



Complementary Therapy: Citrus Aromatherapy for pain

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ABSTRACT

Pain is an unpleasant sensory sensation that can coincide with the onset of the disease. This pain will cause a psychological condition that will disrupt the daily life of the patient if it is not treated immediately. Health workers will certainly provide interventions that can be used by patients and their families to support this reduction in sensation. A complementary action that can be used to reduce this pain perception is a citrus aromatherapy. Citrus aromatherapy has a complete content not only relaxes the mind but also inhibits pain inhibitors so that the perception of pain can be immediately reduced. The pain decrease perception will certainly improve the quality of life of patients after the disease, both acute and chronic.

Keywords: aromtherapy, pain

INTRODUCTION

Pain is a symptom of disease, for example cancer, which is the most frequent and a heavy burden that patients often feel during their illness (Shute, 2013). Pain is an unpleasant sensory and emotional experience due to damaged tissue in the body (Rosjidi, 2010). There are several complementary actions that can be given to reduce the sensation of pain, one of which is by using citrus aromatherapy. Aromatherapy citrus contains benefits that are useful for improving the health and well-being of the body, accelerating healing of diseases and maintaining the balance of the system in the body as well as reducing the perception of pain that is felt (Kushariyadi, 2011)

DISCUSSION

1. Definition of Pain

Pain is a feeling that arises and is an unpleasant sensory emotional experience associated with tissue damage (Price & Wilson, 2005). Pain occurs simultaneously with many disease processes or with multiple diagnostic tests or treatments (Smeltzer & Bare, 2001). Pain is a protective mechanism that aims to raise awareness that tissue damage has been or will occur in the body (Sherwood, 2001).



2. Classification of Pain

In general, pain is classified into acute pain and chronic pain. Acute pain has a rapid time and varies in intensity from mild to severe and lasts for a short period of time. Acute pain can occur immediately after an acute injury or disease, and can occur during invasive procedures or surgical intervention. The function of acute pain itself is to provide a warning of future injuries or illnesses (Potter & Perry, 2005).

3. Factors Affecting Pain

The factors that influence an individual's experience of pain are very complex so that as a nurse, they should be able to consider these factors in dealing with children who experience pain. These factors can also increase or decrease the child's perception of pain. Some of these factors include:

a. Age

Potter & Perry (2005) explained that age is one of the important variables that can affect pain. Developmental differences found between the two age groups (children and the elderly) can influence how the individual reacts to pain. When viewed from their cognitive development, preschoolers have not been able to remember the explanation of pain as an experience that can occur in various situations. Children do not have a lot of vocabulary and have difficulty verbally explaining and expressing pain to parents or health workers. In this case, nurses should adapt the appropriate approach in an effort to find ways to assess the pain felt by the child (including what to ask and the behavior to be observed) and how to prepare a child for invasive actions that can hurt him.

b. Gender

Research subjects involving the sex of boys and girls on the level of pain response have been done for a long time, but the effect of gender on the level of pain response did not differ significantly in response (Potter & Perry, 2005).

c. Meaning of Pain



The meaning of a person about pain is related to the experience of pain and how the child adapts to pain. The way children interpret pain is different, if the pain experienced gives the impression of a threat, a loss, punishment and a challenge. The degree and quality of pain perceived by children are related to the meaning of pain (Potter & Perry, 2005).

d. Past Experience With Pain

Past experiences with pain do not necessarily mean that the child will accept pain more easily in the future. If the child has never felt pain, the first perception of pain can interfere with the child's coping with the pain (Potter & Perry, 2005).

The way a person responds to pain is the result of how many pain events he has experienced over the course of his life. If the pain is managed properly and appropriately, the child may be better able to tolerate the pain. The undesirable effects that occurred in the past indicate the importance of the role of nurses to be aware of the undesirable experiences of children that have occurred in the child's past related to pain so as not to recur (Smeltzer & Bare, 2001).

e. Attention

Perception of pain is influenced by the ability of children to focus their attention on pain. Increased attention makes the pain increase, while the distraction effort given will make the pain response decrease. This concept is one of the concepts that can be applied to reduce the effects of pain that arises. There are various therapies that can be used to reduce pain, such as relaxation, distraction, guided imagination or *guide imagery*, and *massage*. The child's focus and concentration on other stimuli will cause the pain to be placed on peripheral awareness so that tolerance to pain increases. This pain diversion effort causes a reduced response to pain (Potter & Perry, 2005).



f. Worry

Potter & Perry (2005) anxiety often affects the level of perception of pain, but pain can also cause feelings of anxiety. Pain stimuli activate parts of the limbic system that are believed to control a person's emotions, particularly anxiety. The limbic system processes a person's emotional reactions to pain by making it worse or eliminating it. An emotionally healthy child usually tolerates pain better than someone who has a less stable emotional status.

g. Fatigue

Fatigue can increase the perception of pain. Fatigue causes the pain sensation to intensify and reduces a person's coping ability to pain. When fatigue is accompanied by difficulty sleeping, the perception of pain can be even greater. Pain will decrease after the individual experiences a deep sleep phase compared to the end of a tiring day (Potter & Perry, 2005).

h. Coping Style

When a child experiences pain while undergoing treatment at the hospital it can make him feel helpless. Children often lose control of the environment over the loss of control over the outcome of events that occur. Thus, coping style affects a child's ability to cope with pain (Potter & Perry, 2005).

i. Culture

Cultural beliefs and values influence how individuals deal with pain. Preschoolers learn what to expect and what their culture accepts. This includes how they react to pain. Some cultures view that showing a pain response is natural, but other cultures tend to practice closed behavior in responding to pain (Potter & Perry, 2005).

j. Family and Social Support

Potter & Perry (2005) another factor that is also significant in influencing children's responses to pain is the presence of the closest person. Parents

depend on children in pain to support, help or protect them. The absence of parents or loved ones may make the pain worse and the child more stressed. The presence of parents is especially important for children in dealing with pain.

