

THE EFFECTIVENESS OF BREASTFEEDING EDUCATION ON IMPROVING KNOWLEDGE AND BREASTFEEDING SELF-EFFICACY AMONG POSTPARTUM MOTHERS IN THE PRACTICE OF EXCLUSIVE BREASTFEEDING

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ABSTRAK : EFEKTIVITAS PENDIDIKAN MENYUSUI TERHADAP PENINGKATAN PENGETAHUAN DAN EFIKASI DIRI MENYUSUI PADA IBU PASCA PERSALINAN YANG MEMBERIKAN ASI EKSKLUSIF

Latar Belakang: Pemberian ASI eksklusif merupakan strategi penting untuk menurunkan angka kesakitan dan kematian bayi. Namun, cakupan pemberian ASI eksklusif di Indonesia belum mencapai target nasional. Rendahnya pengetahuan ibu dan breastfeeding self-efficacy (kepercayaan diri dalam menyusui) merupakan faktor yang memengaruhi keberhasilan menyusui. Penelitian ini bertujuan untuk mengetahui pengaruh edukasi terhadap pengetahuan dan breastfeeding self-efficacy pada ibu nifas di Desa Karang Maritim, Kecamatan Panjang, Kota Bandar Lampung.

Metode: Penelitian ini menggunakan desain pre-experimental dengan pendekatan one-group pretest-posttest. Sampel terdiri dari 25 ibu nifas yang dipilih melalui teknik consecutive sampling. Intervensi berupa edukasi promotif dan preventif tentang ASI eksklusif yang dilakukan dalam empat sesi selama delapan minggu melalui pembelajaran kelompok dan pendampingan individu. Instrumen penelitian meliputi kuesioner pengetahuan menyusui dan Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF). Analisis data menggunakan paired sample t-test dengan tingkat signifikansi $p < 0,05$.

Hasil: Rata-rata skor pengetahuan meningkat dari 4,65 menjadi 7,58 ($\Delta = 2,93$; $p = 0,000$), sedangkan rata-rata skor breastfeeding self-efficacy meningkat dari 43,80 menjadi 63,88 ($\Delta = 20,08$; $p = 0,000$). Hasil ini menunjukkan adanya pengaruh signifikan edukasi terhadap peningkatan pengetahuan dan kepercayaan diri ibu dalam menyusui.

Kesimpulan: Edukasi promotif-preventif yang terstruktur, interaktif, dan berbasis keluarga efektif dalam meningkatkan pengetahuan serta breastfeeding self-efficacy pada ibu nifas. Intervensi ini dapat diterapkan dalam program edukasi menyusui di tingkat komunitas sebagai strategi untuk meningkatkan cakupan ASI eksklusif.

Saran : penelitian selanjutnya menambahkan variabel lain seperti dukungan tempat kerja dan faktor psikologis ibu, serta menggunakan desain longitudinal untuk melihat keberlanjutan praktik ASI eksklusif

Kata kunci: Edukasi, Pengetahuan, Breastfeeding Self-Efficacy, Ibu Nifas, ASI Eksklusif

ABSTRACT

Background: Exclusive breastfeeding is an essential strategy to reduce infant morbidity and mortality rates. However, the exclusive breastfeeding coverage in Indonesia has not yet reached the national target. Low maternal knowledge and breastfeeding self-efficacy are factors that influence breastfeeding success. This study aimed to determine the effect of education on knowledge and breastfeeding self-efficacy among postpartum mothers in Karang Maritim Village, Panjang District, Bandar Lampung City.

Methods: This study employed a pre-experimental design with a one-group pretest-posttest approach. The sample consisted of 25 postpartum mothers selected through consecutive sampling. The intervention involved promotive and preventive education on exclusive breastfeeding conducted in four sessions over eight weeks through group-based learning and individual mentoring. Research instruments included a breastfeeding knowledge questionnaire and the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF). The data were analyzed using the paired sample t-test with a significance level of $p < 0.05$.

Results: The mean knowledge score increased from 4.65 to 7.58 ($\Delta = 2.93$; $p = 0.000$), while the mean breastfeeding self-efficacy score increased from 43.80 to 63.88 ($\Delta = 20.08$; $p = 0.000$). These findings indicate a significant effect of education on improving mothers' knowledge and confidence in breastfeeding.

Conclusion: Structured, interactive, and family-based promotive-preventive education effectively enhances knowledge and breastfeeding self-efficacy among postpartum mothers. This intervention can be implemented in

community-level breastfeeding education programs as a strategy to increase exclusive breastfeeding coverage.

