

## THE EFFECT OF WOOLWICH MASSAGE ON BREAST MILK PRODUCTION IN POSTPARTUM MOTHERS AT PRATAMA MADINA CLINIC, PERCUT SEI TUAN DISTRICT, DELI SERDANG REGENCY IN 2023

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### ABSTRACT

The cause of low coverage of exclusive breastfeeding during the first 6 months of a baby's life is due to one of the mothers who lack confidence that the breast milk they have can cover their nutritional needs and the problems that often occur faced by postpartum mothers are the lack of breast milk that comes out and even the milk does not come out, causing unsuccess in exclusive breastfeeding and mothers must give formula milk to their babies (Sukriana, 2018). Efforts that can be made to increase breast milk production by doing massages such as *woolwich massage* or stimulation given to the mother can cause a sense of relaxation and comfort so that it can increase the hormones Prolactin and Oxytocin and the production of oxytocin by the pituitary which plays a role in squeezing milk out of the alveoli (Arkha, 2018). The 2016 Indonesian Health Data Profile shows that the coverage of breast milk in Indonesia is still low compared to the Indonesian Health Profile data in 2015 with a percentage of 55.7% of infants who exclusively breastfeed 0-6 months to 54% in 2016. According to an initial survey conducted by the author at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency, many postpartum mothers complained that their breast milk was little or even did not come out, during interviews with several postpartum mothers said that they were worried that during the breastfeeding process the breast milk did not come out properly. Based on the background described above, the researcher is interested and motivated to discuss further whether there is an effect of *woolwich massage* on breast milk production in postpartum mothers at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023.

Keywords: Breast Milk, Post Partum, Woolwich Massage

## INTRODUCTION

Exclusive Breast Milk is breast milk that comes out when the baby has been born and is given to newborns when there are other additional foods or liquids can be in the form of formula milk, honey, water, tajin water, or others before the baby reaches 6 months of age. Exclusive Breastfeeding is a natural nutrient that is very important for babies, but the government's program in providing Exclusive Breastfeeding has not reached the target, which is still difficult to develop and this is also a social problem that has not been solved in the community (Usman, 2019).

The impact that occurs on babies who are not given breast milk babies will be susceptible to diseases that will result in the growth and development of intelligence will be inhibited because babies do not get immune substances and do not get nutritious and quality food obtained from breast milk (Awaliyah, 2015).

The above research is in accordance with the research conducted (Usman Hastuti, 2019) The way that can be done to increase breast milk production in postpartum mothers is by giving the mother a relaxation sensation to stimulate the hormones prolactin and oxytocin by doing a *woolwich* massage. The way to do *this woolwich* massage is done in the lactive sinus area, more precisely 1-1.5 cm

outside the mother's aerolla mammae using both thumbs for 15 minutes.

The massage is carried out to stimulate nerve cells in the breast, passed to the hypothalamus and responded to by the anterior pituitary which will later release the hormone prolactin then will be flowed by the blood to the breast myoepithelial cells so that it can produce breast milk and even the benefits of the woolwich massage method in addition to increasing breast milk production also increase breast milk secretion and prevent breast inflammation or mastitis (Usman Hastuti, 2019).

## METHOD

### 3.1. Types of Research

This study uses a type of quantitative research with the research methods used as follows: *Experiment* with a research design *one group before and after intervention design* or *Pre test-post test design* (Notoadmodjo, 2017) .

### 3.2. Location and Time of Research

#### 3.2.1. Research Location

This research was conducted at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023.

#### 3.2.1. Research Time

This research will be planned in April-July 2023.

### 3.3. Population and Sample

#### 3.3.1. Populasi

The population is the entire object of the study or the object being studied, the population in this study is all postpartum mothers who are in Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023. The population in the study was all postpartum mothers in April-July. This study wanted to find out the effect of *Woolwich Massage* on breast milk production in postpartum mothers.

#### 3.3.2. Sample

The large number of samples for the treatment group in this study using the Frederer formula:

$$(T-1) (n-1) \geq 15$$

Where: n = Sample size of each group

t = Number of groups

$$(1-1) (n-1) \geq 15$$

$$(0) (n-1) \geq 15$$

$$n \geq 15$$

Thus, the sample totaled 15 who served as a control group at once. Sampling in this study is by using a purposive sampling technique using criteria with the type of *Non-Random (Non-Probability)*

The inclusion criteria in this study are:

1. Mothers who have postpartum vaginal
2. Mothers who give exclusive breastfeeding

3. Mothers who post partum up to 6 months
4. Mothers who have babies and healthy babies
5. Mothers who are willing to be research respondents

The exclusion criteria in this study are:

1. Malnourished postpartum mothers
2. Mothers with postpartum depression
3. Mothers who are not willing to be respondents.

## RESEARCH RESULTS

### 4.1.1. Univariate Results

The general data of the respondents in this study included age, last education, parity and childbirth history. The results of the descriptive review of general data are in the form of the following tables:

#### 1. Respondent Characteristics by Age

Table 4.1 Characteristics of respondents based on age at Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency.

It	Age	Sum	
		Frequency	Percentage (%)
1	< 20	2	13,3 %
2	20-35	9	60 %
3	> 35	4	26,7 %
	<b>Total</b>	15	100%

## 2. Characteristics of Respondents Based on Education

Table 4.2 Characteristics of respondents based on education at Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency

No	Education	Sum	
		Frequency	Percentage (%)
1	SD	3	20,3 %
2	SMP	5	33,3 %
3	SMA	7	46,7 %
	<b>Total</b>	15	100%

Based on table 4.2, it shows that the majority of respondents have a high school education, namely 7 respondents (46.7%).

