The Effect Of Providing Rolling Massage To Public Mothers On Breast Milk Explosion At PMB Ruri Cisauk In 2023

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Abstract.

Background The prevalence of successful breastfeeding coverage for postpartum mothers is still very low, namely 51% of 78 mothers during 2023 and in 2022 as many as 48% of 109 mothers, from the results of interviews many mothers complained that breast milk was not coming out, babies did not want to breastfeed and other. Based on researchers' observations, many postpartum mothers give formula milk on the grounds that breast milk does not come out or there is little breast milk. The purpose of the study was to study the effect of rolling back massage on breast milk expenditure in puerperal mothers at PMB Cisauk in 2023. This research method is a Quasy Experiment, one group pre-post design, the population in this study is all postpartum mothers who were at PMB Cisauk on 29 October-25 November 2023, totaling 20 people using total sampling with a sample size of 20 respondents, using data namely primary data with observation, analysis using the T-Dependent Test. Research results: From the statistical test results of the dependent t test, it is known that there is an effect of rolling back massage on breast milk production in postpartum mothers in PMB Cisauk in 2023 with a value of P=0.000. Conclusions and Suggestions: it is hoped that health workers can provide additional information and socialize or provide counseling when carrying out postpartum visits to families and husbands about the benefits of rolling massage to the community, especially breastfeeding mothers, to increase their breast milk output so that later mothers can breastfeed exclusively.

Keywords: *Rolling massage, postpartum mothers and breast milk production.*

I. INTRODUCTION

UNICEF and WHO recommend exclusive breastfeeding until babies are 6 months old. Breast milk (ASI) is expected to be given to babies from birth to 2 years old, if the baby is given breast milk alone until 6 months of age without adding or replacing it with other food or drink, it is an exclusive breastfeeding process. From the data obtained, exclusive breastfeeding coverage throughout the world was only around 36% during the 2007-2017 period (WHO, 2019).Nationally, the coverage of babies receiving exclusive breast milk in 2020 is 66.06%. This figure has exceeded the 2020 Strategic Plan target of 40%. The highest percentage of exclusive breastfeeding coverage is in West Nusa Tenggara Province (87.33%), while the lowest percentage is in West Papua Province (33.96%). There are four provinces that have not achieved the 2020 Strategic Plan target, namely Maluku and West Papua, while DKI Jakarta Province has exclusive breastfeeding coverage of 65.4% (Kemenkes Profile, 2020).In Indonesia, exclusive breastfeeding is regulated in Minister of Health Decree No. 450/2004 and Government Regulation Number 33 of 2012 concerning Providing Exclusive Breast Milk. Exclusive provision of breast milk (ASI) for babies from birth to six months of age. Joint Regulation of the Minister of State for Women's Empowerment, Minister of Manpower and Transmigration, and Minister of Health No. 48/2008, no. Per. 27/2008, No. 1177/2008 concerning Increasing Breastfeeding during working hours at work (Astuti. et al, 2017).The highest exclusive breastfeeding in 2020 was reported by South Jakarta and North Jakarta, while the lowest was in East Jakarta which was still below 50%. Overall, exclusive breastfeeding in DKI Jakarta reached 65.4%, higher than in 2019, namely 53.3%, but down compared to 2018, namely 81.9%.

Further observations are needed to find the reasons for the decline in exclusive breastfeeding coverage in DKI Jakarta this year (DKI Jakarta Health Profile Health Office, 2020). Based on data from the Central Statistics Agency, the coverage of babies aged less than 6 months who received exclusive breastfeeding was 45.66% in 2018, 68.08% in 2019 and 70.86% in 2020 (Central Statistics Agency, 2021) Mother's milk (ASI) is the most important baby food, especially in the first months of a baby's life. Many

problems arise in the first days of breastfeeding, such as breast milk not coming out or lack of milk production, resulting in the baby not getting adequate breast milk. This happens because many postpartum mothers do not know the importance of doing oxytocin massage which has an effect on the smooth release of breast milk. Breast milk (breast milk) is the first natural food for babies, containing all the energy and nutrients that babies need in the first month of life (Nugroho, 2017). However, there are many obstacles in the lactation process, including causes of poor breastfeeding, namely food, peace of mind and soul, use of contraceptives, breast care, physiological factors, rest patterns, baby sucking factors, cigarette and alcohol consumption (Rini, 2017). Breast milk irregularities can be divided into four parts, namely not coming out at all (agalaxia), little milk (oligolaxia), too much milk (polygalaxia), and prolonged discharge (galactorrhea). Irregularities in milk production can be overcome in various ways, namely: breast care, namely breast care which is carried out to facilitate breastfeeding and avoid difficulties during breastfeeding by doing massage, breast exercises, namely training or movements to facilitate breast milk, breast massage and rolling massage to the bone. fifth-sixth costae (Gunawan, 2017).

