THE EFFECTIVENESS OF COUNTER PRESSURE AND EFFLEURAGE MASSAGE ON THE INTENSITY OF LABOR PAIN DURING THE ACTIVE PHASE I

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ABSTRAK EFEKTIVITAS COUNTER PRESSURE DAN EFFLEURAGE MASSAGE TERHADAP INTENSITAS NYERI PERSALINAN KALA I FASE AKTIF

Latar Belakang: Nyeri dapat meningkatkan pernapasan dan denyut jantung ibu, dan jika tidak ditangani dengan cepat, bisa berakibat fatal bagi ibu dan bayi. Bidan biasanya menghabiskan lebih banyak waktu dengan pasien yang mengalami nyeri dibandingkan dengan petugas kesehatan lainnya. Peran bidan meliputi mengidentifikasi dan mengatasi penyebab nyeri serta memberikan intervensi yang tepat untuk mengurangi nyeri. Karena itu, penanganan dan pemantauan nyeri pada fase aktif persalinan sangat penting untuk menentukan apakah persalinan akan berlangsung normal atau memerlukan tindakan medis karena komplikasi yang disebabkan oleh nyeri yang sangat hebat.

Tujuan: Menganalisis efektivitas counter pressure dan effleurage massage terhadap intensitas nyeri persalinan kala I fase aktif di RSUD dr. Rubini Mempawah.

Metode: Penelitian ini menggunakan desain kuasi-eksperimen dengan rancangan pretest-posttest nonequivalent control group design. Populasi yang diteliti adalah ibu-ibu yang menjalani persalinan pada fase aktif selama bulan Mei dan Juni, dengan jumlah 78 orang. Sampel penelitian terdiri dari 20 orang, dibagi menjadi 10 orang untuk intervensi counter pressure dan 10 orang untuk intervensi pijat effleurage. Teknik pengambilan sampel yang digunakan adalah consecutive sampling.

Hasil: Terdapat perbedaan signifikan dalam intensitas nyeri persalinan pada fase aktif sebelum dan setelah penerapan metode counter pressure dengan nilai $p < 0,004$. Begitu pula, terdapat perbedaan signifikan dalam intensitas nyeri sebelum dan setelah penerapan pijat effleurage, juga dengan nilai $p < 0,004$. Selain itu, efektivitas antara metode tekanan kontra dan pijat effleurage dalam mengurangi intensitas nyeri persalinan pada fase aktif juga berbeda secara signifikan, dengan nilai $p < 0,001$.

Kesimpulan: Counter pressure lebih efektif daripada effleurage massage dengan nilai post-test counter pressure memiliki selisih nilai median 3 sedangkan nilai post-test effleurage massage memiliki selisih nilai median 2.

Saran: Diharapkan peneliti selanjutnya dapat menerapkan terapi komplementer untuk mengurangi intensitas nyeri persalinan. Penelitian ini diharapkan dapat menjadi referensi untuk studi lebih lanjut mengenai efektivitas metode counter pressure dan pijat effleurage dalam mengurangi intensitas nyeri persalinan pada fase aktif.

Kata Kunci : counter pressure, effleurage, nyeri persalinan

ABSTRACT

Background: Pain can increase maternal breathing and heart rate, and if not treated quickly, can be fatal for both mother and baby. Midwives usually spend more time with patients experiencing pain than other health workers. The role of midwives includes identifying and addressing the causes of pain and providing appropriate interventions to reduce pain. Therefore, pain management and monitoring in the active phase of labor are very important to determine whether labor will proceed normally or require medical intervention due to complications caused by very severe pain.

Purpose: To analyze the effectiveness of counter pressure and effleurage massage on the intensity of labor pain in the first stage of the active phase at RSUD dr. Rubini Mempawah.

Methods: This study used a quasi-experimental design with a pretest-posttest nonequivalent control group design. The population studied were mothers who underwent labor in the active phase during May and June, totaling 78 people. The study sample consisted of 20 people, divided into 10 people for counter pressure

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intervention and 10 people for effleurage massage intervention. The sampling technique used was consecutive sampling.

