Optimization of Breastfeeding Support Groups in Breastfeeding Self-Efficacy

Ihda Mauliyah¹, Widya Hary Cahyati¹, Oktia Woro Kasmini Handayani¹

¹ Universitas Negeri Semarang, Central Java, Indonesia

Corresponding author: ihda_mauliyah@students.unnes.ac.id

Abstract: Breastfeeding Self-Efficacy (BSE) is a mother's belief in her ability to breastfeed her baby and determines whether she chooses to breastfeed. The presence of a breastfeeding support group can offer assistance and inspire mothers, leading to improved breastfeeding self-efficacy. The research design employed a Pre-Experimental design with a One-Group Pretest-Posttest Design methodology. The study included pregnant women in the third trimester through the postpartum period (6 weeks) and 40 breastfeeding mothers. An initial evaluation assessed Breastfeeding Self-Efficacy in pregnant women. The intervention involved establishing a breastfeeding support group and providing coaching to assist and educate postpartum mothers. Subsequently, a follow-up assessment of breastfeeding self-efficacy was conducted among postpartum mothers. Data analysis utilized the Wilcoxon Sign Rank Test, revealing a significance level (p) of $0.046 < \alpha = 0.05$. The study found a significant relationship between breastfeeding self-efficacy before and after participation in a breastfeeding support group. The findings demonstrate a notable impact on breastfeeding self-efficacy pre and post the involvement of the breastfeeding support group, underscoring the necessity of such groups for enhancing Breastfeeding Self-Efficacy.

Keywords: Support Group, Breastfeeding, Breastfeeding Self Efficacy

INTRODUCTION

Exclusive breastfeeding means providing babies with only breast milk without any additional food except medicine and water when taking medicine from the age of 0-6 months. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend exclusive breastfeeding for the first 6 months. It is essential to breastfeed the baby within the first hour after birth, whenever the baby wants and avoid using bottles or pacifiers.

Mother's milk is considered the primary source of nutrition for babies, unmatched in its nutritional value. It provides the essential proteins, fats, sugars, and calcium necessary for a baby's growth and development. Additionally, breast milk contains antibodies that safeguard the baby from diseases during breastfeeding and beyond. UNICEF highlights that exclusive breastfeeding can significantly reduce infant mortality rates in Indonesia, preventing around 30,000 infant deaths annually. Moreover, globally, exclusively breastfeeding for six months can avert 10 million deaths

of children under five. Breast milk stands as a vital factor in ensuring the health and survival of infants, offering unparalleled benefits compared to other milk types in reducing disease and malnutrition risks. Data on exclusive breastfeeding for babies less than 6 months old at world level during the 2014-2020 period reached 44%. Southeast Asia has a percentage value almost the same as the world percentage, namely 45%, meaning that the success of exclusive breastfeeding is still below 50% of the Population (UNICEF, 2023). According to the Indonesian Ministry of Health's 2021 performance report, the percentage of infants under 6 months old receiving exclusive breast milk was 69.7%, dropping to 67.96% in 2022, below the national target of 45%. This highlights the necessity for increased support to enhance coverage, potentially leading to an increase (WHO, 2023).

Self-efficacy in breastfeeding is a key factor in breastfeeding success. Mothers with higher levels of self-efficacy are more likely to start and maintain breastfeeding for longer periods. The study emphasizes the need for support and education to enhance mothers' self-efficacy in breastfeeding and achieve successful outcomes (Johari & Abdul Hamid, 2021). There is a significant relationship between social support and breastfeeding self-efficacy in women in Iran; social support has a greater influence on breastfeeding self-efficacy (Faridvand, 2017)

Factors affecting the inability to practice exclusive breastfeeding include educational knowledge, gestational age, nipple pain, work environment, work facilities, workload, and supportive cultural norms (Sulasmi et al., 2021). The establishment of a breastfeeding support group is crucial for mothers. Feeling supported, loved, and cared for can lead to positive emotions, boosting oxytocin levels and ensuring smooth breast milk production. These groups offer substantial benefits by enhancing exclusive breastfeeding practices and improving mothers' knowledge and attitudes towards breastfeeding. Through a breastfeeding support group, mothers can access information, emotional support, and practical assistance to maintain optimal breastfeeding practices. Exclusive breastfeeding support groups play a key role in promoting exclusive breastfeeding.

