

Efektivitas *Effleurage Massage* Terhadap Nyeri *Afterpains* Pada Ibu Nifas Multipara Hari Ke 1 dengan Persalinan Normal di RS. Medirossa 2 Cibarusah

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ABSTRAK

Ibu postpartum sering mengalami perubahan baik secara fisiologis maupun psikologis, salah satunya adalah perubahan reaksi tubuh akibat kontraksi rahim. Hal ini menyebabkan rasa tidak nyaman pada ibu terutama pada area perut akibat kontraksi rahim yang disebut afterpain. Nyeri akibat kontraksi rahim (afterpain) memerlukan penanganan yang harus diminimalkan atau ditekan seminimal mungkin. Sebagai bidan yang memberikan asuhan penuh kasih sayang kepada ibu, nyeri yang dirasakan ibu perlu diintervensi, salah satunya dengan memberikan pijat effleurage. Untuk mengetahui efektivitas pijat effleurage terhadap afterpain pada ibu postpartum multipara hari ke-1 dengan persalinan normal di RS Medirossa 2 Cibarusah. Penelitian ini menggunakan metode quasi eksperimen dengan rancangan pretest-posttest one group design. Sampel dalam penelitian ini adalah seluruh ibu postpartum multipara hari ke-1 dengan persalinan normal yang memenuhi kriteria inklusi pada bulan November sampai dengan Desember 2023 sebanyak 32 orang, teknik pengambilan sampel adalah total sampling. Instrumen penelitian menggunakan lembar observasi skala nyeri Numeric Rating Scale (NRS). Uji statistik yang digunakan adalah uji Wilcoxon. Terdapat penurunan intensitas nyeri sesudah intervensi effleurage massage dimana sebelum effleurage massage nilai mediannya adalah 4 (minimum 1, maksimum 7) dan intensitas nyeri sesudah effleurage massage nilai mediannya adalah 2 (minimum 0, maksimum 4). Dari hasil uji Wilcoxon diperoleh nilai $p = 0,000$ ($\alpha < 0,05$). Terdapat efektivitas effleurage massage terhadap afterpain pada ibu postpartum multipara hari ke-1 dengan persalinan normal di RS Medirossa 2 Cibarusah tahun 2023. Diharapkan bidan dapat menerapkan effleurage massage sebagai salah satu teknik untuk meredakan afterpain pada ibu postpartum dengan persalinan normal.

Kata Kunci: Pijat effleurage, Afterpains, Ibu pascapersalinan multipara

ABSTRACT

Postpartum mothers often experience changes both physiologically and psychologically, one of which is a change in body reaction due to uterine contractions. This causes discomfort in the mother, especially in the abdominal area due to uterine contractions called afterpains. Pain due to uterine contractions (afterpains) requires treatment to be minimized or suppressed as little as possible. As a midwife who provides loving care for mothers, the pain felt by the mother needs to be intervened, one of which is by providing effleurage massage. To determine the effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital. Quasi-experimental with a pretest-posttest one group design. The sample in this study were all multiparous postpartum mothers on day 1 with normal delivery who met the inclusion criteria in November to December 2023 as many as 32 people, the sampling technique was total sampling. The research instrument used a Numeric Rating Scale (NRS) pain scale observation sheet. The statistical test used was the Wilcoxon test. There was a decrease in pain intensity after effleurage massage intervention where before effleurage massage the median value was 4 (minimum 1, maximum 7) and the pain intensity after effleurage massage the median value was 2 (minimum 0, maximum 4). From the results of the Wilcoxon test, $p.value = 0.000$ ($\alpha < 0.05$) was obtained. There is effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital in 2023. It is hoped that midwives can apply effleurage massage as one of the techniques to relieve afterpains in postpartum mothers with normal delivery.

Keywords: Effleurage massage, Afterpains, Multiparous postpartum mothers

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INTRODUCTION

The postpartum period is a period that lasts for 42 days starting from the exit of the placenta and ends when the reproductive organs return to normal. One of the changes during the postpartum period is uterine contractions (Andarie, 2018).