## 3. Respondent Characteristics Based on Job

Table 4.3 Characteristics of respondents based on occupation at Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency

No	Work	Sum	
		Frequency	Percentage (%)
1	Not Working	11	73,3 %
2	Work	4	26,7 %
	<b>Total</b>	15	100%

Based on table 4.3, it shows that the majority of respondents are not working, namely 11 respondents (73.3%)

#### 4. Characteristics of Respondents Based on Parity

Table 4.4 Characteristics of respondents based on parity at Pratama Madina Clinic,

Percut Sei Tuan District, Deli Serdang Regency

No	Paritas	Sum	
		Frequency	Percentage (%)
1	Primipara	5	33,3 %
2	Multipara	10	66,7 %
<b>Total</b>		15	100%

Based on table 4.4, it shows that the majority of multipara respondents are 10 respondents (66.7%).

#### 5. Characteristics of Respondents Based on Childbirth History

Table 4.5 Characteristics of respondents based on maternal childbirth history at Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency

No	Maternal Childbirth History	Sum	
		Frequency	Percentage (%)
1	Normal Childbirth	12	80,0 %
2	Sectio Caesaria	3	20,0 %
<b>Total</b>		15	100%

Table 4.6 Frequency Distribution Effect of woolwich massage on breast milk production in postpartum mothers

Based on the average before and after doing a woolwich massage to postpartum mothers of the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023

NO.	Variable	N	Min	Max	Mean	SD
1	Pre-test	15	15	40	26,93	7,905
2	Post-test	15	70	95	83,93	7,713

Based on table 4.6, the results obtained from the *pre-test* and *post-test* sheets of woolwich massage from 15 respondents before woolwich massage are known, the average is 26.93 (SD:

7,905)(Min:15)(Max:40) while the average after woolwich massage is 83.93 (SD:7,713)(Min:70)(Max:95).

#### 4.1.2. Bivariate Analysis

The normality test is used to determine whether the distribution of data

in a data group or variable is normally distributed or not. This test is used as a

requirement in the *dependent t-test* analysis. The data normality test uses *Shapiro-Wilk values*. As a test criterion, if the significant value > from 0.05, it can be said that the data that has been collected is normally distributed.

**Table 4.6**

**Data Normality Test**

	Kolmorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig	Statistic	Df	Sig
Pre-test	0.148	15	0.200	0.960	15	0.694
Post-test	0.184	15	0.182	0.903	15	0.105

From table 4.6, the significance results in the shapiro-wilk values of 0.694 and 0.105 are obtained. Because the significance value > 0.05, it can be concluded that the data is normally distributed.

Table 4.7 Comparison of Values Before and After Woolwich Massage on Breast Milk Production in Postpartum Mothers at Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023.

NO.	Variable	Mean	SD	HERSELF	<i>P Value</i>	N
1	Pre-test	26,93	7,905	2,041	-	15
2	Post-test	83,93	7,713	1,992	0,000	15

#### 4.2 Discussion

4.2.1 Distribution of frequency and percentage of respondents. Based on the characteristics at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023.

The research entitled "The effect of *Woolwich massage* on breast milk production in postpartum mothers at the Madina Primary Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023.

With a sample of 15 people. At the time of the study, the response of postpartum mothers was very good and cooperative.

The results obtained from the distribution of frequency and percentage based on age are the majority of 20-35 years old as many as 9 people, based on education is the majority of high school students which is 7 people, based on employment is the majority of non-working as many as 11 people and based on parity at the Pratama Madina Clinic Kec. Percut Sei Tuan Regency Deli Serdang most of the respondents are multipara as many as 10 people and the majority of childbirth history is normal childbirth as many as 12 people.

#### **4.2.2 Effect of *Woolwich Massage* on Breast Milk Production in Postpartum Mothers in**

#### **Pratama Madina Clinic Kec. Percut Sei Tuan Regency. Deli Serdang**

Based on the results of the study, it was analyzed with a *dependent T-test* statistical

test on the effect of *Woolwich massage* on breast milk production in postpartum mothers at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency, which was held from April to June 2023. 15 respondents were obtained who were then pre-tested on all respondents and then given intervention for 7 consecutive days which was carried out in each respondent's house, the post-test was carried out on the 7th day after the pre-test activity which obtained the following results. The data analyzed by statistical tests showed a *p value* = 0.000

when compared to  $\alpha = 0.05$  then *the p value* is  $< \alpha$ , so the statistical conclusion taken is that there is an effect of *Woolwich massage* on breast milk production in postpartum mothers.

#### **CONCLUSION**

Contains answers to the research objectives. From the results and discussion of the effect of *woolwich massage* on breast milk production in postpartum mothers at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023 and the conclusions that can be obtained from this study are:

1. The average score of breast milk production before *Woolwich massage* for postpartum mothers at Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023 is 26.93 ml
2. The average score of breast milk production after *Woolwich massage* on postpartum mothers at the Pratama Madina Clinic, Percut Sei

Tuan District, Deli Serdang Regency in 2023 is 83.93 ml

3. There are caregivers of breast milk production after Woolwich massage on postpartum mothers at the Pratama Madina Clinic, Percut Sei Tuan District, Deli Serdang Regency in 2023 shown by the results of the *t dependent* test obtained a *p-value* of  $0.000 < 0.05$  which means that there is an influence of breast milk production after Woolwich massage is carried out on postpartum mothers.

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