

Effects of Finger Handheld Therapy on Dysmenorrhea in SMKN 07 Kota Bengkulu

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Abstract— *Women of reproductive age in Indonesia are estimated to be 55% experienced pain during menstruation. The impact of dysmenorrhea is alarming to women's comfort. Even about 10% of women who experience menstrual pain can not follow daily activities. The results of the initial survey found that students who experience dysmenorrhea on average do not know how to handle/overcome pain during menstruation — knowing the effect of finger gymnastics therapy on the decrease of pain Disminore on schoolgirl SMKN 07 Kota Bengkulu. This research uses a research type of pre-experiment pre-post test. The samples of this research are all students who experienced disminore in SMKN 07 Kota Bengkulu as many as 30 people. Data collection using observation sheet. Statistical analysis using t-test. The results showed that the average of pain group intensity of hand-held finger therapy was 1.67 which included mild pain, the mean value of pain intensity in the control group was 3.53 which included mild pain leading to moderate pain. Significantly related groups of hand-held finger therapy. The results of this study are expected to be used as one of the efforts to overcome disminore on SMKN 07 Kota Bengkulu through community service activities.*

Keywords— *disminore, finger handheld therapy,*

I. INTRODUCTION

The incidence of dysmenorrhea in the world is substantial. According to some international reports, the prevalence of dysmenorrhea is very high, and at least 45-90% of women experience dysmenorrhea throughout the reproductive years. On average more than 50% of women in every country

experience menstrual pain. Another study, in the world, said the prevalence of primary dysminore still reached 90% inactive women [1]. Disminore is experienced by around 55% of women of reproductive age in Indonesia. Although it is generally not dangerous, it is often disturbing for women who experience it. The incidence of primary type dysmenorrhea in Indonesia is around 54.89%, while the rest are secondary types [2].

Dysmenorrhea is menstrual pain which is a symptom and not a disease. Dysmenorrhea is pain during or immediately before menstruation is one of the most common gynecological problems in all ages [3]. Dysmenorrhea suffered by adolescents will cause them to lose the concentration of learning in school, even leaving school lessons so that they fill in the attendance list [3].

Handling that can be given to reduce dysmenorrhea is by administering pharmacological therapies such as administration of analgesic drugs, hormonal therapy, therapy with non-steroidal anti-prostaglandin drugs and dilatation of the cervical canal [4]. Besides, non-pharmacological therapy is also needed to reduce dysmenorrhea. One of them is by using relaxation techniques. This technique is based on the belief that the body responds to anxiety that stimulates the mind due to pain or the condition of the disease [5].

Finger handheld therapy is a simple method and from several studies says that this method is effective in reducing pain [6]. Unbalanced feelings, such as worry, fear, anger, anxiety, and sadness can inhibit the flow of energy that causes pain. Finger handheld relaxation is used to move the energy that is blocked into smoothness (7).

The technique of handheld finger is part of the Jin Shin Jyutsu technique. Jin Shin Jyutsu is acupressure Japanese. The art form that uses a simple touch of hands and breathing to balance energy in the body. Hands (fingers and palms) are simple and powerful tools to harmonize and bring the body

into balance. Each finger is related to everyday attitudes. The thumb is associated with anxiety, the index finger is associated with fear, the middle finger is associated with anger, the ring finger is associated with sadness, and the little finger is associated with low self-esteem and discouragement [7]. The handheld relaxation treatment will produce impulses sent through nonnociceptive afferent nerve fibers. Non-nociceptor nerve fibers cause the "gate" to be closed so that the pain stimulus is inhibited and reduced [8].

Preliminary surveys conducted by researchers at the City of Bengkulu 07 Vocational Schools, Bengkulu City High School 03, and Bengkulu City 10 Senior High Schools. The highest number of female students with dysmenorrhea was found in students of SMK 07 City of Bengkulu on March 2017 for 20 students who were successfully interviewed during recess, 19 students who experienced dysmenorrhea, one student who did not experience dysmenorrhea. Of the students who experienced dysmenorrhea, on average there were no students who knew how to handle/overcome the dysmenorrhea.

II. METHODS

Experimental quasi-research was used in this study. This design uses a pre-post test queasy experiment type, which is the research carried out by doing the first observation (pre-test) before the intervention is carried out then a second observation (post-test) is carried out at the time after the intervention.

The population in this study were female students at SMK 07 City of Bengkulu who experienced dysmenorrhea. The subject in this research is that 30 respondents were divided into two groups: hand-held therapy and control group. Inclusion criteria in this study were: Students who experienced dysmenorrhea or menstrual pain in the moderate category, students who did not treat any dysmenorrhea, Students who have regular menstrual cycles and students who are willing to become respondents

A complete group, random design sampling technique, is used in this research. The subject in this research is that 30 respondents were divided into two groups: finger handheld therapy and control group.

