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Comparison of rebozo technique and warm compress on reducing pain intensity in pregnant women during the active phase i in the working area of Wanayasa Health Center, Purwakarta Regency, 2025

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ABSTRACT

Labor pain can lead to decreased contractions and prolonged labor. According to World data in the World Health Organization in 2019, the case of mothers with painful labor states that only 10-15% of labor lasts without pain, thus the data is most found in mothers with painful labor, namely a prevalence of 85-90% of labor takes place with pain. The rebozo technique and warm compress are new non-pharmacological therapies to reduce the intensity of labor pain that are easy, inexpensive, and comfortable for mothers. Objective: To find out the comparison of rebozo technique and warm compress on the intensity of pain reduction in pregnant women during the first active phase. Research Method: The type of research is Quasi experiment pre-test and post-test two group design. Technique of sampling purposive samples. The data were analyzed by paired T test and Wilcoxon test. Results: The results of the analysis showed that the average respondent after being given the rebozo technique experienced a decrease in pain of 3.27, while the respondents after being given warm compresses experienced a decrease in pain of 4.87 with a p-value of 0.006 so it was concluded that there was a significant difference in the reduction in the intensity of labor pain given by the rebozo technique and warm compress, where the rebozo technique was more effective compared to the administration of warm compresses. Suggestion: Apply the natural method of the rebozo technique during the delivery process as one of the mother's loving care that will provide a sense of comfort and can reduce labor pain in childbirth mothers.

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INTRODUCTION

Childbirth is a moment that is highly anticipated by every married couple who wants to have children. This process brings happiness to both, where the baby and amniotic fluid are removed from the uterus. Overall, childbirth is also referred to as a series of events that begin with regular

contractions, until finally the baby, placenta, and amniotic fluid are born into the world, either with help or with their own efforts (Wahyuni, 2023). Labor pain is a physiological thing and is experienced by mothers before the delivery process. The level of pain felt by each mother can be different, even the same mother can feel different pain in each delivery. This pain is a subjective experience experienced by each individual due to changes in the function of the body's organs, which affects the progress of the birth process through the birth canal. Causes of labor pain include cervical stretching, uterine contractions, and cervical dropping, all of which cause the release of prostaglandin hormones that can trigger pain (Pratiwi, 2021). The impact of unresolved labor pain can result in a prolonged labor process where the mother can experience anxiety and stress that causes excessive release of hormones such as catecholamines and steroids which can cause disturbances in the strength of uterine contractions so that uterine inertia occurs which causes the occurrence of old partus, and stress in the mother in childbirth can cause fatigue and affect the supply of oxygen to the fetus. which is at risk of causing hypoxia (lack of oxygen), which can potentially pose various risks that endanger the life of the mother and fetus (Ayu et al., 2024).

According to World data in the World Health Organization in 2019, the case of mothers with painful labor states that only 10-15% of labor lasts without pain, thus the data is most found in mothers with painful labor, namely a prevalence of 85-90% of labor takes place with pain (WHO, 2019 in Hayati, 2024), labor pain in Indonesia in 2019 which is seen based on data (Ministry of Health of the Republic of Indonesia, 2019 in Hayati, 2024) stated that 15% of mothers in Indonesia experienced labor complications accompanied by pain and 22% stated that the labor experienced was a painful labor because they felt severe pain in childbirth, while 63% did not receive information about the preparations that must be made to reduce labor pain. Currently, there is no specific national target set by the Indonesian government for a reduction in the percentage of labor pain. Although there is no specific target for the reduction of labor pain, various non-pharmacological interventions have been researched and applied to help reduce pain during labor (Arumsari, 2023). Based on the results of data in West Java according to (Ministry of Health of the Republic of Indonesia, 2020 in Ningsih, 2023), it is known that pain during childbirth in pregnant women in the first period shows 6.7%. The percentage of labor pain in the Wanayasa Health Center Working Area, Purwakarta Regency includes Pamitran Clinic at 64%, PMB Midwife Nina at 18% and PMB Midwife at 18%.