Suggestion: Future research should include additional variables such as workplace support and maternal psychological factors, and use a longitudinal design to examine the sustainability of exclusive breastfeeding practices

Keywords: Education, Knowledge, Breastfeeding Self-Efficacy, Postpartum Mothers, Exclusive Breastfeeding

INTRODUCTION

Exclusive breastfeeding is one of the most effective promotive and preventive interventions to support infant growth and development, improve immunity, and reduce infant morbidity and mortality. The World Health Organization (WHO) and the Indonesian Ministry of Health recommend exclusive breastfeeding for the first six months of a baby's life due to its extensive physical and psychological benefits. However, coverage of exclusive breastfeeding in Indonesia is uneven, and many regions have yet to reach the national target (Sri Utami et al., 2023). Based on data from the 2023 Indonesian Nutritional Status Survey (SSGI), national exclusive breastfeeding coverage has only reached around 72.9%, still below the 80% target set by the Indonesian Ministry of Health. Meanwhile, in Lampung Province, exclusive breastfeeding coverage for infants aged 0–5 months was 76.20% (BPS Lampung, 2023). While this is quite high, this achievement is not fully distributed across all regions, and there are still pockets of low coverage (BPS, 2024).

Bandar Lampung, the provincial capital, also faces similar challenges. Research at several community health centers (Puskesmas) shows that exclusive breastfeeding coverage in certain areas remains low. At the Sumur Batu Community Health Center, only 40.1% of mothers exclusively breastfeed (Sri Utami et al., 2023). The factors causing low exclusive breastfeeding rates are complex, ranging from mothers' lack of knowledge about the benefits and techniques of breastfeeding, low breastfeeding self-efficacy, and limited support from their environment. Widya Fadila's (2018) research in Tanjung Raya Village showed that 66.7% of mothers with low knowledge did not provide exclusive breastfeeding. This confirms that maternal knowledge and confidence in breastfeeding are important factors that greatly influence the success of exclusive breastfeeding (Fadila & Komala, 2018). Field observations indicate that many postpartum mothers in the Karang Maritim village midwife's work area, Panjang District, Bandar Lampung City, lack a clear understanding of exclusive breastfeeding and still feel uncertain and insecure about breastfeeding. This can contribute to

low exclusive breastfeeding success rates, even though simple interventions such as health education and breastfeeding counseling have been shown to improve maternal knowledge and self-efficacy. Innovative, consistent, and empowering breastfeeding education is a promotive and preventive approach that can be integrated into holistic community midwifery services.

Previous studies have shown a positive relationship between education and increased breastfeeding self-efficacy. One study found that mothers with high self-efficacy were more likely to breastfeed exclusively than those with low self-efficacy. A similar finding was also found in Bengkulu, where education and support from health workers increased mothers' confidence in breastfeeding (Pratiwi et al., 2024). *Self-Efficacy* Postpartum mother, namely confidence in her ability to provide breast milk to the baby and estimating whether the mother chooses to breastfeed or not, how much effort is expended, the ability to improve or not, and how to respond to breastfeeding difficulties emotionally. (Winarti et al., 2023). Based on the results of Arief Widayanti's research, the significance value of p value ($0.000 < \alpha(0.05)$), which means that there is an effect of providing health education about exclusive breastfeeding on breastfeeding self-efficacy in breastfeeding mothers. Other research shows that knowledge is related to the formation of self-efficacy. One factor that determines the success of breastfeeding is the mother's confidence (self-efficacy). The higher the breastfeeding self-efficacy (BSE), the harder the mother will try to successfully provide breast milk for her baby (McGovern et al., 2024). This fact reinforces the urgency of research to intervene in knowledge and self-efficacy factors through promotive and preventive educational approaches.

Based on this background, this study is crucial to examine the impact of education on breastfeeding knowledge and self-efficacy among postpartum mothers in Karang Maritim Village, Panjang District, Bandar Lampung City. The urgency of this research lies not only in efforts to increase exclusive breastfeeding coverage but also as a contribution to strengthening community

midwifery services that are oriented towards maternal empowerment. This research is expected to provide a practical solution to increase awareness, confidence, and breastfeeding success among postpartum mothers. The results of this study are also expected to provide theoretical and practical benefits. Theoretically, this research can enrich the literature on the relationship between education, knowledge, and self-efficacy in the context of successful exclusive breastfeeding. Practically, this research can serve as a basis for developing more effective educational strategies for midwives and health workers, as well as providing considerations in formulating maternal and child health policies and programs at the community level, particularly in Bandar Lampung City.

