



Social Cognitive Theory (SCT) Based Breastfeeding Education Model: Implications for Early Breastfeeding Practices and Maternal Self-Efficacy in Badung Regency, Bali

Putu Ayu Dina Saraswati¹, Ni Putu Yunita Sri Lestari², I Wayan Adi Artha Wiguna³, Babucarr Jassey⁴

^{1,2,3} STIKes Bina Usada Bali, Badung, Bali, Indonesia

⁴ Department of Public Health Service, Ministry of Health, The Gambia

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CORRESPONDENCE

E-mail: dhinaadriana@gmail.com

A B S T R A C T

Exclusive breastfeeding coverage in Indonesia, including Badung District, remains below the national target of 67%. Maternal self-efficacy and employment status are key barriers, often leading to early introduction of formula feeding. This study aimed to analyze the effect of a breastfeeding education model based on Social Cognitive Theory (SCT) on early breastfeeding practices, maternal self-efficacy, and infant growth. A quasi-experimental study with a non-equivalent control group design was conducted involving 76 postpartum mothers (38 in the intervention group and 38 in the control group), recruited on the third day postpartum. The intervention group received SCT-based breastfeeding education for six weeks, while the control group received standard breastfeeding education. Data were analyzed using Chi-square, Mann-Whitney, and t-tests, with a significance level set at $p < 0.05$. The intervention group demonstrated significantly higher post-test scores for early breastfeeding practices (36.16 vs. 29.37; $p < 0.001$) and maternal self-efficacy (52.00 vs. 38.71; $p < 0.001$) compared with the control group. SCT-based breastfeeding education is effective in improving early breastfeeding practices and enhancing maternal self-efficacy. Its integration into breastfeeding promotion programs is recommended to optimize maternal and child health outcomes.

INTRODUCTION

Breast milk is the best food for babies in the first six months of life because it contains all essential nutrients, including proteins, fats, carbohydrates, vitamins, minerals, enzymes, hormones, and antibodies in the right amount and proportion (Maizuputri et al., 2024; Rosuzeita et al., 2018). Exclusive breastfeeding plays an important role in optimal growth and protection of babies from various diseases.

However, exclusive breastfeeding coverage in Indonesia still has not reached the target. WHO data in 2022 shows exclusive breastfeeding coverage of 67.96%, a decrease compared to 2021 of 69.7%. The government targets 80% coverage, but in Badung Regency, the coverage figure is still around 67% (Badung Health Office, 2023; Ministry of Health, 2016; Munira SL, 2023; Stuart Scott, 2015). This low achievement is influenced by the factors of working mothers, lack of knowledge about lactation management, and a less supportive social environment. This condition has an impact on the low confidence or self-efficacy of mothers in giving exclusive breastfeeding.

Self-efficacy is one of the main psychological factors in the success of breastfeeding. Mothers with self-efficacy are Taller and are more able to face challenges, such as pain, fussy babies, and social pressure to give formula milk. Research shows that mothers with self-efficacy are more likely to successfully initiate and maintain exclusive breastfeeding, are more confident in making decisions, and actively seek help to

solve breastfeeding problems. (Miaty et al., 2016; Prasitwattanaseree et al., 2019; Rai et al., 2023; Souza et al., 2020).

Previous studies have also supported the importance of self-efficacy. Dennis (2003) developed the Breastfeeding Self-Efficacy Scale (BSES), which has been proven to be able to predict the success of exclusive breastfeeding. (Durmazoğlu et al., 2024). A study in Madiun by Syahputri et al. (2020) used the SCT approach and found that personal factors and social support had a significant effect on the success of exclusive breastfeeding. (Ayran & Çelebioğlu, 2022). Research by Indrasari et al. (2024) also shows that demographic factors, knowledge, and self-efficacy of Mothers are closely related to breastfeeding success. (Seddighi et al., 2022). In addition, a meta-analysis by Meedya et al. (2010) confirms that interventions that improve self-efficacy consistently support the achievement of exclusive breastfeeding. (Ouyang et al., 2023).