Pain management in childbirth can be done pharmacological and non-pharmacological methods, as a midwife pain management can be done in non-pharmacological ways including relaxation techniques, deep breathing techniques, birthing balls, warm compresses, rebozo, and massage therapy (Pratiwi, 2021). In this study, the researcher will use the rebozo technique and warm compresses to overcome labor pain during the first active phase. The rebozo technique is a non-pharmacological (traditional) method used to overcome pain during childbirth. The technique originated in Mexico, where local women used rebozo before, during, and after childbirth. This rebozo technique uses a scarf with a length of 80 inches, and a width of 27 inches, the use of a scarf in the rebozo technique is used to gently shake the mother's body, and provides a comfortable effect on the muscles and ligaments around the abdomen and pelvis. The use of the rebozo technique is usually carried out in pregnant women who have entered 28 weeks of pregnancy and can be applied during the delivery process (Musliha et al., 2023).

Rebozo itself has several techniques to be given to mothers including sifting birth balls, sifting while lying down and shaking the apple tree, Shake the Apple is a technique that is done by moving the mother's buttocks slowly according to the comfort of the mother, using fingers, and with both hands supporting the gym ball or can also use a sofa covered with pillows. This technique helps to loosen the ligaments and pelvic muscles, making it easier for the baby to get into the pelvis. In addition, there is Sifting Birthball (using a gym ball) is a technique that involves the use of fingers to wrap the abdomen. A companion can help by spreading the mother's legs wide and taking a comfortable position, while the mother moves her hands as if she is gently pedaling a bicycle. This rebozo shifting technique is useful to help loosen the muscles and

ligaments in the uterus. And the last one, Sifting While Lying Down (Lying Down), is a technique in which the mother lies down using a pillow, with the head in a higher position. The fingers are placed around the waist to the hips, then shake slowly and gently, like a swinging motion (Nurpratiwi, 2020 in Febrianti, 2024).

In addition to the rebozo technique, warm compresses are also a non-pharmacological treatment that has been proven to be able to reduce the pain of childbirth of mothers in the active phase of normal labor. Warm compresses involve the use of warm water applied to the part of the body that is experiencing tension or pain. This warm temperature can increase blood flow to the area, relieve muscle tension, and provide a significant calming effect (Rahayu, 2024).

The steps to administer a warm water compress intervention are by using a rubber bag filled with warm water that has a temperature of 37° - 41°C, after which it is placed on the lower back by tilting the mother to the left and placed for 10 minutes (Saidah et al., 2022). A warm water compress applied to a woman's lower back is called the lumbosacral area. This area is located at the bottom of the spine, specifically between the lumbar bone (lower back) and the sacrum bone (the base of the spine). Pressure in this area during labor is often the main source of pain, because the fetal head presses on the nerve and bone tissue around the area so that the heat that is released will increase circulation to the area thereby improving tissue anoxia caused by pressure (Maysarah Nasution et al., 2023). Based on the results of studies that have been conducted, it is stated that before the administration of warm compresses, the results of the pain scale in the category of severe pain were controlled (46.05%) and after the administration of warm compresses in the category of moderate pain (58.83%) and concluded that this study has the effect of giving warm compresses on the reduction of labor pain and is one of the recommendations that can be given to all maternity mothers as one of the non-pharmacological treatment interventions (Rahayu, 2024).

There are various ways to measure pain intensity, including visual analogue scale (VAS), wong-baker FACES pain rating scale, numeric rating scale (NRS) and verbal description scale. In this study, a numeric rating scale (NRS) was used. Based on the results of the study (Nurpratiw, 2024) this instrument is very simple to use which only involves assessing the numbers 0 to 10 to describe the intensity of pain so that it is easy to understand. This NRS scale has also been widely carried out by previous studies to assess the level of pain in childbirth.

The application of the rebozo technique and warm compresses is relevant to midwifery service policies in primary health facilities because both are safe, simple, and effective non-pharmacological methods for reducing labor pain. Both techniques are in line with the principles of humanized childbirth and Continuity of Care, so they can be integrated into midwifery service standards to improve comfort, safety, and the quality of evidence-based care for mothers giving birth at the community health center level.

Based on the results of a preliminary survey that has been conducted in December 2024 in the Wanayasa Health Center Work Area, including the Pamitran Clinic, which is one of the clinics in the Wanayasa sub-district area with an average number of births of 35 people per month, after that PMB Nina with an average number of births of 10 people per month and PMB Dini with an average number of deliveries of 10 people per month. Pain reduction techniques carried out in these places include Bhirthing Ball, massage therapy and deep breathing but the provision of rebozo techniques and warm compresses has not been routinely carried out due to the availability of inadequate equipment such as quality rebozo fabrics or facilities to prepare rubber bags for warm compresses. Therefore, the researcher is interested in conducting a study on "Comparison of rebozo and warm compress techniques to reduce pain intensity in pregnant women during the first active phase in the Working Area of the Wanayasa Health Center, Purwakarta Regency".

