SELF-EFFICACY OF THE PREGNANT WOMAN FOR BREASTFEEDING: CROSS-SECTIONAL STUDY

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ABSTRACT

Objective: to identify self-efficacy for breastfeeding in pregnant women followed-up by health facilities in the municipality of Cascavel, Paraná. Methodology: quantitative, descriptive, cross-sectional study with a temporal cut from October 2017 to June 2018, performed with pregnant women enrolled in the prenatal follow-up system at health and outpatient clinics in the municipality. Results: the sample was composed of 101 interviewees, of whom 66.34% presented high efficacy for breastfeeding, 29.70%, medium, and 3.96%, low efficacy. In addition, pregnant women with higher family income did not present a low efficacy for breastfeeding, and of the 75.24% who had completed high school, 47.52% showed high efficacy. Conclusion: sociodemographic issues, such as income and schooling, can influence maternal self-efficacy, affecting women's confidence in the breastfeeding process. High self-efficacy has been demonstrated for breastfeeding in prenatal care. Therefore, strategies should be used to maintain maternal self-efficacy in order to promote maternal self-confidence in the postpartum period and reduce the risk of early weaning. Pregnant women who were identified as having low efficacy for breastfeeding had a higher risk of early weaning. So, health professionals and the family should provide the necessary support to the pregnant women, in order to empower them in their postpartum breastfeeding capacity.

Keywords: Nursing, Breast Feeding, Pregnant woman, Self-efficacy.

INTRODUCTION

Breastfeeding promotes approach, affection, protection and nutrition for the child, constituting a protective factor for the non-development of late health problems such as obesity and chronic diseases(1). In addition, it influences the immune system, nutritional status, physiology and cognitive and emotional development, and has physical and psychic implications for the woman who breastfeeds(1).

According to the 2nd survey of the breastfeeding prevalence in Brazil, carried out from 1999 to 2008, in the country's capitals, only 41% of mothers breastfed their child exclusively until the sixth month. In the southern region, this figure was 43.9%, and specifically in Curitiba, Paraná, 46.1%(2).

In order to promote breastfeeding in Brazil and reduce early weaning, the National Breastfeeding Incentive Policy and government policy strategies for breastfeeding were implemented. In the state of Paraná, the Rede Mãe Paranaense network was implemented in 2012, including, among its objectives, the guarantee of prenatal care with quality to all pregnant women in Paraná, stratifying the risk and ensuring follow-up of the children and encouraging breastfeeding(3).

Thus, in prenatal care, it is necessary to talk about the advantages of breastfeeding for the woman, child and family, as well as, about the management of this process, promoting the support and encouragement of the breastfeeding. This practice may contribute to increase maternal self-efficacy for this role, by helping to solve postpartum problems and, consequently, increasing the period of exclusive breastfeeding(4). In this context, it is important to identify the knowledge, beliefs and attitudes that the pregnant woman has regarding the act of breastfeeding and, if she has, her previous experiences, in order to provide counseling about breastfeeding from the beginning of pregnancy(4).
The use of validated scales to assess maternal perception of breastfeeding may be employed in prenatal care to identify the specific difficulties related to the personal aspects of the pregnant woman, such as her reliance on breastfeeding after childbirth. The validation of the Breastfeeding Self-Efficacy Scale (BSES) in Brazil identified it as a reliable and valid instrument, capable of assessing maternal perception regarding its self-efficacy for the practice of breastfeeding. The use of this scale makes it possible to recognize factors inherent to breastfeeding, favoring actions to promote maternal and child health, implying the care offered by professionals in the perinatal period\(^5\).

Based on the evidences, in order to encourage the maintenance of exclusive breastfeeding, beyond the public policies aimed at promoting breastfeeding, it is necessary to understand the maternal perception of self-confidence in breastfeeding. Thus, it is imperative that the health professional, in prenatal consultations, assess maternal self-efficacy for the empowerment of women for the breastfeeding process.

