

FACTORS ASSOCIATED WITH BREASTFEEDING SELF-EFFICACY IN THE IMMEDIATE PUERPERIUM IN A PUBLIC MATERNITY HOSPITAL

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ABSTRACT

Objective: to verify the association between sociodemographic variables, obstetric history, current pregnancy, and puerperium with breastfeeding self-efficacy. **Method:** cross-sectional study conducted in southwestern Maranhão, Brazil, between October 2020 and July 2021 with the participation of 240 postpartum women, using the Breastfeeding Self-Efficacy Scale - Short Form. Descriptive analysis, possible associations, simple and multiple logistic regression models were performed. **Results:** 83.3% had high breastfeeding self-efficacy, 46.7% were between 26 and 35 years old, 81.2% were married or in a stable union, 94.2% breastfed in the first hour of life, 37.9% received orientation on breastfeeding in the Primary Health Care Unit, and 84.2% offered only breast milk to the newborn in the maternity hospital. These factors were associated with high breastfeeding self-efficacy ($p < 0.05$). **Conclusion:** The research contributed to guide health professionals to provide superior quality care to pregnant and postpartum women and lactating mothers, aiming to increase breastfeeding self-efficacy, identifying, among these women, those who need more support.

DESCRIPTORS: Breast Feeding; Self-Efficacy; Infant Nutrition; Weaning; Postpartum Period.

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INTRODUCTION

The attitude of breastfeeding is linked to a historical, sociodemographic, and emotional scenario, having peculiar definitions for each woman. Although the importance of women as protagonists in the promotion of breastfeeding is acknowledged, this attribution also permeates the collective social burden under the strong influence of the current model of breastfeeding (BF) adopted by the programs of the National Policy for the Promotion, Protection, and Support of Breastfeeding. In this context, despite the result of lower health care costs, reduced rates of breastfeeding are still perceived¹.

Despite initiating exclusive breastfeeding (EBF) in the immediate postpartum period, many mothers complement or abandon this practice in the first weeks. This is due to several factors, such as breast problems, insufficient milk production, and the baby's difficulty in sucking². It is also possible to highlight the mother's socioeconomic status, level of education, her condition regarding being primiparous or multiparous, emotional factors, lack of family encouragement, genuine intention to breastfeed, and lack of knowledge on the subject by the mother³.

The World Health Organization (WHO) characterizes as good the percentage of 50% to 89% of children on EB and as very good if above 90%⁴⁻⁵. In Brazil, in 2020, there was an increase in the prevalence of continued BF in the first hour of life (53.1%) and EBF among children up to four months old (60%), outlining a scenario adjacent to the global goal for 2030, which is to reach about 70% in these indicators. Moreover, a similar parameter was noted in the advancement of the prevalence of breastfeeding in children under two years of age, reaching (60.9%)⁶. It is believed that this level rises in line with the policies recommended by the WHO/United Nations Children's Fund (UNICEF) and the Ministry of Health⁴⁻⁵.

Recent studies have revealed that lactating women are held responsible for the practice of breastfeeding, highlighting their positive expectations for breastfeeding their children; however, they often disregard their desires, needs, and insecurities regarding the context of caring for the newborn (NB)⁷. Self-efficacy is an improvement in personal ability to successfully perform certain tasks or behaviors to achieve likely results, being considered a modifiable factor⁸⁻⁹.

Given the importance of self-efficacy, a breastfeeding self-efficacy scale (BSES), the Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF), was developed in Canada to assess the confidence of nursing mothers in breastfeeding¹⁰⁻¹¹. The short version of the BSES, already validated in Brazil, allows us to know in advance the area in which women have lower breastfeeding self-efficacy, enabling, when necessary, the implementation of actions and care strategies with individualized interventions to optimize breastfeeding promotion assistance before deciding not to breastfeed or to wean early¹²⁻¹³.

To verify and understand the mother's self-confidence and satisfaction in the breastfeeding process, it is useful to assess breastfeeding self-efficacy. The self-efficacy theory, proposed by Albert Bandura, a Canadian psychologist, proposes to expand the individual's perception of his abilities when performing a certain activity⁸. It is believed that the existence of a health education strategy applicable to the hospital setting may increase not only maternal self-efficacy in breastfeeding, but also breastfeeding rates and the prolongation of complementary breastfeeding.

This study aimed to verify the association between sociodemographic variables, obstetric history, current pregnancy, and puerperium to breastfeeding self-efficacy.

