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PROMOTION OF BREASTFEEDING SELF-EFFICACY THROUGH A GROUP EDUCATION SESSION: RANDOMIZED CLINICAL TRIAL

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ABSTRACT

Objective: to assess the effect of the group education strategy based on the use of the flipchart “I can breastfeed my child” in promoting breastfeeding self-efficacy.

Method: a clinical trial was developed with 208 postpartum women, randomly distributed between the intervention and control group. The intervention consisted in the application of the flip chart “I can breastfeed my child” during a group session at the rooming-in service. The Breastfeeding Self-Efficacy Scale – Short Form was used to measure the self-efficacy scores during the monitoring period (rooming-in, 15 days after birth and monthly until 120 days).

Results: a higher percentage of women with high breastfeeding self-efficacy was found during the monitoring period in the intervention group ($p=0.002$) and higher average self-efficacy scores in this group during the monitoring period ($p<0.05$).

Conclusion: the use of the flip chart during a group session modified or reinforced the mothers’ breastfeeding self-efficacy - Registration number: RBR-6srs33.

DESCRIPTORS: Self-efficacy. Health promotion. Health education. Breastfeeding. Nursing.

PROMOÇÃO DA AUTOEFICÁCIA EM AMAMENTAR POR MEIO DE SESSÃO EDUCATIVA GRUPAL: ENSAIO CLÍNICO RANDOMIZADO

RESUMO

Objetivo: avaliar o efeito da estratégia educativa em sessão grupal a partir da utilização do álbum seriado “Eu posso amamentar o meu filho” na promoção da autoeficácia em amamentar.

Método: foi desenvolvido um ensaio clínico com 208 puérperas randomizadas aleatoriamente para o grupo intervenção ou controle. A intervenção consistiu na aplicação do álbum seriado “Eu posso amamentar o meu filho” em sessão grupal no alojamento conjunto. Utilizou-se a *Breastfeeding Self-Efficacy Scale – Short Form* para mensurar os escores de autoeficácia no período de acompanhamento (alojamento conjunto, 15 dias após o parto e mensalmente até os 120 dias).

Resultados: encontrou-se maior percentual de mulheres com autoeficácia em amamentar alta ao longo do período de acompanhamento no grupo intervenção ($p=0,002$) e um aumento da média dos escores de autoeficácia nesse grupo no período de acompanhamento ($p<0,05$).

Conclusão: houve modificação ou reforço da autoeficácia materna em amamentar com a utilização do álbum seriado em sessão grupal - Número de Registro: RBR-6srs33.

DESCRIPTORIOS: Autoeficácia. Promoção da saúde. Educação em saúde. Aleitamento materno. Enfermagem.

PROMOCIÓN DE LA AUTOEFICACIA EN AMAMENTAR POR MEDIO DE SESIÓN EDUCATIVA GRUPAL: ENSAYO CLÍNICO RANDOMIZADO

RESUMEN

Objetivo: evaluar el efecto de la estrategia educativa en sesión grupal a partir de la utilización del álbum seriado “Puedo amamentar a mi hijo” en la promoción de la autoeficacia en el amamantamiento.

Método: se ha desarrollado un ensayo clínico con 208 puérperas aleatorizadas aleatoriamente para el grupo intervención o control. La intervención consistió en la aplicación del álbum serial “Puedo amamentar a mi hijo” en sesión grupal en el alojamiento conjunto. Se utilizó el método de muestreo a corto plazo para medir las puntuaciones de autoeficacia en el período de seguimiento (alojamiento conjunto, 15 días después del parto y mensualmente hasta los 120 días).

Resultados: se encontró mayor porcentaje de mujeres con autoeficacia en amamentar alta a lo largo del período de seguimiento en el grupo intervención ($p=0,002$) y un aumento de la media de los escores de autoeficacia en ese grupo en el período de seguimiento ($p<0,05$).

Conclusión: hubo modificación o refuerzo de la autoeficacia materna en amamentar con la utilización del álbum seriado en sesión grupal - Número de Registro: RBR-6srs33.

