

ARTICLE INFORMATION

Received: December, 16, 2024

Revised: January, 09, 2025

Available online: January, 10, 2025

at : <https://ejurnal.malahayati.ac.id/index.php/minh>

Education and training in breast care for postpartum mothers during the Covid-19 pandemic

Marieta Kristina Sulastawati Bai*, Raimunda Woga, Rifatunnisa

Prodi Keperawatan Ende, Poltekkes Kemenkes Kupang

Corresponding author: *E-mail: selvibaigudi@gmail.com

Abstract

Background: Breast care is an activity carried out consciously to maintain breast health during pregnancy and after childbirth in order to prepare for lactation during the postpartum period. Based on a preliminary survey conducted at Ende General Hospital in November 2021, it was found that many mothers were still not skilled in breast care.

Purpose: To determine the effect of breast care training on breast care skills for postpartum mothers during the Covid-19 pandemic.

Method: One Group pretest posttest design, sample selection using purposive sampling technique. The sample obtained was 16 participants. The instrument used in the study was a checklist. The data was then analyzed using univariate analysis which processed the data results in the form of percentages and bivariate analysis using the Wilcoxon test.

Results: Skills before the intervention participants when performing breast care can mostly perform breast care with assistance as many as 9 (56.3%), and after the intervention most participants can perform breast care independently as many as 11 (68.8%).

Conclusion: There is an effect of breast care training on breast care skills in postpartum mothers at Ende Regional Hospital in 2022.

Suggestion: Health workers should improve plans or promotions about the importance of breast care which is useful for increasing breast milk production so that it can help the success of the government program in efforts to provide exclusive breastfeeding.

Keywords: Breast Care Skills; Breast Care Training; Covid-19 Pandemic; Postpartum.

INTRODUCTION

Breast care is an activity carried out consciously to maintain breast health during pregnancy and after childbirth in order to prepare for lactation at postpartum time (Wijayanti, & Setyaningsih, 2016; Pratama, Pitaloka, Wulandari, Annisa, Pratiwi, Suherni, & Indri, 2023; Yousef, 2019). By doing breast care during puerperium, it is hoped that mothers can increase breast milk production by stimulating the mammary glands which can provide the benefits of exclusive breastfeeding for babies, providing body

protection that formula milk does not have (Anggraini, & Dilaruri, 2022).

According to research conducted in Dhaka on 1,667 infants for 12 months, exclusive breastfeeding can reduce the risk of death from acute respiratory infections and diarrhea. According to the World Health Organization (WHO) globally in 2014 only 38% of infants in the world received exclusive breastfeeding for the first 6 months as recommended and according to basic health research in 2013, the coverage of

Education and training in breast care for postpartum mothers during the Covid-19 pandemic

breastfeeding in Indonesia was only 30.2%, this figure is below the target of the Ministry of Health, which is exclusive breastfeeding coverage for infants 0-6 months by 2017 of 80% (Dewi & Sunarsih, 2018; World Health Organization, 2020; Ministry of Health of the Republic of Indonesia, 2013).

In Indonesia in 2010, only a small proportion of postpartum women practiced breast care (breast care) only about 17% of 37 postpartum women and it was caused by the lack of training received about the importance of practicing breast care during the postpartum period (Rambe & Nasution, 2021). In East Nusa Tenggara Province (NTT), the percentage of mothers who do not breastfeed immediately covers 66% due to the lack of maternal care of the breasts to prepare for lactation (East Nusa Tenggara Provincial Health Office, 2018). The number of postpartum mothers in Ende district is 3,861 people and only 45% of them take care of their breasts during the postpartum period (Ende District Health Office, 2020).

Based on data taken from the Ende Regional General Hospital in November 2021, there were 183 postpartum mothers who were breastfeeding (Ende District Health Office, 2021). An initial survey conducted by the author on several postpartum mothers at the Ende Regional General Hospital on November 14, 2021, showed that there were 7 out of 12 postpartum mothers who were not skilled in caring for breasts, and only 5 postpartum mothers were skilled in caring for breasts, so this is a problem that needs immediate handling.

