (2010) <sup>(12)</sup> Brazil	- Verify the factors related to early weaning in multiparous women in a rooming house.	- 87 women. - Aged between 20 and 25 years.	- Risk factors for early weaning in RI: newborn refusing milk was more prevalent, both among women with less than seven years of schooling (n=2; 4.25%) and among those with more than seven years of schooling (n=11; 23,4%). - Among puerperae with higher education, the reasons for weaning in RI were: the mother considered she had too little milk (n=7; 14.9%) and the mother believed that the milk did not satisfy the baby's hunger (n=6; 12.8%).	- It is observed that greater clarification is needed among mothers, still in the rooming-in, about the process of breastfeeding.
Moraes et al. (2011) <sup>(13)</sup> Uruguay	- Description and analysis of breastfeeding technique and presence of nipple cracks before hospital discharge.	-204 mother-baby binomials. - Mean maternal age: 24.0 years.	- The frequency of complications was 76.5%, with 57.3% pain during breastfeeding and 40.1% nipple cracks. - An association was observed between changes in the breastfeeding position, difficulties for the baby to grasp the nipple and sucking with the appearance of nipple cracks (p= 0,000). - Having cracks in previous pregnancies was associated with the appearance of cracks in the current pregnancy (IC: 95%: 1,66-9,35) (p= 0,000). - Having previous children reduces the occurrence of complications (IC: 95%: 0,13-0,77) (p=0,01).	- The frequency of breastfeeding with complications is high before hospital discharge and is associated with primiparity. - There is an association between changes in the breastfeeding position, difficulties for the baby to grasp the nipple and sucking with the appearance of nipple cracks. - A history of nipple cracking in previous pregnancies is associated with cracking in the current pregnancy.
Pereira et al. (2013) <sup>(14)</sup> Brazil	- Investigate how Step 4 of the Baby Friendly Hospital Initiative was applied, assess the prevalence of breastfeeding in the first hour after birth, and analyze the factors associated with not breastfeeding in this period of life.	- 403 women. - Age ranged from 13 to 46 years, with 24.3% being adolescents.	- The prevalence of breastfeeding in the first hour after birth was 43.9%. - Factors that influenced breastfeeding in the first hour of life: women who were non-black (PR = 0.62; 95% CI: 0.42-0.90), multiparous (PR = 0.66; 95% CI: 0.47-0.93), had prenatal care (PR = 0.23; 95% CI: 0.08-0.67), delivered normally (PR = 0.41; 95% CI: 0.28-0.60), had a birth weight of 2.500g (PR = 0.31; 95% CI: 0.11-0.86) and who received help from health care staff to breastfeed in the delivery room (PR = 0.51; 95% CI: 0.36-0.72).	- The help provided by the health care team for breastfeeding at birth, as well as the non-black maternal color, multiparity, prenatal care, normal delivery, and adequate birth weight contributed to the initiation of breastfeeding in the first hour of life.
Shimoda et al. (2014) <sup>(15)</sup> Brazil	- To verify the association between persistence of breast lesions in puerperal women and breastfeeding conditions during cohabitation.	- 60 puerperae with breast lesions during hospitalization.	- Of the women who breastfed exclusively, 12 (23.1%) had nipple lesions and 40 (76.9%) had intact nipples. - Of the 16 puerperae who still had lesions, 14 (87.5%) were of the excoriation type and 2 (12.5%), fissures, all in the healing process. - Less pigmented nipple-areolar region influenced nipple lesion persistence (p=0.041). - Persistence of nipple lesion was associated with nipple pain (p=0.006). - Occurrence of nipple lesions was associated with inadequate latching of the newborn to the breast (p=0.007).	- There was a significant association between persistence of a breast lesion, inadequate sucking pattern of the neonate, and breast pain. - These associations reinforce the importance of breastfeeding assistance, both in the rooming-in and in the first week postpartum, for the maintenance of breastfeeding.
Sá et al. (2016) <sup>(16)</sup> Brasil	- To identify the factors associated with breastfeeding in the first hour of life.	-1,027 mother-baby binomials. - Maternal age between 20 and 29 years.	- The prevalence of breastfeeding in the first hour of life was 77.3%. - Factors that negatively interfered with breastfeeding in the first hour: not having had adequate prenatal care (PR = 0.72), having had a cesarean delivery (PR = 0.88), and mother and child not staying in a room together after delivery (PR = 0.28).	- Factors related to health services, such as prenatal care, type of delivery, and rooming-in interfered with breastfeeding in the first hour. - The practices of health services and health professionals were the main determinants of breastfeeding in the first hour.

