

The Effect Of Effleurage On Pain Level Reduce In Active Phase I Of Normal Delivery: Literature Review

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ABSTRACT

Background: The high maternal mortality is caused by severe pain during childbirth. Labor pain also causes various kinds of problems and disorders in childbirth, especially psychological problems. In order to reduce labor pain, there are two ways, namely pharmacological and non-pharmacological, one of which is using effleurage message. Objectives: To determine the effect of effleurage on reducing the level of pain in the active phase of the first stage of normal labor: Literature Review. Method: Literature Review research method with PICOS (T) technique. Research sources using electronic based such as Google Scholar with DOI. The search keywords were Maternal Maternity, Stage I, Active Phase, effleurage, Progress of labor. Inclusion criteria physiological childbirth without complications and complications with articles published in the last 5 years. Results: From ten articles, it was stated that there was a change in pain after effleurage message by giving message to the abdomen in the form of skin stimulation which was used during labor to reduce pain effectively. Conclusion: There is an effect of effleurage on reducing the level of pain in the active phase of the first stage of normal labor.

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1. INTRODUCTION

Childbirth is a physiological process. In women giving birth, the period marked by uterine contractions is characterized by pain, regularity, cervical dilatation and cervical effacement. WHO data for 2020 notes that every day there are 830 thousand women who die due to complications of pregnancy and childbirth. The Maternal Mortality Rate (MMR) in 2020 is 305/100,000 live births caused by prolonged labor (41%) [1]. Prolonged labor is labor that lasts more than 24 hours for primiparas and more than 18 hours for multiparas [1].

Labor pain can also cause hyperventilation so that oxygen demand increases, blood pressure increases, and reduced intestinal motility and urinary bladder [2]. This situation will stimulate an increase in catecholamines which can cause interference with the strength of uterine contractions resulting in uterine inertia. If labor pain is not treated, it will cause prolonged labor [3]. This will cause the birthing mother to have a bad birth experience, experience birth trauma which can cause postpartum blues, so it is very important for birth attendants to meet the mother's need for a sense of security and comfort.

Factors that influence labor pain include psychological and physiological factors. The physiological factor in question is contraction. Pain in labor is a manifestation of the contraction (shortening) of the uterine muscles. It is these contractions that cause pain in the waist, abdominal area and radiates towards the thighs. Labor pain is caused by stretching of the lower uterine and cervical segments and the presence of uterine muscle ischemia [4].

Labor pain can be treated in two ways, namely by pharmacology and also non-pharmacology, one of the traditional methods used to deal with labor pain is the biuret message. also the mother's back, this aims to provide stimulation to the mother in dealing with the fear and anxiety that is released can cause stress in childbirth [5]; [6]. The first study that attempted to prove the effect of effleurage in reducing pain levels in phase I of the active phase of normal labor through a Literature Review

2. METHOD

The method used in this research is Literature Review [7]. using the PICOS (T) technique as a reference for determining search keywords for research journals. Search database using Google Scholar, National Library of Indonesia e-resource, Biomed Central Psychiatry, DOAJ, Elsevier and Garuda Portal. Search for articles using the keywords Maternity Mother, First Stage, Active Phase, effleurage, Labor progress.

The study used inclusion criteria, namely 1) the study population was physiological maternity, 2) given treatment to mothers in labor in the active phase I in the active phase with effleurage, 3) used a quasi-experimental or cross-sectional design and 4) used Indonesian and English languages published in 2017 – 2021.

3. RESULTS AND DISCUSSION

The selected articles were assessed for quality using the Joanna Briggs Institute (JBI) systematic review. The search found 49 articles from the database. The final process of searching for articles is ten articles that are eligible for evaluating the quality of the articles. ten articles were found from Google Scholar (n=8), DOAJ (n=1), Eperpusnas (n=1). the final results of the literature search can be seen in table 1.

