
The Effect of Therapeutic Essential Fragrance of Roses through Inhalation Treatment on the Pain Scale of Post Sectio Caesarea Patients

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Submitted: January 1, 2019 -Revised: March 19, 2019 -Accepted: March 24, 2019 -Published: March 31, 2019

ABSTRACT

In 2008, it was reported that the number of women giving birth with sectio caesarea (SC) increased 4 times compared to the last 10 years before. Childbirth figures in the United States as much as 35% of all childbirths, and in Asia as much as 28%. WHO reported that the incident of SC childbirth in developing countries occurred about 10-15% of all types of labor. Childbirth with SC is not considered as a new thing for some mothers as well as the mothers from upper middle class. It is proved by the increasing of Indonesian SC childbirth of 5% to 20% in the last 20 years. There are some of the complications arising from the SC. One of those is the pain in the area of the incision. This study aimed to examine the effect of therapeutic essential fragrance of roses through inhalation treatment to the pain scale of SC post-surgery patients in obstetrics ward in the H. Abdul Manap hospitals, Jambi in 2013. This study used quasi-experimental research which was designed with one group pre test-post test. The data was collected using a verbal description scale (verbal response scale). Based on the results of the analysis showed that there was a significant reduction in patient pain scale after the treatment of roses essential inhalation was given (p-value = 0.003). Statistical test results showed that the optimal decline in patient pain scale before and after the treatment. That could be stated that the decline of the pain scale was optimal due to the decline from an average of 3.27 (fourth quartile) to 2.97 (second quartiles). The pain scale of post-surgery patients of sectio Caesarea before they had been given the rose essential inhalation treatment had an average pain scale between 3.05 to 3.48, conversely when they had the treatment resulted the decline of pain scale with the ranges from 2.97 to 3.25 which the lowest value scale was 2 and the highest was 4. It is suggested that the use of essential rose inhalation treatment could be an alternative in order to reduce the pain of sectio Caesarea post-surgery patients and it is expected improving patients proficiency in the non-pharmacological pain management.

Keywords: Pain, Post sectio Caesarea, Therapeutic essential fragrance of roses, Inhalation treatment

INTRODUCTION

Sectio Caesarea is the delivery of a fetus through an incision in the abdominal wall (laparotomy) and the uterine wall (hysterectomy). Some of the complications arising from SC one of which is pain in the area of the incision.⁽¹⁾ Pain in the incision area which makes the patient very annoyed and uncomfortable.⁽²⁾ Pain is a feeling unpleasant condition is very subjective because of the feeling of pain is different for each person in terms of scale or level, and only one is exactly who can explain or evaluate the pain they experienced. Many theories explaining the physiology of pain, but the simplest one is the theory Gate control theory of Melzack and Wall⁽³⁾ describes the gelatinous substance of the spinal cord work like gates that allow or block the pain impulses to the brain. In other words, if there is a substance that affects the gelatinous substance, the substance can be used for the treatment of pain.

In general, pain management can be done pharmacologically by administering drugs and tranquilizers analgesic. While the non-pharmacological through distraction, relaxation and stimulation of the skin warm or cold compresses, deep breathing exercises to music, aromatherapy, reiki, guided imagery, hypnosis, relaxation.⁽⁴⁾

The use of aromatherapy was not a pleasant scent to breathe. According to the Rho⁽⁵⁾, aromatherapy is the use of essential oils from plants to enhance health, vitality of the body, mind and soul, by inhalation, bath soak, compresses, topical application, and massage. Certain diseases can benefit from aromatherapy essential oils as an example for pain therapy.⁽⁶⁾ One species of plants producing essential oils are often used to relax the body and reduce anxiety by inhalation derived from rose, as compared to other flowers like jasmine and lavender are also fragrant, roses have 14.2% of the total chemical compounds geraniol (C₁₀H₁₈O) with different components

of other flowers from the flower petals and fragrant effect produced is also more refreshing. In addition, a rose petal also contains 3.71% linalool chemical compounds that sedative.⁽⁷⁾

From the preliminary study conducted by researchers at the General Hospital of H. Abdul Manap, City of Edinburgh in April 2013 in getting from the clerk mentioned that the average patient treated at the SC obstetrics ward had a complaint of pain after surgery, and from survey in ward, there are 3 of them suffered severe pain and one of them mild pain. Actions taken by doctors and nurses in pain management simply by administering analgesic drugs. Non-pharmacological therapy that has been done is to take a deep breath relaxation techniques and massage. Therapeutic essential oil fragrances rose by inhalation has not been used to reduce pain in clients Post Operation SC. Aromatherapy can be as an alternative that can reduce pain for aromatherapy still not been popularized as a form of treatment in health care efforts.

