

# Pre-natal and puerperium factors that interfere on self-efficacy in breastfeeding

*Fatores do pré-natal e do puerpério que interferem na autoeficácia em amamentação*

*Los factores del prenatal y del posparto que interfieren en la autoeficacia de la lactancia materna*

Andressa Peripolli Rodrigues<sup>1</sup>  
Stela Maris de Mello Padoin<sup>2</sup>  
Laura de Azevedo Guido<sup>2</sup>  
Luis Felipe Dias Lopes<sup>2</sup>

1. Universidade Federal do Ceará.

Fortaleza - CE, Brazil.

2. Universidade Federal de Santa Maria.

Santa Maria - RS, Brazil.

## ABSTRACT

**Objective:** To analyze which factors related to pre-natal and puerperium that interfere on self-efficacy in breastfeeding to hospitalized women in puerperium in joint accommodation. **Methods:** Quantitative research, transversal, developed with 322 women in puerperium, in the period of December 2011 to March 2012, with an instrument composed by Breastfeeding Self-Efficacy Scale-Short Form and a characterization form of the women in puerperium. The bi-varied analysis was performed in the Statistical Package for Social Science software. **Results:** Most of women in puerperium showed high self-efficacy on breastfeeding. It was occurred statistically significant association of self-efficacy on breastfeeding with the fact that the baby had been placed to suck after the first hour. **Conclusion:** The promotion of self-efficacy in maternal breastfeeding should begin in the pre-natal, being early stimulated on the maternity and accompanied during puerperium and childcare.

**Keywords:** Self Efficacy; Breastfeeding; Rooming-in care; Postpartum period; Pregnancy.

## RESUMO

O objetivo deste estudo foi analisar quais os fatores relacionados ao pré-natal e ao puerpério que interferem na autoeficácia em amamentação para as puérperas internadas em alojamento conjunto. **Métodos:** Pesquisa quantitativa, transversal, realizada com 322 puérperas, no período de dezembro de 2011 a março de 2012, com um instrumento composto pela *Breastfeeding Self-Efficacy Scale-Short Form* e um formulário para caracterização das puérperas. A análise bivariada foi efetuada no *software Statistical Package for Social Science*. **Resultados:** A maioria das puérperas apresentou alta autoeficácia na amamentação. Ocorreu associação estatisticamente significante da autoeficácia na amamentação com o fato de o bebê ter sido colocado para sugar após a primeira hora. **Conclusão:** A promoção da autoeficácia materna em amamentar deve ter início no pré-natal, ser estimulada precocemente na maternidade e acompanhada durante o puerpério e puericultura.

**Palavras-chave:** Autoeficácia; Aleitamento materno; Alojamento conjunto; Período pós-parto; Gravidez.

## RESUMEN

**Objetivo:** Analizar los factores relacionados al prenatal y al posparto que interfieren en la autoeficacia de la lactancia materna para las puérperas internadas en un alojamiento conjunto. **Métodos:** Investigación cuantitativa, transversal, realizada con 322 puérperas, en el período de diciembre de 2011 a marzo de 2012, con un instrumento compuesto por *Breastfeeding Self-Efficacy Scale-Short Form* y un formulario para la caracterización de las puérperas. El análisis bivariado fue realizado en el *software Statistical Package for Social Science*. **Resultados:** La mayoría de las puérperas presentó alta autoeficacia en la lactancia. Ocurrió asociación estadísticamente significante de la autoeficacia en la lactancia después de poner el bebé para mamar pasado la primera hora. **Conclusión:** La promoción de la autoeficacia de la lactancia materna debe comenzar durante la atención prenatal, también hay que ser estimulada temprano en la maternidad y acompañada durante el puerperio y puericultura.

**Palabras-clave:** Autoeficacia; Lactancia materna; Alojamiento conjunto; Período de postparto; Embarazo.

### Corresponding author:

Andressa Peripolli Rodrigues.  
E-mail: andressaufsm@hotmail.com

Submitted on 04/19/2013.

Resubmitted on 10/17/2013.

Accepted on 10/17/2013.

