Self-efficacy in the practice of breastfeeding in adolescent puerperal women

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INTRODUCTION

Breast milk is a complex and dynamic food with numerous advantages for the newborn and its mother¹. The World Health Organization (WHO) and the Ministry of Health recommend breastfeeding for children under 6 months of age exclusively and as supplementation for children up to 2 years or more².

The act of breastfeeding goes far beyond nourishing the child, and it involves interaction between mother and child, with an impact on adequate growth, protection against infections, cognitive and emotional development, and future protection against the development of chronic diseases that are common in adults^{3,4}.

In Brazil, the National Study on Food and Nutrition (ENANI–in Portuguese) conducted in 2019 showed a prevalence of exclusive breastfeeding in infants under 6 months of age and continued breastfeeding in infants between 20 and 23 months of 45.8 and 35.5%, respectively⁴.

Maternal age has been identified as an important factor in the early discontinuity of breastfeeding⁵. Several factors interfere with the duration of breastfeeding practiced by adolescent mothers, such as lack of family support and/or information, absence of a partner, return to work or school, early introduction of other foods for the infant, and the use of pacifiers⁶.

Another relevant factor that influences a woman's behavior during breastfeeding is the mother's confidence in her ability to breastfeed⁷, also called breastfeeding self-efficacy. Several pieces of evidence have shown that the promotion of mothers' self-efficacy in breastfeeding contributes to the prevention of early weaning by promoting holistic, humanized care, contributing to effective assistance, aiming at increasing the time of exclusive breastfeeding, and consequently reducing morbidity and children mortality⁸. Despite this, publications involving teenage mothers, especially in our country, are still scarce in the literature.

Thus, the objective of the present study was to evaluate the self-efficacy of adolescent mothers in their ability to breastfeed, as well as its reflection in practice and adherence to exclusive breastfeeding.

METHODS

The study was approved by the Research Ethics Committee of the Centro Universitário Doutor Leão Sampaio (UNILEÃO – In Portuguese), under opinion No. 3,277,812, following the ethical precepts of resolution 466/2012 of the National Research Ethics Commission. All participants signed the terms of consent to display their information.

Through a descriptive, cross-sectional study with a quantitative, non-probabilistic approach, 30 adolescent puerperal women in the immediate postpartum period (between the first and tenth postpartum day), followed up in the Family Health Strategies (ESF) of the urban area of Juazeiro do North, Ceara, Brazil. Women who were illiterate, with restrictions that made it impossible to understand the instrument, with premature births, or with neonates hospitalized in an intensive care unit for more than 10 days were excluded.

Initially, the researcher made a telephone contact with all nurses working in the FHS to obtain information about pregnant adolescents who were close to childbirth. Professionals were asked to schedule a visit to the postpartum woman's residence during the immediate postpartum period.

Data were collected from August 2019 to January 2020. In the period, 38 adolescent puerperal women attended by the ESF in the municipality and eligible for the study were identified, of which three moved to another municipality with their family members and five gave up the collection, resulting in a total of 30 participants (Figure 1).

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Data were collected using two instruments. The first instrument was a questionnaire that included sociodemographic and obstetric variables.

The second instrument was the Breastfeeding Self-Efficacy Scale–Short-Form (BSES-SF), which consists of a structured, self-completed Likert scale containing 14 questions divided into two domains: technical and intrapersonal thinking. The instrument allows for assessing the participants' self-efficacy in breastfeeding. Each question has five possible answers that range from 1 to 5, where 1 – totally disagree, 2 – disagree, 3 – sometimes agree, 4 – agree, and 5 – totally agree. The total score of the scale varies from 14 to 70 points, being considered low effectiveness: from 14 to 32 points; medium effectiveness: from 33 to 51 points; and high effectiveness: from 52 to 70 points. The scale was validated in Brazil by Dodt⁹ presenting Cronbach's alpha of 0.74, indicating high internal consistency, ratified by the intraclass correlation coefficient that ranged from 0.69 to 0.78, which confirms the reliability of the BSES-SF⁹.

