

Building trust to childbirth: assessment of a nursing intervention programme

Construir a confiança para o parto: avaliação de um programa de intervenção em enfermagem
Construir la confianza para el parto: evaluación de un programa de intervención en enfermería

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Abstract

Background: The self-efficacy of the woman during labor influences its perception and affects her satisfaction with the childbirth experience. Several studies have shown that childbirth preparation classes need to integrate and reinforce this concept.

Objective: To assess the effectiveness of the Build Trust to Childbirth programme in the perception of labor self-efficacy of pregnant women.

Methodology: Longitudinal, quasi-experimental study, with pre- and post-test with repeated measures. Conducted in an institution of northern Portugal. Sample of 66 pregnant women in the experimental group and 55 in the control group. The Childbirth Self-Efficacy Inventory was used.

Results: The self-efficacy expectations increased very significantly over time in the experimental group ($F(1,81; 118) = 37.26; p = 0.000$). There were no statistically significant differences between the groups ($F(1; 119) = 3.39; p = 0.068$).

Conclusion: The programme promoted a significant increase in labor self-efficacy of the pregnant woman, with no significant differences with the control group.

Keywords: prenatal education; labor, obstetric; self efficacy; nurse midwives

Resumo

Enquadramento: A autoeficácia da mulher durante o trabalho de parto influencia a forma como este é percebido e afeta a sua satisfação com a experiência de parto. Vários estudos demonstraram ser necessário que a preparação para o parto incorpore e reforce este conceito.

Objetivo: Avaliar a eficácia do programa Construir a Confiança para o Parto na percepção de autoeficácia das grávidas para lidarem com o trabalho de parto.

Metodologia: Estudo longitudinal, quasi-experimental, pré e pós-teste, com medidas repetidas. Realizado numa instituição do Norte de Portugal. Amostra de 66 grávidas no grupo experimental e 55 no grupo controlo. Utilizado o Questionário de Autoeficácia no Trabalho de Parto.

Resultados: As expectativas de autoeficácia aumentaram de forma extremamente significativa ao longo do tempo no grupo experimental ($F(1,81; 118) = 37,26; p = 0,000$). Não se encontraram diferenças com significado estatístico entre os grupos ($F(1; 119) = 3,39; p = 0,068$).

Conclusão: O programa promoveu um aumento significativo da autoeficácia da grávida para lidar com o trabalho de parto, embora sem diferenças significativas com o grupo controlo.

Palavras-chave: educação pré-natal; trabalho de parto; autoeficácia; enfermeiras obstétricas

Resumen

Marco contextual: La autoeficacia de la mujer durante el parto influye en la forma como este se percibe y afecta a su satisfacción con la experiencia del parto. Varios estudios demostraron que es necesario que la preparación para el parto incorpore el refuerzo de este concepto.

Objetivo: Evaluar la eficacia del programa Construir la Confianza para el Parto en la percepción de la autoeficacia de las embarazadas para lidiar con el trabajo del parto.

Metodología: Estudio longitudinal, cuasiexperimental, pre y postest, con medidas repetidas. Se realizó en una institución del norte de Portugal. La muestra estuvo formada por 66 embarazadas en el grupo experimental y 55 en el grupo de control. Se utilizó el Cuestionario de Autoeficacia en el Trabajo del Parto.

Resultados: Las expectativas de autoeficacia aumentaron de forma extremadamente significativa a lo largo del tiempo en el grupo experimental ($F(1,81; 118) = 37,26; p = 0,000$). No se encontraron diferencias con significado estadístico entre los grupos ($F(1; 119) = 3,39; p = 0,068$).

Conclusión: El programa promovió un aumento significativo de la autoeficacia de la embarazada para lidiar con el trabajo del parto, aunque sin diferencias significativas con el grupo de control.

Palabras clave: educación prenatal; trabajo de parto; autoeficacia; enfermeras obstétricas

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Introduction

In Portugal, childbirth preparation is a right, explained by Law no. 142/99 of 31 August (Lei nº: 142/99 de 31 de agosto, 1999). It consists of a useful intervention in the woman/couple preparation, whose primary goal is to teach the woman/couple techniques for the correct use of coping strategies to manage labor. Although it has been performed in various health institutions in our country for many years, there is no supporting evidence of its effectiveness in the promotion of the labor self-efficacy.

