

THE EFFECTIVENESS OF SPIRITUAL EMOTIONAL FREEDOM TECHNIQUE (SEFT) AND ABDOMINAL STRETCHING EXERCISE ON PRIMARY DYSMENORRHEA

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Abstract

Non-pharmacological methods that can reduce dysmenorrhea pain are Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise. The purpose of this study was to determine the differences in the effectiveness of Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise on the intensity of dysmenorrhea pain in adolescent girls. This research method uses a quasi-experimental research design using a non-equivalent pretest-posttest design. The total population is 132 female students and a sample of 30 respondents with sampling using non-probability sampling technique by means of consecutive sampling. Data analysis using Paired T-test, the normality test is obtained the data is not normally distributed, then the test used is the Wilcoxon Test. The results showed can be concluded that there is no significant difference between Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise on the intensity of primary dysmenorrhea in adolescents. The results of the comparison test of the two techniques show that at Mann Whitney Test there was a difference between the 2 interventions, in which the SEFT intervention was more effective. It is expected that adolescents can perform Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise to reduce dysmenorrhea pain.

Keywords: *Spiritual Emotional Freedom Technique (SEFT), Abdominal Stretching Exercise, dysmenorrhea*

INTRODUCTION

Menstrual pain (dysmenorrhea) is a reproductive health problem that is very disturbing for women who are menstruating in the form of pain/cramps in the abdomen¹. The earliest sign that can be seen is a change in his physique. In adolescent girls are usually marked by changes in body shape, changes in the reproductive system that is marked by the occurrence of menstruation. In general, dysmenorrhea is not dangerous, but it is often considered disturbing for most women who experience it. The degree of dysmenorrhea pain in each woman is not the same. Some are still able to work, some are having problems with their activities². Menstruation in adolescents is a sign that the teenager has experienced puberty. The occurrence of menstruation usually often experiences complaints, these complaints can interfere with the woman's physical activity. These complaints usually include lower abdominal pain, low back pain, or dysmenorrhea³.

According to Prawirohardjo (2011) dysmenorrhea can be grouped into two, namely; Primary dysmenorrhea is menstrual pain without pathological disease in the pelvis and female

reproductive organs. This dysmenorrhea usually occurs in productive age/adolescents, while secondary dysmenorrhea is menstrual pain characterized or accompanied by pathological diseases of the pelvis or female reproductive organs, such as; endometriosis, uterine myoma, adenomyosis, pelvic inflammatory disease, pelvic adhesions, etc⁴.

The incidence of menstrual pain in the world is very high. On average, more than 50% experience menstrual pain in their productive age. In Indonesia, it is estimated that the incidence of menstrual pain is around 55% in the productive age. The most common dysmenorrhea in Indonesia is primary dysmenorrhea which usually occurs in adolescents, which is 54,89%, while secondary dysmenorrhea is only 9,36%. The impact that occurs due to menstrual pain (dysmenorrhea) in adolescents is reduced physical activity in adolescents. Many teenagers who experience dysmenorrhea every month will reduce their daily activities because they experience severe pain. Even to the point of interfering with their learning activities, because the pain is so severe, teenagers find it difficult to concentrate when receiving lessons or even absent from learning activities in class. If adolescents who suffer from dysmenorrhea are always absent and do not participate in learning activities every month, it will affect their academic activities. Thus, special treatment is needed to deal with dysmenorrhea in adolescents.

There are several therapies to treat pain due to dysmenorrhea. Both pharmacological and non-pharmacological therapy. In pharmacological therapy, pain can be treated with analgesic therapy which is used to treat pain in general. However, this therapy has the effect of dependence and provides side effects of drugs that are dangerous for a person. While non-pharmacological therapies that are often used include warm compresses, massage in the abdominal area, sports, such as dysmenorrhea gymnastics, doing exercises, musical distraction, and many more. Non-pharmacological therapy is considered effective because it does not cause side effects⁵.

Spiritual Emotional Freedom Technique (SEFT) therapy is a therapy using light tapping using the fingers at certain points to help solve problems of physical and emotional pain. Where this therapy uses a combination of psychological energy systems and spiritual powers. The body's energy system will be re-flowed by tapping and one's spirituality will be revived when tapping is in progress, so that both physical and psychological problems will disappear.

