

Prevalence of exclusive breastfeeding up to six months of age in full-term newborns during the pandemic and factors associated with early weaning

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ABSTRACT

Purpose: to investigate the prevalence of exclusive breastfeeding up to 6 months old in full-term newborns at a public hospital and the main factors associated with early weaning, during the pandemic caused by severe acute respiratory syndrome.

Methods: an observational, cross-sectional study with 98 mothers of full-term babies, conducted from January to August 2021, during the COVID-19 pandemic. The participants answered two structured questionnaires. One was applied immediately after childbirth, with questions on identification and socioeconomic data, obstetric-gynecological background, and current pregnancy and childbirth. The second questionnaire, applied 6 months after childbirth, had questions about the child's feeding status. Statistical tests were used to associate the prevalence of exclusive breastfeeding up to 6 months old and other variables, at the 5% significance level.

Results: 16.3% of the babies were exclusively breastfeeding until the sixth month, during the COVID-19 pandemic, in the public hospital where the study was carried out. Exclusive breastfeeding up to 6 months old was not associated with the study variables.

Conclusion: the prevalence of exclusive breastfeeding until the sixth month in full-term babies, in a public hospital, during the COVID-19 pandemic, was 16.3%. None of the variables analyzed was associated with early weaning.

Keywords: Breast Feeding; Weaning; Rooming-in Care; Infant, Newborn; Maternal and Child Health



INTRODUCTION

Breastfeeding is the most effective way to meet the newborns' nutritional, immunological, and psychological needs, making it a strong strategy for reducing infant morbidity and mortality^{1,2}. Breastfeeding brings numerous benefits to infants, preventing respiratory infections¹, diminishing the risk of leukemia², diabetes², and obesity², providing adequate nutrition, developing the stomatognathic system³, preventing dental malocclusions⁴, and strengthening the mother-baby emotional bond⁵. There are also several benefits for the mother, such as protection against breast⁶ and ovarian cancer⁷ and less financial expenses with formulas, bottles, and so forth⁸. Environmental benefits are also mentioned, given that manufacturing infant formulas produces waste, consumes much energy, and releases carbon dioxide into the atmosphere⁸.

The number of children on exclusive breastfeeding (EBF) until 6 months old in Brazil and worldwide is far below what is recommended by the World Health Organization (WHO)⁹. Victora et al.¹⁰ analyzed global data and found a 47% prevalence of EBF in low-income countries, 39% in low/middle-income countries, and 37% in middle/high-income countries. Despite being a natural process, breastfeeding is influenced by biological, socioeconomic, cultural, and demographic factors¹¹. Moderate to strong evidence supports that EBF at 6 months is affected by the mother's professional status, knowledge and beliefs about breastfeeding, type of delivery, self-efficacy, intention to breastfeed, and so on¹². Knowing the factors that can lead to early weaning in different situations is important so that they can be avoided.

Divergent opinions during the 2020-2023 pandemic caused by severe acute respiratory syndrome (SARS-CoV-2) compromised professional practices to encourage breastfeeding. Although no evidence indicated that SARS-CoV-2 was transmitted through breast milk and disregarding the importance of the immunomodulatory capacity of breast milk, some institutions recommended separating mothers from their babies temporarily if the puerperal woman had suspected or confirmed COVID-19 to reduce the risk of transmission¹³. This separation soon after birth, a crucial moment for establishing breastfeeding, can compromise its continuity¹³.

Moreover, health professionals were reassigned to other roles, and various families were left unattended or referred to professionals without the necessary experience and professional background to provide

breastfeeding guidance. Breastfeeding projects had secondary importance during the pandemic, which may have influenced the prevalence of EBF due to the lack of professional support¹⁴. Moreover, social distancing imposed as a preventive measure reduced the mother's family support network¹⁴.

Many speech-language-hearing pathologists were reassigned to work in emergency units, given their important role in treating oropharyngeal dysphagia in severe cases of COVID-19¹⁵. Therefore, guidance and intervention for establishing and maintaining breastfeeding, commonly carried out by such pathologists at maternity hospitals, outpatient clinics, and community health centers, were canceled.

