



The Effect Of Lactation Massage On Breast Milk Production In Breastfeeding Mothers

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ABSTRACT

Breastfeeding is a proven way to make babies healthier and help them grow well. Exclusive breastfeeding as a baby can reduce the risk of stunting. Breastfeeding is the process of giving milk to babies with breast milk (ASI) from the mother's breasts. The success of exclusive breastfeeding is greatly influenced by the smooth production of breast milk from the beginning of the breastfeeding period. 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. Breastfeeding initiation rate Early childhood (IMD) also decreased from 58.2 percent in 2019 to 48.6 percent in 2021. The main reason babies are never breastfed is because breast milk does not come out or is not smooth at the start of the breastfeeding period (65.7%) babies aged 0- 5 months (33.3%) have been given food with the largest type of food (84.5%) namely formula milk. The East Java Central Statistics Agency (BPS) recorded that in 2022 the percentage of babies aged up to 6 months who received exclusive breast milk was 69.72%. Plus, the percentage of new babies born who received Early Breastfeeding Initiation (IMD) was 69.22%. This type of research is quasi-experimental with quantitative research methods. This research uses a pre-post test post test without control group design. The population in this study were all 20 breastfeeding mothers in Sooko Village. Data collection instruments used checklists/Standard Operating Procedures (SOP) for lactation massage and questionnaire sheets as well as breast milk expenditure observation sheets. The results of breast milk production are measured using a breast pump and measured using a measuring cup. From the results of the paired t-test, a significance of $0.000 < 0.05$ was obtained, so it can be concluded that there is an influence of lactation massage on breast milk production in breastfeeding mothers.

Keywords: Lactation massage, Breast Milk, Breastfeeding Mother

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INTRODUCTION

Breastfeeding is a proven way to make babies healthier and help them grow well¹. Exclusive breastfeeding as a baby can reduce the risk of stunting. Breastfeeding is the process of giving milk to babies with breast milk (ASI) from the mother's breasts. The success of exclusive breastfeeding is greatly influenced by the smooth production of breast milk from the beginning of the breastfeeding period. Breast milk production that is not yet smooth at the beginning of the breastfeeding period is one of the problems that influences breastfeeding mothers to give formula milk from an early age to babies². The level of breastfeeding in Indonesia has decreased significantly in recent years, therefore UNICEF and WHO are calling for more to be done. many efforts to protect, promote and support breastfeeding – with a focus on helping working mothers.

To support the success of exclusive breastfeeding, it is closely related to the smooth production of breast milk during the breastfeeding process. One way to increase breast milk production is by doing lactation massage. Lactation massage is massaging the neck, back and breasts to improve blood flow thereby maintaining the smooth flow of breast milk. Lactation massage aims to facilitate breast milk flow, prevent blockage of breast milk ducts, increase breast milk volume and relaxatio³.

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. Breastfeeding initiation rate Early childhood (IMD) also decreased from 58.2 percent in 2019 to 48.6 percent in 2021. The main reason babies are never breastfed is because breast milk does not come out or is not smooth at the start of the breastfeeding period (65.7%) babies aged 0- 5 months (33.3%) have been given food with the largest type of food (84.5%) namely formula milk. The East Java Central Statistics Agency (BPS) recorded that in 2022 the percentage of babies aged up to 6 months who received exclusive breast milk was 69.72%. Plus, the percentage of new babies born who received Early Breastfeeding Initiation (IMD) was 69.22%⁴.

The benefit of lactation massage is that it can reduce pain where swollen breasts often make mothers feel pain and even fever. If your breasts are frequently massaged, you will experience less pain when breastfeeding. Then the quality of the milk is better, where mothers who regularly do lactation massage for 30 minutes twice a day will experience a decrease in sodium levels in breast milk. This can automatically make breast milk quality better and healthier⁵. Makes latching easier, where lactation massage helps soften the breasts and ensures that the baby breastfeeds more easily. So the automatic attachment is also more perfect. Prevents stretch marks and sagging breasts, where when the breasts enlarge, the possibility of the mother having stretch marks is very large. By regularly doing lactation massage, you can help maintain the youthfulness of the skin around the breasts and prevent stretch marks from appearing.