Results: There was a significant difference in the intensity of labor pain in the active phase before and after the application of the counter pressure method with a p value <0.004. Likewise, there was a significant difference in the intensity of pain before and after the application of effleurage massage, also with a p value <0.004. In addition, the effectiveness between the counter pressure method and effleurage massage in reducing the intensity of labor pain in the active phase also differed significantly, with a p value <0.001.

Conclusion: Counter pressure is more effective than effleurage massage with post-test counter pressure values having a median value difference of 3 while post-test effleurage massage values have a median value difference of 2.

Suggestions; It is hoped that further researchers can apply complementary therapy to reduce the intensity of labor pain. This study is expected to be a reference for further studies on the effectiveness of the counter pressure method and effleurage massage in reducing the intensity of labor pain in the active phase.

Keywords: : counter pressure, effleurage, labor pain

INTRODUCTION

Pain is an unpleasant experience arising from both sensory and emotional responses to a stimulus that indicates potential or actual harm to body tissues. It is subjective and varies greatly between individuals, influenced by factors such as culture, perception, attention, and other psychological variables. These factors can impact ongoing behavior and motivate individuals experiencing pain to seek relief or stop the discomfort (Apriana et al., 2024; Pratiwi & Diarti, 2019; Wahyuni et al., 2024).

The labor process starts with uterine contractions that induce pain and discomfort in expectant mothers. Most women will experience pain during labor, but the perception of this pain varies individually. Each person reacts differently to the same stimulus based on their own pain threshold. Pain is an unpleasant sensation caused by sensory nerves consisting of two physiological and psychological components. The physiological component is the process of receiving impulses by sensory nerves and channeling them to the central nerve. While the psychological component includes recognition of sensations, interpretation of pain, and reactions to the results of interpretation of pain (Rejeki, 2020) (Damayanti et al., 2021; Rahmi et al., 2024).

At the beginning of labor, contractions may feel like regular low back pain or cramps during menstruation. These initial contractions are usually short and weak. It comes approximately every 15-20 minutes. However, some labor begins with increasingly frequent strong contractions. Many women initially feel pain in the back, then to the front. If his keeps coming but lasts less than 30 seconds, it means that he has just entered the early labor period. In labor, contractions will actually get stronger, longer, and more frequent (Mardiana et al., 2024; PADILA, 2018)

According to the Ministry of the Republic of Indonesia from several studies that have been conducted, about 90% of childbirth is accompanied by pain. Based on the report of the Family Health and Nutrition section of the West Kalimantan Provincial Health Office, the largest maternal mortality rate is in Mempawah regency, which is 350 per 100,000 live births, and the smallest is in Pontianak City at 119 per 100,000 live births (Dinas Kesehatan Provinsi Kalimantan Tengah, 2022). Based on data from Dr. Rubini Mempawah Hospital in 2022, it was recorded that there were 4 maternal deaths, 671 cesarean sections, and as many as 301 mothers gave birth spontaneously.

Based on research by Ebirim, Buowari, and Ghosh in 2012, among 300 mothers in the active phase of labor, 32% reported experiencing severe pain, 57% reported moderate pain, and 11% reported mild pain. In a similar study conducted in the UK, 93.5% of mothers described their labor pain as severe. Additionally, research from Firland found that 80% of women characterized their pain as severe and unbearable or intolerable (Pratiwi & Diarti, 2019).

Pain is a natural aspect of labor. If not managed effectively, it can lead to additional complications, such as heightened anxiety due to insufficient knowledge and experience with labor. This anxiety increases the production of adrenaline, which causes vasoconstriction and reduces blood flow from the mother to the fetus. As a result, the fetus may experience hypoxia, while the mother might endure prolonged labor and increased systolic and diastolic blood pressure. (Friscila et al., 2023; Hikmah Annisa et al., 2019; Norani et al., 2024).

Pain can lead to increased breathing and heart rate in the mother, and if not addressed promptly, it may result in severe consequences for both mother and baby, potentially leading to death. Therefore, managing and controlling pain during the active phase of labor is crucial for determining whether labor will proceed normally or require medical intervention due to complications from severe pain. Unresolved pain can cause hyperventilation, which increases oxygen demand, elevates blood pressure and heart rate, disrupts blood flow to the placenta, and impairs intestinal motility and urinary function. (Ante et al., 2026; Fitriani, Friscila, et al., 2023; Fitrianingsih et al., 2017).

