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Effectiveness Of Using Hot Jelly Belt in Reducing Pain Disminore in Latest Adolescents at STIKES As Syifa Kisaran

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ABSTRACT

Menstrual pain is a symptomatic phenomenon including abdominal pain, cramps, back pain. Applying a warm compress using the principle of conducting heat through conduction will improve blood circulation and reduce muscle tension in the area of pain. The purpose of this study was to reduce dysmenorrhea pain in late adolescents by using the Hot Jelly Belt. This type of research used a quasi-experimental research design with a pretest posttest control group design. The sampling technique used was purposive sampling with a sample of 60 late adolescents (18-21 years old). Analysis test with wilcoxon signed rank test. Based on the results of the statistical test, the chi square test obtained a significant p-value of 0.018 <α 0.05, which means that there is a difference in dysmenorrhea pain before and after using the hot jelly belt in adolescents. These results prove that the use of hot jelly belts to reduce dysmenorrhea pain in adolescents is proven effective.

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INTRODUCTION

Adolescence is a period of transition from childhood to adulthood. There are various opinions that discuss the age limit of adolescents. The age limit for adolescents can be divided into 3 groups, namely 12–15 years old including early adolescence, 15–18 years old including middle adolescence, and 18–21 years old including adolescence.

Dysmenorrhea is pain that occurs during menstruation, usually with a feeling of cramps and is centered on the lower abdomen that radiates to the lower back to the thighs. Usually this dysmenorrhea is also accompanied by nausea, vomiting, dizziness, and diarrhea. This complaint can occur varies from mild to severe. According to WHO the incidence of dysmenorrhea in the world is very large, that is, more than 50% of women in every country experience pain during menstruation (dysmenorrhea), in Indonesia primary dysmenorrhea reaches 64.8% and secondary dysmenorrhea reaches 19.36%. Primary dysmenorrhea is found 1 to 2 years after experiencing the first menstruation. Dysmenorrhea causes adolescents to be unable to carry out their usual activities (BKKBN.2014; Sunarsih, 2019)

A compress is a pad of linen or other material that is folded in layers, applied under pressure, sometimes medicinal and can be wet or dry, hot or cold. The purpose of giving compresses is to

lower body temperature, reduce pain or pain, reduce bleeding and limit inflammation. Some indications for giving compresses are clients with high temperatures, clients with heavy bleeding, and clients in pain. Warm compresses are applying compresses to areas that have large blood vessels using warm water. The temperature of the water used in warm compresses is 34°C to 37°C (93-98°F).9

Hot Jelly BeltsorWarmbelt therapy is a warm compress therapy made from parachute fabric combined with cotton and then a belt is made and inside is a gelpack. Hot packs are hot bags measuring 20cm x 15cm which contain gel to make the tool elastic and flexible. Hot packs are useful for treating pain, muscle stiffness, widening blood clots and increasing blood circulation. The warm therapy in question is a form of therapy that uses hot media obtained from boiling water then the gel pack is immersed in the boiled water for 5-10 minutes. This warm belt can retain heat for 1 hour. 9 Heat therapy using hot pack gel or warm belt is given at 46.5°C −51.5°C because in general an increase in blood flow can occur in the warmed part of the body. After getting enough heat from the hot water, the hot pack gel or warmbelt is put into a belt or belt made of parachute cloth and then directly applied to the mother's back for 15-20 minutes. This therapy is indicated to obtain relaxation of the body, and reduce cycles of pain, ischemic spasm and hypoxia. Regarding the use of hot pack gel or warm belt in applying heat to the body, it is quite effective. This is because the hot pack gel or warm belt is able to withstand hot temperatures longer so that it can increase blood vessel vasodilation and can increase blood flow.

RESEARCH METHOD

Research design

This type of research uses a quasi-experimental research design with a pretest posttest control group design.

Population and Research Sample

The population in this study were 60 late adolescents (18-21 years old) at the As Syifa Kisaran STIKES. The sampling technique used is purposive sampling.

Data collection

The type of data collected is primary data in the form of the identity of the respondent, along with the variables examined through a questionnaire.

RESULTS AND DISCUSSIONS

Characteristics of Respondents

Table 1. Characteristics of Respondents at STIKes As Syifa 2022 Range

No	Demographic Data	Frequency	%
1	Age		
	18 years	28	46,7
	19 years old	16	26,7
	20 years	9	15.0
	21 years	7	11,6
	Amount	**60**	**100**

Based on the table above, it is known that the characteristics of respondents based on the age of the majority are 18 years old as many as 28 people (46.7%), while the minority is 21 years old as many as 7 people (11.6%).

The incidence of dysmenorrhea in adolescents at the STIKES As Syifa Kisaran

Data on the incidence of dysmorhea in adolescents at the STIKES As Syifa Kisaran were obtained from 20 respondents, which can be seen in Table 2 below:

Table 2. The incidence of dysmenorrhea in adolescents before and after using the hot jelly belt at the As Syifa Kisaran STIKES

Pain Classification	Pretest		Posttest	
	f	%	f	%
No pain	0	0	41	68.3
Slight pain	0	0	19	31,7
Painful	1	1,7	0	0
The pain is pretty bad	25	41.7	0	0
Severe pain	18	30.0	0	0
Pain is very severe	16	26,6	0	0
Amount	**60**	**100**	**60**	**100**

Based on Table 2 above, it can be explained that of the 60 respondents who obtained before using the hot jelly belt, the majority experienced quite severe pain, as many as 25 people (41.7%). Meanwhile, after using the hot jelly belt, it was found that 41 people (68.3%) no longer felt the pain of dysmenorrhea.

