

FULL PAPER

Systematic review and meta-analysis of the relationship between health education and breastfeeding self-efficacy among mothers

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This study aimed to evaluate the effectiveness of health education in improving breastfeeding self-efficacy among mothers. This study followed the “PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)”. We conducted a thorough search of literature published between 2018 and September 2023 across several databases, including PubMed, Medline, Cochrane Library, CINAHL, Google Scholar, and ProQuest. Two authors independently screened titles and abstracts of the remaining studies using the Abstrackr tool. The quality assessment and risk of bias evaluation were conducted using the “Joanna Briggs Institute (JBI)” tool for randomized controlled trials. Data analysis was conducted using RevMan Software version 5, calculating mean differences between intervention and control groups to determine the intervention's effect size. Our systematic review included a total of nine articles with 864 participants, with 418 assigned to the intervention group and 446 to the control group. All studies reported significant increases in breastfeeding self-efficacy. The results indicated a substantial positive effect of the educational intervention on breastfeeding self-efficacy, resulting in a Z-score of 5.36 and a p-value of less than 0.001. The heterogeneity among the studies was high ($I^2 = 87\%$). A symmetrical funnel plot (Figure 3) suggested no significant publication bias, as confirmed by Egger's and Begg's tests. Health education is an intervention that is routinely carried out in various countries to increase breastfeeding self-efficacy among mothers. From the results of previous research, a personal approach needs to be taken in health education so that this intervention can run more optimally.

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KEYWORDS

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Introduction

Breastfeeding self-efficacy refers to a mother's confidence in her breastfeeding ability, is a

crucial variable that health professionals focus on to improve the rates of exclusive breastfeeding [1-4]. Research has shown a robust correlation between high breastfeeding

self-efficacy and the sustained practice of breastfeeding until the recommended duration [5,6]. Furthermore, studies indicate that increased breastfeeding self-efficacy is positively associated with both the duration and exclusivity of breastfeeding across various cultures and age groups [6].

With the growing interest in breastfeeding self-efficacy among mothers, several such interventions have been scientifically successful in increasing breastfeeding self-efficacy [7,8]. The interventions assessed in studies included health education, breastfeeding support, antenatal training and group maternal education [9]. Those interventions focused on health education, whether carried out in groups or individually [10,11].

Health education aims to promote health and reduce diseases caused by personal or collective behaviors, fostering healthier lifestyles [12,13]. Specifically, health education for breastfeeding mothers focuses on enhancing health outcomes by encouraging complete breastfeeding practices. Research indicates that mothers with higher breastfeeding self-efficacy are more likely to exclusively breastfeed their newborns during the immediate postpartum period [14-16]. Although previous studies on health education among mothers have largely concentrated on psychological and knowledge outcomes [10,15,17-18]. There is a noted gap in research regarding the impact of health education on mothers' breastfeeding self-efficacy. This study seeks to address this gap by evaluating whether health education can effectively enhance breastfeeding self-efficacy among mothers.

Methods

Study design

This study used "PRISMA guidelines (Preferred Reporting Items for systematic review and meta-analysis)" developed by Moher *et al.* [19]. This report was attached to our supplementary materials.

Eligibility criteria

The inclusion criteria to be eligible to be included in our review if the study (a) used a randomized controlled trials and/or quasi-experimental design; (b) evaluated breastfeeding education as the intervention among breastfeeder women; (c) included a control group; (d) assessed breastfeeding self-efficacy; and (e) provided mean and standard deviation to calculate the effect size. We excluded studies that (a) were published five years ago (below 2018); (b) used "systematic review and meta-analysis, cross-sectional, and observational study design"; (c) included participants with mothers with chronic/systemic disease and/or had mastitis; (d) used non-educational intervention for mothers for example counselling, yoga, or any type of body-mind relaxation; and (e) written other than English and Indonesian.