RESEARCH METHODOLOGY

This study employed a quantitative approach with a quasi-experimental method using a pretest-posttest design without a control group. Data collection was conducted through interviews and

observation sheets. The study was carried out in April 2024 at SMAN 1 Penawartama, Tulang Bawang Regency, Lampung Province.

The study population consisted of 88 female students from grades X–XI, and 42 of them who experienced dysmenorrhea were selected through purposive sampling. The research procedure included preparation, implementation, and evaluation stages. Data were analyzed univariately and bivariately using the Wilcoxon Signed Rank Test to determine differences in pain intensity before and after the abdominal stretching intervention.

This research is quantitative using the Quasy Experimental research method. This study uses a Nonequivalent Control Group Design where there are two groups that are given different interventions. The interventions in this study is a comparison of rebozo techniques and warm compresses on the reduction of pain intensity in pregnant women during the first active phase in the Working Area of the Wanayasa Health Center, Purwakarta Regency. The population in this study is all active phase I maternity mothers in the Working Area of the Wanayasa Health Center, Purwakarta Regency, including Pamitran Clinic, PMB Nina and PMB Dini with an average accumulation of 55 people per month. The sampling method used in this study is with purposive samples. The sample criteria include inclusion criteria and exclusion criteria, with a sample size of 30 people where these criteria determine whether or not the sample can be used. Bivariate analysis in this study was carried out by means of a 2-mean paired test (Pre test and Post test), warm compresses using the Paired T-Test, rebozo technique used Wilcoxon test, and the comparison between the intervention using mann-whitney test.

RESULTS AND DISSCUSIONS

Results

Univariate Analysis

Table 1. Frequency distribution of respondent characteristics based on age, education and occupation

Variable		Rebozo		Warm compress	
		n	%	n	%
Age	20-35 years old	14	93.3%	13	83.7%
	>35 years old	1	6.7%	2	13.3%
Total		15	100%	15	100%
Education	S1	3	20.0%	3	13.4%
	SMA	12	80.0%	10	66.7%
	SD	0	0,0%	2	13,2%
Total		15	100%	15	100%
Work	Guru	3	20.0%	2	13.3%
	IRT	11	73.3%	11	73.3%
	Self employed	1	6.7%	3	10.0%
Total		15	100%	15	100%
Parity	G1P0A0	8	53,4%	12	80,0%
	G2P0A0	6	40,0%	2	13,4%
	G3P0A0	1	6,6%	1	6,6%
Total		15	100%	15	100%
unveiling	4	1	6,6%	1	6,6%
	5	3	20,0%	2	13,4%
	6	5	33,4%	7	46,6%
	7	6	40,0%	5	33,4%
Total		15	100%	15	100%

Based on table 1, it shows that in the group of maternity mothers who were given rebozo technique intervention, as many as 14 respondents (93.3%) were 20-35 years old, 12 respondents (80.0%) had a high school education and 11 respondents (73.3%) worked as housewives. In the group that was given the warm compress intervention, 13 respondents (83.7%) were aged 20-30

years, 10 respondents (66.7%) had a high school education and 11 respondents (73.3%) worked as housewives.

a. The average intensity of dysmenorrhea pain before abdominal stretching among adolescent girls at SMAN 1 Penawartama, Tulang Bawang Regency, Lampung Province, in 2024.

Table 2. Average intensity of dysmenorrhea pain before abdominal stretching

Variable	Total	Measurement	Median	Std Deviation	Min	Max
Pain Intensity	42	Pre-test	3.00	0.821	2	1

Based on Table 2, the average intensity of dysmenorrhea pain among 42 adolescent girls at SMAN 1 Penawartama before performing abdominal stretching was 3.00, classified as mild pain, with a standard deviation of 0.821. The minimum value was 2 (mild pain), and the maximum value was 4 (moderate pain).

b. The intensity of dysmenorrhea pain after abdominal stretching among adolescent girls at SMAN 1 Penawartama, Tulang Bawang Regency, Lampung Province, in 2024.