Conventional breastfeeding education has not been effective enough to change maternal behavior. An approach that is able to touch the psychological aspect, especially in building self-efficacy (Huda et al., 2022; Maleki et al., 2021; Mesters et al., 2013; Wong et al., 2021). Social Cognitive Theory (SCT) emphasizes the interaction between personal factors, social environment, and behavior in forming healthy habits. The SCT-based approach allows breastfeeding education to be designed more effectively by strengthening cognitive factors, social support, and the formation of early breastfeeding behaviors (Handayani et al., 2010; Minas & Ganga-Limando, 2016)

Studies on the application of SCT in breastfeeding education are still limited, especially in Badung Regency, which has a distinctive social and cultural context. Therefore, this study was conducted to analyze the influence of the SCT-based breastfeeding education model on early breastfeeding practices and self-efficacy of breastfeeding mothers in Badung Regency.

METHOD

The design of this study uses a quasi-experimental design with a non-equivalent control group pretest-posttest design approach. The research subjects were divided into two groups, namely the treatment group and the control group. The treatment group received breastfeeding education based on Social Cognitive Theory (SCT), while the control group only received standard education.

The study population was all breastfeeding mothers 0–3 days postpartum who were in the working area of UPTD Puskesmas Petang I as the control group and UPTD Puskesmas Kuta Utara as the treatment group. The research was carried out from May to June 2025. Samples were selected using purposive sampling techniques based on the set inclusion criteria.

The number of samples was calculated based on the sample size determination formula for experimental studies, taking into account alpha values of 0.05, beta of 0.05, standard deviation, and mean difference from previous studies. From the results of the calculation, it was obtained that a minimum sample requirement of 34 respondents per group was obtained. However, by taking into account the possibility of a dropout of 10–25%, the number of samples was increased so that 38 respondents in the treatment group and 38 respondents in the control group were obtained.

Before the research was conducted, this procedure had received ethical approval from the Health Research Ethics Committee (KEPK). The instruments used consisted of an early breastfeeding practice questionnaire developed by the researcher and tested for validity and reliability, as well as a Breastfeeding Self-Efficacy Scale Short Form (BSES-SF) questionnaire to measure maternal self-efficacy.

The intervention was given to the treatment group in the form of SCT-based breastfeeding education, which was carried out once every week for six weeks. In the control group, mothers only received standard education according to procedures at health facilities. Measurements were taken in both groups, both before and after the intervention.

The data obtained were analyzed using the Shapiro-Wilk normality test to determine the distribution of the data. Furthermore, bivariate analysis was performed using a paired t-test to assess changes in the group, and an independent t-test or non-parametric test (Chi-square, Mann-Whitney) to compare results between groups. The significance level was set at $p < 0.05$.

RESULT

This study involved 76 people, 38 postpartum mothers in the control group and 38 postpartum mothers in the intervention group. This study was conducted in Badung Regency, Bali, from May to June 2025. Each subject met the inclusion and exclusion criteria and was a postpartum mother on the third day postpartum. For six weeks, interventions and observations were carried out to evaluate how effective the Social Cognitive Theory-based breastfeeding education model was on early breastfeeding practices and maternal self-efficacy.

Table 1. Characteristics of respondents

Yes	Variable	Group		Total	P value
		Control (n=38)	Intervention (n=38)		
1	Age				
	<20 years old	8 (21,1%)	5 (13,2%)	13 (17,1%)	0,591*
	20-35 years old	19 (50,0%)	19 (50,0%)	38 (50,0%)	
	>35 years old	11 (28,9%)	14 (36,8%)	25 (32,9%)	
2	Parity				
	Primipara	21 (55,3%)	23 (60,5%)	44 (57,9%)	0,642*
	Multipara	17 (44,7%)	15 (39,5%)	32 (42,1%)	
3	Mother's work				
	Work	20 (52,6%)	19 (50,0%)	39 (100%)	0,818*
	IRT	18 (47,4%)	19 (50,0%)	37 (100%)	
4	Nipple Anatomy				
	Sink	11 (28,9%)	11 (28,9%)	22 (28,9%)	1,000*
	Usual	27 (71,1%)	27 (71,1%)	54 (71,1%)	
5	Planned pregnancy				
	Not	3 (7,9%)	3 (7,9%)	6 (7,9%)	1,000*
	Yes	35 (92,1%)	35 (92,1%)	70 (92,1%)	
Total		38 (100%)	38 (100%)	76 (100%)	

Test description: * *Chi-Square test*

Table 1 shows a homogeneous and comparable distribution of the basic characteristics of the respondents in both groups. These variables included age, parity, occupation, nipple anatomy, and planned pregnancy status, with the entire $p > p$ -value of 0.05 based on the Chi-Square test. The homogeneity of these characteristics ensures that comparisons between control groups and interventions in follow-up analyses can be made validly and objectively.