Midwives spend more time with patients experiencing pain than any other health worker. Midwives play a role in identifying and addressing the cause of pain and providing appropriate interventions to reduce pain so it is very important for midwives to know the right interventions in reducing pain. In general, pain management is grouped into two, namely pharmacological and non-pharmacological pain management (Norhalimatussa'diah et al., 2023; Pratiwi & Diarti, 2019).

Non-pharmacological pain management is a method that is more effective, simpler, and does not cause side effects (Sugianti & Joeliatin, 2019). Non-pharmacological methods for managing labor pain include various techniques such as stimulation and cutaneous massage, effleurage, deep back massage, rubbing massage, firm counter pressure, abdominal lifting, ice and heat therapy, transcutaneous electrical nerve stimulation, distraction, relaxation techniques, acupressure at point L14, acupressure at GB21, lavender therapy, rose effleurage, finger grip relaxation compress, rebozo, progressive relaxation, and the use of a birth ball. These methods are relatively simple and can be easily performed by anyone. The role of midwives is crucial in utilizing these techniques to enhance patient comfort and reduce the intensity of labor pain. (Fitriani, Mauyah, et al., 2023; Maimunah et al., 2023; Utami & Fitriahadi, 2019).

Counter pressure massage involves applying pressure to the sacrum area to block the transmission of pain signals from the uterus to the brain, often using the fists. This technique aims to alleviate tension, stiffness, and restlessness in the body, particularly in the back or sacral region. According to research by Muldaniyah in 2022, counter pressure massage significantly affects pain intensity during the active phase of labor, with a p-value of 0.000, indicating a statistically significant result ($p < 0.05$). (Damayanti et al., 2021; Muldaniyah & Ardi, 2022).

Effleurage massage involves gently rubbing the abdomen in sync with the mother's breathing during contractions to help distract her from focusing on the pain. According to Herinawati's research in 2019, effleurage massage significantly reduces pain during the active phase of labor at the Nuriman Rafida Midwife Independent Practice and the Latifah Independent Midwife Practice in Jambi City, with a p-value of 0.000, indicating a statistically significant effect ($p < 0.05$). (Herinawati et al., 2019).

The results of research conducted by (Paseno et al., 2019) regarding "Counter Pressure Massage and Effleurage Massage are Effective in Reducing Labor Pain During Phase I" indicates that both counter pressure massage and effleurage massage interventions resulted in a reduction in labor pain intensity. However, counter pressure massage was found to be more effective than effleurage massage in decreasing the intensity of labor pain during the active phase I.

In a preliminary study conducted by the author at RSUD dr. Rubini Mempawah in February 2023, involving 10 mothers in labor during the active phase I, the findings were as follows: one person reported mild pain with a score of 2, six individuals reported moderate pain with scores ranging from 4 to 6, and three individuals reported severe pain with scores between 7 and 8. This study differs from previous research by examining the combined effect of counter pressure and effleurage massage on labor pain intensity.

RESEARCH METHODS

This research is a quantitative study utilizing a quasi-experimental design. It is termed quasi-experimental because it does not constitute a true experiment due to the presence of external variables that may influence the dependent variables. The specific design used is the pretest-posttest nonequivalent control group design. In this design, a pretest is conducted before the treatment is applied, allowing for a more accurate assessment of the treatment's effects by comparing conditions before and after the intervention.

The population in this study is 78 mothers who underwent labor during the first active phase in May and June 2023 in the obstetrics room of Dr. Rubini Mempawah Hospital. Sampling in this study was determined by the author using 2 small sample groups, namely 10 in the counter pressure group and 10 in the effleurage massage group so that the number of respondents in this study was 20 respondents.