Table 3. Average intensity of dysmenorrhea pain after abdominal stretching

Variable	Total	Measurement	Median	Std Deviation	Min	Max
Pain Intensity	42	Post-test	1.00	0.477	1	2

Based on Table 3, the average intensity of dysmenorrhea pain among 42 adolescent girls at SMAN 1 Penawartama after performing abdominal stretching was 1.00, within the mild pain category, with a standard deviation of 0.477. The minimum value was 1 (mild pain), and the maximum was 2 (mild pain).

Normality Test

Table 4. Results of the shapiro-wilk normality test of the rebozo technique

Tests of Normality						
Kolmogorov-Smirnov				Shaphiro-Wilk		
	Statistic	df	Mr.	Statistic	df	Mr.
PRE PAIN	.276	15	.003	.816	15	.006
POST PAIN	.239	15	.021	.851	15	.018

Based on the results of the analysis in the table above, it shows that the results of the normality test in the rebozo technique are not abnormally distributed, because they do not meet the p-value of <0.05. So the Wilcoxon test is used as a substitute for the paired t-test. The Wilcoxon test tested whether there was a significant difference between the two groups without assuming a normal distribution.

Table 5. Results of shapiro-wilk warm compress normality test

Tests of Normality						
Kolmogorov-Smirnov				Shaphiro-Wilk		
	Statistic	df	Mr.	Statistic	df	Mr.
PRE PAIN	.127	15	.200	.897	15	.086
POST PAIN	.238	15	.005	.893	15	.074

Based on the results of the analysis in the table above, it shows that the results of the normality test on the warm compress are normally distributed, because it has met the p-value of <0.05. So the test used is the Paired T-Test used.

Bivariate Analysis

Table 6. Effect of pain level on active phase i childbirth in mothers before and after getting the rebozo technique

Variable	n	Pain Before Intervention					Pain After Intervention				
		Mean	*Std. Deviation*	*Std. Mean*	*Error*	*P Value*	*Mean*	*Std. Deviation*	*Std. Mean*	*Error*	*P Value*
Technical Rebozo	15	8,13	0,990	0,256		0,0001	3,27	1,280	0,330		0,0001

Based on Table 6, it shows the average pain level of respondents before the rebozo technique, namely with severe pain (8.13) and the average after the rebozo technique, namely with moderate pain (3.27). The results of the statistical test were obtained that the P-Value 0.0001 (<0.05) showed a significant difference between pain before and after the rebozo technique was performed, proving that the Ho hypothesis was rejected and Ha was accepted. In this study, it means that there is a significant influence of the rebozo technique in reducing pain in labor in the first phase of active labor in the Working Area of the Wanayasa Health Center.

Table 7. Effect of pain level on active phase i labor in mothers before and after getting a warm compress

Variable	n	Pain Before Intervention					Pain After Intervention				
		Mean	*Std. Deviation*	*Std. Mean*	*Error*	*P Value*	*Mean*	*Std. Deviation*	*Std. Mean*	*Error*	*P Value*
Warm Compress	15	7,60	1,183	0,306		0,0001	4,87	1,552	0,401		0,0001

Based on table 7, it shows the average pain level of respondents before warm compresses, namely with severe pain (7.60) and the average after warm compresses, namely with moderate pain (4.87). The results of the statistical test were obtained that the P-Value 0.0001 (<0.05) showed a significant difference between pain before and after this warm compress was performed, proving that the hypothesis of Ho was rejected and Ha was accepted. In this study, it means that there is a significant influence of the treatment of giving warm compresses in reducing pain in labor during the first active phase in the Working Area of the Wanayasa Health Center, especially in the Pamitran Clinic, TPMB Midwife Nina and TPMB Midwife Dini.

Table 8. Comparison of pain levels felt by pregnant women during the first active phase after receiving the rebozo technique and warm compresses

Group	N	Mean	S.D	S.E	P.Value
Technical Rebozo	15	3,27	1,280	0,330	
Warm Compress	15	4,87	1,552	0,401	0,0001

Based on table 8, it is found that the P-Value is 0.0001 (<0.05), this states that Ha is accepted and Ho is rejected. In this study, there was a difference between the reduction in the intensity of labor pain given by the rebozo technique treatment and warm compresses in reducing pain in labor phase I of the active phase in the Wanayasa Health Center Working Area, especially in the Pamitran Clinic, TPMB Midwife Nina and TPMB Midwife Dini.

