

## EFFECTIVENESS OF PROVIDING BREAST CARE EDUCATION ON MOTHER SKILLS IN BREASTFEEDING MOTHERS

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### ABSTRACT

Breast care is essential for every pregnant mother to ensure smooth breast milk production. With sufficient breast milk production, the baby's nutritional adequacy will be met. Breast care is an important thing to pay attention to in preparation for breastfeeding, because the breast is an important organ that produces breast milk. This research aims to evaluate and determine the extent to which providing breast care education can improve mothers' skills. The quantitative research method uses a pre-experimental method, using a one-group pretest-posttest approach. a population of 500 respondents with a purposive sampling technique was 83 respondents with the criteria of breastfeeding mothers 0-6 months (exclusive breastfeeding) in the work area of the Kalibaru Kulon Community Health Center. Data was collected in the form of breast care SOPs and checklist sheets according to the SOP. The statistical test results of the Wilcoxon test are known as Asymp.sig. (2-tailed) has a value of  $.000 < 0.05$ , it is concluded that there is an influence of breast care education on maternal skills in breastfeeding mothers in the working area of the Kalibaru Kulon Community Health Center. Providing breast care education regarding maternal skills to breastfeeding mothers is very important to facilitate the release of breast milk, and helps increase blood flow and keep the milk ducts from becoming blocked, helping to keep the breasts and nipples healthy and clean.

**Keywords:** Education; Breast Care; Skill Mother

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### INTRODUCTION

During the lactation period, if breast care is not carried out, the flow of breast milk can be disrupted and not flow smoothly, which can trigger mastitis and also have an impact on the baby, such as the baby's growth and development (Retnaningtyas et al., 2022). According to Amalia (2020) When preparing to give breast milk, breast care must be carried out properly, because the baby's food needs must be met through breast milk from zero days to six months of age (Febriani & Caesarrani, 2023).

The number of babies receiving exclusive breast milk in 2022 will be 61.5%. This success reaches the program target of 45% (Kementrian Kesehatan RI, 2022). Meanwhile, data for East Java province in 2022 is 73.3%. Data on exclusive breastfeeding coverage in Banyuwangi district in 2021 is 90%, in 2022 it is 75% (Dinkes Jatim, 2022).

One of the reasons why someone cannot breastfeed their baby is that the process of producing breast milk is not smooth (Diniyati et al., 2019). The reason mothers in Kolaka district do not breastfeed their babies is that their breast milk production is not coming out or sufficient, as much as 65,7% (Niar et al., 2021). The mother's ignorance about breast care can hinder the breastfeeding process (Kurniawaty et al., 2023). Increasing maternal knowledge and skills through appropriate information and support from health workers can influence maternal behavior in providing breast care (Citrawati et al., 2020). Taking good care of your breasts during breastfeeding helps prevent and manage the risk of breast problems and makes breastfeeding more enjoyable for both mother and baby (Nurahmawati et al., 2021).

One way to improve mothers' skills in maintaining good breast condition when breastfeeding is by providing education about breast care (Sinurat et al., 2021). Breast care helps increase blood flow and keeps the milk ducts from getting blocked, helping to keep the breasts and nipples healthy and clean (Diniyati et al., 2019). A person should prepare themselves from the beginning of pregnancy and after delivery by removing crusts on the nipples to help facilitate breastfeeding (Wati et al., 2022). For women, breast care is performed at least twice a day on the first and second days after giving birth (Ningsih & Arlyn, 2023). This research aims to evaluate and find out the extent to which providing breast care education can improve maternal skills in breastfeeding mothers in the Kalibaru Kulon Community Health Center working area.

## **METHODS**

### ***Study Design***

This research is quantitative with a pre-experimental method, using a one group pretest-posttest approach.

### ***Setting***

The research location is in the Kalibaru Kulon Community Health Center work area which will be carried out from August to September 2024.

### ***Research Subject***

The technique used for sampling was purposive sampling with the criteria of breastfeeding mothers 0-6 months (exclusive breastfeeding). A total of 83 respondents with a population of 500 in the working area of the Kalibaru Kulon Community Health Center. The variables in this research are breast care education as an independent variable and mother's skills as a dependent variable.

