

The Relationship of Respiratory Relaxation Techniques with the Intensity of Dysmenorrhea Menstrual Pain in School-Out Adolescents

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ABSTRACT

This study aims to determine the effect of breathing relaxation techniques on reducing the intensity of dysmenorrhea menstrual pain in out-of-school teenagers in Bone district. This research design is a quasi-experimental design with a one group pretest-posttest approach. The samples taken in this study were 34 respondents from 102 populations using consecutive sampling. Data collection using a questionnaire sheet and observations then analyzed using the paired sample t test. The instrument used was the NRS observation sheet, research time atdo it from August to October. The research results were obtained after being given breathing relaxation techniques, less than half (39.4%) experienced mild and moderate pain, with a p-value = 0.001 ($p < 0.05$) meaning that H1 was accepted which means there insignificant effect after being given deep breathing relaxation techniques. This result is influenced by the breathing relaxation technique given for 15 minutes which can provide a feeling of comfort, reduce uterine tension and improve circulation blood. Future researchers are advised to develop research by paying attention to physical factors that can reduce differences in the intensity of menstrual pain as well as the need to monitor the implementation time in carrying out breathing relaxation techniques correctly in a more relaxed and comfortable manner.

KEYWORDS: Menstruation, Menstrual pain,Dysmenorrhe),Breathing,Relaxation techniques

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INTRODUCTION

Dysmenorrhea is discomfort during the first or second day of menstruation which is very common. Dysmenorrhea is painful menstruation and is one of the most common gynecological problems experienced by women of all ages. So it can be concluded that dysmenorrhea is Menstruation is accompanied by pain (cramps) in the abdominal area and occurs on the first day, and is a gynecological problem that commonly occurs in women (Marlinda & Purwaningsih 2013).

There are many methods to reduce pain, including the use of deep breathing relaxation techniques, also known as deep breathing, sleep breathing, slow/slow breathing (slow breathing), and advanced breathing (birth breathing), which involves modifying a person's breathing pattern to reduces pain due to cervical dilation during childbirth. By using this breathing method, pregnant women can balance their body's hormone levels and make all their body organs function simultaneously. (Kuswandi 2014).

If dysmenorrhea is not treated immediately, it canhas an impact on the activities or activities of women, especially teenagers. Women cannot carry out normal activities and require treatment or prescription medication. From 30-60% 7-15% of women who experience dysmenorrhea do not go to school or work (Ningsih, 2011).

Pain is the body's defense mechanism to prevent pain further damage by providing encouragement to get out of the situation that caused the pain. Intervention to reduce the discomfort or pain of dysmenorrhea, namely pharmacological and non-pharmacological interventions. Midwives play a big role in non-pharmacological pain management, one of which is by using breathing relaxation techniquesin accordance with Lamage's theory (2013)

Based on research conducted by Marni (2014) was obtained that after being given relaxation techniques deep breathing mild pain increased from 10% to 53.3% and moderate pain from 73.3% to 46.7% and none I'm in serious pain. From preliminary studies research carried out was

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obtained that of the 15 female students who 12 of them were interviewed who experienced this menstrual pain (dysmenorrhea) and 3 of them do not experience menstrual pain (dysmenorrhea). Of the 12 female students who experienced pain Of these, 10 female students dealt with pain by taking painkillers, and 2 another student said at the time If you experience pain, don't do anything, just wait until the pain occurs lost it self.

By breathing deeply through the nose during contractions, which inflates the belly, and gently pushing air through the mouth, which deflates the belly, relaxation breathing techniques can help the laboring mother experience less discomfort without the need for medication. Discomfort can be overcome by using relaxation techniques (Taqwin 2018).

The physiological mechanism of breathing is a protective action because it is a fight-or-flight reflex triggered by the central nervous system. Physiologically, deep abdominal breathing stimulates the parasympathetic nervous system. As a result, blood circulation will flow smoothly through oxygenation, which will trigger the release of endorphins associated with a decrease in heart rate and an increase in feelings of calm. At the same time, endorphins can also suppress the sympathetic system, leading to a decrease in the release of stress hormones such as cortisol (Kamilya Jamel Baljon, et al. 2020).

Based on the problems described above, it is necessary to conduct research determine determine the effect of breathing relaxation techniques on reducing the intensity

of dysmenorrhea menstrual pain in out-of-school teenagers in Bone district.

RESEARCH METHODS

The research design uses a quasi-experimental design with a one group pretest-posttest design. In this study, observations were carried out twice, namely before treatment was given and after treatment was given. Observations carried out before the experiment were called pre-test, and observations after the experiment were called post-test. The total population was 102 respondents with sampling using consecutive sampling of 34 respondents. The instruments used were pain level observation sheets and biographical data and used paired sample t test analysis with SPSS 23 for Windows.

