

## The Effect Of Giving Marmet Techniques On The Fluency Of Breastfeeding In Postpartum Mothers At Gaji Health Center 2023

Mariyatul Qiftiyah<sup>1</sup>, Dewi Setyowati<sup>2</sup>

<sup>1</sup>Department of Midwifery, Faculty of Nursing and Midwifery, Institut Ilmu Kesehatan Nahdlatul Ulama Tuban

<sup>2</sup>Bachelor of Midwifery Study Program, Faculty of Nursing and Midwifery, Institut Ilmu Kesehatan Nahdlatul Ulama Tuban

### ABSTRACT

*Breastfeeding should be a pleasant experience for both mother and baby because there are many benefits of breastfeeding, including exclusive breastfeeding. But sometimes, various problems arise when breastfeeding both the mother and the baby, which complicates the process. The breastfeeding problems that may be experienced by the mother and the baby are; The problem is because the milk production is less so it does not provide exclusive breastfeeding. The purpose of this research is to find out "The Effect of Giving Marmet Techniques on the Smoothness of Breastfeeding for Postpartum Mothers at the Gaji Health Center in Tuban Regency". The research design used a pre-experimental type of design using a statistical test with a paired T test with a p value <0.05. The population of all postpartum women in the working area of the Gaji Health Center in February 2023 was 30 people. Based on bivariate analysis using the Paired T Test, it was found that the effect of the marmet technique on the smooth production of breast milk for post partum mothers at the Salary Health Center had a p value of 0.000 <0.05. Therefore health workers, especially midwives, are expected that the marmet technique needs to be applied to every postpartum mother, whether breastfeeding is smooth or not smooth so that the mother can provide maximum breastfeeding.*

**Keywords:** *Marmet Techniques, Fluency, Breastfeeding, Post partum*



Received : Sept 29, 2023      Received in revised form : Oct 7, 2023      Accepted : Oct 15, 2023

### INTRODUCTION

Breastfeeding should be a pleasant experience for both mother and baby because there are many benefits of breastfeeding, including exclusive breastfeeding. However, sometimes various problems arise during

breastfeeding for both mother and baby, making the process difficult.<sup>15</sup>The breastfeeding problems that mother and baby may experience are; Problems with sore nipples, swollen breasts, mastitis, fungal infections, large breasts on one side, too little milk production, too much milk production, sore breasts when

**Correspondence :** Mariyatul Qiftiyah. Institut Ilmu Kesehatan Nahdlatul Ulama Tuban. iqtadabi@gmail.com

breastfeeding, blocked milk ducts, the baby has difficulty breastfeeding because of the size of the mother's breasts, etc <sup>3,13</sup>

Exclusive breastfeeding is giving breast milk without additional or substitute food/drinks to babies up to 6 months old. <sup>16</sup>Breast milk has the nutritional content that babies need until they are 6 months old. That's why there is no need for other sources of intake during that period as long as the breast milk produced is of good quality. But, after 6 months, exclusive breastfeeding does not mean you have to stop. Breast milk can still be given to babies until they are 2 years old. <sup>5,10,12</sup>

After giving birth, during the first and second days of the postpartum period, the milk produced is around 50-10 ml a day. The amount will increase to 500 ml in the second week, and will continue to increase 10-14 days after giving birth <sup>2,6</sup>. On the 14th day (2 weeks) after birth, the size of the uterus will gradually shrink to 350 grams, and will return to normal as before on the 60th day or in the 8th week. At that time the influence of estrogen and progesterone has disappeared, and is completely replaced by the hormone prolactin which will stimulate the production of breast milk. Apart from that, the influence of oxytocin causes the

myo-epithelium of the mammary glands to contract so that milk comes out. In the second week and so on, breast milk production will increase <sup>9,14</sup>

High maternal and infant mortality rates still pose a threat to human resource development in Indonesia. The infant mortality rate in 2022 in Indonesia will still be 24 per 1,000. This means that for every 1,000 births there are 24 deaths. If there are 100 people giving birth, there are between 2 and 3 deaths <sup>2</sup>

According to 2021 Basic Health Research (Riskesdas) data, 52.5 percent – or only half of the 2.3 million babies aged less than six months – are exclusively breastfed in Indonesia, or a decrease of 12 percent from the figure in 2019. Exclusive Breastfeeding Coverage also fell from 58.2 percent in 2019 to 48.6 percent in 2021.

