

# Health Education on Self-Efficacy in Breastfeeding Mothers: Literature Review



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## ABSTRACT

Mother's milk is the first food for newborns and is the main nutrition for babies. Efficacy is important in breastfeeding, because it is used as a parameter of the mother's ability to breastfeed. Knowledge is one of the mother's self-efficacy factors for breastfeeding. Objective: The purpose of this study was to determine whether there is an effect of health education on lactation management on breastfeeding self-efficacy in mothers. Method: The research design used is a literature review, starting with topic selection, then searching through several databases, namely Google Scholar and Science Direct by entering key-words. Results and conclusions: From 163 articles, we selected 9 relevant articles to identify the effect of health education on breastfeeding self-efficacy in mothers. Breastfeeding education interventions increase breastfeeding self-efficacy, infant feeding attitudes, and rates of exclusive breastfeeding. Self-efficacy in breastfeeding mothers through a health education approach encourages mothers through self-management to follow a plan (eg, tests, treatment, procedures, behavior change) that is formulated in collaboration with health professionals such as during health education.

**Keywords:** breastfeeding, breastfeeding self-efficacy, health education.

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## INTRODUCTION

Exclusive breastfeeding is defined as breastfeeding alone without consuming solid food or other liquids except for vitamins, minerals and other medicines needed for babies in their first six months of life.<sup>1</sup> In addition to its beneficial properties on infant well-being, breastfeeding reduces mortality caused by infectious diseases. Exclusively breastfed babies have a lower risk of developing gastrointestinal diseases and allergies.<sup>2</sup> Breastfeeding experience greatly influences subsequent breastfeeding. Due to a history of failed breastfeeding and a shorter breastfeeding period in the child due to previously unresolved breastfeeding problems and also low self-confidence.<sup>3</sup> These mothers have unpleasant experiences in breastfeeding other children, and this reduces their tendency to breastfeed, so there is a need for health education for mothers.

Education for health professionals can be designed using new theories that address a person's motivation to learn.<sup>4</sup> Social cognitive theory considers the construct of self-efficacy as the

most important variable influencing performance behavior and effective thinking and processes.<sup>5,6</sup> Therefore, it can be considered a fundamental construct when assessing learning needs and designing educational interventions. Self-efficacy is a person's belief in organizing and performing the tasks necessary to achieve desired results. Breastfeeding education programs that focus on breastfeeding self-efficacy have been made available to women of childbearing age in recent years. Several studies have found that mothers with higher breastfeeding self-efficacy are more likely to breastfeed their newborns exclusively in the immediate postpartum period.<sup>1,7</sup> In particular, the available evidence suggests a positive effect of the program's breastfeeding self-efficacy intervention on the efficacy rate of breastfeeding and exclusive breastfeeding at 1~2 months postpartum among mothers.<sup>8</sup>

Health education on breastfeeding issues increases the rate of exclusive breastfeeding. Many studies have demonstrated the positive effect of breastfeeding counseling and interventions on the continuation of exclusive

breastfeeding.<sup>9</sup> However, according to the survey conducted, there was no research on the effect of counseling on self-efficacy and breastfeeding problems in women who failed to breastfeed.<sup>10</sup> Therefore, this literature review was conducted to determine the effect of health education on breastfeeding self-efficacy and the frequency of breastfeeding problems in women with breastfeeding failure.

## METHODS

### Type of review

This study can be classified as a literature review due to its identification, selection, appraisal, and synthesis of high-quality research evidence relevant to the question. According to Snyder<sup>11</sup>, a literature review includes identifying, selecting, appraisal, and synthesizing high-quality research evidence and developed based on a specific research question.

### Literature Search

The search strategy began with a scoping search in the EBSCO host database to identify as many keywords relevant to the topic under review as possible. Three

concepts were developed: health education as a concept 1, self-efficacy as concept 2, and breastfeeding mothers as concept 3. Each concept includes synonyms and subject headings. The findings were combined using *Boolean* terms (AND, OR, NOT) and subject headings. We identified articles in the literature that focused on health education, self-efficacy, and breastfeeding mothers, clearly referenced in the title and abstract.

