


Efflurage Massage For Mothers With Latent Phase I Labour Pain At Sikumana Health Centre

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Article Info	ABSTRACT
Keywords: Delivery mother, latent phase 1, labor pain, Efflurage Massage	Background: Labor and delivery of a baby is a normal process for women of childbearing age and women experience pain during labor is a physiological process of data from the puskesmas sikumana Kupang City shows that, The number of Trimesster-III mothers. K4. In 2023 at the Sikumana health center there were 1111 people, in 2024 from January to May there were 435 people. Case Study Objectives: This case study aims to determine the action of efflurage massage therapy to reduce pain in mothers in labor during the 1st latent phase at Sikumana Health Center. Methods: This case study design is a type of qualitative case study. This qualitative case study research includes an intensive study of one research unit such as one client, family, group, community or institution. Results: The results obtained the number of research respondents were 2 people with female gender. The research was conducted on 24 June - 01 July 2024 in the ponok room of the Sikumana Kupang health center. Conclusion: From the results of the examination after 8 hours given the efflurage massage technique, it can be said that the efflurage massage technique is effective for reducing pain in laboring women in the first stage of the latent phase.
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INTRODUCTION

Labor and giving birth to a baby is a normal process for women of childbearing age and women experience pain during labor is a physiological process, objectively in the first phase of active labor usually maternal anxiety tends to increase as the mother feels contractions and increasingly intense pain. Mothers begin to fear losing control and use a variety of coping mechanisms.

Based on data from the Indonesian Ministry of Health (2017), the number of women giving birth in Indonesia in 2016 was 5,112,269 people and the number of women giving birth assisted by health workers in health service facilities amounted to 4,114,519 people (80.48%). In 2015, the number of women giving birth increased to 5,007,191. However, the number of mothers assisted by health workers in health care facilities decreased to 4,433,738 people (88.55%). According to the Central Bureau of Statistics of East Nusa Tenggara Province, the number of mothers giving birth in 2020 was (84.88%), in 2021 it was (88.21%), and in 2022 it was (90.10%), the data from the puskesmas sikumana Kupang City shows

that, the number of mothers Trimesster-III. K4. In 2023 at the Sikumana health center there were 1111 people, in 2024 from January to May there were 435 people. background.

At the beginning of labor in the first stage, primigravida mothers will feel more pain than multiparous mothers. Primigravida mothers do not know how the labor process is as a result of which the mother feels worried and anxious, causing tension and more pain Pain in labor is found to experience mild pain 15%, moderate pain 35% and severe pain 30% and very severe pain 20%. (Julia & Pujiati, 2021). Management to reduce pain in labor is done with pharmacology and non-pharmacology. Pharmacological management is more effective and more expensive and has side effects, while non-pharmacological methods are easier, cheaper and without side effects.

This efflurage massage technique can provide other benefits such as improving blood circulation, accelerating the process of absorbing the remnants of combustion in muscle tissue that can cause fatigue, massage procedures with effleurage techniques are effectively carried out 10 minutes to reduce pain so that the mother feels comfortable, fresh and relaxed after the massage. This case study aims to determine the action of efflurage massage therapy to reduce pain in laboring mothers in the first phase of the latent phase at the Sikumana Health Center.

METHODS

The type of research used in this research is a qualitative case study approach. The research design uses an Observational Case Study which is a type of study conducted by researchers to analyze or evaluate a physical object, process, or ongoing activity, which requires researchers to make direct observations in the field to obtain data. So that the research in this case study is to observe how efflurage massage therapy decreases pain in laboring mothers in the latent phase 1 at Sikumana Health Center. Observations were carried out for 7x for 8 hours with a qualitative approach to 2 respondents/patients of laboring women in the 1st stage of the latent phase.

The subjects of the case study research were two patients in nursing care to reduce pain with the application of efflurage massage therapy for mothers in the first phase of the latent phase who were treated at Sikumana Health Center.

1. Inclusion criteria
 - a. Primigravida
 - b. Multigravida
 - c. Mother in normal labor
 - d. Latent phase 1 laboring mothers who experience labor pain
 - e. Willing to participate in this study.