Disscusion

The results demonstrate a significant reduction in dysmenorrhea pain intensity following the implementation of abdominal stretching. The average pre-intervention pain level was 3.00, decreasing to 1.00 post-intervention, with a p-value of 0.000 (<0.05). This finding confirms the efficacy of abdominal stretching in alleviating menstrual pain among adolescent girls. It supports Harahap et al. (2023), who noted that abdominal stretching increases beta-endorphin release, producing a physiological analgesic effect. This form of exercise reduces pain through muscle relaxation and improved blood circulation in the pelvic area. Prostaglandin levels—major

contributors to uterine contractions and menstrual pain—can be suppressed through increased progesterone levels stimulated by regular physical activity. Stretching also relaxes abdominal and pelvic muscles while enhancing tissue oxygenation. Gusti Handayani et al. (2023) explained that such exercise controls prostaglandin secretion and prevents excessive uterine contractions.

Psychologically, abdominal stretching also yields positive effects. Adolescents with dysmenorrhea often experience discomfort, fatigue, and difficulty concentrating. Regular stretching not only reduces pain but also improves mood and academic focus, enhancing quality of life and school productivity. Armour et al. (2019) indicated that dysmenorrhea-related disturbances may lead to school absenteeism and reduced academic performance.

Abdominal stretching is considered a safe, affordable, and practical non-pharmacological approach. Its effectiveness has been validated in several studies, including Faridah et al. (2019), Ardiani & Sani (2020), and Murfat (2022), all of which reported significant pain reduction following the intervention. Therefore, this technique is highly recommended for inclusion in physical education or adolescent reproductive health programs. Combining it with breathing relaxation may further enhance its therapeutic impact.

However, some participants did not experience a significant pain reduction. This could be due to improper technique, lack of motivation, or irregular practice. Individual pain responses also vary depending on stress levels, lifestyle, and hormonal factors. Thus, continuous education is necessary to ensure adolescents can perform the exercises correctly and independently.

CONCLUSION

Based on the results of the research that has been carried out, the following conclusions are obtained the level of pain in pregnant women before being given the rebozo technique was 8.13 and after being given the rebozo technique was on average 3.27, which proves that there is a difference between before and after being given treatmentAlmost all (90.8%) or 59 respondents had a positive attitude before the Reproductive Health Counseling was carried out through video media about the prevention of sexual behavior of at-risk adolescents, and all (100%) or 65 respondents had a positive attitude after health counseling reproduction through video media about the prevention of sexual behavior of adolescents at risk. The level of pain in women before giving warm compresses was 7.60 and after being given warm compresses was 4.87, which proves that there is a difference between before and after treatment. Comparison of the average value after intervention in maternity was the rebozo technique with an average score of 3.27 and warm compress with an average of 4.87, so it was concluded that there was a significant difference from the average of patients who were given the rebozo technique and warm compress treatment, where the rebozo technique was more effective than the administration of warm compresses on reducing the intensity of labor pain.

The findings confirm that the rebozo technique is more effective than warm compresses in reducing labor pain intensity during the first active phase of childbirth. This research contributes to strengthening evidence-based midwifery service policies by supporting the integration of traditional, low-cost, and non-pharmacological interventions—such as the rebozo technique—into standard maternal care protocols to enhance maternal comfort and safety. Practically, the results can guide policymakers and midwifery educators in formulating clinical practice guidelines and training programs focused on holistic, culturally sensitive pain management. Future research should explore the long-term physiological and psychological effects of the rebozo technique, employing longitudinal or comparative studies across different healthcare settings and cultural contexts to assess its sustained impact on maternal outcomes and childbirth experiences.

References

Afrilia, E. M., & Successty, C. E. (2021). *The effect of the rebozo technique on the length of period I in vaginal delivery*. *5*(1).

Agustina, E., Maharrani, T., Usnawati, N., & Kusumaningtyas, K. (2024). Differences in Labor Pain in the First Stage of the Active Phase Before and After Being Given Rebozo Shake The Apple Tree at TPMB Afah Fahmi, Surabaya City Area. *Jurnal Ilmiah Kebidanan (The Journal Of Midwifery)*, *12*(1), 101–109. https://doi.org/10.33992/jik.v12i1.3295

Amelia at al. (2019). *konsep dasar buku ajar persalinan*. https://doi.org/https://press.umsida.ac.id/index.php/umsidapress/article/view/978-602-5914-75-1

Anita. (2023). *Burnt water compresses and labor pain*. *1*, 22–28.

