

IMPLEMENTATION OF DEEP BACK MASSAGE IN MATERNITY PERIOD 1

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ABSTRACT

Childbirth is the process by which the baby, placenta and amniotic membrane come out of the mother's uterus. Pain in labor is uterine contraction pain that can result in increased activity of the sympathetic nervous system. Deep back massage is an emphasis on the sacrum that can reduce tension in the sacrolycous joint from the posterior occiput position of the fetus. Objective: This study aims to determine the effect of deep back massage on labor pain in phase I. Method: This type of research is qualitative with a case study research method using the Continuity Of Care (COC) midwifery care approach. Deep back massage pain management is carried out during phase I. Then the evaluation is carried out every 30 minutes by assessing the pain scale using a pretest-posttest design using the Wong-Baker FACES Pain Rating Scale (facial scale) and Comparative Pain Scale techniques. Results: Pain in labor in the first period decreases after a deep back massage. Conclusions: The implementation of deep back massage can reduce pain in mothers who give birth in the first trimester.

Keywords: deep back massage; labor pain; period 1

INTRODUCTION

According to (WHO, 2024) Maternal death is a death that occurs during pregnancy, childbirth, and the postpartum period (also known as "pregnancy-related death") defined as: "the death of a woman during pregnancy or within 42 days of termination of pregnancy, whatever the cause of death (obstetric death) Nationally, the Maternal Mortality Rate (MMR) in Indonesia has decreased from 305 deaths per 100,000 live births (Inter-Census Population Survey, 2015) to 189 deaths per 100,000 live births (Long Form Population Census, 2020). These results show a significant decrease, even much lower than the target in 2023, which is 194 deaths per 100,000 live births (Ministry of Health of the Republic of Indonesia, 2023). The main complications that cause almost 75% of all maternal deaths are: heavy bleeding (mostly postpartum bleeding), infections (usually after childbirth), high blood pressure during pregnancy (preeclampsia and eclampsia), complications of childbirth; and unsafe abortions (WHO, 2023). Childbirth is the process by which the baby, placenta and amniotic membrane come out of the mother's uterus. Labor begins when the uterus contracts and causes changes in the cervix (opening and thinning) and ends with the birth of the placenta completely (Sondakh, 2015).

Labor pain begins to arise in phase I of the latent phase, which is the process of opening the cervix up to 3 cm and the active phase, which is the process of opening the cervix from 4 cm to 10 cm. In the active phase towards the peak of opening, there is an increase in the intensity and frequency of contractions, so that the peak response of pain is in the active phase. (Solehati, Tetti et al., 2018). Labor pain is an unpleasant experience. Discomfort, fear and pain are one of the problems for mothers who are having a normal delivery. This is of course the biggest challenge of childbirth, and if left unresolved or unresolved, it will slow down the progress of childbirth (Aziato et al., 2017). Childbirth that is not advanced can endanger the mother's life because there is a risk of

intrapartum infection which will increase and if there is a pelvic disproportion, the risk of uterine rupture will increase. This results in the death of the mother and fetus in a short time (Hanifa 2017). As a result of the first period of elongation in the fetus, there will be Asphyxia, trauma caused by pressure on the fetal head, injury due to action. In mothers will result in decreased enthusiasm, fatigue, infection and risk of uterine rupture (Saifudin, 2016). The treatment and supervision of labor pain, especially in the first phase of the active phase, is very important, because this is the determining point whether a mother can undergo a normal labor or end an action due to complications caused by very severe pain. Considering that the impact of pain is quite significant for mothers and babies, there must be efforts to reduce the pain (Maita, 2016).

According to (Fitrihadi, 2019) Midwives have a very large contribution in reducing nonpharmacological pain. Interventions included in the nonpharmacological approach are psychological analgesia carried out from the beginning of pregnancy, relaxation, massage, stimulation of cutaneous, aromatherapy, hypnosis, acupuncture and yoga. Massage is the act of pressing by the hand on soft tissues, usually tendon muscles or ligaments, without causing a shift or change in joint position to reduce pain, produce relaxation, and/or improve circulation. Basic movements include: circular movements performed by the palms, pressing and pushing forward and backward using force, patting, squeezing, and twisting movements (Henderson, 2006 in Mariati, 2023). Deep back massage is an emphasis on the sacrum that can reduce tension in the sacrocyous joint from the posterior occiput position of the fetus. During contractions, emphasis can be placed on the sacrum which begins at the beginning of contractions and ends after the contractions stop (Fitrihadi, 2019).

