



The Effect of Efflurance Massage on Reducing Labor Pain Intensity at Ujungloe Health Center

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ABSTRACT

Effleurage massage is one of the massages that can reduce the intensity of labor pain. Effleurage massage is done on the back area where massage in that area can relax the muscles, provide a peaceful rest and increase the comfort of the mother during labor. Gentle massage on the back area can play a role in reducing the intensity of labor pain. The purpose of this study was to determine the effect of effleurage massage on reducing the intensity of labor pain in mothers giving birth at the Ujungloe Health Center. This study is a type of quasi-experimental study with the design used is a pretest posttest one group design. This design has a pretest, before being given treatment with a total sample of 18 respondents using total sampling using Wilcoxon test *sign rank test*. The results of this study were obtained (p value = 0.000 < 0.05) then it was found that there was a significant effect of giving effleurage massage in reducing labor pain, it was found that the frequency of back pain in mothers giving birth normally before effleurage massage, the most respondents felt moderate pain as many as 12 respondents (67%) and after effleurage massage, the most respondents felt mild pain as many as 15 respondents (83%). The conclusion of this study is that effleurage massage has an effect on reducing labor pain at the Ujungloe Health Center. This study is expected to provide benefits for the development of obstetrics, one way which can be done to reduce labor pain with non-pharmacological actions, furthermore, researchers are expected to provide training to midwives in health centers so that they can be more skilled in carrying out message efflurance to mothers in labor to reduce labor pain.

Keywords: Message Efflurance, Labor Pain

I. INTRODUCTION

Childbirth is a process of exiting the product of conception that can live from the inside through the vagina to the outside world with a rear head presentation without using special equipment or assistance and without injuring the mother and baby, generally taking place in no more than 24 hours. The causes of the labor process are still complex theories. Humoral factors, the influence of prostaglandins, uterine structure, uterine circulation, the influence of nerves and nutrition are referred to as factors that cause labor to begin. (1)

In 2018, the prevalence of labor pain in Indonesia was quite high, which was around 86.8%. In addition, around 35.5% of labor pain is a subjective experience of physical sensations related to uterine contractions, dilation and cervix, and fetal descent during labor. (7) Labor pain if not immediately addressed can cause death in the mother and death in the baby, because pain can cause the mother's breathing and heart rate to increase, thereby disrupting blood flow and oxygen to the placenta. Handling and monitoring labor pain, especially when entering the first active phase of labor, is very important, because this is a determining point whether the

mother can undergo normal labor or end up with action due to complications resulting from the onset of very severe pain. (4)

One of the non-pharmacological actions to reduce labor pain is message efflurange. Massage techniques are done for 3-10 minutes to relieve pain, working by encouraging the release of endorphins so as to block the transmission of pain stimuli. massage and massage that stimulate blood circulation and metabolism in the tissue so as to provide comfort in the massaged area. Massage in this case is a manipulation of soft tissue structures that can calm and reduce psychological stress by increasing endogenous morphine harmonics such as endorphins, enkephalins and dynorphins while reducing stress harmonic levels such as cortisol, norepinephrine and dopamine. (3)

This research is in line with Eline's research (2020) with the title Research on the Effect of Effleurage Massage Technique on Pain Levels in Women Giving Birth in the First Active Phase at the BPM Panarung Health Center Area, Palangka Raya City. The research results obtained were that The average pain at the beginning of Effleurage Massage was 5.58 with a standard deviation of 0.809. While the pain after Effleurage Massage showed an average value of 3.46 with a standard deviation of 0.647. The final result obtained that the P value (value) = 0.000. Based on the results of the statistical test at alpha 0.05, a p value of 0.000 ($P < 0.05$) was obtained, which means that there is a significant effect between pain before and after massage, in other words, if Effleurage Massage is performed, it can reduce pain. So from the results of this analysis, it can be concluded that there is an effect of the Effleurage Massage technique on pain in the first stage of the latent phase.

Based on initial data at Ujungloe Health Center in May to July, the number of mothers giving birth was 32 people, where on average the mothers experiencing severe pain, so researchers were interested in conducting a study "is there an effect of efflurange message on reducing the intensity of labor pain.

II. RESEARCH METHODS

This type of research is a quasi-experimental research with the design used is a pretest posttest one group design. This design includes a pretest, before treatment is given. This research was conducted in the Ujungloe Health Center area from August 13 to September 10, 2024. The population of this study were all mothers giving birth at the Ujungloe Health Center while the sample in this study were mothers giving birth in the first active phase and met the inclusion criteria. The criteria in this study are: Willing to be respondents, mothers giving birth in the first active phase, and mothers were not given analgesics and induction during labor.

III. RESULTS AND DISCUSSION

a. Characteristics

Table 1. Distribution of respondent characteristics based on age

Umur Ibu	Frekuensi	%
< 20 Tahun	0	0
20-30 tahun	8	44,4
31-40 Tahun	10	55,6
Jumlah	18	100

Based on table 1, the frequency distribution of respondents aged 20-30 years was 8 respondents (44.4%) and those aged 31-40 years were 10 respondents (55.6%).