METHOD

The research design used in this study is a Pre-Experimental design with a One Group Pretest-Posttest Design approach. Initially, the researcher assessed the Breasfeeding Self Efficacy scale (pretest), followed by an intervention. Subsequently, the Breasfeeding Self Efficacy scale was reassessed

after the intervention (posttest). The study included a sample of 40 pregnant women aged <36 weeks through the postpartum period (6 weeks). The study utilized the Breastfeeding Self-Efficacy Scale Short Form (BSES-SF), comprising 14 questions assessing confidence in breastfeeding using a Likert scale. The scale includes statements with five choices ranging from "Not at all confident" to "Very confident," scored from 1 to 5. Results are categorized into low (1) and high (2) self-efficacy. This research evaluates tools for measuring breastfeeding self-efficacy, highlighting its significant role in breastfeeding initiation and duration (Casal et al., 2017). The BSES-SF was translated into Indonesian, tested for validity, and found 12 out of 14 statements to be valid (r value \geq 0.3). Two invalid items were removed, resulting in a 12-statement scale. The reliability test indicated a Cronbach Alpha of 0.921 (> 0.8), demonstrating high reliability.

The intervention involved an initial assessment of breastfeeding self-efficacy in pregnant women, followed by providing guidance to breastfeeding support groups to offer education and support to postpartum mothers. Four interventions were conducted in the support group: introduction and socialization, in-depth study of lactation, group education using booklets, and educational sessions with facilitators. Missionaries then provided further education to postpartum mothers. Following coaching, the group offered additional education and support to the mothers. A second Breastfeeding Self-Efficacy assessment was conducted on the mothers. Data analysis used the Wilcoxon Sign Rank test with $\alpha < 0.05$ significance level. If $\alpha < 0.05$, the null hypothesis (H0) is rejected, and the research hypothesis (H1) is accepted, indicating the impact of breastfeeding support groups on Breastfeeding Self-Efficacy in mothers.

RESULT

Table 1. Characteristics of Respondents based on Age, Education, Family Income

Quantity	Characteristic	(%)
	S	
Education		
Elementary School	1	5
Junior High School	4	20
Senior High School	11	55
Bachelor	4	20
•		
Age		
17 – 25 years	11	55
26 – 35 years	8	40

36 – 45 years	1	5
Income		
1,5 Million	11	55
> 1,5 – 2 Million	2	10
>2 – 2,5 Million	2	10
>2,5 Million	5	25

According to Table 1, over 50% of breastfeeding mothers are between the ages of 17-25, have completed high school, and earn a monthly income of over 1.5 million.

Table 2. Breastfeeding Self Efficacy in Breastfeeding Mothers

BSE-Scale		Pre	Post		
	Total	Procentage (%)	Total	Procentage (%)	
Tall	9	45	13	65	
Low	11	55	7	35	
Total	20	100	20	100	

Based on Table 2 above, it indicates that Breastfeeding Self-Efficacy before the involvement of breastfeeding support groups for Breastfeeding Mothers had a BSE-Scale that was more than partially low, whereas Breastfeeding Self-Efficacy after the involvement of breastfeeding support groups for Breastfeeding Mothers had a BSE-Scale that was more than partially high.

Table 3. Results of Normal Distribution Statistical Tests and Wilcoxon Sign Rank Test

N		Pre	Post	Z	-2.000b
		20	20	Asymp.sig (2 tailed)	.046
Normal Parameter s	Mean	48.75	64.65		
	SD	9.82	61.16		

Based on the table, the mean BSE-Scale score before the breastfeeding support group intervention was 48.75, and after the intervention, it increased to 64.65. The Wilcoxon Sign Rank Test indicated statistical significance with α = 0.046 (α < 0.05).