Table 1. Article characteristics

Author and title	Data base	Aim	Research method and collecting data	Population and Sample	Findings
Setianto, R. (2017). Pengaruh <i>Message effleurage</i> Terhadap Pengurangan Rasa Nyeri Pada Persalinan Kala I Fase Aktif Di Wilayah Kerja Puskesmas Kemalang. Journal Center of Research Publication in Midwifery and Nursing, 1(2).	DOAJ Available online at https://stikesmu-sidrap.e-journal.id/JIKP 147 Jurnal Ilmiah Kesehatan Pencerah, 09 (2), 2020, 147-154 DOI: https://doi.org/10.12345/jikp.v9i02.191	Knowing the effect of message effleurage on reducing pain in labor during the first active phase in the working area of the Kemalang Health Center	Quantitative, quasi-experimental Questionnaire	The research sample was 30 respondents who were taken by accidental sampling technique	The pre-test pain scale was moderate for 22 people (73.3%) with an average of 5.50 while the post-test was moderate for 20 people (66.7%) with an average of 4.60. P value of 0.001 (p <0.05). There is an effect of message effleurage on reducing pain in labor during the first active phase in the working area of the Kemalang Health Center
Lante, N., Yulianti, Y., & Badar, H. (2021). Pengaruh <i>Message effleurage</i> terhadap Pengurangan Tingkat Nyeri	Perpusnas PROMOTIF: Jurnal Kesehatan Masyarakat ISSN 2089-0346 (Print) ISSN 2503-1139 (Online)	The aim of the study was to determine the effect of message effleurage on reducing the level of pain in the first stage	Quantitative, quasi-experimental Questionnaire	The population of this study were all mothers who gave birth normally in the PONEC Room of the Kalumata Health Center, Ternate City.	The pain level before effleurage message was obtained an average of 7.8, after effleurage message was obtained an average of 6.3 with a significance value

Author and title	Data base	Aim	Research method s and collecti ng data	Population and Sample	Findings
Persalinan Kala I di ruang PONED Puskesmas Kalumata Kota Ternate Tahun 2019. Promotif: Jurnal Kesehatan Masyarakat, 11(1), 69-74.	Artikel six of labor in the Volume 11, PONED room Nomor 01, at the Juni 2021 Kalumata Health Center, Ternate City..				of 0.001 (p-value <0.005). Conclusion: There is an effect of message effleurage on the level of labor pain in the first stage of labor in mothers giving birth in the PONED room at the Kalumata Health Center, Ternate City.
Paseno, M., Situngkir, R., Pongantung, H., Wulandari, F., & Astria, D. (2019). <i>Message counterpressure and message effleurage effectively reduce labor pain.</i> Jurnal Ilmiah Perawat Manado (Juiperdo), 7(1), 20-32.	Google Cendekia JUIPERDO Vol.7 No.1 2019 <i>Message Counter & Message effleurage</i> Matilda Paseno dkk STIK Stella Maris Makassar https://ejurnal.poltekkes-manado.ac.id/index.php/juiperdo	Determine the difference in the effectiveness of message counterpressure with message effleurage on labor pain in the first stage at the Special Hospital for Mothers and Children in Pertiwi Makassar.	Quantitative, quasi-experimental Questionnaire	This study uses a Quasi-Experiment research method with a pre-test post-test control design approach. The sample selection was carried out using consecutive sampling technique, the number of samples was 20 respondents (10 respondents for counterpressure message and ten respondents for effleurage message).	p value = 0.009. The p value <α, then the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted.
Lestari, S., & Apriyani, N. (2019). <i>Pengaruh Message effleurage Terhadap Perubahan Tingkat Nyeri Pada Pasien Kala one Fase Aktif Persalinan.</i>	Google Cendekia Jurnal Kesehatan Vol. 10 No. 1 Tahun 2019 DOI: http://dx.doi.org/10.38165/jk . e-ISSN: 2721-9518 p-ISSN: 2088-0278	The purpose of this study was to determine the effect of message effleurage on changes in pain levels during the first active phase of labor in the Work	Quantitative, quasi-experimental Questionnaire	The population in this study were all patients who would give birth in March, totaling 42 people and the sampling method used a purposive sampling	The results showed that the level of labor pain before the intervention was given was severe pain (average 7.37) and after the intervention was given the pain was moderate (average

Author and title	Data base	Aim	Research method s and collecti ng data	Population and Sample	Findings
Jurnal Kesehatan, 10(1), 12-18.	LP3M Sekolah Tinggi Ilmu Kesehatan (STIKes) Cirebon	Area of the Plered Public Health Center, Cirebon Regency in 2018		technique of 38 people.	4.95). The decrease in pain level after being given the intervention was 2.42. Statistical test results obtained a p value of 0.000 which is smaller than the α value of 0.05, thus message effleurage is effective in reducing pain during the first active phase of labor
Astuti, T. W., Susiloningtyas, I., & Wulandari, C. L. (2020). Efektifitas <i>Message effleurage</i> Terhadap Tingkat Nyeri Pada Ibu Bersalin. Jurnal Keperawatan Karya Bhakti, 6(2), 14-20.	Fakultas Kedokteran Universitas Islam Sultan Agung Jurnal Keperawatan p-issn : 2477-1414 Volume 6, Nomor 2, Juli 2020 e-issn : 2716-0785 Hal 14-20	Knowing the effectiveness of effleurage message on the level of pain in labor mothers	Quantitative, quasi-experimental Questionnaire	The population in this study were all patients who would give birth in March, totaling 30 people and the sampling method used a purposive sampling technique of 30 people.	<i>Effleurage is massaging using moderate pressure with long strokes, squeezing with hands over the superficial layer of muscle tissue useful to help control local pain and increase circulation done for 10-20 minutes every hour can lower blood pressure, slow heart rate, and increase breathing</i>
Seftianingtyas, W. N., Istiananingsih, Y., & Anggaraini, S. (2021). Pengaruh <i>Message effleurage</i> Terhadap Tingkat Nyeri Ibu Bersalin Kala I Fase Aktif Di Kamar	http://ojs.abdinusantara.ac.id/index.php/antakebidanan/article/view/611	To find out the effect of message effleurage on the pain level of mothers during the active phase I in the delivery room at Pupuk Kaltim Hospital in 2021	Quantitative, quasi-experimental Questionnaire	Using the total sample technique with a total sample of 52 respondents	The research results show that Asymp.Sig (2-tailed) has a value of <0.001. Because the value is 0.001<0.05, it can be concluded that there is an effect of message effleurage on the level of pain in laboring mothers