Based on data from districts/cities, it is known that exclusive breastfeeding coverage in East Java in 2020 was 68.2%. This coverage has decreased compared to 2019 (71.8%). This decrease was due to the Covid-19 pandemic in the targets examined. (Provincial Health Office Health Profile 2020), Exclusive breastfeeding coverage is decreasing, due to several factors, namely mothers not giving exclusive

breast milk, babies being given formula milk, and mothers working. So the aim of this research is to increase the target of exclusive breastfeeding coverage<sup>6,12</sup>

The impact of postpartum mothers' breast milk production which is not smooth can cause breast milk dams, mastitis, in babies it will cause jaundice and malnutrition. Astari and Djuminah, 2012 Exclusive breastfeeding coverage at Salary Health Centers in 2020 was 22.2%. This coverage has decreased compared to 2019 (31.8%), as evidenced in initial interviews of 10 postpartum mothers who gave birth at Salary Health Centers, 4 people whose breast milk was smooth and 6 people's breast milk is not good enough.

The efforts made to overcome the problem of smooth breastfeeding are pharmacological and non-pharmacological. Pharmacologically it is metoclopramide, domperidone and Chlorpromazine, while non-pharmacologically it is oxytocin massage, acupressure massage, endorphine, warm compresses, breast care using the marmet technique<sup>9,11</sup>

The marmet technique is one solution to promote breast milk production. The Marmet Technique develops massage and stimulation methods to help lock the breast milk

secretion reflex. This marmet technique is a safe way that can be used to stimulate the breasts to increase breast milk production. The pathophysiology of the marmet technique is that the principle aims to empty breast milk from the lactiferous sinus which is under the areola so it is hoped that emptying breast milk in the lactiferous sinus area will stimulate the release of the hormone prolactin, the release of the hormone prolactin will then stimulate the mammary alveoli to produce breast milk. If the breast milk is not emptied, the mother's breasts will experience mastitis, dams, so it is necessary to find ways to overcome the irregularity of breast milk, one of which is the Marmet Technique.<sup>14</sup>

Based on this problem, researchers are interested in conducting research on "The Effect of the Marmet Technique on the Smoothness of Breastfeeding for Postpartum Mothers at the Gaji Health Center, Tuban Regency

## MATERIAL AND METHOD

This research was conducted at the Gaji Community Health Center which is located 5 (five) km from the government center of Kerek District and 30 (thirty) km from the city of Tuban, precisely on Jl. Gaji Raya No.1,

Sidomulyo, Salary Kec. Kerek Tuban Regency.

Bivariate analysis was carried out to identify the influence between two variables<sup>1,4</sup>. In this study there was 1 group of paired data, interval scale but the data was not normally distributed so to see the smooth flow of breast milk before and after being given the marmet technique in paired groups (pre and post) using the Paired T Test with a significant value of 0.05.

Data collection was carried out in February 2023 on 30 patients during postpartum care. The data collection procedure uses secondary data, namely the Medical Records of pregnant women aged 0-20 weeks in the working area of the Salary Health Center.

The independent variable in this research is the provision of Marmet Technique as a variable that influences the dependent variable. The dependent variable in this research is smooth breastfeeding as a variable that is influenced by the independent variable

## RESULT

### 1. general data of respondents

Table 1. Frequency Characteristics Based on Age of Postpartum Mothers at Community Health Center Salary for February, Tuban Regency, 2023

No.	Age of postpartum	<i>f</i>	%
1.	≤20 21-25	2	6,7
2.	26-30	20	66,6
3.		8	26,7
Total		30	100,0

Based on table 1, it shows that the majority of postpartum mothers at the Gaji Community Health Center in February were aged 21-25 years, namely 20 respondents (66.6%).