Table 2. Early Breastfeeding Practices, Self-Efficacy and Infant Weight Before and After the SCT-Based Breastfeeding Education Model

Yes	Variable	Group		P value
		Control (n=38)	Intervention (n38)	
1	Pretest Breastfeeding Practice			
	Red $\pm$ SD	17.53 $\pm$ 5.05	17.89 $\pm$ 4.93	0,771*
	Median	18,0	18,0	
	Range	10 - 25	10 - 25	
2	Posttest Breastfeeding Practice			
	Red $\pm$ SD	29.37 $\pm$ 6.36	36.16 $\pm$ 5.88	0,000*
	Median	30,0	37,0	
	Range	20 - 39	25 - 46	
3	Self-Efficacy Pretest			
	Red $\pm$ SD	23.76 $\pm$ 6.77	24.50 $\pm$ 6.27	0,647*
	Median	24,50	25,0	
	Range	14-35	13-35	
4	Self-Efficacy Posttest			
	Red $\pm$ SD	38.71 $\pm$ 6.09	52.0 $\pm$ 7.76	0,000*
	Median	38,0	53,0	
	Range	30 – 50	36 - 64	

Test Description: *) *Mann-Whitney Test*

Table 2 showed that before the intervention, infant weight, self-efficacy, and early breastfeeding practices did not differ statistically substantially ($p > 0.05$) and had relatively equal average, median, and range values in both groups. After six weeks of the SCT-based teaching model, the intervention group's early

breastfeeding habits (mean 36.16 vs. 29.37; $p = 0.000$) and maternal self-efficacy (mean 52.0 vs. 38.71; $p = 0.000$) improved significantly higher than in the control group.

Table 3. Social Cognitive Theory (SCT) Based Breastfeeding Education Model: Implications for Early Breastfeeding Practices and Maternal Self-Efficacy in Badung Regency, Bali

Yes	Variable	Group		P value
		Control (n=38)	Intervention (n38)	
1	Delta Breastfeeding Practice			
	Red $\pm$ SD	11.84 $\pm$ 8.35	18.26 $\pm$ 7.07	0,000**
	Median	11,5	17,5	
	Range	-5 - 26	5-36	
2	Delta Self-efficacy			
	Red $\pm$ SD	14.94 $\pm$ 9.39	27.50 $\pm$ 8.90	0,001**
	Median	15,50	28,0	
	Range	-2 - 36	8 – 49	

Test Description: *) *Mann-Whitney Test*, **) *T Independent Test*

Table 3. showed changes (delta) in infant weight scores, maternal self-efficacy, and early breastfeeding practices before and after the intervention for both groups. Compared to the control group (mean delta 11.84 $\pm$ 8.35; $p = 0.000$), the average increase in early breastfeeding habits in the intervention group (mean delta 18.26 $\pm$ 7.07) was much greater. Similarly, the increase in mean maternal self-efficacy in the intervention group (mean delta 27.50 $\pm$ 8.90) was higher than in the control group (mean delta 14.94 $\pm$ 9.39; $p = 0.001$). Based on these findings, compared to traditional teaching, the SCT-based breastfeeding education model is substantially more successful in improving early breastfeeding behavior and self-efficacy of parents in Badung Regency, Bali.

DISCUSSION

Characteristics of respondents

In this study, the characteristics of the respondents showed that the control and intervention groups were distributed in a balanced manner based on important variables such as age, parity, maternal occupation, nipple anatomy, and planned pregnancy status. The absence of statistically significant differences in all basic variables ($p > 0.05$) indicates this homogeneity. Therefore, it is possible to objectively compare the two groups to evaluate the impact of Social Cognitive Theory-based educational interventions on early breastfeeding practices and maternal self-efficacy. To guarantee the internal validity of the research and reduce selection bias, a balanced distribution is essential.

According to other studies, the mother's age between 20 and 35 years is the ideal reproductive age for exclusive breastfeeding. Mothers aged 20 to 35 are more likely to breastfeed exclusively than mothers younger than 20 or older than 35 (Indrasari et al., 2024). Mothers aged 20 to 35 years are more likely to breastfeed exclusively than those younger than twenty or older than thirty-five; This age group was 1.6

times more likely to succeed, suggesting that most mothers in this age group continued to breastfeed exclusively for up to six weeks (Asih Dwi et al., 2022).