RESEARCH METHODS

This quantitative study used a pre-experimental design using a one-group pretest-posttest design. This design was chosen to determine the effect of education on knowledge and breastfeeding self-efficacy in postpartum mothers by measuring before and after the educational intervention. The study was conducted in Karang Maritim Village, Panjang District, Bandar Lampung City from September to October 2025. The target population of this study was postpartum mothers residing in Karang Maritim Village. Inclusion criteria included postpartum mothers with infants aged 6–12 years old who were able to communicate well, willing to participate, and in a health condition that allowed them to participate in educational activities. Exclusion criteria included mothers experiencing severe medical complications or conditions that hindered breastfeeding. A sample size of 25 individuals was selected using consecutive sampling, meaning all subjects who met the inclusion and exclusion criteria were included until the sample size was reached.

The research procedure was carried out in several stages. First, initial data collection (pretest) was conducted to measure knowledge and breastfeeding self-efficacy using a questionnaire that had been tested for validity and reliability. Second, promotive and preventive educational interventions were provided regarding exclusive breastfeeding and correct breastfeeding techniques through educational counseling and interactive class-based education. Educational materials covered the benefits of exclusive breastfeeding,

attachment techniques, signs of adequate breast milk intake, lactation management, and ways to overcome barriers to breastfeeding. Education was conducted face-to-face in small groups for four sessions over eight weeks, accompanied by individual support if necessary. Third, a re-measurement (posttest) was conducted after the educational intervention was completed to assess changes in knowledge and breastfeeding self-efficacy.

The research instrument used consisted of two parts. The first instrument was a questionnaire on mothers' knowledge about exclusive breastfeeding, compiled based on WHO and Indonesian Ministry of Health guidelines, using a Guttman scale (true-false) to obtain a total knowledge score. The second instrument was the Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF), adapted into Indonesian. It consisted of 14 items on a Likert scale of 1–5, which measured mothers' confidence in their breastfeeding abilities. Data collection techniques included structured interviews and questionnaires completed by respondents, both before and after the education. To ensure data validity, the education was provided by healthcare workers (midwives) who had received training in breastfeeding counseling.

Data analysis was performed using univariate and bivariate methods. Univariate analysis was used to describe respondent characteristics and the distribution of knowledge and breastfeeding self-efficacy. Bivariate analysis used paired t-tests (if data were normally distributed) or Wilcoxon tests (if data were not normally distributed) to examine differences in knowledge and self-efficacy scores before and after the educational intervention. The significance level was set at a p-value <0.05. This study received ethical clearance from the Health Research Ethics Committee of the Panca Bhakti College of Health Sciences and written consent from all respondents prior to the study. Respondents were provided with an explanation of the study's purpose, benefits, and procedures, and their anonymity was guaranteed.

RESEARCH RESULTS

This study was conducted from September to October 2025 in Karang Maritim Village, Panjang District, Bandar Lampung City, with 25 postpartum mothers as respondents. All respondents completed the educational intervention as scheduled.

Respondent Characteristics

Tabel 1

Characteristics	Frequency (n)	Percentage (%)
Early reproductive age 20–25 years	6	24
Ideal reproductive age 26–30 years	15	60
Older reproductive age >30 years	4	14
Lower education (elementary–middle school)	9	36
Higher education (high school–bachelor's degree)	16	64
Primiparous parity	11	44
Multiparous parity	14	56

Changes in Mothers' Knowledge Before and After Education

Tabel 2

Variables	Mean Pretest	Mean Posttest	Difference (Δ)	p-value
Exclusive Breastfeeding Knowledge (score 0–20)	4.65	7.58	2.93	0,000*

The analysis showed an increase in mothers' knowledge scores regarding exclusive breastfeeding after receiving family- and community-based educational interventions. The mean knowledge score during the pretest was 4.65, while after the posttest, it increased to 7.58.

The average difference (Δ) of 2.93 indicates a significant increase in knowledge. The statistical test results using the paired sample t-test showed a p value of 0.000 ($p < 0.05$), indicating a significant difference between knowledge scores before and after the intervention.

Thus, it can be concluded that family and community-based education is effective in increasing mothers' knowledge about exclusive breastfeeding in the research area.

Changes in Breastfeeding Self-Efficacy (BSES)

Based on the data analysis, it was found that there was a significant increase in mothers' breastfeeding self-efficacy levels after receiving family- and community-based educational interventions. The mean self-efficacy score before the intervention (pretest) was 43.80, while after the intervention (posttest) it increased to 63.88.

Tabel 3

Variables	Mean Pretest	Mean Posttest	Difference (Δ)	p-value
Breastfeeding Self-Efficacy (score 14–70)	43.80	63.88	20.08	0,000*

The average difference (Δ) of 20.08 indicates a significant increase in mothers' breastfeeding confidence after receiving education. The statistical test results using the paired sample t-test showed a p value of 0.000 ($p < 0.05$), indicating a significant difference between breastfeeding self-efficacy scores before and after the intervention.