Moreover, we focused on articles published in English because their accessibility to the broad scientific community enhances reproducibility. This search yielded 1232 relevant articles that included health education, self-efficacy, and breastfeeding mothers in the title or abstract from January 2016 until August 2021. Members of the study team reviewed the title and abstract, further excluded the articles based on the following criteria: duplication ( $n = 485$ ), the non-English publication ( $n = 29$ ), incomplete articles ( $n = 222$ ), not related to health education self-efficacy ( $n = 225$ ), and the population was not breastfeeding mother ( $n = 288$ ). Accordingly, the number of articles

dropped was ( $n = 1223$ ) after applying the exclusion mentioned above criteria. We obtained the full texts of all nine articles that met the inclusion criteria. The database searches were PubMed, CINAHL, Scopus, Science Direct and Google Scholar. These databases were relevant to the topic under review and provided health-related journal articles. The relevant studies were selected and reported in [Figure 1](#).

## RESULTS

This section can be divided into subheadings. It should provide a concise and precise description of the experimental results, their interpretation, and the experimental conclusions that can be drawn.

### Analysis and compilation of literature searches

After analyzing nine relevant studies comprehensively, summarized the elements of health education on breastfeeding self-efficacy in mothers. The most frequently used elements were the following: maternal knowledge, personalized lifestyle, biodata or

evidence-based, patient preferences, interdisciplinary collaborative practice, self-management, and direct patient priority care. Therefore, we first explain the definition and operation of the concept of health education provided to mothers.

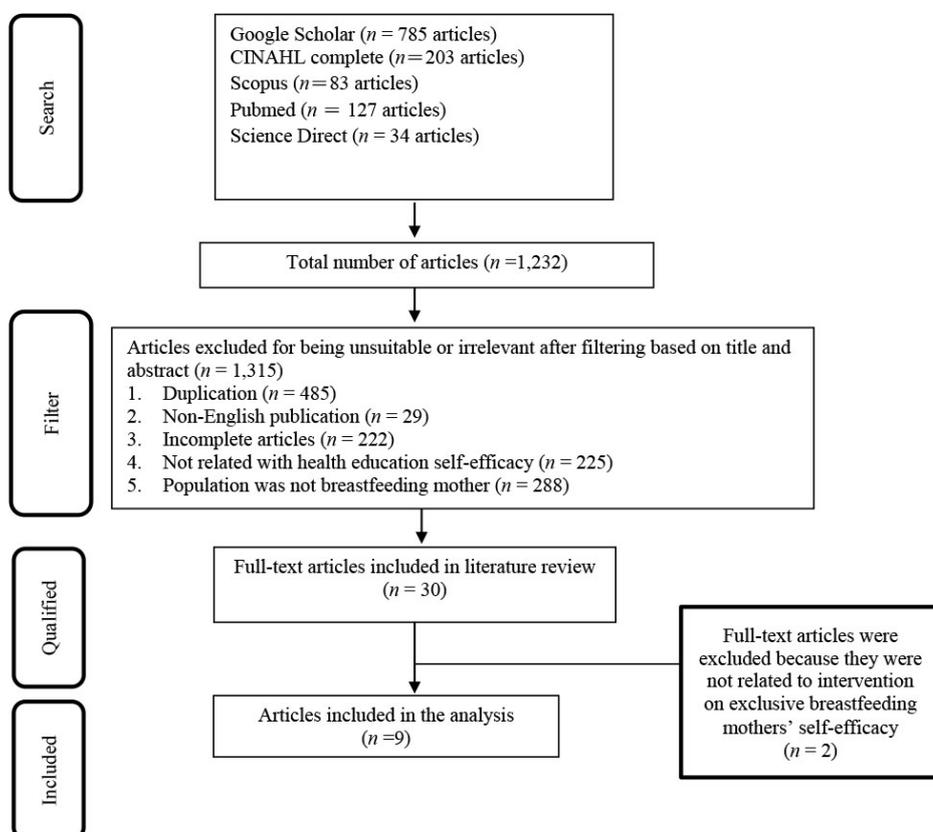
### Discovery of elements and description of the concept

Nine articles were found for health education on breastfeeding self-efficacy in mothers through literature study and discussing concept descriptions. Concepts can be identified by extracting data from each article, comparable definitions are used in each article and health interventions, then integrating the results. Therefore, reaching the final result is reviewed. A description of the concepts and strategies of each article can be seen in [Table 1](#) and is explained below.