4. Pain Scale Measurement

The step taken is to give verbal questions to the patient about how much pain he feels. If the patient cannot express pain verbally, the patient is asked to describe how severe the pain is based on a number scale. There are several tools that can be used to determine the level of pain felt by patients, including using *the Visual Analog Scale (VAS)*, *the Wong-Baker Faces Pain Rating Scale*.

VAS has been used very widely in recent decades in pain-related studies with reliable, valid and consistent results.

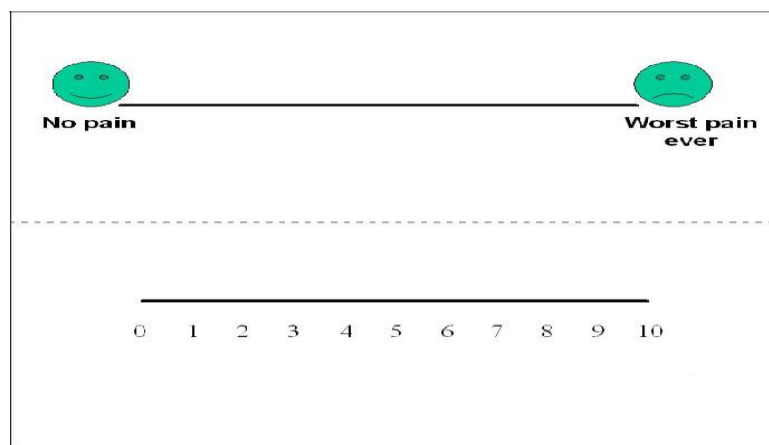


Figure 2. VAS Pain Measurement Scale

The VAS pain measuring scale is a scale in the form of a straight line with a length of usually 10 cm. Interpretation of VAS values 0-3 is mild pain, 4-6 is moderate pain and 7-9 is severe pain and 10 is the most severe pain (National Prescribing Service Limited, 2007).

5. Aromatherapy



Aromatherapy comes from two words, namely aroma and therapy. Aroma means sweet or fragrant and therapy means treatment. So that aromatherapy is one of the treatment of diseases by using smells that generally come from plants and smell nice, tasty, and delicious which are called essential oils (Agusta, 2002).

Aromatherapy has the meaning of "healing using perfumes". Namely refers to the use of essential oils in holistic healing to improve health and emotional comfort as well as restore balance to the body (Sharma, 2009). Complementary therapies (complementary), such as homeopathy, aromatherapy and acupuncture must be done in conjunction with conventional medicine (Jones, 2006)

6. Citrus Aromatherapy

Citrus aromatherapy oil is easy to obtain and contains 66-80% limonene, geranyl acetate, nerol, linalyl acetate, 0.4-15% α pinene, 1-4% β pinene, 6-14% terpinene and myrcen (Young, 2011). Limonene is the main component in citrus chemical compounds that can inhibit the work of prostaglandins (one of the transmitters of pain) so that it can reduce pain (Cheragi and Valadi, 2010). Another benefit that is obtained from this aromatherapy is that it normalizes emotional states and provides a calming effect because the content of Linalyl acetate contained in citrus aromatherapy is an ester compound formed by combining organic acids and alcohols.

7. Mechanism of citrus aromatherapy on the mechanism of treatment Through Inhalation

According to Price Shirley and Price Len (1997), access via the nasal passages is clearly the fastest and most effective way to treat emotional problems such as stress and depression (as well as some types of headaches). This happens because the nose has a direct connection with the brain which is responsible for triggering the effects of essential oils regardless of the pathway used to reach the brain. The nose itself is not an organ of smell but changes the temperature and humidity of the air that is inhaled and collects any foreign objects that are inhaled into the respiratory air.



If essential oils are inhaled, the essential molecules in the oil will be carried away by turbulent currents to the roof of the nose. On the roof of the nose there are fine hairs (cilia) that protrude from the receptor cells into the nasal passages. When the oil molecule locks onto these vessels, an electromagnetic message (impuls) is transmitted via the olfactory bulb and olfactory tract into the limbic system. This process triggers a memory and emotional response through the hypothalamus, which acts as a transmitter and regulator, causing these messages to be sent to other parts of the brain in other parts of the body. The message received will be converted into work so that it releases euphoric, relaxing, sedative or stimulant neurochemicals according to their needs.

Through absorption through the skin

When we put essential oil onto the skin which has been mixed with base oil, the oil will be absorbed by the pores and circulated by the blood vessels throughout the body. This absorption process takes about 20 minutes (Poerwadi, 2006)

8. Benefits of citrus aromatherapy

Benefits felt by citrus aromatherapy (Rosalina, 2013):

- a. Improve mood
- b. Relaxing thoughts
- c. Improve concentration
- d. Inhibits pain inhibitors thereby reducing pain sensation

CONCLUSION

1. One of the complementary therapies that can be used to reduce pain is by using citrus aromatherapy
2. Citrus aromatherapy has the benefit of calming the mind as well as reducing the perception of pain
3. Aromatherapy pain relief can be used by means of inhalation or through skin absorption



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