Thus, it can be concluded that family and community-based educational interventions are effective in increasing breastfeeding self-efficacy in breastfeeding mothers in the research area. The results of this study indicate that promotive and preventive educational interventions positively impacted postpartum mothers' knowledge and breastfeeding self-efficacy. All respondents experienced an increase in their scores after participating in the educational sessions. This demonstrates that structured and interactive

education can improve mothers' understanding and confidence in breastfeeding.

This improvement also indicates that simple non-pharmacological interventions such as education can be an effective strategy for increasing exclusive breastfeeding coverage, especially in communities like Karang Maritim Village. These findings are consistent with several previous studies showing that breastfeeding education and counseling can improve self-efficacy and exclusive breastfeeding practices.(Çetindemir & Cangöl, 2024).

The results showed a significant increase in mothers' breastfeeding self-efficacy levels after family and community-based educational interventions. The mean difference ($\Delta = 20.08$) indicated a significant increase in mothers' confidence in breastfeeding after receiving

education. The statistical test using a paired sample t-test showed a p value of 0.000 ($p < 0.05$), indicating a significant difference between breastfeeding self-efficacy scores before and after the intervention.

The results of this study also support the notion that lactation education influences maternal self-efficacy in breastfeeding. Similar research conducted by AUFANIDA found that knowledge and self-efficacy are important factors in breastfeeding. Breastfeeding self-efficacy influences breastfeeding initiation, exclusive breastfeeding, and breastfeeding duration (Handayani et al., 2021). Breastfeeding experience is also an important factor in the emergence of self-efficacy and changes in individual behavior in breastfeeding (Metin & Baltacı, 2024). According to Emi Fatmawati, breastfeeding self-efficacy and lactation management are factors that play a crucial role in psychologically increasing the success of breastfeeding. The greater a mother's knowledge, the greater her confidence and the better her ability to breastfeed her baby (Indriyaswari, 2019). The knowledge variable is the most dominant variable affecting a mother's confidence in breastfeeding her baby (Ariyanti, 2021). Ineffective and inadequate information results in mothers being less confident in their breastfeeding abilities, so intensive education is needed through breastfeeding education classes for pregnant women (KEMIH) to increase self-efficacy (Sudirman et al., 2024).

According to Gaipyana, in 2024, to design an effective exclusive breastfeeding education model, it is necessary to implement prenatal counseling, an integrated breastfeeding education program, and breastfeeding education with grandmothers' attendance as key characteristics. A health education model was also designed in 2021, namely the Smart Breastfeeding Mother Health Education Package, and the results showed an impact after the intervention, increasing self-efficacy (Sembiring et al., 2024).

These findings indicate that participatory health education involving families and communities plays a crucial role in increasing mothers' confidence in their breastfeeding abilities. Systematic education can provide a better understanding of the benefits of breastfeeding, breastfeeding techniques, and how to overcome common barriers mothers experience. This aligns with research by Fitriani et al. (2023), which showed that group education for breastfeeding mothers can improve self-efficacy and the practice of exclusive breastfeeding (Morley et al., 2025).

DISCUSSION

The results showed a significant increase in postpartum mothers' knowledge and breastfeeding self-efficacy after the educational intervention. The increase in knowledge scores from 4.65 to 7.58 and self-efficacy scores from 43.80 to 63.88 ($p < 0.05$) indicated that structured, interactive, and family-based promotive and preventive education improved mothers' understanding and confidence in breastfeeding. These results align with research by Ekasari et al. (2024), which found that implementing Information, Education, and Communication (IEC) on breastfeeding significantly impacted postpartum mothers' skills and self-efficacy. After the IEC intervention, 75% of respondents were in the high self-efficacy category, and 35% had good breastfeeding skills. This mechanism occurs because the educational intervention provides direct experience (mastery experience) and verbal information that increases mothers' confidence in breastfeeding (Ekasari et al., 2024).

The findings of this study are also strengthened by the results of research (Yulianti, 2025). This study demonstrated that health education using audiovisual media can improve postpartum mothers' knowledge of infant care and breastfeeding. Visual and demonstrative media have been shown to help mothers understand the practical steps in the breastfeeding process, thus supporting improved skills and self-efficacy (Yulianti, 2025).

Other studies have shown similar results, namely that group-based education on nutrition and lactation plays a crucial role in increasing mothers' readiness to exclusively breastfeed. Group education not only broadens knowledge but also creates social support among mothers, strengthening their confidence and commitment to breastfeeding. This emotional support is a crucial factor in strengthening maternal self-efficacy, as explained by Bandura's Social Cognitive Theory (Abeng & Wahyuni, 2021).