The various research instruments used in this study were: INC assessment format, pain assessment format. The data collection methods are as follows:

- a. Interview, obtained through anamnesa containing the identity of the patient and person in charge, chief complaint, patient and family medical history, menstrual history, past history of pregnancy, childbirth and puerperium, current pregnancy history, psychosocial aspects, and daily habit patterns.

- b. Observation, this data collection method is through an observation with the five senses and tools according to the assessment format, the objective data collected includes: examination of general condition, awareness, measurement of vital signs, weight weighing, height measurement, LILA measurement, abdominal circumference measurement, physical examination and supporting examination.
- c. Documentation studies in the form of medical records, patient status, and diagnostic examination results.

Data analysis is carried out by stating facts, then comparing with existing theories, then outlined in the discussion opinion. The analysis technique used is by narrating the answers obtained from interviews, observation by researchers and documentation studies that produce data to answer the formulation of research problems, and then compared with existing theories as material to provide recommendations in the intervention.

Data presentation can be done with tables, pictures, charts, or narrative text. The confidentiality of the research subject is guaranteed by obscuring the identity of the research subject. In the direct experience of researchers in this research process, there are several limitations experienced and can be some factors that can be considered for future researchers, in further perfecting their research because this research itself certainly has shortcomings that need to be improved in future studies. Some of the limitations in the study include:

1. The object of research is only focused on normal laboring women in the latent phase, but most patients who enter have entered the active phase.
2. In the process of asking patients for consent to become respondents, there were some patients who wanted to become respondents but did not want to be documented and some refused to become respondents.

RESULTS AND DISCUSSION

Overview

The results of research on the action of efflurage massage on mothers with labor pain in the latent phase 1 at the sikumana health center. Puskesmas sikumana Kupang city is one of the Puskesmas that has a ponek building in the city of kupang which provides the best safe & compassionate care for everyone, the place of research that researchers do in the ponek room. The author conducted data collection from June 25, 2024 in the ponek room and performed efflurage massage for 7x 8 hours for 1 day in the room with a therapy duration of 15-30 minutes each therapy to each patient.

Respondent data

Table. 1 Characteristics of Respondents of laboring mothers in latent phase 1

Respondents	Name	Age	Education	Jobs	Parity	Marital status
Respondent 1	Mrs. A	27 Years	HIGH SCHOOL	IRT	multipara	Marry
Respondent 2	Mrs. S	25 Years	HIGH SCHOOL	IRT	primiparous	Marry

Table.1 above shows that the respondents were 27 years old and 25 years old, had a high school education, worked as housewives during the pregnancy of their fourth child and first child, and were all married.

Before and after efflurage massage action

Table. 2 Results before efflurage massage

No.	Date	Respondents	Degree of pain before efflurage massage	Description
1	June 25, 2024	Respondent 1	7	Severe pain
2	June 27, 2028	Respondent 2	8	Severe pain

Table.2 Above it is known that respondent 1 before efflurage massage, shows a pain scale of 7 which is classified as severe pain. The opposite is felt by respondent 2 before efflurage massage, showing a pain scale of 8 which is classified as severe pain.

Table. 3 Results after efflurage massage

No.	Date	Respondents	Degree of pain after efflurage massage	Description
1	June 25, 2024	Respondent 1	5	Moderate Pain
2	June 27, 2024	Respondent 2	6	Moderate pain

Table. 3 Above the results of efflurage massage for 3 days on June 1 to 4, 2024 in a duration of 15-30 minutes in the ponok room of the Siikumanna Health Center, Kupang city, the results of respondent 1 after efflurage massage were obtained, showing a pain scale of 5 which was classified as moderate pain. The opposite is felt by respondent 2 after efflurage massage, showing a pain scale of 6 which is classified as moderate pain.