METHODS

This is a cross-sectional, exploratory research with quantitative approach, conducted in a large public maternity hospital, located in the southwest of the state of Maranhão, inserted in the *Iniciativa Hospital Amigo da Criança* -IHAC (Child Friendly Hospital Initiative), of tertiary reference in perinatal and neonatal care. The research was conducted in the period from October 2020 to July 2021, and data collection occurred between January and March 2021. The steps of this methodology were guided by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) tool.

About 450 normal and surgical deliveries were performed monthly. Considering a 90% confidence interval and a 5% sampling error, the sample comprised 240 puerperal, and the criterion of convenience was adopted for the selection of participants. Included were puerperal aged 18 years and older, in immediate puerperium, between eight and 48 hours postpartum, admitted to the rooming house, who were on EBF and in the period of at least six hours postpartum. Were excluded: those younger than 18 years old; with children hospitalized in the neonatal intensive care unit; who, in the immediate postpartum period, had clinical and obstetric complications and pathologies that contraindicated breastfeeding and/or prevented communication with the researcher.

An adapted survey instrument¹⁴ was used, composed of 22 closed questions containing sociodemographic characteristics (age, race, marital status, education, occupation, and family income) and obstetric data (number of children, parity, history of prematurity, previous breastfeeding practice, main reasons for breastfeeding, whether breastfeeding was interrupted, and factors that hindered or prevented breastfeeding). The questions about current pregnancy and puerperium contained information about prenatal care; breastfeeding in the first hour; how long they intended to breastfeed exclusively; whether they received guidance on breastfeeding, where and by which professional, and whether formula was offered to the NB in the maternity hospital.

The BSES-SF, originally constructed in Canada¹⁵, abbreviated, and translated into Portuguese¹⁰, is constituted, in the original form, by 33 items and, in the short form, by 14 items, which are divided into two domains: Technique (eight items) and Intrapersonal Thoughts (six items). The scale is based on the Likert-type opinion criterion, which specifies the level of agreement on a statement, resulting in a score obtained based on the sum of each item: low effectiveness (14 to 32 points), medium (33 to 51 points) and high (52 to 70 points)¹⁰. After checking for errors and inconsistencies, descriptive analysis was performed using absolute and relative frequencies for all investigated variables and self-efficacy.

To evaluate possible associations between self-efficacy and the variables under investigation, simple and multiple logistic regression models¹⁶ were used, since the response was binary (high self-efficacy: yes or no). To select the main risk factors, univariate logistic analysis (unadjusted) was initially performed, considering as selection criteria all the variables that presented a p-value < 0.20. Subsequently, multivariate logistic regression (adjusted) was performed with these selected variables to estimate the odds ratios (OR), with confidence intervals of 95% and a significance level of 5%. There was no multicollinearity among the independent variables evaluated¹⁷. All tests were performed in IBM Statistical Package for the Social Sciences (SPSS), version 24, at 5% significance level.

The research was approved by the Research Ethics Committee of the Federal University of Maranhão, under opinion number 3,938,561.

RESULTS

The minimum age of the participants was 18 years and the maximum, 46 years with a range of 28 years, mean of 27.6 years, standard deviation of 6.02 years, and median of 27 years. The 112 (46.7%) participants or puerperal women were between 26 and 35 years old, 104 (43.3%) were yellow, 195 (81.2%) were married or in a stable union, 149 (62.1%) had schooling between eight and 12 years old, 194 (80.0%) had no employment relationship, and 127 (52.9%) had family income between one and two minimum wages (Table 1).

Table 1 - Sociodemographic characteristics, obstetric history and current pregnancy and puerperium. Imperatriz (MA), Brazil, 2021

Variables	n (%)
Age, years	
18-25	102 (42.5)
26-35	112 (46.7)
≥36	26 (10.8)
Race	
White	44 (18.3)
Yellow	104 (43.3)
Brown	86 (35.8)
Black	6 (2.6)
Marital Status	
Single and/or divorced	45 (18.8)
Married and/or stable union	195 (81.2)
Education, years	
< 8	43 (17.9)
8-12	149 (62.1)
>12	48 (20.0)
Employment relationship	
Yes	46 (19.2)
No	194 (80.8)
Family income, minimum wage*	
<1	58 (24.2)
1-2	127 (52.9)
>2	55 (22.9)
Children	
1	71 (29.6)
2 to 3	149 (62.1)
≥ 4	20 (8.3)