Data were entered into an Excel® 2013 spreadsheet, and analyses were performed using the Statistical Package for Social Sciences (SPSS 25.0). Categorical variables were arranged as absolute numbers and percentages and compared using the chi-square or Fisher's exact test. The standard deviation for breast-feeding self-efficacy was evaluated. A significance level of 5% was adopted to reject the null hypothesis.

RESULTS

Table 1 shows the general characterization of adolescent mothers with a predominance of the following characteristics: ages between 17 and 19 years, completed high school, and single.

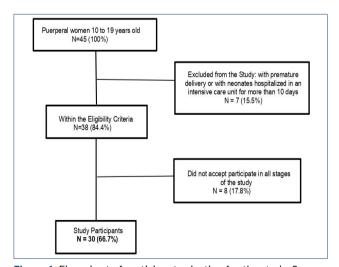


Figure 1. Flow chart of participant selection for the study. Source: Prepared by the author.

Table 1. Association between the effectiveness rates of adolescents during the immediate postpartum period and social and obstetric variables.

Self-efficiency					n .					
	Moderate	%	High	%	р					
Age group										
14-16 years	5	62.5	3	37.5	0.4					
17-19 years	12	54.6	10	45.4						
Education										
Incomplete elementary	7	77.8	2	22.2						
Complete elementary	4	66.7	2	33.3	0.27					
Incomplete high school	4	33.3	8	66.7						
Complete high school	2	66.7	1	33.3						
Religion										
Catholic	10	52.6	9	47.4	0.00					
Evangelical	5	62.5	3	37.5	0.28					
Does not defined	2	66.7	1	33.3						
Marital status										
Married	3	60	2	40	0.00					
Stable union	6	66.7	3	33.3	0.33					
Single	8	50	8	50						
Number of people residing in	the househ	old								
2 - 4	5	71.4	2	28.6						
5 - 7	9	47.4	10	52.6	0.3					
8-10	3	75	1	25						
Planned pregnancy?										
Yes	6	50	6	50	0.4					
No	11	61.1	7	38.9						
Had prenatal care?										
Yes	15	53.6	13	46.4	0.32					
No	2	100	0	0						
How many appointments?										
0 - 4	3	75	1	25						
5 - 7	5	38.5	8	61.5	0.33					
8 - 10	9	69.2	4	30.8						
Received guidance and encouragement to breastfeed?										
Yes	16	55.2	13	44.8	0.32					
No	1	100	0	0						
Who guided/encouraged										
Nurse	14	56	11	44						
Doctor	5	55.6	4	44.4						
Health agent	11	61.1	8	44.4						
Mother	16	64	9	36	0.2					
Grandmother	13	76.5	4	23.5						
Sister	5	71.4	2	28.6						
Partner	4	44.4	5	55.6						
Type of delivery				33.0						
Cesarean	9	50	9	50	0.37					
Vaginal	8	66,7	4	33,3	0.37					
Placed the newborn on the chest immediately after delivery?										
Yes	3	50	3	50	0.42					
No	14	58.3	10	41.7	0.42					
				41./						
If not at what time did you br			42.0	0.20						
After arriving in the room	9	56.2	7	43.8	0.28					
The next day	5	83.3	1	16.7						

Juazeiro do Norte, CE, 2020 (n=30). Source: Direct Survey, 2019–2020. p significance level of the chi-square or Fisher's exact test.

Most women did not plan the pregnancy and underwent 5–10 prenatal consultations. The results revealed that there was no statistically significant difference when comparing adolescent mothers with medium and high self-efficacy to breastfeed, considering social and obstetric variables.

The classification and average points based on the score obtained by the questionnaire revealed self-efficacy to breast-feed: medium [17 adolescents (56.6%); 42.2+5.8 points] and high [13 adolescents (43.3%); 56.6+4.6 points]. No postpartum woman showed low self-efficacy.

Table 2 shows the distribution of responses by adolescent mothers according to the technical domain of the BSES-SF

questionnaire. In total, 16 (53.3%) of the participants felt that the baby was breastfeeding enough. In addition, 26 (86.7%) adolescents reported not using infant formula or cow's milk as a supplement and practicing exclusive breastfeeding. With regard to latching during the entire feeding, 20 (66.7%) adolescents could not see if it was correct. Eighteen (60%) of the participants reported that they could not control the organization of their routine.

