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## **Effectiveness Of Loving Massage To Treat Back Pain In Pregnant Women In Third Trimester**

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### **ABSTRACT**

Back pain is one of the discomforts in pregnancy because it can interfere with the activities of pregnant women. Back pain is caused by an adaptation process in the body of pregnant women. The purpose of this study was to determine the effect of loving massage on back pain in pregnant women at PMB Ika Mardiyanti, Jedong Cangkring Village, Prambon Sidoarjo. This study used an analytic design with a cross sectional design. with a Quasi Experiment approach to Non Equivalent Control Group Design. The population and sample of the study were pregnant women. Samples were taken using a total sampling of 30 pregnant women, 15 received intervention and 15 controls. The independent variable is the method of loving massage while the dependent variable is back pain. Data analysis using Mc Nemar and Mann Withney statistical test.

The results showed that (66.7%) of respondents were of low risk age (20-35 years), (83.3%), (70%) of low risk parity (children <5). Statistical analysis with Mc Nemar obtained =  $0.01 < \alpha = 0.05$  meaning that there is an effect of loving massage on back pain, and from the results of Mann Withney obtained =  $0.007 < \alpha = 0.05$  meaning that there is a difference between the intervention group and the control group.

The conclusion is that there is an effect of giving loving massage to back pain in third trimester pregnant women. It is hoped that midwives will improve IEC regarding the handling of discomfort during pregnancy both pharmacologically and non-pharmacologically so that it does not become pathological and have an impact on the mother and the fetus.

**Keywords:** Loving Massage, Back Pain, Pregnancy

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**BACKGROUND**

One of the complaints that are often experienced by pregnant women in the third trimester is back pain, this is due to the increased heavy burden carried by the mother, namely the baby in the womb. (Purnamasari, 2019). The mother's body system in the process of pregnancy undergoes changes, all of which require an adaptation, both physical and psychological. Many mothers experience this adaptation, one of which is back pain.

According to (Herawati, 2017) The results of research on pregnant women in various regions of Indonesia reach 60-80% of people who experience back pain during pregnancy. In East Java Province, it is estimated that around 65% of 100% of pregnant women experience back points (back pain).

Based on the results of interviews with 10 pregnant women at PMB Ika Mardiyanti, Jedong Cangkring Prambon Sidoarjo Village, it was found that 5 out of 10 pregnant women who experienced back pain during the third trimester overcame back pain with medical treatment (taking medicine), 3 mothers were able to carry out independent treatment with how to drink hot tea and rest at home. Meanwhile, 2 pregnant women did massage to a massage shaman.

An enlarged uterus affects the center of gravity, stretching outward and weakening the abdominal muscles, changing posture, and putting pressure on the back. Excess weight certainly greatly affects the muscles to work more, resulting in stress on the joints. Pregnancy hormones can loosen the joints and ligaments that run from the pelvis to the spine. The greater the gestational age, most pregnant women experience back pain. Back pain that is often experienced by mothers during pregnancy when pregnancy enters the third trimester with pain that often appears, especially in the back, pelvis and legs. Increased production of hormones during pregnancy, especially hormones estrogen yang semakin meningkat selama hamil, This increase in the hormone estrogen affects the back, especially when entering the age of 7 months, the muscle and joint tissue will develop and become more flexible (Nurtiyana, 2016).

The phenomenon of this problem shows that complaints of back pain in pregnant women are still the main problem felt by pregnant women, especially the third trimester and inappropriate massage will harm the mother and fetus is still the main choice, it would be better if the community, especially pregnant women, were able to overcome the problem of back pain. at the end of pregnancy by using complementary non-pharmacological therapy with massage therapy. Therefore, researchers are interested in conducting research to find out "The effectiveness of loving massage on back pain.

**METHODS**

This study used an analytic design with a cross sectional design. with a Quasi Experiment approach to Non Equivalent Control Group Design. The population and sample of the study were pregnant women. Samples were taken using a total sampling of 30 pregnant women, 15 received intervention and 15 controls. The independent variable is the method of loving massage while the dependent variable is back pain. The data that has been collected is then processed with spss using the Mc Nemar and Mann Whitney. With a significance level of 95%.

**RESULT**

From data collection obtained 30 respondents, each 15 respondents for the control group and 15 respondents for the treatment group. Based on the assessment conducted in the intervention and control groups, data on the characteristics of respondents including

maternal age, parity, and back pain pre and post given the intervention are presented in the table below.