There are several theoretical causal factors that affect breast care: Internal factors are: age, motivation, and family support, External factors are: education, knowledge and occupation (Rosyad, Rochmawati, & Prabawati, 2021; Ouyang, & Nasrin, 2021). In addition, the practical causes found in the lack of breast care are: decreased milk production and milk output, which is influenced by two hormones namely prolactin and oxytocin, prolactin affects the amount of milk production while oxytocin affects milk output (Wahyuni, Andriani, Yanniarti, & Yorita, 2022).

Micro impacts can arise if breast care is not done as early as possible. These impacts include: buried nipples, children have difficulty breastfeeding, breast milk comes out for a long time, limited milk production, dirty breasts, mothers are not ready to breastfeed, breast skin, especially nipples, will easily blister While the Macro Impact is a further impact: Swollen breasts,

inflamed breasts Mastitis and breast abscesses (Prawirohardjo, 2010; Nurahmawati, Mulazimah, Ikawati, Agata, & Pratika, 2021).

This is what underlies the preparation of this study, with the aim of seeing whether there is an effect of breast care training on breast care skills in postpartum women at Ende Regional General Hospital in 2022. Through this study, it is hoped that it can be an evaluation and benchmark for the level of knowledge of postpartum women related to breast care which in turn can provide benefits related to maximum breast milk production for mothers in the postpartum period.

RESEARCH METHOD

This study used a pre-experimental research method with a one group pretest posttest design. The subject group was observed before the intervention, then observed again after the intervention.

This study was conducted at Ende Regional General Hospital in May - July 2022. The population in this study were all postpartum women at Ende Regional General Hospital in 2021. Sampling using purposive sampling technique and obtained 16 participants with inclusion criteria willing to be participants and be at the research site when the research was conducted; and exclusion criteria for postpartum women who have chronic diseases (tuberculosis and malaria), and postpartum women who have a history of post partum bleeding (past bleeding).

Before the intervention was given, researchers monitored the skills of postpartum women when performing breast care. Then provide education and training on breast care, including; Understanding breast care, the right time to care for the breasts, and the correct steps to care for the breasts. Then monitor the skills of postpartum women after breast care training and record the results on the checklist sheet. The data instrument used to determine breast care skills used a questionnaire. Breast care skills were categorized; incapable if the value was 0-33%, with assistance if the value was 34-75%, and independently if the value was 76-100%.

Data analysis used univariate analysis and bivariate analysis with a significance of $\alpha < 0.05$, the distribution used was the Wilcoxon test.

Marieta Kristina Sulastawati Bai*, Raimunda Woga, Rifatunnisa

Prodi Keperawatan Ende, Poltekkes Kemenkes Kupang
Corresponding author: *E-mail: selvibaigudi@gmail.com

DOI: <https://doi.org/10.33024/minh.v7i10.500>

RESEARCH RESULTS

Table 1. Karakteristik of the Participant (N=16)

Variable	Results
Age (n/%) (Mean±SD)(Range)(Year)	(25.19±6.023)(20-45)
20-35 Year	15/93.8
> 35 Year	1/6.2
Education (n/%)	
Elementary School	1/6.2
High School	11/68.8
University	4/25.0
Occupations (n/%)	
Civil Servant	1/6.2
Private Employee	5/31.2
Self-employed	3/18.8
Unemployment	7/43.8

From Table 1, it can be interpreted that the mean and standard deviation of the participants' age is 25.19 ± 6.023 with an age range between 20 and 45 years. The majority had a high school education as many as 11 (68.8%), and were unemployed as many as 7 (43.8%).

Table 2. Before and After Breast Care Skills (N=16)

Variables	Before	After	Negative Rank	Positive Rank	Ties	p-value
Breast Care Skills (n/%)						
Independent	1/6.2	11/68.8	0	14	2	0.000
With Assistance	9/56.3	5/31.2				
Unable to	6/37.5	0/0.0				

Based on table 2, it can be seen that before being given breast care training, most participants 9 (56.3%) can perform breast care with assistance and after being given breast care training, most participants 11 (68.8%) can perform breast care independently.