Table 2. Frequency Characteristics Based on Education of Postpartum Mothers at Community Health Center Salary for February, Tuban Regency, 2023

No.	Education	<i>f</i>	%
1.	SD	6	20
2.	SMP	6	20
3.	SMA	14	46,7
4.	PT	4	13,3
Total		30	100,0

Based on Table 2, it shows that the majority of postpartum mothers at the Salary Health Center in February had the lowest level of education SMA 14 respondents (46.7%).

Table 3. Frequency Characteristics Based on Parity of Postpartum Mothers Postpartum Mothers at the Community Health Center Salary for February, Tuban Regency, 2023

No.	Parity postpartum	<i>f</i>	%
1.	Primipara	3	
2.	Multipara	15	10
3.	Grandemultipara	12	50
			40
	Total	30	100,0

Based on Table 3, it shows that the majority of postpartum mothers at the Gaji Community Health Center in February were mothers with more than one birth experience, namely 15 respondents (50%).

## 2. Respondent-specific data

Table 4. Distribution of breast milk production for post-partum mothers before being given Marmet technique treatment at the Salary Health Center in February Kec. Kerek, Tuban Regency in February 2023.

Production brest milk	Before treatment	
	<i>f</i>	%
Smooth	11	36,7
Not Smooth	19	63,3
Total	30	100

Based on table 4, it is known that breast milk production in postpartum mothers before the marmet technique was carried out from 30 respondents, it was found that the majority of breast milk production was not smooth 19 respondents (63.3%).

Table 5 Distribution of Breast Milk Production for Postpartum Mothers after being given the Marmet Technique treatment at the Gaji Health Center, Kec. Kerek, Tuban Regency, 2023.

Production brest milk	After treatment	
	Frekuensi	Persentase (%)
Lancar	27	90
Tidak Lancar	3	10
Jumlah	30	100

Based on table 5, it is known that the number of breast milk production in postpartum mothers using the marmet technique was 30 people. After the marmet technique treatment, it was found that 27 respondents (90%) had smooth breast milk production.

Based on the results of the analysis using the paired T test where  $p < 0.005$ , namely  $0.000 < 0.005$  with the SPSS 16.0 for Windows application, this means that there is an influence of giving the marmet technique on the smoothness of breastfeeding for postpartum mothers

at the Gaji Community Health Center in 2023.

## DISCUSSION

Based on the results of univariate analysis using the Paired T Test to determine the effect of providing the Marmet technique on the smoothness of breastfeeding for postpartum mothers at the February Salary Health Center, Tuban Regency in 2023, it was found that the  $p$  value was 0.000 ( $< \alpha = 0.05$ ), so H1 was accepted, which means there is The Effect of Giving the Marmet Technique on the Smoothness of Breast Milk.

The technique of expressing breast milk using the marmet method aims to empty breast milk from the lactiferous sinus which is located under the areola so it is hoped that emptying breast milk in the lactiferous sinus will stimulate the release of prolactin. It is hoped that the release of the hormone prolactin will stimulate the mammaryalveoli to produce breast milk. The more breast milk is removed or emptied from the breast, the better the milk production in the breast will be <sup>2,7,14</sup>

Based on research theory and related research results, researchers assume that the smooth flow of breast milk is a very complex interaction

between mechanical, nervous and hormonal stimuli and by providing the marmet technique can improve these three things.

The characteristic factors of respondents in this research include: the mother's age being too young indirectly affects breast milk production, because it is related to the mother's physical and mental readiness to face the challenges of breastfeeding, as well as mothers who have a low level of education. Insufficient knowledge or mothers with low education can affect access to correct information about the benefits of breast milk, correct breastfeeding techniques and how to overcome problems that may arise during breastfeeding. Insufficient knowledge can lead to distrust or the mother's inability to face any problems or obstacles that arise during breastfeeding. Mothers who have had the experience of giving birth for the first time tend to experience confusion because they have no experience regarding caring for a baby or breastfeeding, so primiparous mothers are much more anxious than muktiparous mothers<sup>5,12</sup>. In the event that an anxious mother experiences a bad psychological condition, which affects the smooth production of breast milk, the mother's good psychological condition will



motivate her to breastfeed her baby so that the hormones that play a role in breast milk production will increase because breast milk production starts from the breastfeeding process and will stimulate breast milk production<sup>6, 9,11</sup>

Based on the description above, the researcher concluded that it is important to use the marmet technique to facilitate breast milk in postpartum mothers because the marmet technique will stimulate the mammaryalveoli so that breast milk production increases.