Search strategies and data resources

A comprehensive and systematic search database was performed for studies published from 2018 – September 2023, those electronic bibliographic databases including PubMed, Medline, Cochrane Library, CINAHL, Google Scholar, and ProQuest. The researchers used a free-text broad search term to discover all studies that related to our reviews: "Breastfeeding education" AND "Pregnant women" AND "Breastfeeding self-efficacy". To discover more possible databases, the researcher used a Boolean search strategy and modified the keywords for instance by using synonyms of the main variables: ("Breast feeding" OR "Breast" OR "Feeding" OR "Breast milk" OR "Human Milk" OR "Lactation" OR "Milk Secretion" OR "Colostrum" OR "Exclusive breast feeding") AND ("Pregnant women" OR "postpartum" OR "pregnancy" OR "gestation") AND ("Breastfeeding self-efficacy" OR "self-efficacy" OR "self-confidence") AND ("Education" OR "health education" OR "instruction" OR "training") AND ("Randomized controlled trials" OR "RCT" OR "clinical trials" or "Groups" OR "Quasi experimental"). The research modified the strategies for searching databases in the electronic database as necessary for example by applying and removing the medical subject

heading [MeSH] designation, applying and eliminating wildcards [*]. We also searched the articles manually to find additional studies that are possible to be included in our review, for instance, we used a hand search on the Google website and used a reference list of articles.

Study selection

In the initial phase of the study, duplicate records were removed. Titles and abstracts of the remaining studies were extracted and screened by two independent authors (XY and XX) using the Abstrackr tool. Upon obtaining the full texts, a comprehensive data extraction was carried out using a structured table. This table included essential information such as author names, publication years, countries of study, study designs, participant characteristics (total number, age, and demographics), types of interventions (duration and frequency), measurement instruments, and outcomes. Any disagreements encountered during the data extraction process were resolved through discussions among the authors or, if necessary, by consulting a third author.

Quality assessment

The quality of the studies and the appraisal of potential risk of bias were conducted using the Joanna Briggs Institute (JBI) tool, which is specifically designed for assessing the risk of bias in randomized controlled trials. This tool assigns a maximum score of 13, with responses to each item being "Yes," "No," or "Unclear." A score of one is awarded for a "Yes" response, while "No," "Unclear," or "Not applicable" responses receive zero. All studies included in our review were independently assessed by the first and the second authors. Any discrepancies or conflicting assessments between the authors were resolved through discussion or, if necessary, by involving a third author.

Analysis

For data analysis, we employed Revman Software version 5. The effect size of the

intervention was determined by calculating the mean differences between the intervention and control groups. Additionally, heterogeneity among the studies was assessed using the I^2 statistic. If the heterogeneity score exceeded 50%, a random effects model was applied. Statistical significance was established at a p-value of less than 0.05.

Results and discussion

A total of 123 articles were identified in the primary search based on different website searching databases including PubMed (123), Cochrane Library (123), CINAHL + MEDLINE (123), ProQuest (123), and other resources (3). Then, the team excluded 123 duplicates, 123 articles were removed in the title and abstract review due to different reasons including, 123 were not a randomized controlled trial, 123 were review studies, 123 studies were not educational interventions, 123 studies in which breast-feeding self-efficacy wasn't the outcome, 123 studies did not present M and SD of breast-feeding self-efficacy and 123 have no control group. A total of 6 articles with 123 participants meet our inclusion criteria and are eligible for meta-analysis. All articles were published in English and Indonesian. The quality of the articles was assessed by two independent authors. The flowchart of the extraction process of the articles as well as its selection process is displayed in Figure 1.

