

THE EFFECT OF ABDOMINAL LIFTING MASSAGE ON INTENSITY LABOR PAIN IN THE 1ST ACTIVE PHASE

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ABSTRAK : PENGARUH PIJAT ABDOMINAL LIFTING TERHADAP INTENSITAS NYERI PERSALINAN KALA I FASE AKTIF

Latar belakang : Nyeri persalinan yang timbul semakin sering dan semakin lama dapat menyebabkan ibu gelisah, takut dan tegang bahkan stres yang berakibat pelepasan hormon yang berlebihan seperti adrenalin, katekolamin dan steroid (Sulistiawati & Ningrum, 2020). Sebagian besar persalinan (90%) selalu disertai rasa nyeri sedangkan rasa nyeri pada persalinan merupakan hal yang lazim terjadi, nyeri selama persalinan merupakan proses fisiologis dan psikologis (Rejeki & Irawan, 2019). Angka nyeri persalinan yang dilaporkan didapatkan hasil bahwa rata-rata di Indonesia sebanyak 85-90% Wanita hamil yang akan menghadapi persalinan mengalami nyeri persalinan yang hebat dan 7-15% tidak disertai rasa nyeri (Fitriawati et al., 2021).

Tujuan : Tujuan penelitian ini adalah Untuk mengetahui Pengaruh Abdominal Lifting Massage Terhadap Intensitas Nyeri Persalinan Kala I Fase Aktif Di PMB Dince Safrina

Metode : Jenis penelitian ini adalah pre experiment. Pendekatan penelitian ini dengan studi One Group Pre Test- Post Test yaitu penelitian yang memberikan tes awal (Pretest) sebelum diberikan perlakuan, setelah diberi perlakuan barulah memberikan test akhir (posttest). Penelitian dilakukan dari bulan Januari s/d April 2022 di PMB Dince Safrina Kota Pekanbaru. Sampel dalam penelitian ini berjumlah 15 orang. Teknik pengambilan sampel dalam penelitian ini teknik Non Probability Sampling berupa Purposive Sampling. Metode pengumpulan data dalam penelitian ini dengan observasi yaitu menilai intensitas nyeri ibu bersalin kala I sebelum dilakukan intervensi dan setelah dilakukan intervensi. Instrument pengumpulan data yang digunakan yaitu skala Numeric Rating Scale (NRS). Analisa data menggunakan SPSS dengan melakukan Analisa univariate dan Bivariate.

Hasil : hasil penelitian yang didapat adalah Rata-rata intensitas nyeri nyeri persalinan kala 1 fase aktif sebelum dilakukan Abdominal Lifting Massage adalah 4,8 (SD = 0,9), Rata-rata intensitas nyeri nyeri persalinan kala 1 fase aktif setelah dilakukan Abdominal Lifting Massage adalah 3,53 (SD = 0,9).

Simpulan : kesimpulan pada penelitian ini adalah Ada pengaruh Abdominal Lifting Massage terhadap intensitas nyeri persalinan kala I fase aktif di PMB Dince Kota Pekanbaru ($p=0,000$) artinya $p < \alpha (0,05)$

Diharapkan bagi bidan di PMB Dince Safrina agar dapat menerapkan Abdominal Lifting Massage pada ibu bersalin sebagai tambahan alternatif untuk mengurangi rasa nyeri pada ibu bersalin kala I fase aktif, sehingga ibu dapat bersalin dengan aman dan nyaman.

Kata kunci: Abdominal Lifting Massage, Nyeri Persalinan, Kala I Fase Aktif

ABSTRACT

Background: Labor pain that occurs more frequently and lasts longer can cause mothers to be anxious, afraid and tense and even stressed which results in excessive release of hormones such as adrenaline, catecholamines and steroids (Sulistiawati & Ningrum, 2020). The majority of births (90%) are always accompanied by pain, while pain during labor is a common occurrence, pain during labor is a physiological and psychological process (Rejeki & Irawan, 2019). Reported labor pain figures show that on average in Indonesia 85-90% of pregnant women who are about to give birth experience severe labor pain and 7-15% are not accompanied by pain (Fitriawati et al., 2021).

Goal: Goal This research is to determine the effect of abdominal lifting massage on the intensity of labor pain during the first active phase at PMB Dince Safrina.

