

# Breastfeeding self-efficacy among adolescent mothers

## Autoeficácia em amamentar entre mães adolescentes

Renata de Lima Bizerra<sup>1</sup>, Jéssica Pinheiro Carnaúba<sup>2</sup>, Anne Fayma Lopes Chaves<sup>3</sup>, Rebeca Silveira Rocha<sup>4</sup>, Hérica Cristina Alves de Vasconcelos<sup>5</sup>, Mônica Oliveira Batista Oriá<sup>6</sup>

## **ABSTRACT**

The objective of the study was to assess breastfeeding self-efficacy among lactating adolescents. A quantitative study involving 172 lactating adolescents, conducted in 14 Basic Health Units in the northeast cities of Brazil. For data collection, we used a form and the Breastfeeding Self-Efficacy Scale – Short Form. Data were analyzed with a statistical software. Results showed high breastfeeding self-efficacy (84%), with more adherence to the items: "Ensure that my baby is properly latched on for the whole feeding" (91%), and "Always recognize then my baby is finished breastfeeding" (93%), and less referent to feed the baby without using formula (18%) and breastfeed in front of people (14%). We found high breastfeeding self-efficacy in adolescent mothers in our study, showing a new knowledge about this specific public, in general, related to breastfeeding vulnerability.

**Descriptors:** Breast Feeding; Self-Efficacy; Adolescent; Obstetric Nursing.

## **RESUMO**

O objetivo da pesquisa foi avaliar autoeficácia em amamentar entre adolescentes lactantes. Estudo quantitativo, que envolveu 172 adolescentes lactantes, realizado em 14 Unidades Básicas de Saúde de municípios do nordeste do Brasil. Para a coleta utilizou-se um formulário e aplicou-se a *Breastfeeding Self-Efficacy Scale-Short Form*. Os dados foram analisados em programa estatístico. Os resultados apontaram elevada autoeficácia em amamentar (84%), com maior adesão aos itens: "Eu sempre percebo se o meu bebê está pegando o peito direitinho durante toda a mamada" (91%) e "Eu sempre sei quando o meu bebê terminou a mamada" (93%) e menor referente a alimentar o bebê sem usar leite em pó (18%) e amamentar na frente das pessoas (14%). Constatou-se que as mães adolescentes estudadas apresentaram elevada autoeficácia em amamentar, evidenciando um novo conhecimento em relação a esse público específico, em geral, relacionado a vulnerabilidade diante do aleitamento materno.

Descritores: Aleitamento Materno; Autoeficácia; Adolescente; Enfermagem Obstétrica.

<sup>1</sup> Nurse. Nurse of the Family Health Strategy from the City Hall of Quixadá. Quixadá, CE, Brazil. E-mail:faymalopes@bol.com.br.

<sup>&</sup>lt;sup>2</sup> Nurse. Resident in Family Health at the School of Public Health of Ceará. Quixadá, CE, Brazil. E-mail: <u>jessicarnauba91@hotmail.com</u>.

<sup>&</sup>lt;sup>3</sup> Nurse, Master in Nursing. Student of the Nursing Graduate Program, Doctoral Level, at Universidade Federal do Ceará (UFC). Assistant Professor at Centro Universitário Estácio do Ceará. Fortaleza, CE, Brazil. E-mail: annefayma@yahoo.com.br.

<sup>&</sup>lt;sup>4</sup> Nurse, Master in Nursing. Student of the Nursing Graduate Program, Doctoral level, at Universidade Federal do Ceará (UFC). ). Assistant Professor at Centro Universitário Estácio do Ceará. Fortaleza, CE, Brazil. E-mail: <a href="mailto:bekinharocha@hotmail.com">bekinharocha@hotmail.com</a>.

<sup>&</sup>lt;sup>5</sup> Nurse, Ph.D in Nursing. Assistant Professor at Centro Universitário Estácio do Ceará. Fortaleza, CE, Brazil.E-mail: hekinha@hotmail.com.