DOI: 10.5935/1414-8145.20140037

## INTRODUCTION

Breastfeeding (BF) is the best way to nourish a baby, as it provides quality of life and protection to the health of the child and the mother, in addition to create stronger links between both of them. However, breastfeeding is not a natural organic and spontaneous act, demands continuous learning and understanding of the family and the health care team<sup>1</sup>.

Thus, it is necessary to ensure adequate prenatal care, in order to prevent, diagnose and treat the undesirable events in pregnancy, aiming at the well-being of the pregnant woman and her fetus, in addition to direct about childbirth and the puerperium. In puerperal period the nursing staff has an important educational role to the care that the woman in puerperium must have with herself and with the baby<sup>2</sup>.

Due to the short period in which the woman in puerperium remains hospitalized in the joint accommodation (JA), postpartum care is built essentially within the family, which can transmit beliefs, taboos, habits, attitudes, and behaviors<sup>2</sup>. In addition, there are other factors involved in the difficulty of breast-feeding or in early interruption of breastfeeding, among them the ignorance of mothers about BF, in addition to the social, political and cultural aspects which affect breastfeeding<sup>3</sup>.

In this sense, one of the aspects that can positively influence the choice of maternal breastfeeding is the self-efficacy in breastfeeding, which is characterized by confidence or expectation of women with respect to their knowledge and skills to breastfeed their baby successfully. So, the more elevated the self-efficacy the greater can be the period of BF. During the prenatal period, 27% of women with low levels of confidence in breastfeeding discontinued BF in the first week after childbirth. Women with low level of confidence in the BF, had 3.1 times more risk to stop breastfeeding than those who had complete confidence<sup>4</sup>.

According to the perception of women in puerperium regarding to the self-efficacy in breast-feeding, it seeks to build evidence in relation to women's attitudes about breastfeeding that culminate with the development of strategies for the promotion of BF and increased its prevalence. So, to identify the factors related to prenatal and puerperium, that interfere with the maternal self-efficacy will entail in the practice of breastfeeding, because it will be possible to support interventions that stimulate the beginning and maintenance of BF, through a focus on maternal and child health of individualized manner according to the characteristic of the women in puerperium.

Therefore, the objective of this study is to analyze the factors related to prenatal and the puerperium that interfere in self-efficacy in breastfeeding to the women in puerperium hospitalized in joint accommodation.

### Review of the literature

As a search performed in LILACS and PubMed databases in order to identify the factors that interfere in self-efficacy in breast-feeding, it was possible to evidence that self-efficacy is a concept which refers to personal skill to perform, with success, certain activities or behaviors that produces a desirable result<sup>5</sup>.

It can also be defined as the personal conviction that can be performed an action to produce desirable results in a given situation<sup>6</sup>.

In his studies, Bandura noticed that self-efficacy interfere with health behaviors, because people need to believe that they can adhere to healthy behaviors, so they can undertake the necessary efforts to reach them. Furthermore, he claims that one of the processes that can interfere with the behavior of people is their motivation<sup>5</sup>.

Thus, the expectation of self-efficacy (to be judged to be able to accomplish something) is based on four information sources<sup>5</sup> that underlie the expectation of self-efficacy and which can be found in the everyday life of the JA, namely: personal experiences, if the woman already has breastfed previously and was successful, she will be more secure as to their performance and, on the contrary, if the experience was negative, this can make her insecure, fearful and, consequently, less confident in their ability to breastfeed the child; observation of experiments or vicarious experience, because in the JA women can exchange experiences, observe the performance of the other, to talk, to take questions, and encourage each other, making them more confident and safe; verbal persuasion that occurs through experienced people, professionals and consultants who can convince the person of their potential and ability to assume a behavior; and emotional responses, because those answers with physical effects such as anxiety, fear, fatigue and pain, influence negatively on perception of self-efficacy<sup>7</sup>.

These elements may influence the choice, in the realization and maintenance of breastfeeding. With it, it is established a behavior that will be initiated and maintained in accordance with the interpretation of each individual.

