

THE EFFECT OF DISMENORE GENDER ON DECREASE PAIN TASTE OF STUDENTS IN THE STATE OF MITRA HUSADA MEDAN IN 2019

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Abstract

Dysmenorrhea is a physical disorder in women who are menstruating in the form of abdominal pain / cramping. Cramps are especially felt in the lower abdomen radiating to the back or inner surface of the thigh. Prevention can be done by doing gymnastics or called dysmenorrhea gymnastics. Light exercise such as gymnastics is highly recommended to reduce dysmenorrhea. Gymnastics is one of the relaxation techniques that can be used to reduce pain because when doing gymnastics, the brain and spinal cord structure will produce endorphins, hormones that function as natural sedatives and cause a sense of comfort. This type of research uses quantitative research, using quasi-experimental research designs (Quasi Experiments) with Non Equivalent Control Group Design. Where in this study, using 2 groups, namely the control group and the intervention group, which was then measured before giving dysmenorrhea gymnastics (pre-test) and after giving dysmenorrhea gymnastics (post-test).

Keywords: Dysmenorrhea, Gymnastics Dysmenorrhea

Preliminary According to the World Health Organization (WHO) (2014), adolescents are residents in the age range of 10-19, and adolescence is divided into early adolescence (10-13 years old adolescents), middle adolescence (middle adolescenc) aged 14-16 years and late adolescence (17-19 years old). According to the Regulation of the Minister of Health of the Republic of Indonesia No. 25 of 2014, adolescents are residents in the age range of 10-18 years and according to the Population and Family Planning Agency (BKKBN) the age range of adolescents is 10-24 years and unmarried (Center for Data and Information of the Indonesian Ministry of Health, 2014).

According to WHO data (2014), in Indonesia, the incidence of disminore was 55% among productive age, where 15% of them complained about activities being limited due to disminore. Women have experienced disminore as much as 90%, this problem disturbs at least 50% of women of reproductive age and 60-85% in adolescence. Dysminore causes many

absences at school or office to force sufferers to rest, leave work and their daily lifestyle.

According to the results of the Indonesian Demographic and Health Survey (IDHS) in 2017 the population aged 10-19 years is 22.9% of the total population of Indonesia. The estimated number of menstrual events in Indonesia is 55% of women of reproductive age who are tortured during menstruation. The incidence (prevalence) of menstrual pain ranges from 45.95%, among women of childbearing age.

Menstruation is a natural and natural process in a woman's life. Disminore is pain in the abdomen that comes from Uterine cramps and occurs during menstruation. Dysminorrhea can also be interpreted as menstrual pain that occurs without signs of infection or pelvic disease. Besides dysminore also has meaning as uterine pain during menstruation. Primary dysminorrhea is not associated with pathological care and can occur without organic disease. The intensity of dysminorrhea can be reduced after pregnancy or at the age of around 30

years. So it can be concluded that dismenore is a pain felt by women during menstruation (Jannah & Rahayu, 2019).

Menstrual disorders are abnormalities of menstrual bleeding, related to the length and duration of the cycle, the amount of blood cycles, and pain. This involves the hypothalamus, pituitary, ovary and endometrium. Based on the type of pain, menstrual pain can be divided into spasmodic dysminore and congestive dysminore (Jannah & Rahayu, 2019).

Teenagers are the transition from childhood to adulthood. Adolescence is a period where there is a sudden change in the body and many questions arise in the minds of adolescents. First they are unable to cope with these changes, and secondly they also bring problems. Problems that are full of challenges in adolescent girls are related to menstruation. Menstruation is a physiological process of endometrial release that contains many blood vessels and this event occurs once every month the

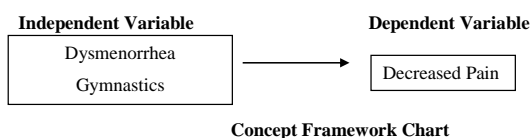
O1.....X1.....O2
O3.....O4

Research design :

Information :

- O1 = Pre test before doing Disminore gymnastics
- O2 = Post test after doing Disminore gymnastics
- X1 = Implementation of disminore gymnastics
- O3 = Pre test in the control group.
- O4 = Post test in the control group

The conceptual framework is a formulation or simulation of the theoretical framework or theories that support the research. Therefore, this conceptual framework consists of variables and variable relationships with one another (Notoatmodjo, 2014).



Results and Discussion
Research result

The results of research conducted by researchers with the title "The Effect of

menstrual cycle is the distance between the start of the last menstruation and the start of the next menstruation (Saifuddin, 2012).

Preliminary survey conducted by researchers found that all female students had experienced menstrual pain (dismenore) when they were menstruating, but the difference was the level of pain when experiencing pain.