<sup>&</sup>lt;sup>6</sup> Nurse, Ph.D in Nursing. Associate Professor at Universidade Federal do Ceará (UFC). Fortaleza, CE, Brazil. E-mail: oriaremon@hotmail.com.

#### INTRODUCTION

In the past years, an interest in action planning for maternal-infant public health programs has been noticed, with emphasis in breastfeeding practice. This interest happens from the motivation to develop research aiming to conduct a situational diagnosis and an action planning to elaborate new interventions to broaden breastfeeding practice<sup>(1)</sup>.

Breastfeeding prevalence is really distinct among continents. In the north region of Russia, breastfeeding rate is 47,2% and in the Northwest of China is 76,2%<sup>(2)</sup>. In Brazil, the II Breastfeeding Prevalence Research in Brazilian Capitals and Federal District showed the exclusive breastfeeding (EB) prevalence in children between 0 and six months of 41% (CI 95% 39,7-42,4), while the breastfeeding prevalence of children of nine to 12 months was 58,7% (CI 95% 56,8-60,7). Despite of this improvement, more efforts are still needed for Brazil to reach compatible breastfeeding levels in accordance with the World Health Organization (WHO) <sup>(3)</sup>.

Adolescent mothers are inserted in the breastfeeding context, whose literature still seems to be ambiguous in relation to their commitment with the breastfeeding process. Globally, a research with 6.421 women in Canada pointed that adolescents have lower index of breastfeeding at the beginning and duration<sup>(4)</sup>. In Brazil, a study conducted in Curitiba with 24 adult and 13 adolescent mothers concluded that maternal age did not influence breastfeeding prevalence or duration<sup>(5)</sup>. On the other hand, in Porto Alegre, a study with 341 adolescent mothers showed low EB rate (47,8%) and tended to decrease during the first six months of the baby's life (13,8%), therefore the importance to consider influencing factors on breastfeeding<sup>(6)</sup>.

Within these factors, it can be cited: low education levels, not having previous experience with breastfeeding and the growing female participation in the job market<sup>(5-6)</sup>. But, authors also emphasized maternal self-efficacy in the breastfeeding ability as of fundamental importance

for the breastfeeding choice, conduction and  $\label{eq:choice} \mbox{maintenance}^{(6)}.$ 

Self-efficacy consists on the woman's confidence or expectation in relation to her knowledge and abilities to successfully breastfeed her child. A very used instrument to measure this maternal confidence for breastfeeding is the Breastfeeding Self-Efficacy Scale (BSES) and its shortform version (BSES-SF), which already had been validated in Brazil<sup>(7-8)</sup>. The choice of scale allows the health professional to previously know the field in which the woman has lower self-efficacy, thus, allowing implementing care strategies and breastfeeding promotion<sup>(7)</sup>.

A study conducted with 100 pregnant adolescents in Canada tried to measure the BSEF-SF reliability and validity with adolescents. Results showed that the scale is valid and reliable, and it can predict the start, duration and exclusivity of breastfeeding in this population<sup>(9)</sup>.

Thus, attention to breastfeeding during adolescence should be intensified, considering that this public can be compromised and committed with the breastfeeding process<sup>(10)</sup>, and it is up to the health professional to not establish pre-concept labels of incapacity to care for the child and to look for new alternatives for this public to adhere to breastfeeding promotion.

The breastfeeding incentive is the nurse's responsibility, and can guarantee the support and instruction to the mother during pre-natal period, through pregnancy and conjunct groups, accommodation. This professional can offer support during childcare and promotion of campaigns to incentivize breastfeeding. Thus, the present study will subsidize the health professional, allowing the professional to previously know where adolescent mothers present lower confidence, therefore, allowing to implement care strategies and breastfeeding promotion with this public. The study aimed to assess breastfeeding self-efficacy among lactating adolescents

#### **METHODS**

A cross-sectional, quantitative research conducted in 14 Health Basic Units (HBU) from three cities in the Northeast region of Brazil.