The inclusion criteria in this study were out-of-school teenage girls in Watampone China, out-of-school teenagers who experienced menstrual pain (primary dysmenorrhea), out-of-school teenagers who were willing to be respondents. The exclusion criteria in this study were out-of-school teenage girls who menstruated without experiencing menstrual pain, out-of-school teenage girls who experienced menstrual pain (secondary dysmenorrhea), out-of-school teenage girls who used analgesics. The independent variable in this study is breathing relaxation techniques, while the dependent variable is the intensity of menstrual pain (dysmenorrhea). The research location was carried out in the Chinese village of Watampone, the research was carried out from August to October.

RESULT AND DISCUSSION

Table 3.1 Frequency Distribution of Adolescents dropping out of school based on pain level before being given intervention

No.	Pain Level Before intervention	Frequency	Frekuensi	Presentase (%)
1.	Mild Pain	1	1	1,5
2.	Moderate Pain	4	4	7,5
3.	Severe Pain	27	27	87,5
4.	Very Severe Pain	2	2	3,5
Amount		34	34	100

Based on table 3.1, it shows that of the 34 samples of out-of-school teenagers with levels of pain before being given intervention, it was found that the highest frequency was teenagers with severe pain, 27 people (87.5%), then teenagers

with moderate pain, 4 people (7.5%) , there were 2 teenagers with very severe pain (3.5%), followed by 1 teenager with mild pain (1.5%).

Tabel 4.1 Wilcoxon Signed Ranks Test Ranks

		N	Mean Rank	Sum of Ranks
post test - pre test	Negative Ranks	24(a)	12.00	252.00
	Positive Ranks	4(b)	16.00	48.00
	Ties	6(c)		
	Total	34		

Source: Secondary data processed in 2023

a post test < pre test

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b post test > pre test
 c post test = pre test

	post test - pre test
Z	-3.272(a)
Asymp. Sig. (2-tailed)	.001

Source: Secondary data processed in 2023

a Based on positive ranks.

b Wilcoxon Signed Ranks Test

Table 4.1 shows that 24 respondents reported reduced discomfort. If the Wilcoxon test results are compared with $\alpha = 0.05$, the value of $p = 0.01$ is obtained, which indicates a value of $P < \alpha$, which means H_a is accepted and H_0 is rejected. Based on post-test data, there is a correlation between respiratory relaxation and the degree of discomfort experienced during menstruation.

DISCUSSION

Based on table 3.1, it shows that of the 34 samples of out-of-school teenagers with levels of pain before being given intervention, it was found that the highest frequency was teenagers with severe pain, 27 people (87.5%), then teenagers with moderate pain, 4 people (7.5%), there were 2 teenagers with very severe pain (3.5%), followed by 1 teenager with mild pain (1.5%).

Pain results from actual or potential tissue injury and is an unpleasant sensory or emotional experience. The physiological need is pain. A painful and highly subjective feeling, pain can only be fully understood by the individual experiencing it. (Maslow's Hierarchy).

Any discomfort is considered pain. People experiencing acute pain may respond significantly differently than those experiencing chronic pain or discomfort that lasts for several minutes. Fatigue caused by pain may leave a person too tired to groan or cry.

According to research by Niky Wahyuning Gusti (2019), the calculated t value after intervention in the form of breathing relaxation techniques was 6.197 and the p value was 0.000. This was determined through the use of SPSS for the t test. The research results showed that H_a was accepted because there was a significant relationship between the degree of pain experienced by the mother during the first stage of labor and the effectiveness of the breathing relaxation technique, with the calculated t result being greater than the t table 2.021 (6.197). > 2.021 and the p value is smaller than the significance level of 0.05 ($0.000 < 0.05$).

CONCLUSION

1. The Wilcoxon test results show that H_a is accepted and H_0 is rejected. The p value =

0.01 indicates that the P value $< \alpha$ when compared with $\alpha = 0.05$.

2. The post test results showed that there was a relationship between respiratory relaxation and pain intensity at the beginning of menstruation with a decrease in the degree of labor pain. Thus, it can be said that in the Chinese village of Watampone there is a relationship between respiratory relaxation and pain intensity in teenagers who have dropped out of school.

ACKNOWLEDGMENTS

The results of this research can be serve as a guide for perfect and develop further research. Researchers are advised to pay attention to physical factors can reduce the intensity difference menstrual pain (dysmenorrhea) and the need for it monitoring or timing implementation with certainty implement relaxation techniques breathe deeply properly with more relaxed and more comfortable.

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