Postpartum mothers often experience changes both physiologically and psychologically, one of which is a change in the body's reaction due to uterine contractions. The intensity of uterine contractions increases after delivery which causes pain and makes the mother uncomfortable. Pain disorders during the postpartum period are often experienced even in normal delivery without complications. This causes discomfort in the mother, especially in the abdominal area due to uterine contractions called afterpains (Nugroho, T. et al. in Andarie, 2018).

Afterpains are caused by contractions in continuous relaxation of the uterus. Uterine contractions occur physiologically which triggers the onset of pain that can disturb the mother's comfort during the postpartum period. The pain called afterpains (meruyan/ mules-mules) is caused by uterine contractions, usually lasting 2-4 days after delivery. The pain that arises is subjective (Asih, Y. and Risneni, 2016).

The pain experienced by the mother not only affects her but also her baby. Pain due to increasingly frequent uterine contractions makes the mother lazy to breastfeed her baby, because when the mother breastfeeds, oxytocin is released from the posterior pituitary gland which is stimulated by the baby's suction. Oxytocin also stimulates myometrial contractions in the uterus, which are usually reported by women as afterpains (uterine contraction pain after giving birth) (Walyani, E. S. and Th. Endang. P, 2017).

According to Cunningham (1995), pain (afterpains) is often experienced by multiparous parity because there is periodic alternating strong relaxation and contractions that cause pain that persists throughout the early puerperium which is sometimes severe enough to require analgesics, while in primiparas the uterine tone increases so that the fundus generally remains tight and tends to remain tonically contracted (Andarie, 2018).

Pain due to uterine contractions (afterpains) requires treatment to be minimized or suppressed as little as possible. As a midwife who provides loving care for mothers, the pain felt by the mother needs to be intervened, so that it can reduce the discomfort felt by the mother and the mother can feel comfortable (Andarmoyo, 2020).

Pain can be treated with pharmacological or non-pharmacological therapy. In pharmacological therapy, clients are usually given therapy in the form of analgesic or opioid drugs to relieve pain which can cause side effects from the use of these drugs, but in non-pharmacological therapy, clients are usually given therapy such as massage. This massage therapy can minimize or even suppress pain with minimal side effects or even no side effects, one of which is by using the effleurage massage technique (Andarmoyo, 2020).

Effleurage massage is a form of massage using the palms of the hands to apply gentle pressure to the surface of the body in a circular direction repeatedly (Reeder, 2011).

The effleurage technique aims to increase blood circulation, apply pressure, and warm the abdominal muscles and increase physical and mental relaxation. Effleurage is a safe massage technique, easy to do, does not require many tools, does not cost money, has no side effects and can be done alone or with the help of others (therapists) (Ekowati, et al., in Andarie, 2018).

Based on research conducted by Sitorus & Harianja. F, et al (2020), conducted a study on 30 multiparous postpartum mothers at the Sartika Manurung Clinic and the Wasti Medan Clinic from January to April 2020 showed that the majority of respondents who experienced afterpains were aged 20-35 years, namely (92.5%). The results of the study based on univariate analysis before effleurage massage therapy obtained a median value of 5.00 (moderate pain) with a minimum-maximum value (2-6). The results of the study based on univariate data after the effleurage massage technique was carried out, there was a decrease in the pain scale, that an average median value of 2.00 (mild pain) with a minimum-maximum value (0-3) was obtained.

After statistical testing with the Wilcoxon test, a p-value of $0.000 < \alpha = 0.05$ was obtained, which means that there is a difference before and after the effleurage massage was performed. Thus, it can be concluded that there is an effect of the effleurage massage technique on postpartum mothers who experience afterpains at BPM Wasti and BPM Sartika Manurung Medan in 2020.

From the results of a preliminary study (direct observation and interviews) conducted on 6 postpartum multiparous mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital, respondents said they felt postpartum pain, 4 out of 6 respondents said pain with a scale of 5-6 using the NRS pain scale at Medirossa 2 Cibarusah Hospital and 2 out of 6 respondents said pain with a scale of 3-5 using the NRS pain scale at Medirossa 2 Cibarusah Hospital.