Abdominal Stretching Exercise is one of the non-pharmacological ways to reduce pain in dysmenorrhea. This Abdominal Stretching Exercise is a simple treatment to reduce pain during dysmenorrhea. Abdominal stretching is stretching the muscles in the abdomen to reduce or prevent muscle spasms in the abdomen which can cause dysmenorrhea pain⁶.

Based on the description of the background above, the author wants to know the effectiveness of Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise on primary dysmenorrhea.

MATERIAL AND METHODS

This research is a type of quantitative research. The research design is a quasi-experimental or quasi-experimental design using a non-equivalent pretest-posttest design. This study used two experimental groups (Spiritual Emotional Freedom Technology (SEFT) and Abdominal Stretching Exercise) which began with a pretest, then treatment and ended with a posttest. The research population was 132 female students with a sample of 30 respondents who experienced dysmenorrhea. The sampling technique used a sample with a non-probability sampling technique by means of consecutive sampling. The instrument used is Pain Measurement Scale with Visual Descriptive Scale (VDS).

RESULTS

This research was conducted on students of the Health Polytechnic of the Ministry of Health of East Borneo. The research was conducted to find out The Effectiveness of Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise on Dysmenorrhea Intensity in Students of Health Polytechnic East Borneo. The research was carried out for 3 months, starting from April to June 2020. A total of 30 female students who met the inclusion criteria were selected as research samples. Obtained research results which include:

Profile of Respondents

At this stage, analysis is carried out dthe percentage frequency distribution of each respondent's general characteristicswhich includes age, age of first menstruation, menstrual cycle, duration of menstruation and menstrual pain.

Table 1. Frequency and percentage of the profile of the respondents

| Characteristics | Frequency (n) | Percentage (%) |
|--|---------------|----------------|
| Age (years) | | |
| 19 | 5 | 15,2 |
| 20 | 11 | 33,3 |
| 21 | 3 | 9,1 |
| 22 | 7 | 21,2 |
| 23 | 4 | 12,1 |
| Age of First Menstruation (years) | | |
| < 10 | 1 | 3,3 |
| 10-15 | 27 | 90,0 |
| > 15 | 2 | 6,7 |
| Menstrual Cycle | | |
| Reguler | 22 | 73,3 |
| Irreguler | 8 | 26,7 |
| Menstruation Duration (days) | | |
| 3-7 | 26 | 86,7 |
| > 7 | 4 | 13,3 |
| Menstrual pain | | |

| | | |
|-------|----|------|
| Heavy | 28 | 93,3 |
| Light | 2 | 6,7 |

Table 1 shows that of the 30 respondents, almost 11 respondents were 20 years old (33,3%) and a small proportion of 21 year old respondents were 3 (9,1%). The age of the first menstruation of respondents was mostly at the age of 10-15 years as many as 25 people (90%) and there was only 1 respondent (3,3%) whose age at first menstruation was <10 years. The majority of respondents' menstrual cycles are regular as many as 22 people (73,3%) and there are 26,7% of respondents who have irregular menstrual cycles. All respondents feel pain during menstruation with a heavy scale of 28 people (93,3%) and there are also respondents who experience pain during menstruation with a light scale of 2 people (6,7%).

Menstrual Pain Scale

The Pre and Post Intervention Pain Scale Scores in Group 1 and Group 2 can be summarized in the following table:

Table 2. Distribution of Respondents Based on Menstrual Pain Scale

| Menstrual Pain Scale | Group 1 | | Group 2 | |
|----------------------|----------------|---------------|----------------|---------------|
| | Mean±SD | Frequency (n) | Mean±SD | Frequency (n) |
| Pre | 2,8667±0,63994 | 15 | 2,9333±0,59362 | 15 |
| Post | 2,1333±0,35187 | 15 | 2,2667±0,59362 | 15 |

Table 2 shows the value of the difference in the mean and standard deviation between pre and post intervention in group 1, the value of the difference in the mean and standard deviation of the Pre and Post Intervention Menstrual Pain Scale in group 1 is 0,7334±0,28807. The difference in the mean and standard deviation between pre and post intervention in group 2, the value of the difference in the mean and standard deviation of the Pre and Post Intervention Menstrual Pain Scale in group 2 is 0,6666±0.