Vaccination substantially reduced the transmission of the virus, the number of serious cases of the disease, and deaths¹⁶ and established the end of the COVID-19 pandemic. However, understanding the practices adopted during the pandemic and their consequences can help plan actions and change behaviors.

Therefore, this study aimed to investigate the prevalence of EBF at 6 months of life in full-term babies, in a public hospital, and the main factors associated with early weaning during the SARS-CoV-2 pandemic.

METHODS

This is an observational, cross-sectional study with two-time measurements and a quantitative approach. It was approved by the Research Ethics Committee of the Odilon Behrens Metropolitan Hospital, Brazil, under evaluation report number 4.480.984 (CAAE 40528220.3.0000.5129). All participants signed an informed consent form.

The sample of 98 participants was recruited by convenience, with a mean age of 27 years, standard deviation (SD) of 6 years (minimum of 18 years and maximum of 42 years), mothers of full-term babies admitted to the rooming-in ward of the Odilon Behrens Metropolitan Hospital, which has 31 beds. The research was carried out from January to August 2021 – i.e., during the SARS-CoV-2 pandemic, which lasted from March 2020 to May 2023.

The inclusion criteria were being 18 years or older; having a full-term newborn (greater than or equal to 37 weeks); breastfeeding the child admitted to the rooming-in ward in January and February 2021; having the desire to breastfeed; and answering the questionnaire, which was applied 6 months after the first contact.

Mothers of newborns who had severe congenital heart or lung diseases and genetic syndromes were

excluded, as they had a higher risk of incoordination during sucking, swallowing, and breathing functions, and structural changes that could interfere with breastfeeding. Mothers with diseases or therapeutic procedures that contraindicated or could interfere with breastfeeding were also excluded.

The participants answered two structured questionnaires prepared by the researchers. The first one was applied immediately after delivery (within 48 hours), while still in the hospital, in January and February 2021, and the second questionnaire was applied 6 months after delivery (in July and August 2021). Data on clinical history and time of delivery were consulted in the newborns' medical records.

The first questionnaire had three parts: I) Identification and socioeconomic data (with questions about color/race, profession, family income, number of people living in the house, and maternal age); II) Obstetric-gynecological history (including the number of children and breastfeeding of previous children); and III) Data on pregnancy and childbirth (with questions about prenatal care, type of delivery, pregnancy planning, breastfeeding in the first hour after birth, the guidance received during prenatal and postpartum care – professional who provided guidance, how the guidance was given, and its content –, feeding upon hospital discharge, use of artificial nipples, breastfeeding complaints, and maternal opinion about the sufficiency of her milk for the child).

The second questionnaire was administered by telephone 6 months after childbirth. It had a single part with yes/no questions about the current situation of the mother and infant (type of feeding, age at weaning, age at which mixed breastfeeding began, age at which solid foods were introduced, reason for discontinuing EBF, and desire to resume breastfeeding if it had been interrupted).

The response variable of this study was the prevalence of EBF at 6 months old. The following explanatory variables were used: identification and socioeconomic data, obstetric-gynecological history, pregnancy and childbirth data, and guidance content. The data were recorded in a Microsoft Excel spreadsheet and then analyzed using measures of central tendency (mean and median) and dispersion (SD) for continuous variables, and frequency distribution for categorical variables. The chi-square test, Fisher's exact test, multiple comparisons chi-square test, and t-test were used to associate the variables, at the 5% significance level and 95% confidence interval.

RESULTS

The mean age of mothers on EBF was 27.5 years (SD = 5.8) and that of mothers not on EBF was 27.1 years (SD = 6.0), with no association between maternal age and EBF at 6 months ($p = 0.806$, t-test).

The interviewees' socioeconomic profile indicated that they were predominantly self-declared multiracial. The number of responses in each work-related option was similar (self-employed, working in a company, and working at home). The predominant family income was around one minimum wage. On average, four people lived in their households (SD = 1.3). No association was found between EBF at 6 months and socioeconomic data (Table 1).