Table 1. Distribution of Respondents by Age of Pregnant Women at PMB Ika Mardiyanti Prambon Sidoarjo, 2021

		Age		
		Low risk	High risk	Total
Group	Intervention	8	7	15
		53.3%	46.7%	100.0%
	Control	10	5	15
		66.7%	33.3%	100.0%
Total		18	12	30
		60%	40%	100.0%

Table 2. Distribution of Respondents Based on Parity of Pregnant Women in PMB Ika Mardiyanti Prambon Sidoarjo, 2021

		Parity		
		Low risk	High risk	Total
Group	Intervention	12	3	15
		80%	20%	100.0%
	Control	9	6	15
		60%	40%	100.0%
Total		21	9	30
		70.0%	30.0%	100.0%

Table 3. Distribution of Respondents Based on Back Pain (Pre) Loving Massage at PMB Ika Mardiyanti Prambon Sidoarjo, 2021

		Backpain (pre)		
		No	Yes	Total
Group	Intervention	6	9	15
		40%	60%	100.0%
	Control	4	11	15
		26.7%	73.3%	100.0%
Total		10	20	30
		33.3%	66.7%	100.0%

Table 4. Distribution of Respondents Based on Back Pain (Post) Loving Massage at PMB Ika Mardiyanti Prambon Sidoarjo, 2021

		Back pain (post)		Total
		No	Yes	
Group	Intervention	11	4	15
		73.3%	26.7%	100.0%

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Control	5	10	15
	33.3%	66.7%	100.0%
Total	15	15	30
	50%	50%	100.0%

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Age is one of the physiological factors that can directly affect the pregnancy process. Based on the data in Table 1, it can be seen that of the 30 respondents, most of them are in the low risk age range of 20-35 years, namely 18 respondents (60%), where this age is the productive age and the right time to get pregnant and give birth.

This means that most of the respondents are in a healthy and safe reproductive age (no risk) i.e. 20-35 years, where at that age is a productive age. (Holness, 2018). At a healthy reproductive age, most women can undergo pregnancy, childbirth, and postpartum in optimal conditions so that the mother and baby are healthy (I. Mardiyanti et al., 2018). At the age of 20-35 years, the female reproductive organs have developed and functioned optimally so that it will reduce various risks during pregnancy (I. Mardiyanti et al., 2019).

Loving massage is a holistic therapy that is used to reduce discomfort, one of which is back pain. It is done by starting with breathing relaxation and then praying to God for the well-being of the body, mind and spirit, followed by bringing up a sense of caring, loving and loving massage to the mother sincerely. (Ika Mardiyanti & Zuwariyah, 2019). Massage techniques are carried out using effleurage, petrissage, acupressure and love kneading on certain body parts to increase circulation and relaxation. (Rahayu, 2020).

Low back pain is so common in pregnancy that it is described as one of the minor disorders of pregnancy. Pregnant women incline the stomach so that it adds to the curve of the lower back which causes pain (Fitriani, 2019).

Back pain is caused by the hormones estrogen and progesterone which relax the joints, bones and muscles in the hips. As the baby grows, the curvature in the lumbar spine may increase as the abdomen is pushed forward, this can also cause back pain (Purnamasari, 2019).

The parity of respondents in table 2 shows most (70%) of low risk, namely primigravida and multigravida. Most of the primigravida have not been able to adapt to conditions and changes in body posture. Meanwhile, multigravida and grandemultigravida have been able to adapt because they already have experience with pregnancy and childbirth. So that the complaints experienced by primigravida are usually higher than multigravida (Herawati, 2017).

### **Analysis of measurement models**

Based on the results of the influence test using statistical analysis with Mc Nemar, it was found that  $0.01 < \alpha = 0.05$ , meaning that there was an effect of loving massage on back pain, and from the results of Mann Withney, it was obtained  $0.007 < \alpha = 0.05$ , meaning that there is a difference between intervention group and control group.

### **DISCUSSION**

The results of this study indicate that the respondent's pain intensity after giving the loving massage intervention obtained 4 (26.7%) which previously was 9 (60%). This shows that the decrease in the intensity value of each individual is different even though the interventions carried out are the same. This difference is caused because pain is subjective and personal, therefore each individual's experience of pain is different because it includes physiological, social, spiritual, psychological and cultural influences. (Sarwono

Prawihardjo, 2010). The decrease in pain intensity is associated with the gate-control theory which states that cutaneous stimulation such as massage activates the transmission of A-beta sensory nerve fibers, so that after back massage there is a decrease in pain intensity. (Hutahean, 2013).

Massage is effective in providing physical and mental relaxation, reducing pain, and increasing the effectiveness of pain treatment by releasing endorphins, thereby inhibiting the transmission of painful stimuli. However, the level of endorphins in each individual is different so that the same stimulus is felt differently by different people (Rahayu, 2020). This causes there are respondents who do not experience a decrease in pain after giving loving massage.

## CONCLUSION

There is an effect of Loving Massage on back pain in third trimester pregnant women.

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