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Article

THE EFFECT OF CINNAMOMUM BURMANNI AROMATHERAPY AS PAIN RELIEF OF FIRST STAGE OF LABOR

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A B S T R A C T

The results of the Indonesian Demographic and Health Survey (SDKI) in 2012 show that the Infant Mortality Rate (IMR) is 32/1000 live births and the Maternal Mortality Rate (MMR) is 359 / 100,000 live births. While the Millennium Development Golds (MDG's) target in 2015 for IMR is 23/1000 live births and for MMR 102 / 100,000 live births (Kemkes RI, 2013). Efforts in overcoming labor pain can use traditional medicine, namely with cinnamon aromatherapy. This study aimed to determine the effect of cinnamon aromatherapy on mothers during the latent phase of labor. The target in this study is maternal, who enters the 1st stage of the latent phase.The design used in this study was a one-group pretest and post-test quasi-experimental research design. The population is maternal. The sampling technique in this study was purposive sampling. The data collection tool was the observation sheet. The sample amounted to 8 people. The univariate data analysis test was carried out by looking at the data normality test (Shapiro Wilk test). The bivariate analysis test using the paired t-test. The bivariate analysis results showed that there was an effect of reducing pain after being given cinnamon aromatherapy by showing results (p-value 0,000). The conclusion of this study is the effect of cinnamon aromatherapy on labor pain. Research using the inhalation method, the impact of cinnamon aromatherapy, can be used to relieve pain during childbirth used by midwives and can be used regularly and used as material for future researchers by students and other health workers.

I. INTRODUCTION

Childbirth is a process that begins with uterine contractions that cause progressive dilation of the cervix, birth of a baby, and the birth of the placenta, and this process is a natural process (Rohani, 2011). In this case, pain during labor is the pain of uterine contractions, increasing the sympathetic nervous system. Changes in blood pressure, heart rate, breathing with skin color, if not addressed, will increase anxiety, tension, fear, and stress (Anik, 2010).

Labor pain can cause stress, which causes excessive release of hormones such as catecholamines and steroids. This hormone can cause smooth muscle tension and vasocontraction of blood vessels. This can result in decreased uterine contractions, decreased circulation of the uterine placenta, reduced blood flow from oxygen to the uterus, and the emergence of uterine ischemia, making pain impulses multiply (Sumarah, 2009).

The stages of labor are divided into four stages, namely: stage I (opening); stage II (expulsion of the fetus); stage III (removal of the placenta); and stage IV (observation) (Sulisetyawati and Nugraheny, 2010). In the first stage of labor, there is a psychological change in a mother, namely worry and anxiety. While in the second stage of delivery, a mother can control herself again, is tired, restless. In the third stage, the mother's pain begins to decrease, and there is a feeling of anxiety, continuing fatigue. And During the fourth stage of a mother, the mother will release the pressure and tension she feels and get new responsibilities to care for and care for the baby she has been born with (Cunnigham, 2005).

.Anxiety disorders have several effects on childbirth. Namely, excessive catecholamines in the first stage also lead to decreased uterine contractions, decreased blood flow to the placenta, decreased oxygen available to the fetus, and can increase the length of the first stage of labor (Simpkin, 2005).

Pain management is a medical discipline that uses a multidisciplinary approach that includes pharmacological approaches (including pain modifiers), non-pharmacological, and psychological to relieve pain or pain relief. Non-pharmacological pain management is an effort to overcome or ease pain using a non-pharmacological approach. These efforts include relaxation, distraction, massage, guided imaginary (Syamsiah, 2015).

People in Indonesia have long used natural ingredients to treat various health problems. One of them is relaxation with aromatherapy. Aromatherapy is a method that uses essential oils to promote physical, emotional, and spiritual health. Another effect is reducing pain and anxiety. Essential oils or essential oils that reduce or eliminate pain (Solehati & Kosasih, 2015).

Cinnamon is a member of the Lauraceae family, a spice from Indonesia and one of the oldest herbal medicines. Based on research that has been done in humans and animals, it shows many

beneficial effects of cinnamon for health, such as diarrhea, antimicrobial, anti-inflammatory, antioxidant, germicidal, analgesic, antiseptic, antispasmodic, treatment of impotence, dyspnea, rheumatism, wounds, and toothache, even the flu. The oil extracted from cinnamon has anti-inflammatory activity as a treatment for dysmenorrhea and to stop bleeding. Cinnamon bark has a spicy and sweet taste, smells good, and is warm. Some of the cinnamon chemicals include essential oils, eugenol, safrole, cinnamaldehyde, tannins, calcium oxalate, resin, and tanning agents. The pharmacological effects of cinnamon are antirheumatic, appetite enhancer, and pain reliever (Winkanda, 2015).

According to data obtained at the Siulak Deras Public Health Center, the interpretation of delivery in January was as many as 22 patients gave birth. Therefore the researchers were interested in researching the effect of cinnamon aromatherapy on stage 1 labor in mothers giving birth at Siulak Deras Public Health Center.

II. METHODS

This research uses a quantitative approach. This type of research is a quasi-experimental research with a one-group pretest-posttest design.

The population in this study were childbearing mother in working area of Siulak Deras Public health center. This study's sample was 16 respondents using nonprobability sampling techniques, namely slovin sampling.