**Subtitle:** RI = rooming-in; CI = confidence interval; PR = prevalence ratio; n = number; (p=) = p value

Chart 2. Continued...

Authors, year of publication, country of origin	Objective	Sample characteristics	Results	Conclusion
Cirico et al. (2016) <sup>(17)</sup> Brasil	- To evaluate the suitability of the Breast Trauma Indicator tool, implemented in the rooming-in unit of a university hospital, as a quality care indicator.	- 1,691 puerperae. - Most of the puerperae were adults (85.7%), over 19 years old.	- The average breast trauma index was 55.5%, the most frequent trauma was excoriation (62.2%), and the main cause was inadequate latching by the newborn (44%). - Maternal and neonatal variables significantly associated with the presence of breast trauma ( $p \leq 0.05$ ): age group (adolescent <19 years - 63.9%), parity (primiparous - 60.2%), skin color (white - 62.6%), color of the nipple-areolar region (pinkish - 70.3%), not being a premature newborn (58.6%), stay of the newborn in the neonatal intensive care unit (66.7%), having had previous trauma (57.0%), having inadequate sucking pattern (70.1%).	- The most frequent type of breast trauma was excoriation and the main cause was inadequate latching by the newborn. - Maternal and neonatal factors are associated with breast trauma
Rosa and Delgado (2017) <sup>(18)</sup> Brazil	- To verify maternal knowledge about breastfeeding and introduction to food and to identify the difficulties of breastfeeding in the joint housing of a university hospital.	- 40 mother-infant binomials hospitalized in rooming-in. - Mean maternal age: 26 years	- The frequency of difficulties in breastfeeding varied between 5% and 45%, according to the aspect evaluated. - The aspects with the highest number of behaviors indicating difficulties in the initiation of breastfeeding were: breast anatomy, sucking, and establishing affectionate bonds. - In the aspect of breast anatomy, it was observed that 45% (n=18) of the mothers had breast tissue with abrasions, fissures and redness and 13% (n=5) had flat or inverted nipples. - With reference to the baby's sucking aspect, 40% (n=16) had their lower lip turned inward during feeding, 30% (n=12) maintained rapid sucking with clicking, and 28% (n=11) did not have their mouth wide open to perform the latch. - Regarding the aspect of affective bonds, frequent difficult behaviors were found, with 30% (n=12) of the mothers hardly touching the babies, 18% (n=7) of the mothers nervously holding the baby, and 15% (n=6) not maintaining eye contact with the babies. - Breast tissue abrasions were associated with baby not maintaining the latch, rapid sucking with clicking, and inward-facing lower lip at breastfeeding ( $p < 0.05$ ).	- The mothers investigated have limited knowledge about breastfeeding, are unaware of the health benefits to women, but cited benefits in relation to their children. - Unfavorable aspects were observed at the time of breastfeeding.
Barbosa et al. <sup>(19)</sup> 2018 Brazil	- To evaluate the factors associated with breast trauma in rooming-in.	- 73 puerperae and 76 newborns (three twins). - Maternal age between 20 and 34 years.	- There was a significant association between breast trauma and post-breastfeeding pain or burning ( $p=0.000$ ), prenatal orientation ( $p=0.016$ ) and number of prenatal visits ( $p=0.018$ ), and even puerperae who had seven or more prenatal visits had breast trauma.	- Breast trauma is less frequent when there is guidance during prenatal care. - However, the number of prenatal visits did not influence the presence of breast trauma.
Silva et al. (2018) <sup>(20)</sup> Brazil	- Investigate the prevalence of exclusive breastfeeding at birth and its risk factors.	- 546 live births, from rooming-in	- About the reasons for not breastfeeding: 3.1% of the mothers considered their milk insufficient to satisfy the newborn's hunger and 3.7% reported that the child did not want to breastfeed. - The use of pacifiers and bottles at birth were also found as risk factors for breastfeeding: 20.7% of the children used a pacifier and 4.4% used a bottle. - About breast problems: women reported as causes for suspending breastfeeding: painful nipples (3.5%), flat and inverted nipples (2.4%), nipple fissures (3.1%), breast engorgement (0.8%), blocked ducts, and mastitis (0.6%).	- As the main cause for not breastfeeding, most mothers reported that their milk was insufficient to satisfy the baby's hunger and/or that the children did not want it. - Breast problems were one of the reasons for not breastfeeding. - The use of pacifiers and bottles are risk factors for EBF.