Characteristics of included studies

The summary of the characteristics of the 9 studies included in the analysis are presented in Table 1. Of the 864 participants in total, 418 were assigned to the intervention group and 446 in the control group. Studies that we included in our review were mostly published within the last five years (2018-2023). The result also showed that three papers were conducted in the western hemisphere and six studies were from the eastern hemisphere. This includes two studies from Turkey, one study conducted in the United States, one study conducted in Taiwan, China and Iran, and three studies from Indonesia. Of these, significant

increases in breastfeeding self-efficacy were reported in all works. Regarding the intervention class, studies presented the education intervention within various formats for instance using theory materials, using tools such as booklets, videos, and pamphlets. Moreover, studies in our review also revealed that education intervention was delivered by phone calls and social media such as WeChat. The duration of the intervention varied from one to six months.

Assessing the risk of bias

Table 2 presents the assessment of the risk of bias towards all studies included in our review.

Based on the guidelines provided by the JBI assessment tool, studies conducted by Akturk *et al.* [38] scored 10 from both reviewers, study conducted by Lee *et al.* [39] and Ozturk *et al.* [40] scored 9 from both reviewers, a higher score (11) was shown study by Shaefai *et al.* [41]. In addition, a study conducted by Demerci *et al.* [42]. scored 9 from the two authors, You *et al.* [43] has the highest score given by both authors (12), and lastly, all three studies conducted in Indonesia only had 6 scores from both authors those studies were from Lindayani and Purnamayanti [44], Fata and Rahmawati [45], Angio and Sukesu *et al.* [46].