DESCRIPTORES: Autoeficacia. Promoción de la salud. Educación en salud. Lactancia materna. Enfermería.

INTRODUCTION

Health promotion is one of the main theoretical-conceptual models that support health policies around the world¹ and self-efficacy stands out as one of its fundamental concepts and principles, relevant for coping with the contemporary health challenges. The concept of self-efficacy refers to the belief in the personal ability to successfully perform certain activities or behaviors that produce a desirable outcome.²⁻³

In breastfeeding, self-efficacy is represented by a woman’s belief or expectation that she has enough knowledge and skills to breastfeed her baby successfully.⁴ Thus, the belief in self-efficacy is built on the expected efficacy and the expected outcome.²⁻³

The expectation of effectiveness is the conviction that the person can successfully perform the behavior necessary to produce the desired results, and the expected result is the person’s estimate that a particular behavior will lead to a certain outcome. Hence, the expected outcome and expected effectiveness differ as individuals may believe that a given action leads to a result but, if they do not feel confident about their ability to do so, the initial belief will not influence their behavior.²⁻³

This explains why many women, despite knowing the technique and benefits of breastfeeding, cannot breastfeed exclusively until the child has reached six months of life, since knowledge alone does not guarantee women the confidence they need to maintain breastfeeding.⁴ In addition, individuals constitute their self-efficacy beliefs by interpreting information from four main sources: experience of mastery or personal experience (the woman who has previously breastfed and was successful will be more confident about her performance), vicarious experience (observation of other women, changing

her beliefs by comparing with the achievements of others), social or verbal persuasion (encouragement and convincing of the mother that she has the necessary capacities to breastfeed) and somatic and emotional or physiological states (capacity, strength and vulnerability to breastfeed, for example, pain, anxiety, and fatigue).^{2-3,5}

In this sense, self-efficacy in breastfeeding is considered a variable that can be modified through educational interventions and social support. Therefore, studies have been carried out to evaluate the effect of educational interventions, built based on the reference framework of self-efficacy in breastfeeding, to assess the woman’s confidence in breastfeeding and its impact on breastfeeding.⁶⁻⁷

In view of the positive results of these educational interventions based on maternal self-efficacy, the flip chart entitled “I can breast-feed my child” was individually constructed, validated and individually applied during prenatal and postpartum care, aiming to promote maternal self-efficacy in breastfeeding through an educational intervention.⁸ Therefore, it is advisable to propose its use in a group session.

The group becomes a space where dialogue is an essential instrument for the subjects’ engagement in the construction of knowledge, in the development of autonomy and co-responsibility in the care and promotion of health. It also ensures the interaction among individuals and with the health professional, allowing the identification of perceptions and experiences.⁹

Thus, the objective of this study was to evaluate the effect of the educational strategy in a group session based on the use of the flip chart “I can breastfeed my child” in promoting breastfeeding self-efficacy.

METHOD

A randomized and controlled clinical trial, based on the application of an educational intervention in a group session that promotes breastfeeding self-efficacy, through the flip chart "I can breastfeed my child" in the intervention group (IG). This educational material was submitted to face and content validation, through the evaluation of a committee composed of five nursing experts, and also validated with lay people.¹⁰

The study was developed at the rooming-in unit of a university hospital that is a referral institution in the Central-West of Rio Grande do Sul (Brazil). It should be noted that this hospital is not accredited under the Baby-Friendly Hospital Initiative.

The inclusion criteria for participation in the study were: women in the immediate postpartum period (1st to 10th day) and more than six hours after giving birth, because this period represents a moment of emotional and physiological stress for the mother and newborn; aged 12 years or over, considering the Statute of the Child and Adolescent; postpartum women hospitalized at the rooming-in unit accompanied by the newborn with good vitality, effective suction capacity and thermal control.