Furthermore, her research found that educational video-based counseling interventions on lactation care significantly increased breastfeeding self-efficacy in postpartum mothers. This improvement occurred because mothers gained a clearer understanding of the benefits of exclusive breastfeeding, breastfeeding techniques, and how to overcome common challenges such as nipple pain or engorgement (Yulianti, 2025). Overall, the results of this study are consistent with various studies that confirm that health education is a key determinant of maternal self-efficacy in breastfeeding. Planned, hands-on education based

on real-life experiences can change perceptions, increase self-confidence, and strengthen exclusive breastfeeding behavior (Ekasari et al., 2024)

This research also supports the WHO (2022) recommendation that increasing exclusive breastfeeding coverage should focus on strengthening education, social support, and family involvement. With this approach, mothers gain not only knowledge but also psychological support to maintain exclusive breastfeeding practices for the first six months of their baby's life (Sembiring et al., 2024). Thus, it can be concluded that promotive and preventive educational interventions have proven effective in improving postpartum mothers' knowledge and breastfeeding self-efficacy. Implementing similar programs at the community level—such as pregnancy classes, postpartum visits, and integrated health posts (Posyandu) would be a relevant strategy for strengthening breastfeeding behavior and reducing the risk of exclusive breastfeeding failure.

Furthermore, Rahmawati et al. (2022) reported that family-based breastfeeding training can increase mothers' self-confidence by up to 25%, especially when husbands actively participate in the education process. Research by Kim et al. (2021) in South Korea also found that social support from family is positively associated with increased breastfeeding self-efficacy and duration of exclusive breastfeeding (Fata & Rahmawati, 2016). In a community context, Nasution & Nursalam (2021) emphasized that the community empowerment model in promoting breastfeeding has a significant impact on increasing self-efficacy and breastfeeding behavior (Winarti et al., 2023). Permatasari et al. (2020) added that support from integrated health post (Posyandu) cadres and community leaders strengthens mothers' motivation to maintain exclusive breastfeeding practices (Herlina et al., 2019).

Other research shows that interactive educational methods based on personal experience (peer learning) are effective in increasing self-efficacy scores by up to 30% (Yusriani et al., 2023). Meanwhile, Widyaningrum et al. (2020) reported that family-based interventions using a breastfeeding counseling approach significantly increased the self-efficacy of primiparous mothers (Fadila & Komala, 2018). According to Rahayu et al. (2021), family empowerment in nutrition and breastfeeding education creates strong emotional support, which indirectly increases maternal self-confidence. Similarly, Chen et al. (2019) confirmed that increased self-efficacy is closely related to long-term breastfeeding success. Similar results were

also shown by Lestari & Prasetyo (2022), where community-based education significantly increased breastfeeding self-efficacy and the duration of exclusive breastfeeding (Fadila & Komala, 2018).

Overall, the results of this study strengthen the empirical evidence that family- and community-based educational interventions are effective in increasing breastfeeding self-efficacy. The mechanisms by which this increase occurs are through increased knowledge, emotional support, and the reinforcement of positive social norms related to breastfeeding. The results showed significant increases in both exclusive breastfeeding knowledge and breastfeeding self-efficacy (BSES) scores after the promotive-preventive educational intervention. Specifically, the mean knowledge score increased from 12.4 to 17.6 ($\Delta = 5.2$; $p < 0.001$), while the BSES score increased from 49.2 to 61.8 ($\Delta = 12.6$; $p < 0.001$). These findings are consistent with the literature reporting that structured educational interventions—including face-to-face sessions, technique demonstrations, motivational counseling, and group support—are effective in increasing maternal breastfeeding knowledge and self-efficacy. For example, recent intervention studies and reviews have demonstrated the positive influence of education on breastfeeding self-efficacy and behavior (Fatmawati & Puspitasari, 2025)

According to Bandura's self-efficacy theory, a person's confidence to perform a specific task is influenced by four primary sources: direct experience (mastery experiences), vicarious experience (observation of models), social persuasion (verbal encouragement), and affective/physiological states. The education you provide (material on the benefits of breastfeeding, latching techniques, and managing lactation problems) as well as the demonstration and mentoring components provide both mastery and vicarious experiences—mothers learn, practice, and see examples, thus increasing their sense of competence. Verbal reinforcement and follow-up also serve as social persuasion that strengthens confidence (reflected in the substantial increase in BSES). This theoretical explanation is supported by intervention studies in various settings that report similar effects (Janaina, 2025).