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The independent variables in this study were Counter Pressure and Effleurage Massage. Counter Pressure is a massage with strong pressure by placing the heel of the hand or flat part of the hand on the sacral region at the time of his appearance until his subsides for 20 minutes every hour during the active phase. Effleurage Massage is a mild and firm abdominal rubbing massage performed when his arises until his subsides for 20 minutes every hour during the active phase. The variables tied to this study are labor pain, which is pain that occurs due to cervical dilation and distension of the lower segment of the uterus, pain felt compared to the strength of contractions and pressure that occurs. Primary data in this study were collected through observation using the Numeric Rating Scale pain measuring instrument.

Data collection techniques in this study were carried out in the following ways:

1. Determine respondents who fit the inclusion criteria
2. Respondents who meet the inclusion criteria are then given information about the research to be carried out
3. The willing respondent then signs informed consent
4. Measuring the intensity of pain in maternity mothers during the active phase before counter pressure treatment is given
5. Counter pressure
6. Measuring the intensity of pain in maternity mothers during the active phase I that has been given counter pressure
7. Write the results of pain intensity in pre-post counter pressure mothers on the Numeric Rating Scale (NRS) observation sheet.
8. After 10 counter pressure respondents were met, researchers intervened on 10 respondents of effleurage massage.

In this study, univariate analysis was used to assess the distribution and average frequency of labor pain intensity during the active phase before and after administering either the counter pressure or effleurage massage method. Bivariate analysis was then conducted to explore the relationship between two variables and evaluate the effectiveness of these massage methods in reducing labor pain intensity during the active phase at RSUD dr. Rubini Mempawah.

Before conducting bivariate analysis, normality tests were performed using the Shapiro-Wilk test, appropriate for samples of fewer than 50 respondents. The test revealed a significance value of <0.05, indicating that the data were not normally distributed. Consequently, the Wilcoxon test was used for data analysis, which showed that the pretest-posttest results (p-value < 0.05) indicated a significant effect of both counter pressure and effleurage massage on labor pain intensity during the active phase I. After assessing the impact of each intervention, the researchers compared the effectiveness of counter pressure and effleurage massage using the Mann-Whitney test, finding a significant difference in effectiveness between the two methods (p-value < 0.05).

RESEARCH RESULTS

Table 1
Frequency Distribution Based on Respondent Characteristics

Characteritics	n	%
Age		
<20	3	15
20-35	14	70
>35	3	15
Employment		
housewives	19	95
employee	1	5
Education		
Elementary	5	25
High school	14	70
College	1	5
Parity		
Primi gravida	10	50
Multi gravida	8	40
Grande multi gravida	2	10

Based on Table 1, the distribution of respondents is as follows: 3 respondents (15%) are under 20 years old, 14 respondents (70%) are between 20 and 35 years old, and 3 respondents (15%) are over 35 years old. The optimal reproductive age for a mother is between 20 and 35 years, as ages outside this range can increase the risks associated with pregnancy and childbirth. Women under 20 may face risks because their reproductive organs are not fully developed and their psychological maturity is insufficient, which can lead to obstetric complications and higher maternal and perinatal mortality rates.

The number of respondents based on the characteristics of the number of parity as many as 10 people (50%) are primigravida, 8 people (40%) are multigravida, and 2 people (10%) are grande multi

gravida pregnancies. In grande multi gravida has a greater risk than primigravida or multigravida such as anemia, malnutrition, sagging in the abdominal wall which can cause bleeding during labor and after delivery.

The results of the univariate analysis in the table 2 above based on counter pressure treatment of labor pain intensity during the active phase I, showed that respondents before counter pressure treatment with pain intensity 6 as many as 4 people (40%), pain intensity 7 as many as 1 person (10%), pain intensity 8 as many as 3 people (30%), and pain intensity 9 as many as 2 people (20%). While the number of respondents after counter pressure treatment with pain intensity 3 was 3 people (30%), pain intensity 4 was 2 people (20%), and pain intensity 5 was 5 people (50%).

The results of univariate analysis based on effleurage massage treatment on labor pain intensity during the active phase I, showed that respondents before the treatment of effleurage massage with pain intensity 6 as many as 2 people (20%), pain intensity 7 as many as 2 people (20%), and pain intensity 8 as many as 6 people. While the number of respondents after effleurage massage treatment with pain intensity 5 was 4 people (40%), pain intensity 6 as many as 4 people (40%), and pain intensity 7 as many as 2 people (20%).

