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**DETERMINANTS OF BREASTFEEDING INTERRUPTION AT SIX**  
**MONTHS OF THE BABY'S LIFE**

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*Abstract*

Although breastmilk is uniformly accepted as the most complete and effective nourishment to ensure the baby's health and with clear benefits to the mother, it can be seen that the breastfeeding rate is still far from satisfactory. This study aims to identify evidence in the scientific literature about the determinants of breastfeeding interruption within six months of the baby's life. A systematic review was carried out by searching in PUBMED, The Cochrane Library, Scielo data base and Google Academic for studies published between January 2010 and October 2015, based on previously defined inclusion criteria and the selected studies were subsequently evaluated. Two reviewers assessed the quality of the studies to be included, using the grid for critical evaluation. After quality evaluation, four articles were included in the study corpus between 87.5% and 95.0% quality levels. Meta-synthesis and analysis of the articles identified that the factors that lead to the breastfeeding interruption at six months of the baby's life are: concerns about lactation, baby weight loss, mother's disease or her need for taking medication, blocked ducts, problems related to psychosocial management, lifestyle conflicts, inadequate positioning for latching-on, poor or weak milk complaint, breastfeeding pain, nipple cracks, breast engorgement, maternal anxiety and crying baby. Given the scientific evidence, the causes of breastfeeding interruption are multifactorial and are associated with mother's, baby's and health problems. The promotion of breastfeeding requires evidence-based education programs, to improve breastfeeding prevalence rates up at least into the six months of the baby's life.

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**Keywords:** Breastfeeding, interruption at six months.



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## **1. Introduction**

In the last few decades, the evidence of advantages of breastfeeding for health and the recommendations for its practice has intensified. The World Health Organization (WHO) highlights the main advantage the reduction of infant morbidity and mortality and health benefits that extend into adulthood. Breastfeeding is considered one of the fundamental pillars for the promotion and protection of children's health (Sarafana, Abecasis, Tavares, Soares & Gomes 2006), promotes the overall development of the baby and it is a unique moment of affection and exchange between mother and baby.

Although the mother, and the community itself, benefit from breastfeeding, there are still high rates of early abandonment.

The decision to breastfeed is personal and is affected by numerous factors: hospital practices; medical problems that occur before and during pregnancy; complications during childbirth; support structures for breastfeeding; family support, among others.

Even though they are informed of the importance of breastfeeding, many women give up breastfeeding because they are faced with difficulties, especially in the first postpartum days, or are unsuccessful in their maintenance due to specific breastfeeding problems, namely: incorrect handling, pain, discomfort, among others (Cremonese et al., 2011).

Maintaining breastfeeding for the period recommended by the WHO requires knowledge of signs indicating the early terminus. According to Aguiar & Silva (2011), the identified risk factors for abandonment are: the biological conditions of the mother, especially her state of health; the presence of pain or diseases; the social representations about breastfeeding; the woman's own satisfaction with life; social support, specifically the support of health and family services (Greiner, 2014).

## **2. Problem Statement**

Although breastmilk is uniformly accepted as the most complete and effective nourishment to ensure the baby's health and the clear benefits to the mother, it can be seen that the breastfeeding rate is still far from the intended requirements.

## **3. Research Questions**

What are the determinants of breastfeeding interruption within six months of the baby's life?

## **4. Purpose of the Study**

The purpose of this study is to identify evidence in the scientific literature about breastfeeding interruption determinants within six months of the baby's life

## **5. Research Methods**

A systematic review was carried out by searching in PUBMED, The Cochrane Library, Scielo data base and Google Academic for studies published between January 2010 and October 2015, based on previously defined inclusion criteria and selected studies were subsequently evaluated. Two reviewers

assessed the quality of the studies to be included, using the established framework for critical evaluation. After a rigorous evaluation, four articles were included in the study corpus. The inclusion criteria included experimental studies, quasi-experimental systematic reviews with and without meta-analysis in the field of breastfeeding in the first 6 months of life.

## 6. Findings

The findings are presented in Tables 1 – 4 below. Each table presents the evaluation of one study under Type of Study/ population, Interventions/results, Conclusions/Critical review of Quality.