## DISCUSSION

The main result of this study was the finding of the effect of health education on self-efficacy in breastfeeding mothers. To implement the interventions in each article to improve self-efficacy, patients must explain pressing issues to the healthcare professional using a shared decision-making tool. Discussions between patients and health professionals during health education are likely to lead to options for improving self-efficacy in breastfeeding mothers. Discussion of possibilities between healthcare professionals and patients can ensure agreement on benefits, risks, costs, including patient beliefs, values, lifestyle. The information collected is evidence of patient preferences.

Self-management in mothers' knowledge of seeking information and applying it is also an important component of any intervention, as in 9 articles. Self-management involves prioritizing appropriate action decisions for the patient. Self-efficacy encourages patients through self-management to follow a plan (e.g., tests, medications, procedures, behavior change) formulated in collaboration with health professionals during health education.<sup>12</sup> For self-management, understanding of facts or perspectives among patients is required. Verifying and clarifying this understanding is very important for



**Figure 1.** Flowchart of screening articles on breastfeeding mothers' self-efficacy.

health literacy. The decision to apply self-management to solve a problem is not always made when the problem is first discussed. As such, healthcare professionals should arrange follow-up to track the outcomes of decisions that have been made together. Several articles have reported the application and effectiveness of health education on self-management in approaches to increase efficacy in breastfeeding mothers. This concept is appropriate for these patients as it prioritizes appropriate problem solving and reduces unnecessary interventions. Furthermore, lifestyle considerations have become increasingly important. Therefore, empirical research is needed to verify the effectiveness of this concept.

In the appointed article, research was carried out by giving a pre-test before counseling and a post-test after counseling. However, in several other articles, it is not explained how long the research will take. The instrument used to measure the level of knowledge in the study was using a questionnaire. The questionnaire was given in two stages: before and after the research was conducted with the same questions.

Another core intervention to improve self-efficacy is based on a team of professionals, including medical specialists, nurses, nurse specialists, pharmacists, and nutritionists.<sup>13</sup> In addition, mothers are involved in the decision-making and preparation of care programs and goals. Every professional should implement an interdisciplinary communication platform and cooperation model. When health education is centered on breastfeeding mothers, the extension model can increase mothers' knowledge about exclusive care for individuals and allow the establishment of an accurate treatment plan, thereby increasing the effectiveness of health education on self-efficacy in breastfeeding mothers.<sup>14</sup> This concept makes it possible to provide services for high-quality or special-quality cases. In addition, this type of service considers not only medical care but also the personality of the mother based on biographical data or evidence, patient preferences, and patient priority direct care. Effective model design, innovation and practical interventions ensure

good patient outcomes and better self-management.

Inadequate breastfeeding education during prenatal preparation is a documented barrier to breastfeeding during the early postpartum period.<sup>14</sup> However, most prenatal classes are delivered with a traditional didactic approach, which limits the effectiveness of changing breastfeeding behavior.<sup>9,15</sup> Expectations of breastfeeding efficacy improve breastfeeding behavior by increasing self-confidence through performance achievement, vicarious learning, verbal persuasion, and physiological responses. Our intervention program provides a learning experience using interactive methods prior to the postpartum period that has the potential to increase participants' confidence and their ability to breastfeed successfully. This was confirmed in open feedback at the end of the 3-week program and demonstrated the breastfeeding knowledge and skills learned at IBEP and BSES-SF prepared them for breastfeeding before the birth of their child. All participants in our program were first-time mothers and fathers, and as such, receiving IBEP and BSES-SF during the prenatal stage may have eased the transition to breastfeeding.

Incorporating four aspects of self-efficacy expectations, with particular attention to novice mothers, partially explained the higher breastfeeding self-efficacy scores for the intervention group in our study. Mothers have the opportunity to experience performance gains during simulated breastfeeding scenarios as they practice correct breastfeeding positions with a real-life crying prop, which also increases their confidence when their baby cries and needs to be fed. Fathers are often excluded from breastfeeding education and feel powerless to support mothers during breastfeeding.<sup>16</sup> Including a support partner in our program allows couples to experience simulated scenarios together, learn to cope as a team, gain knowledge of breastfeeding skills in a safe environment, and practice supporting each other.