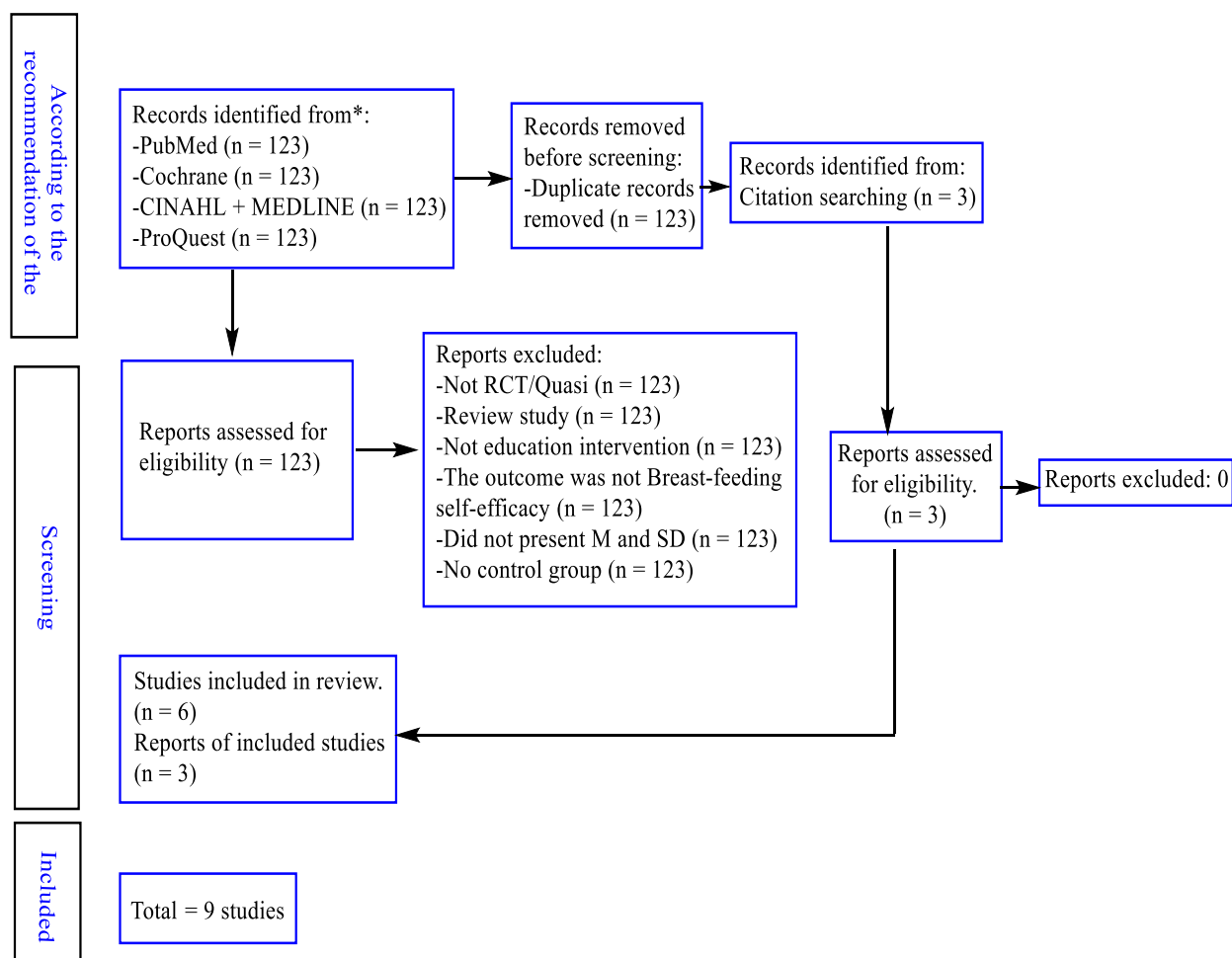


FIGURE 1 The flowchart of the extraction process of the articles

TABLE 1 Baseline characteristics of studies

No.	[Ref.]	Study Design	Characteristics of patients			Intervention (time/frequency)	Instrument	Outcomes (Mean ± SD)
			All women EG & CG					
			N (total participants)	Age (M, SD)	Parity			
1	[38]	a pre-test-post-test randomized controlled quasi-experimental study	Total: 76 EG: 38 CG: 38			Breastfeeding education was administered to the mothers in the intervention group within their own rooms using direct narration accompanied by the use of a puppet and an amigurumi breast model. Following the educational session, a question-and-answer approach was utilized to reinforce learning. To assess comprehension and retention of the breastfeeding information, mothers were asked to demonstrate various practices. These included correct techniques for holding the child, latching, positioning the child appropriately, and the processes involved in expressing and storing breast milk, as instructed by the researcher.	Postnatal self-efficacy scale.	Breastfeeding self-efficacy EG: 60.50 ± 3.90 CG: 54.92 ± 6.19

2	[39]	A quasi-experimental design	Total: 214 EG: 92 CG: 122	CG : (M=34,7, SD=4,16) EG : (M=34,1, SD=4,27)	Outcome measures included self-administered questionnaires (BSES-SF) and exclusive breastfeeding rates. In the intervention group, support groups met weekly from 10 am to 11 am. Each session, attended by 8 to 10 mothers, began with a 15-minute lecture covering breast anatomy, lactation mechanisms, latch-on positions, milk production, and infant soothing. Topics were selected based on common postpartum questions. Mothers were encouraged to attend a second session during the fifth to sixth week postpartum, considering cultural practices of postpartum confinement and recovery.	Breastfeeding self-efficacy EG: 48.6 ± 11.64 CG: Post-test: 43.0 ± 12.91 Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF)
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3	[40]	A quasi-experimental study post-test only	Total: 67 EG: 34 CG: 33	EG : 18-25: 44,1% 26-30: 41,2% >31: 5% CG : 18-25: 44,8% 26- 30:38,8% >31: 16.4%	EG : The control group received standard care, while the intervention group received additional targeted breastfeeding education. Home visits in the first postpartum week included administering personal data forms and the Breastfeeding Self-Efficacy Scale–Short Form (BSES-SF) for both groups. At the study's end, all participants received brochures from the researchers. Educational sessions for the intervention group, comprising 4–5 participants, were held in the hospital's education room for pregnant women. Each session, lasting about 4 hours, included various teaching methods such as verbal instruction, slides, models, videos, and Q&A sessions. After the sessions, intervention group members were provided with the researcher's contact information for any breastfeeding queries.	Breastfeeding Self Efficacy	EG: 61.12 ± 4.06	Breastfeeding self-efficacy
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4	[41]	Randomized controlled clinical trials	Total: 108	EG	EG	elf-efficacy was measured using the Breastfeeding Self-Efficacy Scale (BSES). The intervention group received breastfeeding counseling in clusters of 5-7 participants, with four sessions held within a week, while the control group received standard care. Educational sessions for the intervention group covered various topics including breast milk benefits, anatomy, hormonal influences, common challenges, maternal nutrition, and pumping techniques, concluding with the distribution of an informative booklet. Ongoing support, provided by the same consultant, continued via phone calls or face-to-face counseling until the fourth month postpartum. Both groups documented breastfeeding problems and completed the BSES on day 15, and at the second and fourth months postpartum.	Breastfeeding self-efficacy EG: 133.8 ± 10.3 CG: 109.4 ± 24.7
			EG: 54 CG: 54	(M=32,3, SD=5,3)	Parity 1: 28 (52%) 2: 19 (35,2%) 3: 7 (13%)		
				CG			Breastfeeding Self Efficacy
				(M=30,2, SD=6,0)			