## CONCLUSION

There was an influence of the marmet technique on the smooth production of breast milk for postpartum mothers at the Gaji Community Health Center in 2023

## ACKNOWLEDGMENT

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## REFERENCE

1. Alhamda, Syukra. 2016. *Buku Ajar Metlit dan Statistik*. Yogyakarta: DEEPUBLISH (Grup Penerbit CV BUDI UTAMA).
2. Aprilina, Happy Dwi. 2016. *Kombinasi Breast Care dan Teknik Marmet Terhadap Produksi ASI*. *Post Sectio Caesaria di Ruang Flamboyan RSUD Prof. dr. Margono Soekarjo Purwokerto. Jurnal Ilmiah Ilmu-ilmu Kesehatan*. Vol. 14No. 2. :1-9.
3. Astuti, Sri, dkk. 2015. *Asuhan Kebidanan Nifas dan Menyusui*. Bandung:Erlangga.
4. Munir, Miftahul, dkk, 2022, *"Metode Penelitian Kesehatan"*, Tuban, CV Eurika Media Aksara
5. Pollard, Maria. 2015. *ASI Asuhan Berbasis Bukti*. Jakarta: EGC.
6. Puspitasari, Alisa M.. 2016. *Hubungan Inisiasi Menyusu Dini dengan Kelancaran Pengeluaran ASI pada Ibu Post Partum di Puskesmas Patrang Kabupaten Jember*. Skripsi. Universitas Jember. Jember.
7. Rini, Susilo dan Kumala Feti. 2016. *Panduan Asuhan Nifas dan Evidence Based Practice*. Yogyakarta: Budi Utama.
8. Sari, Eka Puspita dan Riamandini, Kurnia Dwi. 2014. *Asuhan Kebidanan Masa Nifas (Postnatal Care)*. Jakarta: Trans Info Media.
9. Setiawandari. 2014. *Perbedaan Pengaruh Teknik Marmet dan Pijat Oksitosin Terhadap Produksi ASI pada Ibu Post partum di Rumah Sakit Ibu dan Anak IBI Surabaya*. Tesis. Universitas Sebelas Maret. Surakarta.
10. Sugito, Mohamad Shofin. 2016. Ayah ASI dalam Prespektif Al-Qur'an. *Jurnal Studi Gender dan Anak*. Vol. 3 No. 1. :75-91.
11. Titisari, Ira. 2016. Perbandingan Efektifitas Kombinasi Teknik Marmet dan Pijat Oksitosin dengan

- Breast Care Terhadap Produksi ASI pada Ibu Post Partum. *Jurnal Ilmu Kesehatan*. Vol. 5 No. 1: 87-95.
12. Trisnawati, Yuli. 2017. Korelasi Lama Inisiasi Menyusu Dini (IMD) terhadap Pengeluaran ASI di Puskesmas Kalibagor Kabupaten Banyumas. *Jurnal Ilmiah Kebidanan*. Vol. 8 No. 1: 50-56.
  13. UNICEF. 2013. *ASI adalah Penyelamat Hidup paling Murah dan Efektif di Dunia*. [https://www.unicef.org/indonesia/id/media\\_21270.html](https://www.unicef.org/indonesia/id/media_21270.html) (diakses tanggal 2 Oktober 2022).
  14. Widiastuti, Anita. 2015. Pengaruh Teknik Marmet terhadap Kelancaran Air Susu Ibu dan Kenaikan Berat Badan Bayi. *Jurnal Kesehatan Nasional*. Vol. 9 No. 4: 316-319.
  15. Widiyanto, Subur, dkk. 2012. Hubungan Pendidikan dan Pengetahuan Ibu Tentang ASI Eksklusif dengan Sikap Terhadap Pemberian ASI Eksklusif. *Jurnal Kedokteran Muhammadiyah* Vol. 1 No. 1 : 25-29.
  16. Wiji,Rizki Natia. 2014. *ASI dan Panduan Ibu Menyusui*. Yogyakarta: Nuha Medika.