Test Requirements Analysis

Table 3. Pain Scale Normality Test in Group 1 (SEFT Therapy) and Group 2 (Abdominal Stretching Exercise Therapy) of Students at the Health Polytechnic of the Ministry of Health of East Borneo in 2020

| Pain Scale | Shapiro Wilk Test | |
|------------|-------------------|---------|
| | Group 1 | Group 2 |
| | p | p |
| Pre-test | 0,003 | 0,001 |
| Post-test | 0,000 | 0,000 |

Table 3 shows the results of the pain scale normality test with a limit of $\alpha = 0,05$ using the Shapiro Wilk Test. The results of the normality test in group 1 in the pre-test showed p-value of 0,003 which indicated p-value $< 0,05$, and in the post-test, p-value of 0.00 was obtained, which indicated p-value $< 0,05$.

The results of the normality test in group 2 in the pre test showed p value of 0,001 which indicated p value < 0,05 and in the post test the result of p value was 0,00 which indicated p value < 0,05. Based on the p value of the normality test results, it can be concluded that in group 1 and group 2, the pre-test and post-test data values were not normally distributed. The next test requirement is to perform data transformation and the data is not normally distributed, then the test used is the Wilcoxon Test.

Paired T-Test (Wilcoxon Test)

Based on the results of the normality test, the hypothesis significance test of two paired samples for know the pain scale before and after the intervention was given to group 1 and group 2 using the Wilcoxon Test which can be seen in table 4 below.

Table 4. Test of Mean Differences Before and After Intervention in Group 1 (SEFT Therapy) and Group 2 (Abdominal Stretching Exercise Therapy) of Students at the Health Polytechnic of the Ministry of Health of East Borneo in 2020

| Pain Scale | n | Pre Test Mean±SD | Post Test Mean±SD | p |
|----------------|----|------------------|-------------------|-------|
| Group 1 | | | | |
| Pain Scale | 15 | 2.8667±0.63994 | 2.1333±0, 35187 | 0.002 |
| Group 2 | | | | |
| Pain Scale | 15 | 2.9333±0.59362 | 2.2667±0.59362 | 0.032 |

Table 4 shows the results that in group 1 obtained a p-value of 0,002 < 0,05. Based on these values, it can be concluded that there is a significant difference in the mean Pain Scale between pre and post SEFT therapy interventions. In group 2, the p-value was 0,032 < 0,05. Based on these values, it can be concluded that there is a significant difference in the mean Pain Scale between pre and post Abdominal Stretching Exercise therapy interventions.

Unpaired T Test (Mann Whitney Test)

Testing the difference in the mean difference in pain scales in group 1 and group 2 was tested using the Mann Whitney Test because all data were not normally distributed, which can be briefly seen in table 5 below.

Table 5. Test of Differences in Mean Difference in Pain Scale Before and After Intervention in Group 1 (SEFT Therapy) and Group 2 (Abdominal Stretching Exercise Therapy) Students at the Health Polytechnic of the Ministry of Health of East Borneo in 2020

| Pain Scale | Intervention Group | n | Mean±SD | p |
|------------------|--------------------|----|-----------------|-------|
| Pre-Test | | | | |
| Pain Scale | Group 1 | 15 | 2.8667±0.63994 | 0.753 |
| | Group 2 | | 2.9333±0.59362 | |
| Post Test | | | | |
| Pain Scale | Group 1 | 15 | 2.1333±0, 35187 | 0.586 |
| | Group 2 | | 2.2667±0.59362 | |

Table 5 shows the significance value of the pain scale in group 1 and group 2, namely p-value > 0,05. Based on this value, it can be concluded that there is no significant difference in the pain scale score between the two groups.

DISCUSSION

In this study, it was found that most respondents had a pain level of 8. Where a pain level of 8 was defined as very severe pain, where this severe pain resulted in the respondent not being able to move and tolerate menstrual pain, this caused respondents to be disturbed to carry out their activities especially when classroom learning.