5	[42]	Pilot study randomised controlled trial	Total: 36 EG: 18 CG: 18	<p>The study involved 45 low-risk, nulliparous individuals recruited from a hospital midwifery practice at 34-36 6/7 weeks gestation. They were randomly assigned to either the Antenatal Milk Expression (AME) intervention group or a standard lactation education handout group. Weekly interventions occurred from 37 to 40 weeks gestation. The AME intervention included a demonstration of milk expression techniques, personalized feedback, and daily practice. Participants watched a video, practiced under guidance, and received instructions on safe expression, collection, and storage. Weekly visits reinforced the technique, addressed queries, and collected milk samples for analysis. Participants practiced milk expression at home daily and documented it. They received colostrum collectors and instructions for transport and storage at the hospital. Lactation outcomes were assessed during postpartum hospitalization, 1-2 weeks postpartum, and 3-4 months postpartum, with milk samples collected for analysis.</p>	BSES-SF EG: 67.0 ± 4.0 CG: 57.0 ± 11.0
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6 [43]

a randomised controlled trial

Total: 207
EG: 104
CG: 103

“The Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF)”, a 5-point Likert scale comprising 14 items, evaluates maternal self-efficacy in breastfeeding. The intervention was structured into four phases. Phase I involved baseline data collection using specially designed questionnaires to assess participants’ knowledge and intentions regarding breastfeeding upon hospital admission. In Phase II, based on initial findings, the research team (HY, BL, and JH) developed and implemented a tailored intervention program prior to delivery. This included correcting misconceptions, emphasizing breastfeeding’s benefits for metabolic control and infant health, hands-on instruction in breastfeeding techniques, and distribution of a comprehensive breastfeeding manual. Additionally, participants were invited to join a WeChat group to facilitate the sharing of successful breastfeeding experiences. Phase III included hands-on breastfeeding support within 24 hours postpartum and assessment of breastfeeding skills prior to discharge. Phase IV involved a series of at least six telephone-based breastfeeding counseling sessions at critical postpartum intervals- antenatal, immediate postpartum, 6 weeks, 3 months, and 6 months- with additional support as needed. All interventions were overseen by a certified lactation consultant (JX). The control group received standard lactation support during the antenatal and postnatal periods. Data collection points included admission, discharge, and postpartum at 6 weeks, 4 months, and 6 months.

