

## THE EFFECT OF WARM COMPRESS ON BACK PAIN IN THE THIRD TRIMESTER PREGNANT WOMEN IN OUR CLINIC WITH SAND SPIRITUAL PANGARAAN

Ernamari<sup>1</sup>, Srilina Br Pinem<sup>2</sup>, Uli Yuslini Pasaribu<sup>3</sup>

<sup>1</sup>Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan [Midwife Professional Education Professional Program]

<sup>2</sup>Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan [Midwife Professional Education Professional Program], <sup>3</sup>Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan

### ABSTRACT

*Back pain in Indonesia is more common in pregnant women and in the 40 year old age group. Overall, back pain is the most common complaint with a prevalence rate of 49%. However, around 80-90% of those who experience back pain state that they have not made any effort to overcome the onset of these symptoms, in other words, only about 10-20% of those who seek medical treatment go to health workers. This study used Quasy Experimental Design research, with 1 group pretest post test design. With the aim of knowing the effectiveness of warm compresses for pregnant women Tm 3 who experience back pain at the Kita Bersama Pasir Pangaraian Rohul Clinic. Year 2021. The population and samples in this study were all third trimester pregnant women at the Kita Bersama Pasir Pangaraian Rohul Clinic. In 2021. With a total of 20 pregnant women. After conducting research at the Kita Bersama Pasir Pangaraian Rohul Clinic. In 2021. The statistical test results obtained a p value of 0.000, so it can be concluded that there is a significant difference between pain intensity before and after being given warm compresses. So that warm compresses performed on third trimester pregnant women have an effect on reducing the intensity of back pain felt by the mother.*

**Keywords:** Back pain, warm, compress



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### INTRODUCTION

Pregnancy is a natural and normal process. During pregnancy a mother experiences changes that occur both physically and psychologically. These changes cause pregnant women to experience discomfort. The discomfort felt by pregnant women usually varies in

each trimester of pregnancy. Most women also experience minor discomfort during pregnancy to some degree throughout a normal pregnancy, including nausea, heartburn, joint pain, back pain, dyspnea, nasal congestion, varicose veins, leg cramps.

Back pain is pain that occurs in the lumbosacral area. Back pain will usually

**Correspondence :** Srilina Br Pinem. Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan [Midwife Professional Education Professional Program]. srilina46@gmail.com

increase in intensity with increasing gestational age because this pain is the result of a shift in the center of gravity and changes in body posture. These changes are caused by the growing weight of the uterus, the weight of the growing uterus, excessive bending, walking without rest, and lifting weights. Symptoms of back pain are also caused by the hormones estrogen and progesterone which relax the joints, ligaments and muscles of the hips. In addition to substances that can stimulate pain sensitivity. The body also has substances that can inhibit (inhibitor) pain, namely endorphins and enkephalins which can relieve pain.

Back pain in Indonesia is more common in pregnant women and in the 40 year old age group. Overall, back pain is the most common complaint with a prevalence rate of 49%. However, around 80-90% of those who experience back pain state that they have not made any effort to overcome the onset of these symptoms, in other words, only about 10-20% of those who seek medical treatment go to health workers.<sup>1</sup>

The results of research on pregnant women in various regions in Indonesia reached 60 -80% of people who experience back pain during pregnancy.

According to Mudayyah (2020) said (83%) pregnant women experience back pain, whereas according to Ummah (2017) said that primigravida and multigravida pregnant women (80%) experience back pain. As many as 50% of pregnant women complain of back pain which is quite disturbing during pregnancy. In pregnant women, it is recorded that about 50% of women experience low back pain and about 10% of women with chronic low back pain started when she was pregnant.<sup>2</sup>

## MATERIAL AND METHOD

This study used Quasy Experimental Design research, with 1 group pretest post test design. With the aim of knowing the effectiveness of warm compresses for pregnant women Tm 3 who experience back pain at the Kita Bersama Pasir Pangaraian Rohul Clinic. Year 2021.

The population and samples in this study were all third trimester pregnant women at the Kita Bersama Pasir Pangaraian Rohul Clinic. In 2021. With a total of 20 pregnant women.

## RESULT

**Table 1. An overview of the effect of warm compresses before and after**

	Pre Average pain scale	Post Average pain scale
	7.35	4
Standar	1.42	1
Min – Maks	5-9	2
		-
		6

Source: (Primary data, 2021)

Based on table 1, it describes the pain scale before and after the warm compress action. So it can be seen that the pain scale value before the intervention was carried out on average was 7.35 with a standard deviation of 1.42 and after the intervention the average value obtained was 4.05 with a standard deviation of 1.23.