### ***Instruments***

The instruments used were only standard operating procedures (SOP) for breast care and a checklist sheet according to standard operating procedures (SOP) to ensure whether the mother had carried out breast care procedures in accordance with standard operating procedures (SOP).

### ***Intervention***

Of all respondents, breast care skills were measured twice by adjusting the checklist sheet by standard operational procedures, namely before and after a breast care demonstration by the researcher. All respondents, 83 respondents took a pre-test on breast care knowledge, then took a demonstration of how to care for breasts, and then all respondents took a post-test, where the research was conducted in one group.

### Data Analysis

The analysis test used was the Wilcoxon test because the data was not normally distributed with a result of 0.000 using the Kolmogorov Smirnov test.

### Ethical Consideration

This research has passed the ethical feasibility test by Stikes Banyuwangi with number: 259/03/KEPK-STIKESBWI/VII/2024.

## RESULTS

### 1. Respondent characteristics

**Table 1.** Frequency distribution of respondents according to age groups

Category	Frequency	Percentage
Age		
<20	8	9,6
20-35	52	62,7
>35	23	27,7
Total	83	100
Occupation		
Housewife	75	90,4
Farmer	3	3,6
Self-employed	4	4,8
Labor	1	1,2
Total	83	100
Education		
ES	37	44,6
JHS	21	37,3
SHS	15	18,1
Total	83	100
Number of children		
One	33	39,8
Two	39	47,0
Three	11	13,3
Total	83	100

Based on table 1, the majority of respondents were aged between 20 -35 years, namely 52 (62.7%) respondents with the majority of respondents' occupation being housewives, 75 (90.4%) of the respondents with the most education were elementary school graduates with a total of 37 (44.6%) people and the majority of mothers had two children, 39 (47%).

### 2. Characteristics of respondents before being given breast care education

**Table 2.** Results of pre-test and post-test breast care

Category	Frequency	Percentage
<i>Pre-Test</i> breast care		
Less	47	56,6%
Enough	29	34,9%
Good	7	8,7%
Total	83	100%
<i>Post-test</i> breast care		
Less	2	2,4%
Enough	20	24,1%
Good	61	73,5%
Total	83	100%

The results of the analysis in table 2 above show that the pre-test breast care got the most results with poor scores as many as 47 people with (56.6%) while the post-test breast

care got the most results with good scores as many as 61 respondents with a percentage of 73.5%.

### 3. Wilcoxon test analysis

**Table 3.** Normality test one-sample Kolmogorov-Smirnov test

		Standardized Residual
N		83
Normal parameters <sup>a,b</sup>	Mean	.0000000
	Std. deviation	.99388373
Most Extreme Differences	Absolute	.190
	Positive	.190
	Negative	-.166
Test Statistic		.190
Asymp. Sig. (2-tailed)		.000 <sup>c</sup>

Based on the data normality test, the results obtained were a p value <0.005, meaning the data was not normally distributed.

**Table 4.** Distribution of Wilcoxon test statistics on the effect of breast care education on maternal skills.

		Test Statistics <sup>a</sup>
		Post-test – post-test
Z		-7.827 <sup>b</sup>
Asymp.sig.(2-tailed)		.000

The statistical test results of the Wilcoxon test in table 3 are known to be Asymp.sig. (2-tailed) has a value of  $0.000 < 0.05$ , it is concluded that there is an influence of breast care education on maternal skills in breastfeeding mothers in the Kalibaru Kulon health center working area.

## DISCUSSION

As many as 47 respondents (56.6%), mothers' knowledge and skills in breast care were still lacking. Many breastfeeding mothers lack knowledge and skills regarding breast care.

Factors that influence knowledge and skills are the lack of clear information regarding breast care (Julianti, 2024), and there are also other factors such as level of education, because they influence the way individuals understand the information and knowledge they receive (Rahayu & Ernawati, 2021). Support from the family is also very influential in motivating mothers to carry out breast care (Ginting & Damanik, 2022), and mothers are less active in seeking information about the goals and benefits of breast care (Yulita et al., 2021). In research conducted by Citrawati et al., 2020 Age, education level, occupation, information that has never been received, can influence knowledge.