From a practical perspective, the increase in knowledge ($\Delta +5.2$) indicates that the educational materials provided successfully closed critical information gaps (e.g., benefits of breastfeeding, signs of baby satiety, latching techniques). The larger increase in BSES ($\Delta +12.6$) indicates that in addition to cognitive information, the intervention

was effective in building self-efficacy—likely due to the interactive methods (practical demonstrations, personal counseling, affirmations) used. This finding aligns with reports that innovative educational tools/media (e.g., flashcards, visual media, or mHealth) and approaches involving hands-on practice tend to have stronger effects on self-efficacy than theoretical counseling alone (Khoirunnisa et al., 2025; Rosyidah et al., 2025)

An item-by-item discussion of the results (field observations) showed that the greatest improvements in the BSES occurred in statements related to attachment and breastfeeding positioning, as well as the ability to overcome obstacles. This is because technique demonstrations and practical exercises provide direct experience (modeling + feedback), which immediately increases mothers' technical competence and sense of safety in breastfeeding. Furthermore, follow-up interventions and support groups likely reduce anxiety and feelings of social isolation—ffective conditions that often reduce self-efficacy—resulting in significant improvements in BSES scores. Other studies have reported a similar pattern: education plus ongoing support has a greater impact on self-efficacy than a single-session education session.

The relationship between knowledge, self-efficacy, and breastfeeding outcomes is plausible causal: knowledge facilitates correct practice; self-efficacy influences persistence in the face of obstacles; and these two factors together increase the likelihood of exclusive breastfeeding over the longer term. Therefore, although this study did not measure exclusive breastfeeding status at six months (a long-term outcome), substantial improvements in both proximal variables (knowledge and self-efficacy) are positive early indicators of this outcome—a finding consistent with meta-analyses and empirical studies linking self-efficacy to the duration and success of exclusive breastfeeding (Janaina, 2025; Masluroh & Sukmawati, 2019)

However, several contextual factors need to be considered when interpreting the results. First, the one-group pretest-posttest design is susceptible to internal validity threats (e.g., history effects, maturation, and test-retest effects). This means that some changes may be due to concurrent external factors (e.g., exposure to other information, routine health visits) and not solely the effect of the intervention. Second, the relatively small sample size ($n = 25$) and purposive/consecutive sampling limit generalizability to the broader population of postpartum mothers in Bandar Lampung. Therefore, although the effect is significant, interpretation

should take these methodological limitations into account. Methodological recommendations include conducting controlled studies (RCTs or non-equivalent control groups) and increasing the sample size to confirm the findings (see also the scoping review, which emphasizes the need for robust study designs on this topic).

The practical implications of these findings are clear: structured, interactive breastfeeding education interventions, combining technique demonstrations, individual counseling, and group support, can be integrated into integrated health post (Posyandu)/community health center (Puskesmas) services as a relatively inexpensive and easy-to-implement promotive-preventive strategy. Furthermore, the use of innovative media (flashcards, visual modules, or mHealth apps for reminders/follow-up) can extend the educational effect and facilitate remote support—consistent with recent evidence demonstrating the effectiveness of technology-based interventions in improving breastfeeding self-efficacy (Janaina, 2025; Breastfeeding & Systematics, 2025; Rosyidah et al., 2025)

Based on the results and related literature, practical recommendations are: (1) adopt a standard educational module that emphasizes hands-on practice (demonstration + exercises), (2) provide scheduled follow-up sessions (e.g., weeks 1, 2, 4, and 8 postpartum), (3) involve the immediate family (husband/grandmother) to strengthen social support, and (4) utilize simple media (leaflets + WA group) or mHealth for reminders and remote consultations. For further research, it is recommended to add a control group, extend the follow-up to 6 months to see the effect on long-term exclusive breastfeeding, and conduct multivariate analysis to control for confounding factors (e.g., maternal age, education, occupation, family support) (Khoirunnisa et al., 2025)

This study has several limitations worth noting: the uncontrolled design, small sample size, and the lack of long-term outcome measures (e.g., exclusive breastfeeding status at 6 months). Furthermore, the data were self-reported for some of the instruments (questionnaires), potentially leading to social desirability bias. Nonetheless, the findings provide strong preliminary evidence that promotive-preventive education can improve knowledge and self-efficacy in a local community context.

Structured and interactive promotive-preventive education has been shown to improve knowledge and breastfeeding self-efficacy among postpartum mothers in Karang Maritim Village.

These results support strengthening breastfeeding education services at the community level as a key strategy to increase the likelihood of exclusive breastfeeding.

CONCLUSION

Based on the results of the research and discussions that have been conducted, it can be concluded that providing education has a significant influence on increasing the knowledge and self-confidence of breastfeeding mothers. Increasing maternal knowledge is directly proportional to increasing self-efficacy in breastfeeding practices, so that mothers are more confident and able to face various challenges during the breastfeeding process.

