

## Overview of Student Skills in Performing a Combination of Effleurage Massage Techniques and Slow Deep Breathing to Reduce Menstrual Pain

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### ABSTRACT

**Introduction:** In general the treatment of menstrual pain is divided into two categories, pharmacology and non-pharmacology. Non pharmacological pain management is safer to use because it does not cause side effects like drugs because non pharmacological therapy uses physiological processes. One of the non pharmacological pain management is a combination of effleurage massage technique and slow deep breathing. Massage effleurage is a movement using the entire surface of the hand that is rubbed lightly and soothingly. This technique aims to improve blood circulation, reduce pain, and stretch muscles as well as promote physical and mental relaxation. Dysmenorrhea that never goes away makes medical personnel, one of which is physiotherapy, very capable of playing an important role in handling it. The role of physiotherapy in cases of menstrual pain itself or dysmenorrhea is to help provide exercise therapy in the form of deep breathing exercises which are deep breathing techniques with the aim of increasing the amount of oxygen in the body and providing a relaxing effect on the body and education in the form of healthy lifestyle and healthy activities to reduce the consumption of analgesic drugs that have long-term dependency effects. **Objective:** This study was to describe the combination of effleurage massage technique and slow deep breathing of female students in reducing menstrual pain. to know the description of the combination of effleurage massage technique and slow deep breathing of female students in reducing menstrual pain. **Method:** This study uses a descriptive research design. The sample in this study was determined using a quota sampling technique, namely as many as 32 respondents who fit

the inclusion criteria. **Conclusion:** most of the respondents were able to do a combination of effleurage massage and slow deep breathing techniques.

**Keywords:** effleurage massage, menstrual pain, slow deep breathing

## Introduction

The incidence of menstrual pain according to the *World Health Organization* (WHO) is 1.769.425 people (90%), 10-15% severe menstrual pain. The prevalence of menstrual pain in Malaysia in adolescents is 62,3%. Where as in Indonesia, the incidence of menstrual pain consists of 54,89% of primary menstrual pain and 9,36% of secondary menstrual pain. Based on the results of the study, the incidence of menstrual pain in West Java was quite high, the results of the study found that 54, 9% of women experienced menstrual pain, consisting of 24,5% experienced mild menstrual pain, 21,28% experienced moderate menstrual pain and 9,36% experienced severe menstrual pain (Safitri, 2015). The impact of menstrual pain on young women includes: disturbed sense of comfort, decreased activity, disturbed sleep patterns, disturbed appetite, disturbed interpersonal relationships, difficulty concentrating on work and study. Pain also affects emotional status towards feelings, irritability, depression and anxiety (Kozier, 2010).

In general, the treatment of menstrual pain is divided into two categories, namely pharmacology and non-pharmacology. Pharmacologically, menstrual pain can be treated with analgesic drugs such as ibuprofen and naproxen sodium. Although analgesics can reduce pain effectively, the use of analgesics will cause addiction and dangerous side effects of drugs (Muhidin, 2016). According to Yatim in Hartati et al, apart from using pharmacological therapy, the management of menstrual pain can also be done with non-pharmacological therapy. Non-pharmacological pain management is safer to use because it does not cause side effects like drugs because non-pharmacological therapy uses physiological processes. Pain management includes light exercise or dysmenorrhea exercises, consuming fruits and vegetables, reducing sugar and caffeine levels and massage with effleurage techniques (W. dan E. Hartati, 2015).

Massage effleurage is a movement using the entire surface of the hand that is rubbed lightly and soothingly. This technique aims to improve blood circulation, reduce pain, and stretch muscles as well as promote physical and mental relaxation. Effleurage massage strokes stimulate the fibers in the skin to make it comfortable during uterine contractions so that it improves blood circulation to the uterus and blocks pain impulses can be reduced. Massage effleurage is a massage technique that is safe, easy to do, doesn't require a lot of tools, doesn't cost money, doesn't have side effects and can be done alone or with the help of others (Sari, D. P., & Hamranani, 2019).