Table 3 shows the distribution of the adolescent mothers' responses according to the intrapersonal thoughts domain of the BSES-SF. In total, 20 (66.6%) of the participants reported dealing with breastfeeding successfully, in the same way that they

Table 2. Distribution of the adolescents' responses during the immediate postpartum period according to the technical domain of the Breastfeeding Self-Efficacy Scale-Short-Form questionnaire.

Domain Technical		Disagree		Sometimes agree		Agree		Totally agree	
		%	n	%	n	%	n	%	
1. I always feel when my baby is getting enough.	5	16.7	9	30	13	43.3	3	10	0.37
3. I always feed my baby without using formula milk as a supplement.	2	6.7	2	6.7	21	70	5	16.7	0.45
4. I always notice that my baby is holding the breast correctly throughout the feed.	3	10	17	56.7	7	23.3	3	10	0.35
6. I can always breastfeed even if my baby is crying.	9	30	6	20	13	43.3	2	6.7	0.37
11. I always breastfeed my baby on one breast and then switch to the other.	2	6.7	8	26.7	13	43.3	7	23.3	0.44
12. I always continue to breastfeed my baby with each feeding. (at each feeding).	0	0	5	16.7	17	56.7	8	26.7	0.47
13. I can always match my needs to the baby's needs. (I organize my bathing, sleeping, feeding needs with the baby's breastfeeding).	5	16.7	13	43.3	8	26.7	4	13.3	0.38
14. I always know when my baby is finished with a feed.	5	16.7	14	46.7	10	33.3	1	3.3	0.36

Juazeiro do Norte, CE, 2019-2020 (n=30). Source: Direct Survey, 2019-2020.

Table 3. Distribution of adolescents' responses during the immediate postpartum period according to the intrapersonal thoughts domain of the Breastfeeding Self-Efficacy Scale-Short-Form questionnaire.

Domain intrapersonal thoughts		Totally disagree		Disagree		Sometimes Agree		Agree		Totally agree	
		%	n	%	n	%	n	%	n	%	
2. I always deal with breastfeeding successfully, just as I deal with other challenges. (Successfully overcome breastfeeding and other life situations).	0	0	3	10	7	23.3	16	53.3	4	13.3	0.42
5. I always handle breastfeeding in ways that satisfy me.	1	3.3	7	23.3	8	26.7	12	40	2	6.7	0.38
7. I always feel like continuing to breastfeed.	0	0	4	13.3	6	20	18	60	2	6.7	0.41
8. I can always breastfeed comfortably in front of my family.	0	0	7	23.3	7	23.3	13	43.3	3	10	0.39
9. I am always satisfied with my breastfeeding experience.	0	0	1	3.3	17	56.7	11	36.7	1	3.3	0.39
10. I can always deal with the fact that breastfeeding takes time. (Even consuming my time I want to breastfeed).	0	0	5	16.7	8	26.7	14	46.7	3	10	0.40

Juazeiro do Norte, CE, 2019-2020 (n=30). Source: Direct Survey, 2019-2020.

dealt with other challenges and expressed a desire to continue breastfeeding. In total, 16 (53.3%) felt comfortable breastfeeding in front of family members, but satisfaction with breastfeeding was mentioned by only 12 (40%) of the participants.

DISCUSSION

The present study revealed that all the evaluated adolescent mothers had medium to high scores of self-efficacy to breast-feed. The analysis of the domains of the scale made it possible to identify aspects that can make the breastfeeding process difficult and that are subject to intervention. The sociodemographic and obstetric variables did not differ in the comparison between the groups with medium and high efficacies to breastfeed.

The identification of confidence to breastfeed among adolescents can contribute to the understanding of their situational context and to the removal of social and structural obstacles that may interfere with the woman's ability to breastfeed in a confident and peaceful way. It is noteworthy the practicality of the BSES-SF instrument applied in the present study with scientific evidence of reliability and validity in all age groups¹⁰.