Method: This type of research is pre experiment. This research approach is with study One Group Pre Test- Post Test namely research that provides an initial test (Pretest) before being given treatment, after being given treatment then gives a final test (posttest). The research was conducted from January to April 2022 at PMB Dince Safrina, Pekanbaru City. The sample in this study amounted to 15 people. The sampling technique in this research is technical Non Probability Sampling form Purposive Sampling. The data collection method in this study

was observation, namely assessing the pain intensity of mothers in the first stage of labor before the intervention and after the intervention. The data collection instrument used is a scale Numeric Rating Scale (NRS). Data analysis using SPSS by carrying out univariate and bivariate analysis.

Results: The research results obtained were the average pain intensity of labor pain in the 1st stage of the active phase before it was carried out Abdominal Lifting Massage was 4.8 (SD = 0.9), the average pain intensity of labor pain during the 1st active phase after Abdominal Lifting Massage was 3.53 (SD = 0.9).

Conclusion: the conclusion of this research is that there is an influence Abdominal Lifting Massage on the intensity of labor pain during the first active phase in PMB Dince Pekanbaru City ($p=0.000$) meaning $p < \alpha$ (0.05)

It is hoped that midwives at PMB Dince Safrina can apply Abdominal Lifting Massage to mothers in labor as an additional alternative to reduce pain in mothers during the first active phase, so that mothers can give birth safely and comfortably.

Keywords: Abdominal Lifting Massage, Labor Pain, First Stage Active Phase

INTRODUCTION

Pain due to uterine contractions during labor is a normal thing, but pain can also cause anxiety and fatigue in the mother which will have a negative effect on the progress of labor and the well-being of the fetus. It can also become a pathology if it is felt continuously and excessively (Bellefonds, 2022). Labor pain begins to appear in the first stage of the latent phase and will continue to increase in intensity of pain in the first stage of the active phase. The pain that occurs can affect the mother's condition in the form of fatigue, fear, worry and cause stress. Stress can cause weakening of uterine contractions and result in prolonged labor and even death in the mother (Dartiwen, 2023) (Faradilah, 2014). Excessive sympathetic activity, due to pain and stress, can exacerbate uncoordinated uterine contractions. Stress increases adrenaline, causing weak uterine contractions. As the cervix opens and thins, every mother in labor experiences increasing pain. Pain during labor can cause anxiety and fatigue in the mother, resulting in a negative influence on the progress of labor and the well-being of the fetus (Widiawati1, 2017) (MIF, 2024).

A safe delivery does not mean that the birth is without pain or illness. Because pain in labor is natural. It is destined that women can survive with this condition (Kramer, 2016). In general, women already understand that labor is almost always accompanied by pain, but they can't It is undeniable that only a few women are ready to face childbirth (Nurchayati et al., 2020) (Liana, 2021). Labor pain that occurs more frequently and lasts longer can cause the mother to be anxious, afraid and tense and even stressed which results in the release of excessive hormones such as adrenaline, catecholamines and steroids. This hormone can cause smooth muscle tension and vasoconstriction of blood vessels which results in reduced blood and

oxygen flow to the uterus, which can cause uterine ischemia, fetal hypoxia and increase pain impulses. Increased catecholamines can cause disturbances in the strength of uterine contractions, resulting in uterine inertia which has an impact on prolonged labor (Sulistiawati & Ningrum, 2020) (Chambers-Goldberg, 2012). Labor pain that the pregnant woman is unable to adapt to can be dangerous and life-threatening for the pregnant woman and the fetus and can increase the metabolism of the mother's body which will have an impact on increasing blood pressure, pulse rate, respiratory rhythm and increasing temperature which affects the gastrointestinal, urinary and respiratory systems (Fitriawati et al., 2021) (ACOG, 2020).