Parity	
Primiparous	71 (29.6)
Second Parity	86 (35.8)
Multiparous	83 (34.6)
Prematurity	
Yes	60 (25.0)
No	180 (75.0)
Previous breastfeeding	
Yes	167 (69.6)
No	73 (30.4)
Reasons for breastfeeding	
Felt obliged	90 (37.5)
Desired to breastfeed	74 (30.8)
Received help and support	6 (2.5)
No previous experience	36 (15.0)
Others	34 (14.2)
Breastfeeding Interruption	
Yes	78 (32.5)
No	162 (67.5)
Reasons for interruption	
Breast problems	14 (17.9)
Insufficient milk production	42 (53.9)
Return to work	4 (5.1)
New pregnancy	18 (23.1)
Performing PN	
Yes	221 (92.1)
No	19 (7.9)
Professional responsible for the NP	
Nurse	79 (34.0)
Physician	9 (3.9)
Both	144 (62.1)
Received orientation on breastfeeding	
Yes	214 (89.2)
No	26 (10.8)
Place of orientation	
BHU	81 (37.9)
Maternity Hospital	94 (43.9)
BHU and Maternity	39 (18.2)
Professional who oriented	

Doctor	2 (0.9)
Nurse	123 (57.5)
Nurse and doctor	74 (34.6)
Others	15 (7.0)
Breastfed in the first hour of life	
Yes	226 (94.2)
No	14 (5.8)
Intend to breastfeed exclusively	
Yes	236 (98.3)
No	4 (1.7)
Less than 6 months	3 (1.3)
Intended time of breastfeeding	
6 months	135 (56.5)
More than 6 months	101 (42.3)
Breastfed in the first hour of life	
Yes	202 (84.2)
No	35 (14.6)
Intend to breastfeed exclusively	3 (1.3)
Yes	
No	3 (1.3)
Less than 6 months	37 (15.4)
Intended time of EBF	200 (83.3)

Source: authors (2021).

* Value of minimum wage R\$1,100.00.

PN: Prenatal; BHU: Basic Health Unit; EBF: exclusive breastfeeding; NB: newborn.

Regarding obstetric history, 149 (62.1%) of them had between two and three children, 86 (35.8%) were second parity, 180 (75.0%) of the participants had no history of prematurity, 167 (69.6%) had breastfed during a previous pregnancy, 90 (37.5%) reported feeling of obligation as a reason for breastfeeding their children, and 162 (67.5%) did not stop breastfeeding. Among the 42 (53.9%) who stopped breastfeeding, the reason was insufficient milk production.

Regarding data on the current pregnancy and immediate postpartum period, 221 (92.1%) had prenatal care, 144 (62.1%) were accompanied by nurses and physicians, 214 (89.2%) received guidance on breastfeeding, 94 (43.9%) received guidance on breastfeeding at the maternity hospital, 123 (57.5%), by a nurse, 226 (94.2%) breastfed their babies within the first hour of life, 135 (56.6%) intended to breastfeed exclusively until the sixth month, and 202 (84.2%) fed only breast milk. The largest proportion of the interviewees 200 (83.3%) showed high self-efficacy to breastfeed.

In the univariate analysis, the variables age 26 to 35 years and over 36 years, married or stable union, education < eight years and between eight and 12 years, no employment relationship, family income from one to two minimum wages, two to three children, breastfeeding in the newborn's first hour of life, guidance on breastfeeding in the UBS,

and only breast milk as the newborn's food in the maternity ward showed a statistically significant association with high breastfeeding self-efficacy ($p < 0.20$) (Table 2).

Table 2 - Univariate analysis of sociodemographic characteristics, obstetric history, and current pregnancy and immediate puerperium in relation to high self-efficacy in breastfeeding. Imperatriz (MA), Brazil, 2021

Variables	n (%)	High self-efficacy	
		OR (95%CI)	p* value
Age, years			
18-25	83 (81.4)	1.0	
26-35	95 (84.6)	2.2 (1.6-3.6)	0.10
≥36	22 (84.8)	2.3 (1.7-4.1)	0.16
Race			
Brown	68 (79.1)	1.0	
White	35 (79.5)	0.9 (0.4-2.4)	0.95
Black	5 (83.3)	1.3 (0.5-2.8)	0.83
Yellow	92 (88.5)	1.9 (0.8-5.1)	0.26
Marital status			
Single or divorced	32 (71.1)	1.0	
Married or in a stable union	168 (86.2)	2.5 (1.2-5.4)	0.02
Education. years			
>12	34 (70.8)	1.0	
8-12	128 (85.9)	2.5 (1.2-5.4)	0.10
<8	38 (88.4)	3.1 (1.5-6.2)	0.11
Employment relationship			
Yes	33 (71.7)	1.0	
No	167 (86.1)	2.4 (1.1-5.2)	0.02
Family income. minimum wages†			
>2	41 (74.5)	1.0	
<1	49 (84.5)	1.8 (0.7-4.8)	0.21
1-2	110 (86.6)	2.2 (1.0-4.8)	0.05
Number of children			
1	54 (77.1)	1.0	
2-3	128 (85.3)	1.7 (1.0-3.5)	0.14
≥4	18 (90.0)	2.7 (0.6-5.7)	0.22
Performing prenatal care			
No	15 (78.9)	1.0	
Yes	185 (83.7)	1.4 (0.4-4.3)	0.59