The cognitive-behavioral theory has emphasized the importance of health professionals knowing and acting on the patients' thoughts, emotions, behaviors, and attitudes, to contribute to the control of individuals' pain, well-being, and adaptation (Prata, 2016; Zinken, Craddock, & Skinner, 2008). Concerning the birth, studies show that efficacy influences the perception of birth and their authors recommend that childbirth preparation classes include and strengthen the efficacy theory in their *curriculum* (Ip, Chan, & Chien, 2005; Cunqueiro, Comeche, & Docampo, 2009; Prata, 2016).

We consider that childbirth preparation classes contribute to the woman's/couple's empowerment because they help to gather information on labor and childbirth, to define realistic goals, to learn coping strategies to manage pain, and sustain informed decision-making and an adequate support system for other significant individuals and health professionals. To understanding the perception of the woman's pre-birth self-efficacy can help health professionals to prepare the pregnant woman for childbirth adequately and, consequently, help to promote a more positive childbirth experience (Prata, Santos, & Reis Santos, 2009).

Several research studies on maternal confidence and childbirth outcomes applied self-efficacy (Ip et al., 2005; Cunqueiro et al., 2009). However, we did not find in Portugal studies on the promotion of pregnancy self-efficacy or its influence on childbirth satisfaction.

Therefore, and also to promote the labor and childbirth self-efficacy, we developed the Building Trust to Childbirth programme (*Construir a Confiança para o Parto - CCpP*).

This study aimed to evaluate the effectiveness of the CCpP programme in the perception of labor self-efficacy of pregnant women.

Background

We developed the CCpP intervention program based on Albert Bandura's self-efficacy theory, on the Lamaze philosophy for the 21st century, and Nola Pender's health promotion model, after having conducted a literature review and two studies. One study was exploratory-qualitative, aiming to identify a set of nursing interventions for the promotion of labor self-efficacy, and the other was a consensus study, of quantitative nature, whose purpose was to validate the relevance and applicability of the identified interventions (Prata, 2016).

Albert Bandura's social cognitive theory states that self-efficacy beliefs, essential to protect the physiological response to stress (Pereira & Almeida, 2004), result from the meanings people confer on the information obtained through successful personal experiences, observation of the performance of others, verbal persuasion, and perception of somatic and emotional states (Bandura, 1997; Pajares, 2002; Pereira & Almeida, 2004; Baptista, Santos, & Dias, 2006; Zinken et al., 2008). These personal beliefs relate to the ability to overcome obstacles. However, the abilities being present is not sufficient, as the person must believe he/she possesses them and, consequently, can achieve a specific line of action (Prata et al., 2009). Labor and childbirth self-efficacy includes self-efficacy expectations (pregnant woman's evaluation about her ability to perform a specific behavior in the active labor phase and the expulsive period), essential in health-related behavior self-regulation moments. It also includes outcome expectations (pregnant woman's evaluation that this behavior leads to a particular outcome in the two labor phases), necessary to shape intention (Pereira & Almeida, 2004).

The Lamaze philosophy defends the natural birth, acknowledges the woman's inherent ability to give birth, and promotes healthy birth practices (Lamaze International, 2013). According to this philosophy, the woman in labor must be surrounded by health professionals and family members who trust and help her to trust in her ability to give birth and to move freely for her comfort.

Giving birth safely, being comfortable during labor, formulating a childbirth plan, preparing for informed decision-making and communication with health professionals, improving knowledge

about natural childbirth, and presenting the scientific evidence are objectives of the childbirth preparation programs based on this philosophy (Romano & Lothian, 2008; Prata, 2016). Nola Pender's health promotion model aimed to understand which behavior determinants should be the foundation for health counseling. According to Pender (2011), this model defends that the individual must be considered holistically due to his/her multidimensional nature. Also, it is based on the expectancy-value theory and Albert Bandura's social cognitive theory, which includes self-efficacy as a personal belief, the model's central concept (Pender, 2011). Thus, it constitutes a useful resource to prepare the woman/couple for decision making and active participation in labor and childbirth.

These theoretical premises and the nursing interventions identified in the conducted studies allowed formulating the CCpP programme, with the purpose of promoting labor self-efficacy and enabling the woman to become more satisfied with the childbirth experience.

It is a patient-centered programme because it acknowledges the woman's inherent skills and abilities to give birth and values her beliefs. Moreover, from its development resulted: a behavioral approach, which aims to change pregnant women's attitudes and behaviors related to childbirth, to encourage an active involvement in this process; a cognitive approach, which helps the pregnant woman/couple to alter their way of thinking, and adopts positive attitudes to increase confidence and self-awareness; and an educational and empowerment approach, whose purpose is to inform and educate about self-efficacy and labor, in order to facilitate choices and informed decision-making for self-efficacy promotion.

