

The Effect Of Counter Pressure And Kneading Techniques On Reducing The Intensity Of Labor Pain In The First Stage Of Active Phase

Evi Sriayuningtyas^{1*}, Resi Galaupa²

^{1,2} Midwifery Study Program, STIKes Abdi Nusantara Jakarta, Indonesia.

* Corresponding author:

Email: evisria46@gmail.com

Abstract.

Pain is a form of discomfort felt by the mother at the time of delivery. One way that can be used to overcome the problem of pain during labor is to apply massage techniques. Among them, the counter pressure massage technique can be done in the lumbar region using the heel of the hand or fist. And the kneading technique is massaging or squeezing using the palms of the hands or fingers to pinch some parts of the skin. The purpose of this study was to determine the effect of counter pressure and kneading techniques on reducing pain intensity in the first stage of normal delivery in primiparous mothers at BPM Evi Sriayuningtyas. Method This type of research is a Quasi Experiment with a one-group pretest-posttest design approach. The population in this study were all mothers who gave birth vaginally at BPM Evi Sriayuningtyas in March-April 2022, a sample of 30 people was obtained using purposive sampling technique. Research Results: Based on the results of hypothesis testing using the Wilcoxon test, the value of $< (0.000 < 0.05)$ stated that there was an effect of counter pressure techniques and kneading techniques on reducing pain intensity in the first stage. Conclusion The application of counter pressure techniques and kneading techniques can be used as a intervention in helping mothers in labor to cope with labor pain.

Keywords: Counter Pressure Technique, Kneading Technique, Labor Pain

I. INTRODUCTION

Childbirth is a series of events that ends with the expulsion of a term baby or nearly term, followed by the expulsion of the placenta and fetal membranes from the mother's body, a process of opening and thinning the cervix and uterine contractions causing pain during labor (1). Pain is a form of discomfort defined in various perspectives. The pain experienced during labor is different for each mother. Mothers always try to overcome pain during childbirth by doing various behaviors and habits (2). Maternal mortality rate (MMR) is one of the important indicators of public health status. AKI describes the number of women who die from a cause of death related to pregnancy or treatment disorders (excluding accidents or incidental cases) during pregnancy, childbirth and in the puerperium (42 days after delivery) without taking into account the length of birth per 100,000 live births (3). This pain subject is influenced by parity, size and position of the fetus, medical procedures, anxiety, fatigue, culture and environmental coping mechanisms. Other physical barriers that can cause pain or tenderness are the result of prolonged labor, the mother has a disease or complications during childbirth and repeated examinations of the birth canal by medical personnel (4). Along with advances in technology and education (midwifery) safe delivery for mothers and babies has begun to be developed. Some concrete forms that have been developed are cesarean delivery and water birth. Both types of labor become labor mothers tend not to experience severe pain in labor that occurs.

However, the impact of these developments is a surge in the costs needed to give birth. One way that can be used to overcome the problem of pain during labor is to apply massage techniques. Two massage techniques that have been developed and used by midwives and birth attendants are the counter pressure massage technique and the kneading technique (5). Counter pressure is a strong pressure massage by placing the heel of the hand or using a fist, or also using a tennis ball. The counter pressure technique is carried out in the lumbar area where the uterine and cervical sensory nerves run with the uterine sympathetic nerves entering the spinal cord through the thoracic nerves 10-11-12 to the lumbar 1. Kneading technique is a massaging or squeezing movement using the palms of the hands or fingers hands to pinch some parts of the skin. This type of massage requires a little pressure. The kneading in this massage art really helps reduce muscle tension and is very relaxing (6). The application of non-pharmacological therapy to treat pain in labor is a method that must be developed by all midwives or birth attendants. This will indirectly help mothers in labor in overcoming pain due to labor that occurs and reduce the risk of complications due to childbirth that

occurs. In addition, the application of non-pharmacological therapy to overcome labor pain can also help reduce the incidence of delivery by cesarean method which requires no small amount of money and can provide maternal care (7). So that researchers are interested in knowing the effect of the Counter Pressure Technique and kneading technique on the Intensity of Labor Pain in the Active Phase I.

II. METHODS

The type of research used in this research is quasi-experimental, which is an experiment that controls the research situation by using a certain design and or determining the subject to get one of the various levels of research. The research situation is the dependent variable which is given intervention or treatment by the researcher with a one group pre and post test design approach (8). This research was conducted in March-April 2022 at PMB Evi Sriyuningtyas, data was collected using observation sheets and the Wong Baker Pain Rating Scale to measure pain. Data processing was carried out using SPSS 22 and data analysis was carried out using Shapirouilk with data not normally distributed so that the Wilcoxon test was used.

III. RESULT AND DISCUSSION

Table 1. Frequency Distribution of Respondents by Ag Primipara Maternity First Stage at PMB Evi Sriyuningtyas in 2022

Age	Frecuency	Percentage (%)
20 – 25 Years	22	73,33
26 – 31 Years	8	26,67
Total	30	100

Source : Primay data, 2022

Based on table 1 shows that of the 30 respondents, the most were at the age of 20-25 years, namely 22 people (73.33%) and at the age of 26-31 years, namely 8 people (26.67%).

Table 2. Frequency Distribution of Pain Levels in the First Stage of Labor in Primiparous Mothers Before the Counter Pressure Technique and Kneading Technique At PMB Evi Sriyuningtyas in 2022

Pain Level	Frecuency	Percentage (%)
Moderate Pain	10	33,33
Severe Pain	20	66,67
Total	30	100

Source : Primay data, 2022

Based on table 2, it can be seen that most of the respondents who gave birth to primiparous women at PMB Evi Sriyuningtyas experienced severe pain, namely 20 people (66.67%) and 10 people (33.33%) experienced moderate pain.