Professional responsible for prenatal care			
Physician	7 (77.8)	1.0	
Nurse	64 (81.0)	0.8 (0.1-4.3)	0.82
Both	121 (84.0)	1.2 (0.6-2.5)	0.57
Parity			
Multipara	55 (77.5)	1.0	
Primipara	69 (83.1)	1.4 (0.6-3.2)	0.38
Second parity	76 (88.4)	2.2 (0.9-5.2)	0.26
Prematurity			
No	146 (81.1)	1.0	
Yes	54 (90.0)	2.1 (0.8-5.3)	0.22
Previous breastfeeding			
No	57 (78.1)	1.0	
Yes	143 (85.6)	1.7 (0.8-3.4)	0.25
Reasons for breastfeeding			
No previous experience	27 (75.0)	1.0	
Other	26 (76.5)	0.9 (0.3-2.7)	0.88
Received help and support	5 (83.3)	1.5 (0.2-4.1)	0.71
Desired to breastfeed	62 (83.8)	1.6 (0.6-4.3)	0.36
Felt obliged	80 (88.9)	2.4 (0.9-6.9)	0.86
Interrupted breastfeeding			
Yes	64 (82.1)	1.0	
No	136 (84.0)	1.1 (0.6-2.3)	0.71
Reasons for interruption			
Return to work	3 (75.0)	1.0	
Insufficient milk production	33 (78.6)	0.6 (0.2-3.2)	0.56
Breast problems	12 (85.7)	0.7 (0.3-3.5)	0.61
New pregnancy	15 (88.2)	1.2(0.4-5.2)	0.83
Breastfed in the first hour of life			
No	7 (50.0)	1.0	
Yes	193 (85.4)	5.8 (1.9-17.7)	0.02
Intend to breastfeed exclusively			
No	3 (75.0)	1.0	
Yes	197 (83.5)	1.6 (0.2-16.6)	0.65
Breastfeeding time. months			
>6	87 (86.1)	1.0	
6	109 (80.7)	0.7 (0.3-1.4)	0.27
<6	3 (100.0)	‡	‡
Received orientation on breastfeeding			
No	20 (76.9)	1.0	

Yes	180 (84.1)	1.6 (0.6-4.2)	0.36
Place of orientation			
Maternity hospital	73 (77.7)	1.0	
Maternity and BHU	31 (79.5)	0.9 (0.4-2.2)	0.81
BHU	76 (93.8)	3.9 (1.2-12.9)	0.02
Professional orientation			
Nurse and Doctor			
Nurse	106 (86.2)	1.0	
Others	13 (86.7)	0.6 (0.1-2.9)	0.53
Physician	2 (100.0)	0.9 (0.2-4.6)	0.95
NB feeding maternity			
Breast milk + occasional complement	9 (25.7)	‡	‡
Breast milk + occasional complement	1 (33.3)	1.0	
Only breast milk	190 (94.1)	0.6 (0.2-4.5)	0.77

Source: authors (2021).

* Wald chi-square; † value of minimum wage R\$ 1,100.00; ‡ presence of zero values that make it impossible to calculate the OR. OR: odds ratio; CI95%: 95% confidence interval; BHU: Basic Health Unit.

In the multivariate analysis (adjusted), the variables: age 26 to 35 years; over 36 years; married or in a stable union; no employment relationship; breastfeeding in the first hour of life of the newborn; orientation about breastfeeding in the BHU; and only breast milk as food for the newborn in the maternity ward remained associated with high self-efficacy in breastfeeding in women in the immediate postpartum period ($p < 0.05$) (Table 3).

