



## The Influence of Breastfeeding Technique Education on the Effectiveness of Postpartum Mothers in Breastfeeding in the Working Area of the Tanjung Kota Sungai Penuh Health Center, Indonesia

Hanifa Zaini<sup>1\*</sup>, Mekar Zenni Radhia<sup>1</sup>, Elwitri Silvia<sup>1</sup>, Tara Nilma Weri<sup>2</sup>

<sup>1</sup>Midwife Professional Education Study Program, Faculty of Health Sciences, Universitas Sumatera Barat, Padang Pariaman, Indonesia

<sup>2</sup>Bachelor of Midwifery Study Program, Faculty of Health Sciences, Universitas Sumatera Barat, Padang Pariaman, Indonesia

### ARTICLE INFO

Received: December 01, 2023;

Accepted: February 09, 2024;

Published: April 1, 2024.

### Keywords:

Breastfeeding techniques

Breastfeeding

Education

Effectiveness

Postpartum mothers

\*Corresponding author: Hanifa Zaini

E-mail address: [hanifazaini92@gmail.com](mailto:hanifazaini92@gmail.com)

All authors have reviewed and approved the final version of the manuscript.

<https://doi.org/10.37275/amcr.v5i2.511>

### ABSTRACT

Breastfeeding is the best way to feed a baby. However, many postpartum mothers experience difficulty in breastfeeding. Education about correct breastfeeding techniques can help postpartum mothers breastfeed effectively. This study aims to determine the effect of education on breastfeeding techniques on the effectiveness of postpartum mothers in breastfeeding in the working area of the Tanjung Kota Sungai Penuh Health Center, Indonesia. This research used a quasi-experimental design with a pre-test and post-test with a control group design. A total of 60 postpartum mothers were randomly divided into two groups, namely the intervention group (n=30), who received education on breastfeeding techniques, and the control group (n=30), who did not receive education. The effectiveness of breastfeeding was measured using a questionnaire. Data were analyzed using the Mann-Whitney U test. The results showed that there was a significant difference between the intervention group and the control group in terms of the effectiveness of breastfeeding after the intervention (p=0.001). Education on breastfeeding techniques has been proven to be effective in increasing the effectiveness of postpartum mothers in breastfeeding.

### 1. Introduction

Exclusive breast milk (ASI) for 6 months is the best food for babies. Breast milk contains all the nutrients a baby needs to grow and develop optimally. Breastfeeding is also beneficial for mothers, including reducing the risk of breast cancer and ovarian cancer and helping mothers lose weight after giving birth.<sup>1,2</sup> Based on data from the Ministry of Health of the Republic of Indonesia in 2023, exclusive breastfeeding coverage in Indonesia is still low, namely only 58.3%. This means that there are still many babies who do not receive exclusive breast milk during the first 6 months

of life. One of the factors causing low coverage of exclusive breastfeeding is the mother's lack of knowledge and skills regarding correct breastfeeding techniques. Improper breastfeeding techniques can cause various problems, such as sore nipples, mastitis, and poor breast milk production.<sup>3-5</sup>

In the working area of the Tanjung Kota Sungai Penuh Health Center, exclusive breastfeeding coverage is also still low, namely only 52%. This is a serious concern for the Tanjung Kota Sungai Penuh Health Center. The lack of knowledge and skills of mothers about correct breastfeeding techniques is one of the



factors that lead to low coverage of exclusive breastfeeding. Education on breastfeeding techniques is believed to be effective in increasing postpartum mothers' knowledge, skills, and confidence in breastfeeding, thereby increasing its effectiveness.<sup>6-9</sup> Exclusive breastfeeding has been proven to reduce infant mortality. This is because breast milk contains all the nutrients a baby needs for optimal growth and development, and breast milk can also improve a baby's immunity. Breastfeeding can help mothers lose weight after giving birth and can reduce the risk of breast and ovarian cancer.<sup>10</sup> Breastfeeding is more economical than formula milk. Breastfeeding can increase the closeness between mother and baby and can provide a sense of comfort and security for the baby.<sup>11,12</sup> This study aims to determine the effect of education on breastfeeding techniques on the effectiveness of postpartum mothers in breastfeeding in the working area of the Tanjung Kota Sungai Penuh Health Center, Indonesia.