METHOD

This type of research is qualitative with a case study research method using the Continuity Of Care (COC) midwifery care approach. Continuity Of Care is continuous midwifery care for pregnant women, childbirth, postpartum, newborns and family planning. This research was conducted at PMB Saumi Fijriyah on Mrs. I who was given continuous care starting from pregnancy in the third trimester, childbirth, postpartum, newborn to family planning. Complementary care provided is in accordance with the needs of the mother during the mentoring. In this study, from the first period of childbirth, the mother was immediately given deep back massage pain management which aims to relax the mother so that the mother's labor runs smoothly. This is intended so that at the time of delivery in the first period the mother's pain decreases so that there are no physiological changes such as an increase in blood pressure, an increase in heart rate, and an increase in respiratory frequency and does not cause anxiety and tension. During the deep back massage in the first phase carried out by the researcher, the researcher educated and taught Mrs. I's husband and family so that Mrs. I's husband and family could perform and apply pain management when there were contractions during childbirth in the first period. Deep back massage pain management is carried out during phase I. This pain management is carried out in each contraction with a duration of 20 seconds of compression and then pressure again if the contractions continue.

Then the evaluation is carried out every 30 minutes by assessing the pain scale using a pretest-posttest design using the Wong-Baker FACES Pain Rating Scale technique (facial scale). The Wong-Baker FACES Pain Rating Scale is a way to assess the level of pain by looking at facial expressions when pain is felt. This pain scale is relatively easy to do because just by looking at the

patient's facial expression when face-to-face without us asking about the pain (Loretz, 2005; Rejeki, 2020).

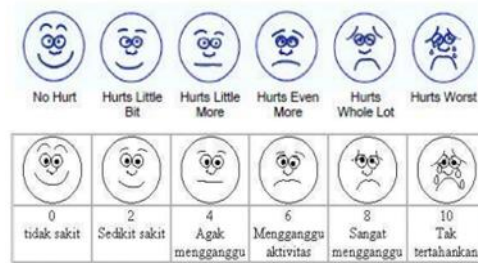


Figure 1 Skala Wong-Baker FACES Pain Rating Scale (Loretz,2005;(Rejeki, 2020)

The pain scale assessment was also carried out using the Comparative Pain Scale 0-10. Provocative/palliative assessment can be studied by asking what causes pain? What makes the pain better? What causes the pain to get worse? What do you do when you're in pain? Does the pain wake you up while you sleep? (Loretz, 2005; (Rejeki, 2020).

RESULT AND DISCUSSION

Table 1.
 Results of Observation of Pain Scale Phase I

DATE	Hour	Pain Scale	
		Before massage	After massage
28/03/2024	01.00	6	4
	01.30	6	4
	02.00	6	4
	02.30	6	4
	03.00	6	4
	03.30	6	5
	04.00	6	5
	04.30	8	5
	05.00	8	6
	05.30	8	6
	06.00	8	6

Based on table 1 on Observation of the Pain Scale, it can be concluded that the pain of labor in phase I decreases after deep back massage.

Pain in labor is uterine contraction pain that can result in increased activity of the sympathetic nervous system. Severe pain during labor can cause physiological changes in the body, such as increased blood pressure, increased heart rate, and increased respiratory rate, and if not treated immediately, this condition will increase worry, tension, fear and stress. Increased consumption of body glucose in stressed maternity mothers causes fatigue and catecholamine secretion which inhibits uterine contractions, and this causes labor to be prolonged (Syarif, 2020). Labor pain can be reduced by pharmacological and non-pharmacological methods. Non-pharmacological management of labor pain has several advantages over pharmacological pain management. The body has natural pain relief, which is endorphins. Endorphins can be obtained by massage. Massage is applying hand pressure to soft tissues without causing movement or changes in joint position to relieve pain. (Taqiyah & Jama, 2021).