However, even though the BSES has been validated for almost ten years in Brazil, its use is restricted, and it is not widely disseminated and applied in the health services during the evaluations of pregnant and/or postpartum women. In this context, through the BSES scale application the aim of this study was to identify self-efficacy for breastfeeding in pregnant women followed-up by the health units in the municipality of Cascavel, Paraná.

**METHODOLOGY**

This study has a quantitative, descriptive, cross-sectional approach, performed with 101 pregnant women enrolled in the prenatal care system (SIS Prenatal), treated in 10 health units, distributed in the four geographic regions of the city (North - three units; South - three units; East - two units and Oeste - two units) and at the outpatient clinic of the school hospital in the municipality of Cascavel, Paraná.

This was a convenience sampling; the sample calculation was performed by the online margin of error calculator\(^6\), based on the total births in the municipality in 2016, with a sampling error of 10% and a 95% confidence interval. In the study were included pregnant women classified as at-risk, with gestational age equal to or greater than 37 weeks and less than 42 and, who were not adolescents.

The data collection instrument was applied by a trained researcher, while the pregnant woman waited for the medical consultation, in the waiting room of the Health Units and the ambulatory of the school hospital, from October 2017 to June 2018.

The Breastfeeding Self-Efficacy Scale (BSES) has 33 assertions in its total form, and Oriá and Ximenes\(^5\) present the short form version, that has nine questions, which was used in this study. The pregnant woman received scores according to the degree of agreement with the response in every item, each one of them contains five response options, ranging from 1 to 5, on a Likert scale, with a maximum score of 45 and the minimum of 09 points. The BSES score analysis indicates that the higher the score obtained, the greater the woman’s confidence level in her potential for breastfeeding. Therefore, it is also more likely for this woman to start and persist in Exclusive Breastfeeding for longer. Thus, the classification of the score between 9-21 is defined as low efficacy; 22-33 medium efficacy and 34-45 high efficacy, for breastfeeding\(^5\).

The variables under study were age, schooling and maternal income, gestational age and self-efficacy scores, as measured by BSES. The variables of this scale evaluate the maternal perception as, namely: when the baby is satisfied when breastfed; how the puerpera confronts breastfeeding and other life situations; on the intention to use artificial milk after childbirth; satisfaction with breastfeeding; reaction to baby crying; about the desire to continue breastfeeding; whether or not the mother is comfortable with breastfeeding in front of other people; and about satisfaction with their experience with breastfeeding. The data were tabulated in Excel - Microsoft for Windows 2010, with the calculation of the total and minimum scores, presented in relative and absolute frequency.

This study was approved by the Committee of Ethics in Research with human beings of the State University of the West of Paraná.
RESULTS

Table 1 identifies that 63 (62.37%) of the pregnant women are primiparous and only 38 (37.62%) had breastfeeding experience. Interestingly, 33 (32.67%) and 26 (25.74%) of them, even without breastfeeding experience due to primiparity, achieved high and medium efficacy scores, respectively.

In relation to the family income, 35 (34.65%) earned up to a minimum wage and of these, 20 (19.80%) had high efficacy, 12 (11.88%), medium and only 3 (2.97%), low. Among the pregnant women who had a family income of two minimum wages, the majority (n=32; 31.68%) presented high efficacy for the breastfeeding. It can also be observed that, among pregnant women with income of three and four minimum wages, none had low efficacy and the number of pregnant women with high scores was higher than those with medium efficacy (Table 1).

Observing the variable Gestational Age, it is identified that most of the interviewees were between 37 to 39 weeks, predominating among them the highest scores for the efficacy for the breastfeeding (Table 1).

Table 1. Self-efficacy scores of pregnant women interviewed, Cascavel, PR, Brazil, 2018.