Regarding the exclusion criteria, we considered: women who presented clinical problems; obstetric problems; postpartum women with some comprehension and verbal expression difficulty that prevented them from participating in the educational intervention or answering the instruments; infectious maternal condition that prevented or contraindicated breastfeeding; postpartum women hospitalized at the rooming-in unit with children hospitalized at the Neonatal Intensive Care Unit; and mothers of newborns who presented some alteration that made breastfeeding difficult (palatine cleft, esophageal atresia, among others).

Regarding the criteria to discontinue the study: drop-out of the postpartum woman or legal guardian (in the case of adolescents) after the beginning of the data collection; alteration of the telephone contact during the study that made it impossible to continue the data collection; unsuccessful telephone contact after five attempts on consecutive days; death of the postpartum woman or infant during the study; and postpartum women whose newborn was offered for adoption.

For the data collection, the BSES-SF was used as instrument,¹¹⁻¹² which is based on the Social Cognitive Theory²⁻³ and measures the maternal self-effi-

cacy scores in breastfeeding. This Likert-type scale is composed of 14 items, organized in the technical and intrapersonal thoughts domains. Scores range from 14 to 70 points and, the higher the score, the higher the maternal self-efficacy in breastfeeding.¹³

Self-efficacy in breastfeeding in the groups was categorized as high self-efficacy (52 to 70 points) and medium self-efficacy (33 to 51 points).⁵ In addition to the scale, two forms were used. The first served to discover the sociodemographic profile of the sample, obstetric and gestational disorders; in the second form, the variables related to the birth, birth and feeding of the newborn were verified.

Data collection was carried out from March to October 2014, daily and during the day shift. The beginning of the field stage occurred with the training of research assistants for the use and understanding of Breastfeeding Self-Efficacy Scale - Short Form (BSES-SF). In addition, fortnightly meetings were scheduled with all those involved in collecting data to discuss the procedures and problems that could arise during the application of the instruments.

The researcher was responsible for the application of all the data collection instruments in the first phase of the study, which occurred at the rooming-in unit. Furthermore, she was responsible for the application of the group education session with the IG women, thus guaranteeing the uniformity of the information for all the postpartum women who were part of this study group. The application of the scale by telephone contact between 15 and 120 days after birth in both groups (IG and control group CG) was the sole responsibility of properly trained research assistants who used a Standard Operating Procedure (SOP) to collect the data.

The first phase of the study took place after the selection of the postpartum women, according to the inclusion criteria, starting the data collection with the application of the BSES-SF and the forms in the two groups, which happened before the group education session in the IG. For all the women, the data were collected from the primary source (directly from the postpartum women), at the bedside in the rooming-in unit.

In the second phase, the mothers of the CG, after the application of the instruments, received the unit's conventional guidelines regarding breastfeeding and did not receive interventions supported by the study. The breastfeeding care established in the unit's routine consists of a visit by the nurses, orientation on proper breastfeeding management and solution of problems like breast engorgement,

manual milking, among others; using the actions recommended by the Brazilian Ministry of Health as a reference framework.

The intervention in the IG was carried out in a group education session, through the use of the flip chart "I can breastfeed my child", in a room reserved for this purpose, located at the rooming-in unit, joining six women on average in each group session. This number in each group facilitated the interaction among the participants and was also adopted because it had been used successfully in another educational intervention study with a flip chart.¹⁴

The average length of the intervention in the group session was 40 minutes, carried out by the researcher herself, at a single moment, still at the rooming-in unit, so that the woman, when discharged, could see the breastfeeding self-efficacy and put the breastfeeding in practice.

The flip chart "I can breastfeed my child", constructed and validated in the Northeast of Brazil, consists of seven figures and seven scripts. At the beginning of the educational intervention, the cover of the flip chart was presented, showing a newborn anxious for the breast, stimulating the dialogue with the postpartum woman. Figure 1 of the chart represents the mother breastfeeding the newborn, and it highlights the correct breast latch and the position of the mother and son during breastfeeding. Figure 2 indicates that the child has emptied the left breast and the mother is preparing to offer the other breast, emphasizing the importance of offering both breasts or alternating between both.