METHODS

The type of this study was quasi experimental with One group pre test-post test design. The data collection was done by using a scale of verbal descriptions (a verbal response scale) for pain scale. The study was conducted to identify the effect of aromatherapy roses to the pain scale of post-SC patient. This design did not use a control group, but the initial observation was the basis for testing changes that occurred after the intervention (the use of aromatherapy rose). Tests on the effects of the treatment of the subjects after intervention known through final observations.

The experiment was conducted in obstetrics ward, H. Abdul Manap hospital, city of Jambi, because this hospital is a referral of obstetric maternal affection. This research was conducted in September-October, 2013.

The population in this study was that post-SC patients were treated in obstetric wards of H. Abdul Manap hospital, city of Jambi. Sample was selected using purposive sampling technique.

Assessment of pain scale was done by using the Verbal Scale Response (1-5). Pre test was conducted in patients 6 hours post-SC. After the pain scale measurements prior to treatment, then nurses intervene by providing essential fragrance inhalation of roses that have been packaged in bottles roll on patients who were experiencing pain for ± 10 minutes. Patients were asked to inhale the fragrance in a state of calm and breath with regular breathing pattern and it will be measured back pain scale (post-test).

The numerical data were analyzed descriptively in the form of mean and standar deviation⁽⁸⁾, then analyzed using Wilcoxon test.

RESULTS

Table 1. Pain Scale of Post Sectio Caesarea Patients before and after inhalation of Essential Roses

Variable	Mean	Mean Difference	SD Difference	p-value	95%CI
Pain before inhalation	3.27	0.3	0.182	0.003	3.05-3.48
Pain after inhalation	2.97				2.68-3.25

The mean score of pain scale of post-SC patients before being given the inhalation of essential rose was 3.27, with a standard deviation of 0.583. Lowest pain scale was 2 and the highest was 4. The 95% believed that the average patient's pain scale between 3.05 up to 3.48, while mean score after being given the inhalation of essential rose was 2.97, with a standard deviation of 0.765. Lowest pain scale was 2 and the highest was 4. The 95% believed that the average patient's pain scale between 2.68 up to 3.25.

The p-value was 0.003. Statistical analysis showed that the optimal decline in the patient's pain scale before and after being given the inhalation of essential rose. The decline is said to be optimal because of a decline from an average of 3.27 (forth quartile) to 2.97 (second quartiles).

DISCUSSION

Based on the results, all patients experience pain. The scale of the pain felt by the patient varies with the mean of 3.27. It can be explained that in patients post surgery the patient will feel pain in the body undergoing surgery. According to Smeltzer⁽⁹⁾ factors that affect response to pain are: 1) experience of the past, individuals who have experience multiple and prolonged the pain will be less agitated and more tolerant to pain than people who just had a little pain. For most people, however, this is not always true. Often, more experienced individuals

with pain experienced, the more afraid of the people of the painful events that would result. 2) Anxiety, The relationship between pain and anxiety are complex. Anxiety often increases the perception of pain, but pain can also lead to a feeling of anxiety. The pattern of autonomic arousal is the same in pain and anxiety. It's hard to separate a sensation. 3) Culture, Beliefs and cultural values affect the way people cope with pain. Individuals learn what to expect and what is acceptable to their culture. This includes how to react to pain. There is a difference in meaning and attitudes associated with pain in various cultural groups. An understanding of the pain in terms of cultural significance will assist nurses in designing a relevant nursing care for clients who are experiencing pain. 4) Age, age is an important factor affecting pain, particularly in children and the elderly. Development, which was found among this age group can influence how young son and elderly react to pain. Very young children have difficulty expressing and expressing pain. 5) Placebo Effect, Placebo is a substance with no pharmacological activity in the form of tablets, capsules, liquid injection and so on. Placebos are generally composed of sugar, normal saline, or plain water. Because the placebo has no pharmacological effects, these drugs only provide the effect of the issuance of scientific products (endogenous) endorphins in descending control systems, causing the effect of a decrease in pain.⁽¹⁰⁾