The programme, directed at pregnant women/couples with 20 years or more of age and with 28 or more weeks of pregnancy, is carried out in two theoretical classes, four theoretical-practical classes, a trip to the delivery room, and individual contact. Classes are weekly, each lasting 90 minutes, and allow up to 12 participants.

Research Question

Is the CCpP programme effective in promoting women's self-efficacy to cope with labor?

Hypotheses

H1: Labor self-efficacy increases significantly in women who completed the CCpP programme.
H2: Pregnant women who completed the CCpP programme report a significantly higher labor self-efficacy than pregnant women who attended the standard classes.

Methodology

A quantitative, longitudinal, and quasi-experimental study, with pre- and post-test with repeated measures. Non-probabilistic convenience sample. Inclusion criteria were being pregnant, having 20 or more years of age, being 28 or more weeks pregnant, and willing to participate in childbirth preparation classes in the institution. Exclusion criteria were having scheduled elective cesarean section, having already completed childbirth preparation, and not willing to participate in all phases of the study.

Of the 246 pregnant women who agreed to participate in the study, we lost 89 (36%), 36 in the experimental group, between the first and second moments, and in the third moment 36 (23%), 18 in the experimental group. The main loss reasons were clinical aspects and not filling out the questionnaire in the third evaluation moment.

The participants registered in the childbirth preparation classes according to their availability. Those who wished to attend the classes on Tuesdays and Thursdays belonged to the experimental group; the others were allocated to the control group.

The data collection took place at an institution in the northern region of Portugal, between January 2011 and September 2012, in three moments: Pre-test (M₁) – data collection held in prenatal appointments, between 28 and 32 weeks of pregnancy, to the participants of both groups, when they accepted to participate in the classes; Post-test (M₂) – between 37 and 39 weeks of pregnancy, after participating in the classes (CCpP programme and childbirth preparation classes, according to the psychoprophylactic method); Follow-up (M₃) – 48 to 72 hours after childbirth.

The researcher and two nurse midwives in ma-

ternal health and obstetrics of the institution, experienced in childbirth preparation, implemented the CCpP programme. There was a preparatory phase to introduce the programme, the data collection tool, and to standardize concepts, with the purpose of minimizing procedure differences between the many research team members. For evaluation purposes, we used a questionnaire, which we previously delivered to the participants in a sealed envelope and which they subsequently returned to the service.

As a data collection instrument, we used in the Childbirth Self-Efficacy Inventory (CBSEI) by Nancy Lowe (1993), translated and adapted to the Portuguese population by Neves (2010), with the authorization granted by both authors. This instrument consists of a self-report questionnaire, with two subscales of 15 and 16 items and a Likert-type response grid of 10 points — the final score results from the sum of the subscales' scores. A higher score corresponds to a greater perception of self-efficacy. The study of internal consistency of CBSEI revealed a value of Cronbach's alpha coefficient (based on the standardized items) for the total scale of 0.96, and each subscale, values ranging between 0.87 and 0.95. These results are consistent with the values found by other authors (Lowe, 1993; Howharn, 2008; Neves, 2010) and allow affirming that the CBSEI provides confidence in the results because it shows highly constant values of internal consistency.

Using central tendency and dispersion measures and the parametric tests (Student's *t*-test for independent and paired samples, and analysis of variance and F-ANOVA for repeated mea-

asures) we performed the statistical treatment of the data in the IBM SPSS Statistics program, version 21.0 for Windows.

All participants signed the informed consent form, and the Board of Directors approved this study after a favorable opinion of the institution's Ethics Committee.

Results

The sample was composed of 121 pregnant women, 66 in the experimental group and 55 in the control group. They were mostly married, had higher education, and were between 20 and 41 years old in the and control experimental groups, with a mean age of 31.17 (*SD* = 4.28) and 32.9 (*SD* = 4.14) years old, respectively. As regards the groups' equivalence, we found no statistically significant difference.

In the first moment of evaluation (*M*₁), pre-intervention (Table 1), concerning the outcome expectations for the active labor phase, after applying Student's *t*-test for independent samples, we found no statistically significant differences between groups (*t* (117.9) = -0.971; *p* = 0.334). However, we verified that pregnant women in the control group had on average higher outcome expectations for the active labor phase (*M* = 8.41; *SD* = 0.61) than the participants in the experimental group (*M* = 8.29; *SD* = 0.81). In the expulsive period (EP; Table 1), pregnant women in the control group also manifested a higher outcome expectation (*M* = 8.58; *SD* = 1.08), yet, no statistically significant differences occurred between the groups (*t* (119) = -1.23; *p* = 0.221).

