



The Relationship Between Oxytocin Massage With Public Breast Milk Expenditure

Aros Rostiana¹, Marni Br Karo², Hainun Nisa³

^{1,2,3} Program Studi Kebidanan (S1) dan Profesi Bidan STIKes Medistra Indonesia, Indonesia. Jl. Cut Mutia Raya No. 88A Sepanjangjaya Bekasi 17114, Indonesia

Email: rostianaaros@gmail.com¹, marnikaro.stikesmi@gmail.com², nisa.sty18@gmail.com³

ABSTRACT

The most important time during breastfeeding is the first few days after giving birth. If a mother is assisted properly when she starts breastfeeding, it is likely that the mother will be successful in continuing to breastfeed. The reality on the ground shows that a small expenditure and ejection of breast milk in the first days after giving birth is an obstacle in early breastfeeding. It was stated that mothers who did not breastfeed their babies in the first days of breastfeeding were caused by mothers' anxiety and fear of reduced milk output and mothers' lack of knowledge about the breastfeeding process. Anxiety and fear by causing a decrease in the hormone oxytocin so that breast milk cannot come out immediately after giving birth, the mother finally decides to give formula milk to her baby. If the mother does not know how to deal with a decrease in milk production, one of which is by means of oxytocin massage.

Keywords: *Breast Milk Expenditure, Massage, Oxytocin*

INTRODUCTION

Mother's milk (ASI) is the best nutrition the most appropriate for newborns to old age 6 months, because the baby's intestines cannot yet digest food at that time apart from breastfeeding (Nurainun & Susilowati, 2021). Breast milk can reduce disorders gastrointestinal problems in babies due to direct breast milk produced by the mother so it is fresh and sterile (Muslimah et al., 2020). The composition contained in breast milk is very contains many benefits, namely as nutrition, hormones, immune, growth factors, antiallergies, antibodies and anti-inflammatories that can prevent infection in babies (Nufus, 2019). Breastfeeding is a skill learned by both mother and baby, both of which require time and patience to fulfill the nutrition of the baby for six months (Winda, Yessy, 2020). The decrease in milk production in the first days after giving birth can be caused by a lack of stimulation of the hormones prolactin and oxytocin which cannot flow smoothly (Ibrahim, 2021). So many mothers give formula milk to their babies to meet the nutritional needs of these babies (Kemenkes RI, 2016).

METHOD

This Research design used to facilitate research used to facilitate researchers in making a research or developing research,

research design also helps researchers to achieve research goals and or the results of their thoughts. The sample was 50 people with a sampling method, namely random sampling. The research design in this study was an analytic observational design, namely cross sectional. In this analytic observational design, researchers try to find relationships between variables, namely by conducting an analysis of the data collected.

RESULTS AND DISCUSSIONS

Result

The From the results of cross-tabulation it is known that postpartum mothers who have had oxytocin massage and experienced milk ejection are included in the smooth category, there are 40 (80.0%) postpartum mothers, and those who have had oxytocin massage but their milk expenditure is included in the substandard category, there are 10 (20.0%) postpartum mothers. Based on the Pearson Chi-Square test, it is known that the P value is 0.009, meaning that there is a significant relationship between oxytocin massage and breastfeeding for postpartum mothers on days 1-3 at PMB Midwife Robiatul Adawiyah.

research design used to facilitate research used to facilitate researchers in making a research or developing research, research

design also helps researchers to achieve research goals and or the results of their thoughts. The research design in this study was an analytic observational design, namely cross sectional. In this analytic

observational design, researchers try to find relationships between variables, namely by conducting an analysis of the data collected.

1. Univariate analysis

Table 1. Frequency Distribution of Oxytocin Massage for Postpartum Mothers at PMB Midwife Robiatul Adawiyah

Oxytocin massage	Frequency	Persentase (%)
Done	50	100.0
Not done	0	0
Total	50	100.0

Based on Table 1, it is known that all samples of postpartum mothers at PMB Midwife Robiyatul Adawiyah as many as 50 (100%) of postpartum mothers had received oxytocin massage.

Table 2 Distribution of the Frequency of Expending Breast Milk for Postpartum Mothers at PMB Midwife Robiatul Adawiyah

Milk production	Frequency	Persentase (%)
Smooth	40	80.0
Not smooth	10	20.0
Total	50	100.0

Based on Table 2, it is known that as many as 40 (80.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah breast milk expenditure were included in the current category, and as many as 10 (20.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah their breastfeeding expenditures were included in the substandard category.