<table>
<thead>
<tr>
<th>Experience</th>
<th>Low efficacy</th>
<th>Medium efficacy</th>
<th>High efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primiparous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breastfed Previously</td>
<td>4 3.96</td>
<td>26 25.74</td>
<td>33 32.67</td>
</tr>
<tr>
<td></td>
<td>0 0</td>
<td>4 3.96</td>
<td>34 33.66</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 minimum wage</td>
<td>3 2.97</td>
<td>12 11.88</td>
<td>20 19.80</td>
</tr>
<tr>
<td>2 minimum wages</td>
<td>1 0.99</td>
<td>11 10.89</td>
<td>32 31.68</td>
</tr>
<tr>
<td>3 minimum wages</td>
<td>0 0</td>
<td>6 5.94</td>
<td>13 12.87</td>
</tr>
<tr>
<td>4 minimum wages</td>
<td>0 0</td>
<td>1 0.99</td>
<td>2 1.98</td>
</tr>
<tr>
<td>Schooling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete High School</td>
<td>4 3.96</td>
<td>24 23.76</td>
<td>48 47.52</td>
</tr>
<tr>
<td>Incomplete High School</td>
<td>0 0</td>
<td>3 2.97</td>
<td>14 13.86</td>
</tr>
<tr>
<td>Elementary School II</td>
<td>0 0</td>
<td>1</td>
<td>14 13.86</td>
</tr>
<tr>
<td>Elementary School I</td>
<td>0 0</td>
<td>2</td>
<td>1.98</td>
</tr>
<tr>
<td>Gestational Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-22</td>
<td>2 1.98</td>
<td>18 17.82</td>
<td>21 20.79</td>
</tr>
<tr>
<td>23-27</td>
<td>1 0.99</td>
<td>8 7.92</td>
<td>26 25.74</td>
</tr>
<tr>
<td>28-32</td>
<td>1 0.99</td>
<td>2 1.98</td>
<td>11 10.89</td>
</tr>
<tr>
<td>33-37</td>
<td>0 0</td>
<td>1 0.99</td>
<td>7 6.93</td>
</tr>
<tr>
<td>38-42</td>
<td>0 0</td>
<td>1 0.99</td>
<td>2 1.98</td>
</tr>
<tr>
<td>Gestational Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37w and 1d to 38w</td>
<td>2 1.98</td>
<td>14 13.86</td>
<td>41 40.59</td>
</tr>
<tr>
<td>38w and 1d to 39w</td>
<td>1 0.99</td>
<td>8 7.92</td>
<td>19 18.81</td>
</tr>
<tr>
<td>39w 1d to 40w</td>
<td>0 0</td>
<td>5 4.95</td>
<td>5 4.95</td>
</tr>
<tr>
<td>40w 1d to 41w</td>
<td>1 0.99</td>
<td>1</td>
<td>0.99</td>
</tr>
<tr>
<td>41w 1d to 41w 6d</td>
<td>0 0</td>
<td>2</td>
<td>1.98</td>
</tr>
</tbody>
</table>

Source: Research database.
w= weeks; d= Day

According to the Table 2, which deals with the scores of the self-efficacy scale, the majority of the pregnant women presented high efficacy for the breastfeeding, which, according to the scale shows, are confident in their ability to breastfeed. The BSES evidenced in this study the high maternal self-efficacy for breastfeeding in 67 (66.34%) of the pregnant women, and 38 participants had previous experience with breastfeeding management, 34 (33.22%) had high efficacy in the evaluation of BSES. However, even primiparous, which corresponded to more than half of the
interviewees (n=59; 58.41%), also presented high and average efficacy for breastfeeding.

Table 2. Total scores on the Breastfeeding Self-Efficacy Scale (BSES), according to the score, Cascavel, PR, Brazil, 2018.

<table>
<thead>
<tr>
<th>BSES</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low efficacy</td>
<td>4</td>
<td>3.96</td>
</tr>
<tr>
<td>Medium efficacy</td>
<td>30</td>
<td>29.70</td>
</tr>
<tr>
<td>High efficacy</td>
<td>67</td>
<td>66.34</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research database.