The study population was composed by mothers of lactating children six months old or younger attended at the childcare consultations in the HBU conducted during September and October of 2013. The inclusion criteria for participants' inclusion were: to be an adolescent mother and to be breastfeeding. Adolescents were excluded from the study if they did not understand the questions while the instruments were being applied, as: difficulty regarding their income definition, type of delivery and understanding of the items in the scale.

For the sample calculation, three cities and the number of children registered in the HBU (data provided by the institution) were used as basis, totalizing 426 (171 from Tabuleiro do Norte, 132 from Mombaça and 123 from Quixadá). For the variable "breastfeeding prevalence", we estimated 33%<sup>(11)</sup>. The level of confidence was set at 95% and the sampling error of 5%, for a population of 426. We used the calculation for finite populations, resulting in a sample of 190, but due to the inclusion criteria, the sample was totalized in 172 mothers, who were selected through simple randomization and proportionally divided between the research sites.

For data collection, we used a form created by the researcher, containing socio-economic data, obstetric history and the Breastfeeding Self-Efficacy Scale – Short Form (BSES-SF). The BSES-SF is a self-reported instrument to measure self-efficacy of mothers and their ability to breastfeed. This scale is composed by 14 items, in which the answer pattern varies from 1 (totally disagree) to 5 (totally agree), and the total scores can vary from 14 to 70 points. After adding the scores, women can be classified as<sup>(8)</sup>: low efficacy (14 to 32 points); medium efficacy (33 to 51 points) and high efficacy (52 to 70 points).

Lactating adolescents were assessed during the wait for childcare consultations, which is monthly conducted

with children two years old or younger. The data collection occurred after agreement to participate and authorization of those responsible for the adolescents, who signed the Free and Informed Consent. Data collection was in an adequate and private environment, when the form with the BSES-SF scale was applied.

Data were analyzed through a software and the exploratory analysis used absolute and relative frequencies, means and standard deviations. Data was presented in tables.

The study was conducted after approval of the Ethics in Research Committee from the Faculdade Católica Rainha do Sertão, under the protocol number 399/11.

#### **RESULTS**

The socioeconomic and obstetric characteristics of the sample are presented in Tables 1 and 2.

Adolescent's age varied from 14 to 18 years, mean of 16 years (SD  $\pm 2,3$ ). Regarding education, it varied from three to 15 years of education, mean of 11 years (SD $\pm$  2,8).

Regarding obstetric history, 169 (98%) adolescents had prenatal, being vaginal type of delivery for 93 (54%) of them. We observed that 159 (92%) of them had previous breastfeeding practice.

Lactating adolescents were classified regarding their breastfeeding self-efficacy (Graph 1).

Results indicated predominance of high breastfeeding self-efficacy (845), represented by scored between 52 to 70 points and showing that adolescents feel confident to breastfeed. The medium self-efficacy was detected in 15%, those obtained 33 to 51 points, and only 1% of lactating adolescents presented low self-efficacy, adding scores of 14 to 32 points.

With the intention to assess which area mothers presented higher and lower breastfeeding self-efficacy, Table 3 shows the items in the scale, with emphasis in items of lower and higher scores.

**Table 1:** Socioeconomic characteristics of lactating adolescents attended in childcare consultations at the HBUs. Quixadá, Tabuleiro do Norte and Mombaça, Brazil, 2013.

Variables	N	%
Marital status		
Single	47	27
Stable relationship/married	119	69
Widow	3	2
Divorced	3	2
Occupation		
Farmer	40	23
Stay home	68	40
Others	64	37
Income		
Less than 1 salary*	63	36
1-3 salaries	89	52
More than 3 salaries	20	12
Nº of residents		
1 to 4	108	63
5 to 9	57	33
10 or more	7	4

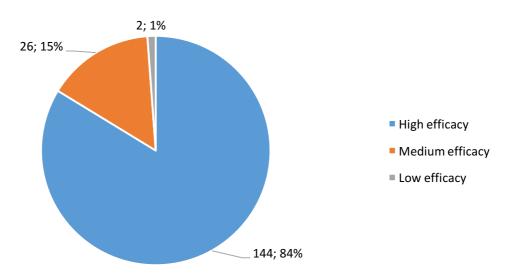
<sup>\*</sup> Minimal wage at the data collection R\$ 678,00 (\$1,464,48).