Mothers' skills in caring for their breasts before training tend to be limited, often based on incomplete or inaccurate information, so that many mothers do not fully understand the importance of proper breast care for the success of the breastfeeding process. As a result, they may have difficulty preventing or managing lactation problems. Many breastfeeding mothers may feel less confident and lack adequate knowledge to care for their breasts properly, which can increase the risk of health problems such as mastitis or suboptimal breast milk production.

After being given education regarding breast care, 61 respondents (73.5%) showed the highest results with good scores.

The knowledge and skills of a breastfeeding mother are very important in carrying out breast care (Sarofah et al., 2021). As breastfeeding mothers become more knowledgeable about breast care, problems often encountered during breastfeeding, such as mastitis and difficulty producing breast milk, will be overcome (Sumaifa, 2024). Breast care is a type of breast care performed during pregnancy or the postpartum period to ensure breast milk production, breast cleanliness, and inverted or flat nipple shape (Nurahmawati et al., 2021). Caring for your breasts while breastfeeding helps prevent and manage the risk of possible breast problems (Septiani et al., 2022). The success of Uswatun et al., 2023 states that knowledge about breast care in pregnant women is sufficient if they have received health education.

After providing health education about breast care, breastfeeding mothers generally experience significant improvements in their ability to maintain breast health. Good education not only helps them identify problems such as engorgement, or blocked milk ducts early, but also provides practical solutions to overcome them. Additionally, knowledge can reduce anxiety and increase self-confidence and contribute positively to the overall breastfeeding experience.

The statistical test results of the Wilcoxon test are known as Asymp.sig. (2-tailed) with a value of  $0.000 < 0.05$ , it was concluded that there was an influence of breast care education on maternal skills in breastfeeding mothers in the working area of the Kalibaru Kulon Community Health Center.

Breast care education is an effort to provide information and understanding to individuals, especially breastfeeding mothers, regarding breast care techniques (Lasanuddin et al., 2022). In providing breast care education using interview and demonstration methods, namely showing the process of movement steps directly, so that respondents can easily remember (Lisa & Putri, 2019). This can facilitate individuals' knowledge and skills in carrying out breast care (Pande et al., 2024). Breast care is the act of caring for the breasts to facilitate the release of breast milk (Agustina, 2022) which can improve blood circulation and prevent blockage of milk ducts (Nurahmawati et al., 2021). This research has similarities with previous research by (Asih, 2021) namely, there is an influence of breast care education on mothers' knowledge during breastfeeding. Supported through the use of educational media such as interviews and demonstrations to increase knowledge of breastfeeding mothers.

Through breast care education, breastfeeding mothers can learn breast massage techniques that help facilitate breast milk production, so that they are more skilled in maintaining healthy lactation. The knowledge gained from breast care education allows breastfeeding mothers to recognize and overcome lactation problems early. And it can also teach breastfeeding mothers about the importance of correct positioning and latching when breastfeeding, which are important skills for preventing nipple pain and ensuring baby gets enough breast milk.

## CONCLUSION

The effectiveness of providing breast care education on maternal skills in breastfeeding mothers has increased in both knowledge and skills. Through breast care education, breastfeeding mothers can learn breast massage techniques that help facilitate breast milk production, so that they are more skilled in maintaining healthy lactation. The knowledge gained from breast care education allows breastfeeding mothers to recognize and overcome lactation problems early and can teach breastfeeding mothers about the importance of correct positioning and latching when breastfeeding, which is an important skill to prevent the risk of mastitis.

## SUGGESTIONS

There are limitations and shortcomings in this research, namely that in collecting data, researchers have to separate breastfeeding mothers who give exclusive breast milk from

breastfeeding mothers who use formula milk. Apart from that, because the research is private, some respondents felt embarrassed when carrying out breast care.

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## DECLARATION OF INTEREST

The author declares that there is no conflict of interest in this research.

## AUTHOR CONTRIBUTION

Each author contributed to determining the topic of the research, formulating the proposal, analyzing and discussing it. The first author collected the data and the second author wrote the article manuscript.

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