Table 2
Distribution of Respondents' Frequency Based on Counter Pressure and Effleurage Massage Treatment on the Intensity of Labor Pain During the Active Phase I

Categories Labor Pain	n	%
Counter Pressure		
Before		
6	4	40
7	1	10
8	3	30
9	2	20
After		
3	3	30
4	2	20
5	5	50
Effleurage Massage		
Before		
6	2	20
7	2	20
8	6	60
After		
5	4	40
6	4	40
7	2	20

Table 3
Data Normality Test Before and After Counter Pressure and Effleurage Massage Treatment

Variabels	*Saphiro-Wilk*	
	p-value	description
Before Counter Pressure	0.034	Not normally distributed
After Counter Pressure	0.004	Not normally distributed
Before *Effleurage Massage*	0.001	Not normally distributed
After *Effleurage Massage*	0.025	Not normally distributed

It can be concluded that the data is abnormally distributed. So that both pre-test and post-test groups were analyzed with the Wilcoxon test.

Based on the table above, it can be seen that there is a significant effect before and after counter pressure with a p-value of 0.004<0.05, as well as the effleurage massage group, there is an influence before and after effleurage massage with a p-value of 0.004<0.05. Meanwhile, to test the difference in the effectiveness of post-test counter pressure and effleurage massage using the Mann-Whitney test.

In the counter pressure group, the lowest value of labor pain intensity before intervention was 6 and the highest value was 9. After counter pressure was carried out, there was a significant decrease in pain intensity with the lowest value of 3 and the highest value of 5. While the lowest value before effleurage massage is 6 and the highest value is 8. After effleurage massage there was a decrease in the intensity of labor pain with the lowest value of 5 and the highest value of 7.

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Table 4
Analysis of the Effect of Counter Pressure and Effleurage Massage on the Intensity of Labor Pain During the Active Phase I

Variabels	Median	SD	Min	Max	*p-value*
Counter Pressure					
Pre-Test	7.50	1.252	6	9	0.004
Post Test	4.50	0.919	3	5	
Effleurage Massage					
Pre-Test	8.00	0.843	6	8	0.004
Post Test	6.00	0.789	5	7	

Table 5
Differences in the Effectiveness of Counter Pressure and Effleurage Massage on the Intensity of Labor Pain During the Active Phase I

Variabels	Mean	SD	Mean Difference	p
Counter Pressure Post Test	4.50	0.919	3.00	0.001
Effleurage Massage Post Test	6.00	0.789	2.00	

Based on the table above, it can be seen that the p-value is 0.001<0.05, with the median value in the counter pressure group with a difference of 3.00 and in the effleurage massage group with a difference of 2.00. Based on these results, it can be concluded that there is a difference in effectiveness between counter pressure treatment and effleurage massage, where in the counter pressure treatment group proved to be more effective in reducing the intensity of labor pain during the active phase I. These results show that the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted.

DISCUSSIONS

The effect of counter pressure on the intensity of labor pain during the active phase I.

Based on the study results, the median pain intensity value for the group receiving counter pressure treatment was 7.50 before the intervention and 4.50 after the intervention. Data analysis revealed a significant effect of counter pressure on reducing labor pain intensity during the active phase I, with a p-value of 0.004.

Counter pressure is a technique designed to alleviate labor pain. It involves applying a consistent, firm pressure to a specific area in the lower back during contractions, typically using a fist, the base of the palm, or another strong object. Alternatively, pressure can be applied to both side thighs using the hands, and this technique is usually performed by a birth attendant or healthcare provider. (Rejeki, 2020)

The counter pressure technique is applied to the lumbar region, where the sensory nerves of the uterus and cervix converge with the sympathetic nerves of the uterus, traveling through the spinal cord from the thoracic nerves (T10-T12) to lumbar nerve 1. This method blocks pain impulses by stimulating large-diameter nerves, which helps close the gate control mechanism and prevents pain signals from reaching the cerebral cortex. (Mander, 2004).

