



The Effect of Giving Shiatsu Massage on Dysmenorrhea Pain in Tasikmalaya Health Polytechnic on 2018

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Abstract. Menstruation is a situation where the endometrium is released in the form of flakes and bleeding due to the release of the hormones estrogen and progesterone which drops and stops causing vasoconstriction of blood vessels which is immediately followed by vasodilation. (Manuaba, 2009) During menstruation, some young women will feel the pain of dysmenorrhea, or in medical language it is called dysmenorrhea which is caused by uterine muscle spasms. (Price, 2012) Pain during dysmenorrhea which is complained of by (50%) women who experience menstrual disorders throughout the world have the same characteristics. Menstrual disorders that are often experienced by women such as lower abdominal pain, irregular menstruation, low back pain, and one of them is dysmenorrhea. (Kasdu, 2005). Dysmenorrhea is a disorder during menstruation characterized by excruciating pain in the lower abdomen during menstruation and can also be felt in the hips, lower back, or thighs. The pain is spasmodic (cramps). Other accompanying symptoms include nausea, vomiting, dizziness, and a general feeling of illness. Dysmenorrhea is divided into two, namely primary dysmenorrhea and secondary dysmenorrhea. Primary dysmenorrhea occurs when there is no physical disorder that causes it and only occurs during the ovulatory cycle. While secondary dysmenorrhea arises because there is a physical disorder. (Price, 2012) Women who experienced primary dysmenorrhea at the time of menstruation reached more than (50%) with (10%-20%) experiencing quite severe symptoms. While women who experience secondary dysmenorrhea only (25%). Reports showing data that women who experience dysmenorrhea (12%) have severe dysmenorrhea, (37%) moderate dysmenorrhea, and (49%) mild dysmenorrhea. (Purwanti, 2013) As many as (40%-70%) women during their reproductive years experience dysmenorrhea and (10%) feel that their activities are disturbed. Both academic activities, social, and sports. In addition, it is related to repeated absences both at school and at work so that it interferes with women's productivity in their daily lives. (Praise, 2010) Shiatsu is a word that comes from Japanese which consists of two elements which mean finger (Shi) and pressure (atsu). This term is used to describe a form of therapy that is recognized by the Japanese government. One of the characteristics of this therapy is the use of static pressure on the right acupoint points, where these points and lines in Japanese are called tsubo, also used in acupuncture or needling and in English, tsubo are also called acupoints. -massage point). Shiatsu can help relieve pain associated with various conditions. Shiatsu can also help an individual with self-development and self-healing; balance the causes of the condition; Taking into account the physical and psychological functions, health promotes and

strengthens the body's own healing ability. Shiatsu is a very relaxing experience and regular Shiatsu sessions help prevent the build-up of stress in everyday life. After Shiatsu treatment, the individual may have feelings of increased vitality and relaxation. Some of the direct physical benefits of Shiatsu are that it stimulates the circulatory, lymphatic and hormonal systems and regulates the activity of the autonomic nervous system. After conducting a preliminary study on 20 female students in the Midwifery Department of Tasikmalaya, the results showed that 10 female students experienced dysmenorrhea during dysmenorrhea and 5 people overcame it by taking over-the-counter medicine and 2 people overcame it by resting and applying warm oil. The 7 people who experienced dysmenorrhea mentioned the losses they got because of dysmenorrhea, namely disrupted activities.

Objective: Comparing Medicine with shiatsu massage which intend to show that shiatsu massage is effective in relieving the pain felt by women during dismenoree. **Method:** The method used is a study on students by comparing medicine with shiatsu massage **Conclusion:** Providing insight to teen in handle dysmenorrhea with a simple method (shiatsu massage).

Keywords: Shiatsu · massage · dysmenorrhea

1 Introduction

1.1 Background

Menstruation is a situation where the endometrium is released in the form of flakes and bleeding due to the release of the hormones estrogen and progesterone which drops and stops causing vasoconstriction of blood vessels which is immediately followed by vasodilation [5].

During menstruation, some young women will feel the pain of dysmenorrhea, or in medical language it is called dysmenorrhea which is caused by uterine muscle spasms. (Price, 2012) Pain during dysmenorrhea which is complained of by (50%) women who experience menstrual disorders throughout the world have the same characteristics. Menstrual disorders that are often experienced by women such as lower abdominal pain, irregular menstruation, low back pain, and one of them is dysmenorrhea [6].

Dysmenorrhea is a disorder during menstruation characterized by excruciating pain in the lower abdomen during menstruation and can also be felt in the hips, lower back, or thighs. The pain is spasmodic (cramps). Other accompanying symptoms include nausea, vomiting, dizziness, and a general feeling of illness. Dysmenorrhea is divided into two, namely primary dysmenorrhea and secondary dysmenorrhea. Primary dysmenorrhea occurs when there is no physical disorder that causes it and only occurs during the ovulatory cycle. While secondary dysmenorrhea arises because there is a physical disorder [3].

Women who experienced primary dysmenorrhea at the time of menstruation reached more than (50%) with (10%-20%) experiencing quite severe symptoms. While women who experience secondary dysmenorrhea only (25%). Reports showing data that women who experience dysmenorrhea (12%) have severe dysmenorrhea, (37%) moderate dysmenorrhea, and (49%) mild dysmenorrhea [3].