In figure 3 of the chart, the identification that breastfeeding was successful could be emphasized, such as the frequency of bladder elimination by the child, the fact that the newborn released the breast alone, slept quietly and was growing and gaining weight adequately. In figure 4, the baby is crying a lot, but the mother remains calm and investigates the reason for crying: she changes the diaper, reassures the child and offers her breast.

In figure 5 of the chart, the mother is in her family context, performing various activities, demonstrating that it is possible to reconcile her tasks with the child's breastfeeding. Figure 6 illustrates the family environment where the mother is breastfeeding and receives the visit of her child's grandparents, discussing the issue of breastfeeding in public and the importance of the mother breastfeeding in a place where she feels comfortable.

Finally, figure 7 of the chart depicts the return of mother and child to the Basic Health Unit for the

postpartum and childcare consultation, indicating that the child should be breastfed exclusively for at least six months. The researcher followed the sequence of the figures, always stimulating the dialogue and addressing the four sources of information of Theory of Self-efficacy,^{2,3} permitting the construction of maternal breastfeeding self-efficacy.

The researcher used the script forms to facilitate the focus on BSES-SF items, which are distributed in two domains. First, the technical domain includes the proper positioning of the newborn during feeding, ways to improve comfort during breastfeeding, recognition of signs of quality lactation and proper suction. The other domain refers to intrapersonal thoughts, such as the desire to breastfeed, to identify whether the internal motivation for breastfeeding was based on the satisfaction of the breastfeeding experience, among other factors.¹⁵

The third phase of the study occurred 15 days after the first BSES-SF application (at the rooming-in unit), when the scale was reapplied by telephone contact in the groups. It is justified to use the telephone as a data collection strategy in view of its use in health and nursing research,^{11,15-18} even making use of this resource as an intervention strategy.¹⁹

At the rooming-in unit, the postpartum women received a folder containing a copy of the BSES-SF, so that they could use it during the telephone interview, following the reading by the research assistant. Through this strategy, the memory bias was avoided, facilitating the women's understanding of the scale items.

Thus, before starting to collect the information, the assistants made sure that the woman had the folder with the copy of the BSES-SF at hand. All interviews from this moment on were carried out by the research assistants, who were not aware of the study groups, thus guaranteeing the blinding of the data collection.

The fourth phase began 30 days after the first application at the rooming-in unit and took place monthly by telephone contact to apply the BSES-SF, ending when the child completed 120 days of life. The duration of each interview varied, depending on the transmission quality of the telephone operators' signal, taking 30 minutes on average. The dependent variable of the study was maternal breastfeeding self-efficacy (measured by the BSES-SF).

To calculate the sample, the proportion of 30% of possibility of the outcome was considered in the CG and 55% in the IG, and a recommended formula

was used to compare the two groups.²⁰ The application of the formula resulted in the sample size of 208 postpartum women in the IG and 104 in the CG. As shown in figure 1, there was a loss in the follow-up of the postpartum women, corresponding to 45 in

IG and 64 in CG. The majority of the losses relate to the telephone contact, such as a number change, a cell phone disconnected during the attempts to get contact or not answering the phone call at some point in the follow-up.