Breastfeeding Self Efficacy

EG: 112 ± 103
CG: 108 ± 102

7	[44]	Quasy experimental	Total: 66 EG: 33 CG: 33	<p>The study utilized purposive sampling to select 66 respondents. The findings revealed significant enhancements in both knowledge and self-efficacy regarding breastfeeding following the intervention, as indicated by p-values less than 0.05. These improvements were consistent across both study groups. The data underscore the positive impact of breastfeeding education on increasing the knowledge and self-efficacy of primigravidas. It is essential to develop a comprehensive knowledge base about breastfeeding during pregnancy to prepare mothers adequately. Furthermore, there is a correlation between the acquisition of knowledge and the development of self-efficacy. To optimize these outcomes, more robust efforts are required from healthcare facilities and professionals to deliver effective breastfeeding education.</p>	Breastfeeding Self Efficacy	EG: 61.33 ± 4.73 CG: 55.54 ± 7.61
8	[45]	posttest only control group	Total: 40 EG: 20 CG: 20	<p>This analysis reveals a strongly positive correlation between perceived social support and breastfeeding self-efficacy among mothers exclusively breastfeeding. Specifically, higher levels of perceived social support are associated with greater self-efficacy in breastfeeding. In contrast, lower levels of perceived social support correlate with reduced breastfeeding self-efficacy. This relationship underscores the importance of social support in enhancing the confidence and capabilities of mothers engaged in exclusive breastfeeding.</p>	Breastfeeding Self Efficacy	EG: 61.15 ± 5.57 CG: 49.85 ± 9.44

9	[46]	Quasy experimental	Total: 50 EG: 25 CG: 25	The study demonstrated that self-efficacy and maternal motivation for breastfeeding were influenced before and after the delivery of a breastfeeding success package, comparing intervention and control groups. The findings conclude that peer education significantly enhances mothers' self-efficacy and motivation for breastfeeding. Thus, peer education is an effective strategy for boosting the self-efficacy and motivation among breastfeeding mothers.	Breastfeeding Self Efficacy	EG: 50.52 ± 12.77 CG: 31.60 ± 6.00
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EG: Experimental Group

CG: Control group

TABLE 2 JBI critical appraisal assessment

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Total score
[38]	Y/Y	N/N	Y/Y	N/N	U/U	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	10/10
[39]	N/N	N/N	Y/Y	N/N	U/U	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	9/9
[40]	Y/Y	N/N	Y/Y	N/N	N/N	N/N	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	9/9
[41]	Y/Y	Y/Y	Y/Y	N/N	U/U	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	11/11
[42]	Y/Y	U/U	Y/Y	N/N	U/U	U/U	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	9/9
[43]	Y/Y	Y/Y	Y/Y	Y/Y	N/N	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	Y/Y	12/12
[44]	N/N	N/N	N/N	N/N	N/N	N/N	Y/Y	Y/Y	N/N	Y/Y	Y/Y	Y/Y	Y/Y	6/6
[45]	N/N	N/N	U/U	N/N	N/N	N/N	Y/Y	Y/Y	N/N	Y/Y	Y/Y	Y/Y	Y/Y	6/6
[46]	N/N	N/N	U/U	N/N	N/N	N/N	Y/Y	Y/Y	N/N	Y/Y	Y/Y	Y/Y	Y/Y	6/6

Q1 = Question No. 1 "(Was true randomization used for assigning participants to treatment groups?)"

Q2= Question No. 2 "(Was allocation to treatment groups concealed?)"

Q3 = Question No. 3 "(Were treatment groups similar at the baseline?)"

Q4 = Question No. 4 "(Were participants blind to treatment assignment?)"

Q5 = Question No. 5 "(Were those delivering treatment blind to treatment assignment?)"

Q6 = Question No. 6 "(Were outcomes assessors blind to treatment assignment?)"

Q7 = Question No. 7 "(Were treatment groups treated identically other than the intervention of interest?)"

Q8 = Question No. 8 "(Was follow-up complete and if not, were differences between groups in terms of their follow-up adequately described and analysed?)"

Q9 = Question No. 9 "(Were participants analysed in the groups to which they were randomized?)"

Q10 = Question No. 10 "(Were outcomes measured in the same way for treatment groups?)"

Q11 = Question No. 11 "(Were outcomes measured reliably?)"

Q12 = Question No. 12 "(Was appropriate statistical analysis used?)"

