

## The effectiveness of breastfeeding technique guidance on the ability of primipara postpartum mothers to provide breastfeeding

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### **Abstract:**

Low breastfeeding in infants is a serious threat to the baby's development as the next generation. Failure to breastfeed due to lack of understanding and ability in breastfeeding techniques. The importance of maternal care in postpartum as an effort to avoid it. The purpose of this study was to identify the influence of breastfeeding techniques guiding postpartum mothers' breastfeeding ability. This research is a pre-experiment with ne Group Pretest Posttest. The population in this study were all postpartum primipara mothers treated at Aura Syifa Kediri Hospital with 32 respondents. Sampling technique using simple random sampling with a sample of 30 respondents. The data collection instrument uses a checklist sheet. Data analysis using the Wilcoxon Match Pairs Test. The results obtained Z Count (4.782) > Z Table (1.645), there are effects of breastfeeding guidance technique towards postpartum primipara mothers' breastfeeding ability in Aura Syifa's Hospital. The study recommended that the breastfeeding technique guidance method be implemented as an intervention to improve breastfeeding programs.

### **Keywords:**

breast milk; breastfeeding; postpartum; primipara



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## INTRODUCTION

Many relatively inexpensive and easily implemented interventions can improve neonatal health and survival. One important example is early initiation of breastfeeding (EIBF) and exclusive breastfeeding. Early breastfeeding provides significant benefits for both mothers and infants. For infants, breastfeeding plays a vital role in promoting growth, health, and survival, as breast milk provides essential nutrients and antibodies. For mothers, breastfeeding can reduce morbidity and mortality by stimulating uterine contractions, thereby decreasing the risk of postpartum hemorrhage.

The Indonesian Health Survey (SKI) is an integrated survey combining the Basic Health Research (Riskesdas) and the Indonesian Nutritional Status Survey (SSGI). The 2023 SKI was conducted to evaluate the achievements and outcomes of health development programs over the previous five years in Indonesia and to measure annual trends in the nutritional status of children

under five from 2019 to 2024. The data generated by this survey serve as health status indicators at both the national and Regency/City levels.

The availability of data and information related to health development achievements is essential for the Ministry of Health and provincial and Regency/City governments as a basis for formulating policies, programs, and future development activities that are evidence-based, well-directed, and accurately targeted, including the preparation of the National Medium-Term Development Plan (RPJMN 2024–2029) by the Ministry of National Development Planning/Bappenas. To ensure the provision of valid and accurate data, the Health Development Policy Agency (BKPK) collaborated with the Central Statistics Agency (BPS) in developing the methodology and sampling framework for the 2023 SKI. In addition, BKPK collaborated with cross-program sectors within the Ministry of Health, the World Health Organization, and the World Bank to develop survey instruments, guidelines, and reporting procedures.

18 provinces have not yet achieved the national target coverage, including East Java. In East Java, the proportion of mothers initiating breastfeeding within 1 hour of birth was 33.5%, while initiation within 1–6 hours was also 33.5%, and initiation within 7–23 hours was 3.3%. Based on Regency/City data, the exclusive breastfeeding coverage in East Java in 2023 was 74%. Overall, this achievement had not yet met the established target of 77%. Fifteen districts/cities achieved the target, whereas 23 districts/cities did not. One area that failed to meet the target was Kediri, with an exclusive breastfeeding coverage rate of 62% (East Java Health Profile, 2023). Low rates of breastfeeding among infants represent a serious threat to infant growth and development, particularly as infants constitute the future generation of the nation.

Breastfeeding can be more easily achieved when mothers receive adequate information from health workers about appropriate breastfeeding techniques. Breastfeeding skills are essential for mothers, and support from healthcare professionals is necessary to ensure effective, comfortable breastfeeding. Inadequate breastfeeding ability can be addressed through interventions by healthcare workers, including counseling, education regarding the benefits of breastfeeding, and assistance with breastfeeding techniques for postpartum mothers.

Based on a preliminary study, the total number of deliveries at Aura Syifa Hospital during the last four months, from September to December 2024, was 519 deliveries. Of these, 346 deliveries (67%) were normal vaginal births. The average number of mothers giving birth normally at Aura Syifa Hospital, Kediri was 87 per month. Researchers also observed breastfeeding mothers at the hospital over a two-week period from January 15 to January 29, 2025. During this period, 28 primiparous postpartum mothers were enrolled, and 13 (46%) did not breastfeed their infants on the first postpartum day and instead chose formula feeding because the infants cried frequently and breast

milk production was perceived as inadequate. Further assessment revealed that 11 mothers used incorrect breastfeeding positions or improper infant attachment techniques.

The preliminary study indicated that breastfeeding technique is a crucial component of successful breastfeeding because it can reduce breastfeeding-related problems. Therefore, guidance regarding appropriate breastfeeding techniques should be provided from the early postpartum period to improve breastfeeding success in subsequent days. This phenomenon encouraged the researchers to investigate the effectiveness of breastfeeding technique assistance on the breastfeeding ability of primiparous postpartum mothers.