Method

This type of research is quantitative research, using quasi-experimental research designs (Quasi Experiments) with Non Equivalent Control Group Design. Where in this study, using 2 groups, namely the control group and the intervention group, which was then measured before giving dysmenorrhea gymnastics (pre-test) and after giving dysmenorrhea gymnastics (post-test) (Rizki, 2018).

Dysmenorrhea Gymnastics Against Pain Relief Against Students of STIKES Mitra Husada Medan in 2019".

Characteristics of Respondents

Age

Characteristics of respondents by age can be seen from the following table:

Table Frequency Distribution of Respondents by Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 20 Tahun	16	53.3	53.3	53.3
21-24 Tahun	14	46.7	46.7	100.0

Table Frequency Distribution of Respondents by Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid < 20 Tahun	16	53.3	53.3	53.3
21-24 Tahun	14	46.7	46.7	100.0
Total	30	100.0	100.0	

Based on the frequency distribution of respondents by age it can be seen that from 30 respondents the majority in usa <20 years were 16 respondents (53.3%) and the minority at age 21-24 years were 14 respondents (46.7%)

Pain intensity before gymnastics

The level of pain intensity measured in this study appears in the values taken in the Pain Intensity table before gymnastics. The following is the intensity of pain before exercising:

Pain Intensity Table before gymnastics

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Ringan	4	13.3	13.3	13.3
Sedang	9	30.0	30.0	43.3
Berat	17	56.7	56.7	100.0
Total	30	100.0	100.0	

Based on the Pain Intensity Table before gymnastics it can be concluded that the most dominant pain intensity that has the highest value (maximum) is the Severe Pain Intensity with a frequency of 17 Respondents (56.7%), then those between the maximum and minimum values are Medium Pain Intensities with a frequency of 9 respondents (30.0%) and the last is the minimum value found in the intensity of mild pain with a frequency of 4 respondents (13.3%).

Pain intensity after gymnastics

The level of pain intensity measured in this study looks at the value taken in the Pain Intensity table after gymnastics. The following is the intensity of pain after gymnastics is done:

Pain Intensity Table after gymnastics

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Ringan	12	40.0	40.0	40.0
Sedang	15	50.0	50.0	90.0
Berat	3	10.0	10.0	100.0
Total	30	100.0	100.0	

Based on the Pain Intensity Table after gymnastics performed it can be concluded that the intensity of pain before exercise is reduced in the intensity of severe pain. In the Pain intensity section has a frequency of 3 respondents (10.0%), then in the moderate pain intensity has a frequency of 15 respondents (50.0%) and the last in the intensity of mild pain has a frequency of 12 respondents (40.0%).

Statistics on pain intensity before and after gymnastics

Here are the pain intensity statistics before and after gymnastics:

Statistical tables of pain intensity before and after gymnastics

		Pain intensity before gymnastics	Pain intensity after gymnastics
N	Valid	30	30
	Missing	0	0
Mean		2.4333	1.7000
Std. Error of Mean		.13290	.11890
Std. Deviation		.72793	.65126
Sum		73.00	51.00

On the Statistical Table of Pain Intensity before and after gymnastics there is a comparison of the mean values, namely the Pain Intensity before gymnastics (2.4333) while the mean values on Pain Intensity after gymnastics (1.7000). In the standard deviation in the Pain intensity section before gymnastics has a value of (.72793) In the standard deviation in the Pain Intensity section after gymnastics has a value of (.65126).

T-Test Pain Intensity Before And After Gymnastics Independent Samples Test

Table
Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Intensitas nyeri	7.588	.008	4.390	58	.000	.66667	.15187	.36266	.97067
			4.390	52.235	.000	.66667	.15187	.36195	.97139

The paired T-test results showed $p = 0,000$ ($p < 0.05$) which proves that the influence of Dysmenorrhea Gymnastics Against Pain Relief Against Students of STIKES Mitra Husada Medan in 2019.

Discussion

Based on the calculation results of each statement item, it was found that the total score at the time of the initial test was higher than the final test. The results showed there was a difference between disminore pain before doing gymnastics, and after gymnastics the results obtained from this hypothesis test using the Dependent T-test found $p = 0.00$ ($p, 0.05$). the results of this study indicate that disminore gymnastics is effective in reducing pain scale during menstruation.

Dysminore is influenced by physical and psychological factors such as stress and the influence of the prostatglandin hormone. Therefore, by doing disminore gymnastics, the body will produce the hormone β -endorphin which functions as a natural sedative in the human body produced by the brain that can reduce stress, produce comfort and reduce pain during menstruation (praise, 2012).

The results of this study are also supported by the results of research conducted by Sorman (2014), where in the research he conducted with the intervention group using the paired T test $p = 0.00$ ($p < 0.05$), while in the control group using the test using an alternative test of Wilcxon found the value $p = 0.276$ ($p < 0.05$), which means that disminore exercises affect the reduction of pain during menstruation.