Based on the description above, the author wants to conduct further research with the title "the effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital in 2023".

METHOD

This study is a type of quasi-experimental study with the design used is a pretest posttest one group design. The sample in this study were all multiparous postpartum mothers on day 1 with normal delivery who met the inclusion criteria in November to December 2023 as many as 32 people, the sampling technique was total sampling. The research instrument used a Numeric Rating Scale (NRS) pain scale observation sheet. The statistical test used was the Wilcoxon test.

RESULTS AND DISCUSSION

Results

1. General Description of Research Respondents

The number of respondents in this study was 32 multiparous postpartum mothers with normal delivery who met the inclusion criteria. To find out the general description of the respondents, see the table below.

Table 1. Frequency distribution of respondents' overview based on age and parity at Medirossa 2 Cibarusah Hospital in 2023

No.	Variabel	N	Persentase (%)
1	Uge		
	20-25 Year	6	18.8
	26-30 Year	10	31.3
	31-35 Year	8	25.0
	36-40 Year	6	18.8
	41-45 Year	2	6.3
2	Umber of births		
	2 Time	22	68.8
	3 Time	7	21.9
	4 Time	2	6.3
	5 Time	1	3.1
	Total	32	100

Based on table 1, it can be described that the age of postpartum mothers is mostly between 26-30 (31.3%), and the least is between 41-45 years (6.3%). The largest number of deliveries is 2 times (68.8%), while the least number of deliveries is 5 times (3.1%).

2. Univariate Analysis

Table 2. Frequency distribution of respondents based on pain intensity before and after being given effleurage massage at Medirossa 2 Cibarusah Hospital in 2023

No.	Pain Intensity	N	Persentase (%)
1	Before intervention		
	Mild pain (1-3)	13	40.6
	Moderate pain (4-6)	18	56.3
	Severe pain (7-9)	1	3.1
2	After intervention		
	No pain (0)	2	6.3
	Mild pain (1-3)	27	84.4
Mod	erate pain(4-6)	3	9.4

	Total	32	100
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Based on table 2, it can be seen that the number of respondents before being given the effleurage massage intervention was 1 person (3.1%) experiencing severe pain, 18 people (56.3%) experiencing moderate pain, and 13 people (40.6%) experiencing mild pain, while after being given effleurage massage, 3 people (9.4%) experienced moderate pain, 27 people (84.4%) experienced mild pain, and 2 respondents (6.3%) felt no pain.

3. Normality Test

Before conducting bivariate analysis, a normality test was first conducted to determine whether the data was normally distributed or not. The normality test in this study used the Kolmogorov-Smirnov test and the Shapiro Wilk test. The data tested were pain intensity data before (pretest) and after (posttest) effleurage massage was given.

Tabel 3. Results of the normality test of the effectiveness of effleurage massage data on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital in 2023

Data	Kolmogorov-Smirnov^a		
	Statistiks	Df	Sig.
<i>Pre-Test</i>	0.140	32	0.112
<i>Post-Test</i>	0.211	32	0.001

Data	Shapiro-Wilk		
	Statistic	Df	Sig.
<i>Pre-Test</i>	.950	32	0.146
<i>Post-Test</i>	.917	32	0.017

Based on table 3, it can be seen that the sig or p. value on the post-test data using the Kolmogorov-Smirnov test is 0.001 and the Shapiro-Wilk test obtained a p. value on the post-test data of 0.017. From the normality test, it was found that there was a p. value <0.05 , meaning that the data was not normally distributed, so the test used in this study was the Wilcoxon test.

4. Bivariate Analysis

Tabel 4. Effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital in 2023

Intensity	N	Median	SD	P.Value
Painful		(Minimum-maximum)		
<i>Pre-Test</i>	32	4 (1-7)	1,501	0,000
<i>Post-Test</i>	32	2 (0-4)	1,045	

Based on table 4, it was found that the posttest pain intensity (after being given effleurage massage) was lower compared to the pretest pain intensity (before being given effleurage massage), which can be seen in the pretest pain intensity with a minimum value of 1 and a maximum value of 7, while the posttest pain intensity with a minimum value of 0 and a maximum value of 4, meaning that there was a decrease in pain intensity after being given *effleurage massage* intervention.