Table. 4 Distribution of respondents' pain before and after getting efflurage massage action

No.	Date/Time	Respondent 1		Description	Date/Time	Respondent 2		Description
		Before	After			Before	After	
1	June 25, 2024 07.50- 08.20	7	6	Severe pain	June 27, 2024 07.50- 08.20	8	7	Severe pain
2	June 25, 2024 09.40 -10.20	7	5	Moderate pain	June 27, 2024 09.40 -10.20	8	6	Moderate pain
3	June 25, 2024 10.50- 11.18	7	5	Moderate pain	June 27, 2024 10.50- 11.18	8	6	Moderate pain
4	June 25, 2024 11.40-12.10	7	6	Severe pain	June 27, 2024 11.40-12.10	8	7	Severe pain
5	June 25, 2024 12.40-13.15	7	6	Severe pain	June 27, 2024 12.40-13.15	7	6	Moderate pain
6	June 25, 2024 13.30-14.00	7	5	Moderate pain	June 27, 2024 13.30-14.00	7	7	Severe pain
7	June 25, 2024 14.30-14.55	7	5	Moderate pain	June 27, 2024 14.30-14.55	7	6	Moderate pain

Table. 4 Above shows the measurement using the pain observation sheet obtained the results of the pain of respondent 1 and respondent 2. Before getting efflurage massage, the pain scale felt by the severe pain category, this is evidenced by the score of the pain observation sheet assessment of respondent 1 on a score of 7 (severe pain) and respondent 2 is on Score 8 (severe pain). After getting efflurage massage, the pain scale felt in the moderate pain category, this is evidenced by the results of the assessment score of the pain observation sheet of respondent 1 with a pain scale of 5 and respondent 2 with a pain scale of 6 which is categorized as moderate pain.

Discussion

This study is designed to provide an overview of the interpretation and reveal the description of efflurage massage actions to reduce pain in maternal patients with latent phase 1 labor pain at the sikumana health center in accordance with the research objectives, the following will be discussed:

Overview of Pain Levels Before Being Given Efflurage Massage Actions of Mothers with labor pain in the latent phase phase 1

Table.2 shows the results of the pres test showing that the level of pain felt by mothers with latent phase 1 labor pain at the Sikmana Health Center in Kupang City experienced severe pain. In this study, it was found that the respondent with the highest pain was respondent 2 with a pain scale of 8 while in respondent 1 the result of the pain scale score was 7. The results of this study are supported from (Nurdiana Lante, et al, June 2021) with the result that before being given effleurage massage the majority of pain experienced by respondents was severe pain (90%).

This is in accordance with the research conducted by (Al-ghonny dian utari and Elfira sri futriani 2022) obtained before the intervention of effleurage massage in laboring mothers when I was as many as 6 people with severe pain intensity and 9 people with moderate intensity. This is also in accordance with the theory according to Maryuani (2010) in (Nurdiana Lante, et al, June 2021) Based on the observations of researchers that in the first stage of labor, respondents usually experience severe pain so it is necessary to provide non-pharmacological alternative therapy, namely by performing effleurage massage on the abdomen to relieve labor pain during stage I.

Researcher analysis of laboring mothers experiencing pain in the process of labor can be caused by the pull and pressure that occurs in the birth canal, because at the time due to the emphasis of the fetal presentation in organs around the birth canal such as: bladder, urethra (urinary tract), and colon. The greatest pain felt by the mother during birth is pain due to the pull on the perineal tissue. The perineum is the protective and muscular area that extends from the front of the vagina or birth canal to the anus.

Overview of Pain Levels After Being Given Efflurage Massage Actions of Mothers with labor pain in the latent phase phase 1

The results of the post test show that the pain level of mothers with labor pain in the first phase latent after getting efflurage massage action, the level of pain felt by mothers with labor pain in the first phase latent decreased to moderate pain. This is in accordance with . This is supported by Gate Control Theory in (Nurdiana Lante, et al, June 2021) (Nurdiana

Lante, et al., June 2021), namely pain will decrease after massage because pain fibers carry pain stimulation with stimulation to the brain and close the gate so that there is a limitation of pain intensity in the brain. Massage is a distraction that can increase the formation of endorphin in the descending control system so that it can make patients more comfortable due to muscle relaxation.