Based on research conducted by (Muldaniyah & Ardi, 2022) on the impact of counter pressure massage on pain intensity during the first active phase of labor at the Jumpandang Baru Makassar Health Center, the pain levels before the intervention showed that 25 respondents (78.1%) experienced severe pain, while 7 respondents (21.9%) reported mild pain. After the counter pressure massage, the majority of respondents reported mild pain, with 28 individuals (87.5%) experiencing this level, and only 12.5% reported severe pain. The McNemar test results indicated a p-value of 0.000, which is less than 0.05, demonstrating a significant effect of counter pressure massage in reducing pain intensity during the active phase of labor.

Applying the counter pressure massage technique helps close the pain gate by blocking the transmission of pain signals to the spinal cord and brain. Additionally, the strong pressure from this technique stimulates the release of endorphins at the synapses of spinal cord and brain cells, which inhibits the transmission of pain messages and leads to a reduction in the perception of pain (Muldaniyah & Ardi, 2022)

The results of this study agree with research conducted by (Hazma et al., 2023) which investigated the impact of counter pressure on labor

pain intensity during the active phase I at the Tanjungsari Natar Health Center, South Lampung Regency. Their study also found a significant effect of counter pressure on labor pain, with a p-value of 0.000, indicating a substantial reduction in pain levels during this phase.

The results of this study are also in line with research conducted by (Novitasari, 2019) which found that applying counter pressure massage with a fist to the mother's lower back for 20 minutes led to a reduction in pain levels. In Novitasari's study, respondents showed a decrease in pain scale, with 4 respondents (40%) experiencing moderate pain and 6 respondents (60%) reporting mild pain after the intervention. This indicates a significant reduction in pain levels during the active phase I before and after the counter pressure massage technique was applied to maternity mothers at the Bergas Health Center.

The counter pressure technique is highly effective for use at the end of labor. It involves applying pressure to the lower back or sacrum area of the laboring mother using a fist for 20 minutes, which helps alleviate pain during contractions. This method targets the innervation in the lower back to provide relief from labor pain (Novitasari, 2019)

Another similar study is a study conducted by (Puspitasari et al., 2020) which demonstrated a significant reduction in labor pain intensity following a counter pressure massage on the sacral vertebra. In this study, continuous, firm pressure was applied using the palm of the hand for 10-15 minutes during contractions, effectively alleviating pain.

The effect of effleurage massage on the intensity of labor pain in the first active phase.

Based on the results of the effleurage massage group research before the intervention was given a median value of 8.00 and after the effleurage massage intervention a median result of 6.00 was obtained. Based on the results of data processing conducted by researchers, it was concluded that there was an influence before and after effleurage massage was carried out on maternity mothers during the active phase I with a p-value of 0.004.

Effleurage is a gentle massage technique applied using the fingertips, typically on the abdomen, in sync with the mother's breathing during contractions. This method can be performed by the mother herself or a labor support person. Its primary purpose is to help distract the mother from the pain of contractions. Effleurage operates on the Gate Control Theory, which aims to "close the gate" and block the transmission of pain signals to higher centers of the central nervous system (Herinawati et al., 2019)

According to research conducted by (Herinawati et al., 2019) at the Independent Practice of Midwives Nuriman Rafida and the Independent Practice of Midwives Latifah Jambi City in 2019 conducted on 30 respondents, after effleurage massage for 20 minutes in each contraction there was a significant decrease in labor pain during the I active phase. As many as (57%) respondents felt mild pain, (33%) felt moderate pain, and (10%) felt severe pain.

Therefore, it can be concluded that effleurage massage effectively closes the gate or inhibits pain impulses, resulting in a reduced amount of pain reaching the central nervous system. When both tactile and pain stimuli are present simultaneously, the tactile sensations can travel to the brain and effectively close the internal pain gates. This process, combined with the distraction provided by the massage or touch, can also enhance the production of endorphins in the descending control system and promote muscle relaxation.

The results of this study are in line with research conducted by (Rosita & Lowa, 2020) which examined the impact of deep back and effleurage massages on labor pain reduction during the active phase I at the Jumpandang Baru Makassar Health Center. Their study demonstrated that a 30-minute effleurage massage effectively reduced labor pain intensity. Effleurage massage proves effective in alleviating labor pain by stimulating and regulating the body, enhancing blood circulation, and ensuring that oxygen, nutrients, and waste products are efficiently transferred from the mother to the placenta. Additionally, it helps relax tension, lower emotions, and reduce pain during labor.