Table 3 Distribution of Age Frequency of Postpartum Mothers in PMB Midwife Robiatul Adawiyah

Age	Frequency	Persentase (%)
<25 years old	25	50.0
25-35 years old	21	42.0
>35 years old	4	8.0
Total	50	100.0

Based on Table 3, it is known that as many as 25 (50.0%) postpartum mothers at PMB Robiyatul Adawiyah midwives are aged 24 years and under, as many as 21 (42.0%) postpartum mothers at PMB Robiyatul Adawiyah midwives are aged 25-35 years, and

as many as 4 (8.0%) mothers Postpartum at PMB Midwives Robiyatul Adawiyah are over 35 years old.

Table 4 Distribution of Educational Frequency for Postpartum Mothers in PMB Midwife Robiatul Adawiyah

Education	Frequency	Persentage (%)
Elementary education	10	20.0
Junior high school education	9	18.0
High school education	18	36.0
Bachelor	13	26.0
Total	50	100.0

Based on Table 4 it is known that as many as 10 (20.0%) Postpartum mothers at PMB Midwife Robiyatul Adawiyah had the last education, namely elementary school, as many as 9 (18.0%) Postpartum mothers at PMB Midwife Robiyatul Adawiyah had junior high school education, as many as 18 (36.0%) Postpartum mothers at PMB Midwife Robiyatul Adawiyah has a high school education, and 13 (26.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah have a Bachelor's degree.

Table 5 Distribution of the Frequency of Occupation of Postpartum Mothers in PMB Midwife Robiatul Adawiyah

work	Frequency	Persentage (%)
Housewift	26	52.0
Employee	8	16.0
Government employees	13	26.0
Trader	3	6.0
Total	50	100.0

Based on Table 5 it is known that as many as 26 (52.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah worked as IRT, as many as 8 (16.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah worked as employees, as many as 13 (26.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah works as a civil servant, and 3 (6.0%) of postpartum mothers at PMB Midwife Robiyatul Adawiyah work as traders.

Tabel 6 Distribution of the Frequency of Types of Delivery for Postpartum Mothers at PMB Midwives Robiatul Adawiyah

Type of childbirth	Frequencyi	Persentage (%)
Normal	45	90.0
Caesarean section	5	10.0
Total	50	100.0

Based on Table 6, it is known that as many as 45 (90.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah gave birth normally, and as many as 5 (10.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah gave birth through the SC process.

Table 7 Distribution of the Frequency of Postpartum Mother's Days at PMB Midwife Robiatul Adawiyah

Postpartum Day	Frequency	Persentase (%)
Day 1	18	36.0
Day 2	8	16.0
Day 3	24	48.0
Total	50	100.0

Based on Table 7 it is known that as many as 18 (36.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah are on the first day of childbirth, as many as 8 (16.0%) postpartum mothers at PMB Midwife Robiyatul Adawiyah are on the second day of childbirth, and as many as 24 (48.0%) mothers Postpartum at PMB Midwife Robiyatul Adawiyah is on the 3rd day of childbirth.

Table 8 Distribution of the Frequency of Parity of Postpartum Mothers in PMB Midwife Robiatul Adawiyah

Parity	Frequency	Persentase (%)
Primipara	18	36.0
Multipara	30	60.0
Grandemultipara	2	4.0
Total	50	100.0

Based on Table 8, it is known that as many as 18 (36.0%) of postpartum mothers at PMB Midwife Robiyatul Adawiyah were Primiparas, as many as 30 (60.0%) of postpartum mothers at PMB Robiyatul Adawiyah Midwives were multiparous, and as many as 2 (4.0%) Postpartum mothers at PMB Robiyatul Adawiyah Midwives Adawiyah is a grand multipara.

2. Bivariate Analysis

Table 9 The Relationship between Oxytocin Massage and Expenditures for Postpartum Mothers at PMB Midwife Robiatul Adawiyah

Oxytocin Massage	Milk production				Total		P Value (Pearson Chi-Square)
	Smooth		Not smooth				
	f(n)	%	f(n)	%	f(n)	%	
Done	40	80.0	10	20.0	50	100.0	0,009
Not done	0	0	0	0	0	0	
Total	40	80.0	10	20.0	50	100.0	

Based on the bivariate analysis in Table 9, it is known that postpartum mothers who had undergone oxytocin massage and experienced breastfeeding were included in the smooth category, there were 40 (80.0%) postpartum mothers, and those who had had oxytocin massage but their milk expenditure was included in the substandard category. 10 (20.0%) postpartum mothers. Based on the Pearson Chi-Square test, it is known that the P value is 0.009, meaning that there is a significant relationship between oxytocin massage and breastfeeding for postpartum mothers on days 1-3 at PMB Midwife Robiatul Adawiyah.