Rolling massage has a calming, relaxing effect, increases the pain threshold and loves the baby, so that the hormone oxytocin comes out and breast milk comes out quickly. Oxytocin can be obtained in various ways, whether oral, intra-nasal, intra-muscular, or by massage which stimulates the release of the hormone oxytocin. This rolling massage action can be assisted by the baby's father or grandmother by massaging (Rahayu 2016).Rolling massage is a solution to overcome the irregular flow of breast milk after giving birth and beyond if the mother's breast milk is not flowing smoothly and does not affect parity. Rolling massage is massage along the side of the spine up to the fifth and sixth rib bones and is an attempt to stimulate the hormones prolactin and oxytocin after giving birth (Gunawan, 2017). The purpose of rolling massage is to stimulate the oxytocin reflex (down reflex). Where the mother will feel relaxed, fatigue after giving birth will disappear, and breast milk will come out quickly (Afrianti, 2019). Apart from stimulating the let down reflex, the benefits of rolling massage are providing comfort to the mother, reducing engorgement, reducing breast milk blockages, stimulating the release of the hormone oxosin, maintaining milk production when the mother and baby are sick (Rahayu, 2016).Badriyah's research (2022) states that there is an influence of rolling back massage therapy on the smooth flow of breast milk in postpartum mothers in the Parit Deli Community Health Center Working Area with the results of the Wilcoxon statistical test pvalue = 0.000<0.005.The initial survey conducted by researchers on 23-26 May 2023 at PMB Ruri Priyandari Cisauk. In 2023, the number of successful breastfeeding coverage for postpartum mothers was 51% from 78 mothers during 2023 and in 2022 it was 48% from 109 mothers, from the results In interviews, many mothers complained that breast milk was not coming out, the baby did not want to breastfeed and so on.

Based on researchers' observations, many postpartum mothers give formula milk on the grounds that breast milk does not come out or there is little breast milk, so with this problem they are interested in conducting research with the research title "The effect of rolling back massage on breast milk production in postpartum mothers at PMB Cisauk in 2023".Based on the problems found that many mothers do not breastfeed for the reason that breast milk does not come out, the baby does not want to breastfeed and so on, the research problem can be formulated "Is there an effect of rolling back massage on the release of breast milk in postpartum mothers in PMB Cisauk in 2023?". The aim of this research is to study the effect of rolling back massage on breast milk production in postpartum mothers at PMB Cisauk in 2023.

II. METHODS

This type of research is quantitative research using a Quasy Experiment design, one group pre-post design. The population in this study was all postpartum mothers who were at PMB Cisauk on 29 October-25 November 2023, totaling 20 people. Samples were taken as a whole who met the sample criteria, namely 20 people using total sampling. The data collected in this research is in the form of secondary data and primary data. Data analysis uses univariate and bivariate analysis.

III. RESULTS AND DISCUSSION

1. Univariate Analysis

a. Respondent Characteristics

Table 1. Frequency Distribution Based on Respondent Characteristics At PMB Ruri Cisauk

NO.	Respondent Characteristics	Frequenci (F)	Percentage (%)
1.	**Age**		
	<20 year	3	15,0
	20-35 year	16	80,0
	>35 year	1	5,0
2.	**Education**		
	Tidak Sekolah	0	0,0
	Dasar (SD dan SMP)	6	15,0
	Menengah (SMA)	12	80,0
	Tinggi (D1-Sarjana)	2	5,0
3.	**Work**		
	Work	11	55,0
	Doesn't work	9	45,0
Total		20	100,00

Based on table 1. above, of the 20 respondents there are a small number of respondents, namely 3 (15%) aged <20 years, almost all respondents 16 (80%) aged 20-35 years and a small number of respondents 2 (5%) aged >35 year. Of the 20 respondents, a small number of respondents 6 (15%) had basic education (SD and SMP), the majority of respondents 12 (80%) had secondary education (SMA) and a small number of respondents 2 (5%) had tertiary education. Of the 20 respondents, the majority of respondents 11 (55%) were working and almost all of the respondents 9 (45%) were not working.

b. Average breast milk production for postpartum mothers before and after rolling back massage.