**Table 2. The Effect of Warm Compresses on Pain Intensity Before and After Treatment**

Mean ± SD	Δ Mean	p value	CI 95%	n
Pre 7,35 ± 1,42			2,71	20
Post 4,05 ± 1,23	3,30	0,00	3,89	

Source: (Primary data, 2021)

Based on table 2, the p value = 0.00, it can be concluded that there is a significant difference in the effect of warm compresses before and after treatment. Where the average value before

treatment was  $7.35 \pm 1.42$  and after warm compresses it became  $4.05 \pm 1.23$  so that the difference in the average decrease was 3.30. This proves that giving warm compresses affects the intensity of back pain in third trimester pregnant women.

## DISCUSSION

Based on the results of the study, it was shown that the 20 respondents before being given warm compresses had an average pain level that varied from a pain scale of 7 to a pain scale of 9 which indicated that the pain scale was in the category of severe pain. This can happen because pain is subjective. The pain scale is subjectively said by pregnant women and we only listen to what the mother says without being able to evaluate it further. In general, pain is an uncomfortable feeling that is very subjective and only people who experience it can describe and evaluate these feelings.<sup>3</sup>

Based on the results of the study, after being given warm compresses, it was shown that there was a decrease in pain intensity in third trimester pregnant women who experienced moderate pain on average. The results of this study are supported by research conducted by Aini (2017) which

says that warm compresses have an effect on reducing back pain in third trimester pregnant women.<sup>4</sup>

The decrease in pain scale can be influenced by several factors. Pain can be influenced by several factors, namely the hormones progesterone and relaxin which cause the joints to become soft, especially along the spinal column, such as changes in the center of gravity with increasing gestational age and generally play a role in complaints of back pain.<sup>3</sup>

The level of stress due to worry, pressure and other psychological influences during pregnancy is a contributing factor to the occurrence of back pain. Stimulation of stress stimulates the muscles to tighten, causing pain.<sup>5</sup>

The use of warm compresses for areas that are tense and painful is considered to be able to relieve pain. Warmth reduces muscle spasm caused by ischemia which stimulates neurons which block further transmission of pain stimuli causing vasodilation and increased blood flow to the area being compressed (Walsh, 2010). The results of this study were also reinforced by research conducted by Wahyuni & Prabowo (2012) which said that reduced pain was due to improved posture in pregnant women.<sup>6-7</sup>

The results showed that there was a significant difference before and after being given warm compresses, this was based on the results of the T-test which showed a p value of 0.00 so that  $H_0$  was rejected  $H_a$  was accepted thus there was an effect of giving warm compresses on the intensity of back pain in third trimester pregnant women. The decrease in pain scale after being given a warm compress was 3.30. This study shows that warm compresses have an effect on reducing back pain in third trimester pregnant women.

The results of this study are in line with Hakiki's research (2015) which stated that warm water therapy is very effective for pregnant women who experience spinal pain with a decrease in pain after warm water therapy is 2.71.<sup>7</sup>

This is in line with Alloya's study (2016) which states that warm compresses are effective in reducing lower back pain in third trimester pregnant women with an average of 7.2 to 3.6 after giving warm compresses. Another study by Richad (2015) said that warm compresses were effective in reducing back pain in pregnant women with the results of the pain scale research before administration having an average of 5.90 and after being given compresses

to 4.23, in other words a decrease after giving compresses. Another study by Saudia & Sari (2018) said that warm compresses can reduce back pain in third trimester pregnant women so that warm compresses can be applied to pregnant women who experience back pain with a decrease in results after giving compresses, namely 0.733.<sup>8-10</sup>

The difference between before and after giving this warm compress occurs because the warm compress itself has a physiological effect, namely it can soften fibrous tissue, make the body's muscles more relaxed, reduce or eliminate pain, and improve blood flow.<sup>11</sup> The feeling of heat generated from warm compresses can cause dilatation and physiological changes occur so that blood circulation can improve and relieve pain. This heat response is used for pain reduction therapy. The therapeutic effect of giving warm compresses will be able to reduce muscle spasms and reduce joint stiffness.<sup>12</sup>

According to Potter & Perry (2010) the process of pain relief is influenced by cutaneous stimulation which can result in larger and faster transitions of A-beta sensory nerve fibers. This process slows pain transition through the small diameter C and A-delta fibers

closing the synapse gate so as to block pain messages. In Aini's study (2017) this is in accordance with the gate control theory that stimulation of the skin with warm compresses produces messages via A-delta fibers, fibers that transmit pain quickly resulting in closed pain gates so that the cerebral cortex does not receive pain signals and the pain intensity changes or decreases. So it can be concluded that warm compresses can help reduce back pain in pregnant women.<sup>11</sup>

## CONCLUSION

After conducting research at the Kita Bersama Pasir Pangaraian Rohul Clinic. In 2021. The statistical test results obtained a p value of 0.000, so it can be concluded that there is a significant difference between pain intensity before and after being given warm compresses. So that warm compresses performed on third trimester pregnant women have an effect on reducing the intensity of back pain felt by the mother.

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