A massage for 20 minutes every hour during the labor stage will be more pain-free, as the massage stimulates the body to release endorphin compounds which are natural pain relievers and create a comfortable and pleasant feeling. The parts of the mother's body that can be massaged are the head,

shoulders, abdomen, legs and hands, back and legs. When massaging, the massager must pay attention to the mother's response whether the pressure given is appropriate (Hindriati, 2019).

Deep back massage is an emphasis on the sacrum that can reduce tension in the sacrolycous joint from the posterior occiput position of the fetus. During contractions, emphasis can be placed on the sacrum which begins at the beginning of contractions and ends after the contractions stop. If the client is using a fetal monitor, it can see the contraction line to start and end the stress. Emphasis can be done with clenched hands like tennis balls on sacrum 2,3,4. The deep back massage method treats the patient lying on his side, then the midwife or the patient's family presses the sacrum area steadily with the palm of the hand, releases and presses again, and so on (Fitrihadi, 2019)

The intensity of pain will be different for each maternity mother, so the emphasis on the sacred area helps mothers reduce pain and anxiety during childbirth, especially for mothers who experience more pain (Sofiyanti and Maulana, 2023). Labor pain is unique and different in each individual because pain is not only associated with physical conditions, but also related to the mother's psychological condition at the time of delivery (Sholehah, 2020). Labor pain tolerance and pain expression are influenced by physical and psychological cultural factors (Siyoun & Mekonnen, 2019). Based on table 1, the average pain in labor in the first phase of the active phase has decreased significantly, which is 5.6, indicating moderate pain. The reduction in labor pain is influenced by the deep back massage treatment which is carried out by placing emphasis on the sacrum area. Basically, by emphasizing stimulating cutaneous so that it can inhibit pain impulses from reaching the hypothalamus. This is in accordance with the theory of gate control. Back Pressure is effective in the first phase of opening 4-7 cm (Katili et al., 2018)

Another factor that can affect the intensity of labor pain in addition to the age factor is parity. Younger mothers have a more intense pain sensation than older mothers (Taqiyah et al., 2019). In primipara maternal parity, the intensity of uterine contractions is stronger than in multipara mothers where multipara mothers who have had previous childbirth experience will be more adaptable to pain compared to mothers who have never had experience in this case primipara mothers (Adam, J and Umboh, JM 2015). The way to do a deep back massage is by rubbing a gentle rub, and there is a little pressure using both hands on the sacrum area. This method is given for 20 minutes with a frequency of 30-40x rubbing per minute. Massage is done while the mother is contracting (Rahmawati, 2022). Emphasis on the sacrum can reduce the tension of the sacrolycous joints thereby stimulating the body to release endorphin compounds which are natural pain relievers and create a comfortable and pleasant feeling. Illustration Gate control theory that pain fibers bring pain stimulation to the brain is smaller and the sensory journey is slower than that of extensive touch fibers. When touch and pain are stimulated together, the sensation of touch travels to the brain closing the inner gate of the brain. The presence of massage that has a distraction effect can also increase the formation of endorphins in making muscle relaxation (Jumhirah, 2018)

According to (Anita W, et al. 2023) Deep Back Massage is very good applied to mothers in childbirth with a more frequent massage frequency during contractions by childbirth companions such as husbands where the closeness of emotional relationships will be more established so that mothers feel more attention and affection to face the childbirth process. According to research by (Ratna & Ernawati, 2022) deep back massage can be categorized as a safe and effective massage method to overcome labor pain in stage I. Deep back massage technique can increase the release of endorphins, in addition to reducing pain, it can also increase the action of oxytocin in helping

the contraction of the myometrium in the opening process and in addition massage gently presses the sacrum area with softness which will make the mother give birth more relaxed and painful. felt can be reduced during childbirth. From the results of research that has been carried out, pain management with the deep back massage technique has the potential to be a safe and effective non-pharmacological method to reduce pain in stage I. With proper integration in obstetric practice, this technique can be a valuable option to improve the women's childbirth experience and reduce dependence on pharmacological analgesia which may have certain risks and side effects

CONCLUSION

After pain management with the deep back massage technique in childbirth during the first period, the mother's pain was reduced from a pain scale of 8 to 5-6. It can be concluded that the implementation of deep back massage can reduce pain in mothers who give birth in the first trimester.

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