There are two ways to reduce pain, namely pharmacological methods and non-pharmacological methods (Mayoclinic, 2023). Non-pharmacological methods that can be used to reduce pain are relaxation techniques, imagery and visualization, breathing techniques, effeurage, counterpressure, deep back massage, touch and massage, hot and cold acupressure applications, aromatherapy, abdominal lifting, biofeedback, hydrotherapy, waterbirth, hypnosis, hypnobirthing (Sri Mainansi & Ika Putri Damayanti, 2022) (Febriyanti et al., 2021). The Abdominal Lifting technique is an alternative choice to reduce the feeling of first stage labor because it has become a habit for mothers who are about to give birth, or in other words, Abdominal Lifting is "kujuk" or in Indonesian it is massage/kneading. So there is no clear rejection if a midwife does a massage or teaches the family to do a massage (Livana et al., 2017) (Crompton, 2020). Abdominal lifting is a stroke that is done in the opposite direction to the top of the abdomen without any pressure on the inside and is done repeatedly, in a supine position and the head is slightly elevated. By paying attention to the condition of the mother in labor, this technique can

be applied in the physiological first stage to reduce the intensity of pain (Wati, 2022).

RESEARCH METHODS

This type of research is pre-experiment. This research approach is with study One Group Pre Test- Post Test namely research that provides an initial test (Pretest) before being given treatment, after being given treatment then gives a final test (posttest). The research was conducted from January to April 2022 at PMB Dince Safrina, Pekanbaru City. The sample in this study amounted to 15 people. The sampling technique in this research is technical Non Probability Sampling form Purposive Sampling namely selecting samples based on specific criteria applied by researchers such as: all pregnant women with term pregnancies, mothers giving birth during the first active phase starting from opening 4, mothers able to communicate verbally and non-verbally. The data collection method in this study was observation, namely assessing the pain intensity of mothers in the first stage of labor before the intervention and after the intervention. Data collection begins with the researcher passing the ethical review/ethical clearance from KEPK Poltekkes Kemenkes Riau

with Number LB.02.03/6/08/2022, then the researcher explained the objectives and procedures of the research to be carried out and filled in their informed consent to patients who were willing to act as respondents, then researchers measured the intensity of pain before doing so Abdominal Lifting Massage. Next is done Abdominal Lifting Massage. Every time a mother gives birth she experiences contractions for 20 minutes. After 20 minutes of treatment, the intensity of the mother's pain was measured again Abdominal Lifting Massage. Then the difference in pain intensity reduction scores from the treatment given was assessed. The data collection instrument used is a scale Numeric Rating Scale (NRS). Next, carry out an analysis of the influence Abdominal Lifting Massage on the intensity of labor pain during the first active phase, data analysis using SPSS by carrying out univariate and bivariate analysis.

RESEARCH RESULTS

Based on research conducted from January to April 2022 at PMB Dince Safrina, Pekanbaru City regarding the influence Abdominal Lifting Massage on labor pain during the 1st active phase using 15 respondents, the following results were obtained:

Table 1
Post-treatment Abdominal Lifting Massage on the intensity of labor pain Phase I active phase at PMB Dince Pekanbaru City

Group	N	Mean	SD	Mix-Max	Wilcoxon	p-value
Pre test	15	4.8	0.9	3-6	-3.578	0.000
Posttest		3.53	0.9	2-5		

In table 1 it can be seen that the average intensity of labor pain in the active phase before it is carried out Abdominal Lifting Massage was 4.8 (SD = 0.9) with a minimum pain score of 3 and a maximum of 6. After carrying out Abdominal Lifting Massage was 3.53 (SD = 0.9) with a minimum pain score of 2 and a maximum of 5. The statistical test used was the Wilcoxon test with a confidence level of 95%. From this test it was obtained p-value namely 0.000, this shows that there is an influence Abdominal Lifting Massage on the intensity of labor pain during the first active phase in PMB Dince, Pekanbaru City.

DISCUSSIONS

Abdominal lifting is a technique for reducing pain during labor (NHS, 2023). The abdominal lifting technique is carried out in the latent phase when contractions last 40-50 seconds. The mother feels pain in the first stage or during contractions, in this

condition there is visceral pain and feels like a feeling of mucus coming from the uterus and cervix. Pain is caused by stretching of the uterus and dilatation of the cervix. Pain can be felt in the abdominal wall. Lumbosacral area, iliac crest, buttocks and thighs. During the first active period, the sensation of pain is felt very, very strongly. The sensation makes the mother's expression look helpless, the mother's ability to hear and concentrate also decreases (Sri Mainansi & Ika Putri Damayanti, 2022). The abdominal lifting technique is carried out by applying opposite strokes towards the top of the stomach without pressing towards it. This can stimulate large nerve fibers to increase the mechanism of activity of the substantia gelatinosa which results in the closing of the mechanism door so that T cell activity is inhibited and causes the delivery of stimuli to be hampered and pain will not be transmitted to the cerebral cortex (Rahmawati & Ningsih, 2019)

(Dahlas, 2019).