METHOD

This type of research is quasi-experimental with quantitative research methods. This research uses a pre-post test post test design without control group design. The population in this study were all 20 breastfeeding mothers in Sooko Village. This research used a total sampling of 20 breastfeeding mothers in Sooko Village. This research had 2 variables, namely the independent variable was lactation massage and the dependent variable was breast milk production. The research was carried out in Sooko Village, starting from September 7 to October 5 2023. Data collection instruments used checklists/Standard Operating Procedures (SOP) for lactation massage and questionnaire sheets as well as breast milk expenditure observation sheets. The results of breast milk production are measured using a breast pump and measured using a measuring cup. The collected data was analyzed using univariate analysis and bivariate analysis. Univariate analysis was used to describe the characteristics of respondents including age, education, occupation, source of information about health, pregnancies experienced, and number of children. Meanwhile, there is a normality test, homogeneity test using bivariate analysis, and the Paried t-Test using SPSS 25.0

RESULTS

1. Univariate Analysis

Description of Research Subject Characteristics

Table 1. Distribution of characteristics of research respondents

No	Indicator	N	%
1	Usia		
	< 20 years and > 35 years (High Risk)	2	10
	20-35 tahun (Usia Produktif)	18	90
	Total	20	100
2	Education		
	Graduated from elementary school	0	0
	Graduated from middle school	1	5
	Graduated from high school	11	55
	Academi / PT	8	40
	Total	20	100
3	Work		
	Taking care of the household/housewife	10	50
	Civil servants	0	0
	Private	6	30
	Self-employed	4	20
	Total	20	100
4	Number of children you have		
	Don't have children yet		

1 child	4	20
Two children	13	65
>2 children	3	15
Total	20	100

From the research results, it was found that almost all of the respondents were in the reproductive age aged 20 - 35 years, namely 18 respondents (90%), a small number of respondents were in the high risk age <20 and >35 years, namely 2 respondents (10%). More than half of the respondents in this study had a high school graduate education background, namely 11 respondents (55%), half of the respondents in this study had jobs taking care of the household / housewife, namely 10 respondents (50%). Most of the respondents in this study had 2 children, namely 13 respondents (65%).

2. Bivariat Test

The research data meets the assumption of homogeneity with the results of the homogeneity test obtaining an F-statistic probability value > level of significance = 0.05. From these data, the research population has similarities.

Table 2. Table of research results based on the level of breast milk volume production in breastfeeding mothers before and after being given lactation massage in Sooko Village

Variabel	Mean	Median	Modus	Min	Max	Std.Deviasi
Volume of breast milk before giving lactation massage	4,260	4,000	5,00	2,00	7,00	0,375
Volume of breast milk After giving lactation massage	23,934	23,000	24,00	21,00	26,00	1,141

Source: Primary data, results of respondent data processing in 2023

Based on table 2, it shows that the average level of breast milk volume production before lactation massage is given to breastfeeding mothers and after lactation massage is given is different. Before the lactation massage, breast milk production for breastfeeding mothers in Sooko Village was 4,260 ml with a median of 4,000 and a mode value of 5.00 with a value range of 0.375. The average volume of breast milk production after giving lactation massage to breastfeeding mothers was 23.934 with a median of 23.00 and a mode value of 24.00 with a range of values of 1.141.

Tabel 3. Paired t-test analysis table to determine the effect of giving lactation massage on breast milk production in breastfeeding mothers in Sooko Village

Variabel	t-hitung	Sig	Level of Significant
Pre-test & Post-test testN:20	-12,005	0,000	0,05

Based on the paired t-test table, the significance is $0.000 < 0.05$, so H_0 is rejected. This means that there is a significant difference between the average before treatment and the average after treatment. In the t table, a negative t count is obtained, namely -12.005, meaning that the average before treatment is lower than the average after treatment. So it can be concluded that there was an increase in breast milk production in the pre-test to post-test treatment group, which means that there was an influence of lactation massage on breast milk production in breastfeeding mothers.

DISCUSSION

The research results show that the average level of breast milk volume production before giving lactation massage to postpartum mothers is 4,260 ml. The average level of breast milk volume production is 4.00. After giving lactation massage to postpartum mothers it was 23,934. This shows that breast milk production after lactation massage increases breast milk production.

Lactation massage is a massage technique to help the release of breast milk. Lactation Massage is done by massaging several areas of the body such as the head, neck, back, shoulders and breast area. This massage is intended to help facilitate the release of breast milk. Physiologically, breast milk will come out smoothly starting from day 3 to⁶. However, there are several factors that influence the smooth production of breast milk, one of which is the mother's age. From the research results it was found that almost all 90% of respondents were aged 20-35 years (reproductive age)⁷.

In reproductive age or women of childbearing age, relatively young people are able to make independent decisions and provide the best possible care for their babies. Mothers who are at risk of reproduction, namely mothers under 20 years of age or over 35 years of age, because their body physiology is still good and optimal⁸. Age is one of the main factors that influences a mother's milk production. A mature mother will do her best for her baby's development, so that he can grow and develop optimally. As people grow older, their psychological and mental states mature⁹.