Author and title	Data base	Aim	Research method s and collecti ng data	Population and Sample	Findings
Bersalin Rumah Sakit Pupuk Kalimantan Timur Tahun 2021. Jurnal Antara Kebidanan, 4(2), 76-83.					
Sa'diyah, U. N., Purwanti, S., & Syukur, N. A. (2020). Efektifitas <i>effleurage</i> Message Dan Teknik Counterpressure Terhadap Tingkat Nyeri Ibu Bersalin Kala I Fase Aktif.	http://repository.poltekkes-kaltim.ac.id/1032/2/SLR%20REVISI%20UMI%20NUR%20S.pdf	To determine the difference in effectiveness before and after administration of <i>effleurage</i> Message and Counterpressure Techniques on the level of maternal pain during the first active phase of labor	Quantitative, quasi-experimental Questionnaire	This study uses a Quasi-Experiment research method with a pre-test post-test control design approach. The sample selection was carried out using consecutive sampling technique, the number of samples was 20 respondents (10 respondents for counterpressure message and ten respondents for <i>effleurage</i> message).	<i>Effleurage Message and Counterpressure Techniques Affect the Pain Level of Mothers in the Active Phase I of Labor</i>
Jasmi, J., Susilawati, E., & Andriana, A. (2020). Pengaruh Pemberian Rose <i>effleurage</i> Terhadap Intensitas Nyeri Persalinan Kala I Fase Aktif Pada Persalinan Normal Primigravida Di Bidan Praktik Mandiri Ernita Kota Pekanbaru. JOMIS (Journal	JOMIS (Journal of Midwifery Science) P-ISSN : 2549-2543 Vol 4. No.1, Januari 2020 E-ISSN : 2579-7077 DOI : 10.36341/jomis.v4i1.1090 Attribution-NonCommercial 4.0 International	The aim of the study was to determine the effect of giving rose <i>effleurage</i> on the intensity of labor pain during the first stage of the active phase in normal primigravida deliveries at BPM Ernita Pekanbaru City which was conducted	Quantitative, quasi-experimental Questionnaire	The population in this study were all mothers giving birth at BPM Ernita, the sample in this study were 30 mothers giving birth during the first primigravida, which were taken using a purposive sampling technique.	The results showed that the average pain intensity in women giving birth before rose <i>effleurage</i> was 6.00 and after rose <i>effleurage</i> was 4.60. The results of statistical tests using the Wilcoxon test at 95% confidence level found that there was an effect of giving rose <i>effleurage</i> on the