Table 2: Characteristics in accordance with obstetric history. Quixadá, Tabuleiro do Norte and Mombaça, Brazil, 2013.

Variables	n	%	
Types of delivery			
Vaginal	93	54	
Cesarean	79	46	
Previous breastfeeding practice			
Yes	159	92	
No	13	8	
Attended prenatal			
Yes	169	98	
No	3	2	

**Graph 1:** Distribution of breastfeeding self-efficacy in lactating adolescents. Quixadá, Tabuleiro do Norte and Mombaça, Brazil, 2013.

# Brestfeeding self-efficacy



**Table 3:** Distribution of answers from BSES-SF items, of lactating adolescents attended the childcare consultations at the BHUs. Quixadá, Tabuleiro do Norte e Mombaça, Brazil, 2013.

Item	Disagree		Sometimes agree		Agree	
	n	%	n	%	n	%
1. Determine that my baby is getting enough milk	12	7	17	10	143	83
2. Successfully cope with breastfeeding like I have with other challenging tasks	8	5	36	21	128	74
3. Breastfeed my baby without using formula as a supplement	31	18	28	16	113	66
4. Ensure that my baby is properly latched on for the whole feeding	2	1	13	8	157	91
5. Manage the breastfeeding situation to my satisfaction	4	2	18	11	150	87
6.Manage to breastfeed even when my baby is crying	4	2	29	17	139	81
7.Keep wanting to breastfeed	11	6	17	10	144	84
8. Comfortably breastfeed with my family members present	23	14	30	16	119	70
9. Be satisfied with my breastfeeding experience	4	2	24	14	144	84
10. Deal with the fact that breastfeeding can be time-consuming	4	2	14	8	154	90
11. Finish feeding my baby on one breast before switching to the other breast	4	2	14	8	154	90
12. Continue to breastfeed my baby for every feeding	4	2	29	17	139	81
13. Manage to keep up with my baby's breastfeeding demands	12	7	28	16	132	77
14. Tell when my baby is finished breastfeeding	5	3	7	4	160	93

To facilitate understanding for the analysis of items, answers were pooled as: "totally disagree" and "disagree" were pooled as "disagree", and "totally agree" and "agree" were grouped as "agree".

We noted that items with higher scores among women were: "Ensure that my baby is properly latched on for the whole feeding" (91%) and "Tell when my baby is finished breastfeeding" (93%). On the other hand, the items with lower scores were: "Breastfeed my baby without using formula as a supplement" (18%) and "Comfortably breastfeed with my family members present" (14%).

# **DISCUSSION**

The mean age of lactating adolescents in the study was similar to the study conducted in Canada, which also assessed maternal self-efficacy for breastfeeding among adolescent mothers<sup>(9)</sup>. Married women or living in a stable relationship were predominant, a factor that can favorably contribute to increase breastfeeding self-efficacy<sup>(12)</sup>.

In relation to maternal education, the mean was 11 years, considered a good level for the socioeconomic reality of this population. This finding is favorable to breastfeeding, as this research points that being adolescent mother with more years of education (eight to

11 years) increased in 49% the exclusive breastfeeding prevalence on the first six months of life $^{(6)}$ .

Regarding occupation, it was observed that most adolescents did not work, what can be considered a protection factor to exclusive breastfeeding, as women who works outside tend to be more worried with the child' adaptation and offer the bottle earlier<sup>(13)</sup>.

In agreement with other authors, who affirmed that early pregnancy is associated to lower education and income determinants, women from this study presented low income. This data is worrying, considering that a family income lower or equal three minimum wages is a risk factor for early weaning (OR3,73; CI95% 1,23-11,34)<sup>(14)</sup>.

Families living with 1-4 people were predominant, being a stimulating breastfeeding factor due to verbal persuasion. A study conducted with 100 puerperium women in a public maternity in Fortaleza-CE showed a significant association between the number of five to seven people residents in the house and the increase in breastfeeding self-efficacy<sup>(12)</sup>.