Researchers assume that the provision of efflurance massage in mothers with latent phase 1 labor pain reduces pain that has not previously been obtained, changes in pain levels in this study can be caused by being carried out in an inclined position, this massage technique causes a relaxing effect and creates a feeling of comfort.

Effleurage massage can be done alone or with a labor partner during contractions. Activating endorphin compounds in the synapse of spinal nerve cells and the brain, so that the transmission of pain messages can be inhibited, as a result the perception of pain will change. Endorphins are neurotransmitters or neuromodulators that inhibit the delivery of pain stimuli by attaching to opiate receptors on the nerves and spinal cord so as to block pain messages to higher centers and can reduce pain sensations. In addition to relieving pain, this technique can also reduce muscle tension and increase blood circulation in the painful area.

An overview of efflurance massage to reduce pain in patients with labor pain

This study obtained results regarding the description of the efflurance massage action to reduce pain in 2 respondents, the efflurance massage action on mothers with labor pain in the latent phase 1 at the sikumana health center shows in a good category which is characterized by a decrease in pain this is evidenced by the results of the observation sheet which shows pain in 2 respondent mothers with labor pain in the latent phase 1 in the moderate pain category, namely with a pain scale of 5 and 6. Researchers assume that there is an effect of efflurance massage on 2 respondents.

According to the results of the analysis of the researchers, laboring mothers experience pain in the process of labor can be caused by the pull and pressure that occurs in the birth canal, because at the time due to the emphasis of the fetal presentation in the organs around the birth canal such as: bladder, urethra (urinary tract), and colon. The greatest pain felt by the mother during birth is pain due to the pull on the perineal tissue. The perineum is the protective and muscular area that extends from the front of the vagina or birth canal to the anus. Some studies say mothers who are massaged for 20 minutes every hour during the stages of labor will be more pain-free, because massage stimulates the body to release endorphin compounds which are natural pain relievers and create a feeling of comfort and relaxation.

Based on the results of research and analysis from (Herinawati, et al, October 2019) The data on the effect of effleurage massage on labor pain during the active phase I obtained the results that the average respondent's pain decreased after massage. This proves that effleurage massage can reduce labor pain response from severe pain scale to moderate pain and moderate pain scale to mild pain. Statistically there is a significant difference with a sig value (2-tailed) count 0.000 <0.05, it can be concluded that there is a significant influence between effleurage massage on pain in the first phase of active labor. Based on the analysis of the researchers, the respondents felt more relaxed and calm and the pain was reduced

because the efflurage massage action was included in the criteria for relaxation therapy, for the implementation steps during the research process the same as the theory discussed where the efflurage massage action provides the benefit of pain to decrease due to the relaxation method efflurage massage Activates Endorphin compounds are neurotransmitters or neuromodulators that inhibit the delivery of pain stimuli by attaching to opiate receptors on the nerves and spinal cord so as to block pain messages to higher centers and can reduce pain sensations.

CONCLUSION

Based on the results of research that has been conducted on two respondents at the Sikumana Puskesmas ponok room, the results obtained are as follows: 1) Mothers with labor pain in the latent phase 1 at Sikumana Health Center, the majority of housewives are married with the latest high school education. 2) Two respondents of mothers in labor at stage 1 at Sikumaa Health Center experienced severe pain. 3) The description of the pain level of laboring women in the first stage of the latent phase before being given efflurage massage therapy experienced severe pain and after being given efflurage massage therapy the level of pain experienced by the mother fell to moderate.