Subtitle: RI = rooming-in; CI = confidence interval; PR = prevalence ratio; n = number of individuals; (DFHI)<sup>(26)</sup> and is a practice that can reduce neonatal

Chart 2. Continued...

Authors, year of publication, country of origin	Objective	Sample characteristics	Results	Conclusion
Cunha et al. <sup>(21)</sup> 2019 Brazil	- To estimate the prevalence of breast trauma and correlate its occurrence with sociodemographic and obstetric factors in a sample of postpartum women assisted in a teaching hospital.	- 320 puerperae assisted in the rooming-in. - Mean age: 24.4 years.	- 35.3% of the puerperae had some type of trauma. The most frequent traumas were: excoriation, hyperemia and fissure. - Considering only excoriation and fissure, the prevalence of trauma was 26.6%.	- Only previous experience with breastfeeding was a protective factor for breast trauma in puerperal women assisted in rooming-in.
Pitilin et al. <sup>(22)</sup> 2019 Brazil	- To analyze the factors associated with breastfeeding self-efficacy in rooming-in, according to nipple types.	- 60 puerperae hospitalized in rooming-in. - Average age: 26.5 years.	- Non-protrusive nipples were related to latching difficulty and the need for assistance during breastfeeding. - Protruding nipples promoted satisfaction during breastfeeding.	- Breast protrusion seems to favor the practice of breastfeeding, from the reduction of anxiety and increased maternal self-efficacy.

**Subtitle:** RI = rooming-in; CI = confidence interval; PR = prevalence ratio; n = number; (p=) = p value

mortality by 22%<sup>(27)</sup>. A study conducted in Ghana (Africa), with approximately 11,000 children, concluded that 22% of neonatal deaths could have been avoided if all of them had been breastfed within the first hour<sup>(28)</sup>. In India, late initiation of breastfeeding (more than 24 hours) was found to be related to a 78% increased risk of neonatal mortality<sup>(29)</sup>. A study in Nepal (Asia), with more than 22,000 infants, found that the risk of neonatal mortality increased by 41% when breastfeeding occurred after 24 hours of life<sup>(30)</sup>.

In this study, the search for articles was done in a broad way by means of the guiding question, and the works found cited several aspects that were related to the difficulties of the puerperal woman, and some cited only breast trauma as a complicating factor<sup>(13,15,17,19,21)</sup>. Referring to the most frequent mammary trauma, one article reported and analyzed the type of nipple as a complicating factor<sup>(22)</sup>; the other articles analyzed various factors that could be related to early weaning<sup>(12,14,16,18,20)</sup>.

The main difficulties in breastfeeding faced by puerperae monitored in the rooming-in unit up to 72 hours after delivery were problems related to breast traumas<sup>(13,15,17-21)</sup>. It is one of the major breast problems that directly influence the breastfeeding experience and is pointed out as one of the main risk factors for weaning<sup>(15,25,26)</sup>. Breast trauma can cause pain<sup>(4,26)</sup> and this pain is an unpleasant sensory and affective experience for the woman and can cause her to stop breastfeeding<sup>(27)</sup>.