Previous childbirth experiences did not dominate either group, according to relatively balanced primipara and multipara parity distributions. Previous studies have shown that the experience of childbirth (parity) can affect breastfeeding knowledge and skills, which makes it important. A p value of 0.275 from the study at the Sialang Public Health Center showed that there was no significant correlation between parity and breastfeeding techniques. This suggests that the innate nature of primipara or multipara mothers does not affect the way they breastfeed. However, the same study found a significant relationship between the level of knowledge and breastfeeding techniques, with a p-value of 0.002, suggesting that knowledge is essential for good breastfeeding practices (Amiruddin et al., 2023).

In addition, the number of working mothers and housewives is evenly distributed, which means that the influence of job status on breastfeeding behavior can be minimized. The family helps with exclusive breastfeeding. Regardless of their employment status, mothers who have strong family support are more likely to breastfeed themselves (Simanjuntak et al., 2022). Flexible work arrangements and support from colleagues and supervisors are essential to allow mothers to continue breastfeeding after returning to work. They increase confidence in meeting personal breastfeeding goals and maintaining the supply of breast milk (Burns et al., 2023).

It was noted that the anatomical variables of the nipple, as well as the status of the planned pregnancy, were balanced between groups. Variations such as denser areolas, shorter nipples, or wider nipples can also cause problems. These anatomical differences can cause problems getting the right hooks, which are very important for proper breastfeeding (Ventura et al., 2021). Thus, the results of the research obtained can later be attributed more to the effectiveness of the SCT-based education model, without being influenced by characteristics that have the potential to be a confounding factor.

Early Breastfeeding Practices and Self-Efficacy Before and After the SCT-Based Breastfeeding Education Model

In this study, control groups and interventions were studied before and after the application of the Social Cognitive Theory (SCT)-based educational model, as well as the level of maternal self-efficacy and infant weight. The initial scores, or pretests, for all the major variables in the two groups were generally comparable and showed no statistically significant differences. This ensures that the results of the comparison after the intervention show a direct influence of the applied educational model. The variables of early breastfeeding practice and self-efficacy improved significantly in the intervention group after the application of the six-week SCT education model.

The intervention group had a significant increase in post-intervention early breastfeeding practice scores to 36.16 compared to the control group of 29.37. They also had a significant improvement in self-efficacy scores, with a posttest average of 52.0, much higher than the control group's 38.71. The Social Cognitive Theory (SCT) educational model emphasizes the role of observational learning, imitation, and modeling, which are essential for breastfeeding behavior. Theories such as social support, self-efficacy, and outcome expectation have been used effectively in various efforts to encourage breastfeeding practices. With these interventions, the initiation, duration and exclusivity of breastfeeding have increased, especially when adapted to specific cultural and community situations.

Self-efficacy is an important predictor of the initiation and duration of breastfeeding. Studies have shown that higher self-efficacy in mothers leads to increased breastfeeding rates. For example, interventions that increase maternal confidence in their ability to breastfeed have resulted in significant improvements in breastfeeding practices (Eastin & Sharma, 2020). A study has shown that learnings drawn from the experiences of representatives and role models positively affect breastfeeding practices. It is more likely for mothers who see their peers or healthcare providers breastfeeding well to start and continue breastfeeding on their own (Syahputri et al., 2020). Positive results regarding the health benefits of breastfeeding for both mother and child were associated with higher breastfeeding rates. Educational programs that emphasise these advantages can effectively change the way mothers view breastfeeding and encourage them to do so (Anjomshoa et al., 2018).

In this study, SCT-based educational interventions, which included home visits, booklet modules, and training, succeeded in improving breastfeeding rates. These programs are usually centered on increasing knowledge, being more effective, and supporting breastfeeding. (Dueñas-Espín et al., 2020). Learning from experience is an important factor in improving self-efficacy. A study in Madiun, East Java, found that observational learning significantly improved exclusive breastfeeding practices (OR=3.86) (Syahputri et al., 2020). As research by Hartati and Silitonga shows, the use of booklets and other educational materials helps breastfeeding mothers successfully and improves their self-efficacy through observational learning (Hartati & Silitonga, 2023).