The results of this literature review can be considered for applying in health education, especially to increase mothers' knowledge about exclusive breastfeeding.

So that people understand and understand more about exclusive breastfeeding and mothers have the intention to give exclusive breastfeeding to their children.

This literature review compares and analyzed the results of research using a quasi-experimental approach, so it is still necessary to use a qualitative approach in order to obtain more comprehensive research results more in-depth about the provision of health education to breastfeeding mothers on the success of breastfeeding seen from the parameters of self-efficacy of breastfeeding mothers. This article needs to be developed using a meta-analysis approach.

## CONCLUSION

Self-efficacy in breastfeeding mothers through a health education approach encourages mothers through self-management to follow a plan (e.g., tests, treatment, procedures, behavior change) formulated in collaboration with health professionals such as during health education. For self-management, understanding facts or perspectives among patients is required. Verifying and clarifying this understanding is very important for health literacy.

## DISCLOSURE

### Conflict of Interest

The authors declare there is no conflict of interest regarding publication of this article.

### Funding

There is no funding.

### Ethic Approval

Not applicable.

### Author Contribution

All authors equally contributed to all processes in this research, including preparation, data gathering, data analysis, drafting, and approval for publication of this manuscript.

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**Table 1. Extraction results from articles.**

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p><i>Effectiveness of an integrated breastfeeding education program to improve self-efficacy and exclusive breastfeeding rate: A single-blind, randomized controlled study</i> (Juei-Fen Tsenga,d, Su-Ru Chenb, Heng-Kien Auc, Roselyn Chipojola d,f, Gabrielle T. Lee , Pi-Hsia Lee d, Meei-Ling Shyud, Shu-Yu Kuo, 2020)</p>	<p><i>International Journal of Nursing Studies</i></p>	<p>a. Study design: A single-blind, randomized controlled trial.                      b. Population/sample: 104 breastfeeding mothers                      c. Sampling technique: block-randomization to an intervention or control group                      d. Single variable: Effectiveness of an integrated breastfeeding education program to improve self-efficacy and exclusive breastfeeding rate                      e. Intervention: integrated breastfeeding education program intervention (IBEP)                      f. Instrument: Questionnaire                      g. Statistical test: independent t test, chi-square or Fisher's exact test</p>	<p>Ninety-three mothers completed the study. Data were compared for the self-efficacy intervention group (n = 50) with the control group (n = 43). Initial measures did not differ between groups. The intervention group had significantly higher breastfeeding self-efficacy at 36 weeks gestation (mean difference (MD): 7.3; p &lt; .001), and postpartum at 1 week (p &lt; .001), 1 month ( p &lt; .001) and 3 months (p &lt; .01) with MD: 6.7, 7.9, and 8.1, respectively; the difference in scores from baseline was also significantly greater for gestational age at 36 weeks to 3 months (MD from 9.1~9.9, p &lt; .001) and 6 months postpartum (MD: 7.0, p &lt; .05). Infant feeding attitude scores increased significantly from 36 weeks gestation to 6 months postpartum for the intervention group (MD from 3.5~7.4, p &lt; . 05). Rates for exclusive and predominant postpartum breastfeeding were significantly higher for the intervention vs control group (p &lt; .02) at 1 week (98% vs 86%), 1 month (100% vs 90.7%), and 3 months (94 % vs 76.7%). Postpartum odds ratio (OR) for exclusive and predominant breastfeeding was greater in the intervention group at 3 months (OR = 4.7, 95% Confidence interval (CI), 1.2 - 18.6; p = .05) and for Exclusive breastfeeding at 6 months (OR: 2.82, 95% CI 1.0–8.1; p = .05)</p>	<p>Breastfeeding education interventions increase breastfeeding self-efficacy, infant feeding attitudes, and rates of exclusive breastfeeding. Breastfeeding education programs can be effective in maintaining breastfeeding in new mothers.</p>