The most frequent breast traumas observed were excoriation<sup>(15,17,18,21)</sup>, fissures<sup>(13,16,18,19)</sup> and redness/hyperemia<sup>(16,18,19)</sup>. Nipple cracking has also been described<sup>(13)</sup> as a recurrent type of nipple trauma in the immediate postpartum period and that directly influences early weaning<sup>(13)</sup>. The variety of nomenclature used to define breast trauma stands out as an observation of the present study: complications<sup>(13)</sup>, breast lesion<sup>(15)</sup> and breast issues<sup>(20)</sup>. For this work we opted for the term "breast trauma", which is defined as injury and/or alteration of the mammary tissue, generally resulting from inadequate management and/or error in the breastfeeding technique (incorrect positioning and/or incorrect holding of the infant)<sup>(21)</sup>.

The factors that were associated with the appearance of nipple trauma described in the studies analyzed were: changes in breastfeeding position<sup>(13,18,31)</sup>, grip difficulties<sup>(13,18,31)</sup>, inappropriate suction pattern<sup>(13,17,32)</sup>, presence of mammary trauma in previous pregnancies<sup>(13)</sup>, primiparity<sup>(13,17,33)</sup>, less pigmented nipple-areolar region<sup>(15,17)</sup>, adolescent nutrient<sup>(17)</sup>, white skin color<sup>(17)</sup>, not being the premature newborn<sup>(17)</sup>, the newborn's stay in the neonatal intensive care unit<sup>(17)</sup>, in addition to orientation and number of prenatal visits, and even puerperal women who had seven or more visits had breast trauma<sup>(19)</sup>.

Other factors are also described in the literature as being associated with breast trauma: individual maternal and family characteristics, the neonates' characteristics, and the health care services related to the postpartum and BF process<sup>(13,33)</sup>. As for the characteristics of childbirth care, we observed an association between the mammary lesion and the following variables: use of anesthesia at delivery, gestational age between 37 and 40 weeks, and the presence of breastfeeding in the first hour of life<sup>(34)</sup>. On the other hand, the orientation received on proper grip and positioning of the infant at the breast was considered a protective factor for breast trauma<sup>(35)</sup>.

The newborn (NB) should suck in an adequate manner to ensure efficient and safe feeding, with rhythm, strength and support, which encompasses adequacy in the following aspects: Searching and sucking reflex, lip seal, tongue and jaw movement, suction-swallowing-breathing coordination, and sucking rhythm. These movements allow a variation in intraoral pressure and are fundamental in extracting and driving milk<sup>(36)</sup>. Through suckling at the breast, during the first months of life, the newborn will adequately develop the phono-articulatory organs and the functions performed by them<sup>(36)</sup>.

It is also worth mentioning the importance of evaluating the lingual frenulum alteration. Studies report that this alteration causes difficulties in breastfeeding, and those difficulties arise in 25% of the cases of children with this problem<sup>(37)</sup>. The main symptoms associated with ankyloglossia during breastfeeding are pain in the mother's nipple, sucking and milking difficulties, resulting in early weaning and weight loss<sup>(38)</sup>. The deprivation

of tongue movement can also compromise the functions of sucking, chewing, swallowing, and speaking<sup>(39)</sup>.

Regarding the breasts, breast engorgement, blocked ducts, and mastitis were cited as causes of difficulty for breastfeeding in the rooming-in<sup>(20)</sup>. These complications that affect the breasts lead to pain and, consequently, can determine early weaning<sup>(40,41)</sup>, demanding systematic monitoring by the rooming-in health team<sup>(18)</sup>.