## METHOD

It is a quantitative research and with transversal delineation, developed in the Tocogynecology Unit of the University Hospital of Santa Maria (UHSM), located in the Central-West region of the State of Rio Grande do Sul (RS)/Brazil. The sample for convenience of 322 women in puerperium was calculated from a statistical formula with 95% confidence interval and sampling error of 0.05; based on the number of childbirths made at the institution in the year 2011 (1,938 Childbirths).

The women in puerperium were selected from the prompt-book, according to the demand of hospitalization in the unit, considering as criteria for inclusion in the study women in the immediate postpartum period and after the six-hour period of childbirth; from 12 years old<sup>8</sup>; women in puerperium hospitalized in JA accompanied of the newborn (NB) with good vitality, effective suction capacity and thermal control.

The exclusion criteria were women who presented clinical complications at the time of data collection; obstetric complications in puerperal period; women in puerperium with some cognitive and mental limitation; maternal infectious condition that made impossible or contraindicate the BF; and women in puerperium hospitalized in JA with children hospitalized in the Neonatal Intensive Care Unit.

Data collection began in December 2011 and was completed in March 2012. The data were collected directly with the women in puerperium, in their own bed or in a reserved room, according to preference.

For its accomplishment, a form was used to characterize the obstetrical factors related to pregnancy and current puerperium, in addition to the Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF), which is composed of 14 items. To identify the self-efficacy was used the sum of the scores obtained on each item in the range: low effectiveness (14 to 32 points); average effectiveness (33 to 51 points) and high efficiency (52 to 70 points)<sup>9</sup>.

For database composition, dual independent typing was performed, with a view to ensure the accuracy of the data, in the Epi Info software version 3.5. The analysis of the variables was carried out in Statistical Package for Social Science software (SPSS version 17.0), through absolute frequencies, relatives and statistical significance test ( $p < 0.05$ ).

In addition, the internal consistency of BSES-SF was evaluated using internal consistency coefficient of *Cronbach's Alpha*, with value obtained of 0.89, which confirms the suitability of the instrument to the chosen population and which can be comparable to the original version of 0.94<sup>10</sup>. In addition, it was higher than the values obtained in the study of Turkey (0.87)<sup>11</sup> and in a study in the northeastern region of Brazil (0.74)<sup>12</sup>.

Ethical issues were guaranteed through the standards of Resolution N<sup>o</sup> 196/96 of the National Health Council of the Health Ministry, using the Free and Clarified Consent Form and, in the case of women in puerperium are teenagers, the Free and Clarified Assent Form. The project was approved by the Research Ethics Committee of the Federal University of Santa Maria in November 2011 (CAAE: 0323.0.243.000-11).

## RESULTS

With respect to the age of women in puerperium, the average was 26 years old, and 36% had incomplete elementary school and average monthly income of 1.9 minimum wages. Part of them were single (66%) and 67% were not working.

There was a predominance of concordance of the women in puerperium with relation to the statements of BSES-SF. Thus, of 322 women in puerperium, 261 (81%) had high self-efficacy, while 61 (19%) had average self-efficacy.

According to the data presented in Table 1, it is observed the relationship between self-efficacy on breastfeeding with the variables of pregnancy and current puerperium. It was found that there was statistically significant association between putting the baby to suck after the first hour of birth ( $p = 0.018$ ) with self-efficacy in breastfeeding (Table 1).

## DISCUSSION

The women in puerperium in the study had high and average self-efficacy in breast-feeding, which can indicate that high self-efficacy scores in hospital discharge can reflect on exclusive

breastfeeding of the child. Thus, the BSES-SF can be a tool for identifying the need for intervention<sup>13</sup>.

It was contacted in this study that the number of pre-natal consultations did not influence significantly the self-efficacy of breastfeeding. This fact can be considered with another study also descriptive and quantitative approach that aimed to verify the perception of 155 women in puerperium regarding the self-efficacy in breast-feeding and that also characterized the obstetrical profile of them, held near a maternity school in the city of Fortaleza (Ceará), which indicated that despite not having found association it shows that women who carry out less than five prenatal consultations breastfeed for less time than they do between five and nine appointments<sup>9</sup>.