From the results of the statistical test, a p.value of 0.000 ($\alpha < 0.05$) was obtained, meaning that there was a significant difference in the intensity of afterpains before and after effleurage massage intervention was given. Based on the data above, it can be concluded that there is effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibarusah Hospital in 2023.

Discussion

1. Intensity of afterpains pain before effleurage massage

After analyzing the data on the intensity of afterpains pain before effleurage massage, a median value of 4 (moderate pain) was obtained with a minimum value of 1 (mild pain) and a maximum value of 7 (severe pain). Based on univariate analysis, it can be seen that the number of respondents before being given effleurage massage intervention was 1 person experiencing severe pain (3.1%), 18 people experiencing moderate pain (56.3%), and 13 people experiencing mild pain (40.6%).

Afterpains felt by the mother are caused by sequential contractions and relaxation of the uterus that occur continuously. This pain is more common in women with high parity and in breastfeeding women because when women breastfeed their babies, the stimulation from the baby's sucking releases oxytocin through the bloodstream, this hormone goes to the uterus, causing contractions when oxytocin is released (Mansyur, N. and A. Kasrida D., 2014)

According to Andarmoyo, (2020) pain due to uterine contractions (afterpains) requires treatment to be minimized or suppressed as little as possible. As a midwife who provides loving care for mothers, the pain felt by the mother requires intervention, so that it can reduce the discomfort felt by the mother and the mother can feel comfortable.

This study is in accordance with the study conducted by Sitorus & Harianja in 2020 at BPM Wanti and BPM Sartika in Medan City in 2020, from 30 respondents, the pain intensity before the intervention was 22 people (73.3%) experienced moderate pain and 8 people (26.7%) experienced mild pain.

From this study it can be concluded that multiparous postpartum mothers on day 1 with normal delivery experience afterpains, with pain intensity ranging from mild to severe. In this phase, the role of a midwife is needed to help reduce the intensity of pain experienced by the mother so that the mother can feel comfortable.

2. Intensity of afterpains pain after effleurage massage

Based on the research, the results of data analysis on the intensity of afterpains pain after effleurage massage obtained a median value of 2 (mild pain) with a minimum value of 0 (no pain) and a maximum value of 4 (moderate pain). From the univariate analysis, it can be seen that the number of respondents after being given effleurage massage intervention was 3 people (9.4%) experiencing moderate pain, 27 people (84.4%) experiencing mild pain, and 2 people (6.3%) experiencing no pain. *Intensitas nyeri afterpains setelah dilakukan effleurage massage*

Menurut Andarmoyo, (2020) Pain management strategy is an action to reduce pain, including pharmacological and non-pharmacological therapy. Non-pharmacological therapy that can be done includes providing massage therapy to the mother called the effleurage massage technique.

According to Alam & Hadibroto, (2007), effleurage, a gentle and slow movement of rubbing certain body parts, effleurage can be a short or long movement with the entire palm touching the part to be rubbed. Massaging can increase muscle relaxation, calm nerve endings, and relieve pain (Alfisah, F. in Andarie, 2018).

This study is in accordance with the study conducted by Sitorus & Harianja in 2020 at BPM Wanti and BPM Sartika in Medan City in 2020, from 30 respondents, the intensity of pain after the intervention was 25 people (83.3%) experienced mild pain and 5 people (16.7%) said they did not experience pain.

From this study it can be concluded that multiparous postpartum mothers on day 1 with normal delivery who experienced afterpains experienced a decrease in pain intensity after being given effleurage massage intervention. Effleurage massage given to the mother causes a relaxation reaction that can reduce the intensity of afterpains in postpartum mothers.