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p><i>Effectiveness of theory-based educational interventions on breastfeeding self-efficacy and exclusive breastfeeding: a systematic review and meta-analysis</i> (Roselyn Chipojola MSN, Hsiao-Yean Chiu PhD, Mega Hasanul Huda MSN, Yen-Miao Lin MSN, Shu-Yu Kuo PhD, 2020)</p>	<p><i>International Journal of Nursing Studies</i></p>	<p>a. Research design: published randomized controlled b. Population/sample: healthy mothers who have term babies, who intend to breastfeed, or who are breastfeeding c. Sampling technique: randomized controlled trial d. Dependent variable: Breastfeeding self-efficacy and exclusive breastfeeding e. Independent variable: The effectiveness of theory-based educational intervention f. Intervention: Educational programs are offered through a face-to-face mode (12 studies) or include a combination of face-to-face and telephone modes (12 studies) g. Statistical test: Correlation test</p>	<p>In total, 24 randomized controlled trials were identified, and 5678 mothers were included in the study, with 4178 mothers in the breastfeeding self-efficacy group and 1500 mothers in the theory of planned behavior group. Mothers who received the intervention-based theory had better breastfeeding outcomes up to 6 months postpartum.</p>	<p>The theory-based educational intervention was effective in increasing breastfeeding self-efficacy and exclusive breastfeeding rates at 6 months. Future breastfeeding education programs that combine breastfeeding self-efficacy theory and planned behavior will assist in promoting sustainable breastfeeding practices among mothers.</p>
<p><i>Design, implementation and evaluation of an education course to promote professional self-efficacy for breastfeeding care</i> (Elena Antónanzas-Baztana,b,e, María-J. Pumar-Méndezc,d,e, Blanca Marín-Fernándezb, María D. Redín-Aretab, Maider Belintxonc,d,e, Agurtzane Mujikac,d,e, I, Olga Lopez-Dicastillo, 2020)</p>	<p><i>Nurse Education in Practice</i></p>	<p>a. Research design: The Kirkpatrick model b. Population/sample: 43 health workers c. Sampling technique: Total Sampling d. Single variable: Design, implementation and evaluation of an education course to promote professional self-efficacy for breastfeeding care e. Intervention: The intervention has a pre-post design. f. Instrument: Questionnaire g. Statistical test: Wilcoxon test</p>	<p>Participants' satisfaction with higher education measures in all aspects was measured (greater than 3.9 in a score of 0-5). Professionals showed signs of not being able to increase self-efficacy levels of adequacy to support breastfeeding (Wilcoxon test p-value = &lt; 0.05, before intervention; median = 55, [IQR] = 11; after intervention: median = 60, [IQR] = 14). Participants, managers, and course organizers identified changes in the way professionals care for breastfeeding mothers.</p>	<p>This educational intervention increases professional confidence in breastfeeding efficacy and performance</p>

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p><i>The Effect of Antenatal Education on Breastfeeding Self-Efficacy: Primiparous Women in Turkey</i> (Berrak Mizrak, RN, MSN, Nebahat Ozerdogan, PhD, Ertugrul Colak, PhD, 2017)</p>	<p><i>International Journal of Caring Sciences</i></p>	<p>a. Research design: Case Study b. Population/sample: This study was conducted in 6 family health centers (eFrHC) in Eskisehir. There are a total of 90 respondents. c. Sampling technique: Total Sampling d. Dependent variable: Breastfeeding mother's self-efficacy e. Independent variable: Antenatal education f. Intervention: Researchers provided breastfeeding counseling to the intervention group to develop the effectiveness of breastfeeding. g. Instruments: Antenatal Questionnaire, Postnatal Questionnaire, Breastfeeding Self-efficacy Scale, LATCH Breastfeeding Assessment Tool h. Statistical test: two-way repeated measures ANOVA, post hoc Holm-Sidak</p>	<p>There was no significant difference between the groups in the mean antenatal BSES-SF scores. However, there was a significant difference between the groups in the mean BSES-SF exchange rate at 1, 4 and 8 weeks after birth, with scores being higher in the intervention group at this point. At 1 and 8 weeks after birth, the intervention group had a much higher success rate of breastfeeding than the control group.</p>	<p>This study concluded that the use of breast milk and support for pregnant women from prenatal to gestational age increase the effectiveness of breastfeeding and successful breastfeeding. Breastfeeding nurses should be informed about the self-efficacy of breastfeeding in mothers. Nurses should try to incorporate the effectiveness of breastfeeding into breastfeeding education.</p>