Author and title	Data base	Aim	Research methods and collecting data	Population and Sample	Findings
of Midwifery Science), 4(1), 9-14.		from March to June 2018			pain intensity of the first active phase of labor in primigravida normal labor (p value = 0.000).
Yanti, J. S., Saputri, E. M., & Pratiwi, W. (2021). Efektifitas Pelaksanaan Pijat Effluarage Pada Ibu Bersalin Di Klinik Pratama Deliana. Ensiklopedia of Journal, 3(2), 214-218.	Yanti, J. S., Saputri, E. M., & Pratiwi, W. (2021). Efektifitas Pelaksanaan Pijat Effluarage Pada Ibu Bersalin Di Klinik Pratama Deliana. Ensiklopedia of Journal, 3(2), 214-218. http://jurnal.ensiklopediaku.org/ojs-2.4.8-3/index.php/ensiklopedia/article/download/641/588	The aim of the study was to determine the effectiveness of effleurage message in birthing mothers. This type of research is quasi-experimental.	Quantitative, quasi-experimental Questionnaire	The population in this study were mothers giving birth at the Deliana Pratama Clinic Pekanbaru.	The results showed that effleurage message was effective for reducing labor pain in birthing mothers with a pvalue of 0.002 (<0.05). It can be concluded that there is a significant difference in the reduction of labor pain between before effleurage message and after effleurage message in pregnant women
Jasmi, J., Susilawati, E., & Andriana, A. (2020). Pengaruh Pemberian Rose effleurage Terhadap Intensitas Nyeri Persalinan Kala I Fase Aktif Pada Persalinan Normal Primigravida Di Bidan Praktik Mandiri Ernita Kota Pekanbaru. JOMIS (Journal of Midwifery	ISSN 2580-4936 http://heanoti.com/index.php/hn/article/view/hn20701	This study aims to analyze the effectiveness of effleurage and counterpressure message to reduce labor pain in the 1st stage of the active phase of labour	Quantitative, quasi-experimental Questionnaire	The research subjects were 68 mothers during the first active phase who were divided equally into two groups.	Labor pain before and after the intervention in the effleurage group was 9.26 ± 1.05 and 6.88 ± 1.22 (p = 0.00) respectively. Meanwhile, in the counterpressure group, it was 9.00 ± 0.98 and 6.59 ± 1.28 (p = 0.00). The mean reduction in labor pain in the effleurage and counterpressure groups was 2.38 and 2.41, respectively

Author and title	Data base	Aim	Research method s and collecti ng data	Population and Sample	Findings
Science), 4(1), 9-14.					(p=0.74). There is no significant difference between effleurage and counterpressure in reducing labor pain

4. CONCLUSION

Pain is a multifactorial phenomenon, which is subjective, personal, and complex, which is influenced by psychological, biological, socio-cultural, and economic factors [8]. Labor pain is one of the causes of various kinds experienced by birth mothers. Labor pain can be said to be normal if the pain is not disturbing and also does not experience significant obstacles and is still in a physiological process. Labor pain can be said to be pathological pain because it is related to psychological, biological, socio-economic and cultural influences that can affect mothers in facing childbirth. Labor is divided into four stages, namely stage 1 opening to opening ten and also stage 2 which is the latent phase and active phase which lasts for 8 hours or more three which is the process in which labor takes place [9].

Labor pain can be overcome one way with effleurage message [4];[10];[11]. Effleurage message is one of the message methods to reduce pain during labor which is listed in the Summary of pain relief measures during labor, where during the first stage of the latent phase (0-3 cm opening) and the active phase (4-7 cm opening) the activities that can be carried out by the birthing mother is effleurage. Effleurage is light message using your fingers, usually on your stomach, in rhythm with your breathing during contractions. Effleurage can be done by the mother herself or a birth attendant during the contractions to distract the mother from pain during contractions [12]. The main action of effleurage message is the application of the Gate Control theory which can "close the gate" to inhibit the passage of pain stimuli to higher centers in the central nervous system.

Effleurage comes from the French effleurage which means a light touch, but some interpret it effleurage which means rolling/gliding, effleurage is manipulation of the outer tissue where the hand slides on the surface of the tissue [13]. Effleurage is a movement by using the entire surface of the palm and fingers always adjusting to the part of the body being rubbed. Hands rub supply toward the heart (sentipental) with pushing and pressure. But it is also permissible to go sideways (sentipetal) for example rubbing in the chest area, stomach and so on [3]. The effleurage technique is performed at the beginning of the 5-dose message and closes the 3-dose message either partly or for the whole body. Effleurage that is carried out on the limbs (extremities) is always with good encouragement and pressure and each rubbing must end in the lymph nodes (in the armpits for the upper limbs and groin for the lower limbs [13].

In giving effleurage message, this is done by giving a subtle touch, paying attention to time effectiveness, cost, safety (not endangering the mother and fetus) and effective [14]. Based on the butterflies in the abdomen with gentle and light strokes slowly it will increase abdominal relaxation and reduce muscle tension so as to provide comfort to the mother and reduce pain intensity [4];[13].

Effleurage on the back for 10-20 minutes every hour can lower blood pressure, slow heart rate, and improve breathing [9];[15]. This is consistent with the theory that back massage is a non-pharmacological way of treating pain. Message is applying hand pressure to soft tissues, usually muscles, tendons or ligaments, without causing movement or changes in joint position to reduce pain, produce relaxation and improve circulation. Message can inhibit the passage of pain stimuli to higher centers in the central nervous system. Furthermore, the tactile stimulation and positive feelings that

develop when the form of attention, full of touch and empathy is carried out, act to strengthen the effect of message to control pain [16].

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