



The provision of complementary therapy on the intensity of pain reduction in childbirth

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ARTICLE INFO

Article history:

Received 19 October 2022
Accepted 10 January 2023
Published 20 January 2023

Keyword:

Childbirth
Complementary
Gymball
Lavender Aromatherapy

ABSTRACT

Labor pain is a physiological condition that begins to arise in the 1st stage of labor in the latent phase and the longer the pain is felt it will get stronger, the peak of pain occurs in the active phase. The personality of a mother undergoing labor plays an important role in pain, naturally, the mother will feel anxious, tense and weaker in facing labor than a relaxed and confident mother. The study aimed to find out complementary care that can help mothers in reducing labor pain. This research method is a case study followed by continuity of care from pregnant women, childbirth, postpartum and newborns. The intervention was given to 15 pregnant women who were followed until they gave birth. The results of the intervention found that there was a decrease in pain in the birthing mother with the use of a gym ball as seen from the results of the NRS (Numeric Rating scale) there was a decrease in value from 8 (moderate pain) to a value of 4 (no pain). In giving complementary aromatherapy, the mother still feels labor pain but looks more relaxed. Conclusion Complementary administration of lavender aromatherapy can be given simultaneously as gym ball complementary administration helps mothers relax more and makes birth mothers more comfortable.

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Kata kunci:

Persalinan
Komplementer
Gymball
Aromatherapy Lavender

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DOI: 10.30604/jika.v8iS1.1714

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ABSTRAK

Nyeri persalinan merupakan suatu kondisi yang fisiologis yang mulai timbul pada persalinan kala 1 fase laten dan semakin lama nyeri yang dirasakan akan bertambah kuat, puncak nyeri terjadi pada fase aktif. Kepribadian seorang ibu yang sedang menjalani proses persalinan berperan penting terhadap rasa nyeri, secara alamiah ibu akan merasa cemas, tegang dan lebih lemah dalam menghadapi persalinan dibanding ibu yang rileks dan percaya diri. Tujuan penelitian untuk mengetahui asuhan komplementer yang dapat membantu ibu bersalin dalam mengurangi nyeri persalinan. Metode penelitian ini dengan studi kasus yang diikuti secara continuity of care dari ibu hamil, bersalin, nifas dan bayi baru lahir. Di berikan intervensi pada 15 orang ibu hamil yang diikuti sampai bersalin. Hasil intervensi didapatkan adanya penurunan nyeri pada ibu bersalin dengan penggunaan gymball dilihat dari hasil NRS (Numeric Rating scale) terdapat penurunan nilai dari 8 (nyeri sedang) menjadi nilai 4 (tidak nyeri). Pada pemberian komplementer aromaterapi ibu bersalin tetap merasakan nyeri persalinan namun terlihat lebih rileks. Kesimpulan Pemberian komplementer aromaterapi lavender dapat diberikan bersamaan saat pemberian komplementer gymball membantu ibu lebih rileks dan membuat ibu bersalin lebih nyaman.

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INTRODUCTION

The success of development in the health sector is determined based on the indicators of the Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) which also describe the quality of mothers and children in Indonesia (Muchtari et al., 2016). Maternal Mortality Rate is related to the process of childbirth, delivery, obstetric care, complications of pregnancy and during the puerperium. 295,000 women died during and after pregnancy and childbirth in 2017. Most of these deaths (94%) occurred in low-resource settings, and most were preventable (WHO, 2019).

Childbirth is a physiological process experienced by a mother and the birth of a baby is a highly anticipated social process. In general, pregnant women expect a normal, safe and comfortable delivery with minimal pain, but every delivery is at risk of experiencing labor complications. One of the disturbances during labor is the occurrence of birth pain (Rahmawati et al., 2013). According to WHO, of all deliveries, more than 80% of deliveries proceeded normally and around 15-20% of labor complications occurred (Susetyoaji, 2017).

Psychological disturbances (stress) due to pain felt by the mother result in an increase in steroid hormones and catecholamines which cause smooth muscle tension and vasoconstriction of blood vessels. This process causes a decrease in the contractions that occur at the time of delivery, the flow of oxygen and blood to the uterus decreases, and there is ischemia in the uterus which causes an increase in the number of pain impulses. Unresolved anxiety can also trigger increased pain in labor (Wijayanti et al., 2021). Therefore, this can increase the number of morbidity and mortality rates for mothers and babies (Fauziah, et al, 2018).

Many methods are used to reduce labor pain, both pharmacological and non-pharmacological. The use of pharmacological methods has better effectiveness than non-pharmacological methods, but the use of pharmacological methods often causes side effects and sometimes does not have the expected effect. Whereas non-pharmacological methods apart from reducing pain in labor also have non-invasive effects, are simple, effective, and without harmful effects (Budiarti, 2019).