Table 2. Frequency Distribution Based on Back Pain in Mothers in Labor Before Effleurage Massage

Pain Levels	Frequency	%
Severe pain	6	33
Moderate pain	12	67
Mild pain	0	0
Amount	18	100

Table 3. Shapiro-Wilk Normality Test

No	Group	Shapiro Wilk		Note
		Statistics	P.value	
1	Back pain before effleurage massage	0.786	0.001	Abnormal
2	Back pain after effleurage massage	0.802	0.002	Abnormal

Based on table 4.4 above, the normality test with Shapiro Wilk shows that the significance value based on back pain of normal labor mothers before effleurage massage (pretest) is $0.001 < 0.05$ and back pain of normal labor mothers after effleurage massage (post test) is $0.002 < 0.05$. The significance value of both groups is less than 0.05 so it can be said that back pain of normal labor mothers before effleurage massage and after effleurage massage is not normally distributed.

Table 4. The effect of administering effleurage massage techniques on normal labor pain is as follows:

Variables	Mean	Min	Max	P Value	N
Back pain before effleurage massage	6.22	5	7		
Back pain after effleurage massage	2.78	2	4	0,000	18

Based on table 5, it can be seen that the average back pain of mothers giving birth normally before being given effleurage massage was 6.22 with a minimum pain scale of 5 and a maximum pain scale of 7. While the average back pain of mothers giving birth after being given effleurage massage was 2.78 with a minimum pain scale of 2 and a maximum pain scale of 4. Based on the statistical test analysis, the significant value of labor pain based on the Wilcoxon test was 0.000, which was smaller than the significance level of 5% or ($p \text{ value} = 0.000 < 0.05$), so it can be stated that there is a significant effect of giving effleurage massage in reducing labor pain at the Ujungloe Health Center.

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To reduce labor pain, non-pharmacological actions are a safe alternative choice for the mother and fetus. Interventions in non-pharmacology that are useful for reducing pain during labor include massage techniques. Massage is a sorting and massaging that stimulates blood circulation and metabolism in the tissue so as to provide comfort in the massaged area. Massage in this case is a manipulation of soft tissue structures that can calm and reduce psychological stress by increasing endogenous morphine hormones such as endorphins, enkephalins and dynorphins while reducing stress levels such as cortisol, norepinephrine and dopamine. (3)

This is in accordance with Aini's statement (2016), which states that the benefits of effleurage massage are as follows: Increase skin blood circulation, and stimulate the skin's sensory system rhythmically, increase muscle blood circulation and eliminate muscle fiber tension, repair ligament disorders, smooth blood and lymph circulation, stimulate the nervous system rhythmically to achieve a sedative effect (stimulating and calming), fat tissue: not affected by massage, reduces muscle tension and increases physical and psychological relaxation. A similar thing was expressed by Yuliatun in Ellysusilawati (2018), which stated that the role of effleurage massage can produce impulses that are sent through large nerve fibers on the surface of the skin, these large nerve fibers will close the pain message gate so that the brain does not receive pain messages because it has been blocked by skin stimulation and effleurage massage can also activate endorphin compounds in the synapses of spinal cord and brain nerve cells, so that the transmission of pain messages can be inhibited, as a result the perception of pain will change. In addition to relieving pain, this technique can also reduce muscle tension and increase blood circulation in the painful area. Based on the results of the study and the discussion above, giving effleurage massage is very effective in overcoming normal labor pain, this is proven by a decrease in the mean value before effleurage massage was 6 and after effleurage massage was 2.61. By doing effleurage massage, blood circulation can be smoothed and muscle tension can be stretched so that it can reduce pain during labor.

IV. Conclusion and Suggestions

Based on the results of research conducted at the Ujungloe Health Center based on the frequency distribution of respondent characteristics, the majority were aged 31-40 years, as many as 10 respondents (55.6%), the frequency distribution of back pain in mothers giving birth normally before effleurage massage, the most respondents felt moderate pain as many as 12 respondents (67%), the frequency distribution of back pain in mothers giving birth normally after effleurage massage, the most respondents felt mild pain as many as 15 respondents (83%), so that effleurage massage has an effect on reducing labor pain at the Ujungloe Health Center in 2024 with a p value = 0.000. It is hoped that midwives at Ujungloe Health Center can learn more about effleurage massage and apply it to mothers giving birth because it is effective in reducing labor pain. It is expected that this research can be used as input and contribution of ideas and provide knowledge for health workers, especially midwives, for other researchers to be willing to conduct further research on the position in the implementation of Massage Effleurage between lying and sitting positions whether there is a difference in results between the two. Factors that influence pain such as culture, pain experience, coping style, fatigue,

meaning of pain, family and social support. The research method can use a comparative method or others. The number of respondents can be added again for further research.

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