As many as (40%-70%) women during their reproductive years experience dysmenorrhea and (10%) feel that their activities are disturbed. Both academic activities, social, and sports. In addition, it is related to repeated absences both at school and at work so that it interferes with women's productivity in their daily lives [3].

In the United States, dysmenorrheal pain is reported as the leading cause of repeated absenteeism in female students from school. Epidemiological studies in the adolescent population (aged 12–17 years) in the US, Klein and Litt reported the prevalence of dysmenorrhea reached (59.7%). And 600 million work hours lost due to dysmenorrhea resulted in an economic loss of up to 2 billion US dollars [5].

In Indonesia, the incidence of primary dysmenorrhea is (54.89%) while the rest are secondary types. The prevalence of primary dysmenorrhea in Indonesia is quite high, namely 60 70% and 15% experiencing severe pain. (Purwanti, 2013) Adolescents who experience primary dysmenorrhea reach (72.89%) and those who experience secondary dysmenorrhea (27.11%). In 2010 the prevalence of dysmenorrhea in Indonesia was (64.25%) consisting of (54.89%) primary dysmenorrhea experienced by (60–75%) adolescents, with three quarters of the number of adolescents experiencing mild pain and severe pain, and (9.36%) secondary dysmenorrhea. (Center for Adolescent Reproductive Health Information and Counseling [6].

Handling of dysmenorrhea that can be done with pharmacological treatment is by administering analgesic drugs in the form of mefenamic acid, ibuprofen, diclofenac sodium/naproxen, until hormonal therapy is administered by a doctor. Meanwhile, non-pharmacological treatment is carried out with warm compresses, counterpressure massage, anti-dysmenorrhea pain relief exercises, and herbal ingredients [3].

Research conducted by Paramita in 2010 at SMK YPKK 1 Sleman Yogyakarta described the treatment of primary dysmenorrhea carried out by female students with (48.3%) warm compresses, (13.8%) rest, (12.1%) regular exercise, (17.3%) eat nutritious food, and (10.3%) take analgesic drugs. Meanwhile, the handling effort that can be done by the government in terms of dysmenorrhea is to apply Law No. 13 of 2003 article 81 paragraph 1 regarding dismenorrhoe leave [1, 5, 6].

Prolonged pharmacological treatment can have side effects on the body such as disturbances in the digestive system and metabolism, allergic reactions, to organ damage [4, 5]. To prevent this, non-pharmacological methods can be used to reduce pain during dysmenorrhea.

Shiatsu is a word that comes from Japanese which consists of two elements which mean finger (Shi) and pressure (atsu). This term is used to describe a form of therapy that is recognized by the Japanese government. One of the characteristics of this therapy is the use of static pressure on the right acupoint points, where these points and lines in Japanese are called tsubo, also used in acupuncture or needling and in English, tsubo are also called acupoints. -massage point).

Shiatsu can help relieve pain associated with various conditions. Shiatsu can also help an individual with self-development and self-healing; balance the causes of the condition; Taking into account the physical and psychological functions, health promotes and strengthens the body's own healing ability.

Shiatsu is a very relaxing experience and regular Shiatsu sessions help prevent the build-up of stress in everyday life. After Shiatsu treatment, the individual may have feelings of increased vitality and relaxation. Some of the direct physical benefits of Shiatsu are that it stimulates the circulatory, lymphatic and hormonal systems and regulates the activity of the autonomic nervous system.

After conducting a preliminary study on 20 female students in the Midwifery Department of Tasikmalaya, the results showed that 10 female students experienced dysmenorrhea during dysmenorrhea and 5 people overcame it by taking over-the-counter medicine and 2 people overcame it by resting and applying warm oil. The 7 people who experienced dysmenorrhea mentioned the losses they got because of dysmenorrhea, namely disrupted activities.

This is what motivated the author to conduct research on the effect of Shiatsu massage on dysmenorrhea in students of the Midwifery Department of the Health Polytechnic of the Ministry of Health, Tasikmalaya in 2018.

2 Research Methods

The type of research conducted is Quasi Experiment with One-Group Pre and Post Test design. The population in this study were Level I students at the Health Polytechnic of the Ministry of Health, Tasikmalaya with a sample of 30 people. The sampling technique in this study used the Non Random Sampling method with the Purposive Sampling Technique. The sample criteria were: Students who experienced dysmenorrhea in the last three months, normal menstrual cycle, healthy physical and psychological condition. The instrument for measuring pain was using the Numeric Rating Scale (NRS) (Fig. 2). The stages of the research were: determining the sample, on the first day of menstruation the respondents contacted the researcher to do shiatsu, which began with filling out the NRS and ended with filling out the NRS. The nerve points used to block the pain are: (Fig. 3).

1. Massage the points on the toes, starting with the thumb and then to the other fingers with the last little finger. Every dot of three seconds is repeated 3 times.
2. Massage the points on the soles of the feet, starting from the base of the toes (point 1) and continuing to the heels. Add pressure at point no 3. Repeat three times. (Fig. 1).