REFERENCE

- Julia, H., & Pujiati, W. (2021). PERBEDAAN MASSAGE EFFLEURAGE DAN MASSAGE COUNTERPRESSURE TERHADAP INTENSITAS NYERI PERSALINAN IBU INPARTU KALA I
- Hang Tuah Tanjungpinang ISBN : 978-623-6572-45-0 PENDAHULUAN Persalinan dan melahirkan bayi merupakan suatu proses normal bagi wanita usia sub. 233–243.
- Afroh, F., Judha, M., & Sudarti. (2012). Teori Pengukuran Nyeri & Nyeri Persalinan. Yogyakarta: Nuha Medika.
- Notoatmodjo, S. 2012. Metode Penelitian Kesehatan. Jakarta: PT Rineka Cipta.
- Notoatmodjo, S. 2018, Metodologi Penelitian Kesehatan, Jakarta: Rineka Cipta
- Nursalam. (2015). Metodologi ilmu keperawatan, edisi 4, Jakarta: Salemba Medika.
- Nurdiana Lante.(2021). Pengaruh Massage Effleurage terhadap Pengurangan Tingkat Nyeri Persalinan Kala I di ruang PONEP Puskesmas Kalumata Kota Ternate Tahun 2019
- Kemendes RI. (2020). Angka Kematian Ibu di Dunia. Kemendes, 4(1), 1–10.
<http://eprints.poltekkesjogja.ac.id/5789/3/3.chapter1.pdf>
- Karjatin, A. (2016). Keperawatan Maternitas. Pusdik SDM Kesehatan.
- Rahayu, S. (2020). Teknik Massage Effleurage Dapat Mengurangi Nyeri Kala I Pada Ibu Bersalin Di Puskesmas Halmahera Kota Semarang. Jurnal Kesehatan, 13(1), 46–52.
<https://doi.org/10.23917/jk.v13i1.11100>.
- Puspita Sari, E., & Dwi Rimandini, K. (2014). Asuhan Kebidanan Masa Nifas (Postnatal Care). (T. Ismail, Ed.). Jakarta Timur: CV. Trans Info Media.
- Siti Fauziah. (2015). Keperawatan Maternitas (1st ed.). Jakarta: Prenadamedia group.
- Saifuddin, A. 2014. Buku Panduan Praktis Pelayanan Kesehatan Maternal dan Neonatal. Jakarta: Yayasan Bina Pustaka Sarwono Prawiharohardjo

- Asrinah, A. 2018. Asuhan Kebidanan Masa Peralihan. Yogyakarta: Graha Ilmu
- Alimah, S. (2012) *Massage Exercise Therapy*. 1st edn. Surakarta: Akademi Fisioterapi.
- Darmini, Mk., Prastanti, A. D., MSi, S. D., & MKes, A. H. (2023). Accuracy of bleeding volumetric measurement on head CT scan with sequence and helical techniques using manual and automatic methods: A phantom study. *Med J Malaysia*, 78(7), 865.
- Prastanti, A. D., Abimanyu, B., Kurniawan, A. N., & Nurbaiti, S. (2022). CR Image Optimization and Radiation Dose Limitation With Collimation Adjusting on Cervical Radiography. *Jurnal Imejing Diagnostik (IlmeD)*, 8(1), 35–39.
- Setiawan, A. N., Da Onney, N., Jannah, M., & Prastanti, A. D. (2021). The Profile of Delay Erasure Time and Imaging Plate Sizes to Dark Noise Evaluation in Carestream Computed Radiography System. *Journal of Physics: Conference Series*, 1783(1), 12005.
- WMS, O. A., Murniati, E., & Prastanti, A. D. (2024). THE ROLE OF ARTIFICIAL INTELLIGENCE (AI) ON MRI BRAIN EXAMINATION WITH CLINICAL ISCHEMIC STROKE. *Journal of Vocational Health Studies*, 7(3), 206–217.
- Bambang Wijanarko dan Slamet Riyadi. (2010). *Sport Massage Teori dan Praktik*. Surakarta: Yuma Pustaka.
- Herinawati,dkk.2019. Pengaruh Efflerauge Massage Terhadap Nyeri Persalinan Kala I Fase Aktif Di PMB Bidan Nuriman Rafida Dan PMB Latifah. Jambi. *Jurnal kebidanan Indah*, Firdayanti, N. (2019). manajemen asuhan kebidanan internatal pada ny “N” dengan usia kehamilan pretern di RSUD syekh yusuf gowa. *Jurnal Widwifery*.