

ACUPRESSURE AND DYSMENORRHOEA EXERCISES IN ADOLESCENT WOMEN THOSE EXPERIENCED BY DYSMENORRHOEA

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ABSTRACT

Dysmenorrhea during menstruation which is accompanied by nausea and vomiting, low back pain, fatigue, headaches and pain that radiates to the waist can interfere with daily activities. Acupressure and dysmenorrhoea exercises are non-pharmacological therapies to reduce pain and have the effect of reducing pain. The aim of this case study is to determine the reduction in dysmenorrhea pain scale using acupressure and dysmenorrhea exercises. This research method is descriptive with a pre-post test design approach. The sample in this study was 10 young women who experienced dysmenorrhea, taken based on inclusion and exclusion criteria. The data collection technique in this study was that the researcher carried out anamnesis, physical examination, and assessment of the dysmenorrhea pain scale. Acupressure and dysmenorrhea exercises were carried out and evaluated for 3 days in 3 meetings using NRS. The results of the study showed that all respondents experienced a decrease in the moderate dysmenorrhea myeri scale to mild after doing acupressure or dysmenorrhea exercises. In conclusion, acupressure or pregnancy exercise can reduce the pain scale in adolescents with dysmenorrhea.

Keywords: dysmenorrhea, acupressure, exercise

INTRODUCTION

Dysmenorrhea is stomach pain or stomach cramps that occur during menstruation, which can interfere with daily activities. Dysmenorrhea occurs because the secretory endometrium produces prostaglandins. Excessive prostaglandins cause hypertonicity and vasoconstriction of the myometrium resulting in ischemia, endometrial disintegration, bleeding and pain (Apriyeva et al., 2021). Dysmenorrhea pain lasts less than 3 days with a moderate pain scale (Fahmiah et al., 2021).

According to data from the World Health Organization (WHO), Misliani's

research (2019) stated that the incidence was 1,769,425 people (90%) of women who experienced dysmenorrhoea. On average in European countries dysmenorrhea occurs in 45-97% of women, with the lowest percentage in Bulgaria (8.8%) and the highest reaching 94% in Finland. As many as 90% of women throughout the world experience menstruation.

During menstruation, 53% of menstruating women experience primary dysmenorrhea with 10-20% of these women experiencing quite severe

symptoms. The incidence of dysmenorrhea in Indonesia is 64.25%, of which 54.89% experience primary dysmenorrhea and 9.36% experience secondary dysmenorrhea (Amelia et al., 2022). Based on data from the Health Service Profile in Central Java Province in 2017 in Elsera's research (2022), it was stated that there were 2,899,120 teenagers aged 10-19 years, with 1,465,876 people with dysmenorrhea. The characteristics or characteristics of dysmenorrhea are nausea and vomiting and discomfort during activities. This is most often experienced by women who are experiencing menstruation for the first time or are in their early teens (Sari & Usman, 2021). Dysmenorrhea, if not treated immediately, will certainly hinder daily activities. Even if the woman is still at school, it can interfere with her concentration on studies, resulting in her not going to school. Efforts to treat dysmenorrhea can be minimized with medication or therapy. One therapy that can be used is acupressure. Acupressure comes from the words *accus* and *pressure* which means needle and press. This is used for finger pressure techniques at certain points as a substitute for needles attached to the acupressure healing system (Anggraini et al., 2020).

According to Nuraisyah (2021), midwives have a role in midwifery care such as reproductive disorders, especially primary dysmenorrhoea, as an effort to prevent and treat reproductive disorders. Midwives are facilitators in promoting health such as health education regarding menstruation in adolescents and the pain that occurs during menstruation. Midwives provide continuous and comprehensive services, focusing on aspects of prevention, treatment and health promotion based on partnerships and community empowerment with other health workers so

that they can always be ready to serve anyone who needs help whenever and wherever they are. Midwifery care that can be given to teenagers who experience dysmenorrhea is in the form of pharmacological and non-pharmacological. One of the non-pharmacological therapies.

METHOD

This research is quantitative research with a research design. This research was conducted in March-June 2023 at the Purwokerto Muhammadiyah girls' orphanage. The population in this study was all 40 teenage girls in the Muhammadiyah women's orphanage and the sample in this study was all 19 teenagers who experienced dysmenorrhea, but 10 people met the criteria. Samples were taken based on the criteria of regular menstruation and respondents were not taking painkillers at the time of data collection. The data collection technique used was that teenagers who were experiencing dysmenorrhea were gathered in one place, then the level of dysmenorrhea pain was assessed using NRS before taking action. Then they were divided into 2 groups, namely the group that did dysmenorrhea exercises and the acupressure group. Each group was given an explanation and practice about acupressure and dysmenorrhea exercises once, then their pain level was evaluated using NRS. Dysmenorrhea pain assessment before and after the procedure was carried out 3 times in 3 days. The collected data is processed through editing, coding and tabulating, then analyzed.