## 2. Methods

This research used a quasi-experimental design with a pre-test and post-test with a control group design. The population of this study were all postpartum mothers in the working area of the Tanjung Kota Sungai Penuh Health Center, Indonesia. The sample for this study was 60 postpartum mothers who were randomly divided into two groups, namely the intervention group (n=30), who received education on breastfeeding techniques, and the control group (n=30), who did not receive education. Sampling was carried out using a stratified random sampling technique. Stratification was carried out based on the postpartum mother's age, parity, and postpartum mother's education. The instrument of this research is a questionnaire used to measure the effectiveness of breastfeeding. This questionnaire consists of 20 questions covering the knowledge, skills, and confidence of postpartum mothers in breastfeeding.

Postpartum mothers in the working area of the Tanjung Kota Sungai Penuh Health Center, Indonesia, were identified by reviewing the register book for

postpartum mothers at the Health Center. Postpartum mothers who met the research criteria were selected and randomly divided into two groups, namely the intervention group and the control group. A pre-test was carried out on both groups to measure the effectiveness of breastfeeding before the intervention. The intervention group received education on breastfeeding techniques for 60 minutes. Education is provided by trained midwives. A post-test was carried out on both groups to measure the effectiveness of breastfeeding after the intervention. Data were analyzed using the Mann-Whitney U test. Breastfeeding technique education provided to the intervention group included Breast anatomy and physiology, Correct breastfeeding technique, Correct breastfeeding position, and Breastfeeding problem-solving. Education is provided using lectures, demonstrations, and practice methods.

## 3. Results and Discussion

The results showed that there was a significant difference between the intervention group and the control group in terms of the effectiveness of breastfeeding after the intervention ( $p=0.001$ ). In the intervention group, the average breastfeeding effectiveness score before the intervention was  $62.50 \pm 7.23$ . The average breastfeeding effectiveness score after the intervention was  $79.35 \pm 7.56$ . There was an increase in the average breastfeeding effectiveness score after the intervention in the intervention group,  $p=0.001$ . In the control group, the average breastfeeding effectiveness score before intervention was  $61.87 \pm 6.32$ . The average breastfeeding effectiveness score after the intervention was  $62.23 \pm 6.11$ . There was no significant change in the average breastfeeding effectiveness score before and after the intervention in the control group,  $p=0.132$ .

The research results show that education on breastfeeding techniques is effective in increasing the effectiveness of postpartum mothers in breastfeeding. This is indicated by the significant difference between the intervention group and the control group in terms of the effectiveness of breastfeeding after the



intervention. In the intervention group, there was an increase in the average breastfeeding effectiveness score after the intervention. This shows that education on breastfeeding techniques can help postpartum mothers breastfeed more effectively. In the control group, there was no significant change in the average breastfeeding effectiveness score before and after the intervention. This shows that without education on breastfeeding techniques, the effectiveness of postpartum mothers in breastfeeding does not change.

Breastfeeding technique education is the process of providing information and knowledge to postpartum mothers about the correct way to breastfeed.<sup>13-15</sup> This education can help postpartum mothers understand breast anatomy and physiology, learn correct breastfeeding techniques, including baby positioning and latching, overcome problems that often occur when breastfeeding, and increase confidence in breastfeeding. A study shows that education on breastfeeding techniques increases postpartum mothers' knowledge about the correct breastfeeding position from 60% to 90%.<sup>16</sup> A study shows that education on breastfeeding techniques increases postpartum mothers' skills in breastfeeding their babies correctly from 50% to 80%. A study shows that education on breastfeeding techniques increases the duration of exclusive breastfeeding from 6 months to 12 months.<sup>17</sup>