Regarding obstetric-gynecological history, most mothers had only one child and did not exclusively breastfeed their previous child(ren) until 6 months old, despite reports of no breastfeeding problems and having enjoyed the breastfeeding experience. No statistically significant association was found between EBF in the sixth month and obstetric-gynecological history (Table 1).

Table 1. Association analysis between the response variable (exclusive breastfeeding in the sixth month) and the explanatory variables related to socioeconomic data and obstetric-gynecological history

Socioeconomic data and obstetric-gynecological history		EBF in the 6 th month		Total	p-value
		Yes	No		
Color/Race	Black	5	17	22	0.603**
	East Asian	1	2	3	
	White	2	9	11	
	Multiracial	8	54	62	
	Total	16	82	98	
Occupation	Self-employed	3	29	32	0.431**
	Works in a company	7	29	36	
	Works at home	6	24	30	
	Total	16	82	98	
Family income	Up to 1 minimum wage	6	38	44	0.316**
	2 to 3 minimum wages	6	35	41	
	More than 3 minimum wages	4	9	13	
	Total	16	82	98	
Number of children	1	11	35	46	0.552**
	2	3	28	31	
	3	2	15	17	
	More than 3	0	4	4	
	Total	16	82	98	
Were the other children on EBF?	Yes	4	41	45	0.102***
	No	0	7	7	
	Total*	4	44	52	
Were there complications in previous breastfeeding?	Yes	2	14	16	0.095***
	No	2	30	32	
	Total*	4	44	48	
Was the breastfeeding experience pleasant?	Yes	4	36	40	0.130***
	No	0	8	8	
	Total*	4	44	48	

Caption: EBF = exclusive breastfeeding

* Including only multiparous mothers; ** Multiple comparisons chi-square test; *** Fisher's exact test.

As for pregnancy and childbirth data, most mothers reported planned pregnancy, vaginal birth, breastfeeding within the first hour after birth, and prenatal care – 2.0% had one to four consultations, 13.3% had four to six consultations, 11.2% had seven to eight consultations, and 72.4% had more than eight prenatal consultations. Most mothers reported receiving guidance

during prenatal care and immediately after childbirth, but not during consultations after hospital discharge. In addition, most were discharged from the hospital on EBF, not using artificial nipples, and without breastfeeding complaints during hospitalization. EBF in the sixth month was not statistically significantly associated with pregnancy and childbirth data (Table 2).

Table 2. Association analysis between the response variable (exclusive breastfeeding until the sixth month) and the explanatory variables related to pregnancy, delivery, and postpartum data

Research moment	Variables researched	EBF in the 6th month		Total	Valor de p	
		Yes	No			
Pregnancy	Planned pregnancy	Yes	7	27	34	0.410***
		No	9	55	64	
		Total	16	82	98	
	Prenatal care	Yes	16	81	97	0.657
		No	0	1	1	
		Total	16	82	98	
	Prenatal guidance	Yes	3	18	21	0.775**
		No	13	64	77	
		Total	16	82	98	
Delivery	Type of delivery	Cesarean	10	34	44	0.122***
		Vaginal	6	48	54	
		Total	16	82	98	
	Breastfeeding within the first hour after delivery	Yes	9	58	67	0.255***
		No	7	24	31	
		Total	16	82	98	
	Guidance immediately after childbirth	Yes	15	74	89	0.792**
		No	1	8	9	
		Total	16	81	98	
Immediate postpartum period (at the maternity hospital)	EBF (at the maternity)	Yes	15	73	88	0.567**
		No	1	9	10	
		Total	16	82	98	
	Use of artificial nipples at the maternity	Yes	1	6	7	0.680**
		No	15	76	91	
		Total	16	82	98	
	Maternal complaints at the maternity	No complaint	9	50	59	0.089*
		Sore nipples	4	6	10	
		Breastfeeding pain	2	7	9	
Cracked nipples		0	2	2		
Sore nipples and breastfeeding pain		0	16	16		
Breastfeeding pain and cracked nipples		1	1	2		
Total	16	82	98			
After hospital discharge	Breastfeeding guidance received in follow-up visits after hospital discharge	Yes	8	23	31	0.084***
		No	8	59	67	
		Total	16	82	98	