Social support is also an important component in building self-efficacy. With a significant p-value of 0.0001, Astuti and Sustiwi's research found a positive correlation between breastfeeding self-efficacy and family support. The role of social support, although studies have not found a significant correlation between social support and self-efficacy in their particular situations (Astuti & Sustiwi, 2022). Constructive feedback, often provided through structured health education, is essential to improve self-efficacy. The study by Masluroh and Risnayanti found that lactation education significantly improved knowledge and self-efficacy among breastfeeding mothers, with a p value of 0.000 (Masluroh &

Risnayanti, 2024). To improve self-efficacy, structured health education can provide constructive feedback. Study by (Masluroh & Risnayanti, 2024) It showed that lactation education significantly improved knowledge and self-efficacy among breastfeeding mothers, with a p-value of 0.000.

Interventions that focus on breastfeeding education significantly improve maternal self-efficacy. A study conducted in Iran showed that the education program resulted in a substantial increase in self-efficacy scores in the intervention group compared to the control group. A mobile-based teaching program in Iran results in superior self-efficacy scores at four and eight weeks postpartum compared to standard care (Rahimparvar et al., 2024). The Social Cognitive Theory teaching approach has been shown to be effective in encouraging breastfeeding; However, it is important to understand the broader context of these interventions. Healthcare infrastructure, cultural norms, and socioeconomic situations can affect the effectiveness of SCT-based programs. Further, although Social Cognitive Theory (SCT) offers a powerful framework for understanding and influencing nursing behavior, the incorporation of additional theoretical models, such as Planned Behavior Theory, can result in a more holistic approach to addressing the diverse practice of breastfeeding (Ariyani et al., 2022).

This data proves that the implementation of the SCT-based breastfeeding education model significantly improves breastfeeding practices and maternal self-efficacy in Badung Regency, Bali. These findings are in line with various international studies that validate the significance and efficacy of the SCT approach in improving maternal and child health behaviors and outcomes, and provide a basis for the development of theory-based education programs in the future.

Social Cognitive Theory (SCT) Based Breastfeeding Education Model: Implications for Early Breastfeeding Practices and Maternal Self-Efficacy in Badung Regency, Bali

The study revealed a greater improvement in early breastfeeding habits and maternal self-efficacy in the intervention group compared to the control group after the use of a Social Cognitive Theory-based teaching model. The study showed that the intervention group showed significantly superior improvement in all key metrics compared to the control group. The data illustrate the efficacy of SCT educational interventions in producing substantial changes in maternal and infant health behaviors and outcomes (Safaah et al., 2024).

Maternal self-efficacy, an important determinant of breastfeeding success, was significantly higher in the intervention group. Research has consistently shown that interventions aimed at improving self-efficacy result in higher breastfeeding self-efficacy scores (Mizrak et al., 2017). In line with previous research, the use of SCT-based interventions, which include role-playing, demonstrations, and motivational interviews, effectively increases maternal confidence in breastfeeding (Dodou et al., 2021). The intervention group showed a significant increase in maternal self-efficacy ($p = 0.001$). This proves that SCT-based teaching

interventions have succeeded in increasing maternal confidence in breastfeeding. Self-efficacy is a fundamental concept in Social Cognitive Theory and has been shown to have a significant effect on the onset and duration of breastfeeding. Interventions that improve maternal self-efficacy have resulted in an increase in the rate and duration of breastfeeding. A study shows that self-efficacy in initiating and overcoming barriers is a major predictor of breastfeeding initiation among African-American women (Eastin & Sharma, 2020).

Observational learning, facilitated by example and experience, significantly influences breastfeeding practices. A study in East Java revealed that an increase in the level of observational learning and strong examples greatly improved the practice of exclusive breastfeeding. This suggests that mothers who watch and learn from others who breastfeed effectively are more likely to imitate similar methods (Syahputri et al., 2020). Social support is an important element that supports self-efficacy and nursing practice. Help from family, peers, and health professionals can have a profound impact on a mother's confidence and capacity to breastfeed. A study showed a positive correlation between social support and self-efficacy in breastfeeding working women, suggesting that increased social support was associated with increased self-efficacy (Hapsari & Sarajar, 2024). In addition, counselling interventions that provide social support have been shown to increase maternal confidence in breastfeeding (Sakti et al., 2025). Educational treatments, including visual aids, verbal instruction, and peer counselling, have been shown to improve self-efficacy in breastfeeding. Systematic evaluation showed that these interventions significantly improved maternal self-efficacy, which is essential for successful breastfeeding (Seddighi et al., 2022).