DISCUSSION

The data from this study showed that pregnant women during the prenatal period intend to breastfeed their children and feel confident about this process, since most of them presented high efficacy for breastfeeding. In addition, it was observed that the higher income and higher education were sociodemographic aspects that emerged among those with higher self-efficacy. Another relevant fact was both of the pregnant women, with previous experience with breastfeeding and the primiparous, presented high scores for self-efficacy. This demonstrates that the lack of experience with breastfeeding is not impairing the pregnant woman to feel confident for the breastfeeding process. The study showed that, among pregnant women who had previous experience with breastfeeding, only 11 (30%) kept exclusive breastfeeding up to the child’s sixth month of life. Therefore, only having previous breastfeeding experience does not predict that breastfeeding will be exclusive for a longer period.

Self-confidence for breastfeeding is presented among pregnant women in the third gestational trimester. Therefore, in order to become effective after childbirth and increase the rates of exclusive breastfeeding, it is necessary to promote support to the mother from birth. This support should be provided by the family and the health services. In this sense, strategies such as breastfeeding in the first hour after birth, less possible handling of the newborn in the first hours after birth, direct skin-to-skin contact, among others, may stimulate the mother’s self-confidence to promote breastfeeding. However, interventions such as giving supplementation to the newborn can lead to low maternal self-efficacy due to the maternal feeling of not being able to breastfeed.

In this context, in the follow-up of the pregnant woman, in the primary health care, interventions should be carried out to promote breastfeeding in the prenatal period, developing groups of pregnant women and evaluating maternal self-efficacy for breastfeeding. After delivery, the professional of the maternity should use self-efficacy interventions for the breastfeeding, as well as, during the first week after discharge from the hospital, maternal self-efficacy and the breastfeeding process should be monitored by a home visit. This follow-up should be continued in childcare consultations, at which time breastfeeding should be evaluated and maternal difficulties in managing breastfeeding at home, including verification of self-efficacy scores for the breastfeeding and planning interventions from these data. It should be emphasized that the information offered during the pregnancy-puerperal process, by the health team, should meet the yearnings and needs of the users. Thus, an effective tool to promote exclusive breastfeeding is the use of effective communication for counseling on breastfeeding. However, failures in this communication are observed, and differences in information are evidenced, even though they are not considered relevant aspects for the planning of the users’ health education, such as the woman’s previous knowledge, her anxieties and doubts, her perception about breastfeeding.

In addition, it is necessary to verify the maintenance of the mother’s self-confidence in keeping the lactation process, since a statistically significant association between exclusive breastfeeding and self-confidence in breastfeeding was observed. Therefore, educational actions and guidance on exclusive breastfeeding are required, based on maternal self-efficacy and self-confidence, once they were maintained.
positively associated with longer duration of exclusive breastfeeding\(^{(1),(12)}\). Thus, the use of self-efficacy theory can help the nurse in her competence to promote exclusive breastfeeding among pregnant and postpartum women. This theory indicates that self-efficacy for breastfeeding is influenced by the four main sources of information: personal experiences, which are based on past experiences with breastfeeding; vicarious learning, that is, those coming from the observation of other breastfeeding women, as well as, advice about breastfeeding received; verbal persuasion, which includes the encouragement of friends, family, and health professionals; and the influence of physiological and/or affective states, such as pain, fatigue, anxiety, stress\(^{(5),(8)}\).

It is also noted that many factors contribute to early weaning after childbirth, as demonstrated in a monitoring study of breastfeeding up to the sixth month of life\(^{(6)}\). Among them, the most evident is the maternal impression that milk is weak or that the milk has reduced, followed by return to work or to school, as the second major difficulty, in addition to nipple trauma. When analyzing the factors that influence the self-confidence related to the breastfeeding, it is clear that higher levels of self-efficacy are associated with the presence of some family member for support in the postpartum period for breastfeeding in the baby’s first hour of life\(^{(13)}\).

An integrative review study shows that the factors that help and impair exclusive breastfeeding and breastfeeding are basically the same, which are related to each other, be it educational level, maternal work, number of children, maternal age, type of childbirth or in the use of pacifiers. Moreover, there is the interference of cultural beliefs, such as taboos related to the practice of breastfeeding and practices done by family members\(^{(14)}\).

