

The Effectiveness of Practice Counter Pressure Massage to Reducing the Intensity of Labor Pain

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Abstract: ***Background:** Labor pain could affect the functional mechanisms that cause physiological stress responses, resulting in a decrease in uterine contractions. One of the non-pharmacological methods is very effective in overcoming labor pain is the method of massage. There are many techniques for performing massage, including counter pressure techniques. There are differences in the way or place of massage so that it has different effects and sensations. **Objective:** To analyze the effect of Counter pressure in reducing the intensity of labor pain. **Methods:** Quasi-experiment with random cluster design pretest and posttest control group design. There were 40 samples divided into 2 groups with Consecutive sampling technique. Each group consists of 20 respondents. Group 1 was given a Counter pressure interventions practices, while the second group was a control group. The analysis was used to assess differences in pain reduction between the 2 groups using the Mann-Whitney test. **Results:** The mean difference of the VAS (visual analog scale) measurement scale in the treatment group -41.00 ± 7.88 while the control group -10.50 ± 9.45 can be said that the application of counter pressure massage is more effective in reducing pain intensity compared to the application of back massage viewed from the p -value = 0.000 ($p < 0.05$) which means there is a difference in the decrease in pain intensity. **Conclusion:** Counter pressure massage is effective towards pain relief during the first phase of labor compared to the control group.*

Keywords: Counter pressure, Labor Pain, Visual Analog Scale, Primigravida

1. Introduction

Counter pressure massage is a massage that applying pressure continuous using the base of the hand or fist of one hand on the sacral bone and lumbar region of the patient during a contraction so that it can help reduce the sensation of pain and transmission of pain impulses to the brain. Counter pressure can be applied in lying down position or half-sitting position, depends on the comfort of the mother position.^[18] There are many techniques for performing massage, including counter pressure techniques. There are differences in the way or place of massage so that it has different effects and sensations.^[15] By giving a counter-pressure massage it is hoped that it can close the pain message gate so that the transmission of the pain message can be inhibited and cause a decrease in pain sensation.^[6]

2. Literature Survey

Labor is the process of opening and thinning the cervix, and the fetus descends into the birth canal. Normal labor and delivery is a process of spending the fetus that occurs at term months of pregnancy (37-42 weeks), born spontaneously with the back of the head presentation lasting 18 hours, without complications both mother and fetus.^[11]

In women who have never been pregnant and give birth (primigravida), pregnancy and childbirth are odd to them, especially if they have heard trauma or failure to deal with physiological changes in pregnancy and childbirth can also cause anxiety.^[10]

Pain is a condition in the form of unpleasant feelings, very subjective. The feeling of pain in each person is different in terms of scale or level, and only that person can explain or evaluate the pain he experienced.^[12] Labor pain problems could be a serious complication for the woman. In discussing

studies about labor pain events 65% are due to inefficient uterine contractions.^[9] The cause of maternal death related to labor pain is mainly the incidence of prolonged labor (5%).^[6] There are several methods of pharmacological pain management that have been applied which include non-pharmacological methods of mind and body intervention (hypnosis), alternative systems in medical practice (acupressure), manual healing (massage), bioelectromagnetic applications and physical methods (hydrotherapy), and therapy alternative (aromatherapy).^[47] Non-pharmacological therapy is a therapy that is used that is without using drugs, but by providing a variety of techniques that can at least slightly reduce the pain when labor arrives.^[47] There is one non-pharmacological technique in reducing labor pain that is giving a massage the method that I offer is a counter-pressure massage.^[45] Counter pressure massage is a massage that applying pressure continuous using the base of the hand or fist of one hand on the sacral bone and lumbar region of the patient during a contraction so that it can help reduce the sensation of pain and transmission of pain impulses to the brain. Counter pressure can be applied in lying down position or half-sitting position, depends on the comfort of the mother position.^[18] There are many techniques for performing massage, including counter pressure techniques. There are differences in the way or place of massage so that it has different effects and sensations.^[15] By giving a counter-pressure massage it is hoped that it can close the pain message gate so that the transmission of the pain message can be inhibited and cause a decrease in pain sensation.^[6] The source of pain at the end of stage I and stage II comes from the lower genital tract, including the perineum, anus, vulva and clitoris. Pain impulses are transmitted through the pudental nerve to S4, S3 and S2. Pain that is felt especially in the vulva and surrounding areas and the lumbar region.^[8] The massase counterpressure technique is a massase technique for low back pain in labor with a non-pharmacological (traditional)

method, which is by suppressing nerves in the area of low back pain in the mother, using a fist to the mother's waist for 20 minutes in a sitting position. Emphasis is made when the respondent experiences uterine contractions (which cause low back pain) at the first active phase. [19]