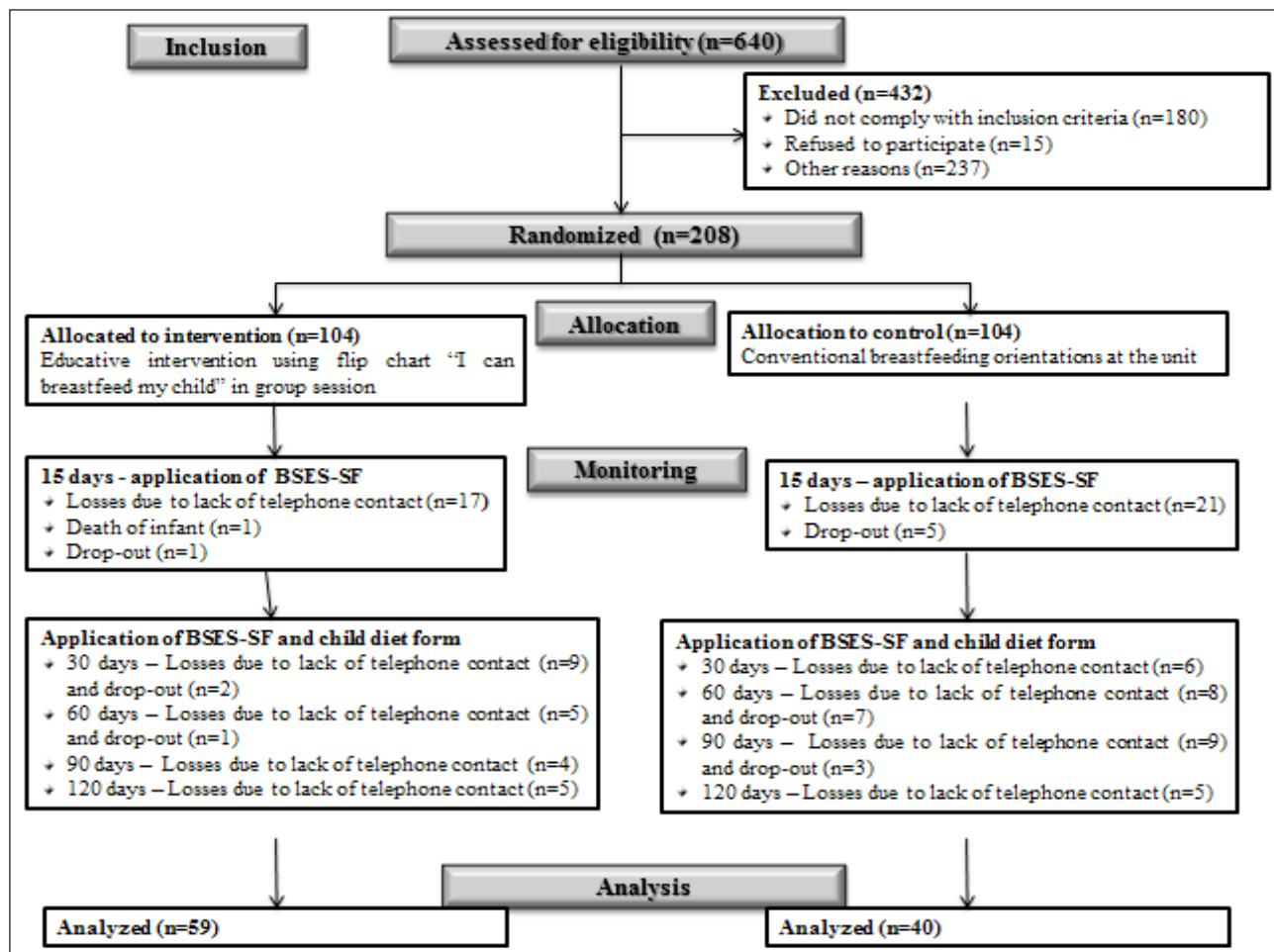


Figure 1 - Diagram representing the participants' flow in each study phase. Santa Maria, RS, Brazil, 2015

The subjects were randomized in blocks²¹ in order to ensure an equal distribution of the participants in the study groups, during the hospitalization period, since both the IG and the CG women were hospitalized at different periods. This selection system of groups in different periods avoids bias in the study, because, as the research was developed at the rooming-in unit, the postpartum women who participated in the group session, even in separate wards, could transmit the information received to the CG. Therefore, we chose to draw the groups per week.

This random selection used the number of the group written on a piece of paper.²¹ The draw was that, each week, a group number was drawn, until both were considered; every two weeks, the draw

was carried out again until the sample number indicated for each group was reached.

We defined the IG as number 1 and the CG as number 2. The unit secretary was asked to perform the draw, due to the lack of involvement in the research and lack of knowledge on which group was drawn. In total, 11 draws were carried out to reach the sample size, with 22 weeks of data collection at the rooming-in unit. The blinding used in the study was of the single type, in which only the research assistants were blinded to the women's allocation group until the data collection was completed.