Table 3 - Multivariate analysis (adjusted) of sociodemographic characteristics, obstetric history, and current pregnancy and immediate puerperium in relation to high breastfeeding self-efficacy. Imperatriz (MA), Brazil, 2021

Variables	OR	CI95%	P* value
Age, years			
18-25	1.0	-	-
26-35	2.5	1.9-4.0	0.02
≥36	3.0	2.0-5.3	0.01
Marital status			
Single or divorced	1.0	-	-
Married or in a stable union	3.0	1.6-6.1	0.01
Education, years			
>12	1.0	-	-
8-12	1.7	0.84-2.2	0.15
<8	1.9	0.9-4.3	0.13

Employment relationship			
Yes	1.0	-	-
No	3.5	1.7-7.1	0.01
Family income. minimum wages†			
>2	1.0	-	-
<1	1.5	0.5-4.2	0.32
1-2	1.7	0.6-4.1	0.10
Number of children			
1	1.0	-	-
2-3	1.2	0.8-2.1	0.15
≥4	2.1	0.9-5.2	0.25
Breastfed in the first hour of life			
No	1.0	-	-
Yes	5.0	1.6-12.2	0.01
Place of orientation			
Maternity hospital	1.0	-	-
Maternity and BHU	1.1	0.6-2.8	0.45
BHU	4.1	1.7-13.2	0.03
NB feeding maternity			
Breast milk + occasional complement	1.0		
Breast milk + occasional complement	0.8	0.4-4.0	0.34
Only breast milk	4.0	2.3-8.2	<0.001

Source: authors (2021).

*Wald chi-square; † value of minimum wage R\$ 1,100.0.

OR: odds ratio; 95%CI: 95% confidence interval; BHU: Basic Health Unit; NB: newborn.

DISCUSSION

Specific information on breastfeeding during the prenatal and postpartum periods is essential to ensure the best assistance and prevention of early weaning, providing a successful experience in the breastfeeding process¹⁸.

Maternal age is a relevant factor in adherence to and duration of breastfeeding. In this study, with increasing age, there were three times more chances of occurrence of high breastfeeding self-efficacy when compared to puerperal of younger age. This corroborates the literature, which showed that women over 35 years old were 21.18 times more likely to have higher levels of self-efficacy, and those between 26 and 35 years old were only 12.59 times more likely to have higher BSES scores¹⁹.

On the other hand, a study with puerperal adolescents showed that most of them (54.26%) had a high level of self-efficacy in the ability to breastfeed because they received help from their mother and mother-in-law. This fact proves that certain practices, such as receiving support and initiating breastfeeding in the first hour of life, influence the increase in maternal breastfeeding self-efficacy²⁰.

Regarding marital status, 195 participants (81.2%) were married or had a stable union and more chances of high breastfeeding self-efficacy (OR=3.0). A study conducted in Uganda, West Africa, with the participation of 84 postpartum women indicated that six out of 10 women had high self-efficacy for breastfeeding, and the associated factors were the presence of a partner and receiving support from health professionals for breastfeeding in the immediate postpartum period²¹. It is also emphasized that the presence of a partner is important for the support and encouragement provided, which positively influences the success of breastfeeding, and its absence may be a determining factor for early weaning²².

Another determining factor in the practice of EBF is related to the non-formal insertion of this group in the labor market, with no employment relationship, thus leading to home care, in addition to intervening in the reduction of family income of most mothers³. In a study of 135 nursing mothers, 64.5% were engaged only in household activities²³.

Being a housewife is considered a protective factor for BF, because the return to work is the main cause of early weaning for some mothers, in addition to anticipating complementary feeding, which may interfere with the child's growth and development^{3,23}. Therefore, the participants in this study had a favorable situation for the practice of BF, considering that most of them, at the time, were not employed.

It is known that adequate guidance during prenatal and postpartum periods favors self-confidence in breastfeeding. For these reasons, since prenatal care, pregnant women should be encouraged to breastfeed their babies and informed about the benefits of the practice and the disadvantages of other milks²⁴. However, in this study, some women did not receive any prior information about breastfeeding during prenatal care or even at the maternity hospital.

A systematic review compared the types of BF counseling (individual and group), aiming to verify its effect on the rates of EBF within 48 hours postpartum, in the first month, and between one and five months. The results showed a significant 43% increase in EBF within 48 hours postpartum when mothers received individual counseling²⁵. Thus, correct information on the breastfeeding process favors greater confidence for mothers to breastfeed soon after birth²⁶.

This study pointed out a significant association between breastfeeding self-efficacy and the variables parity and type of feeding in maternity. In divergence to this result, a study²⁷ detected a statistically significant association between low birth weight and not breastfeeding in the first hour after birth, even after adjustment. There was no association between the type of delivery and breastfeeding in the first hour of life. Therefore, the mother's decision-making power is limited, since the professionals' knowledge and the practices instituted in the hospital service are configured as determining factors for the initiation of breastfeeding in the delivery room. Corroborating this finding, a study conducted in Sweden found that multiparous mothers had higher BSES-SF scores²⁸. Given this issue, high self-efficacy in multiparous women is justified as a protective factor for the success of subsequent pregnancies.