The average dysmenorrhea pain before using the hot jelly belt

Dysmenorrhea pain data before using the hot jelly belt at the As Syifa Kisaran STIKES can be seen in table 3 below:

Table 3. Dysmenorhea pain before using hot jelly belt at STIKES As Syifa Kisaran

Variable	Means	Median	SD	Min	Max
Dysmenorrhea pain before using the hot Jelly Belt	4.82	5.00	0.854	3	6

Based on Table 3 above, it can be explained that 60 respondents obtained an average dysmenorrhea pain before using the hot jelly belt of 4.82, median 5.00, standard deviation 0.854, minimum 3 and maximum 6.

Dysmenorrhea pain data after using the hot jelly belt at the STIKES As Syifa Kisaran can be seen in Table 4 below:

Table 4. Dysmenorrhea pain data after using the hot jelly belt at the STIKES As Syifa Kisaran

Variable	Means	Median	SD	Min	Max
Dysmenorrhea pain after using the hot jelly belt	1.32	1.00	0.469	1	2

Based on Table 4 above, it can be explained that 60 respondents obtained an average pain of dysmenorrhea after using the hot jelly belt of 1.32, median 1.00, standard deviation of 0.469, minimum 1 and maximum 2.

Differences in dysmenorrhea pain before and after using the hot jelly belt

The results of the analysis of the effectiveness of using a hot jelly belt to reduce dysmenorrhea pain at the As Syifa Kisaran STIKes using the chi square test can be seen in the following table:

Table 5. The Effectiveness of Using Hot Jelly Belt in Reducing Dysmenorrhea Pain in Late Adolescents at STIKES As Syifa Kisaran

Data	N	Means	Mean Different	p-values
Before	60	4.82	3	0.018
After	60	1.32		

Table 5 shows that the difference in the mean decrease in dimenorhea pain after using the hot jelly belt is 3. Based on the statistical test results of the chi square test, a significant p-value of 0.018 <α 0.05 is obtained, which means that there is a difference in dysmenorrhea pain before and after using hot jelly belt in teenagers. These results prove that the use of hot jelly belts to reduce dysmenorrhea pain in adolescents is proven effective.

Use of Hot Jelly Belt for Dysmenorrhea Pain

Based on the results of the statistical test, the chi square test obtained a significant p-value of 0.018 <α 0.05, which means that there is a difference in dysmenorrhea pain before and after using the hot jelly belt in adolescents. These results prove that the use of hot jelly belts to reduce dysmenorrhea pain in adolescents is proven effective.

Dysmenorrhea is abdominal pain that comes from uterine cramps that occur during menstruation. The pain occurs with the onset of menstruation and lasts several hours to several days until it reaches the peak of the pain. The most common form of dysmenorrhea in adolescents is stiffness or cramps in the lower abdomen. The feeling is so uncomfortable that it causes irritability, irritability, nausea, vomiting, weight gain, flatulence, back pain, headaches, acne breakouts, tension, lethargy, and depression. These symptoms come the day before menstruation and last 2 days until the end of menstruation.

In the study by Kural et al. It was reported from 100 women who suffered from dysmenorrhea that 20% of these women had a bleeding duration of more than 5 to 7 days. With this analysis, women with bleeding duration of more than 5 to 7 days have 1.9 times more chance of suffering from dysmenorrhea. Long duration of menstruation can be caused by psychological and physiological factors. Psychologically it is usually related to the emotional level of women who are unstable when they are menstruating. While physiologically it is more about excessive uterine muscle contractions or can be said to be very sensitive to hormones, as a result the endometrium in the secretory phase produces higher levels of prostaglandin hormones. The longer the duration of menstruation,

Research by Ningrum, NP In students of the DIII Midwifery Study Program, UNIPA Surabaya, it was recorded that 10 people did not attend lectures in August 2016 due to illness. Four of them claimed permission because they experienced menstrual pain. The incident increased in the following months. In September 2016, 14 people were absent, and six of them were forced to be absent for the same reason, namely pain during menstruation. There are 2 ways to reduce dysmenorrhea, namely pharmacology and non-pharmacology. non-pharmacologically, warm compresses or warm baths, massage, physical exercise, adequate sleep, hypnotherapy, distraction such as listening to music and relaxation such as yoga and dysmenorrhea exercises can be carried out non-pharmacologically.

Warm compresses are a method of using local warm temperatures that can cause several physiological effects. The therapeutic effects of giving warm plaster compresses include reducing pain, increasing blood flow, reducing muscle spasms, and reducing joint stiffness (Mubarak et al, 2015).

Warm plaster compress therapy consists of several types, namely dry hot compresses and wet moist compresses. Dry hot compresses include hot pillows (hot jars) and gel packs (using jelly). Hot temperatures are known to minimize muscle tension. After the muscles relax, the pain will gradually disappear (Laila, 2011). Hot temperatures are known to minimize muscle tension. As a

result, after the muscles relax, the pain gradually disappears. The warm effect of the compress can cause vasodilation in the blood vessels which will increase blood flow to the tissues. In this way the distribution of acids and nutrients to the cells is enlarged and the disposal of these substances is improved which can reduce primary menstrual pain caused by a lack of blood supply to the endometrium (PPNI, 2012).

CONCLUSION

The conclusion in this study isafter being given warm water compresses there was a decrease in moderate pain levels from 75% to 18.8% of respondents and there were 12.5% of respondents whose pain disappeared. The analysis test with the Wilcoxon signed rank test showed a Sig.(2-tailed) value of 0.001 and a Z value = -3.317. These results indicate that (p-value <0.05) means that there is a significant and effective effect on reducing the level of dysmenorrheal pain in young women. Thank you, thanks to the As Syifa Kisaran College of Health Sciences for granting research permission to us.

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