The database was constructed in Access 2007 (Microsoft Office) Program, as it enabled double

typing with automatic verification, permitting the verification of the data with the primary source (forms and scale) in case of differences between the two digits, followed by correction. Afterwards, these were exported to the Statistical Package for the Social Sciences (SPSS Inc., Chicago, United States), version 18.0, which started the data analysis.

For the descriptive analysis, descriptive statistical tests were performed, and absolute and relative frequencies, means and standard deviations were calculated. The comparison of the groups occurred through the baseline and after the intervention, in all the months of monitoring, in separate analyses.

The Kolmogorov-Smirnov and Levene tests were used to verify the normality of the variables and to test the homogeneity of the variances, respectively. The scale means were compared by means of Student's t-test, Mann-Whitney (continuous variables), ANOVA and the Tukey test for multiple comparisons. A significance level of 5%, that is, $p < 0.05$, was considered in all cases.

Regarding the ethical aspects of the study, the standards of Resolution N. 466/2012 by the National Health Council of the Ministry of Health were complied with. Approval for the study was obtained from by the Research Ethics Committee of Universidade Federal de Santa Maria (Rio Grande do Sul

/ Brazil), obtaining CAAE 26532313.0.0000.5346. The study was recorded in the Brazilian Registry of Clinical Trials (REBEC) under registration number RBR-6srs33.

RESULTS

There was no difference between the intervention and control groups in terms of age ($p=0.084$), marital status ($p=0.430$), occupation ($p=0.860$), time spent away from home ($p=0.635$) ($p=0.949$). Regarding the obstetric variables, there was no difference in the number of pregnancies ($p=0.118$), exclusive breastfeeding period of the previous child ($p=0.643$), prenatal care ($p=0.490$) ($p=0.939$), gestational age ($p=0.853$), type of delivery ($p=0.486$) and type of breastfeeding performed at the rooming-in care unit ($p=0.789$). In addition, mean BSES-SF scores at the first interview were similar for both groups ($p=0.404$), indicating the homogeneous distribution of the sample.

A higher percentage of women with high self-efficacy (52 to 70 points) was identified over the follow-up period in the intervention group, indicating a significant difference between the groups ($p=0.002$). In the control group, a high percentage of women with high self-efficacy ($p=0.399$) could be verified, as indicated in table 1.

Table 1 - Comparison of breastfeeding self-efficacy scores between study groups during monitoring times. Santa Maria, RS, Brazil, 2015

Self-efficacy groups	Roomingin-in care n (%)	Times					p-value ^a
		15 days n (%)	30 days n (%)	60 days n (%)	90 days n (%)	120 days n (%)	
Intervention	n=104	n=86	n=74	n=68	n=62	n=59	0,002
Medium	13 (12.5)	3 (3.5)	2 (2.7)	1 (1.5)	1 (1.6)	2 (3.4)	
High	91 (87.5)	83 (96.5)	72 (97.3)	67 (98.5)	61 (98.4)	57 (96.6)	
Control	n=104	n=78	n=72	n=57	n=47	n=40	0.339
Medium	14 (13.5)	8 (10.3)	12 (16.7)	10 (17.5)	7 (14.9)	7 (17.5)	
High	90 (86.5)	70 (89.7)	60 (83.3)	47 (82.5)	40 (85.1)	33 (82.5)	

^a Chi-Squared test for trend in proportions.

According to figure 2, in the intervention group, the maternal breastfeeding self-efficacy increased in the second and third breastfeeding times (15 and 30 days after birth). In addition, at all times, the mean maternal breastfeeding self-efficacy scores

were higher than the averages in the control group. In the control group, the increase in the maternal breastfeeding self-efficacy scores also varied over time, without a significant difference.