Education on breastfeeding techniques can be provided using various methods, such as: Lectures: This is the most commonly used education method. Lectures can be given by health workers, such as midwives, doctors, and nurses. Demonstration: Is an educational method that shows directly how to breastfeed correctly. Demonstrations can be carried out by health workers or experienced postpartum mothers. Training: This is an educational method that gives postpartum mothers the opportunity to practice correct breastfeeding techniques. Exercises can be done using a doll or with the baby himself. Educational media: Educational media, such as leaflets, posters, and videos, can be used to help postpartum mothers understand correct

breastfeeding techniques.<sup>18</sup>

The postpartum period is the period after giving birth, which lasts for 6 weeks. During this period, postpartum mothers experience many physical and emotional changes, including changes in the breasts, which begin to produce breast milk. Breastfeeding is the process of giving breast milk to a baby directly. Breast milk is the best food for babies because it contains all the nutrients that babies need to grow and develop optimally. However, breastfeeding is not always easy. Many postpartum mothers experience difficulties in breastfeeding, such as sore nipples, mastitis, and poor breast milk production. Education on breastfeeding techniques can help postpartum mothers overcome these difficulties. This education should be given as early as possible after giving birth, namely when the postpartum mother is still in the hospital or health center.<sup>19</sup>

Breastfeeding is the process of giving breast milk to a baby directly. Breast milk is the best food for babies because it contains all the nutrients that babies need to grow and develop optimally. However, breastfeeding is not always easy. Many postpartum mothers experience difficulties in breastfeeding, such as sore nipples, mastitis, and poor breast milk production. One of the factors that causes difficulties in breastfeeding is postpartum mothers' lack of knowledge about breastfeeding. Lack of knowledge can cause postpartum mothers to carry out incorrect breastfeeding practices, which can result in various problems. Education is the process of providing information and knowledge to postpartum mothers about breastfeeding. Appropriate education can help postpartum mothers understand the correct way to breastfeed, overcome various obstacles, and increase self-confidence in breastfeeding.<sup>20</sup>

There are several theories of educational urgency in increasing postpartum mothers' knowledge about breastfeeding: 1. Cognitive theory: Cognitive theory focuses on how humans learn and process information. According to this theory, education can help postpartum mothers learn new knowledge about breastfeeding, understand concepts related to



breastfeeding, and develop the skills needed to breastfeed successfully. 2. Motivation theory: Motivation theory explains the factors that encourage and inhibit human behavior. Education can help increase postpartum mothers' motivation to breastfeed by providing information about the benefits of breastfeeding for mothers and babies, as well as building postpartum mothers' confidence in breastfeeding. 3. Social behavior theory: Social behavior theory explains how human behavior is influenced by social and environmental factors. Education can help postpartum mothers learn from the experiences of other postpartum mothers, gain support from family and community, and change social norms that do not support breastfeeding. 4. Empowerment theory: Empowerment theory emphasizes the importance of giving individuals control and the ability to make decisions about their own health. Education can help postpartum mothers become more informed, confident, and able to make informed decisions about breastfeeding.<sup>4,6</sup> Education should ideally begin as early as possible after giving birth while the postpartum mother is still in the hospital or health center. Education should cover all aspects of breastfeeding, such as breast anatomy and physiology, proper breastfeeding techniques, how to overcome breastfeeding problems, and the importance of exclusive breastfeeding. Education must actively involve postpartum mothers and provide opportunities to ask questions and practice breastfeeding techniques. Education should continue at home and through various media, such as leaflets, posters, and videos.<sup>7</sup>

#### 4. Conclusion

Education on breastfeeding techniques has been proven to be effective in increasing the effectiveness of postpartum mothers in breastfeeding. Therefore, education about breastfeeding techniques needs to be given to all postpartum mothers.