The realization of prenatal also promotes the self-efficacy in breastfeeding, because this escort is the benefit the preparation of the mother and family to the BF. In this way, the prenatal contributes to the success of breastfeeding, and women should be informed of the benefits of this practice, of the disadvantages of using other milks and breastfeeding techniques, to increase the ability and confidence of the mother<sup>14</sup>.

The woman prepared during the prenatal period, through information and guidance pertaining to pregnancy, childbirth and the puerperium, will face these periods with greater security, harmony and pleasure, because the lack of information could generate unnecessary concerns and frustrated expectations. It is considered that prenatal is a propitious moment for the couple to receive the necessary guidelines, once this period is motivated and receptive to such information, so this time should be useful for the health professionals<sup>2</sup>.

Also it was not found significant statistical association between self-efficacy in breastfeeding and receiving guidelines of BF in prenatal. In descriptive study conducted with 50 women in puerperium of a maternity hospital in the city of Rio de Janeiro, which aimed to meet the vision of women in puerperium in relation to the care provided by healthcare professionals regarding the practice of breastfeeding, it was identified that more than half of the women were not oriented or felt lack of guidance provided by a professional during the prenatal period<sup>15</sup>.

The access to information, especially the guidelines of health professionals, has influence on confidence of the mother in breast-feeding. The information must get to troubleshooting, as well as to prevent and help the mother to overcome the difficulties that the process of breastfeeding can cause, leaving the mother more confident<sup>14</sup>.

In this study, the type of childbirth related to self-efficacy in breastfeeding showed no statistically significant association. This variable also did not influence significantly the self-efficacy in a study in Portugal, but the authors claim that the type of childbirth constitutes as a good indicator of influence on breastfeeding<sup>16</sup>.

It was also not found significant difference in the score of BSES-SF between mothers who have given birth by vaginally compared to those who underwent cesarean delivery in the United Kingdom<sup>13</sup>. By contrast, in a study conducted in Canada

**Table 1.** Distribution of obstetric variables according to medium and high self-efficacy in breastfeeding. Santa Maria, Rio Grande do Sul, Brazil/Brazil, 2013

Variables	Self-efficacy						p*
	Average		High		Total		
	N = 61	%	N = 261	%	N = 322	%	
Prenatal (n = 322)							1.000
Yes	59	18	250	78	309	96	
No	2	1	11	3	13	4	
Number of appointments (n = 309)							0.175
1 to 6 appointments	26	8	85	28	111	36	
Average of 6 appointments	33	11	165	53	198	64	
Received guidance from AM in the prenatal (n = 309)							0.312
Yes	24	8	121	39	145	47	
No	35	11	129	42	164	53	
Childbirth type (n = 322)							0.378
Vaginal	19	6	98	30	117	36	
Caesarean	42	13	163	51	205	64	
Contact with the baby after childbirth (n = 322)							0.346
In the first hour	48	15	219	68	267	83	
After the first hour	13	4	42	13	55	17	
Placed to suck after childbirth (n = 322)							0.018
In the first hour	14	4	102	32	116	36	
After the first hour	47	15	159	49	206	64	
Received guidance from AM after the childbirth (n = 322)							0.552
Yes	37	12	171	53	208	65	
No	24	7	90	28	114	35	

\* Chi-square test.

with 491 nursing mothers that aimed to reduce the number of items in the BSES, considering its reduced form (BSES-Short Form); and in the study of Turkey developed with 144 pregnant women and 150 women in puerperium to translate the BSES-SF for Turkish language and to evaluate the psychometric properties of the scale among women in the prenatal and postnatal periods; significant differences were found in the score of BSES-SF among mothers who underwent vaginal birth and those who have made caesarean<sup>10,11</sup>, indicating an increase in self-efficacy in breastfeeding.

The childbirth is considered, in most cases, as a significant event and remarkable in family life. Thus, the realization of vaginal birth and its positive experience establish feelings of pleasure and perceived effectiveness, indicating better capacity to deal with and manage the difficulties with breastfeeding<sup>14</sup>.