## METHODS

This study employed a pre-experimental one-group pretest–posttest design. The study population consisted of all primiparous postpartum mothers at Aura Syifa Hospital, totaling 32 respondents. A sample of 30 respondents was selected using a sampling technique. The data in this study were collected from June 7 to June 25, 2025. On the first day, a pre-test was conducted on the ability to provide breast milk. They were then given guidance on breastfeeding techniques. On the second day, they were given further guidance on breastfeeding techniques, followed by a post-test on breastfeeding skills. Data were collected using a checklist instrument. Statistical analysis was performed using the Wilcoxon Matched Pairs Test. Data collection was conducted from the first to the second day of the postpartum period, and the study was carried out over a one-month period.

## RESULTS

Table 1 shows that most respondents were aged 20–35 years, comprising 24 respondents (80%), while respondents aged <20 years and >35 years each accounted for 3 respondents (10%). Based on educational background, most respondents had completed senior high school education, accounting for 16 respondents (53.3%). This was followed by junior high school graduates (8 respondents, 26.7%), college graduates (4 respondents, 13.3%), and elementary school graduates (2 respondents, 6.7%). No respondents reported having no formal education. Regarding occupational status, most respondents were housewives, comprising 20 respondents (66.7%). The remaining respondents were private employees (5; 16.7%), self-employed workers (2; 6.7%), civil servants (2; 6.7%), and other occupations (1; 3.3%).

Table 1. Characteristics of respondents in the Blabak Community Health Center Work Area, Kediri Regency

Characteristics	Frequency	Percentage
<b>Age</b>		
< 20 years	3	10
20 - 35 years	24	80
> 35 years	3	10
<b>Education</b>		
No school	0	0
Elementary school	2	6.7
Junior high school	8	26.7
Senior high school	16	53.3
College	4	13.3
<b>Work</b>		
Housewife	20	66.7
Private employees	5	16.7
Self-employed	2	6.7
civil servant	2	6.7
Other	1	3.3

Table 2. The Effect of Breastfeeding Technique Assistance on Mothers' Ability to Provide Breast Milk Postpartum Primipara

	Before guidance		After guidance		z score
	Frequency	Percentage	Frequency	Percentage	
<b>Breastfeeding Ability</b>					
High	2	6.7	25	83.3	-4.782
Moderate	15	50	5	16.7	
Low	13	43.3	0	0	

Table 2 shows that 15 respondents (50%) demonstrated moderate breastfeeding ability prior to receiving assistance with breastfeeding techniques. After receiving assistance with breastfeeding techniques, most respondents demonstrated high breastfeeding ability, accounting for 25 respondents (83.3%). Prior to receiving assistance with breastfeeding techniques, the breastfeeding ability of primiparous postpartum mothers was predominantly in the moderate category, with 15 respondents (50%), followed by the low category, with 13 respondents (43%). After receiving assistance regarding correct breastfeeding techniques, the breastfeeding ability of primiparous postpartum mothers improved, as indicated by the reduction in the number of respondents in the low and moderate categories. The low category decreased to 0 respondents, while the moderate category decreased to 5 respondents. Conversely, the number of respondents in the high category increased substantially from 2 to 25.

The statistical analysis yielded a Z value of -4.782. Since the Wilcoxon test uses absolute values, the negative sign was disregarded. The critical Z table value at a significance level ( $\alpha$ ) of

0.05 was 1.645. Therefore, because the calculated Z value (4.782) was greater than the Z table value (1.645). These findings indicate that assistance with breastfeeding technique was highly effective in improving breastfeeding ability among primiparous postpartum mothers.

## DISCUSSION

The results of the Wilcoxon Matched Pairs Test examining the effect of breastfeeding technique assistance on breastfeeding ability among primiparous postpartum mothers showed that the calculated Z value was greater than the Z table value ( $4.782 > 1.645$ ). These findings indicate that assistance with breastfeeding technique significantly improved the breastfeeding ability of primiparous postpartum mothers.

Before receiving assistance with breastfeeding techniques, 50% of respondents (15 mothers) demonstrated moderate breastfeeding ability, while 43.3% (13 mothers) demonstrated low breastfeeding ability. These findings indicate that, overall, the respondents had a moderate level of breastfeeding ability. Respondents categorized as having high breastfeeding ability accounted for 6.7% (2 mothers), both of whom had attained higher education. Educational level greatly influences an individual's mindset and behavior in receiving and applying information; therefore, respondents with higher educational attainment may more easily understand and implement breastfeeding techniques. Insufficient information may lead mothers to decide not to breastfeed their infants and instead provide formula milk. Furthermore, inadequate knowledge may result in mothers being unable to breastfeed effectively, thereby limiting the infant's breast milk intake.

