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# Breastfeeding in the first hour of life in Brazil: a systematic review

Lactancia materna en la primera hora de vida en Brasil: una revisión sistemática

Aleitamento materno na primeira hora de vida no Brasil: uma revisão sistemática

## ABSTRACT

**OBJECTIVE:** to identify the prevalence of breastfeeding in the first hour of life in Brazil. **METHOD:** searches were carried out from August to September 2019 in the Scielo and Medline databases, using the descriptors 'breastfeeding'; 'postpartum'; 'prevalence'; 'newborn' and 'cross-sectional studies' in search of studies carried out in Brazil from 2010 to 2019. The recommendations of the Prisma method were used and the data were collected using a structured form and independently evaluated by two authors. **RESULTS:** 23 studies were included in this research, of which 15 had a prevalence of more than 50% of breastfeeding in the first hour of life. Most of the studies were carried out in the Southeast and Northeast regions of the country. **CONCLUSION:** Studies are proposed that involve both the prevalence of breastfeeding in the first hour of life and the variables that influence this practice, especially in the North, Midwest and South regions of Brazil.

**DESCRIPTORS:** Breastfeeding; Post childbirth; Prevalence; Newborn; Systematic review.

## RESUMEN

**OBJETIVO:** identificar la prevalencia de la lactancia materna en la primera hora de vida en Brasil. **MÉTODO:** se realizaron búsquedas de agosto a septiembre de 2019 en las bases de datos Scielo y Medline, utilizando los descriptores 'lactancia materna', 'posparto', 'prevalencia', 'recién nacido' y estudios transversales 'en búsqueda de estudios realizados en Brasil de 2010 a 2019'. Se utilizaron las recomendaciones del método Prisma y los datos fueron recolectados mediante un formulario estructurado y evaluados de forma independiente por dos autores. **RESULTADOS:** En esta investigación se incluyeron 23 estudios, de los cuales 15 tuvieron una prevalencia de más del 50% de lactancia materna en la primera hora de vida. La mayoría de los estudios se realizaron en las regiones Sudeste y Nordeste del país. **CONCLUSIÓN:** Se proponen estudios que involucran tanto la prevalencia de la lactancia materna en la primera hora de vida como las variables que influyen en esta práctica, especialmente en las regiones Norte, Medio Oeste y Sur de Brasil.

**DESCRIPTORES:** Lactancia Materna; Post parto; Predominio; Recién nacido; Revisión sistemática.

## RESUMO

**OBJETIVO:** identificar prevalência do aleitamento materno na primeira hora de vida no Brasil. **MÉTODO:** foram realizadas buscas de agosto a setembro de 2019 nas bases de dados Scielo e Medline, utilizando os descritores 'breastfeeding', 'postpartum', 'prevalence', 'newborn' e 'cross-sectional studies' em busca de estudos realizados no Brasil de 2010 a 2019. Foram utilizadas as recomendações do método Prisma e os dados foram coletados por meio de formulário estruturado e avaliados independentes por dois autores. **RESULTADOS:** Foram incluídos 23 estudos nesta pesquisa, dos quais 15 tiveram prevalência maior que 50% de aleitamento na primeira hora de vida. A maior parte dos estudos foi realizada nas regiões Sudeste e Nordeste do país. **CONCLUSÃO:** Propõe-se estudos que envolvam tanto a prevalência do aleitamento na primeira hora de vida quanto as variáveis que influenciam esta prática, especialmente nas regiões Norte, Centro-oeste e Sul do Brasil.

**DESCRIPTORES:** Amamentação; Pós-parto; Prevalência; Recém-nascido; Revisão sistemática.

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## INTRODUCTION

**B**reastfeeding, in addition to offering food, helps to establish a connection between mother and child, generating positive effects from the nutritional status to the baby's cognitive and emotional development.<sup>1</sup>

Breastfeeding should be encouraged from prenatal care, investigating the desire of women to breastfeed, emphasizing the benefits of breastfeeding for maternal and child health.<sup>2</sup>

Facilitating immediate, uninterrupted skin-to-skin contact and supporting mothers to start breastfeeding early is one of the Ten Steps recommended by the World Health Organization for successful breastfeeding.<sup>3</sup>

Breastfeeding in the first hour of life reduces the risk of death by 33% and reduces the risk of children being affected by common infections.<sup>4</sup>

Even with such scientific evidence that breast milk is superior to any other food for young children, and with all the efforts of several national and international institutions, the prevalence of breastfeeding in Brazil, especially exclusive breastfeeding, is to be desired.<sup>1</sup>

In Brazil, 67,7% of children are breastfed within the first hour of life and the average time of exclusive breastfeeding is 54 days.<sup>5</sup>

**In a study with 244 postpartum women in a reference service in the Northeast, the breastfeeding rate in the first hour of life was 28,7% and factors such as the presence of a nurse in the delivery room, the weight of the newborn was equal to or greater than three kilograms and skin-to-skin contact between mother and child...**

Hospital routines, cesarean section, worse socioeconomic status and difficulties in accessing health services were also presented as independent risk factors for not breastfeeding in the first hour of life.<sup>6</sup>