Discussion

Research design used to facilitate research used to facilitate researchers in making a research or developing research, research design also helps researchers to achieve research goals and or the results of their thoughts. The research design in this study was an analytic observational design, namely cross sectional. In this analytic observational design, researchers try to find relationships between variables, namely by conducting an analysis of the data collected.

Physiologically massage oxytocin through Neurotransmitters will stimulate the medulla oblongata by sending messages to the hypothalamus in the posterior pituitary

it stimulates oxytocin reflex or let down reflex for secretes the hormone oxytocin into the blood (Anggraini et al., 2022). By giving a massage there will be more oxytocin (Saputri et al., 2019). Facilitates breast milk production in breastfeeding mothers

and also provides comfort to the mother (Tompunuh, Magdalena Martha, & Sujawaty, 2019).

The average research results before it was carried out treatment and after oxytocin massage there is an increase in breast milk production (Wulandari et al., 2018). Oxytocin massage which can be done on postpartum mothers increase breast milk production because it can trigger release of

the very important hormone oxytocin in breast milk production (Astuti et al., 2016). When doing massage oxytocin then oxytocin will trigger the cells myoepithelium surrounding the alveoli and ducts to contract so that milk flows from alveoli (milk factories) to ducts leading to the sinuses and nipples so that breast milk is released and breast milk production increases (Nurainun & Susilowati, 2021). This is in accordance with Doko's statement (2019), which states that doing Breast care or breast care can be done increases breast milk production if done on postpartum mothers, this method aims to improve blood circulation and prevent blockage of the milk production ducts resulting in smooth milk production. Apart from that, there are other ways can be done to facilitate breast milk production namely by doing an oxytocin massage. Massage Oxytocin is a massage that is done for stimulates the hormones prolactin and oxytocin after give birth to. This massage is done on the bones back with massage starting from the bones behind the cervical spine (cervical vertebrae) up to twelve thoracic vertebrae. Function of Oxytocin massage is to increase hormones oxytocin and the mother becomes relaxed after doing this massage. Oxytocin massage can make things easier express breast milk and increase breast milk production by

reducing blockage of channels breast milk production (Doko et al., 2019).

Oxytocin massage is also easy to do with not too much movement so it can be done family remembers what to do and what not to do takes a long time (Saputri et al., 2019). Support from husband and family also play an important role in breast-feed (Apreliasari & Risnawati, 2020). One form of this support can be seen from the husband and family agreeing to do an oxytocin massage so that the mother can motivated to breastfeed her baby as well family members who are willing to help do normal housework mother (Delima et al., 2016).

CONCLUSION

Based on the results of the research and discussion, conclusions can be drawn as follows: From the frequency distribution of postpartum mothers a total of 50 postpartum mothers (100%) it is known that postpartum mothers who have had oxytocin massage. The frequency distribution of those who experience breastfeeding are included in the current category, there are 40 (80.0%) postpartum mothers and 10 people (20%) are not smooth. Relationship between oxytocin massage and breastfeeding for postpartum mothers at PMB Midwife Robiatul Adawiyah. Based on the Pearson Chi-Square test, it is known that the value ($p =$

0.009 $\leq \alpha = 0.05$) means that there is a significant relationship between oxytocin massage and milk production for postpartum mothers. 1-3 at PMB Midwife Robiatul Adawiyah.