Table 1
Results of Student's t-test regarding outcome expectations

| | Group | | | | <i>t</i> | <i>p</i> |
|----------------------|--------------|--------------------|----------|--------------------|----------|----------|
| | Experimental | | Control | | | |
| Outcome expectations | <i>n</i> | Mean (<i>SD</i>) | <i>n</i> | Mean (<i>SD</i>) | | |
| Active labor phase | 66 | 8.29 (0.81) | 55 | 8.41 (0.61) | -0.97 | 0.334 |
| EP | 66 | 8.34 (1.09) | 55 | 8.58 (1.08) | -1.23 | 0.221 |

Note. EP = expulsive period; *n* = sample size; *SD* = standard deviation; *p* = probability test; *t* = *t*-test.

About the self-efficacy expectations in the active labor phase (Table 2), the women in the control group showed a higher mean ($M = 7.60$; $SD = 1.40$) than those who joined the experimental group, with a statistically significant difference between the groups ($t(119) = -2.53$; $p = 0.013$). Pregnant women from the control group had a higher self-efficacy ex-

pectation in the active labor phase than those from the experimental group. Regarding the self-efficacy expectations in the EP, the mean was 6.63 ($SD = 1.83$) in the experimental group and 7.38 ($SD = 1.03$) in the control group, whose participants showed a significantly higher self-efficacy expectation in the EP than those of the experimental group.

Table 2
Results of Student's t-test regarding self-efficacy expectations

| | Group | | | | <i>t</i> | <i>p</i> |
|----------------------------|--------------|--------------------|----------|--------------------|----------|----------|
| | Experimental | | Control | | | |
| Self-efficacy expectations | <i>n</i> | Mean (<i>SD</i>) | <i>n</i> | Mean (<i>SD</i>) | | |
| Labor active phase | 66 | 6.85 (1.79) | 55 | 7.60 (1.40) | -2.53 | 0.013* |
| EP | 66 | 6.63 (1.83) | 55 | 7.38 (1.03) | -2.46 | 0.015* |

Nota. EP = expulsive period; *n* = sample size; *SD* = standard deviation; *p* = probability test; *t* = *t*-test. *Significant at level $p \leq 0,05$.

These results led to the conclusion that the two studied samples were equivalent for all variables, excluding those relating to self-efficacy expectations. In the post-test (M_2), the mean related to the outcome expectations was the same in both groups (Table 3). In contrast, we found that the

mean of self-efficacy expectations in the control group ($M = 16.4$; $SD = 2.1$) was slightly higher than the experimental group's ($M = 16.3$; $SD = 2.4$). Still, there was a greater increase in the mean value of self-efficacy expectations in the experimental group between the two moments.

Table 3
Labor self-efficacy, per group, in the two evaluation moments

| <i>N</i> = 121 | Outcome expectations | | Self-efficacy expectations | |
|---------------------------|----------------------|-----------|----------------------------|-----------|
| | Mean | <i>SD</i> | Mean | <i>SD</i> |
| Pre-test (M_1) | | | | |
| Experimental ($n = 66$) | 16.6 | 1.7 | 13.5 | 3.5 |
| Control ($n = 55$) | 17.0 | 1.6 | 15.0 | 2.8 |
| Post-test (M_2) | | | | |
| Experimental ($n = 66$) | 17.3 | 1.4 | 16.3 | 2.4 |
| Control ($n = 55$) | 17.3 | 1.6 | 16.4 | 2.1 |

Nota. M_1 = first moment evaluation; M_2 = second moment evaluation; *N* = sample; *n* = sample size; *SD* = standard deviation.

As regards the measurement performed at follow-up (M_3), the mean of outcome expectations increased in the control group ($M = 17.6$; $SD = 1.7$), becoming slightly higher than the mean of the experimental group ($M = 17.4$; $SD = 1.7$). Likewise, we observed that the mean of self-efficacy expectations in the control group ($M = 17.0$; $SD = 1.9$) was higher than the experimental group's ($M = 16.4$; $SD = 2.7$).

To respond to the hypothesis "Labor self-efficacy efficacy increases significantly in women who completed the CCpP programme," we carried out the ANOVA test for repeated measures in a sample of 66 participants.