Caption: EBF = exclusive breastfeeding

* Multiple comparisons chi-square test, ** Fisher's exact test, *** chi-square test

Most interviewed mothers on breastfeeding (Table 3) reported not receiving guidance during prenatal care. At that time, guidance was provided mainly by the physician during in-person visits at the reference public maternal health center; breast care was the most discussed topic. Most mothers reported receiving

guidance at the hospital immediately after delivery. At that time, guidance was provided by the nursing team, also in individual care, mainly addressing latch-on and positioning at the breast. Few mothers (13%) reported feeling that their milk was not enough for their child.

Table 3. Information on breastfeeding guidance received during prenatal care and immediately after childbirth

Variables researched on breastfeeding guidance		Prenatal		Immediate postnatal period	
		n	%	n	%
Received breastfeeding guidance	Yes	21	21.4	89	90.8
	No	77	78.6	9	9.2
Setting where guidance was provided	Community health center	18	18.4	-	-
	Private clinic	3	3.1	-	-
	Physician	17	81.0	36	40.4
Professional who provided guidance	Nurse	8	38.1	59	66.3
	Speech-language-hearing pathologist	0	0	5	5.6
	Licensed practical nurse	0	0	14	15.7
	Others	0	0	13	14.6
How guidance was provided	Individual care	18	85.7	73	82.0
	Group care	0	0	1	1.1
	Spontaneous conversation	2	9.5	6	6.7
	Booklets	1	4.8	4	4.5
	Individual care and booklets	0	0	5	5.6
Guidance content	Latching and positioning the baby at the breast	8	38.1	83	93.3
	Use of pacifiers and bottles	0	0	3	3.4
	Benefits of breastfeeding	2	9.5	6	6.7
	Ideal EBF time	0	0	4	4.5
	Breast care	9	42.9	18	20.2
	Other information	5	23.8	12	13.5

Captions: EBF = exclusive breastfeeding; n = absolute frequency; % = relative frequency

The study investigated the association between information mothers received before and after childbirth

and EBF at 6 months old (Table 4), but no significant association was found between the variables.

Table 4. Association analysis between guidance content and exclusive breastfeeding in the sixth month

Guidance content	EBF in the 6 th month	Prenatal			p-value	Postnatal			Valor de p
		Yes	No	Total		Yes	No	Total	
Latching and positioning the baby at the breast	Yes	2	1	3	0.531 ⁺⁺	14	1	15	1.000 ⁺⁺
	No	6	12	18		69	5	74	
	Total	8	13	21		83	6	89	
Benefits of breastfeeding	Yes	0	3	3	1.000 ⁺⁺	0	15	15	0.584 ⁺⁺
	No	2	16	18		6	68	74	
	Total	2	19	21		6	83	89	
Breast care	Yes	0	3	3	0.229 ⁺⁺	4	11	15	0.493 ⁺⁺
	No	9	9	18		14	60	74	
	Total	9	12	21		18	71	89	
Other information	Yes	1	2	3	1.000 ⁺⁺	2	13	15	1.000 ⁺⁺
	No	4	14	18		10	64	74	
	Total	5	16	21		12	77	89	
Use of pacifiers and bottles	Yes	0	3	3	-	1	14	15	0.429 ⁺⁺
	No	0	18	18		2	72	74	
	Total	0	21	21		3	86	89	
Ideal EBF time	Yes	0	3	3	-	1	14	15	0.529 ⁺⁺
	No	0	18	18		3	71	74	
	Total	0	21	21		4	85	89	

Caption: EBF = exclusive breastfeeding
⁺⁺ Fisher's exact test, ⁺⁺⁺ chi-square test

Table 5 presents the characteristics of EBF at 6 months, with data collected in the second questionnaire. The data showed that the minority of mothers maintained EBF until the infant's sixth month of life, and the fewest were on mixed breastfeeding. Most infants

had started mixed breastfeeding at 3 months, weaned at 4 months, and introduced solid foods at 5 months. The main reason for early weaning was described as "low milk production", and the mothers generally had no desire to resume breastfeeding.