Based on research that researchers have conducted, there is a decrease in pain intensity before it is carried out Abdominal Lifting Massage was 4.8 (SD = 0.9) with a minimum pain score of 3 and a maximum of 6 and after completion Abdominal Lifting Massage was 3.53 (SD = 0.9) with a minimum pain score of 2 and a maximum of 5. This is in accordance with research (Liana, 2021) that there is a difference in pain scale before and after performing the Abdominal Lifting Technique. The Z value is -4.362 and the p value is 0.000. In contrast to research conducted by (Rahmawati & Ningsih, 2019), data showed that there was no difference in labor pain scores during the first active phase before and after being given the Abdominal Lifting technique.

After carrying out the abdominal lifting massage, the pain intensity scores of all respondents decreased, although there was not a drastic decrease for some. Mothers who receive a massage for twenty minutes every hour during contractions in labor will be more pain-free. This is because massage stimulates the body to release endorphins which function as pain relievers and create a feeling of comfort. This gentle massage helps the mother feel fresher, more relaxed and comfortable during labor (Djuaeriah et al., 2022) (Victoria, 2023) (Miller, 2024).

Good cooperation between midwives and respondents has a big influence on the success of the abdominal lifting technique process. The process of building mutual trust between midwives and respondents is carried out in the pre-induction phase. The success of the second stage, namely induction, is largely determined by pre-induction, if the midwife cannot bring the respondent in a comfortable and calm position, then the effect of the massage will not be optimal. In this study, the process of reducing the pain score which was not very significant could be caused by respondents who could not be invited to cooperate because the pain and anxiety they felt were increasing, thus affecting the mother's attention to carrying out abdominal lifting (Djuaeriah et al., 2022) (Rahmawati & Ningsih, 2019).

There are various anatomical and physiological changes that occur during pregnancy. Uterus increases from prepregnant size of 5 by 10 cm to 25 by 36 cm; it increases 5 to 6 times in size. By the end of pregnancy, each muscle cell in the uterus increases approximately 10 times over its pre-pregnancy length. Once uterus expands upward and leaves the pelvis, it becomes an abdominal organ rather than the pelvic organ. In Connective

tissue, ligaments connected to the pelvic organs are more fibroelastic than ligaments supporting to joint structures (Ramesh Khandale et al., 2016) (Rise et al., 2019). The effectiveness of abdominal exercises, whether for aesthetic purposes or for rehabilitation should be done with a good technique of execution, so that the activity does not become inefficient or that can intensify or produce pain in the region of the spine. Another determining factor for exercise efficiency is their choice, the abdominal exercises cause a relative overload to the spine and its prescription depends on factors such as on a number of variables such as fitness level, Training goals, history of previous spinal injury, and any other specific factors to the individual, however an exercise that generates little overload in the column is the horizontal side support, because it activates very well the obliqua muscles and it generates little overload in the spine, besides working The in quadratus lumborum, a great stabilizer of the trunk. For the increase of the stabilization of the trunk it is necessary that exercises are done of strengthening for the musculature of the abdomen (Serpa et al., 2017) (Mater, 2024) (Coenen et al., 2017).

CONCLUSION

Based on research from March to April regarding the effect of Abdominal Lifting Massage on labor pain during the 1st active phase at PMB Dince Safrina, Pekanbaru City in 2022, it can be concluded that: The average pain intensity of labor pain in the 1st active phase before the Abdominal Lifting Massage was 4.8 (SD = 0.9), The average pain intensity of labor pain in the 1st active phase after the Abdominal Lifting Massage was 3.53 (SD = 0.9), There is an influence of Abdominal Lifting Massage on the intensity of labor pain during the first active phase in PMB Dince Pekanbaru City ($p=0.000$) meaning $p < \alpha$ (0.05)

SUGGESTIONS

It is hoped that midwives at PMB Dince Safrina can apply Abdominal Lifting Massage to mothers in labor as an additional alternative to reduce pain in mothers during the first active phase, so that mothers can give birth safely and comfortably.

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