Arumsari. (2023). *Midwifery care for maternity in NY. E is 34 years old, G2 P1 A0 phase I with a focus on intervention in the administration of lemon aromatherapy to reduce pain in TPMB Sri Endang Kisnawati*. *8*(2), 15–20.

Ayu, I., Hasana, N., Sari, D., Zuniawati, L., & Diniah, S. (2024). Effect of Rebozo Technique Complementary Therapy on Reducing the Intensity of Labor Pain in Phase I of the Active Phase. *An Idea Health Journal*, *4*(03), 147–152.

Ayuningtyas. (2021). The *effectiveness of the rebozo technique on reducing the intensity of labor pain in pregnant women during the first active phase at the Depok Jaya maternity home in 2021*.

Azzizah. (2021). *Maternal labor pain in the first period at the midwife clinic Rita village mandailing natal in 2021 undergraduate midwifery study program*.

Bahrum. (2023). *Education to mothers and husbands about the benefits of the rebozzo technique in reducing labor pain*. 31–35.

Cecen Suci Hakameri, Rika Andriyani, Meli Kastia, & Sri Sevia Amalia. (2023). The Utilization of Warm Compress and Cold Compress Therapy in Overcoming Pregnancy and Childbirth Pain in Mother. *Journal of Medika: Medika*, *2*(2), 6–12. https://doi.org/10.31004/vwf9ma68

Christiana, I., & Kusumawati, D. (2021). The Effect of a Combination of Endorphin and Murrotal Massage on Pain in Period I Labor in Mrs. N Paspan, Banyuwangi Regency. *Scientific Journal of Nursing*, *7*(2), 344–350. https://doi.org/10.33023/jikep.v7i2.848

Fadila, N. U. R., & Eli, A. (2022). *Effect of the combination of oxytocin massage and lavender aromatherapy on the production of postpartum breast milk on days 3-9 at Ramlah Parjib 3 clinic*.

Fajrin, D. H., Audina, V., Health, P., & Pontianak, K. (2023). Difference in the Effect of Rebozo and Warm Compresses on Reducing the Scale of Labor Pain in Phase I of the Active Phase. *Health Journal of the Indonesian Ministry of Health Pangkalpinang*, *11*(2), 248–255. https://doi.org/10.32922/jkp.v11i2.877

Febrianti. (2024). *Midwifery Care in Reducing Labor Pain with the Rebozo Technique*. Budi Utama CV ISSUANCE GROUP.

Fitri. (2023). *The effectiveness of warm compresses on reducing pain intensity during the first active phase*. *13*, 1189–1200.

Handayani. (2020). Chapter III Research Methods. *Suparyanto and Rosad (2015*, *5*(3), 248–253.

Handayani. (2023). The *effectiveness of dry warm compresses and red ginger compresses on the scale of back pain in pregnant women in the third trimester* (M. K. Anik Kurniawati, S.Si.T., Bdn. (ed.)). PUBLISHER TAHTA MEDIA GROUP (CV Publishing Group tahta media group).

Haryanti, H. (2019). Comparison of warm compresses and cold compresses to changes in pain scale in pregnant women in the first period at the Pratama Mutiara Bunda Kawalu Clinic, Tasikmalaya City in 2016. *Bidkemas Health Journal*, *8*(2), 8–16. https://doi.org/10.48186/bidkes.v2i08.121

Hayati, N. (2024). *The Effect of Hypnobirthing Therapy on Reducing Pain Intensity in Pregnant Women at RSIABDT Jakarta in 2024*. *4*, 4732–4741.

Idryani. (2024). *Midwifery, childbirth and newborn care* (Rahmawati (ed.)). SALNESIA (CV. INDONESIAN SCIENCE FACILITIES). https://doi.org/https://doi.org/10.36590/penerbit.salnesia.1

Kasih, N. S., & Hamdani, I. (2023). Comparison of the Effectiveness of Pain Scale Assessment Based on Visual Analog Scale (VAS), Verbal Rating Scale (VRS), and Numeric Rating Scale (NRS) in Postoperative Patients with Sectio Caesarean (SC) at Muhammadiyah Medan Hospital. *Journal of Implementa Husada*, *4*(4), 272–282. https://jurnal.umsu.ac.id/index.php/JIH/article/view/16741

Lestari, E. D., & Handayani, S. (2024). The Effect of the Rebozo Technique on Reducing Pain Intensity in Pregnant Women During the First Active Phase in Pmb Sayinah, Bekasi Regency, West Java. *Journal of Public Health*, *5*, 73–81. https://doi.org/10.572349/verba.v2i1.363