Table 5. Characteristics of exclusive breastfeeding in the sixth month

Variables on the infant's feeding status at 6 months		n	%
EBF	Yes	16	16.3
	No	82	83.7
Type of feeding for babies who were not on EBF	Mixed breastfeeding	31	37.8
	Infant formula	35	42.7
	Baby food	55	67.1
Introducing other foods	Yes	58	59.2
	No	40	40.8
Age at which baby food was introduced	3 months or earlier	3	5.2
	4 months	14	24.1
	5 months	41	70.7
Age at which mixed breastfeeding began	First 15 days	12	18.8
	First month	8	12.5
	Second month	8	12.5
	Third month	17	26.6
	Fourth month	9	14.1
	Fifth month	10	15.6
Age at which the infant was weaned	First 15 days	3	8.3
	First month	5	13.9
	Second month	4	11.1
	Third month	10	27.8
	Fourth month	11	30.6
	Fifth month	3	8.3
Reason reported by the mother for discontinuing EBF before 6 months	Replaced with industrialized products	0	0
	Little milk production	23	28.4
	The infant did not latch on	1	1.2
	Health issues	0	0
	Mother's choice	2	2.5
	Return to work	17	21.0
	Belief that her milk was weak	9	11.1
	Sore nipples	3	3.7
	Beliefs, culture, and lifestyle (breast ptosis)	0	0
	Other reasons	28	34.6
Mother's desire to resume breastfeeding	Yes	4	9.1
	No	40	90.9

Captions: EBF = exclusive breastfeeding; n = absolute frequency; % = relative frequency

DISCUSSION

The 16% prevalence of EBF obtained in this study is lower than that reported in the literature, ranging from 37% to 47% worldwide before the pandemic¹⁰. No pre-pandemic data for comparison purposes were found from the hospital where the research was conducted. However, the prevalence of EBF in this research was lower than that reported for the city of Belo Horizonte in 2008 (37.9%)¹⁷ and 2020 (33%)¹⁸, suggesting a decrease in the EBF rate during the period investigated.

The present study did not indicate an association between EBF at 6 months old and the study variables related to socioeconomic factors, obstetric-gynecological history, pregnancy, delivery, or breastfeeding information the mother received before and after childbirth. The lack of association between EBF at 6 months old and the study variables suggests that other variables not addressed in this study may have led to discontinuing breastfeeding during the pandemic and social isolation.

A study¹⁹ showed that some women experienced anxiety and stress responses while pregnant during the COVID-19 pandemic, due to fear of contagion and limited support networks. Depression negatively impacted the bond between mother and baby, reducing attachment between them, possibly having a negative effect on breastfeeding¹⁹.

This study did not investigate whether the mothers had contracted COVID-19, which may have led some participants to stop breastfeeding at some point during the postpartum period. The nursing mothers' reduced support network due to social isolation may have also influenced them. In this context, it is plausible to think of work overload with professional and domestic tasks as a factor influencing weaning.

Only 21.4% of mothers reported having received prenatal guidance on breastfeeding. A study before the pandemic found that 42.3% of mothers received guidance during prenatal care in the same city²⁰. The SARS-CoV-2 pandemic may have impacted breastfeeding care and guidance in hospitals, as various professionals who worked in health promotion, including speech-language-hearing pathologists, had redirected roles, canceling breastfeeding guidance groups – hence, when guidance was provided, it was done individually or online¹⁴.