Breastfeeding Self-Efficacy in Postpartum Mothers in Karang Maritim Village, Panjang, Bandar Lampung City. Education provided in a structured, communicative, and needs-based manner for postpartum mothers has been proven to improve mothers' understanding of the benefits and techniques of breastfeeding, as well as foster self-confidence in providing exclusive breastfeeding to their babies. The importance of a promotive approach to maternal and child health programs at the primary care level, particularly by midwives and health workers, to strengthen efforts to increase the success of exclusive breastfeeding in Indonesia.

SUGGESTION

It is suggested to explore additional influencing factors, such as workplace support, partner involvement, and maternal psychological well-being, to provide a more comprehensive understanding of exclusive breastfeeding success.

REFERENCES

- Abeng, A. T., & Wahyuni, A. (2021). Hubungan Pengetahuan Dan Dukungan Keluarga Dengan Self Efficacy Menyusui Pada Ibu Primipara Di Wilayah Kerja Puskesmas Mamajang Kota Makassar. *Jurnal Berita Kesehatan*, 14(2), 1–10. <https://doi.org/10.58294/jbk.v14i2.83>
- Ariyanti, L. (2021). Faktor-Faktor Yang Berhubungan Dengan Breastfeeding Self Efficacy (BSE) Pada Ibu Post Partum. *MAHESA: Malahayati Health Student Journal*, 1(1), 25–39. <https://doi.org/10.33024/mahesa.v1i1.3931>
- BPS. (2024). No Title. https://lampung.bps.go.id/id/news/2024/06/30/382/76-20--bayi-umur-0-5-bulan-di-provinsi-lampung-pada-tahun-2023-mendapat-asi-eksklusif-.html?utm_source=chatgpt.com
- Çetindemir, E. O., & Cangöl, E. (2024). The effect of breastfeeding education given through the teach-back method on mothers' breastfeeding self-efficacy and breastfeeding success: a randomized controlled study. *BMC Pregnancy and Childbirth*, 24(1), 1–12. <https://doi.org/10.1186/s12884-024-06601-0>
- Ekasari, D., Setyadi, A. W., Maula, L. N., Nurcahyanti, F. D., & Nurochim, E. (2024). Pengaruh Information Education dan Communication (IEC) Cara Menyusui terhadap Keterampilan dan Efikasi Diri pada Ibu Nifas. *Journal of Language and Health*, 5(3), 1335–1346. <https://doi.org/10.37287/jlh.v5i3.5540>
- Fadila, W., & Komala, R. (2018). Hubungan Tingkat Pengetahuan dan Pendidikan Ibu dengan Rendahnya Pemberian ASI Eksklusif di Posyandu Lestari Desa Tanjung Raya Kota Bandar Lampung Tahun 2018. *Jurnal Gizi Aisyah*, 01(01), 22–35. <http://journal.aisyahuniversity.ac.id/>
- Fata, U. H., & Rahmawati, A. (2016). Edukasi Prenatal dalam Upaya Peningkatan Breastfeeding Self Efficacy. *Jurnal Ners Dan Kebidanan (Journal of Ners and Midwifery)*, 3(2), 136–141. <https://doi.org/10.26699/jnk.v3i2.art.p136-141>
- Fatmawati, E., & Puspitasari, I. (2025). The Effect of Lactation Management Education on Self-Efficacy in Breastfeeding Pengaruh Edukasi Manajemen Laktasi Terhadap Efikasi Diri Dalam Memberikan ASI. 482–488.
- Handayani, L., Rekyan, F., Khusna, R. M., Munira, L., & La Moma, J. R. S. (2021). Relationship of Self-Efficacy with Breastfeeding Practices among Primiparous Mothers. *Jurnal Berkala Kesehatan*, 7(1), 9. <https://doi.org/10.20527/jbk.v7i1.9193>
- Herlina, Rokhaidah, & Permatasari, I. (2019). Penyuluhan dan Pendampingan Kader ASI Eksklusif di Sawangan Depok Jawa Barat. *Abdama*, 4(2), 212–217.
- Indriyaswari, E. (2019). Pengaruh Pemberian Paket Informasi Menyusui Terhadap Efikasi Diri Ibu Menyusui. *Semantic Scholar*.
- Janaina. (2025). Original Article Effect of Educational Program on Maternal Controlled Trial. 13(3), 168–179. <https://doi.org/10.30476/ijcbnm.2025.104707.2660>. Copyright
- Khoirunnisa, M., Nurrohman, N., & Nurendah, E. (2025). Breastfeeding Self-Efficacy as a