DISCUSSION

Initial assessment of the breastfeeding self-efficacy scale in participants before the intervention revealed that over half exhibited low levels. Self-efficacy represents an individual's belief in accomplishing tasks they have not yet attempted, serving as a guiding factor in decision-making and self-motivation towards achieving set objectives. Low breastfeeding self-efficacy and ineffective nursing practices commonly manifest in first-time mothers lacking prior breastfeeding

exposure. All subjects in this study, during the initial evaluation of the breastfeeding self-efficacy scale, were primigravida expectant mothers beyond 36 weeks of gestation, thus lacking prior breastfeeding experience. This factor could significantly impact the preliminary outcomes of the breastfeeding self-efficacy assessment.

Another factor influencing the results of the initial assessment of the breastfeeding self-efficacy scale, indicating that over half have low scores, is the lack of homogeneity in education and age among respondents. The majority have a high school education or higher, which can aid in interpreting, predicting, and problem-solving. Having good knowledge about exclusive breastfeeding is positively related to practicing it. This study suggests increasing mothers' awareness of the benefits of exclusive breastfeeding (Dukuzumuremyi et al., 2020)The initial results of the breastfeeding self-efficacy scale were influenced by the presence of respondents with varying levels of education. The breakdown of respondent education is as follows: 1 (5%) had an elementary school education, 4 (20%) had a junior high school education, 11 (55%) had a high school education, and 4 (20%) had a bachelor's degree. It is important to note that elementary and junior high school education is generally considered to be a lower level of education, and individuals with lower education levels may face greater challenges in understanding and acquiring knowledge. Knowledge and understanding play a significant role in a mother's confidence in breastfeeding. Enhanced knowledge about breastfeeding, positive attitudes, and high self-confidence can contribute to increased practice of exclusive breastfeeding (Gizaw et al., 2022).

The respondents' age characteristics indicate that over half are between 17 and 25 years old. Despite being in the young category, this age group is considered relatively young, with a high level of curiosity and motivation that can significantly influence Breastfeeding Self Efficacy, and ultimately impact breastfeeding success (Kitano et al., 2016). The family income exceeds 1.5 million. Low income hinders the ability to purchase sufficient food. Conversely, higher family income correlates with lower rates of breastfeeding. Pre-pregnancy nutritional status, family income, and early breastfeeding initiation all impact exclusive breastfeeding success (Shofiya et al., 2020). However, breastfeeding practices in many high-income nations still fall short of global guidelines for exclusive breastfeeding for 6 months, continued breastfeeding for 6 months, and breastfeeding for 2 years after (Vaz et al., 2021). Several challenges exist in monitoring breastfeeding indicators in high-income countries. One main challenge is the lack of standard methodology and consistent definitions in data collection, which hinders comparisons between countries. Additionally, variations

in the implementation of interventions supporting breastfeeding post-hospital discharge are also problematic and require attention.

The breastfeeding self-efficacy scale was reassessed after participants underwent an intervention (post-test). Results from the post-test (1 week after the intervention) indicated a significant increase in the scale compared to the pre-test. Table 2 displays the obtained results, revealing that breastfeeding self-efficacy among mothers was initially somewhat low before the involvement of the Breastfeeding Support Group. Conversely, Table 3 demonstrates that following the support group's intervention, breastfeeding self-efficacy among mothers significantly improved, with more than half achieving high scores on the BSE scale.

Statistical tests revealed that the mean BSE-Scale prior to the involvement of the breastfeeding support group was 48.75, which increased to 64.65 post-involvement. The Wilcoxon Sign Rank Test indicated a significance level of α = 0.046 (α < 0.05), suggesting a substantial impact of breastfeeding support groups on enhancing Breastfeeding Self Efficacy among mothers. Early interventions targeting pregnant women on Breastfeeding Self Efficacy have shown significant improvements in this regard. Breastfeeding self-efficacy plays a crucial role in promoting exclusive breastfeeding and significantly influences a mother's satisfaction with the breastfeeding experience, thereby boosting her confidence in her ability to breastfeed her child (Awaliyah et al., 2019).