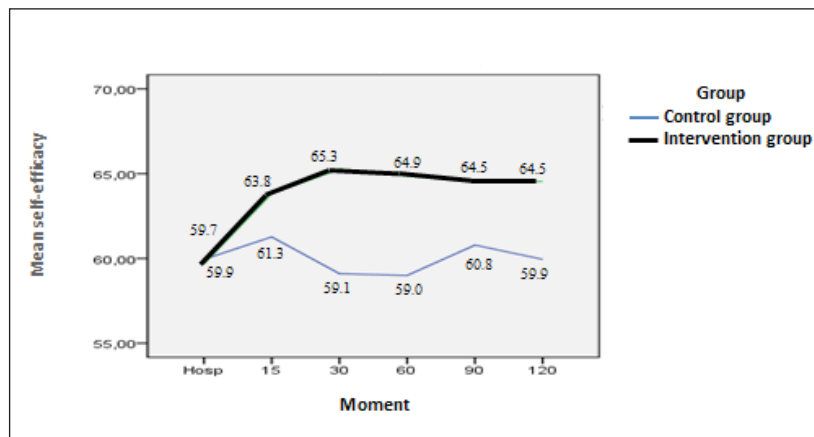


Figure 2 – Upward trend in mean breastfeeding self-efficacy scores according to study groups during monitoring times. Santa Maria, RS, Brazil, 2015

The comparison of means test of the breastfeeding self-efficacy scores did not demonstrate significance between the two study groups at the rooming-in unit ($p=0.404$) before the educative intervention. Nevertheless, a difference in the mean self-efficacy scores was found between the women

in the IG and CG at the other monitoring times, 15, 30, 60, 90 and 120 days after birth ($p<0.05$). This fact evidences the increased maternal breastfeeding self-efficacy in the IG, which continues until the final monitoring time (120 days) (Table 2).

Table 2 – Comparison of mean breastfeeding self-efficacy scores between study groups and between monitoring times. Santa Maria, RS, Brazil, 2015

Time	Intervention group		Control group		p*
	Mean ± SD	Median	Mean ± SD	Median	
1 st time (Baseline)	59.7 ± 6.3	61.0	59.1 ± 6.4	60,0	0,404
2 nd time (15 days)	63.8 ± 5.6	65.5	62.7 ± 6.7	65,0	0,016
3 rd time (30 days)	65.2 ± 4.9	67.0	62.1 ± 8.0	64,0	<0,001
4 th time (60 days)	64.9 ± 4.5	65.0	62.0 ± 8.5	64,0	<0,001
5 th time (90 days)	64.5 ± 4.9	65.0	62.6 ± 7.5	65,0	0,008
6 th time (120 days)	64.5 ± 5.2	66.0	62.5 ± 7.8	64,5	0,003
Friedman’s p [†]	<0.0001[‡]		0.004[§]		

*Student’s t-test to compare each time between control group and intervention group; [†]Friedman’s p to compare the times within each group; [‡]Within the intervention group, only the 1st time differed from the others; [§]In the control group, the 1st time differed from the others and the 2nd from the 6th.

DISCUSSION

The flip chart used in this study is considered a pedagogical tool that allows women to act as protagonists of the learning process about breastfeeding. This happened because the educational action in a group session was mediated by the flip chart, which is based on the BSES-SF items, also addressing the four sources of self-efficacy (personal experience, vicarious experience, verbal persuasion, somatic and emotional states),¹²⁻¹³ which made it possible to increase the breastfeeding self-efficacy scores through the intervention and to intervene in the questions where women had more difficulty.

A study carried out with 201 postpartum mothers at the rooming-in care unit identified an increase in BSES-SF scores after using an educational strategy applied individually, also mediated by the flip chart proposed for this study. This fact supported the data presented, inferring that the postpartum women gained greater self-efficacy to breastfeed and reached good rates of breastfeeding due to the intervention.¹⁵

In this study, there was a significant percentage of women in the CG and IG with high self-efficacy, but a significant difference in self-efficacy scores (medium and high) over the monitoring period (rooming-in, 15, 30, 60, 90 and 120 days after

birth) was only found in the IG, with an increase in maternal breastfeeding self-efficacy. This result shows that the self-efficacy scores of the postpartum women who participated in the educational intervention in a group session were higher than those who received conventional intervention from the unit where the study was performed.