Dysmenorrhea that never goes away makes medical personnel, one of which is physiotherapy, very capable of playing an important role in handling it. The role of physiotherapy in cases of menstrual pain itself or dysmenorrhea is to help provide exercise therapy in the form of deep breathing exercises which are deep breathing techniques with the aim of increasing the amount of oxygen in the body and providing a relaxing effect on the body and education in the form of healthy lifestyle and healthy activities to reduce the

consumption of analgesic drugs that have long-term dependency effects (Ibrahim, Prawata, A. H., & Yetika, 2020).

### Objective

The purpose of this study was to describe the skill combination of effleurage massage technique and slow deep breathing of female students in reducing menstrual pain.

### Method

This study uses a descriptive research design. The design of this study used a group that was given a combination of effleurage massage techniques and slow deep breathing. Students are given ways of combining effleurage massage and slow deep breathing techniques, then their skills are seen in carrying out combination skills of effleurage massage and slow deep breathing techniques.

This research was carried out at STIKes Muhammadiyah Ciamis, involving all female students with menstrual pain complaints. The sample in this study was determined by quota sampling technique, with inclusion criteria being female students who experienced primary menstrual pain, female students with normal gynecology, menstrual pain scale (4-10). Exclusion criteria in this study were female students who used analgesic drugs for 3 months / 3 menstrual cycles. Student with gynecological disorders. The data collection instrument for variables is in the form of checklists that are assessed.

### Result

The result of the research implementation are in the form of data as follows:

Table 1. Frequency Distribution of Students' Skills in Performing a Combination of Effleurage Massage Techniques and Slow Deep Breathing to Reduce Menstrual Pain

Student Skills	Frequency (n)	Percentage (%)
Needs Improvement	0	0
Capable	20	62.5
Proficient	12	37.5
Total	32	100.0

Table 1 shows that there were more respondents who were able to do a combination of effleurage massage and slow deep breathing techniques, namely 26 people (62.5%), while respondents who were proficient in doing a combination of effleurage massage techniques and slow deep breathing were fewer, namely 12 people (37.5%) and respondents who need improvement to do a combination of effleurage massage technique and slow deep breathing, namely 0 people (0%).

### Discussion

More respondents who were able to do a combination of effleurage massage and slow deep breathing techniques, namely 26 people (62.5%), while respondents who were proficient in doing a combination of effleurage massage techniques and slow deep breathing were fewer, namely 12 people (37.5%) and respondents who need improvement to do a combination of effleurage massage technique and slow deep breathing, namely 0 people (0%).

Pain can be overcome by doing various alternatives, both pharmacological and non-pharmacological. Pharmacologically it can be treated with analgesic drugs while non-pharmacological treatment of pain can be done in various ways, including acupuncture, deep breathing techniques, guided imagery, music therapy, effleurage massage and compresses (Zuraida & Aslim, 2020).

According to Azima in Sri Wulan RD (2022) effleurage massage reduces pain through a mechanical effect that can help the veins work and cause body heat as a warm-up. The physiological effect of vigorous rubbing in massage affects blood circulation in the deepest tissues and in the muscles. Massage also increases blood and lymph flow, reduces stress, and relaxes muscles (Sri Wulan Ratna Dewi, 2022).

Effleurage massage therapy is beneficial to improve blood circulation throughout the body, maintain good health, help reduce pain and fatigue, stimulate the production of endorphins which function to relax the body, reduce the burden caused by stress, remove toxins, nourish and balance body organs work. With this effleurage massage stress, pain, and tension can be minimized. Strength and flexibility of mind, body and emotions can be increased (Jama & Azis, 2020).

The advantage of effleurage massage compared to other therapies is that effleurage massage can be very easy to do, namely by means of massage in the form of gentle, slow and long or continuous strokes, besides that there is no need to use special equipment to do it. When compared with pharmacological therapy, effleurage massage has no side effects. Effleurage is a massage technique that is safe, easy, doesn't need a lot of tools, doesn't cost money, doesn't have side effects and can be done alone or with the help of others (Yoenaningsih, 2013).