Q13 = Question No. 13 "(Was the trial design appropriate, and any deviations from the standard RCT design accounted for in the conduct and analysis of the trial?)"

Main results

After assessing the quality of chosen studies, all were incorporated into the meta-analysis. Findings showed a noteworthy enhancement in breastfeeding self-confidence due to the educational intervention (Z-score: 5.36, $p <$

0.001). Nonetheless, significant diversity among the studies was noted, with an I^2 value of 87%. The symmetry in the funnel plot (Figure 2) indicates no significant publication bias, corroborated by both Egger's and Begg's tests.

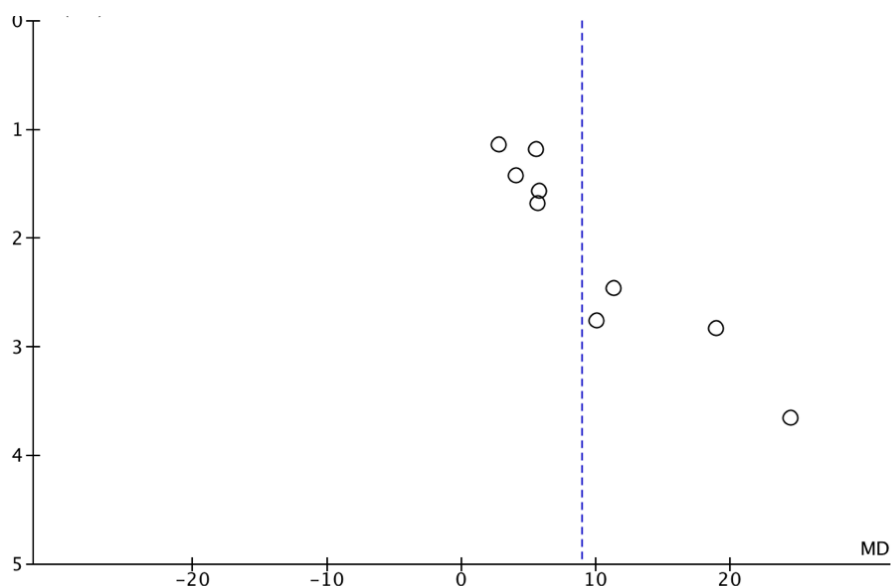


FIGURE 2 Funnel plot

Breastfeeding self-efficacy is a mother's confidence in effectively breastfeeding her child [20]. The concept of self-efficacy was developed by Albert Bandura who explained that a person's self-confidence and perceived competence play an important role in determining their ability to perform certain tasks or behaviors [21]. Health education plays an important role in increasing mothers' confidence in their ability to breastfeed their babies [22-24]. Health education will be able to increase maternal knowledge, improve maternal skills for breastfeeding, help mothers identify and increase maternal access to support from the environment, and with health education can refute erroneous concepts or myths about breastfeeding [23,25-26].

The implementation of health education can be improved in several aspects to improve the quality of health services and achieve better health outcomes [23,24]. One way is to provide health education using effective methods, including personal counseling, health education classes, group support, printed materials, and social media. The combination of the above methods can provide comprehensive support to mothers and families in increasing breastfeeding success [27,28].

Regarding the intervention class, studies presented the education intervention within various formats for instance using theory materials, using tools such as booklets, videos, and pamphlets [15,29-30]. Moreover, studies in our review revealed the education

intervention was delivered by phone calls and social media such as WeChat. The intervention duration varied from one to six months.