The early initiation of breastfeeding brings benefits for both mother and baby and is related to the woman's greater satisfaction and confidence in her ability to breastfeed and care for her baby²⁰. A systematic literature review showed that breastfeeding in the first postpartum hour under free demand, the child's stay in the rooming-in unit, the professionals' intervention when breast complications occur, and the restriction of supplementation for infants were listed as protective factors of in-hospital EBF, despite the short stay in the maternity hospital²⁹.

Among the potentialities of this study, the use of the BSES for the BSES-SF Breastfeeding stands out. This is a scale recognized and used worldwide, making it possible to compare the results of the studies⁹. Moreover, in a systematic review with only longitudinal studies, relating the duration of EBF and the total score of the BSES-SF, it was found that of the total of four studies, three identified a significant increase in EBF over six

months. Only one study did not show this association³⁰. Given this approach, it is believed that the success of breastfeeding depends on favorable measures that can influence those involved in a satisfactory manner, prioritizing the factors that are directly related to the mothers and the situational factors of living conditions.

One of the limitations encountered during the study was the difficulty of access of the researcher to hospital environments due to decrees and restrictions on the number of hospitalizations of pregnant women, making data collection more complex in this period of pandemic. In addition, because it was a cross-sectional study, the characteristics related to BF were related to a short and limited time (the moment of the interview), making memory bias possible because it is a period of hormonal and physiological alternations, which can compromise the accuracy of the information.

CONCLUSION

In the immediate puerperium, the woman should be accompanied by health professionals in the rooming-in and supported in her lactation practice, so that she has support in her difficulties, being directed to childcare consultations, aiming to maintain her confidence and self-efficacy in breastfeeding.

Mothers showed high self-efficacy for breastfeeding, a satisfactory finding for the practice of breastfeeding. In the univariate and multivariate (adjusted) analysis, the variables that were significant for high self-efficacy were age 26-35 years and older than 36 years, married or in a stable union, no employment relationship, breastfeeding within the first hour of life of the newborn, guidance on breastfeeding in the Primary Health Care Unit, and only breast milk as food for the newborn in the maternity hospital.

Knowing the sociodemographic and obstetric profile of this population contributes to guide health professionals to provide superior quality care to pregnant, postpartum, and breastfeeding women, aiming to increase breastfeeding self-efficacy, identifying those who need greater support. Longitudinal studies are suggested to follow up pregnant women to delineate the behavioral trend of breastfeeding.