BIBLIOGRAPHY

- Anggraini, F., Erika, & Ade Dilaruri. (2022). Efektifitas Pijat Oketani dan Pijat Oksitosin dalam Meningkatkan Produksi Air Susu Ibu (ASI). *Jurnal Vokasi Keperawatan (JVK)*, 5(2), 93–104.
<https://doi.org/10.33369/jvk.v5i2.24144>
- Apreliasari, H., & Risnawati. (2020). Pengaruh Pijat Oksitosin Terhadap Peningkatan Produksi ASI. *JIKA*, 5(1), 25–29.
- Astuti, E. R., Nurdianti, R. D. S., & Rokhanawati, D. (2016). Pengaruh Pemberian ASI terhadap Lama Masa Nifas di Puskesmas Trucuk I. *Jurnal Kebidanan Dan Keperawatan*, 12(1), 69–76.
<https://doi.org/https://search.crossref.org/?q=2477-8184>
- Delima, M., Arni, G., & Rosya, E. (2016). Pengaruh Pijat Oksitosin Terhadap Peningkatan Produksi Asi Ibu Menyusui Di Puskesmas Plus Mandiangin. *Jurnal Ipteks Terapan*, 9(4), 283–293.
<https://doi.org/10.22216/jit.2015.v9i4.1238>
- Doko, T. M., Aristiati, K., & Hadisaputro, S. (2019). Pengaruh Pijat Oksitosin oleh Suami terhadap Peningkatan Produksi Asi pada Ibu Nifas. *Jurnal Keperawatan Silampari*, 2(2), 66–86.
<https://doi.org/10.31539/jks.v2i2.529>
- Ibrahim, F. (2021). Penerapan Pijat Oksitosin dan Marmet untuk Meningkatkan Produksi ASI Ibu Nifas. *Journal Midwifery Jurusan Kebidanan Politeknik Kesehatan Gorontalo*, 6(2), 73.
<https://doi.org/10.52365/jm.v6i2.317>
- Kemenkes RI. (2016). Pedoman Pekan ASI Sedunia (PAS) 2016. *Direktorat Gizi Masyarakat*.
- Muslimah, A., Laili, F., & Saidah, H. (2020). Pengaruh Pemberian Kombinasi Perawatan Payudara dan Pijat Oksitosin terhadap Produksi ASI pada Ibu Post Partum. *Jurnal Mahasiswa Kesehatan*, 1(2), 87–94.
- Nufus, H. (2019). Efektivitas Pijat Oksitosin Terhadap Produksi ASI. *Jurnal Borneo Cendekia*, 3(2), 223–227. <https://doi.org/10.1007/s11273-020-09706-3>
<http://dx.doi.org/10.1016/j.jweia.2017.09.008>
<https://doi.org/10.1016/j.energy.2020.117919>
<https://doi.org/10.1016/j.coldregions.2020.103116>
<http://dx.doi.org/10.1016/j.jweia.2010.12.004>
<http://dx.doi.org/10.1016/j.jweia.2010.12.004>
- Nurainun, E., & Susilowati, E. (2021). Pengaruh Pijat Oksitosin Terhadap Produksi ASI Pada Ibu Nifas : Literature Review. *Jurnal Kebidanan Khatulistiwa*, 7(1), 20.
<https://doi.org/10.30602/jkk.v7i1.611>
- Saputri, I. N., Ginting, D. Y., & Zendato, I. C. (2019). Pengaruh Pijat Oksitosin Terhadap Produksi Asi Pada Ibu Postpartum. *Jurnal Kebidanan Kestra (Jkk)*, 2(1), 68–73.
<https://doi.org/10.35451/jkk.v2i1.249>
- Tompunuh, Magdalena Martha, & Sujawaty, S. (2019). Pengaruh Pijat Oksitosin terhadap Produksi ASI pada Ibu Postpartum di Ruang Nifas Rumah Sakit Umum Daerah Prof Aloi Saboe Kota Gorontalo. *Sains, Seminar Nasional Penelitian, Lembaga Pengabdian, D A N Uit*,

Masyarakat, Imd.

Winda, Yessy, S. (2020). Hubungan Pengetahuan Dan Sikap Ibu Dengan Pemberian Asi Eksklusif Pada Bayi Usia 0-6 Bulan Di Desa Kabupaten Aceh Tenggara Tahun 2019 Rahmayuni Winda , Syahradesi Yessy , dan Junaida Sri , Hubungan Pengetahuan Dan Sikap Ibu Dengan Pemberian ASI Eksklusif. *Jurnal Ners Nurul Hasanah*, 8(2), 6–11.

Wulandari, P., Menik, K., & Khusnul, A. (2018). Peningkatan Produksi ASI Ibu Post Partum melalui Tindakan Pijat Oksitosin. *Jurnal Ilmiah Keperawatan Indonesia [JIKI]*, 2(1), 33.
<https://doi.org/10.31000/jiki.v2i1.1001>