The results revealed that outcome expectations increased over time, $F(2; 130) = 6.01$; $p = 0.003$. The Bonferroni post-hoc test revealed a statistically significant difference between the pre-test and the post-test ($p = 0.008$) and between the pre-test and the follow-up ($p = 0.004$). There were no significant differences between the post-test and the follow-up ($p = 0.590$).

Concerning the self-efficacy expectations, we found there was no sphericity. Therefore, it was necessary to correct the F -ANOVA test, in accordance with the Greenhouse-Geisser correction. The results showed that there was a highly significant increase in self-efficacy expectations over time ($F(1.81; 117.94) = 37.26$; $p = 0.000$). According to the Bonferroni post-hoc test, the most significant differences occurred

between the pre-test and the post-test ($p = 0.000$) and between the pre-test and the follow-up ($p = 0.000$), while there were no significant differences between the post-test and the follow-up ($p = 0.899$).

Concerning the hypothesis "Pregnant women who completed the CCpP programme report a significantly greater labor self-efficacy than that of pregnant women who attended the standard sessions," we conducted the ANOVA test for repeated measures in a sample of 121 participants, 66 in the experimental group and 55 in the control group.

As regards the outcome expectations, we found that outcome expectations increased over time ($F(2; 240) = 9.88$; $p = 0.000$). The biggest differences occurred between the pre-test and the post-test ($p = 0.003$) and between the pre-test and the follow-up ($p = 0.000$). There were no significant differences between the post-test and the follow-up ($p = 0.180$).

Outcome expectations in the experimental group did not differ significantly from those of the control group, meaning that the group's effect was not statistically significant ($F(1; 119) = 0.96$; $p = 0.330$). Despite these results, the outcome expectations were affected very significantly over time in the experimental group ($F(2; 130) = 6.01$; $p = 0.003$). In the control group, although the outcome expectations also increase significantly (Table 4), it only became significant in the post-partum ($p = 0.028$).

Table 4
ANOVA for repeated measures, inter and intra-group, in outcome expectations

| Outcome expectations | $F(df)$ | p |
|----------------------|---------------|---------|
| Intergroup | | |
| Groups | 0.96 (1; 119) | 0.330 |
| Intra-group | | |
| Experimental | 6.01 (2; 130) | 0.003** |
| Control | 4.14 (2; 108) | 0.019* |

Note. F = ANOVA test for repeated measures; df = degrees of freedom.

*Significant at level $p \leq 0,05$; **Significant at level $p \leq 0,01$.

The ANOVA test for repeated measures, with the Greenhouse-Geisser correction, determined that the mean outcome expectations in the sample differ significantly between the three evaluations ($F(1.79; 214.62) = 55.44; p = 0.000$). The post-hoc test with the Bonferroni correction revealed that the most significant differences occurred between the pre-test and the post-test ($p = 0.000$) and between the pre-test and the follow-up ($p = 0.000$). There

were no significant differences between the post-test and the follow-up ($p = 0.899$). In accordance with the groups (Table 5), the self-efficacy expectations increased very significantly over time in the experimental group ($F(1.81; 118) = 37.26; p = 0.000$) and in the control group ($F(1.76; 95) = 21.23; p = 0.000$). Nevertheless, there were no statistical significant differences among the groups ($F(1; 119) = 3.39; p = 0.068$).

Table 5
ANOVA for repeated measures, inter and intra-group, in self-efficacy expectation

| Self-efficacy expectations | <i>F(df)</i> | <i>p</i> |
|----------------------------|-------------------|----------|
| Intergroup | | |
| Groups | 3.39 (1; 119) | 0.068 |
| Intra-group | | |
| Experimental | 37.26 (1.81; 118) | 0.000*** |
| Control | 21.23 (1.76; 95) | 0.000*** |

Note. *F* = ANOVA test for repeated measures; *df* = degrees of freedom.
***Significant at level $p \leq ,001$.

Discussion

The CCpP programme was implemented according to the pre-established structure and planning. The control group completed the childbirth preparation course, based on the psychoprophylactic method, provided by the institution where we conducted the study.