A Brazilian study carried out in the Northeast region with 172 adolescent mothers using the same instrument used by us showed a predominance of high self-efficacy to breastfeed in 84% of the participants, higher than that observed by us¹¹.

The absence of mothers with low breastfeeding self-efficacy in our study and in the one mentioned above can be attributed to the important role of the ESF in the dissemination of guidelines on breastfeeding during prenatal care. A previous study showed that the ESF was heavily involved in various activities in the community, with an emphasis on guidance provided during prenatal care for mothers living in the areas covered.

It is known that the socioeconomic context in which the adolescent mothers are inserted has a strong relationship with the knowledge, attitudes, and practices of breastfeeding in low-and middle-income countries. Therefore, these factors must be considered in the work of health teams, especially in screening and monitoring, since the limits imposed by poverty, especially in the north and northeast regions of Brazil, imply access to information, care, and adherence to healthy behaviors¹².

In the present study, 50% of the adolescents had completed or discontinued high school. Mothers with a higher level of education tend to be able to effectively breastfeed their babies, as they are able to analyze the external factors that influence this practice in a more conscious and coherent way, preventing them from interfering in the breastfeeding process¹³.

The survey revealed that most participants were single. Contrasting the data of the present research, some studies reveal that single mothers have greater difficulty in performing the practice of breastfeeding, due to the physical and emotional exhaustion they face when they feel alone in this process and are unable to maintain breastfeeding¹⁴. Teenagers' mothers have the greatest influence on their breastfeeding experience, from making the decision to breastfeed or not, to maintaining to continuing¹⁵.

Identifying and recognizing the influences on a woman's decision to breastfeed, in particular, the confidence to breastfeed among adolescent mothers, makes it possible to optimize the support and encouragement of breastfeeding, contributing to the understanding of its social and structural contexts that may impair a woman's ability to breastfeed¹⁶.

Regarding aspects of self-efficacy for breastfeeding, the results of the present study indicated that mothers showed greater adherence to items related to the breastfeeding technique. On the contrary, there was lower adherence regarding the difficulty of breastfeeding the baby when he was crying, highlighting the need for professionals to work on these aspects related to tolerance and seeking to improve the adolescents' self-confidence¹⁷.

The study limitations include the sample size, the fact that it was carried out in a single municipality in the interior of Ceará, and the cross-sectional design that makes it impossible to establish causal relationships, limiting the findings to the population. It is worth noting that the present work contributed relevant information to the practical field of collective health, given the existence of incipient information on the self-efficacy of adolescent mothers monitored by the ESF for the management of breastfeeding. It also made it possible to identify in which aspects mothers need to be primarily helped, using them in the planning of actions in primary health care and in the identification of groups with greater vulnerability to early weaning.

CONCLUSION

It was found that the adolescent mothers accompanied by the ESF during prenatal care presented medium and high self-efficacy in breastfeeding in the immediate postpartum period, evidencing new knowledge in relation to vulnerability to breastfeeding for this specific public, which resides in a municipality in the interior of Ceará, in general.

Factors that interfere with maternal self-efficacy, when identified early and carefully addressed by the health professional with family support, are more easily resolved, encouraging the puerperal woman to maintain breastfeeding, increasing the duration of exclusive breastfeeding, and, consequently, reducing infant morbidity and mortality.

It is suggested that further studies be carried out using the BSES-SF, as this instrument can help health professionals in prenatal and childcare consultations (longitudinal studies) in order to help plan actions and decisions for qualified and effective care.

ETHICAL ASPECTS

The study was approved by the Research Ethics Committee of the Centro Universitário Doutor Leão Sampaio (UNILEÃO)

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with the opinion number: 3.277.812. Families received information, risks, and benefits from the study. The adolescent puerperal women received term of assente and their responsible a TCLE.

AUTHORS' CONTRIBUTIONS

AMVA: Conceptualization, Data curation, Formal Analysis, Writing – original draft, Writing – review & editing. **ROSS:** Conceptualization, Data curation, Formal Analysis, Writing – original draft, Writing – review & editing.

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