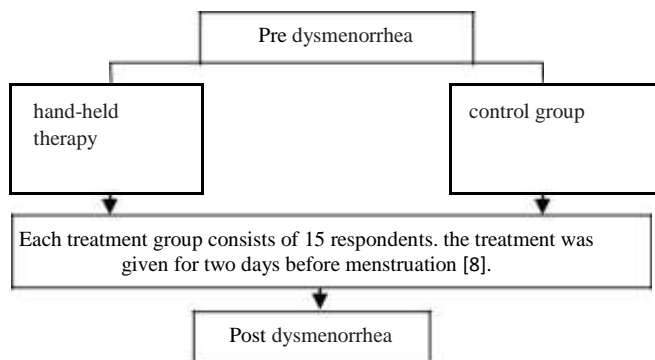


Figure 1. Experiment Design Scheme

The location of the research is in the working area of SMKN 07 Kota Bengkulu by taking 2 class; there are hand-held therapy and control group. The study was conducted in

August 2017. The data collection technique is performed by observation, Perform a pain scale pretest to find out the category of respondent's dysmenorrhea on day 1 of menstruation and On the first day of menstruation, the following month was done post-pain scale to determine the category of respondent's dysmenorrhea. Data analysis was performed Paired Sample T-test statistic test

III. RESULT

TABLE I. RESULTS OF PAIRED SAMPLES T-TEST IN THE FINGER HANDHELD THERAPY GROUP

Variable		Mean \pm SD	P value	n
FHT*	Pre	126,00 \pm 4,183	0,015	15
	Post	110,80 \pm 10,085		

*finger handheld Therapy

Table I showed that the mean significance value of finger handheld therapy before and after the intervention is: p-value 0.015, p-value < 0.05, it means there is a significant difference the mean of finger handheld therapy group before and after the intervention.

TABLE II. RESULTS OF PAIRED SAMPLES T-TEST IN CONTROL GROUP PLACEBO VITAMIN C

Variable		Mean \pm SD	P value	N
*PV	Pre	125,40 \pm 4,304	1,000	15
	Post	125,40 \pm 4,464		

*Placebo vitamin

Table II showed that the significance value of the mean disminorhoe of the placebo vitamin c control group. The significance value of disminorhoe before and after intervention: p-value 1,000, p-value > 0.05 it means there is no significant different the mean of disminorhoe in control group placebo vitamin c before and after the intervention.

IV. DISCUSSION

In the experimental group, there was a decrease in pain. This is because in the experimental group given the hand relaxation technique of fingers and a deep breath, holding the finger will produce impulses sent through non-nociceptive afferent nerve fibers. Non-nociceptive nerve fibers will result in the closure of the gate in the thalamus so that the stimulus leading to the cerebral cortex is blocked so that the intensity of the pain can be reduced. Holding the finger will produce impulses sent through non-nociceptive afferent nerve fibers. Non-nociceptor nerve fibers will result in the closure of the gate in the thalamus so that the stimulus leading to the cerebral cortex is blocked so that the intensity of the pain can be reduced.

Finger handheld Therapy is believed to be able to open a locked flow of energy called energy lock locks so that the flow of energy becomes smooth. The combination of hand-held relaxation of the fingers and a deep breath will produce a sense of comfort because it can free mental and physical from tension and stress so that it can increase tolerance to pain and

the body responds with a decrease in heart rate, decreased respiration and decreased muscle tension.

This is consistent with research conducted by Ernawati, Hartiti, and Hadi (2010) with the results showing that deep breathing can reduce dysmenorrhea pain, deep breathing relaxation techniques that are carried out repeatedly will cause a sense of comfort. This sense of comfort will eventually increase a person's tolerance for pain [9].

Transmission of pain, pain impulses that travel along the sensory nerve to the dorsal root ganglion of the associated spinal nerve and into the posterior cornua of the spinal cord which is called the first neuron. The second neuron appears in the posterior cornua, crosses inside the spinal cord (sensory junction) and delivers impulses through the medulla oblongata, varolli puncher and midbrain to the thalamus. From here impulses travel along the third neuron to the sensory cortex.

Gate Control Theory (gate control theory), the mechanism of neural or spinal resistance occurs in the gelatinous substance found in the dorsal cornua, spinal cord. Nerve impulses received by nociceptors, pain receptors in the skin and body tissues are affected by this mechanism [10].

The position of the obstacle determines whether the nerve impulse runs freely or not into the medulla and thalamus so that it can transmit impulses or sensory messages to the sensory cortex. If the barrier is closed, there is little conduction or not at all. This is what happens to dysmenorrhoea pain and has not been given an intervention to reduce the pain caused during the pre-test. In time the pain disappears after 2-3 days of menstruation on its own in an obstacle course will open, impulses and messages can pass through and are transmitted freely so that the pain will disappear gradually [10].

Menstrual pain will be felt as an of discomfort if only waited until the pain disappears by itself because the impulse barriers gradually disappear. The finger handheld therapy is believed to stimulate the activity of brain cells in the amygdala

Similar to the way some sedative works. Relaxation techniques are an attempt to improve control and confidence and reduce perceived stress (Stuart, 2007). One of the relaxation techniques used is hand-held relaxation techniques. According to Liana in Pinandita et al. (2012), suggested that the finger is mobile relaxation technique is straightforward and easy to do. Grasping the fingers accompanied by attractive breath in profoundly can reduce physical and emotional tension because the finger grips will warm the points of entry and discharge of energy in the meridians (energy channels) that are related to the organs in the body that located on the fingers. The points of reflection on hand providing stimulation in reflex (spontaneous) at the moment at hand. The stimulation will siphon some shock wave or electric toward the brain processed quickly and continues towards the nerves in the body organs of misbehaving so that blockages in the energy pathways to be smooth. The handheld can control the radius of relaxation and restore the emotion that will make the body relaxed. When the body is in a State of relaxed, then the tension on the muscles is reduced which would then reduce anxiety

V. CONCLUSION

There is an effect of handheld finger therapy on disminorhoe on the SMKN 07 Kota Bengkulu.

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