Table 3. Frequency Distribution of Pain Levels in the First Stage of Labor in Primiparous Mothers After Performing the Counter Pressure Technique and Kneading Technique at PMB Evi Sriyuningtyas in 2022.

Pain Level	Frecuency	Percentage (%)
Moderate Pain	13	43,33
Severe Pain	17	56,67
Total	30	100

Source : Primay data, 2022

Based on table 3, it can be seen that most of the respondents who gave birth to primiparous mothers at PMB Evi Sriyuningtyas experienced moderate pain, namely 17 people (56.67%) and those who experienced mild pain were 13 people (43.33%).

Table 4. Results of Analysis of the Effect of Counter Pressure and Kneading Techniques on Reducing Pain Intensity in the First Stage of Normal Delivery in Primiparous Mothers at PMB Evi Sriyuningtyas in 2022.

Group	n	Median	P
Before	30	3	0,000

After	30	2	($p < 0,05$)
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SPSS Wilcoxon Signed Ranks Test Results

Based on the value of the Wilcoxon test analysis, the value of $< (0.000 < 0.05)$, this means that H_0 is rejected and H_a is accepted. Thus, there is an effect of the Counter Pressure Technique and the Kneading Technique on reducing the intensity of pain in the first stage of normal delivery in primiparous mothers at PMB Evi Sriyuningtyas in 2022. This research was conducted at PMB Evi Sriyuningtyas in 2022 with 30 respondents. Analysis of the results of research that has been carried out related to the decrease in the intensity of pain in the first stage of labor before and after being given the counter pressure technique and kneading technique to primiparous mothers at PMB Evi Sriyuningtyas, analyzed using the Wilcoxon test and the data analysis using univariate and bivariate analysis. Based on data from table 1, it shows that of the 30 respondents, the most were at the age of 20-25 years, namely 22 people and at the age of 26-31 years, namely 8 people. Age is one of the factors that can affect the respondent's perception of pain, the respondent's perception of pain will increase according to age. The older the respondent, the better the respondent's understanding of the perception of pain will be. The younger age of the respondent tends to be associated with unstable psychological conditions, so that it can trigger anxiety which causes the pain felt by the respondent to be stronger (9)

Based on data from table 2, it shows that most of the respondents who gave birth were primiparous before the counter pressure technique and kneading technique experienced severe pain, namely 20 people, and 10 people experienced moderate pain. While table 3 shows that after the counter pressure and kneading techniques were carried out, it was seen that 17 respondents experienced moderate pain and 13 respondents experienced mild pain. This is due to the mother's subjectivity and perception of pain. Pain is a normal feeling during labor. The feeling of pain can be eliminated but can be reduced. Primiparous mothers do not have experience with childbirth so that self-preparation has not been maximized (10). In addition, there are several physiological factors that can affect the perception and reaction of each individual to pain. In addition to physiological factors, psychological factors can affect the intensity of pain experienced, namely fear and anxiety about the labor that will be experienced. The provision of counter pressure techniques and kneading techniques as well as ongoing information about pain in the mother during pregnancy and childbirth is very necessary to prepare the mother physically and psychologically for childbirth (11). Based on the results of hypothesis testing using the Wilcoxon test, it shows that there is a decrease in the intensity of labor pain. From these results, the value of $< (0.000 < 0.05)$ stated that there was a decrease in pain intensity after the counter pressure and kneading techniques were carried out.

The results of this study are supported by research conducted by Paseno, et.al, 2019) obtained from the results of statistical tests, the p value $< 0.000 < 0.05$ and the t-count value is 7.649 with a t-table value = 1.833 ($t_{count} > t_{table}$) means that H_0 is rejected and H_a is accepted, it can be concluded that there is a significant difference between the intensity of pain before and after counter pressure action (12). The results of this study are in accordance with the title "The Effect of Counterpressure Application To Reduce Childbirth Pain During Active Phase I at Batua Raya Makassar Health Center" shows that the average value before being given treatment is 7.95 while the average value after being given treatment is 7.95. treatment obtained a value of 4.80. From these results it can be concluded that the average value after being given treatment is smaller than the average value before being given treatment. Based on the results of the paired t test, the p value is 0.00 ($p < 0.05$) so it can be concluded that H_0 is rejected, which means that there is an effect of applying counterpressure to reduce labor pain in the active phase (13) The researcher assumes that by using the counter pressure technique and the kneading technique, it can reduce the intensity of pain in the first stage of normal delivery, in addition to the counter pressure technique and the kneading technique, it is found that the mother feels more comfortable and relaxed. According to the researcher, labor pain is an unpleasant feeling and is an individual response in the labor process. Pain intensity is very subjective, many things can cause labor pain including contraction and stretching of the uterus, opening of the cervix and stretching of the birth canal. There are also several factors that influence pain, one of which is the parity factor, where primiparous mothers do not have experience.

IV. CONCLUSION

The level of pain in the first stage of normal delivery in primiparous mothers after the counter pressure technique and kneading technique was 17 people (56.67%) patients experienced moderate pain and 13 people (43.33%) patients experienced mild pain. It is hoped that the counter pressure technique and the kneading technique can be used in providing care for the first stage of labor in maternal and child health services. in overcoming labor pain because seen from the effect it can reduce the intensity of labor pain in the first stage

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