The presence of breastfeeding support from communities that prioritize breastfeeding is a key factor influencing breastfeeding self-efficacy. This study focused on a breastfeeding support group within a health organization at a Women's Empowerment Center in Sekaran Lamongan District. Through this group's involvement, it offers encouragement and empowerment to mothers, leading to improved Breastfeeding Self-Efficacy. This aligns with a study titled The Impact of Lactation Education on Breastfeeding Mothers' Self-Efficacy, indicating that education on lactation can positively influence mothers' confidence in breastfeeding. Support and education play a crucial role in boosting mothers' breastfeeding confidence (Nurmiaty et al., 2023). Apart from support from peers or family, breastfeeding support groups also play a role in influencing breastfeeding (Mohebi et al., 2018; Bizon et al., 2019; Quintero, 2020) This strategy effectively boosts exclusive breastfeeding at 6 months of age (Santamaría-Martín et al., 2022). Peer counseling shows promise in increasing exclusive breastfeeding rates. Community support for breastfeeding can enhance mothers' self-efficacy in breastfeeding. A study on "Exclusive Breastfeeding Behavior and Nutritional Status of Babies 6-12 Months" demonstrates that breastfeeding support groups

positively impact exclusive breastfeeding behavior and nutritional status in babies aged 6-12 months. Groups receiving support from these groups showed higher levels of exclusive breastfeeding and improved nutritional status in babies (Wati & Muniroh, 2018) Through breastfeeding support groups, mothers receive the necessary support and information to enable exclusive breastfeeding.

Support programs involving formal support groups and mother-to-mother support can help increase mothers' confidence in breastfeeding (Economou et al., 2021). Apart from social support, Breastfeeding Self Efficacy can be fostered through providing Health Education. Breastfeeding Self Efficacy is a process that can be changed and modified which has a big influence on the breastfeeding process. This improvement can be done in various ways, namely by providing Health Education or Health education with breastfeeding preparation classes (O'Sullivan et al., 2018). Educational interventions can increase self-efficacy in breastfeeding (Maleki et al., 2021). Apart from that, one source of Breastfeeding Self-Efficacy, namely Verbal Persuasion given to mothers about breastfeeding, will increase the mother's desire to continue breastfeeding her baby because she knows the many benefits. and the superiority of breast milk (Galipeau et al., 2018). Before providing intervention to respondents, this breastfeeding support group received guidance through 4 coaching sessions including: 1) introduction to the program and socialization; 2) Exploration of material regarding the lactation process: 3). Group educational practice using breast milk booklets: 4) Practice education directly to postpartum mothers accompanied by a facilitator. The intervention provided to the breastfeeding support group for respondents was breastfeeding support, exclusive breastfeeding education, demonstration of the correct way to breastfeed, explanation of breastfeeding technique booklets. This intervention is provided from the final trimester of pregnancy to the postpartum period (6 weeks). Comprehensive activities involve support from breastfeeding support groups, from health workers, adequate facilities are able to increase exclusive breastfeeding for mothers (Rhodes et al., 2021). The findings of this study indicate that breastfeeding support groups play a crucial role in enhancing Brestfeeding Self Efficacy among breastfeeding mothers through support and health education. This is evident from the rise in Breastfeeding self-efficacy scores among the participants.

CONCLUSION

Breastfeeding support groups play a significant role in enhancing breastfeeding selfefficacy among breastfeeding mothers. This is evident from the results of the BSE-Scale study, which showed that more than half of the mothers had low self-efficacy before joining the support groups. However, after joining the support groups, the BSE-Scale results showed a significant improvement in their self-efficacy levels. It is recommended that future research clearly defines research objectives and adopts appropriate research methods. Additionally, it is important to identify relevant research populations, such as primiparous mothers, mothers with different breastfeeding experiences, or mothers facing specific challenges in breastfeeding. clearly defines research objectives and adopts appropriate research methods. Additionally, it is important to identify relevant research populations, such as new mothers, mothers with different breastfeeding experiences, or mothers facing specific challenges in breastfeeding.