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p><i>The effect of prenatal counseling on breastfeeding self-efficacy and frequency of breastfeeding problems in mothers with previous unsuccessful breastfeeding: a randomized controlled clinical trial</i> (Fahimeh Sehhatie Shataei, Mojgan Mirghafourvand and Shiva Havizari, 2020)</p>	<p><i>BMC Women's Health</i></p>	<p>a. Research design: randomized controlled clinical trial b. Population/sample: 108 pregnant women with breastfeeding failure at Tabriz Health Center during 2017-2018 c. Sampling technique: Random Sampling d. Dependent variable: efficacy of breastfeeding and frequency of breastfeeding problems in mothers with previous unsuccessful breastfeeding e. Independent variable: prenatal counseling f. Intervention: The intervention group had four sessions of prenatal counseling and the control received only routine care. Then, mothers who gave birth to their children received counseling for up to 4 months after giving birth. g. Instrument: Breastfeeding Self-Efficacy (BSES) Questionnaire and the frequency of breastfeeding problems h. Statistical test: chi-square test and repeated measure ANOVA test</p>	<p>The mean (SD) of breastfeeding self-efficacy was 119.3 (10.5), 128.3 (8.3) and 133.8 (10.3) in the intervention group and 105.3 (16.1), 105.7 (19.7) and 109.4 (24.7) in the control group in the control group. 15th day, 2nd and 4th month after delivery, respectively. There was a significant difference in breastfeeding self-efficacy between the intervention and control groups on day 15 (<math>p &lt; 0.001</math>), and day 2 (<math>p &lt; 0.001</math> and 4 (<math>p &lt; 0.001</math>) months after delivery. Frequency of breastfeeding problems at the 15th (<math>p = 0.008</math>), 2nd (<math>p &lt; 0.001</math> and 4th (<math>p &lt; 0.001</math>) postpartum were significantly different in most cases the intervention group when compared with the controls.</p>	<p>Research shows that prenatal counseling can improve mothers' efficacy of breastfeeding and solve most breastfeeding problems during the postpartum period.</p>

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p><i>Breastfeeding knowledge and relation to prevalence</i> (Maria del Carmen Suárez-Cotelo, 2018)</p>	<p><i>Journal of School of Nursing</i></p>	<p>a. Research design: Prospective descriptive study b. Population/sample: 297 third trimester pregnant women who attended maternal education class (ME) with a midwife at the Puskesmas during the data collection period. c. Sampling technique: Total sampling d. Single variable: <i>Breastfeeding knowledge and relation to prevalence</i> e. Interventions: Data were collected on mothers' intentions to feed newborns and their knowledge of breastfeeding. Acoustic stimulation for 10 minutes once a day for seven consecutive days using headphones f. Instrument: Self-filling questionnaire g. Statistical test: Chi-square test</p>	<p>297 pregnant women participated in the study, of whom: 90.4% wanted to exclusively breastfeed their babies, but only 28.2% continued to 6 months. The level of knowledge about regular breastfeeding and it was observed that it affects the intention and type of feeding of the newborn, so it is an element that should be considered when developing an educational strategy to increase the rate of breastfeeding.</p>	<p>The level of knowledge of pregnant women about regular breastfeeding and influencing the choice of how to breastfeed their babies and the duration of exclusive breastfeeding. Strategies should be implemented to increase knowledge and increase breastfeeding rates.</p>
<p><i>The effect of a combined intervention on exclusive breastfeeding in primiparas: A randomized controlled trial</i> (Drita Puhari, Mario Malic'ki, Josip Andelo Borovac, Vladimir parac, Boris Poljak, Nađa Arac, Nero Marinovi, Nives Lueti, Irena Zakarija-Grkovi, 2019)</p>	<p><i>Maternal and Child Nutrition</i></p>	<p>a. Study design: This was a single-centre, controlled, randomized, three-arm, superior study, with blind-outcome assessment. b. Population/sample: The study population was primigravida, with singleton pregnancies, who came to the obstetrician at 20 to 32 weeks of gestation. c. Sampling technique: Randomization and blinding d. Dependent variable: exclusive breastfeeding in primiparas e. Independent variable: combined intervention f. Intervention: The intervention in this study consisted of printed educational materials and four proactive telephone calls. The breastfeeding booklet contains information from Session three. g. Statistical tests: chi-square tests and ordinal regression</p>	<p>The primary outcome was exclusive breastfeeding (EBF) at 3 months. Secondary outcomes included breastfeeding difficulties, attitudes toward infant feeding, breastfeeding self-efficacy and social support. Practice staff are not aware of group allocation. Participants in the IG had the highest increase in positive attitudes toward infant feeding, compared with baseline, and significantly higher efficacy of breastfeeding. Participants in the SCG experienced significantly more difficulty breastfeeding, both at 3 and 6 months, compared to AC and IG.</p>	<p>Written breastfeeding materials and proactive telephone support among primiparas are effective ways to increase breastfeeding rates, reduce breastfeeding difficulties and improve self-efficacy and attitudes toward infant feeding.</p>