**Table 01.** Summary of the analysis of Barge & Carvalho (2011)

Barge, S. & Carvalho, M. (2011). Prevalência e fatores condicionantes do aleitamento materno – Estudo ALMAT. <i>Rev Port Clin Geral</i> , 27, 518-525.	
<b>Type of study / population</b>	Observational cross-sectional study, whose sample comprises parturients enrolled in the Family Health Unit (FHU) Lethes and FHU Mais Saúde, of the Local Health Unit of Alto Minho, from January 1 to December 31, 2009. Sampling technique used was proportional stratified random.
<b>Interventions Results / outcomes</b>	The objective of the study was to determine the prevalence of breastfeeding at 6 months and check if their early abandonment is related to maternal age, parity, schooling, professional status, smoking, alcoholism and knowledge level of mothers on the benefits of breastfeeding. The data collection was done through the application of a questionnaire prepared by the researchers. The results showed that the estimated prevalence of breastfeeding at 6 months was 36% (95% CI, 29% - 43%). On average, breastfeeding was maintained for 5 months. The prevalence was higher in parturients with greater age. There was a higher prevalence of breastfeeding in low-educated and licensed parturients, and lower in the parturients who attended preparation classes for delivery, but in the stratified analysis, it was verified that age acted as a confounding variable; there was no statistically significant association for these variables.
<b>Conclusions Critical review of quality</b>	The prevalence of breastfeeding at 6 months was similar to that of the existing studies, but lower than the goals set by the World Health Organization. The association between breastfeeding and age is in agreement with the literature. The authors consider that this study is original in Portugal in the analysis of some conditioning factors of the prevalence of breastfeeding at 6 months, in the scope of primary care.

**Table 02.** Summary of the analysis of Oakley et al. (2014)

Oakley, L., Henderson, J., Redshaw, M., & Quigley, M.A. (2014). The role of support and other factors in early breastfeeding cessation: an analysis of data from a maternity survey in England. <i>BMC Pregnancy and Childbirth</i> , 14, 2-12.	
<b>Type of study / population</b>	Data was collected from a sample of 3840 women aged $\geq 18$ years who delivered term newborns in 2009 in England. The data was collected through the application of questionnaires, three months after the baby's birth. A logistic regression was used to verify the association between postnatal support and other factors, and discontinuation of breastfeeding at 10 days and six weeks after the birth of the child.
<b>Interventions Results / outcomes</b>	Of the 3840 women who started breastfeeding and reported interruption of breastfeeding, 13% had done so on the 10th day; and of the 3354 women who were

	breastfeeding on the 10th day after the birth of the newborn, 17% discontinued breastfeeding at six weeks. The authors stated that socio-demographic factors (maternal age, ethnicity, country of birth, socioeconomic level, schooling level) and the intervention of health professionals in prenatal preparation were associated with the initiative to breastfeed, regardless of whether they chose to discontinue breastfeeding on the 10th day and at 6 weeks. Women who have not received advice about breastfeeding or support from a peer group, the child's father and of health professionals, were more likely to stop breastfeeding on the 10th day. The support and encouragement received from midwives are associated with a lower chance of discontinuation of breastfeeding in both samples at 10 days and at 6 weeks.
Conclusions Critical review of quality	Although several factors influence the probability of a mother continuing breastfeeding, it is evident that sociodemographic factors are strongly associated with continued breastfeeding until at least six months of the child's life. The estimated results suggest that between 34-59% of cases of discontinuation of breastfeeding by day 10 could be avoided if more women in the study sample had received specialized support about breastfeeding.

**Table 03.** Summary of the analysis of Odom et al. (2015)

Odom, E.C., Ruowei Li, M.D., Scanlon, K.S, Perrine, C.G., & Grummer-Strawn, L. (2015). Reasons for Earlier Than Desired Cessation of Breastfeeding. <i>Pediatrics</i> , 131(3), 726-732.	
Type of study / population	The study aimed to describe the prevalence and factors associated with the duration of breastfeeding. Data were analyzed from 1177 mothers aged $\geq 18$ years who responded to monthly surveys during pregnancy until their child was 1 year old. When they discontinued breastfeeding, the mothers were asked to assess the importance of 32 reasons underlying the discontinuation of breastfeeding on a 4-point Likert scale. Multiple logistic regressions were performed to examine the association between the importance of each ratio and the likelihood of mothers not prolonging the desired duration of breastfeeding.
Interventions Results / outcomes	Approximately 60% of the mothers who stopped breastfeeding did so earlier than desired; this decision being associated with mothers' concerns about: (1) difficulties with lactation; (2) baby's weight loss; (3) illness or need to take medication; (4) blockage of the breast ducts.
Conclusions Critical review of quality	They found that mothers who interrupted breastfeeding before the desired time referred as the main reasons for concerns about lactation, infant nutrition and weight loss of the baby, due to the mother's illness or the need to take medication, as well as blockage of the ducts breastfeeding, problems related to psychosocial management, such as having to leave the child for several hours, conflicts in their lifestyle and child self-weaning.