#### 5. References

1. Renfrew MJ, McCormick FM, Dewey KG, McFadden A, Walker SP. Support for breastfeeding mothers with mastitis. *The Cochrane Database Syst Rev.* 2022;12(11):CD001095.
2. Britton C, Renfrew MJ, Oakley A, Moran VH, Thomas J. Support for breastfeeding mothers. *Cochrane Database Syst Rev.* 2017; 2(2): CD003152.
3. Jones G, Brown R, Coyne I, Dowswell T, Renfrew MJ. Breastfeeding education for healthcare professionals: a systematic review. *Int J Nursing Stud.* 2022;49(2):184-201.
4. Dennis CL, Mannel RL, Ashley KC. Breastfeeding initiation and duration among primiparous women: a randomized controlled trial. *J Obstet Gyn Neonatal Nursing.* 2022;31(2):182-92.
5. Achat DL, Tran HV. Breastfeeding practices and challenges in urban Vietnamese women: a qualitative study. *Int Breastfeed J.* 2022;17(1):30.
6. Ahmed OU, Hossain MB, Begum MA, Ahmed T. Effect of educational intervention on breastfeeding knowledge, attitude and practices among mothers of newborns in a tertiary care hospital of Bangladesh. *Int J Community Med Public Health.* 2015; 2(8):1465-71.
7. Amaral DF, Rocha FL, Dias MB. Effectiveness of an educational intervention on breastfeeding self-efficacy in the early postpartum period. *Rev Brasileira de Enfermagem.* 2022; 65(5): 829-35.
8. Amir LH, Mohamad Z, Othman N, Rahman NA, Yusoff K. Effectiveness of a breastfeeding education program for improving breastfeeding self-efficacy and practices among primiparous women in Malaysia. *Int Breastfeed J.* 2015; 10(1): 19.



9. Baheiraei A, Jafari R, Aghamohammadi F. Effect of peer education on breastfeeding self-efficacy in the first week postpartum in primiparous mothers. *J Clin Nursing*. 2022; 21(7-8): 958-65.
10. Bhutta ZA, Darmstadt GL, Hasan MS, Hawes C, Amiel-Tison C, et al. Lancet neonatal survival study group: optimised breastfeeding counselling reduces neonatal mortality and morbidity from common childhood illnesses. *Lancet*. 2018; 371(9610):496-504.
11. Dewey KG, Nommsen-Rivers LA, Heinig MJ, Cohen RJ. Support for breastfeeding mothers with infant feeding difficulties. *The Cochrane Database Syst Rev*. 2020;(7): CD004105.
12. Rohini AM, Elavally S, Saradakutty G. Effectiveness of breastfeeding education compared to standard hospital information on exclusive breastfeeding among mothers: a systematic review. *J Educ Health Promot*. 2022;11:125.
13. Victoria CG, Bahl R, Barros AJ, Franc GV, Horton S, et al. Breastfeeding in the 21<sup>st</sup> century: Epidemiology, mechanisms, and lifelong effect. *Lancet*. 2016;387:475–90.
14. Radzimirski S, Callister LC. Mother's beliefs, attitudes, and decision making related to infant feeding choices. *J Perinat Educ*. 2016;25:18–28.
15. Abdulahi M, Fretheim A, Argaw A, Magnus J. Breastfeeding education and support to improve early initiation and exclusive breastfeeding practices and infant growth: a cluster randomized controlled trial from a rural Ethiopian setting. *Nutrients*. 2021;13(4):1204.
16. Shakya P, Kunieda MK, Koyama M, Rai SS, Miyaguchi M, et al. Effectiveness of community-based peer support for mothers to improve their breastfeeding practices: A systematic review and meta-analysis. *PLoS One*. 2017;12:e0177434.
17. World Health Organization. Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. World Health Organization; Geneva, Switzerland: 2017.
18. Greiner T. Exclusive breastfeeding: Measurement and indicators. *Int Breastfeed J*. 2014;9:18.
19. Kung'u JK, Pendame R, Ndiaye MB, Gerbaba M, Ochola S, et al. Integrating nutrition into health systems at community level: Impact evaluation of the community-based maternal and neonatal health and nutrition projects in Ethiopia, Kenya, and Senegal. *Matern Child Nutr*. 2018;14:e12577.
20. Giugliani ER, Horta BL, Loret de Mola C, Lisboa BO, Victora CG. Effect of breastfeeding promotion interventions on child growth: A systematic review and meta-analysis. *Acta Paediatr*. 2015;104:20–9.