Furthermore, symptoms of mental and behavioral disorders, for example postpartum depression, may be associated with the abandonment of breastfeeding and exclusive breastfeeding. As evidenced by a birth cohort study carried out in Viçosa, Minas Gerais according to which the symptoms of postpartum were associated with the abandonment of the exclusive breastfeeding in the second month after delivery\(^{(15)}\).

Sociodemographic aspects may also influence the maintenance or not of exclusive breastfeeding. In the context of the study, higher family income and higher maternal schooling were observed among pregnant women with higher self-efficacy score for breastfeeding. Similar data were found in a study\(^{(16)}\) developed in Iran, in which the highest BSES scores were detected by logistic regression among mothers with higher family income.

The pregnant women in our study who had high and medium efficacy for breastfeeding are potentially those most likely to have exclusive breastfeeding for longer. However, despite the fact that they feel self-confident for the breastfeeding in the prenatal period, postpartum users may come across the various factors, as those mentioned earlier in this text, which may affect breastfeeding maintenance time. It is necessary, therefore, after maternity leave, that support and continuous support be provided by primary care professionals, as well as the family of the puerpera, so that she can overcome the difficulties that emerge during the process of breastfeeding. In this way, they can keep self-efficacy and increase their self-confidence in this process.

Thus, it is essential to adhere to the policies and programs that aim to maintain breastfeeding against the low prevalence rate of exclusive breastfeeding. In a historical series of evaluation of the trend of breastfeeding in Brazil, the authors indicate that there was a worrying decrease in the progress seen between 1986 and 2006. The prevalence of breastfeeding was not increased, and the exclusive breastfeeding dropped significantly between three to five months of life of the children\(^{(17)}\). It is necessary that health professionals be engaged and prepared theoretically and technically to offer support to the mother and her family. It is known that this practice is a challenge for all health professionals who, although they have theoretical domain of the subject, often do not have practical ability to promote the management of the breastfeeding. Thus, there is a need for continuing education that prepares them for effective advice on breastfeeding\(^{(18)}\).

This technical competence that must be offered by continuing education in service must also be associated with tools that assist the
health professional in his daily work process. Among these tools are the reception, post-natal home visit, the use of self-efficacy assessment scales, such as the one used in this study, among others, so that they contribute to actions to promote breastfeeding and keep the exclusive breastfeeding for longer.

The care of the health team of primary care to pregnant women in the prenatal care should go beyond the focus of concern only with the biological issues of gestation, for example, only the preparation of the breasts for the breastfeeding. It is necessary to provide information that includes social, family, cultural and psychological aspects that involve the breastfeeding process\(^{(19)}\). Likewise, it is necessary to identify maternal knowledge about breastfeeding, its self-efficacy and self-confidence, the perception and intention to breastfeed, so that care can be directed after birth and effectively contribute to the maintenance of the exclusive breastfeeding until the sixth month.

These results provide evidence for nurses’ clinical practice in the management of breastfeeding, pointing out that self-efficacy is an important variable to be verified in the consultations of pregnant and postpartum women. Thus, interventions based on the theory of self-efficacy may improve breastfeeding outcomes.

**CONCLUSION**

This study evidenced during the gestation, the interviewees presented high efficacy for the breastfeeding, which demonstrates the intention to breastfeed the child. In view of this evidence, the maintenance of this maternal self-confidence for the breastfeeding process should be encouraged soon after delivery and after hospital discharge. So, health professionals, both in the maternity ward and in primary care, need to engage to provide necessary support to the nursing mothers in order to contribute to their success in maintaining the exclusive breastfeeding until the sixth month of life.

For this, the use of tools such as BSES, both in prenatal and after delivery, can be effective in supporting the pregnant and puerperal in the breastfeeding process. This scale can be applied to nurses’ or children’s consultations in the health unit, as a way to monitor their self-efficacy and to identify difficulties with breastfeeding, and thus propose effective strategies for the support needed for each mother-baby dyad. In addition, health education actions directed at maternal difficulties should be used, using qualified listening, dialogue and sharing responsibility for the health of the child and the nurse herself.