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p><i>Impacts of antenatal nursing interventions on mothers' breastfeeding self-efficacy: an experimental study</i> (Safiya Sabri Piro and Hamdia Mirkhan Ahmed, 2020)</p>	<p><i>BMC Pregnancy and Childbirth</i></p>	<p>a. Research design: experimental study b. Population/sample: 130 pregnant women attending a primary health care center were randomly assigned to the trial c. Sampling technique: Purposive Sampling d. Dependent variable: efficacy of breastfeeding in mothers e. Independent variable: antenatal nursing intervention f. Intervention: The experimental group received two 60-session 90-minute group breastfeeding education based on breastfeeding self-efficacy theory along with routine care. mothers' knowledge, attitudes, prenatal and postnatal self-efficacy towards breastfeeding were compared between the two groups. g. Instrument: The Iowa Infant Feeding Attitude Scale measured the attitudes. Prenatal Breastfeeding Self-Efficacy Scale measured the self-efficacy during pregnancy and Breastfeeding Self-Efficacy-Short Form measured the self-efficacy in postnatal period h. Statistical test: Pearson Chi-Square test or independent t-test</p>	<p>Self-efficacy of breastfeeding during pregnancy and after two months of delivery in the experimental group was significantly higher. The experimental group had a higher level of knowledge and attitude than the subjects in the control group. In addition, exclusively breastfeeding mothers had higher postnatal self-efficacy levels in the experimental and control groups compared to formula-fed women (52.00 vs 39.45 in controls and 57.69 vs 36.00 in experimental subjects; <math>P &lt; 0.001</math>).</p>	<p>Current investigations show that antenatal breastfeeding education is an effective way to increase breastfeeding self-efficacy levels, which enhances exclusive breastfeeding practices.</p>

Title (Researcher, year)	Journal Source	Research methods	Results	Conclusion
<p>The effect of breastfeeding education on grandmothers' attendance on breastfeeding self-efficacy and infant feeding pattern in Iranian primiparous women: a quasi-experimental pilot study (Tayebeh Charaei, Leila Amiri-Farahani1, Shima Haghani and Syedeh Batool Hasanpoor-Azghady, 2020)</p>	<p>International Breastfeeding Journal</p>	<p>a. Research design: quasi-experimental study                      b. Population/sample: 64 primiparous women                      c. Sampling technique: Purposive Sampling                      d. Dependent variable: efficacy of breastfeeding and infant diet in primiparous women                      e. Independent variable: breastfeeding education with grandmas' presence                      f. Intervention: Breastfeeding education is designed according to the manual for monitoring baby-friendly hospitals.                      g. Instrument: The Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF)                      h. Statistical tests: The chi-squared and Fisher's exact tests</p>	<p>The mean BFSE scores differed significantly between the groups with and without grandmothers at the time of discharge (<math>60.15 \pm 4.47</math> vs. <math>56.84 \pm 6.22</math>, independent t-test; <math>p = 0.017</math>), and at 4 weeks (<math>61.71 \pm 2.66</math> vs. <math>56.62 \pm 9.12</math>, <math>p = 0.004</math>) and 8 weeks after delivery (<math>63.68 \pm 2.14</math> vs. <math>60.03 \pm 6.32</math>, <math>p = 0.003</math>). There were no significant differences in infant feeding patterns between the groups over the same time period</p>	<p>This study suggests that breastfeeding education with grandmothers' presence is effective in increasing mothers' breastfeeding self-efficacy. Family-centred programs should be considered in animal feeding education to increase exclusive breastfeeding.</p>