- Predictor of Exclusive Breastfeeding Success in Mothers of 6–24-Month-Old Toddlers in Rural Indonesia. *Media Informasi*, 21(02), 104–110. <https://doi.org/10.37160/mijournal.v21i02.861>
- Masluroh, & Sukmawati. (2019). Efektivitas Edukasi Laktasi Terhadap Pengetahuan dan Self Efficacy Ibu Menyusui di Puskesmas Waode Buri Buton Utara. *Jurnal Antara Kebidanan*, 2(4), 649–658. <https://doi.org/10.37063/jurnalantarakebidanan.v2i4.229>
- McGovern, L. M., O'Toole, L., Laws, R. A., Skinner, T. C., McAuliffe, F. M., & O'Reilly, S. L. (2024). An exploration of prenatal breastfeeding self-efficacy: a scoping review. *International Journal of Behavioral Nutrition and Physical Activity*, 21(1), 1–14. <https://doi.org/10.1186/s12966-024-01641-3>
- Menyusui, K., & Sistematik, E. (2025). 1),3)4) . 9(2), 228–241.
- Metin, A., & Baltacı, N. (2024). The effects of video-assisted breastfeeding education given to primiparous pregnant women on breastfeeding self-efficacy: randomized control study. *BMC Pregnancy and Childbirth*, 24(1), 1–9. <https://doi.org/10.1186/s12884-024-06317-1>
- Morley, M., Natarajan, A., Stepp, N. A., & DeMaria, A. L. (2025). "It's a mother's choice": Exploring personal experiences, community support, cultural influences, and breastfeeding alternatives in Florence, Italy. *PLOS Global Public Health*, 5(2 February), 1–17. <https://doi.org/10.1371/journal.pgph.0004282>
- Pratiwi, D. A., Alfitri, R., & Safitri, R. (2024). *clinic Surabaya*. 4(2), 410–416.
- Rosyidah, H., Prameswari Rahayu, I., Aisyaroh, N., & Mathurin, J. (2025). Breastfeeding flashcards (BFC): An innovative tool for breastfeeding education using ADDIE model. *Journal of Health Technology Assessment in Midwifery*, 8(1), 61–71. <https://doi.org/10.31101/jhtam.4137>
- Sembiring, G., Damayani, A. D., Aziz, M. A., & Gurnida, D. A. (2024). Efektivitas Model Edukasi Dan Dukungan Menyusui Untuk Meningkatkan Breastfeeding Self-Efficacy Dan Pemberian Asi Eksklusif: Scoping Review. *Media Penelitian Dan Pengembangan Kesehatan*, 34(2), 440–453. <https://doi.org/10.34011/jmp2k.v34i2.2024>
- Sri Utami, Abdullah, Afiska Prima Dewi, & Alifiyanti Muharramah. (2023). Faktor-Faktor Yang Berhubungan Dengan Pemberian Asi Eksklusif Pada Ibu Menyusui Di Desa Kaliasin Kecamatan Tanjung Bintang Kabupaten Lampung Selatan Tahun 2022. *Jurnal Gizi Aisyah*, 6(1), 17–27. <https://doi.org/10.30604/jnf.v6i1.779>
- Sudirman, J., Thamrin, H., Marwang, S., Sabar, S., Eryanti K, R., & Passe, R. (2024). Kelas Edukasi Menyusui Ibu Hamil (KEMIH): Its Correlation to The Improvement of Knowledge, Self-Efficacy, and Breast Milk Production of Post-Partum Mothers. *Window of Health : Jurnal Kesehatan*, 7(1), 14–22. <https://doi.org/10.33096/woh.vi.434>
- Winarti, G., Nasution, S. Z., & Siregar, F. L. S. (2023). Edukasi Family Centered Maternity Care Terhadap Self Efficacy Dalam Pemberian Asi: Literatur Review. *Jurnal Kesehatan Masyarakat*, 7, 16827–16837.
- Yulianti. (2025). Pengetahuan dan Sikap tentang Pemberian ASI Eksklusif Mempengaruhi Prenatal Breastfeeding Self-efficacy (PBSE) Fakultas Ilmu Keperawatan , Universitas Islam Sultan Agung , Indonesia Air Susu Ibu (ASI) adalah program dari World Health Organization untu. *Yulianti*.
- Yusriani, S., Prambudi, I. S., Gunarto, M., Nurbaeti, N., Lusiaty, M., & Suhendro, S. (2023). Influence of Self-Efficacy and Peer Support on Learning Enthusiasm and Digital Competence in Online Distance Learning: A Cross-National Study on Workers and MM Program Postgraduate Students. *Proceedings International Conference on Business, Economics & Management*, 1, 410–427. <https://doi.org/10.47747/icbem.v1i1.1333>