Mentoring is an activity that includes coaching, teaching, and guidance, aimed at helping individuals recognize their potential and maximize their abilities. Since the pretest results showed that breastfeeding ability remained moderate, providing education and assistance on breastfeeding techniques was considered necessary to improve mothers' breastfeeding skills. One approach to achieving this objective is through structured mentoring.

After receiving assistance with breastfeeding techniques, 25 mothers (83.3%) demonstrated breastfeeding ability in the high category, while 5 mothers (16.7%) remained in the moderate category. No respondents were categorized as having low breastfeeding ability. These findings indicate a substantial improvement in breastfeeding ability following the intervention, as reflected in the increase in respondents in the high category and the decrease in the moderate and low categories.

Posttest observations showed that mothers' errors in breastfeeding techniques decreased significantly. Of the 30 respondents, 97% (29 mothers) correctly held and positioned their infants

during breastfeeding. The infants were held with appropriate support behind the shoulders using one hand, with the infant's head resting on the mother's elbow. One of the infant's hands was positioned behind the mother's body and the other in front, while the infant's ears and arms were aligned in a straight line.

Meanwhile, the five respondents who remained in the moderate category after receiving assistance were found to have incomplete breastfeeding practices. Some mothers expressed a small amount of breast milk and applied it to the nipple before breastfeeding, while others did not burp the infant after breastfeeding and instead put the infant to sleep immediately.

The success of the mentoring intervention was also supported by several factors, including educational level and the educational methods applied. The study found that 53.3% (16 mothers) of respondents had completed senior high school education, and most demonstrated good breastfeeding positioning and attachment techniques. Although a small proportion of mothers with a senior high school background still demonstrated moderate breastfeeding ability, all mothers with a college education background achieved high breastfeeding ability. This may be attributed to the ease with which highly educated mothers understood the information provided by healthcare workers. Education significantly influences an individual's capacity to receive, process, and implement information effectively.

The educational method applied in this study involved individual mentoring and health education. This approach increased interaction between mothers and healthcare providers, enabling mothers' problems to be identified and addressed more effectively. Following breastfeeding technique assistance, mothers' breastfeeding ability improved substantially. The findings demonstrated that 25 of 30 respondents (83.3%) achieved high breastfeeding performance after the intervention, indicating that most mothers experienced improvement in their breastfeeding performance.

The mentoring intervention provided to postpartum mothers improved breastfeeding skills. This finding is consistent with the purpose of mentoring, which is to help individuals recognize and maximize their potential. Mentoring enables individuals to adopt better practices and improve previously inadequate skills.

Mothers paid close attention to the directions and guidance provided during the mentoring process. Researchers also reinforced and reminded mothers of the techniques taught. Mothers require adequate information to improve their knowledge and ensure successful breastfeeding. Such information is generally obtained from healthcare workers. Health professionals at healthcare facilities where mothers give birth can provide education regarding postpartum care, particularly

breastfeeding practices. Educational interventions may include demonstrations, leaflets, posters, breastfeeding support programs, and direct health education (Rahmawati et al., 2024).

Guidance regarding appropriate breastfeeding techniques is highly beneficial and should receive serious attention because breastfeeding is essential for optimal infant growth and development. Every mother should receive guidance and instruction from midwives or healthcare professionals to improve her understanding of correct breastfeeding techniques. Incorrect breastfeeding techniques may result in complications during breastfeeding, including inadequate milk production and ineffective milk flow (Durmazoglu, 2021).

In contrast, other studies have reported that mothers who receive strong support from their husbands during the postpartum period tend to have higher breastfeeding success rates. Conversely, husbands who are younger and have lower educational levels may provide less support during breastfeeding. In addition to social support, teaching mothers' yoga practices may benefit both maternal and infant physical and psychological health, thereby positively influencing breastfeeding and maternal attachment during the postpartum period (Boybay, 2022).

Other studies have demonstrated that breastfeeding education websites can significantly improve primiparous mothers' breastfeeding self-efficacy during exclusive breastfeeding. By providing accurate and evidence-based information, these websites help mothers approach breastfeeding with greater confidence. Therefore, breastfeeding education websites are recommended as part of support programs for primiparous pregnant women, particularly regarding correct breastfeeding techniques (Falah K, 2025).

## CONCLUSION

It can be concluded that, before receiving assistance with breastfeeding techniques, most respondents demonstrated moderate breastfeeding ability. After receiving assistance with breastfeeding techniques, most respondents demonstrated high breastfeeding ability. Therefore, breastfeeding technique assistance was found to be highly effective in improving breastfeeding ability among primiparous postpartum mothers. It is recommended that healthcare workers, particularly midwives and nurses, provide continuous guidance and support on correct breastfeeding techniques for primiparous postpartum mothers from the early postpartum period onward. Breastfeeding education should be integrated into routine maternal and child health services through demonstrations, individual mentoring, and practical training to improve mothers' breastfeeding ability and confidence.

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