The results of this study are also in line with research conducted by (Novitasari, 2019) esearch on the comparative effectiveness of effleurage and counter pressure massages for labor pain during the active phase I at the Bergas Health Center. Novitasari's study found a significant reduction in pain scale following the application of effleurage massage. This is attributed to the fact that massage can make mothers feel more refreshed, relaxed, and comfortable during labor, serving as a distraction and altering their perception of pain. Additionally, the effleurage massage can be administered by family members, particularly the husband, which can enhance the mother's sense of support and trust through the comforting touch of her loved ones.

Another similar study is a study conducted by (Purwandari et al., 2022) titled "Effleurage Massage by Husband on The Level of Pain in Maternal When

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The I Phase is Active" found a p-value of < 0.05. This indicates a significant difference in pain levels after administering effleurage massage to maternity mothers during the active phase I at the Sifra Lawongan Maternity Clinic.

The difference in the effectiveness of counter pressure and effleurage massage on the intensity of labor pain during the active phase.

Based on the results of research on the effectiveness of counter pressure and effleurage massage on the intensity of labor pain during the first active phase, it can be seen that the p-value is 0.001<0.05, with the median value in the counter pressure group with a difference of 3.00 and in the effleurage massage group with a difference of 2.00. Based on these results, it can be concluded that there is a difference in effectiveness between counter pressure treatment and effleurage massage, where in the counter pressure treatment group proved to be more effective in reducing the intensity of labor pain during the active phase I. These results show that the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted.

The results of this study are in line with research conducted by (Paseno et al., 2019) which demonstrated that both counter pressure and effleurage massages are effective in reducing labor pain. The study revealed a significant difference in pain intensity before and after the application of counter pressure. Although both techniques are beneficial for alleviating pain, counter pressure is more effective because it works more quickly to block pain. This technique rapidly inhibits or reduces the nerve pathways responsible for transmitting pain sensations, leading to a more substantial decrease in the intensity of pain experienced by the mother.

The data above are the same results as the results of a study (Saribu et al., 2021) which compared the effectiveness of effleurage and counter pressure massages on labor pain intensity in parturient mothers. The study indicated that counter pressure is more effective than effleurage, with an average pain intensity score of 30.31 for counter pressure compared to 42.69 for effleurage. Counter pressure reduces labor pain by applying direct pressure, which alleviates the pain experienced. This technique helps to minimize strain on the pelvic region and the iliac sacro by mitigating internal compression from the fetal head.

Counter pressure is more effective in managing labor pain during the active phase I. Applying counter pressure techniques can effectively close the pain gate, preventing pain signals from reaching the spinal cord and brain. Additionally, the firm pressure used in this technique can stimulate the release of endorphins at the synapses in the spinal cord and brain, which helps inhibit the transmission of pain signals, thereby reducing the overall sensation of pain. (Rejeki, 2020).

This research is also in line with research conducted by (Novitasari, 2019) which examined the effectiveness of effleurage and counter pressure massages on labor pain during the active phase I at the Bergas Health Center. The study revealed that a t-independent test produced a calculated t-value of 0.580 and a p-value of 0.005. Since the p-value is less than 0.005, it indicates that counter pressure massage is significantly more effective than effleurage massage in reducing labor pain during the active phase I for maternity mothers at the Bergas Health Center.

The results indicated that before receiving either effleurage or counter pressure massage, respondents reported moderate pain. After the counter pressure massage, there was a noticeable reduction in pain levels, with respondents experiencing mild pain. This improvement is attributed to the counter pressure massage's effectiveness in alleviating intense pain and providing a more comfortable experience during and between contractions.

CONCLUSION

Counter pressure is more effective than effleurage massage with post-test counter pressure values having a median value difference of 3 while post-test effleurage massage values have a median value difference of 2.

SUGGESTION

It is anticipated that future researchers will explore complementary therapies to further alleviate labor pain, and that this study will serve as a valuable reference for investigating the effectiveness of counter pressure and effleurage massages in managing pain during the active phase of labor.

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