In a study with 244 postpartum women in a reference service in the Northeast, the breastfeeding rate in the first hour of life was 28,7% and factors such as the presence of a nurse in the delivery room, the weight of the newborn was equal to or greater than three kilograms and skin-to-skin contact between mother and child were positively associated with this practice.<sup>7</sup>

A study with 24 postpartum women qualitatively assessed the perception of 24 postpartum women about the encouragement of breastfeeding in the first hour of life by nursing professionals in a public maternity hospital, revealing that all postpartum women had prior knowledge about the benefits and importance of breastfeeding and received a humanized assistance aimed at encouraging this act.<sup>8</sup>

Thus, studies that assess the prevalence of respect for the golden hour in breastfeeding are relevant, given the benefits that such practice offers for the mother-infant dyad.

Therefore, it is clear how important it is for health professionals to encour-

rage early breastfeeding, that is, in the first hour of life, in view of the benefits that prioritizing breastfeeding in the first hour of life can provide.

Therefore, the aim of this study is to identify the prevalence of breastfeeding in the first hour of life in Brazil over a ten-year period, from 2010 to 2019.

## METHODS

This research is a systematic literature review study on the prevalence of breastfeeding in the first hour of life. The survey was carried out from August to December 2019. Initially, searches of scientific studies were carried out, following the recommendations for systematic review and meta-analysis studies of the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement", during the month of September 2019. 9 Searches were performed independently in the Scielo and Medline databases.

The descriptors 'breastfeeding', 'postpartum', 'prevalence', 'newborn' and cross-sectional studies were used combined, generating six possible search combinations: C1(breastfeeding AND postpartum AND prevalence), C2(breastfeeding AND prevalence AND newborn), C3(breastfeeding AND newborn, AND cross-sectional studies), C4(breastfeeding AND postpartum AND newborn), C5(breastfeeding AND postpartum AND cross-sectional studies) e C6(breastfeeding AND prevalence AND cross-sectional studies). The Boolean connector used was the AND, to expand access to all publications.

The results obtained in the initial searches were considered in their entirety. All works found in the search were evaluated by title and/or abstract. The inclusion criteria considered were articles published from 2010 to September 2019, in English, Portuguese or Spanish, only carried out in Brazil. As exclusion criteria, it was considered the exclusion of systematic reviews, meta-analyses, studies that were not cross-sectional

**Data were tabulated using a structured form, collecting the following information: article reference; study location and year of data collection; periodical; sample number; statistical analysis employed; prevalence (or median) of breastfeeding in the first hour of life. After tabulation, the data from the selected studies were independently analyzed by two evaluators.**

and cohort and that presented duplicity in the databases. Studies without free access were contacted via e-mail with corresponding authors, who provided the articles in full.

Data were tabulated using a structured form, collecting the following information: article reference; study location and year of data collection; periodical; sample number; statistical analysis employed; prevalence (or median) of breastfeeding in the first hour of life. After tabulation, the data from the selected studies were independently analyzed by two evaluators.

## RESULTS

The selected studies were included according to the criteria proposed in this review so that, firstly, it was carried out by studies with a time interval of ten years (2010 to 2019) and, when the title and/or abstract were read, they were excluding studies unrelated to the topic or even related to the topic, but which were not carried out in Brazil. The searches resulted in 28 studies, which were included in this review. The steps taken are shown in Figure 1.

After reading in full, 5 articles were excluded, due to duplicity of results and for not presenting data on the prevalence of breastfeeding in the first hour of life, totaling 23 studies included in this research. Table 1 describes the characteristics of the studies.

Of the 23 studies, 15 had a prevalence equal to or greater than 50%.<sup>10-13,15,18,21,22,24,26,28-32</sup> Regarding the location of the studies, three were carried out at the national level,<sup>12,15,21</sup> ten in the southeast region,<sup>11,16-18,20,24-26,28,31</sup> seven in the Northeast region,<sup>13,14,19,22,23,27,30</sup> two in the south region,<sup>10,32</sup> a study in the Midwest region<sup>29</sup> and zero in the North region.

## DISCUSSION

The percentage of children breastfed in the first hour of life (67,7%) exceeded

Figure 1 - Flowchart of study selection steps



that found in the PNDS/2006 (43%).<sup>33</sup> This difference can be partially explained by the fact that the aforementioned survey reflects a more recent situation, of children under 1 year of age, as well as having been published more than ten years ago, different from the studies included in this study. It was not possible to assess the evolution of this indicator, as the 1999 survey did not include this information. Its introduction into current research was due to the recent WHO recommendation and recent reports of the impact of this practice in reducing neonatal mortality.<sup>12</sup>

Breastfeeding during the first hour af-

Table 1 – Summary of the general characteristics of the studies. João Pessoa, PB, 2021.