We concluded that, at the beginning of the study, pregnant women manifested great outcome and self-efficacy expectations. This result may be because the majority of the participants have realistic expectations for labor, appear motivated for attending the childbirth preparation classes, and seek knowledge and the acquisition of competences to deal with labor, which is consistent with the high outcome and self-efficacy expectations. Regarding the evaluation of the CCpP programme, the results demonstrated that it promoted a significant increase in outcome expectations over time, maintaining this effect even after childbirth. As mentioned by Howharn (2008) in the quasi-experimental study

conducted with the purpose of determining the effectiveness of childbirth preparation classes in the self-efficacy to cope with labor pain, we found that information and the practice of behavioral and cognitive techniques for dealing with labor increased outcome expectations.

In the three evaluation moments, although outcome expectations have increased significantly, their evolution was minor and statistically insignificant between the post-test (M₂) and the follow-up (M₃). In the control group, the mean of outcome expectations only increased significantly after childbirth. These results contrast with those of Howharn (2008), who states that there is a significant decrease in outcome expectations in the postpartum.

As to the self-efficacy expectations, we proved that the CCpP programme promoted a significant increase of these expectations in the three evaluation moments, yet, it was minor and statistically insignificant between the post-test and the follow-up. The information, the practice of non-pharmacological techniques

for pain relief during labor, the formulation of the childbirth plan, the sharing of experiences, and the visitations to the delivery room produced effects on self-efficacy expectations of the pregnant woman, which were consistent results with those of other researchers (Lowe, 1993; Howharn, 2008).

Hence, we can conclude that the programme promoted an increase in the pregnant woman's labor self-efficacy, proving the first raised hypothesis.

Despite the increase in labor self-efficacy, regarding the outcome expectations, as well as the self-efficacy expectations, the results did not allow concluding that pregnant women who completed the CCpP programme reported a significantly higher labor self-efficacy than pregnant women who attended regular classes. The fact that, initially, the participants of the control group had significantly higher self-efficacy expectations than those of the experimental group did not allow stating that the statistical results were due to the effects of the CCpP programme or the groups' characteristics. As a result, we could not confirm the presented hypothesis.

Focusing on the methodological limitations of the study, we consider that one should extrapolate the results carefully, because they may not represent populations included in other contexts, as we chose to collect data in a single institution. We suggest replicating the CCpP programme in other contexts, like, in primary health care, private clinics, and also other regions of the country.

Despite this limitation, we consider that this research allowed obtaining results which are significant for the studied population and affect the nursing practice. The results allow nurses midwives to understand the importance of labor self-efficacy and appropriate interventions for its promotion.

Conclusion

Several authors have demonstrated that labor self-efficacy influences the perception of labor, thus recommending to incorporate and work it with pregnant women in childbirth preparation classes.

As we found no studies on this topic in Portu-

gal, we considered relevant and useful to carry out this research, as women/couples/families and nurse midwives could benefit from its results. This study could represent an advantage to health institutions, because, the result of woman-centered nursing interventions in motherhood, can lead to gains in health.

The CCpP programme allowed increasing the outcome and self-efficacy expectations significantly over time, maintaining this effect even after childbirth. We concluded that the conveyed information and the practice of behavioral and cognitive techniques to deal with labor maximized the pregnant woman's outcome expectations. The practice of non-pharmacological techniques for labor pain relief, the formulation of the birth plan, the sharing of experiences, and the visitations to the delivery room increased self-efficacy expectations of women, thereby persuading them about their ability to perform labor-related tasks.

Despite the increase of outcome and self-efficacy expectations, the results did not prove that pregnant women who completed the CCpP programme manifested a significantly higher labor self-efficacy than that of the pregnant women who attended regular classes.

We consider that this result may be because the participants of the control group presented, initially, significantly higher self-efficacy expectations than those of the experimental group. Consequently, we cannot infer safely whether the results are due to the differences between the groups or the intervention itself. However, though it is not possible to assess the effects of the CCpP programme on self-efficacy, we considered that it generated results in its promotion to deal with labor, because the groups became homogeneous, regarding this variable, after the intervention, and at the follow-up.

The strength of the CCpP programme was that it was based not only on theory but also on the knowledge that resulted from interviews carried out to women, thus turning them into active participants in its development.

Another strength was that experts in this study field validated the nursing interventions because it reinforces the possibility of a quality care practice and gains in health, as well as scientific research in the scientific field of nursing and evidence-based practice. Moreover, its implementation and the assessment of its effective-

ness and impact not only in the experimental group, as well as in a control group, allowed better discrimination of the results.

In summary, we can conclude that the programme was effective in promoting labor self-efficacy and that this is a construct worth researching and applying in childbirth preparation classes, because it provides benefits to the woman, helping her to experience more positive feelings during labor.

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