Based on the results of the analysis through the Wilcoxon test, in the rank table, negative rank is obtained 0 which means that there are no mothers who experience a decrease in skills after breast care training, positive rank 14 which means there are 14 participants who experience an increase in skills after breast care training, and ties 2 which means there are 2 mothers who do not experience changes after

breast care training, while in the test statistics table the p-value is obtained Asymp.Sig (2-tailed): 0.000 where the p value < 0.05 , it can be concluded that H_0 is rejected and H_1 is accepted, meaning that there is an effect of breast care training on breast care skills in postpartum women at Ende Hospital in 2022.

DISCUSSION

Based on table 2, it can be interpreted that most participants (56.3%) performed breast care with assistance. The problem of breast care is caused by the mother not breastfeeding, because the milk does not come out and eventually results in swelling of the

Marieta Kristina Sulastawati Bai*, Raimunda Woga, Rifatunnisa

Prodi Keperawatan Ende, Poltekkes Kemenkes Kupang
Corresponding author: *E-mail: selvibaigudi@gmail.com

DOI: <https://doi.org/10.33024/minh.v7i10.500>

Education and training in breast care for postpartum mothers during the Covid-19 pandemic

breast or what is commonly called Breast Milk dam. Breast milk engorgement is caused by constriction of the ducts which results in swelling due to nipple abnormalities, breast swelling, pain and heat. Swelling usually occurs on the third and fourth day after delivery. If the breasts are still swollen, painful and reddish due to infection, mastitis occurs. Mastitis is an inflammation of the breast, and if it remains swollen with pus, it is called an abscess. A breast abscess is a continuation of mastitis. This is due to widespread inflammation and must be incised to remove (Damanik, 2018; Woodard, Bhatt, Knavel, & Hunt, 2021).

Breast care is often called Breast Care which aims to maintain breast hygiene, increase or accelerate milk production so that there are no difficulties in breastfeeding the baby. This breast care is done by sequencing (Utami, Astutik, Rukmawati, Nurhayati, & Retnoningrum, 2020). Breast care is very important during pregnancy to breastfeeding. This is because the breast is the only producer of breast milk which is the staple food of newborns so it must be done as early as possible (Wulan & Gurusinga, 2017).

Breast care technique skills are skills that are applied so that a person can become a counsellor and motivator to a mother so that the mother wants and can breastfeed her child properly. Breastfeeding is not just giving food to the baby, but at the same time a mother also provides love, a sense of comfort and security as well as chants and hums that can stimulate a child's memory and skills.

According to the researchers, most of the participants were able to perform breast care with assistance, indicating that there are factors that influence postpartum mothers' skills in performing breast care such as maternal age. Most mothers who can perform assisted breast care are 20-35 years old and have secondary education. Mothers' knowledge based on their educational background affects their skills in performing breast care. In addition, occupation is also one of the factors that affect mothers' breast care skills. Almost all participants who can perform assisted care have a job. This shows that there is congruence between facts and theories where age, education and employment factors affect mothers' skills in performing breast care.

After the intervention, most (68.8%) performed breast care independently. Skills are behaviours that are acquired through certain stages of learning. Skills

come from coarse or uncoordinated movements through gradual training, the irregular movements gradually change into smoother movements, through the coordination process of discrimination (difference) and integration (fusion) so as to obtain a skill needed for a specific purpose (Soemarjadi, 2012).

Training is the process of advocating skills and providing the necessary knowledge, as well as attitudes so that they can perform breast care techniques correctly (Agustini, 2014).

According to the researcher, the increase in breast care skills after being given training shows that the training has succeeded in increasing knowledge so that it affects the attitudes and behaviour of participants in carrying out breast care. The factors of age and education of mothers greatly affect the process of receiving information through training. This proves that there is a match between theory and fact where age and education are predisposing factors for behaviour change in participating in the training.

The effect of breast care training on breast care skills in postpartum women can be seen that before being given breast care training most participants (56.3%) can perform breast care with assistance and after being given breast training most participants (68.8%) can perform breast care independently.

Knowledge and skills of postpartum women are greatly influenced by training, so it is hoped that mothers can care for their breasts according to competence, because knowledge or cognitive and skills or psychomotor are very important domains in the formation of a person's behaviour. A person's knowledge is influenced by educational factors, knowledge, experience and information received by a person in the form of health messages through print and electronic media (Notoadmojo, 2013).