The most effective time to provide breastfeeding education is during the antenatal or prenatal period, which is the period before childbirth. Offering breastfeeding education during the antenatal or prenatal period, which spans the week or months leading up to childbirth, is considered the most effective approach [31-33]. This timing allows expectant mothers and their families to prepare for and make informed decisions about breastfeeding. Here are some key reasons why this period is ideal for breastfeeding education: 1) *Preparation and Planning*: The antenatal period provides an opportunity for expectant mothers to learn about the benefits of breastfeeding, understand proper techniques, and plan for a successful breastfeeding experience. This early education empowers them to make informed choices regarding their feeding method. 2) *Confidence Building*: By learning about breastfeeding before childbirth, mothers can build confidence in their ability to nurse their babies. They can address any concerns or questions they may have and mentally prepare for the breastfeeding journey. 3) *Establishing Support Networks*: During the antenatal period, mothers can identify and establish support networks, such as lactation consultants, healthcare providers, and breastfeeding peer groups. Having these resources in place before childbirth ensures timely assistance if needed. 4) *Overcoming Challenges*: Antenatal education also equips expectant mothers with knowledge about common breastfeeding challenges and how to address them. This preparation can reduce anxiety and help mothers proactively manage issues that may arise. 5) *Promoting Informed Decision-Making*: Breastfeeding education during the antenatal period allows mothers to make informed decisions about their feeding choices. Informed choices are essential for adhering to the recommended exclusive breastfeeding for the first six months

of an infant's life. 6) *Engaging Families*: This period offers an opportunity to involve family members and support systems in the breastfeeding education process. When families are well-informed, they can provide valuable support to the mother, contributing to her breastfeeding success.

From the explanation above it can be concluded that providing breastfeeding education during the antenatal or prenatal period is highly effective. It empowers expectant mothers to make informed decisions, build confidence, and prepare for a successful breastfeeding experience [34]. Early education also sets the stage for addressing challenges and establishing a support system, ultimately promoting the health and well-being of both mother and child. The effective frequency of breastfeeding education can vary depending on several factors, including individual mothers' needs, their initial knowledge of breastfeeding, and the level of support available [35-37]. From the review literature, some considerations that can help determine the effective frequency of breastfeeding education were, 1) *Prenatal Education*: As previously mentioned, breastfeeding education during the antenatal or prenatal period is crucial. Typically, expectant mothers and their families should receive multiple sessions of education during this time. These sessions might be spread out over several weeks or months to cover different aspects of breastfeeding comprehensively. 2) *Postnatal Support*: After childbirth, mothers benefit from continued support and education, especially during the immediate postpartum period. Healthcare providers and lactation consultants can guide latching, positioning, and early breastfeeding challenges. Frequent follow-up visits or support groups during the first weeks after birth can be beneficial. 3) *On-Demand or As Needed*: Some mothers may require more frequent education and support, while others may need less. Education should be available on an as-needed basis. Mothers can seek

assistance when facing specific issues or when they have questions. 4) *Cultural and Regional Differences*: Consideration of cultural and regional differences is essential. In some cultures or regions, mothers may have well-established breastfeeding traditions and support systems. In such cases, the need for formal education may be reduced, but support and guidance should still be available when required. 5) *Support for Unique Cases*: Mothers with unique circumstances, such as premature infants, multiples (twins or triplets), or medical conditions, may require more frequent and specialized education and support. Healthcare professionals should tailor the frequency to meet these specific needs. 6) *Ongoing Peer Support*: Peer support groups, where mothers share their experiences and insights, can provide continuous education and encouragement. These groups often meet regularly, allowing mothers to connect, learn from each other, and receive ongoing support. 7) *Flexibility and Personalization*: The frequency of breastfeeding education should be flexible and personalized to meet the individual needs of mothers. Healthcare providers and educators should assess each other's situation and provide education and support accordingly.

Conclusion

Health education is an intervention that is routinely carried out in various countries to increase breastfeeding self-efficacy among mothers. Key reasons ideal for breastfeeding education are preparation and planning, confidence building, establishing support networks, overcoming challenges, promoting informed decision-making, and engaging families. From the results of the previous study, a personal approach needs to be taken in health education so that this intervention can be implemented optimally.

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Writing - review and editing: Satriya Pranata, Mira Triharini and Esti Yunitasari
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Conflict of Interest

The authors declare no conflict of interest, financial or otherwise.

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