The smooth production of breast milk, apart from being influenced by age, is also influenced by food factors, peace of mind, adequate rest, and breast care (lactation massage). The diet of breastfeeding mothers does not directly affect the quality or quantity of breast milk produced. The body stores various nutrients that may be needed at any time. However, if the mother's food does not contain enough necessary nutrients over a long period of time, the mammary glands in the mother's breasts will

not function properly, which ultimately disrupts breast milk production¹⁰.

Based on the paired t-test table, the significance is $0.000 < 0.05$, so H_0 is rejected. This means that there is a significant difference between the average before treatment and the average after treatment. In the t table, a negative t count is obtained, namely -12.005, meaning that the average before treatment is lower than the average after treatment. So it can be concluded that there was an increase in breast milk production from the pre-test to post-test treatment group, so it can also be concluded that there is an influence of lactation massage on breast milk production in breastfeeding mothers.

Breast care methods such as lactation massage aim to stimulate the hormones prolactin and oxytocin. These two hormones are believed to stimulate the alveoli cells in the breast glands so that the myoepithelium in the breast can contract, with these contractions causing milk to come out and flow into the small ducts of the breast which causes breast milk to come out¹¹.

Letdown Reflex will work well, one way is by doing a lactation massage, because this lactation massage can provide a feeling of comfort and relaxation which has a positive impact on the reflex. Some of the benefits of lactation massage include being able to make the breasts soft, elastic, reducing pain, tension, stress, anxiety, and being able to lift your mood¹².

According to researchers' assumptions, lactation massage has many effects, for example, with lactation massage, the breasts will feel softer, more elastic, can provide a feeling of comfort so that it can provide a feeling of calm and relaxation¹³. In line with that, it will also have an effect on increasing production. breast milk in nursing mothers. If the elastic breasts are clean and comfortable and accompanied by an increase in milk production, it is possible for the baby to breastfeed well and frequently¹⁴. The more often the baby breastfeeds, the more quickly the milk will be emptied. The more often the baby sucks the mother's breast, the more breast milk production will increase in breastfeeding mothers¹⁵.

The results of research conducted by Komang Widhi Yantari, et al. The Effect of Lactation Massage on Breast Milk Production in Normal Postpartum Mothers at PMB Luh Asih, A.Md.Keb, the results were obtained based on the paired t test results obtained p value < 0.05 , which means there is an influence of lactation massage on breast milk production in normal postpartum mothers at PMB Luh Asih, AMd.Keb. Breast milk production in normal postpartum mothers increased in the control group from 5.22 to 24.6 cc. Meanwhile in the treatment group there was an increase from 4.76 cc to 42.6 cc.

This is in line with the results of Siti Muawanah's research with the research title The Effect of Lactation Massage on the Smoothness of Breast Milk Production in Breastfeeding Mothers at Baby Spa Pati, which stated that the increase in the smoothness of breast milk in breastfeeding mothers who had lactation massage increased significantly compared to breastfeeding mothers who did not have lactation massage.

Another research conducted by Jihan El Arief Hanubun et al with the title The effect of lactation massage on breast milk production in postpartum mothers showed that there was an increase in breast milk production after lactation massage with details of the results, namely: Before lactation massage, most of the breast milk production was 0 (0%) , enough for 3 mothers (15%), less for 17 mothers (85%), after lactation massage, the majority of respondents had a lot of breast milk production for 19 mothers (95%), enough for 1 mother (5%), less than 0 (0%).

From the results of other research carried out by Nani Jahriani entitled The Effect of Lactation Massage on Breast Milk Production in Breastfeeding Mothers in Sendang Sari Village, Asahan Regency in 2019, it was found that lactation massage had an effect on increasing breast milk production with details of the results of the volume of breast milk production of breastfeeding mothers before the majority of lactation massages were carried out. 23 participants (76.7%) had a low breast milk production volume and 7 participants (23.3%) had a good breast milk production volume. The majority of breast milk production volumes of breastfeeding mothers after lactation massage had improved, namely 22 participants (73.3%) and the minority had breast milk production volumes that remained poor, namely 1 participant (3.3%).

CONCLUSION

From the research results, it was found that the average level of breast milk production before giving lactation massage to postpartum mothers was 4,260 ml with a median value of 4,000 and a frequently occurring value of 5.00, while the highest value was 7.00 and the lowest value was 2.00 with a range of values of 0.375. Meanwhile, the average level of breast milk volume production after giving lactation massage to postpartum mothers was 23.934 with an average value of 23.00 and a frequently occurring value of 24.00, while the highest value was 27.00 and the lowest value was 22.00 with a value range of 1.141. From the results of the paired t-test, a significance of $0.000 < 0.05$ was obtained. So it can be concluded that there was an increase in breast milk production in the pre-test to post-test treatment groups and it can also be concluded that there is an influence of lactation massage on breast milk production in breastfeeding mothers.

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