In addition to pharmacological therapy, pain can be treated with non-pharmacological management, including breathing techniques, acupuncture, Transcutaneous Electric Nerve Stimulation (TENS), audionalgesia, cold compresses, massage and aromatherapy (Putri, 2020). It is thought that using essential oils during labor can help pregnant women relax and increase levels of certain hormones such as oxytocin. Some aromatherapy oils that are soothing and uplifting during labor include chamomile, grapefruit, bergamot, ylang-ylang, rose and lavender (Ayuningtyas, 2019).

One way to reduce anxiety is by giving aromatherapy. Several studies have shown that inhaling aromatherapy can reduce a person's anxiety level. Aromatherapy is a therapeutic action using essential oils which is useful to improve one's physical and psychological condition to be better. Each essential oil has unique pharmacological effects, such as antibacterial, antiviral, diuretic, vasodilator, sedative and stimulates the adrenals (Runiari, 2016). The chemical composition of lavender flower essential oil contains the components linalyl acetate (40.76%), linalool (24.60%), cis- β Ocimene (4.85%), β -caryophyllene (4.40%), lavandulyl acetate (3, 83%), trans β Ocimene (3.64%), terpinen-4-ol

(3.57%), 1,8 cineole (0.71), lavandulol (0.71%), and camphor (0.30%) (Lansida, 2017).

Lavender aromatherapy has a refreshing aroma which has the benefit of relieving stress, reducing headaches, migraines, also accelerating wound healing and reducing levels of anxiety and pain (Endisupraba, 2017). In addition to aromatherapy, mothers in labor need to educate prospective mothers regarding pain management using the latest methods according to evidence based practice, such as using non-pharmacological methods. This method can be used by all levels of society cheaply, cheaply, simply, effectively, and without any adverse effects. One of the relaxation techniques and non-pharmacological measures in treating pain during labor is using a birthing ball (Pratiwi et al, 2021).

Birthing balls physical therapy or simple exercises using a ball, where these exercises are applied to pregnant women, giving birth and postpartum women (Kustari et al 2012). This ball plays a role in helping the mother during labor in the first stage of labor in advancing her labor. In addition, it can be used in a variety of positions, for example by sitting on a ball and rocking it makes you feel comfortable and promotes labor by using gravity while increasing the release of endorphins because the elasticity and curvature of the ball stimulates the receptors in the pelvis which are responsible for secreting endorphins (Kurniawati, 2017).

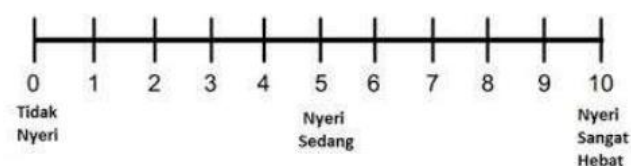
Continuity Of Care (COC) or continuous care is care provided by a midwife to clients or patients starting from pregnancy, childbirth, postpartum, BBL and family planning. This care is an integral part of health services provided by registered midwives which can be carried out independently, collaboratively or as referrals (Ministry of Health, 2020).

So that complementary aromatherapy therapy when given when giving gymballs to women in labor and followed on an ongoing basis from pregnant women to delivery can help women in labor feel more relaxed and have a more comfortable delivery.

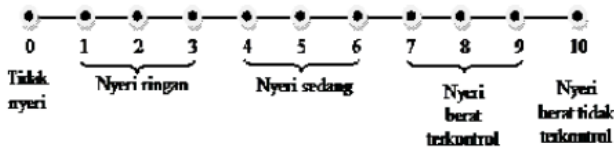
METHOD

The research was carried out using a qualitative research method, a case study technique, namely in patients who were directly given interventions. A total of 10 patients from pregnancy to delivery were followed from pregnancy to delivery according to the problem given the gym ball intervention to reduce labor pain. 5 pregnant women were followed and given interventions until they gave birth and were given lavender aromatherapy to reduce labor pain according to the problems in the mother. The decrease in pain level seen from the NRS scale can be seen below.

Pain measurement method with Numeric Rating Scale. According to Zakiyah (2015)



Measurement method using the Visual Analogue Scale (VAS)



RESULTS AND DISCUSSION

Pain in patients can be caused by age and parity, where Mrs. R said she had given birth 2 times before at the age of 36 years, while Mrs. Y is 39 years old. Besides maternal characteristics, theory (Kurniarum, 2016) also states that labor pain is caused by cervical dilatation, uterine muscle hypoxia, uterine corpus ischemia, stretching of the lower uterine segment and compression of fetal position, medical action, anxiety, fatigue, culture and coping mechanisms and the environment, number of previous births (delivery experience), birthing culture, emotions, family support, preparation for childbirth, position during delivery, presentation of the fetus, beta-endorphin levels of intense uterine contractions during labor and natural pain threshold, so every birthing mother will definitely feel pain the longer the intensity gets stronger.