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REFERENCES

1. Vasconcelos TC, Barbosa DJ, Gomes MP. Fatores que interferem no aleitamento materno exclusivo durante os primeiros seis meses de vida do bebê. *Revista Pró-Univer SUS*. [Internet]. 2020 [cited 12 jul 2021]; 11(1). Available from: <http://editora.universidadedevassouras.edu.br/index.php/RPU/article/view/2208>.
2. Barbosa GEF, Silva VB da, Pereira JM, Soares MS, Medeiros Filho RA dos, Pereira LB, et al. Dificuldades iniciais com a técnica da amamentação e fatores associados a problemas com a mama em puérperas. *Rev Paul Pediatr*. [Internet]. 2017 [cited 12 jul 2021]; 35(3). Available from: <https://doi.org/10.1590/1984-0462/2017;35;3;00004>.
3. Moimaz SAS, Rós D de T, Saliba TA, Saliba NA. Estudo quanti-qualitativo sobre amamentação exclusiva por gestantes de alto risco. *Cien Saude Colet*. [Internet]. 2020 [cited 12 jul 2021]; 25(9). Available from: <https://doi.org/10.1590/1413-81232020259.30002018>.
4. United Nations Children's Fund (UNICEF). *Global Breastfeeding Scorecard, 2019: Increasing commitment to breastfeeding through funding and improved policies and programmes*. [Internet]. Genève: Unicef; 2019 [cited 12 jul 2021]; Available from: <https://apps.who.int/iris/handle/10665/326049>.
5. Ministério da Saúde (BR). Secretaria de Atenção Primária à Saúde. Departamento de Promoção da Saúde. *Guia alimentar para crianças brasileiras menores de 2 anos*. [Internet] Brasília: Ministério da Saúde; 2019 [cited 12 jul 2021]; Available from: https://www.svb.org.br/images/guia_da_crianca_2019.pdf.
6. Universidade Federal do Rio de Janeiro. *Estudo Nacional de Alimentação e Nutrição Infantil – ENANI-2019: resultados preliminares – Indicadores de aleitamento materno no Brasil*. [Internet] Rio de Janeiro: UFRJ, 2020. [cited 12 jul 2021]; Available from: https://enani.nutricao.ufrj.br/index.php/relatorios/1.Estudo_Nacional_de_Alimentação_e_Nutrição_Infantil.2.Aleitamento_materno.
7. Castro IR de, Melo MCP de, Morais RJL de, Santos ADB dos. Childbirth care for primiparas: reflexes in breastfeeding. [Internet]. 2019 [cited 18 may 2021]; 27. Available from: <https://doi.org/10.12957/reuerj.2019.43354>.
8. Bandura A. Toward a psychology of human agency: pathways and reflections, *Perspectives on Psychological Science*. [Internet]. 2018 [cited 18 may 2021]; 13(2). Available from: <https://doi.org/10.1177/1745691617699280>.
9. Chagas C de O das. *A influência da autoeficácia sobre os desfechos do aleitamento materno: revisão integrativa*. [trabalho de conclusão de curso]. Santa Maria (RS): Universidade Federal de Santa Maria; 2019 [cited 18 may 2021]; Available from: <https://repositorio.ufsm.br/handle/1/19983>.
10. Oriá MOB, Ximenes LB. Translation and cultural adaptation of the Breastfeeding Self-Efficacy Scale to Portuguese. *Acta Paul. de Enferm*. [Internet]. 2010 [cited 17 jul 2021]; 23(2). Available from: <https://doi.org/10.1590/S0103-21002010000200013>.
11. Minharro MC de O, Carvalhaes MA de BL, Parada CMG de L, Ferrari AP. Autoeficácia na amamentação e a relação com a duração do aleitamento materno. *Cogitare Enferm*. [Internet]. 2019 [cited 17 jul 2021]; 24. Available from: <http://dx.doi.org/10.5380/ce.v24i0.57490>.
12. Souza MLB, Santos TP, Alves OM, Leite FMC, Lima E de FA, Cançali Primo C. Avaliação da autoeficácia na amamentação de puérperas. *Enferm. foco* [Internet]. 2020 [cited 18 may 2021]; 11(1). Available from: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1103018>.
13. Lima CM de, Sousa LB de, Costa EC, Santos MP, Cavalcanti MC e S, Maciel N de S. Auto eficácia na amamentação exclusiva: avaliação dos domínios técnicos e pensamentos intrapessoais em puérperas. *Enferm. foco*. [Internet]. 2019 [cited 12 jul 2021]; 10(3). Available from: <http://revista.cofen.gov.br/index.php/enfermagem/article/view/1597>.
14. Dodt RCM, Joventino ES, Aquino PS, Almeida PC, Ximenes LB. Estudo experimental de uma intervenção educativa para promover a autoeficácia materna na amamentação. *Rev Latino-am*