Moreover, most mothers reported not receiving information during post-discharge visits. Social isolation and the interruption of non-mandatory

activities influenced elective outpatient care and health education programs, possibly hindering adequate mother-baby follow-up at crucial moments for correctly establishing breastfeeding²¹. A survey of 1,219 breastfeeding women in the United Kingdom during the pandemic found that 27% of them reported difficulty in obtaining postpartum support due to the barrier imposed by confinement, resulting in early weaning for some of them¹⁴. Furthermore, misleading information about maternal and child health and COVID-19 was disseminated due to a lack of knowledge about the virus transmission mechanisms, negatively affecting breastfeeding management and procedures during this period¹⁴.

All these barriers imposed by the pandemic possibly resulted in the low rates of prenatal and postnatal maternal guidance found in this study. Nevertheless, not receiving breastfeeding guidance in any of the periods investigated was not associated with being on EBF in the sixth month. Hence, it is inferred that guidance as an isolated strategy, without proper mother-baby follow-up and support network, does not seem to have the desired effect on maintaining breastfeeding until the sixth month. A systematic literature review identified that long-term, intensive interventions with information, guidance, and support for mothers lengthened breastfeeding most effectively, whether through health education groups, home visits, or individual counseling. On the other hand, strategies without face-to-face interaction, such as telephone calls and printed material, had no effect²². Therefore, it is believed that the way in which health teams provided guidance may not have effectively encouraged breastfeeding during the period in question.

During the hospital stay, 60.2% of mothers reported not having any breastfeeding complaints, whereas sore nipples were the most prevalent complaint among those who reported them. This finding corroborates the literature. Rosa and Delgado²³ found up to 45% of breastfeeding complaints in a university hospital's rooming-in ward, of which sore nipples were the most frequent. Cunha et al.²⁴ found that 35.5% of postpartum women in a teaching hospital's rooming-in ward had some type of nipple trauma. Although most women did not report any complaints during hospitalization, many difficulties can occur after going home. For this reason, it is good practice to continue providing guidance on breastfeeding after childbirth, in childcare visits and breast milk banks. The reduction or interruption of postnatal professional support groups due to the pandemic or

even the nursing mothers' fear of going to health facilities to resolve such complaints may have contributed to early weaning. It is important to emphasize that all mothers who reported sore nipples and breastfeeding pain immediately after childbirth discontinued EBF before their babies were 6 months old. Sore nipples are an important cause of early weaning, as they lead to breastfeeding pain and discomfort²⁵. Since it is generally associated with incorrect latch-on, a health professional's attention to nipple trauma is crucial to avoid early weaning²⁶.

The guidance content was not associated with EBF at 6 months. However, the most discussed topic was breast care (during prenatal care) and the baby's latch and positioning at the breast (during immediate postnatal care) – which does not appear to have changed from before the pandemic. A study carried out in a public hospital in Belo Horizonte¹⁹ found that the most frequently discussed topics at all times during the guidance for pregnant and nursing women included latching on, the benefits of breastfeeding, breast care, and the ideal EBF time. Another study²⁷, conducted in the public health network of Maringá, PR, Brazil, identified that the most frequent guidance received in the maternity ward immediately after childbirth referred to correct positioning and latching. A study before the pandemic also indicated the prevalence of individual counseling strategies, more women receiving guidance immediately after childbirth than in prenatal care, and the role of physicians and nurses as the professionals most present in the guidance¹⁹.

Even though they are aware of the benefits of breastfeeding, women often do not know how to effectively handle breastfeeding when their baby is born. Therefore, they must receive appropriate guidance from health professionals¹⁹. The Primary Healthcare Booklet no. 23, issued by the Brazilian Ministry of Health in 2015²⁸, recommends that information be provided during prenatal care about the pregnant woman's plans to feed the child, previous experiences, breastfeeding myths and beliefs, the importance of breastfeeding, the advantages and disadvantages of infant formulas, the importance of breastfeeding immediately after birth, rooming-in, appropriate techniques (positioning and latch) to prevent breastfeeding complications, possible breastfeeding difficulties, and ways to prevent them. The literature indicates that educational actions are important both during prenatal care and in the immediate and late postnatal period^{19,29}, functioning differently at each stage, influencing the maternal

prenatal decision to breastfeed, and helping resolve postnatal problems.