This study's data collection measurement tool was a observation sheet regarding childbearing women about pain scale in first stage of labor. They were analyzed using the Shapiro Wilk normality statistical test with abnormally distributed data results and using the Wilcoxon test with a significance level of $p < 0.05$ in bivariate analysis with SPSS 15 for Windows.

III. RESULT

Table 1. average of pain scale of labor before intervention

Pre-test	mean	n	Min-Max	SD
	6,75	8	5-8	1,035

Based on Table 1 we know that the average pretest pain scale of labor before intervention were 6.75 with 1.035 deviation standard. Minimal pain scale was 5 and maximal pain scale was 8

Table 2. average of pain scale of labor after intervention

Post-test	Mean	N	Min-Max	SD
	2,50	**8**	**1-4**	**0,926**

Based on Table 2, we know that the average post-test pain scale of labor after intervention were 2.50 with 0.926 deviation standard. Minimal pain scale was 1 and maximal pain scale was 4

Table 3. The Effect of cinnamon aromatherapy on reducing pain scale in childbirth women

	Paired T-Test		
	Mean	Deviation Standar	P value
pretest	67.86	21.18	0,000
Posttest	103.57	24.53	

Based on Table 3, we know that p-value 0.000 (<0.05) means significant differences between the pretest and post-test pain scale. It shows that the pain scale of the postpartum women decreased after the intervention. It proves that there is an effect of cinnamon aromatherapy on reducing pain scale on Childbirth Women.

IV. DISCUSSION

In this study, the results before giving cinnamon aromatherapy, the average respondent experienced moderate. Respondents who experienced mild pain said they felt abdominal pain. The respondent looked a little sullen and a little grimaced, but the respondent could still follow orders well and could even communicate well.

Labor pain can cause stress, which causes the release of excessive hormones such as catecholamines and steroids. This hormone can cause smooth muscle tension and vasocontraction of blood vessels. This can result in decreased uterine contractions, decreased

uteroplacental circulation, reduced blood flow from oxygen to the uterus, and the emergence of uterine ischemia, which makes pain impulses increase (Sumarah, 2009).

Anxiety disorders have several effects in childbirth; namely, excessive catecholamines in the first stage also lead to decreased uterine contractions, decreased blood flow to the placenta, decreased oxygen available to the fetus, etc., increase the length of stage I labor (Simpkin, 2005). Mahmudiono's research results in 2011 also showed that the incidence of labor pain in women giving birth in Indonesia was around 74.89%, while the effects of Novia's research in 2012 showed 84.4%. With a mild pain intensity of 30.7%, moderate pain, 60.0%, and severe pain, 9.3% (Sophia, 2013).

Related research that has been conducted by students at the University of Ilam Medical Science concluded that cinnamon has a significant effect on pain reduction and that there are no side effects. The cinnamon essential oil can help relax tense muscles, reduce joint pain, and relieve labor cramps. Apart from that, it also improves circulation. Cinnamon essential oil and its fragrance help relax tight muscles, reduce joint pain, and ease labor cramps. Also, it improves blood circulation (Keville, 2015).

Although the reduction in pain was not drastic, all respondents had experienced a decrease in pain. This proves that all respondents experienced a reduction in pain. This proves that cinnamon aromatherapy plays an essential role in reducing labor pain. The decline in pain that occurs after being given cinnamon aromatherapy is due to cinnamon's essential oil, which can help relax tense muscles and reduce joint pain. Apart from that, it also improves circulation. Cinnamon essential oil and its fragrance help relax tense muscles, reducing joint pain. (Keville, 2015).

Under the theory put forward by Najmi (2011), aromatherapy can reduce the level of pain because aromatherapy can have a stimulating effect, provide a calming sensation, the brain, balance, perceived stress, relax the mind and body so that this effect can reduce pain. In someone. If the mind feels calm and relaxed, a comfortable atmosphere will be created, and menstrual pain can be reduced.

Also, Ilmi (2012) in Agustina (2016) states that aromatherapy relaxes a sore stomach and has a soothing effect, improves balance, positive thoughts, sensitivity, mental calm, reduces depression, anxiety, coughs, pain during menstruation, stress, and disappointment. This is because aromatherapy's aroma enters our nose and is associated with cilia, the fine hairs on the inside of the nose.

The results of the research conducted by the researcher noticed that the aromatherapy of cinnamon could significantly reduce the labor pain scale. Thus it can be concluded that there is

an effect of giving cinnamon aromatherapy on reducing the pain of stage 1 labor in mothers who give birth at the siulak health care center in 2020

According to the researchers' assumption, cinnamon aromatherapy significantly reduces pain or soreness. When a mother experiences pain, sensory and emotional experiences, it is unpleasant and highly subjective because the feeling of pain is different for each person in terms of scale or level. The aroma of essential oils triggers a reaction in the sense of smell, sending messages to the brain, giving rise to a positive, relaxing effect, and reducing pain.

V. CONCLUSION

Cinnamon aromatherapy significantly reduces pain or soreness. The aroma of essential oils triggers a reaction in the sense of smell, sending messages to the brain, giving rise to a positive, relaxing effect, and reducing pain. The use of cinnamon aromatherapy should be adviced to women in labour to reducing their pain, so that they enjoy their labor process.

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