The initial analysis of this care was that the mother gave birth during the 1st stage of the active phase normally, because the results of all examinations did not show any indications of an emergency for either the mother or the fetus. However, the problem found is pain in the mother, so the need given to the mother is pain management using lavender aromatherapy. The management given to the three patients was by carrying out maternal care such as teaching the mother the correct way of pressing, inviting her husband/family to accompany the mother, providing assistance according to normal delivery care steps. Midwives also really understand the needs of patients by providing care to reduce maternal pain by shifting the focus of attention through inhaling lavender aromatherapy during the active phase of the 1st stage/during the opening.

The intervention given by the midwife is one of the non-pharmacological therapies to reduce pain. Aromatherapy is the use of essential oils by utilizing healing from plants. The author chose lavender as an essence because lavender is an aromatherapy that has extraordinary properties, including as a pain reliever. This is in accordance with the opinion (Lamadah, 2016) which states that the analgesic properties of lavender can be used to relieve pain in various conditions such as changing bandages, palliative care, controlling labor pain and chronic pain. The linalyl acetate component of lavender can relax the muscles.

In this delivery care, aromatherapy is given diffusely through a diffuser during the first stage of the active phase of labour. This is different from the theory (Craig Hospital, 2015) which states that giving aromatherapy by inhalation is usually done by dropping a few drops of essential oil into a bowl of steaming water. The vapor is then inhaled over a period of time, with the effect enhanced by placing a towel over the head and bowl so as to form an awning to catch the moistened and stinky air.

In addition, research (Yazdkhasti & Pirak, 2016) states that if lavender aromatherapy is given by inhalation which is diluted with water in a ratio of 1:10, then the two hands of the respondent who dripped the aromatherapy are recommended to inhale it for 3 minutes with a hand distance

of 2.5-5 cm from the nose. Intervention was continued in 3 times (5-6, 7-8 and 9-10 cm opening). Even though the way of giving aromatherapy is different from the theory and journals referred to, the pain experienced by Mrs. R, Mrs. K and Mrs. Y were slightly reduced compared to before being given aromatherapy.

In addition to the method of giving that is different from theory, the writer also found a gap between theory and practice. In the study (Yazdkhasti & Pirak, 2016) measurements of labor pain were measured using the VAS scale (Visual analogue scale) 30 minutes before intervention in each group and after 30 minutes of aromatherapy. While in practice, the authors did not measure the pain scale before and after giving lavender aromatherapy using a valid measuring instrument. The author is only based on the patient's facial expressions and statements, so he cannot describe the actual pain scale.

Even so, according to the author, every birthing mother will definitely experience pain with different pain thresholds, so that pain is subjective. Labor pain increases as the opening of labor increases. Giving aromatherapy is intended to divert the focus of the mother on the pain she is facing, but the mother still needs other safe therapies because aromatherapy cannot be given during labor because it can cause nausea. If aromatherapy is not possible to be given to women in labor because the price is quite expensive, midwives and birth attendants can perform other non-pharmacological therapies that are more economical, effective and easy to apply such as endorphin pelvic rocking massage or using a gym ball.

Providing complementary care for Birthing Ball to Mrs. E multigravida is different from the primigravida Ny H and Ny. N where from an emotional standpoint for primigravida itself because this is the first experience for the mother so that the mother is still not focused on the care provided, the delivery of primigravida mothers is still progressing but with grade 1 perineal rupture whereas for multigravidas it is because the mother has given birth before and the mother can receive complementary birthing ball care provided by the midwife and applied repeatedly according to the midwife's directions so that the delivery of multi gravida mothers experiences progress and minimal trauma.

The reduction in the pain of the first stage of labor occurred after intervention was carried out in the form of carrying out birth ball exercises which were carried out for thirty minutes in the 1st and 2nd measurements. According to Graston in Rumbin, states that significantly more severe degrees of pain are felt in primiparas than multiparas. There is a difference in the level of pain between parity primiparas and multiparas for stage 1 labor pain, most of the multiparas experience severe pain levels. Primigravida parities experience that the process of cervical effacement occurs earlier than opening, so that the delivery process takes longer than that of multigravidas.

The birth ball exercise is carried out for 30 minutes in primigravida in-partu mothers after the opening of 4cm-7cm (the first stage of the active phase of labor) will have an impact on labor pain. Discomfort can be overcome with body positions that support gravity and positions that accelerate cervical dilatation such as walking, squatting, kneeling and sitting. The use of a birth ball will support the mother to use this position during labor. This will help the fetus descend into the pelvic cavity and the mother will feel less pain (Kurniawati, 2017).

CONCLUSIONS AND SUGGESTIONS

Complementary therapy with aromatherapy can help mothers in reducing the intensity of labor pain. Meanwhile, if aromatherapy is given to birthing mothers who have also previously been given gymball complementary therapy, this can help birthing mothers feel more relaxed and more comfortable after receiving gymball interventions at the same time as being given aromatherapy.

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