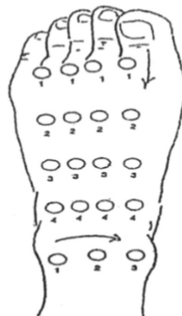


Fig. 1. Pressure point on the foot

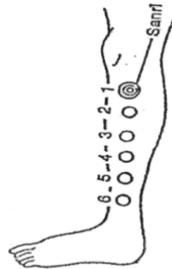


Fig. 2. Pressure point on the Calf

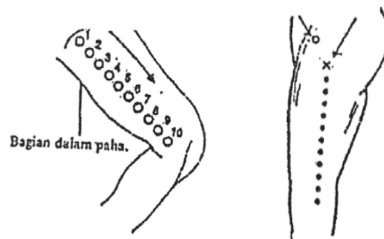


Fig. 3. Pressure point on the Thigh

3. Massage the points on the heels, repeat three times
4. Continue with the massage on the front of the calf, massage 3 times for 3 s.
5. Massage the inside and outside of the thigh, using your thumb to make it stronger. Repeat three times

3 Results and Discussion

1. Dysmenorrhea pain before Shiatsu massage

The level of dysmenorrhea pain before being given shiatsu massage showed that of the 30 respondents, most (33.3%) experienced orthopedic pain on the severe pain scale (Table 1). According to researchers, menorrhagia is caused by high levels of Prostaglandins in the blood. This is in accordance with the statement of Perry and Potter (2006) that during menorrhagia dysmenorrhea, the uterus contracts more strongly. Sometimes when a person contracts it will feel pain (Table 2). Contraction of the uterine muscles occurs when prostaglandins are produced.

Dysmenorrhea pain often occurs in young women, because they have not reached biological maturity (especially reproductive maturity, namely the growth of the endometrium is not yet perfect) and psychological. The peak incidence of women with dysmenorrhea is 20 to 24 years (Suliawati, 2013). The frequency of screaming decreases with increasing age. This happens because of the deterioration of the uterine nerves due to aging [7, 8] (Table 3).

Table 1. Description of pain before treatment

Category	Before	
	F	%
Painless	3	10,0
Mild pain	6	20,0
Moderate pain	8	26,7
Severe pain	10	33,3
Very heavy pain	3	10,0
Amount	30	100

Table 2. Description of pain after treatment

Category	After	
	F	%
Painless	7	23,3
Mild Pain	8	26,7
Moderate Pain	10	33,3
Savere Pain	4	13,3
Very Heavy Pain	1	3,3
Amount	30	100

Table 3. The Effect of Shiatsu Massage on the Pain of Dismenorhoe

Test data	t	Sig.
Pain before Massage Siahtsu	28,797	0,000
Pain after MassageSiahtsu	12,217	0,000

2. Dysmenorrhea pain after Shiatsu massage

Based on the results of the study, it can be seen that the pain level of dysmenorrhea after being given Shiatsu massage therapy showed a decrease in the category of pain to moderate pain. Based on the results of the study, it showed that there was an effect of shiatsu massage on the pain of dysmenorrhea in female students in the Health Polytechnic of the Ministry of Health, Tasikmalaya. This is because shiatsu massage can reduce the pain of dysmenorrhea in female students.

Dysmenorrhea or better known as painful dysmenorrhea is a complaint that is often experienced by women in the lower abdomen. However, this dysmenorrheal pain does

not only occur in the lower abdomen. Some women often feel it in the lower back, waist, pelvis, upper thigh muscles, to the calves. The symptoms felt are pain in the lower abdomen such as being gripped or squeezed, throbbing headache, nausea, vomiting, pain in the lower back, diarrhea, and even fainting. The pain is usually experienced in the first 1–2 days when menstruation comes [7].

Dysmenorrhea pain is one of the most common gynecological complaints that causes a woman to go to the doctor and leave work or daily routine activities for a few hours or a few days [8]. Even if the brain receives a painful stimulus, there is the release of inhibitory neurotransmitters (endorphins and enkephalins) which work to inhibit and help create natural pain killers in the body [7].

Menstruation results in the release of prostaglandins. The release of prostaglandins will result in dysmenorrhea which is supported by factors that influence it. Dysmenorrhea can be overcome, one of which is by non-pharmacological management consisting of deep breathing relaxation, touch techniques, distraction techniques, warm water compresses, and knee chest position so that dysmenorrhea can be reduced or disappeared. Shiatsu massage is an alternative that is recommended to treat dysmenorrhea because in shiatsu massage there are two types of non-pharmacological treatments for treating menorrhea, namely deep breathing relaxation and touch/massage.

4 Conclusion

Based on the results of the study, it was concluded that primary dysmenorrhea pain in Health Polytechnic students of the Ministry of Health Tasikmalaya before being given shiatsu massage was in the severe pain category as many as 10 people (33.3%), Primary dysmenorrhea pain in Health Polytechnic students of the Ministry of Health Tasikmalaya after being given shiatsu massage was in the moderate pain category as many as 10 people (33.3%), There is an effect of shiatsu massage on pain and swelling, a significant value of 0.000.

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