Often people who are more experienced with the pain they experienced, the more afraid of the people of the painful events that would result. These individuals may be less tolerate the pain, as a result she wanted the pain soon subsided before the pain becomes more severe. This reaction is almost certainly the case if the individual knows fear can increase pain and inadequate treatment. The undesirable effects resulting from previous experience shows the importance of nurses to be aware of past experiences of patients with pain. If the pain is resolved with appropriate and adequate, individuals may be less fear of future pain and able to tolerate pain well.⁽¹¹⁾

This study uses verbal measurement scale to assess pain experienced by the patient, such as pain is a condition known uncomfortable feeling caused by a certain stimulus. Stimulus pain stimulus can be either physical, or mental. Pain is subjective, so everyone is not the same response when they felt pain. Pain can not be measured objectively, such as by using a blood test. People who feel the pain that can measure the level of pain they experienced.⁽¹²⁾ The results obtained show the scale of which varies according to the pain felt by the patient.

Scale changes experienced by patients after intervention can theoretically explained that the specific structure of the nervous system involved in changing the stimulus into a pain sensation. Systems involved in the transmission and perception of pain is referred to as nonseptik system. The sensitivity of the system components nonseptik can be influenced by a number of factors and vary among individuals. Not all people exposed to the same stimulus experiencing the same pain intensity. The sensation is very painful for one may be barely perceptible to others. Furthermore, a stimulus may result in pain at one time but not at other times. For example, pain due to arthritis and chronic postoperative pain often feels worse at night⁽⁹⁾, so in this study can be seen the response of patients to different interventions.

Essential roses given by inhalation can provide a change in patient postoperative pain scale sectio Caesarea which has been decreasing pain scale. Inhalation is one way to use methods that are introduced in the most simpel. Mekanisme aromatherapy essential work is through the circulatory system and olfactory system. Organ of smell is the only sense of taste with a variety of nerve receptors in direct contact with the outside world and a direct channel to the brain. Only a limited number eight molecules that can trigger electrical impulses in nerve endings and it takes approximately 40 nerve endings must be stimulated before someone aware of the smell of what is being kissed. The smell is a molecule that evaporates directly into the air. If it enters the nasal cavity through breathing, will be interpreted as the sense of smell. The sense of smell will be split three stages: 1) Acceptance of the odor molecules by the olfactory nerve, which is the act a receptor contains 20 million nerve endings.⁽¹³⁾ 2) The smell Ditransmiskannya as a message to the olfactory center is located on the back of the nose. Olfactory center is only as big as pomegranate seeds at the base of the brain. At this point a variety of neuronal cells interpret the odor and delivered to the limbic system to be sent to the hypothalamus to be processed.⁽¹⁴⁾ When essential oils are inhaled, volatile molecules will carry aromatic elements contained in the oil content of the summit of the nose. 3) Hair shakes contained therein will beerfungsi as receptors, will deliver electrochemical messages to the center of emotion and recall someone who will then deliver a message back to the entire body via the circulatory system. Messages are delivered to the whole body will be converted into an action with the release of neurochemical substances such as feeling happy, relaxed and calm.

Provision of essential rose as a form of non-pharmacological pain management is proven to reduce patient postoperative pain scale sectio Caesarea, but non-pharmacologic not a substitute for drugs, but has a very low risk. Non pharmacological actions necessary to shorten episodes of pain that lasts only a few seconds or minutes. In this case, especially when severe pain that lasts for hours or days, combining non-pharmacological methods with medication is the most effective way to control the pain. Non-pharmacological pain control

becomes cheaper, easier, effective and without adverse effects.⁽¹²⁾ The results show that patients feel no pain disappear, but significantly decreased pain scale.

CONCLUSION

The pain scale of post-SC patients in Obstetrics Ward, H. Abdul Manap Hospital, Jambi City after being given the inhalation of essential rose had an average pain scale of 2.68 to 3.25.

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