The statistically significant relationship between putting the baby to suck after the first hour of postpartum with the breastfeeding self-efficacy goes against another study that validated the

BSES-SF, to the Portuguese reality using a sample of 31 women in puerperium and it was identified that women who breastfed immediately after childbirth had significantly higher values on the scale of self-efficacy in breastfeeding as compared to women who did not<sup>16</sup>.

Breastfeeding in the first hour of life is recommended by the World Health Organization (WHO) and promoted through the fourth step of the Baby Friendly Hospital Initiative (BFHI), which indicates the contact of NBs with their mothers in the first few minutes of life and thus facilitates breastfeeding during this period. This contact is important for women empowerment and establishment of the bond between mother and child in addition to increasing the duration of BF, the prevalence of BF in hospitals and reduces neonatal mortality<sup>17</sup>.

In addition, the lack of contact with the NB soon after birth can reduce the prevalence of BF in the first hour. This contact is often delayed or minimized in favor of the various routines, care and certain practices by the health team and by the institutions.

So even with the appreciation of the initial contact with the NB, not breastfeeding can generate feelings of fear and concern in women in puerperium by the fact of being separated from their children<sup>17</sup>.

Despite the women in puerperium in the study had received guidelines from BF after giving birth, it was not presented statistically association with the breastfeeding self-efficacy. It is known that in puerperal period should be clarified doubts regarding breastfeeding as, for example, engorged breast care, as milk production occurs, up to what age the baby should be breast-fed, among others<sup>15</sup>. The nurse who, due to their close relationship with their mothers, have the opportunity to address topics that are essential for the effectiveness of BF, since the pre-natal, childbirth and monitoring in the childcare service.

It is evidenced as limitation of the study, the memory bias that the women in puerperium may have presented in relation to the period of contact with the baby and put him to suck after childbirth, because it was a fact that occurred at a time of many changes and discoveries, which is the postpartum period. Moment in which emerge feelings and emotions that may interfere in the time to recover memories, even though they are recent.

## CONCLUSION

It was evidenced a significant association between put the baby to suck after the first postpartum time with self-efficacy. Even though this association has been significant, it is necessary that this practice follow recommendations for stimulating BF within the first hour after birth. To this end, it is necessary that the professionals develop skills and abilities in BF to perform appropriate interventions and overcome the potential barriers, mainly, in the delivery room.

We highlight the importance of completion of prenatal, especially with regard to the number of appointments, in addition to the need of providing guidance during this period. In this context, it is insert the public policies for promotion of BF, important for women to be informed of the benefits of breast milk and have the necessary security and stimulus to that breastfeeding be practiced with success.

The quantity and quality of information, together with a proper emotional care and family support of the multidisciplinary team, are fundamental to minimize the anxiety of women. It must be provided the creation of links, dialogue and the active participation of women in prenatal, childbirth and puerperium. Thus, the approach to women for promotion of BF must have early in prenatal care, with the stimulus to practice, should be stimulated early on motherhood and promoted during mother-infant follow-up, to the woman in puerperium feel confident and safe to breastfeed their baby after childbirth. It is indicated the development of further studies to check the quality of prenatal care provided to those who have recently given birth.