No association was found between early weaning and the use of artificial nipples such as pacifiers, baby bottles, or nipple shields in the maternity ward. A study indicates that feeding in baby bottles during hospitalization under speech-language-hearing supervision did not interfere with acceptance of the mother's breast³⁰. However, that study approached premature newborns, so its conclusions cannot be generalized to the sample of the present research. The literature points to pacifiers and bottles as risk factors for early weaning^{31,32}. Only 7.1% of babies in the present study were discharged from the hospital using some type of artificial nipple. A 2019 study showed that the prevalence of bottle and pacifier use among children under 6 months old was 52.1% in Brazil, and the prevalence of pacifier use among children under 2 years old was 43.9%, while in Southeast Brazil it was 46.9%³³. The hospital where the research was conducted is not certified as a Baby-Friendly Hospital, but it does not allow mothers to provide pacifiers or bottles during their stay in the rooming-in ward, which may explain the few mothers who offered these utensils to their children.

The main reasons reported by mothers for discontinuing breastfeeding early were "low milk production" and "return to work". Incorrect latching, with the baby's mouth not properly attached to the mother's breast, makes it difficult to extract breast milk; consequently, the breast empties, resulting in decreased milk production³⁴. However, mothers often believe that their milk is insufficient or weak, which is not true. In both cases, professional guidance would be essential to improve the latch and/or demystify misconceptions. Returning to work also contributes to early weaning³⁵. In this research, at the time of data collection, many companies had already resumed their activities (despite the pandemic) or had employees work from home to reduce exposure to contaminated environments. Although many women could continue practicing EBF while working from home, the reduced support network may have made this opportunity difficult during the pandemic, possibly impacting breastfeeding and the introduction of infant formulas in the baby's diet. The breastfeeding process may have also been impacted by mental health issues in mothers exposed to tension, distress, anxiety, and fear of contracting the virus³⁶, besides the work overload.

The survey of the National Study of Infant Feeding and Nutrition (ENANI, in Portuguese), commissioned

by the Brazilian Ministry of Health in 2019 (the pre-pandemic year), showed that the prevalence of EBF among children under 4 months old was 60.0% in Brazil, being higher in the Southeast (63.5%) and lower in the Northeast (55.8%). Also, the prevalence of EBF among children under 6 months old was 45.7% in Brazil, being more frequent in the South (53.1%) and less frequent in the Northeast (38.0%); in the Southeast, it was 50.0%. The prevalence of mixed breastfeeding among children under 6 months old in Brazil was 19.8%, being higher in the Northeast (26.8%) and lower in the Southeast (14.7%). The comparison of these data with those of the present research suggests a decrease in the EBF rate after the pandemic. However, the population of this research is restricted to a specific public hospital in a single city. Therefore, these findings cannot be generalized³³.

Breastfeeding data from the 2019-ENANI reveal significant progress from previous years but are still below the goals proposed by the WHO for 2030 – i.e., that at least 70% of children under 6 months old are on EBF. The 45.8% prevalence of EBF at 6 months in the 2019-ENANI was higher than that found in the present study, carried out during the pandemic³³.

This study has limitations, including the memory bias of mothers, who may not have accurately remembered the information they were asked about, and the short data collection period. Carrying it out during the pandemic makes the research more scientifically relevant, given the specificity of the moment and the lack of research on the subject during this period.

CONCLUSION

The prevalence of EBF at 6 months in full-term babies, in a public hospital, during the COVID-19 pandemic, was 16.3%. None of the variables analyzed was associated with early weaning.

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SRMG: Data curation; Data analysis; Supervision; Writing – Review & editing.

MCBB: Writing – Review & editing.

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Data sharing statement:

The authors may provide the table with the original data from this research, without identifying the participants, upon request via e-mail to the corresponding author.