Regarding the type of delivery, we observed that most had vaginal, showing that regardless of the modern culture for cesarean section, normal birth it is still expressively conducted. A study in Brazil showed that the type of delivery did not influenced breastfeeding

(p=0,32), but a research conducted in Canada found that adolescents presented lower rates of cesarean<sup>(4)</sup>.

Still, regarding obstetric history, we observed a high number of women with previous breastfeeding experience, which is a benefic finding, as adolescent mothers who had previous breastfeeding experience presented higher levels of self-efficacy<sup>(9)</sup>, agreeing with the pillars of self-efficacy theory that is the previous experience.

The literature points that adolescent mothers with one or more children before have 1,33 higher prevalence to exclusively breastfeed than adolescents without previous children, which can be also related to the previous breastfeeding experience<sup>(6)</sup>.

A major part of the lactating women in this study had prenatal. This finding has important relevance, as in a recent review, success factors from the prenatal period were addressed, citing some national and international studies showing that the decision to breastfeed in most of the cases, is taken even before the actual pregnancy<sup>(15)</sup>. Regarding the adolescent mothers, evidence shows that they present fragile behavior during prenatal<sup>(4)</sup>.

We identified mother with medium and high breastfeeding self-efficacy, corroborating with a study conducted with mothers of diverse ages in Santa Maria – RS, in which 261 (81%) presented high 61 (19%) presented medium self-efficacy<sup>(16)</sup>.

Regarding the scale, we could observe low adherence to the item breastfeeding without formula supplement, implicating in EB maintenance. A research shows that this thought is associated to diverse factors, as the medical guidance, factors related to the mother's work, and lack of maternal knowledge<sup>(14)</sup>.

The lack of breastfeeding knowledge is something worrying when the target public is adolescent mothers, because a study shows that they do not know the importance of breastfeeding, therefore prenatal consultations are more important over time and also, nursing guidance<sup>(17)</sup>.

Another scale item that presented low adherence was related to timidity while breastfeeding, revealed by the difficulty to breastfeed the child in front of other people from the family. This finding is worrying, because the fact that those mothers feel shy to breastfeed in public (even so around relatives) can inhibit this mother to the level of her searching for other alternatives to feed the child.

In relation to the item in which lactating adolescents presented high self-efficacy, the breast latching was predominant and the item that identified when the baby finished the feeding. These results show that mothers presented knowledge regarding breastfeeding technical aspects, in contrary to findings of a research conducted with 151 adolescent mothers from Paraná state, that identified the main difficulties being related to latching and position<sup>(18)</sup>. Thus, we perceive the need and importance of professional guidance during prenatal consultations.

# **CONCLUSION**

Our study showed that adolescent mothers presented high breastfeeding self-efficacy, making a new knowledge evident in relation to this specific public, which is considered vulnerable regarding breastfeeding. The breastfeeding practice during adolescence put us in front the reality that they are mothers with lower socioeconomic status, in its majority are associated with other factors, require different attention to keep breastfeeding, in accordance with what is preconized.

Results indicated that mothers presented higher adherence to items related to breastfeeding techniques. On the other hand, lower adherence was referring to feeding the baby without using formula and to feed the baby in front of other people, demonstrating the need for professionals to work with these aspects, trying to keep their confidence for breastfeeding and, consequently, the breastfeeding rates.

These conclusions points to the nurse as an educator professional, responsible for the assistance to women

during the pregnancy-puerperal cycle. The nurse needs to intensify investments in health education strategies with a group of pregnant and puerperium women, intended to teach them about all aspects involving breastfeeding and, especially, to maintain the adolescents' confidence to breastfeed.

The present study presented as limitation, to not conduct associations between the studied variables and

breastfeeding self-efficacy, not being able to associate the lactating adolescent's profiles with self-efficacy. Thus, we suggest other studies with this public with the intention to explore these relationships, so that professionals could give priority to adolescents more susceptible to low self-efficacy.

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Received: 07/12/2014. Accepted: 04/22/2015. Published: 12/31/2015.