3. Efektivitas *effleurage massage* terhadap nyeri *afterpains* pada ibu nifas multipara hari ke 1 dengan persalinan normal

From the statistical test results, it was found that the intensity of posttest pain (after being given effleurage massage) was lower than the intensity of pretest pain (before being given effleurage massage). After the Wilcoxon test, a p.value of 0.000 ($p < 0.05$) was obtained, meaning that there was a significant difference in the intensity of afterpains before and after being given effleurage massage intervention.

According to Andarmayo (2020) pain due to uterine contractions (afterpains) requires treatment to be minimized or suppressed as little as possible. As a midwife who provides maternal care, the pain felt by the mother requires intervention, so that it can reduce the discomfort felt by the mother and the mother can feel comfortable.

Effleurage massage can provide a comfortable feeling, cause relaxation, and stimulate the release of endorphin hormones that can relieve pain scientifically supported by the theory of Melzack and Wall (1965) about Gate Control Theory. When effleurage massage is performed, uterine contraction pain inhibition occurs, because at that time the A Delta fibers will close the gate so that the cerebral cortex

does not receive pain messages that have been blocked by this counter stimulation massage so that the perception of pain can change (Parulian T. S., et al., in Andarie, 2018).

Based on research conducted by Sitorus & Harianja in 2020, after the Wilcoxon test was carried out before and after the administration of the effleurage massage technique, a p value of 0.000 ($\alpha < 0.05$) was obtained, so in this study it can be concluded that there is an effect of the effleurage massage technique on afterpains in multiparous postpartum mothers at BPM Wasti and BPM Sartika Manurung Medan in 2020.

Based on the results of this study, it can be concluded that there is an effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibusah Hospital in 2023. The effleurage massage technique can be used as a non-pharmacological therapy that can overcome afterpains in postpartum mothers, by decreasing the intensity of pain it will provide comfort to the mother, so that it can help the mother to adapt easily in taking care of herself and caring for her baby.

CONCLUSION

From the results of the study, p.value = 0.000 ($\alpha < 0.05$) was obtained, so it can be concluded that there is effectiveness of effleurage massage on afterpains in multiparous postpartum mothers on day 1 with normal delivery at Medirossa 2 Cibusah Hospital in 2023.

It is hoped that midwives can apply the effleurage massage technique as a form of non-pharmacological therapy to relieve afterpains in postpartum mothers with normal delivery with the aim of providing loving care for the mother, so that postpartum mothers feel comfortable

REFERENCES

- Andarmoyo, S. (2020). *Concept & Process of Pain Nursing*. Jogjakarta: Ar-Ruzz Media.
- Andarie, Desti Putri. (2018). *The Effect of Effleurage Massage Technique on Afterpains in Multiparous Postpartum Mothers at BPM Lismarini and BPM Vitri Suzanti, Palembang City in 2018*. Repository of Poltekkes Kemenkes Palembang. Retrieved October 10, 2023, from <https://repository.poltekkespalembang.ac.id/items/show/70>.
- Asih, Yusari and Risneni. (2016). *Textbook of Postpartum Midwifery Care and Breastfeeding*. Jakarta: Trans Info Media
- Mansyur Nurliana, and A. Karsida Dahlan. (2014). *Textbook of Postpartum Midwifery Care Complete with Learning Guide*. Malang: Selaksa Media.
- Notoatmodjo, Soekidjo. (2018). *Health Research Methods*. Jakarta: Rineka Cipta.

- Reeder, J.S., Martin, Koniak-Griffin. (2011). Maternity Nursing: Women's, Infants' and Families' Health. Jakarta: EGC.
- Sugiyono. (2019). Qualitative Quantitative Research Methods and R&D. Bandung: ALFABETA..
- Sitorus, F., & Harianja, E. (2020). The Effect of Effleurage Massage Technique on Afterpains in Multiparous Postpartum Mothers at Bpm Wanti and Bpm Sartika in Medan City in 2020. Journal of Reproductive Health, 5(1), 7-16.
- Walyani, E. S. and Th. Endang. P. (2017). Postpartum and Breastfeeding Midwifery Care. Yogyakarta: Pustaka Baru Press.