According to the researchers' assumptions with the results of research that states that disminore gymnastics can reduce pain during menstruation, it turns out there is a decrease in pain 1 to 2 degrees of pain scale, such as the scale of the most severe pain to moderate pain, and from moderate pain to mild pain.

Conclusions and recommendations

The results of identification of disminore pain felt during menstruation before exercising dysminorrhea showed an average of severe pain as many as 17 respondents (56.7%), after doing gymnastic disminore, the average pain of disminore was moderate pain of 15 respondents (50.0%) and in mild pain 12 respondents (40.0%). Based on the research results obtained $p = 0, 000$ smaller than p value 0.05 so it can be concluded that

there is the effect of dysminorrhea exercises on reducing pain during menstruation.

Suggestion

Based on the results of the discussion outlined earlier from research conducted on STIKes Mitra Husada Medan students, for the perfection of further research, then there are some suggestions below

For Researchers

The results of this study can add insight and knowledge about the management of menstrual pain (dismenore) in adolescents, especially in STIKes Mitra Husada Medan students. However, deepening of research for further researchers needs to be done to further refine the discussion and related interventions in terms of longer time, more samples.

For Educational Institutions

It is recommended as an input to increase knowledge and insight about services in the reproductive health section to help overcome problems, especially in adolescents related to menstrual pain.

For Respondents

It is expected to be able to add insight and knowledge to adolescents, especially at STIKes Mitra Husada Medan students in order to reduce pain when dismenore pain occurs.

Reference

1. Andarmoyo, S. 2013. Konsep dan proses keperawatan nyeri, Ar-Ruzz, Yogyakarta.
2. Agency For Helth Care Policy And Research (AHCPR). 1992. Panel On The Prediction And Prevention Ofpreasure Ulcers In Adults.
3. Agus, Riyanto.2011. *Buku Ajar Metodologi Penelitian*. Jakarta : EGC.
4. Arikunto, S. 2010. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
5. A. Tamsuri, 2007. *Konsep Dan Penatalaksanaan Nyeri* .Egc, Jakarta.
6. Awar, Saifuddin. 2012. *Metode Penelitian, Yogyakarta: Pustaka Belajar*.
7. Elisabeth j. corwin. (2009), *Buku Saku Patofisiologi Corwin*. Jakarta : Aditya Media.
8. Jannah, Rahayu. 2019. *Kesehatan Reproduksi & Keluarga Berencana Jakarta: Buku Kedokteran EGC*.
9. *Kementrian Kesehatan Republik Indonesia. Data dan Informasi 2014 (Profil Kesehatan Indonesia)*. 2015
10. Malahayati. 2010. *Be A Smart Parent*. Yogyakarta:Jogja Bangkit Publishe.
11. Nurul Naili, 2012.*Perbedaan Tingkat Nyeri Haid (Disminore)Sebelum dan Sesudah Senam Pada Remaja Putri di SMAN 2 Jember.(<http://www.novapdf.com>)*
12. Puji, I (2012), *efektifitas senam disminore dalam mengurangi disminore pada remaja putri di SMU N 5 Semarang. Skripsi, Keperawatan Semarang. Hal (3)*
13. Salsabilla, .2017. *Hubungan Antara Nyeri Haid (Disminore) Terhadap Aktivitas Belajar Pada Siswi Kelas Ix Smma Negeri 52 Jakarta. Diakses pada tanggal 24 mei 2019.*
14. Sorman, M.N (2014). *Efektifitas senam disminore dalam mengurangi disminore pada remaja putri di SMP Negri 2 Siantan Kabupaten Pontianak. Skripsi, program studi keperawatan fakultas kedokteran universitas tanjungpura pontia.*
15. Suparto, Achmad. 2011. *Efektifitas Senam Disminorre Dalam Mengurangi Disminore Pada Remaja Putri*. Phederal.Vol 4 No.1. Mei 2011.Hal.7.
16. Mansjoer, A. 2000. *Kapita Selekta Kedokteran Jilid I*. Jakarta: Media Aesculapius.

17. Notoatmodjo, S. 2014. *Metodologi Penelitian Kesehatan* . Jakarta: Rineka Cipta.
18. Rizki, Nawangwulan. 2018. *Metodologi Penelitian Kesehatan*. Indomedia Pustaka.
19. Riyanto, A. 2018. *Metodologi Penelitian Kesehatan*. Bandung. Numed .
20. Sugiyono. 2012. *Metode Penelitian Kuantitatif Kualitatif dan R & D*. Bandung : Alfabeta.
21. Saryono. (2011). *Metodologi Penelitian Keperawatan*. Purwokerto: UPT. Percetakan dan Penerbitan UNSOED.