AUTHOR/YEAR OF PUBLICATION	SEARCH LOCATION	JOURNAL	287 WOMEN	PREVALENCE OF BF IN THE FIRST HOUR OF LIFE
Bizon et al (2019) <sup>10</sup>	Porto Alegre, RS	Maternal & Child Nutrition	229 women	65,9%
Monteiro et al (2014) <sup>11</sup>	Ribeirão Preto, SP	Midwifery	34.366 children	61%
Venâncio et al (2010) <sup>12</sup>	Todas as capitais brasileiras e DF	Jornal de Pediatria	421 women	67,7%
Medeiros et al (2019) <sup>13</sup>	Fortaleza, CE	Česká Gynekologie	1309 mother-son dyads	50,6%
Vieira et al (2010) <sup>14</sup>	Feira de Santana, BA	BMC Public Health	22919 women	47%
Menezes et al (2018) <sup>15</sup>	Nacional	BMJ Open	905 women	59,1%
Possolli et al(2015) <sup>16</sup>	Rio de Janeiro,RJ	Jornal de Pediatria	916 children	48%
Passanha et al(2015) <sup>17</sup>	Ribeirão Preto,SP	Rev Saúde Pública	276 mother-son dyads	38,5%
Barbosa et al(2017) <sup>18</sup>	Montes Claros,MG	Rev Paul Pediatria	768 postpartum women	59,4%
Bezerra et al(2019) <sup>19</sup>	Aracaju,SE	Rev Paul Pediatria	12.283 mothers	33,1%
Silva et al(2017) <sup>20</sup>	Belo Horizonte,MG	Ciência & Saúde Coletiva	23.940 women	25,5%
Carvalho et al(2016) <sup>21</sup>	Nacional	Saúde reprodutiva	3790 children	56%
Vieira et al(2015) <sup>22</sup>	Feira de Santana,BA	Jornal de Pediatria	562 mother-son dyads	68,9%
IBelo et al(2014) <sup>23</sup>	Recife,PE	Rev Bras Saúde Mat Infantil	160 teenager mothers	31%
Conde et al(2017) <sup>24</sup>	Ribeirao Preto,SP	Acta Paul Enferm	403 postpartum women	53,1%
Pereira et al(2013) <sup>25</sup>	Rio de Janeiro,RJ	Rev Bras Epidemiol	1664 mother-son dyads	43,9%
Torres et al(2014) <sup>26</sup>	Sudeste do Brasil	Cad Saúde Publ	107 postpartum women	65,8% em HA 11,9% HT
Sampaio et al(2016) <sup>27</sup>	Joao Pessoa, PB	Epidemiol Serv Saude	673 postpartum women	9,3%
Esteves et al(2015) <sup>28</sup>	Rio de Janeiro, RJ	Cad Sal Publ	1027 mother-son dyads	50,8%
Sã et al(2016) <sup>29</sup>	Distrito Federal	Rev Bras Epidemiol	310 children	77,3%
Silva et al(2019) <sup>30</sup>	Coelhos, PE	Jornal de Pediatria	429 mothers	60,2%
Alves et al(2018) <sup>31</sup>	Rio de Janeiro, RJ	Ciência & Saúde Coletiva	429 mães	57,6%

Souza et al(2012)<sup>32</sup>

Londrina, PR

Acta Paul Enferm

770 companions of children  
under 1 year old

72,5%

ter delivery occurred in 64,5% of vaginal deliveries and 6% of cesarean deliveries.<sup>13</sup> Therefore, health professionals should promote factors that favor early breastfeeding, through prenatal guidance on the benefits of breastfeeding, vaginal birth and term birth, in addition to encouraging this practice in vulnerable situations, such as mothers with caesarean section and childbirth premature.<sup>14</sup>

There were no studies carried out in the North on this topic in the period between 2010 and 2019, according to this research. The South and Midwest regions had few studies on breastfeeding in the first hour of life.

Considering that, the theme of early breastfeeding, skin-to-skin contact, are current and extremely relevant to maternal and child health, given the scarcity of studies on this theme, there is a need for a closer look with regard to researches related to the analysis of this practice.

One can also reflect on the role of health professionals in the country's maternity hospitals, in the delivery rooms, who must be aware and updated to encourage early breastfeeding, considering the woman's wishes and the WHO guidelines with regard to steps to successful breastfeeding.<sup>3</sup>

## Studies involving both the prevalence of breastfeeding in the first hour of life and the variables that influence this practice are proposed, especially in the North, Midwest and South regions of Brazil.

The role of nurses in the practice of early breastfeeding deserves to be highlighted, as, knowing that breastfeeding is a natural task, but that its success depends on their practice, it is important that guidelines are given at this first moment, in order to guide mother and baby for successful, pleasurable breastfeeding and minimal conflict.<sup>34</sup>

### CONCLUSION

Breastfeeding in the first hour of life falls short of what is recommended by the WHO and the Ministry of Health, based on the studies included in this research.

Studies involving both the prevalence of breastfeeding in the first hour of life and the variables that influence this practice are proposed, especially in the North, Midwest and South regions of Brazil.

It is also proposed the planning and implementation of educational practices and promotion of breastfeeding in the first hour of life, throughout the pregnancy-puerperal process, that is, from prenatal to postpartum, exposing the importance of breastfeeding early maternal care for the baby's health, and the success of the breastfeeding process. ■

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