It should also be noted that puerperal women with low self-efficacy should be supported and monitored, both by the health team and the family, in the gestation period, with a view to empowerment, to increase the level of self-confidence and to stimulate breastfeeding so that the breastfeeding process becomes easier and more enjoyable for both the mother and the child.

The results may support care during pregnancy and the puerperium with regard to breastfeeding. However, the research is limited because it was performed only with pregnant women in a temporal cut, and another limitation refers to the descriptive analysis of the data. Therefore, studies are needed with health professionals involved in maternal and child care in order to investigate the knowledge, skills and competences they possess in relation to BSES and how such an instrument can subsidize practices and interventions that may collaborate in the breastfeeding process.

**AUTOEFICÁCIA DA GESTANTE PARA O ALEITAMENTO MATERO: ESTUDO TRANSVERSAL**

**RESUMO**

**Objetivo:** identificar a autoeficácia para o aleitamento materno em gestantes acompanhadas em unidades de saúde do município de Cascavel, Paraná. **Metodologia:** estudo quantitativo, descritivo, transversal, com recorte temporal de outubro de 2017 a junho de 2018, realizado com gestantes inscritas no sistema de acompanhamento do pré-natal em unidades de saúde e ambulatório do município. **Resultados:** a amostra foi de 101 entrevistadas, das quais 66,34% apresentaram alta eficácia para o aleitamento materno, 29,70%, média, e 3,96%, baixa eficácia. Ademais gestantes com maior renda familiar não apresentaram baixa eficácia para o aleitamento materno e, das 75,24% que tinham ensino médio completo, 47,52% demonstraram alta eficácia. **Conclusão:** questões sociodemográficas, como renda e
escolaridade, podem influenciar na autoeficácia da lactante, repercutindo na confiança da mulher no processo de amamentar. Evidenciou-se alta autoeficácia para o aleitamento no pré-natal, portanto, devem-se empregar estratégias que visem a manter elevada a autoeficácia da mãe, a fim de se promover a autoconfiança da mãe no pós-parto e reduzir risco de desmame precoce. As gestantes que foram identificadas com baixa eficácia para o aleitamento materno apresentaram maior risco de desmame precoce. Portanto, os profissionais de saúde e a família devem prover suporte necessário para que elas sejam empoderadas em sua capacidade de amamentação no pós-parto.


**AUTOEFICACIA DE LA GESTANTE PARA EL AMAMANTAMIENTO MATERO: ESTUDIO TRANSVERSAL**

**RESUMEN**

Objetivo: identificar la autoeficacia para la lactancia materna en gestantes acompañadas en unidades de salud del municipio de Cascavel, Paraná-Brasil. **Metodología:** estudio cuantitativo, descriptivo, transversal, con recorte temporal de octubre de 2017 a junio de 2018, realizado junto a las gestantes registradas en el sistema de acompañamiento del prenatal en unidades de salud y ambulatorio del municipio. **Resultados:** la muestra fue de 101 entrevistadas, de estas 66.34% presentaron alta eficacia para la lactancia materna, 29.70% media y 3.96% baja eficacia. Las gestantes con mayor renta familiar no presentaron baja eficacia para la lactancia materna, 75.24% tenían enseñanza secundaria completa, y el 47.52% de ellas demostró alta eficacia. **Conclusión:** cuestiones sociodemográficas, como renta y escolaridad, pueden influir en la autoeficacia de lactancia materna, repercutiendo en la confianza de la mujer en el proceso de amamantar. Se evidenció una alta autoeficacia para la lactancia en el prenatal, por lo tanto, se deben emplear estrategias para mantener elevada la autoeficacia de lactancia materna, para promover su autoeficacia en el postparto y reducir el riesgo de destete precoz. Las gestantes que fueron identificadas con baja eficacia para la lactancia materna, presentaron mayor riesgo de destete precoz. Por consiguiente, los profesionales de salud y la familia deben proveer el apoyo necesario para que sean empoderadas en su capacidad de lactancia en el postparto.

**Referências**


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