**Table 04.** Summary of the analysis of the study of Prates & Schmalfluss (2015)

Prates, L.A. & Schmalfluss (2015). Problemas e condutas adotadas por puerperas durante a lactação. <i>Rev enferm UFPE online, Recife</i> , 9(2), 500-508.	
Type of study / population	A descriptive study, with a qualitative approach, with the presuppositions of the participant research. Data were collected through an interview with puerperae and analyzed using the content analysis technique. The objective of the study was to know the problems and the behaviors adopted by a group of puerperal women during the breastfeeding period.

<p>Interventions Results / <i>outcomes</i></p>	<p>Problems in breastfeeding were associated with complaints of poor milk, insufficient or weak milk, pain on breastfeeding, cracking, breast engorgement, maternal anxiety and crying of the child as aspects that interfere with breastfeeding.</p>
<p>Conclusions Critical review of quality</p>	<p>It was concluded that a large part of the problems in breastfeeding were due to inadequate positioning and handling, insufficient or weak milk complaints, pain on breastfeeding, cracking, breast engorgement, maternal anxiety and crying, which were the factors underlying the early interruption of breastfeeding.</p>

Based on the selected articles, it was verified that, several factors influence the early abandonment of breastfeeding. Sociocultural, professional, educational level and health promotion actions carried out by committed and motivated health professionals stood out as important variables. The articles highlight a high rate of abandonment of breastfeeding, with a significant number of women continuing to breastfeed at six months of the baby's life. The knowledge of this prevalence and possible causes for the abandonment of breastfeeding could be a starting point for the implementation of measures aimed at a better and more effective promotion of breastfeeding for the recommended time.

In Portugal, more than 90% of mothers breastfeed in the first days of the baby's life, but almost half of the mothers abandon breastfeeding in the first month of life of the newborn (Levy & Bértolo, 2012).

Barge & Carvalho (2011), Oakley et al. (2014) and Odom et al. (2015) found that women, where the prevalence of early abandonment before the 6 months of the baby's life was more evident, were predominantly single, multiparous, with less literacy and low socioeconomic level.

## 7. Conclusion

The prevalence of breastfeeding has fluctuated over the years, being influenced by several factors. From the articles that constitute the corpus of the sample, it was inferred that the difficulties that lead to the interruption of breastfeeding at 6 months of the baby's life are: concerns about lactation, weight loss of the baby, illness of the mother or need to take medication, blockage of the breast ducts, problems related to psychosocial management, conflicts in their lifestyle, inadequate positioning and handling, milk complaint (insufficient or weak), pain on breastfeeding, fissures, breast engorgement, maternal anxiety and crying of the child.

It was also concluded that mothers with lower ages, especially adolescent mothers, tended to breastfeed for less time, due to the lack of support, lower level of education and greater insecurity. It has been found that in many cases the insufficient approach to breastfeeding in prenatal consultations also underlies a higher propensity for early cessation of breastfeeding. In addition to the adequate training in the prenatal period, it is necessary to include in the preparation for the discharge of the puerperium an informative instrument that facilitates breastfeeding and that, in some way, responds to her doubts and helps her to overcome possible difficulties in breastfeeding (Nelas, Ferreira & Duarte, 2008).

It should be noted that the success of breastfeeding depends more on the mother's desire to breastfeed her child than on any other factor. However, she must be motivated and prepared to do so.

The information / training where women can assimilate the benefits of breastfeeding by helping them to overcome the crises and difficulties that may arise during the process is a significant determinant and of great importance at the beginning and duration of breastfeeding.

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