## REFERENCES

1. Catafesta F, Zagonel IPS, Martins M, Venturini KK. A amamentação na transição puerperal: o desvelamento pelo método de pesquisa-cuidado. Esc Anna Nery [online]. 2009 jul/set; [citado 2012 out 23];13(3):609-16. Disponível em: <http://www.scielo.br/pdf/ean/v13n3/v13n3a22.pdf>
2. Francisquini AR, Higarashi IH, Serafim D, Bercini LO. Orientações recebidas durante a gestação, parto e pós-parto por um grupo de puérperas. Cienc. cuid. saude [online]. 2010 out/dez; [citado 2012 dez 12];9(4):743-751. Disponível em: <http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/13826/7193>
3. Demitto MO, Silva TC, Páschoa ARZ, Mathias TAF, Bercini LO. Orientações sobre amamentação na assistência pré-natal: uma revisão integrativa. Revista da Rede de Enfermagem do Nordeste [online]. 2010;[citado 2012 out 23];11(Num Esp):223-229. Disponível em: <http://www.revistarene.ufc.br/revista/index.php/revista/article/view/494/pdf>
4. Oriá MOB, Ximenes LB. Tradução e adaptação cultural da Breastfeeding Self-Efficacy Scale para o português. Acta Paul Enferm [online]. 2010;[citado 2012 dez 15];23(2):230-8. Disponível em: <http://www.scielo.br/pdf/ape/v23n2/13.pdf>
5. Bandura A. Self-Efficacy: the exercise of control. New York: WH Freeman and Company; 1997.
6. Van Der Bijl JJ, Shortridge-Baggett LM. The theory and measurement of the self-efficacy construct. Sch Inq Nurs Pract. 2001;15(3):189-207.
7. Salvetti MG, Pimenta CAM. Dor crônica e a crença de auto-eficácia. Rev. Esc. Enferm. USP [online]. 2007;[citado 2012 dez 13];41(1):135-40. Disponível em: <http://www.scielo.br/pdf/reusp/v41n1/v41n1a17.pdf>
8. Ministério da Saúde (Brasil). Estatuto da Criança e do Adolescente. Lei 8.069, de 13 de julho de 1990. 2. ed. atual. Brasília (DF): MS; 2005.
9. Tavares MC, Aires JS, Dodt RCM, Joventino ES, Oriá MOB, Ximenes LB. Application of Breastfeeding Self-Efficacy Scale-Short Form to post-partum women in rooming-in care: a descriptive study. Online Brazilian Journal of Nursing. 2010 abr;9(1):[s.n.].
10. Dennis CL. The Breastfeeding Self-Efficacy Scale: Psychometric Assessment of the Short Form. J Obstet Gynecol Neonatal Nurs. 2003 nov-dec;32(6):734-44.
11. Tokat MA, Okumuş H, Dennis CL. Translation and psychometric assessment of the Breastfeeding Self-Efficacy Scale - Short Form among pregnant and postpartum women in Turkey. Midwifery. 2010 fev;26(1):101-8.
12. Dodt RCM, Ximenes LB, Almeida PC, Oriá MOB, Dennis CL. Psychometric and maternal sociodemographic assessment of the breastfeeding self-efficacy scale - short form in a brazilian sample. Journal of Nursing Education and Practice. 2012 aug;2(3):66-73.
13. Gregory A, Penrose K, Morrison C, Dennis CL, MacArthur C. Psychometric Properties of the Breastfeeding Self-Efficacy Scale-Short Form in an Ethnically Diverse U.K. Sample. Public Health Nursing. 2008 may/jun;25(3):278-84.
14. Rodrigues AP, Padoim SMM, Paula CC, Guido LA. Factors those influence in self-efficacy of breastfeeding: integrative review. Journal of Nursing UFPE online. 2013 may;[citado 2012 dez 20];7(5):4144-52. Disponível em: [http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/4031/pdf\\_2700](http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/4031/pdf_2700)
15. Barreto CA, Silva LR, Christoffel MM. Aleitamento materno: a visão das puérperas. Revista Eletrônica de Enfermagem [online]. 2009;[citado 2012 dez 20];11(3):605-11. Disponível em: <http://www.fen.ufg.br/revista/v11/n3/v11n3a18.htm>
16. Santos V, Bácia S. Contributo para a adaptação transcultural e validação da Breastfeeding Self-Efficacy Scale - Short Form - versão portuguesa. Rev Port Clin Geral [online]. 2009;[citado 2012 dez 20];25:363-9. Disponível em: [http://old.apmgf.pt/PageGen.aspx?WMCM\\_Paginal=33568&artId=843](http://old.apmgf.pt/PageGen.aspx?WMCM_Paginal=33568&artId=843)
17. Bocolini CS, Carvalho ML, Oliveira MIC, Vasconcellos AGG. Fatores associados à amamentação na primeira hora de vida. Rev. saude publica [online]. 2011 fev; [citado 2013 jan 10];45(1):69-78. Disponível em: <http://www.scielo.br/pdf/rsp/2010ahead/1717.pdf>