CONFLICT OF INTEREST

The authors declare that there are no significant competing financial, professional, or personal interests that might have affected the performance or presentation of the work described in this manuscript.

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REFERENCES

- Awaliyah, S. N., Rachmawati, I. N., & Rahmah, H. (2019). Breastfeeding self-efficacy as a dominant factor affecting maternal breastfeeding satisfaction. *BMC Nursing*, 18(Suppl 1), 1–7. https://doi.org/10.1186/s12912-019-0359-6
- Bizon, A. M. B. L., Giugliani, C., Castro de Avilla Lago, J., de Senna, A. F. K., Martins, A. C. M., de Jezus Castro, S. M., & Giugliani, E. R. J. (2019). Combined pro-breastfeeding practices are advantageous in facilities providing maternity and newborn services. *Maternal and Child Nutrition*, *15*(4), 1–8. https://doi.org/10.1111/mcn.12822
- Casal, C. S., Lei, A., Young, S. L., & Tuthill, E. L. (2017). A Critical Review of Instruments Measuring Breastfeeding Attitudes, Knowledge, and Social Support. *Journal of Human Lactation*, 33(1), 21–47. https://doi.org/10.1177/0890334416677029
- Dukuzumuremyi, J. P. C., Acheampong, K., Abesig, J., & Luo, J. (2020). Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: A systematic review. *International Breastfeeding Journal*, *15*(1), 1–17. https://doi.org/10.1186/s13006-020-00313-9

- Economou, M., Kolokotroni, O., Paphiti-Demetriou, I., Kouta, C., Lambrinou, E., Hadjigeorgiou, E., Hadjiona, V., & Middleton, N. (2021). The association of breastfeeding self-efficacy with breastfeeding duration and exclusivity: longitudinal assessment of the predictive validity of the Greek version of the BSES-SF tool. *BMC Pregnancy and Childbirth*, 21(1). https://doi.org/10.1186/s12884-021-03878-3
- Faridvand, et all. (2017). Relationship between social support and breastfeeding self-efficacy among women in Tabriz, Iran. *British Journal of Midwifery*, 25, 103–109. https://doi.org/https://doi.org/10.12968/bjom.2017.25.2.103
- Galipeau, R., Baillot, A., Trottier, A., & Lemire, L. (2018). Effectiveness of interventions on breastfeeding self-efficacy and perceived insufficient milk supply: A systematic review and meta-analysis. *Maternal and Child Nutrition*, 14(3), 1–13. https://doi.org/10.1111/mcn.12607
- Gizaw, A. T., Sopory, P., & Morankar, S. (2022). Breastfeeding knowledge, attitude, and self-efficacy among mothers with infant and young child in rural Ethiopia. *PLoS ONE*, *17*(12 December), 1–16. https://doi.org/10.1371/journal.pone.0279941
- Johari, N. S., & Abdul Hamid, S. B. (2021). Breastfeeding self-efficacy and infant feeding attitudes among overweight and obese expectant mothers in Kuala Selangor, Malaysia. *Malaysian Journal of Medicine and Health Sciences*, 17, 126 133. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85108974261&partnerID=40&md5=6a54a0e92dae76fc698450a538d38009
- Kitano, N., Nomura, K., Kido, M., Murakami, K., Ohkubo, T., Ueno, M., & Sugimoto, M. (2016). Combined effects of maternal age and parity on successful initiation of exclusive breastfeeding. *Preventive Medicine Reports*, 3, 121–126. https://doi.org/10.1016/j.pmedr.2015.12.010
- Maleki, A., Faghihzadeh, E., & Youseflu, S. (2021). The Effect of Educational Intervention on Improvement of Breastfeeding Self-Efficacy: A Systematic Review and Meta-Analysis. *Obstetrics and Gynecology International*, 2021. https://doi.org/10.1155/2021/5522229
- Mohebi, S., Parham, M., Sharifirad, G., & Gharlipour, Z. (2018). *Social Support and Self Care Behavior Study. January*, 1–6. https://doi.org/10.4103/jehp.jehp
- Nurmiaty, N., Aji, R., A. A, A., Syafar, M., Aswita, A., & Dolofu, M. (2023). The Effect of Lactation Education on Self-Efficacy of Breastfeeding Mothers. *Asian Journal of Healthy and Science*, 2(4), 168–175. https://doi.org/10.58631/ajhs.v2i4.40
- O'Sullivan et al. (2018). A feasibility study of a multidimensional breastfeeding-support intervention in Ireland. *Midwifery*, 58. https://doi.org/https://doi.org/10.1016/j.midw.2017.12.018
- Quintero, et al. (2020). The associative underpinnings of negative urgency and its role in problematic gambling behavior. Addictive Behaviors. *Addictive Behaviors*, 111. https://doi.org/https://doi.org/10.1016/j.addbeh.2020.106533
- Rhodes, E. C., Damio, G., LaPlant, H. W., Trymbulak, W., Crummett, C., Surprenant, R., & Pérez-