Table 2. Average breast milk production for postpartum mothers before and after rolling back massage at PMB Ruri Cisauk in 2023

Group	N	Mean	Min	Max	Std. Deviasi
Pre	20	104,50	75	150	16.928
Post	20	217.05	150	280	42.085

Based on table 5.2, it is known that among the 20 respondents who had not been given rolling massage, the average breast milk output was 104.50 with a minimum of 75 and a maximum of 150 and a standard deviation of 16.928. The average breast milk output of postpartum mothers after giving rolling massage to 20 respondents, the average breast milk output was 217.05 with a minimum of 150 and a maximum of 280 and a standard deviation of 42.085.

2. Bivariate Analysis

Bivariate analysis was carried out to determine the effect of giving rolling massage to postpartum mothers on breast milk production at PMB Ruri Cisauk, which can be seen in table 3 as follows:

Table 3. The effect of giving rolling massage to postpartum mothers on breast milk production at PMB Ruri Cisauk in 2023

Variabel	Mean	Mean Selisih	N	Std. Deviasi	*P Value*
Pre	104,50	-112,550	20	44,786	0,000
Post	217,05				

Based on Table 3 above, it is found that giving rolling massage has an influence on breast milk production in postpartum mothers at PMB Ruri Cisauk. It is known that the average breast milk production before rolling massage is 104.50 while after rolling massage it increases with the average output Breast milk was 217.05, from the T-dependent test the significance value was <0.05, namely 0.000, then Ho was rejected so it was concluded that there was an effect of giving rolling massage to postpartum mothers on breast milk production at PMB Ruri Cisauk in 2023

Discussion

1. Characteristics of respondents at PMB Ruri Cisauk

Based on the research results, it is known that of the 20 respondents there are a small number of respondents, namely 3 (15%) aged <20 years, almost all respondents 16 (80%) aged 20-35 years and a small number of respondents 2 (5%) aged >35 years. Of the 20 respondents, a small number of respondents 6 (15%) had basic education (SD and SMP), the majority of respondents 12 (80%) had secondary education (SMA) and a small number of respondents 2 (5%) had tertiary education. Of the 20 respondents, the majority of respondents 11 (55%) were working and almost all of the respondents 9 (45%) were not working.The age and parity of mothers who have given birth to babies for more than one time produce breast milk on the fourth day after giving birth is higher compared to mothers who give birth for the first time.

This is in line with the theory of Wahyuni (2017) in Zarkoni (2022), the factors that influence breast milk production are the frequency of breastfeeding, low birth weight, premature babies, stress and acute illness as well as the mother's age, education, occupation and parity. Parity is one of the factors causing breast milk not to flow smoothly because mothers are giving birth for the first time so it takes time to make breast milk flow smoothly. Another factor that is also very influential is the level of education. A higher level of education will make it easier for a person or community to absorb information and implement it in daily behavior and lifestyle, especially in terms of health and nutrition. Education level, especially women's education level, influences health status.

2. Average Breast Milk Expenditure of Postpartum Mothers Before Giving Rolling Massage at PMB Ruri Cisauk in 2023

Based on the research results, the average breast milk output of 20 respondents before being given rolling massage was 104.50 with a minimum of 75 and a maximum of 150 and a standard deviation of 16.928. This is a necessary step to increase breast milk production so that the baby's breast milk intake is adequate.A decrease in the smooth production of breast milk after giving birth can be caused by a lack of stimulation of the breast muscles which stimulate the hormones prolactin and oxytocin which play an important role in the smooth production of breast milk. Apart from that, factors that influence breast milk production are breast care, baby sucking, frequency of breastfeeding, food factors, use of contraceptives, breast anatomy, peace of mind and soul, rest patterns, physiological factors and medications and gestational age at birth (Reni, 2019).

Efforts to stimulate the hormone oxytocin in mothers after giving birth are by using the rolling massage technique, so that the reflex for the release of breast milk can be optimal. Rolling massage or back massage is a technique to stimulate the oxytocin reflex or let down reflex. This oxytocin massage is done by massaging the back area along both sides of the spine (Roesli, 2005 in Noviana, 2018).In line with research by Noviana (2018) that from the research results obtained data from observations of primiparous post partum mothers before the rolling massage was carried out, there were 9 non-fluent primiparous post partum mothers (69.3%) with a mean of 2.38. Based on the analysis of observations of post partum primiparous mothers before the Rolling Massage was carried out, the lowest score was that only a small portion of the milk leaked out and only a small portion before being breastfed, the mother's breasts felt tense.