- Enfermagem. [Internet]. 2015 [cited 04 jun 2021]; 23(4). Available from: <https://doi.org/10.1590/0104-1169.0295.2609>.
15. Dennis C-L. The breastfeeding self-efficacy scale: Psychometric assessment of the short form. *J Obstet Gynecol Neonatal Nurs.* [Internet]. 2012 [cited 04 jun 2021]; 32(6). Available from: <https://doi.org/10.1177/0884217503258459>.
 16. DeMaris A. A tutorial in logistic regression. *J Marriage Fam.* [Internet]. 1995 [cited 04 jun 2021]; 57(4). Available from: <https://doi.org/10.2307/353415>.
 17. Fontelles MJ. Bioestatística aplicada à pesquisa experimental. v. 2. São Paulo: Livraria da Física, 2012.
 18. Souza SF de, Alvarenga DBM de, Santos BNS dos, Pinheiro IF, Salles PV. Perfil demográfico e levantamento dos conhecimentos sobre aleitamento materno de puérperas atendidas em uma maternidade pública da região metropolitana de Belo Horizonte: resultado de um projeto de extensão. *Conecte-se! Revista Interdisciplinar de Extensão.* [Internet]. 2017 [cited 04 jun 2021]; 1(1). Available from: <http://periodicos.pucminas.br/index.php/conecte-se/article/view/16195>.
 19. Santos FS, Souza RC, Candido PGG, Santos LH dos, Pascoal LM, Santos Neto M. Autoeficácia do aleitamento materno em puérperas de uma maternidade pública do nordeste brasileiro. *Rev. enferm. Cent.-Oeste Min.* [Internet]. 2020 [cited 14 jun 2021]; 10. Available from: <http://seer.ufsj.edu.br/index.php/recom/article/view/3910>.
 20. Guimarães CM de S, Conde RG, Gomes-Sponholz FA, Oriá MOB, Monteiro JC dos S. Fatores relacionados à autoeficácia na amamentação no pós-parto imediato entre puérperas adolescentes. *Acta Paul. Enferm.* [Internet]. 2017 [cited 04 jan 2011]; 30(1). Available from: <https://doi.org/10.1590/1982-0194201700016>.
 21. Saffari M, Pakpour AH, Chen H. Factors influencing exclusive breastfeeding among Iranian mothers: a longitudinal population-based study. *Health Promot Int* [Internet]. 2017 [cited 14 jun 2021]; 7(1). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5209648/>.
 22. Costa S, Fettermann FA, Azevedo L da S de, Freitas HMB de, Bordignon JS, Donaduzzi DS da S. A prática do aleitamento materno na percepção de mulheres primigestas. *Vivências.* [Internet]. 2019 [cited 04 jul 2021]; 15(29). Available from: <https://doi.org/10.31512/vivencias.v15i29.90>.
 23. Torquato RC, Silva VMGN, Lopes AP de A, Rodrigues L do N, Silva WCP da, Chaves EMC. Perfil de nutrízes e lactentes atendidos na Unidade de Atenção Primária de Saúde. *Esc Anna Nery.* [Internet]. 2018 [cited 04 jul 2021]; 22(1). Available from: <https://www.scielo.br/j/ean/a/4YwH5mCFD7zmYrSjghyjwt/?lang=pt&format=pdf>.
 24. Ferreira FA, Silva AM da, Silva SR de M, Santos MCS dos, Freitas R de SC, Santos REA dos, et al. Aleitamento materno exclusivo: empecilhos apresentados por primíparas. *Rev. enferm. UFPE on line.* [Internet]. 2018 [cited 12 jul 2021]; 12(12). Available from: <https://doi.org/10.5205/1981-8963-v12i12a236599p3205-3211-2018>.
 25. Passos LS dos, Kroll C, Borges L, Rocha ED de M, Schultz LF. Acompanhamento dos atendimentos de puérperas e recém nascidos em um Banco de Leite Humano. *Esc. Anna Nery Rev. de Enferm.* [Internet]. 2020 [cited 12 jul 2021]; 24(2). Available from: <https://doi.org/10.1590/2177-9465-EAN-2019-0086>.
 26. Marques BL, Tomasi YT, Saraiva S dos S, Boing AF, Geremia DS. Orientações às gestantes no pré-natal: a importância do cuidado compartilhado na atenção primária em saúde. *Esc. Anna Nery Rev. de Enferm.* [Internet]. 2021 [cited 12 jul 2021]; 25(1). Available from: <https://doi.org/10.1590/2177-9465-EAN-2020-0098>.
 27. Paredes HDMT, Pontes JS, Rocha CMM da, Almeida MFL de, Pereira S, Anastácio A da S, Capelli J de CS. Amamentação na primeira hora de vida em uma maternidade de referência de Macaé. *Saúde Redes.* [Internet]. 2019 [cited 14 jun 2021]; 5(1). Available from: https://docs.bvsalud.org/biblioref/2020/07/1115993/amamentacao-na-primeira-hora-de-vida-em-uma-maternidade-de-ref_jY3uNDj.pdf.
 28. Gerhardsson E, Hildingsson I, Mattsson S, Funkquist E-L. Prospective questionnaire study showed

that higher self-efficacy predicted longer exclusive breastfeeding by the mothers of late preterm infants. *Acta Paediatr. Int. J. Paediatr.* [Internet]. 2018 [cited 14 jun 2021]; 107(5). Available from: <http://doi.org/10.1111/apa.14229>.

29. Coca KP, Pinto VL, Wesphal F, Mania PMA, Abrão ACF de V. Bundle of measures to support Intra-hospital exclusive breastfeeding: evidence of systematic reviews. *Rev. Paul. Pediatr.* [Internet]. 2018 [cited 14 jul 2021]; 36(2). Available from: <https://doi.org/10.1590/1984-0462/2018;36;2;00002>.

30. Rocha IS, Lolli LF, Fujimaki M, Gasparetto A, Rocha NB da. Influência da autoconfiança materna sobre o aleitamento materno exclusivo aos seis meses de idade: uma revisão sistemática. *Ciênc. Saúde Colet* [Internet]. 2018 [cited 12 jul 2021]; 23(11). Available from: <https://doi.org/10.1590/1413-812320182311.20132016>.

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Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Siqueira LS, Santos FS, Santos LH dos, Santos Neto M**; Drafting the work or revising it critically for important intellectual content - **Siqueira LS, Santos FS, Santos RM de MS, Santos LFS, Pascoal LM, Santos Neto M**; Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Siqueira LS, Santos FS**. All authors approved the final version of the text.

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