Based on the results of the study, 14 participants experienced an increase in breast care skills after being given training. According to the researcher, postpartum mothers who have received training will increase their knowledge when the knowledge increases, the skills they have will increase, if the skills are adequate, a postpartum mother is certainly able and able to take care of her breasts properly and correctly without any mistakes that can have fatal consequences. Scientifically, the mother's skills in breast care can be measured through direct practical tests when the mother is caring for her breasts, from this practice, the skills will be seen.

Marieta Kristina Sulastawati Bai*, Raimunda Woga, Rifatunnisa

Prodi Keperawatan Ende, Poltekkes Kemenkes Kupang
Corresponding author: *E-mail: selvibaigudi@gmail.com

DOI: <https://doi.org/10.33024/minh.v7i10.500>

Education and training in breast care for postpartum mothers during the Covid-19 pandemic

After breast care training for postpartum mothers, it is expected that postpartum mothers have sufficient skills to take care of their own breasts, and the skills gained from training are expected to reduce errors in breast care.

CONCLUSION

The skills before the intervention of participants when performing breast care can mostly perform breast care with assistance, and after the intervention most participants can perform breast care independently. There is an effect of breast care training on breast care skills in postpartum women at Ende Regional General Hospital in 2022.

SUGGESTION

It is expected for breastfeeding mothers to further increase knowledge about breast care that can improve the quality of breast milk which is very beneficial for mothers and babies.

For health workers, it is expected to further improve plans or promotions about the importance of doing breast care that is beneficial to increase breast milk production so that it can help the success of government programmes in efforts to provide exclusive breastfeeding.

For future researchers, it is hoped that the results of this study can be used as a reference in the research plan to be carried out. It can also improve or see the effect of other trainings that are beneficial for breastfeeding mothers.

LIMITATIONS OF THE STUDY

Researchers cannot directly control other factors during the training such as physical factors, emotions and psychological state of participants. These can be other factors that influence the training process to improve mothers' skills in breast care.

ACKNOWLEDGEMENTS

To the Director of Poltekkes Kemenkes Kupang and the Director of Ende Regional General Hospital who have allowed the author to carry out this research. To the Head of the Ende Nursing Study Programme, who gave the author the opportunity to carry out this research. As well as the lecturers of Ende Nursing Study Programme for their suggestions in the implementation of this activity.

Marieta Kristina Sulastawati Bai*, Raimunda Woga, Rifatunnisa

Prodi Keperawatan Ende, Poltekkes Kemenkes Kupang
Corresponding author: *E-mail: selvibaigudi@gmail.com

DOI: <https://doi.org/10.33024/minh.v7i10.500>

REFERENCES

- Agustini, A. (2014). Promosi kesehatan. Deepublish.
- Anggraini, F., & Dilaruri, A. (2022). Efektifitas Pijat Oketani dan Pijat Oksitosin dalam Meningkatkan Produksi Air Susu Ibu (ASI). *Jurnal Vokasi Keperawatan (JVK)*, 5(2), 93-104.
- Damanik, L. (2018). Hubungan Perawatan Payudara Pada Ibu Dengan Kelancaran Asi Pada Ibu Postpartum Di RSUD Estomihi Medan Tahun 2018 (Doctoral dissertation, Institut Kesehatan Helvetia).
- Dewi, V. N. L., & Sunarsih, T. (2018). Asuhan kebidanan pada ibu nifas. Jakarta: Salemba Medika, 198.
- East Nusa Tenggara Provincial Health Office. (2018). Profil Kesehatan Provinsi NTT tahun 2018.
- Ende District Health Office. (2020). Profil kesehatan Kabupaten Ende tahun 2020.
- Ende District Health Office. (2021). Register Ruang Nifas 1 dan Ruang Nifas 3 RSUD Ende.
- Ministry of Health of the Republic of Indonesia. (2013). Riset Kesehatan Dasar (Riskesdas) 2013. Accessed from: <https://layanandata.kemkes.go.id/katalog-data/riskesdas/ketersediaan-data/riskesdas-2013>
- Notoatmodjo, S. (2013). Metodologi Penelitian Kesehatan (Ed. Rev). Jakarta: Rineka Cipta.
- Nurahmawati, D., Mulazimah, M., Ikawati, Y., Agata, D. D., & Pratika, R. (2021). Penyuluhan Perawatan Payudara Pada Ibu Nifas Pasca Persalinan Dini Dalam Memberikan ASI Eksklusif Di Rumah Sakit Angkatan Darat Di Kota Kediri. *Abdimas: Papua Journal of Community Service*, 3(2), 61-67.