- Escamilla, R. (2021). Promoting equity in breastfeeding through peer counseling: the US Breastfeeding Heritage and Pride program. *International Journal for Equity in Health*, 20(1), 128. https://doi.org/10.1186/s12939-021-01408-3
- Santamaría- Martín, M. J., Martín-Iglesias, S., Schwarz, C., Rico-Blázquez, M., Portocarrero-Nuñez, J. A., Diez-Izquierdo, L., Llamosas-Falcón, L., Rodríguez-Barrientos, R., Del-Cura-González, I., Martín-Llorente, F., Casero-Perona, L., Plasencia-Plasencia, P., Sánchez-Méndez, M. Y., Santamaría-Medrano, P., Mielgo-Salvador, R., Cañón-Cañón, C., Valor-Sánchez, D., Fernández-Fernández, R., López-Lozano, S., ... Verdugo-Hernández, R. (2022). Effectiveness of a group educational intervention prolact in primary care to promote exclusive breastfeeding: a cluster randomized clinical trial. *BMC Pregnancy and Childbirth*, 22(1), 1–12. https://doi.org/10.1186/s12884-022-04394-8
- Shofiya, D., Sumarmi, S., & Ahmed, F. (2020). Nutritional status, family income and early breastfeeding initiation as determinants to successful exclusive breastfeeding. *Journal of Public Health Research*, 9(2), 110 112. https://doi.org/10.4081/jphr.2020.1814
- Sulasmi, S., Mufdlilah, M., & Rosyida, L. (2021). Factors affecting the failure of exclusive breastfeeding practice: a scoping review. *Journal of Health Technology Assessment in Midwifery*, 4(2), 117–129. https://doi.org/10.31101/jhtam.2093
- UNICEF. (2023). *Global breastfeeding scorecard 2023*. https://www.unicef.org/documents/global-breastfeeding-scorecard-2023
- Vaz, J. S., Maia, M. F. S., Neves, P. A. R., Santos, T. M., Vidaletti, L. P., & Victora, C. (2021). Monitoring breastfeeding indicators in high-income countries: Levels, trends and challenges. *Maternal and Child Nutrition*, 17(3). https://doi.org/10.1111/mcn.13137
- Wati, N. H., & Muniroh, L. (2018). Pengaruh Kelompok Pendukung Air Susu Ibu (Kp-Asi) Terhadap Perilaku Pemberian Asi Eksklusif Dan Status Gizi Bayi 6-12 Bulan. *Media Gizi Indonesia*, 13(1), 33. https://doi.org/10.20473/mgi.v13i1.33-40
- WHO. (2023). World Breastfeeding Week. https://www.who.int/indonesia/news/events/world-breastfeeding-week/2023