3. Average breast milk production for postpartum mothers after giving rolling massage at PMB Ruri Cisauk in 2023

Based on the research results, it is known that among 20 respondents who had been given rolling massage, the average breast milk output of postpartum mothers after giving rolling massage was 217.05 with a minimum of 150 and a maximum of 280 and a standard deviation of 42.085.Breast milk irregularities can be divided into four parts, namely not coming out at all (agalaxia), little milk (oligolaxia), too much milk (polygalaxia), and prolonged discharge (galactorrhea). Irregularities in milk production can be overcome in various ways, namely: breast care, namely breast care which is carried out to facilitate breastfeeding and avoid difficulties during breastfeeding by doing massage, breast exercises, namely training or movements to facilitate breast milk, breast massage and rolling massage to the bone. fifth-sixth costae (Gunawan, 2017).The results of research conducted by (elvika fit Ari Shanti, 2018) regarding the effectiveness of rolling back massage show that there is an increase in breast milk production. Rolling Massage is a relaxation

therapy which aims to stimulate the central nerves in the posterior and anterior pituitary so that it can increase breast milk production and provide comfort and relaxation after childbirth.

The results of the study showed that there was an influence on breast milk production in post-partum mothers who were given Rolling Massage treatment who experienced smooth milk production.In line with the research of Dewi Ida Ayu Kade Citra Karunia., 2022, the results of the Wilcoxon Sign Rank Test analysis in the control group showed that the calculated Z value was -2.236 with a p-value of 0.025 (p-value < 0.05), in the intervention group which was given back rolling massage The calculated Z value was - 3.162 with a p-value of 0.002 (p-value < 0.05), so it was concluded that Ha was accepted and it was seen that there was an influence of back rolling massage on the smooth breastfeeding of postpartum mothers at the Independent Practice of Midwife Ni Putu Putrini, A.Md.Keb. The statistical results of the Mann Whitney Test in the control and intervention groups showed that the calculated Z value was -2.764 with a p value of 0.006 (p-value < 0.05), so it was concluded that there was a difference in breast milk production in the control and intervention groups as well as giving back rolling massage was effective on smooth breastfeeding of postpartum mothers.

4. The effect of giving rolling massage to postpartum mothers on breast milk production at PMB Ruri Cisauk in 2023

Based on the research results, it was found that giving rolling massage had an influence on breast milk production in postpartum mothers at PMB Ruri Cisauk. It was found that the average breast milk production before rolling massage was 104.50 while after being given rolling massage it increased with an average breast milk production of 217. .05, from the T-dependent test the significance value is <0.05, namely 0.000, then Ho is rejected so it is concluded that there is an influence of giving rolling massage to postpartum mothers on breast milk production in PM Ruri Cisauk in 2023.Rolling massage is a solution to overcome the irregular flow of breast milk after giving birth and beyond if the mother's breast milk is not flowing smoothly and does not affect parity. Rolling massage is massage along the side of the spine up to the fifth and sixth rib bones and is an attempt to stimulate the hormones prolactin and oxytocin after giving birth (Gunawan, 2017). The purpose of rolling massage is to stimulate the oxytocin reflex (down reflex). Where the mother will feel relaxed, fatigue after giving birth will disappear, and breast milk will come out quickly (Afrianti, 2019).

Apart from stimulating the let down reflex, the benefits of rolling massage are providing comfort to the mother, reducing engorgement, reducing breast milk blockages, stimulating the release of the hormone oxosin, maintaining milk production when the mother and baby are sick (Rahayu, 2016).In line with research conducted by Mayangsari (2019) it is stated that there is a difference before and after rolling back massage on breast milk production. There is a difference before and after endhorphin massage on breast milk production. Rolling back massage is more effective than endhorphin massage in producing breast milk in postpartum mothers.In line with Firdayanti's (2020) research, it is also stated that the combination of rolling massage and areola massage has an effect on breast milk production because this combination can stimulate the hormones prolactin and oxytocin thereby producing breast milk.In line with Badriyah's (2022) research, it is stated that there is an influence of rolling back massage therapy on the smooth production of breast milk in postpartum mothers in the Parit Deli Community Health Center Working Area with the results of the Wilcoxon statistical test pvalue = 0.000<0.005.

IV. CONCLUSION

1. Characteristics of postpartum mother respondents at PMB Ruri Cisauk. Of the 20 respondents, almost all of the respondents 16 (80%) were aged 20-35 years, most of the respondents 12 (80%) had secondary education (SMA), most of the respondents 11 (55%) Work.
2. The average breast milk output before rolling massage was 104.50 with a minimum of 75 and a maximum of 150 and a standard deviation of 16.928.
3. The average breast milk output after consuming rolling massage is 217.05 with a minimum of 150 and a maximum of 280 and a standard deviation of 42,085.
4. There is an effect of giving rolling massage to postpartum mothers on breast milk production at PMB Ruri Cisauk in 2023 with a value of p=0.000.

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