3. Methods/Approach

This type of research uses quasi experimental with random cluster design pretest and posttest control group design. There were 40 samples divided into 2 groups with purposive sampling technique. Each group consists of 20 respondents. Group 1 The treatment was given a counter pressure massage interventions with measurements of labor pain with visual analog scale and group 2 performed back massage in accordance with operational standards and measured pain intensity with numeric rating scale and visual analog scale. Analysis was used to assess differences in pain reduction between the 2 groups using the Mann-Whitney test. Research ethics is informed consent, anonymity, confidentiality and truth.[20] Ethical approval was obtained from the Health Polytechnic Semarang Health Research Ethics Committee.

4. Results & Discussion

4.1 The effectiveness of the application of a combination of counter pressure and birth ball exercise on the decrease in first stage labor pain in the treatment group compared to the control group

Labor pain with a VAS measurement scale (visual analog scale) in the treatment group was more effective than the control group seen from p value = 0.000 with a difference in the average labor pain of -41.00 ± 7.88 while the control group had an average difference amounting to -10.50 ± 9.45 and there were significant differences between before and after being given the intervention in the application of a combination of counter pressure and birth ball exercise in the treatment group and the control group applying back massage with p value <0.05.

The mean difference in the VAS (visual analog scale) measurement scale in the treatment group -41.00 ± 7.88 while the control group -10.50 ± 9.45 can be said that the application of counterpressure and birthball exercise combination is more effective in increasing beta-endorphine levels compared to the application Back massage is seen from p-value = 0.000 (p <0.05) which means that there is a difference in the difference between the levels of β -endorphin hormone in the treatment and control groups.

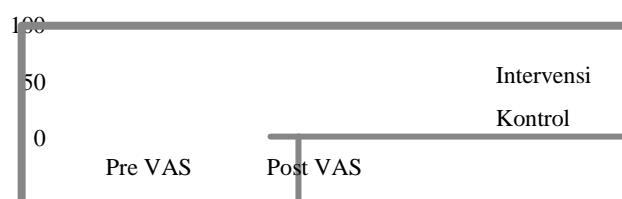


Figure 2 : VAS measurement scale - (visual analog scale)

The measurement VAS scale on the treatment and control difference scores were more prominent where the mean labor pain at the VAS scale in the treatment group was -41.00 ± 7.88 and the VAS scale in the control group. amounting to -10.50 ± 9.45 .

Pain that is felt by the mother occurs due to the transmission of pain impulses through certain nerves. In the first stage of labor, painful nerve impulses originating in the cervix and uterine corpus.[7] Pain that is felt in the lower abdomen and waist that occurs during the first stage of labor. The source of pain at the end of stage I and stage II comes from the lower genital tract, including the perineum, anus, vulva, and clitoris. Pain impulses are transmitted through the pudendal nerve to s4, s3, and s2. Pain that is felt mainly in the vulva and surrounding areas and the waist.[8] Severe pain in childbirth must be treated effectively if not resolved can affect the condition of the mother and fetus. There is non-pharmacological pain management that can be done to reduce labor pain. The application of counter pressure massage is one of the options for labor pain management that can improve labor progress. [9]

After the intervention has given the application of counter pressure massage primigravida mother when I had more self-control ability and can control themselves and can take action to deal with the labor process so that there can be a decrease in pain intensity in the treatment group after the intervention was given.

5. Conclusion

Based on the results of research and discussion on the application of counter pressure massage to the intensity of labor pain in first-time primigravida mothers who have been described, it can be concluded that counter-pressure massage is effective against pain reduction during the first phase of labor in the active phase compared to the control group.

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Author Profile



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