Dysmenorrhea is pain in the lower abdomen or radiating to the inner side of the thigh or lower waist that occurs before menstruation or during menstruation. Menstrual pain is caused by increased production of the hormone progesterone. The hormone progesterone is produced by the connective tissue of the gland. This is related to the release of prostaglandins which are influenced by the hormone progesterone, causing uterine hyperactivity. Prostaglandins also cause myometrial hypertonus and vasoconstriction, causing pain⁷.

Salbilah's research (2016) on abdominal stretching on decreasing the level of menstrual pain (dysmenorrhea) shows that female students who experienced menstrual pain (dysmenorrhea) before the intervention were at most moderate pain levels, with a total of 37 respondents (66.1%). that the average pain level before the intervention was at a moderate pain level⁸.

The results of this study are supported by Anisa (2015) that there is a significant effect between exercise habits and the incidence of dysmenorrhea where there is a decrease in symptoms ranging from physical symptoms and psychological symptoms of primary dysmenorrhea⁷. By doing exercise the body will produce endorphins. The more you exercise, the higher the levels of endorphins that come out. Endorphins are produced in the brain and spinal cord. Endorphins will come out and be captured by receptors in the hypothalamus and limbic system which function to regulate emotions. One of the exercises to reduce the intensity of menstrual pain is to do abdominal stretching exercises. Abdominal stretching exercise performed during dysmenorrhea to increase muscle strength, endurance, and muscle flexibility, reduce muscle pain and muscle tension so that it can reduce the intensity of menstrual pain (dysmenorrhea). The purpose of muscle stretching exercises is to help increase oxygenation (the process of exchanging oxygen and carbohydrates in cells) and to stimulate the flow of lymph drainage, so that it can increase muscle flexibility and can maintain its function properly and improve the elasticity and flexibility of body tissues so as to reduce muscle cramps⁹.

The change in pain scale experienced after undergoing Spiritual Emotional Freedom Technique (SEFT) therapy, from which the majority of them experienced mild pain to no pain,

is evidence that this therapy is suitable for treating dysmenorrhea pain which is often experienced by most adolescents. Compared with the use of pain reliever drugs that are usually consumed every time you feel menstrual pain. Because no matter how safe and without side effects, but if consumed continuously, will have a negative impact on health. In addition, the most severe and terrible is the psychological mental impact that makes the sufferer feel suggestive and do not get away from drugs. They continue to feel that in order not to experience menstrual pain, they must take medicine.

Spiritual Emotional Freedom Technique (SEFT) therapy uses techniques that are safe, easy, fast, and simple, even without risk, because they do not use tools or needles. Only with our index and middle fingers tapped lightly at several points on the body meridians. In addition, involving God in this psychological energy process makes SEFT experience an amplifying effect so that the spectrum of problems that can be overcome is also much wider including physical and emotional, self-success, happiness of the heart and makes the way to personal greatness (self-glory)¹⁰. By doing Spiritual Emotional Freedom Technique (SEFT) therapy, emotional problems and physical problems experienced by a person such as dysmenorrhea, the level of pain felt will be reduced, even disappear in a short time. This is because the Spiritual Emotional Freedom Technique (SEFT) places more emphasis on spirituality (prayer) and the body's energy system by using the tapping method at certain points on the body. In addition to the body's energy system, there is also a relaxation method involving the patient's belief factor which is believed to reduce the pain felt.

CONCLUSION

Based on the results of the study, the average pain of dysmenorrhea before being given the Spiritual Emotional Freedom Technique (SEFT) was 2,8667. The average pain of dysmenorrhea after being given the Spiritual Emotional Freedom Technique (SEFT) exercise was 2,1333. The average dysmenorrhea pain before being given Abdominal Stretching Exercise was 2,9333. The average pain of dysmenorrhea after being given Abdominal Stretching Exercise is 2.2667. In the analysis of the data obtained shows the significance value of the pain scale in group 1 and group 2, namely $p\text{-value} > 0,05$, so it can be concluded that there is no significant difference between Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise on the intensity of primary dysmenorrhea in adolescents. The results of the comparison test of the two techniques show that at Mann Whitney Test there was a difference between the 2 interventions, in which the SEFT intervention was more effective. It is expected that adolescents can perform Spiritual Emotional Freedom Technique (SEFT) and Abdominal Stretching Exercise to reduce dysmenorrhea pain.

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