SCT argues that mastery experiences, or successful behavioral performance, are essential for developing self-efficacy. In the world of breastfeeding, mothers who engage effectively in this practice develop confidence in their ability to survive, a phenomenon reinforced by SCT treatments that offer opportunities to practice and gain feedback. SCT-based therapies often incorporate social support systems, which are important for overcoming barriers in behavior modification. Help from peers and health professionals can help mothers cope with breastfeeding problems, offering emotional and practical help. Interventions based on Social Cognitive Theory (SCT) significantly improved self-efficacy and the success of exclusive breastfeeding in primitive mothers by integrating education, demonstration, and social support. The study offers strong evidence that increasing important elements of Social Cognitive Theory, including observational learning and social persuasion, significantly increases maternal confidence in breastfeeding and enhances exclusive breastfeeding behaviors (Black et al., 2020).

The study's findings strongly support the basic principles of SCT, which highlight the importance of experiential mastery and observational learning in transforming health behaviors. SCT therapy provides knowledge to mothers, facilitates group interactions, allows learning from the experiences of others, and

offers social support that increases confidence and motivation. This method has shown efficacy in overcoming personal and environmental barriers often encountered in breastfeeding practices. Mothers who received SCT-based teaching showed significant improvements in knowledge, self-efficacy, and breastfeeding behaviors compared to the control group. This study underscores the importance of applying SCT principles, such as social support, role modeling, and observational learning, in breastfeeding interventions to improve the success of exclusive breastfeeding, thus reinforcing the evidence that theory-based approaches are highly effective in encouraging positive breastfeeding behaviors among new mothers (Noghabi et al., 2022).

Educational interventions based on Social Cognitive Theory (SCT) were implemented to improve self-efficacy and breastfeeding practices among new mothers in minority communities. The study revealed that the SCT strategy, which integrates social support, learning from role models, and the promotion of self-efficacy, effectively improved self-efficacy and duration of exclusive breastfeeding in the intervention group compared to the control group. These findings reinforce evidence that theory-based strategies, particularly Social Cognitive Theory (SCT), are highly effective in reducing barriers to breastfeeding and encouraging successful breastfeeding practices, especially in socioeconomically disadvantaged communities (Yang et al., 2021).

A randomized controlled experiment assessed the efficacy of a Social Cognitive Theory-based intervention (SCT) on breastfeeding self-efficacy and exclusive breastfeeding success among mothers in Malawi. The findings showed that mothers who underwent SCT intervention showed significant improvements in self-efficacy of breastfeeding and achieved a higher rate of exclusive breastfeeding success compared to the control group. These findings underscore the efficacy of the SCT approach in improving breastfeeding practices, especially by highlighting social support, observational learning, and improved self-efficacy as important elements of successful breastfeeding interventions.

The SCT-based breastfeeding education model significantly improves early breastfeeding practices, maternal self-efficacy, and infant weight gain compared to conventional education. Although there were significant improvements in early breastfeeding practices, self-efficacy, and child weight gain in the intervention group, there were still many hurdles to be faced. The likelihood of a diversity of responses between individuals is evident from the wide range of score changes, which may be influenced by personal motivation, family support, and previous breastfeeding experiences. Factors that were not comprehensively evaluated or controlled in this study. In addition, the use of self-report questionnaires to assess breastfeeding behaviors and self-efficacy can lead to social bias (self-reporting bias), as respondents may provide answers that are perceived as positive, rather than answers that actually represent their experiences.

In addition, the study was limited in terms of the relatively short duration of the intervention, which was six weeks, so it was not possible to identify the long-term effects of the SCT educational model on exclusive breastfeeding behavior and infant growth. The findings of the study may also be less generalizable to maternal populations outside of Badung Regency, Bali, due to different cultural, social, and health care access factors. Not all environmental factors, such as partner support or the quality of health facilities, are measured in detail, although these variables can contribute significantly to the success of breastfeeding practices. Therefore, the results of this study must be interpreted carefully and taken into consideration for design improvement and implementation of interventions in future studies.

CONCLUSION

This study concludes that breastfeeding education based on Social Cognitive Theory (SCT) is more effective than standard education in improving early breastfeeding practices, maternal self-efficacy, and supporting infant growth. The findings highlight the crucial role of psychological factors, particularly self-efficacy, in breastfeeding success, indicating that knowledge-based education alone is insufficient to change behavior. The SCT-based education model is therefore a relevant and effective intervention for health workers in supporting breastfeeding mothers and can be considered for integration into health facility programs and national policies to increase exclusive breastfeeding coverage and improve infant health outcomes.

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