Education and training in breast care for postpartum mothers during the Covid-19 pandemic

- Ouyang, Y. Q., & Nasrin, L. (2021, March). Father's knowledge, attitude and support to mother's exclusive breastfeeding practices in Bangladesh: a multi-group structural equations model analysis. In *Healthcare* (Vol. 9, No. 3, p. 276). MDPI.
- Pratama, E. R., Pitaloka, M. F., Wulandari, M., Annisa, N., Pratiwi, S. A., Suhermi, W., & Indri, Y. (2023). Perawatan Payudara (Breast Care) di Ruang Rawat Kebidanan Rumah Sakit Islam Yarsi Bukittinggi. *Altafani: Jurnal Abdimas*, 1(1), 12-15.
- Prawirohardjo, S. (2010). Ilmu Kebidanan Edisi III, Yayasan Bina Pustaka Sarwono Prawirohardjo, Jakarta. Bagian, 3, 530-555.
- Rambe, N., & Nasution, L. K. (2021). Hubungan Pengetahuan Tentang Perawatan Payudara Pada Ibu Nifas Dengan Kejadian Bendungan Asi. *Jurnal Mutiara Ners*, 4(2), 121-127.
- Rosyad, Y. S., Rochmawati, L., & Prabawati, S. (2021). Pemeriksaan Payudara Sendiri (Sadari). Cv. Eureka Media Aksara. Yogyakarta: Zahir Publishing.
- Soemarjadi, D. (2012). Pendidikan Keterampilan. Jakarta: DEPDIKBUD
- Utami, R. B., Astutik, P., Rukmawati, S., Nurhayati, R., & Retnoningrum, A. D. (2020). Effectiveness of oxytocin massage and breast treatment about the adequacy of breast milk in post partum. *European Journal of Molecular & Clinical Medicine*, 7(2), 4725-4732.
- Wahyuni, E., Andriani, L., Yanniarti, S., & Yorita, E. (2022). Perawatan Payudara (Breast Care) untuk Mengatasi Masalah Puting Susu. Penerbit NEM.
- Wijayanti, T., & Setyaningsih, A. (2016). Efektifitas Breast Care Post Partum Terhadap Produksi Asi. *Jurnal Kebidanan*.
- Woodard, G. A., Bhatt, A. A., Knavel, E. M., & Hunt, K. N. (2021). Mastitis and more: a pictorial review of the red, swollen, and painful breast. *Journal of Breast Imaging*, 3(1), 113-123.
- World Health Organization. (2020). Pekan Menyusui Dunia: UNICEF dan WHO menyerukan Pemerintah dan Pemangku Kepentingan agar mendukung semua ibu menyusui di Indonesia selama COVID-19. Accessed from: <https://www.who.int/indonesia/news/detail/03-08-2020-pekan-menyusui-dunia-unicef-dan-who-menyserukan-pemerintah-dan-pemangku-kepentingan-agar-mendukung-semua-ibu-menyusui-di-indonesia-selama-covid-19>
- Wulan, S., & Gurusinga, R. (2017). Pengaruh perawatan payudara (breast care) terhadap volume ASI pada ibu post partum (nifas) di RSUD Deli Serdang Sumut tahun 2012. *Jurnal Kebidanan Harapan Ibu Pekalongan*, 1, 21-24.
- Yousef, K. F. (2019). Preparation for motherhood: Home based maternal and newborn care for first time mothers. *IOSR Journal of Nursing and Health Science*, 8(1), 29-37.

Marieta Kristina Sulastawati Bai*, Raimunda Woga, Rifatunnisa

Prodi Keperawatan Ende, Poltekkes Kemenkes Kupang
Corresponding author: *E-mail: selvibaigudi@gmail.com

DOI: <https://doi.org/10.33024/minh.v7i10.500>