RESULT AND DISCUSSION

The results of the research carried out obtained the following result:

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Table 1. Respondent Characteristics

Group	Akupresur					Senam dismenore				
	R1-R5					R6-R10				
Characteristics	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Age	15 th	18 th	18 th	16 th	18 th	16 th	17 th	16 th	17 th	18 th
Education	SMP kls 3	SMA kls 3	SMA kls 3	SMA	SM A kls 3	SM A	SM A	SM A	SM A	SM A kls 3
Menarche	14 th	13 th	13 th	13 th	12 th	14 th	14 th	14 th	14 th	13 th
Nutritional status	20 (Normal)	16 (under weight)	24 (overweight)	21(Normal)	22 (Normal)	20 (Normal)	21 (Normal)	21 (Normal)	20 (Normal)	21 (Normal)

The research results based on table 1 show that all respondents (100%) experienced dysmenorrhea in the teenage age category (12-18 years). The results of this study are in accordance with the results of research which shows that primary dysmenorrhea / dysmenorrhea without any abnormalities often occurs in women under 20 years of age / after a persistent ovulatory cycle because their reproductive organs begin to adapt to changes in the reproductive organs and the cervix begins to stretch (Aulya et al., 2021). Based on the educational level of the respondents, most of them are currently studying high school (90%). It is possible that teenagers only do sports when they are at home and school (< 3 times a week) so it is possible that this will increase the risk of dysmenorrhoea. This is in line with research results that 88.9% of teenagers experience primary dysmenorrhea due to lack of physical activity/exercise. Women who do physical activity/exercise regularly (> 3 times a week) can increase blood and oxygen circulation throughout the body and make

the body fit. The results of this study also showed that the majority of respondents experienced menarche at the age of 14 years (50%). This is common. Dysmenorrhea at an early age can cause pain during menstruation. The results of the study show that the earlier menarche is, the greater the risk of dysmenorrhea during the next menstruation due to incomplete maturity of the reproductive organs (Horman et al., 2021). The nutritional status of all teenagers in this study (80%) was in the normal category, 10% underweight and 10% overweight. This is possible due to the influence of a regular lifestyle such as having breakfast before going to school. This is in line with the results of research which shows that 180 teenagers (65%) who eat breakfast have normal nutritional status, while those who don't eat breakfast have the nutritional status of obesity. This happens because teenagers who do not eat breakfast will experience an imbalance in eating patterns which causes the portion of food at noon to be larger while the micro content is minimal (Utami, 2017). Nutritional status is

a measure of body condition that can be seen from the food consumed and the use of nutrients in the body. In general, this nutritional status problem is caused because he eats a lot and is not balanced with

physical activities. Bad eating habits in teenagers can be caused by foods that are high in calories and unhealthy in taste (Novianti, 2017).

Tabel 2. Result pre dan post

Responden	Acupressure group						Dysmenorrhea exercise group					
	Day 1		Day 2		Day 3		Day 1		Day 2		Day 3	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Klien 1	5	4	4	3	3	2	3	2	3	2	2	1
Klien 2	4	3	3	2	2	1	4	2	3	1	2	1
Klien 3	3	3	3	2	0	0	3	2	3	1	2	1
Klien 4	4	3	3	2	0	0	4	2	3	2	2	1
Klien 5	5	4	4	2	1	0	3	2	2	1	2	1

Based on table 2, it shows that respondents who experience dysmenorrhea will experience a decrease in the dysmenorrhea pain scale after taking action, either in the form of acupressure or dysmenorrhea exercises. This is in line with the theory which states that the benefits of acupressure techniques and dysmenorrhea exercises can reduce the scale of pain, namely the body becomes relaxed, calm and reduces pain due to the effects of endorphins produced by the brain and spinal cord, reducing muscle tension, improving blood circulation, and reduces anxiety (Revianti, 2021). This is in line with research that acupressure can reduce the pain scale and minimize pain during menstruation by massaging and stimulating certain parts or points of the body (Revianti, 2021), while dysmenorrhea exercise can reduce the pain scale from moderate (4-6) to mild (1-3) (Kusuma et al., 2023). The results of this study also showed that after

taking action on each group, it showed that acupressure was able to reduce the pain scale to 0 compared to the group that did dysmenorrhea exercises. This is because during dysmenorrhea exercises there are distractions in the form of concentration, such as a busy dormitory environment, and media using cellphones and leaflets will affect dysmenorrhea exercise movements. This is in line with research results which show that gymnastics movements will be optimal if students perform gymnastics movements in a stable, calm environment and with the right media (Tigana, 2016).

CONCLUSION

In conclusion, acupressure or dysmenorrhea exercises are able to reduce the pain scale in adolescents with dysmenorrhea at the Muhammadiyah Purwokerto girls' orphanage. Suggestions for young women who experience

dysmenorrhea, this exercise can be used as initial treatment for dysmenorrhea, and needs to be facilitated by the institution so that teenagers can remember the crusts or location of acupressure, while for further

research it is hoped that they can increase the observation time so that they can see the effects of acupressure and exercise more optimally.

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