Still on the subject of breasts, the type of nipple of the lactating women appeared as a hindrance or facilitator for the practice of breastfeeding. Flat and inverted nipples showed to be an aspect with a high rate of difficulties in the beginning of breastfeeding<sup>(18,20,22)</sup>. However, even though breast protrusion favors satisfaction, correct latching, and breastfeeding self-efficacy<sup>(22)</sup> it is worth reinforcing that different anatomies do not prevent the practice, they only require the use of different strategies and the possibility of using devices that help, providing the child with the benefits granted by breast milk<sup>(42)</sup>.

Difficulty in establishing affectionate bonds (such as mothers who hardly touched their babies, mothers who held the baby nervously, and mothers who did not maintain eye contact with their babies) was also found as behavior indicative of problems in the initiation of breastfeeding<sup>(18)</sup>. Breastfeeding should be understood beyond the biological aspects, seeking the valorization of psychological and socio-cultural factors<sup>(43)</sup>. Thus, the health team needs to be constantly trained to better understand all the dimensions of breastfeeding, as well as the reality of the population it serves.

As risk factors for early weaning in rooming-in, it was also observed that the newborn had refused milk and the mother considered the milk to be weak<sup>(20)</sup>. It is known that women's understanding of breastfeeding directly influences their attitudes towards the act of breastfeeding<sup>(44)</sup>.

Breastfeeding in the first hours after birth is very important for the maintenance of exclusive breastfeeding<sup>(45)</sup>. The immediate postpartum period is characterized by the first two hours after placental abruption. Breastfeeding in this period allows the newborn to better adapt to extrauterine life and to regulate blood glucose, cardiorespiratory, and temperature; the baby's suckling stimulates the pituitary gland, which leads to the production of oxytocin and prolactin, thus increasing milk production<sup>(45,46)</sup>.

The golden hour is characterized by the baby's first hour of life, and practices on how to breastfeed and the skin-to-skin contact occur at this time and are important for both mother and baby; the baby is alert and with the sucking stimuli sharpened, creating the perfect moment for him to get to know his mother and create the first bond with her, through breastfeeding<sup>(4)</sup>. Studies also show reduced mortality among breastfeeding neonates on the first day of life, especially in the first hours after birth<sup>(27,47,48)</sup>. Research has also indicated that sociodemographic characteristics, prenatal procedures, and hospital procedures can promote or hinder breastfeeding in the first postpartum hour<sup>(26)</sup>.

In the studies surveyed, the prevalence of breastfeeding in the first hour after birth is still low<sup>(14,16)</sup>. According to the literature, some factors positively influence breastfeeding to occur in the first hour of life: non-black women, multiparous, who had prenatal care, delivered normally, whose babies had birth weight equal to or greater than 2,500g, and who received help from the health team to breastfeed in the delivery room<sup>(14)</sup>. There are also factors that negatively influenced breastfeeding in the first hour of life such as: not having had adequate prenatal

care, having had a cesarean delivery, and mother and child not staying in a rooming-in unit after delivery<sup>(16)</sup>.

Finally, the high frequency of breastfeeding difficulties in rooming-in brings an alert to the risk of early weaning, which is still a prevalent reality in Brazil and should be investigated. It also warns about the need for guidance and monitoring of the mother-baby dyad in the first hours after birth, offering support to mothers in facing clinical and emotional issues, so that breastfeeding is encouraged and the chances of interruption of breastfeeding are minimized.

As a limitation of this study, it was observed that there is still a small number of articles that refer to the difficulties specifically in rooming-in and, especially, outside the country. In Brazil, in 1993, the basic norms for the implantation of the system of rooming-in in the entire national territory were approved<sup>(49)</sup>, but in many countries, the rooming-in system is only a recommendation.

## CONCLUSION

Most articles indicated that the main difficulty for breastfeeding by puerperae accompanied in the rooming-in up to 72 hours refers to problems related to breast trauma, caused by characteristics of breastfeeding, individual characteristics of women, of the breast, pregnancy, delivery, and the puerperal support network.

Identifying the cause of these difficulties is of utmost importance in order to implement a systematic follow-up by the health team in the rooming-in unit.

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