This fact was proven based on the use of the flip chart "I can breastfeed my child" in a group, considering that this intervention permitting showing, in the figures proposed in the flip chart, realities similar to those of the target audience. Thus, the material contributed to the women gaining confidence in their abilities to breastfeed their children, since it was possible to share group experiences for the promotion of breastfeeding.

Verbal persuasion, one of the sources of self-efficacy, was developed during the use of the flip chart, since women were able to establish their self-efficacy beliefs when they reinforced their personal beliefs in relation to their ability to breastfeed their children. In addition, another source was highlighted, which is the vicarious experience, through the exchange of information with other women who were also experiencing or who had already experienced breastfeeding.^{3,8}

The realization of the intervention in a group session also made it possible to guarantee the women's autonomy. It took place dynamically, reflexively and democratically, since the group permitted the construction of knowledge based on the needs of those involved, stimulating the exchange of experiences and the development of personal skills with a view to health promotion.²²⁻²³

By using creativity and dialogue in health interventions, the professional can overcome the biological and decontextualized view of care, guaranteeing the nursing mother and her family greater safety in breastfeeding the child.²⁴ Associated with the use of strategies to promote the mother's trust, support and guidance offered in the first few weeks postpartum increase breastfeeding self-efficacy and can ensure successful breastfeeding.²⁵

It is also emphasized that the postpartum period is of fundamental importance for breastfeeding to be effective, besides being a period of learning and adaptation for mother, child and family, which requires intensive follow-up after childbirth. The immediate postpartum is a period in which women present many difficulties with breastfeeding but, over time, they are minimized, provided that follow-up and support are offered during this process.²⁶

Recognizing the relevance of the postpartum

period, educational technologies based on breastfeeding self-efficacy have been developed, as is the case of the flip chart used in this study.¹³ Educational technologies can complement the care by clarifying and promoting the breastfeeding and maternal self-efficacy in breastfeeding.²⁷

Thus, the importance of using the flip chart in this period was justified, since it permitted sustaining or elaborating positive beliefs of self-efficacy in the women in the intervention group, evidenced by the data that showed the increase of maternal breastfeeding self-efficacy in the intervention group until the last moment of the follow-up.

The educational practice contributes to the development of the individuals' critical-reflexive attitude, guaranteeing conscious decision-making, besides guaranteeing the exchange of experiences between the individuals and the professional. When using differentiated care strategies, the professional allows the woman to feel welcomed, safe and confident to breastfeed, developing humanized care.²⁷ The use of the flip chart "I can breastfeed my child" in a group session permitted the achievement of satisfactory results, guaranteeing that the women feel confident about their ability to breastfeed their child.

CONCLUSION

This study found a higher percentage of women with high self-efficacy in the IG during the follow-up period and a difference in the mean self-efficacy scores between the women in the IG and the CG at the follow-up moments (15, 30, 60, 90 and 120 days after birth). Thus, a modification or reinforcement of maternal breastfeeding self-efficacy could be verified after using the flip chart "I can breastfeed my son" in a group session, promoting breastfeeding.

The use of the flip chart in a group session allows the health professional, especially the nurse, to use a technology that permits the exchange of knowledge between the subjects and the mediation of the guidelines by a more attractive and practical interaction than conventional educational interventions. The use of the educational strategy in a group session also guarantees the effectiveness of health education actions, since it optimizes their time and covers a greater number of individuals, as these practices often are not developed due to a lack of time to put them in practice.

Although the flip chart "I can breastfeed my child" was built and validated in the Northeast of Brazil (Ceará), there were no regional differences at

the moment of its application in another region of the country (Rio Grande do Sul). The importance of its use in the routine of professionals working with breastfeeding promotion is emphasized, whether in prenatal or postpartum care.

Although the evidence from this study was presented in a consistent and relevant way for the promotion of maternal breastfeeding self-efficacy, following a methodological rigor for experimental studies, one limitation was related to the difficulty of telephone contact with the postpartum women throughout the follow-up period.

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