This study is in line with the results of Hikmah's research (2018) entitled *The Effect of Giving Effleurage Massage Using Rose Aromatherapy Oil on Reducing Dysmenorrhea Pain Intensity in Young Women*. The design of this research is Quasi Experiment with Non Equivalent Control Group Design. The sample in this study consisted of 24 people who were divided into 4 action groups, namely experimental group 1 and experimental 2 which were given effleurage massage using rose aromatherapy and control groups 1 and 2 who were given effleurage massage using sweet almond oil, each group was given an action for 15 minutes and 10 minutes. The most effective action in reducing the intensity of dysmenorrhea pain is effleurage massage using rose aromatherapy for 15 minutes based on the mean value of the Two Way Anova test which is equal to 3.83 and the significance number for the time variable is 0.015 (significant), the oil type variable is 0.000 (significant) and the significant number between the time variable and the type of oil simultaneously is 0.154 (not significant). From the results of this study it is recommended for young women to apply this method when experiencing dysmenorrhea because it is easy to do so that these adolescents can still carry out their daily activities properly (Natassia et al., 2021).

The results of Nita's research (2016) showed that there were differences in pain scales before and after being given effleurage massage therapy with P value = 0.000. So it can be concluded that there is an effect of effleurage massage therapy on reducing the pain scale of primary dysmenorrhea in young women at the Integrated Muhammadiyah Middle School, Bengkulu City (Veronica & Oliana, 2022).

Another study, which was carried out by Trie Wahyu Agustina, Suri Salmiyati with the title Effect of Effleurage Massage Aromatherapy Jasmine on the Level of Dysmenorrhea in Nursing Student Semester IV at 'Aisyiyah University, Yogyakarta, showed that effleurage technique can reduce dysmenorrhea pain. Based on the explanation above, the research that has been done by the researchers shows that the effleurage massage technique can be used as a non-pharmacological therapy to reduce pain during menstruation so that you feel comfortable again during menstruation. Based on the explanation above, the research that has been carried out by the researchers shows that the effleurage massage technique can be used as a non-pharmacological therapy to reduce pain during menstruation so that you feel comfortable again during menstruation (Agustina, Trie Wahyu, 2017).

Other non-pharmacological management, namely the slow deep breathing technique regulates deep and slow breathing which increases the amount of oxygen in the body and stimulates the release of endorphins which has an effect on decreasing the response of the sympathetic nerves and increasing the response of the parasympathetic nerves throughout the body resulting in a relaxed state. According to research by Ernawati, Hartiti, and Hadi, it was found that proper relaxation techniques will provide calm which has an effect on reducing the intensity of menstrual pain (Astria Utami Sutomo W, 2015).

Relaxation techniques that are done repeatedly will cause a sense of comfort. This feeling of comfort will ultimately increase one's tolerance for pain. People who have good pain tolerance will be able to adapt to pain and will also have good coping mechanisms. Besides increasing pain tolerance, the feeling of comfort that is felt after deep breathing can also increase the pain threshold so that by increasing the pain threshold, the pain that occurs is on a scale of 2 (moderate) to scale 1 (mild pain) after deep breathing relaxation techniques are used. This is in accordance with the observations of researchers that respondents who perform deep breathing relaxation techniques well and are supported by a calm environment will have a significant effect on reducing pain intensity (Sri Wulan Ratna Dewi, 2022).

Giving deep breathing exercises can restrain the release of prostaglandins so that anterior uterine vasospasm does not occur and finally relaxation occurs so that dysmenorrhea pain decreases, besides this technique does not cause side effects (Sarawati et al., 2023).

## **Conclusion**

More respondents who were able to do a combination of effleurage massage and slow deep breathing techniques, namely 26 people (62.5%), while respondents who were proficient in doing a combination of effleurage massage techniques and slow deep breathing were fewer, namely 12 people (37.5%).

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