Maysarah Nasution, Kamelia Sinaga, Azri Yani, Ribur Sinaga, & Imran Saputra Surbakti. (2023). The Effect of Warm Compresses on the Reduction of Labor Pain in the First Active Phase at Dr. Tengku Mansyur Hospital, Tanjung Balai City in 2023. *NAJ: Nursing Applied Journal*, *1*(4), 27–39. https://doi.org/10.57213/naj.v1i4.183

Musliha, I., Mandiri, B. P., Periuk, K., & Tangerang, J. K. (2023). *The effectiveness of the Rebozo Shake the Apple (RSTA) technique on pain intensity and duration of 1 active phase in multigrada maternal delivery*. *02*(10). http://dohara.or.id/index.php/isjnm%7C

Ningsih. (2023). *There is an Effectiveness of the Use of 8 Birth Balls on the Scale of Pain in Maternity at PMB Midwife "I" Bandung City*. 1–9.

Nurpratiwi. (2020). *Rebozo technique on pain intensity during the first active phase and the duration of labor in multigravidal mothers*. *4*, 293–304.

Nurpratiwi, Y., Setiawati, Y., Nurul Azizah, N., Health Sciences, F., Medika Suherman, U., & Nursing, Faculty of Health Sciences, M. (2024). Effect of rebozo shake the apple (RSTA) technique on the intensity of labor pain during active phase 1 in Primigravida mothers. In *Medika Malahayati Journal* (Vol. 8, Issue 1).

Nuzulia, A. (2024). Effect of rebozo technique and warm compress on the reduction of low back pain in pregnant women at Nugraha clinic. *Angewandte Chemie International Edition, 6(11), 951–952.*, *14*, 5–24.

Oktaverina, D. I. N. (2022). The Effect of Classical Music Therapy on the Reduction of Postoperative Pain of Sectio Caesarean Surgery in Postpartum Mothers *Braz Dent J.*, *33*(1), 1–12.

Oktavia, S. A. (2020). The Effect of the Combination of Counterpressure Technique with Birth Ball on Labor Pain During Active Phase 1 at Dirgahayu Hospital in 2020. In *Muhammadiah Medical Journal* (Vol. 2, Issue 2, pp. 76–83).

Pratiwi, D. at al. (2021). *Complementary midwifery care in overcoming labor painS*. TEXT LIBRARY.

Qudliya, A.O., Mardliana, N.Y., Annie, S.N., Safitri, L.N., Aliyah, G.R., Isah, S., Rahmaritha, A., & Sugiartu, M. (N.D.). *Liporan pangabaden capra musiarakta*. 1–21.

Rahayu, E. (2024). *Intensity of active phase pf first-stage labor pain in the wprking area*. 1209–1216.

Rahmawati, N., Kartika, I., Meliyanti, M., Hernawati, Y., & Ediawati, I. (2023). The Effect of the Rebozo Technique on the Pain of Childbirth of Pregnant Women in Phase I in Pmb Mrs. I Cibulakan Village in 2023. *STIKES Dharma Husada Bandung*, 5–24.

Saidah, H., Healthyni, C. S., & Wardaya, A. P. (2022). Effect of warm compresses on pain levels in labor during the active phase. *Judika (Journal of Nusantara Medika), 6*(2), 136–148.

Sales, WB, Oliveira, ASC, Rocha, ES, Constantino, AEA, Gerônimo, CAS, Elesbão, JVG, Fonseca, JDM, Cavalcante, RNS, Silva, RBTB & Pontes, I. (2020). *The rebozo technique in the care of women in the pregnancy-puerperal cycle: an integrative review*. *2020*, 1–23.

Sholistiawati, E., Tinggi, S., Health, I., & Indonesia, M. (2022). *The effect of warm compresses on the reduction of pain in pregnant women during the first active phase at the Umi Rahma Jatimulya Primary Clinic, Bekasi Regency in 2022*.

Soeparno, W. S., Sulistyowati, & Ajiningtyas, E. S. (2020). *Diploma III Nursing Yakpermas Banyumas Polytechnic, Diploma III Nursing Email: jurnalyakpermas@gmail.com Yakpermas Polytechnic Banyumas, Diploma III Nursing Winda Setianingsih Soeparno: Penga*. 74–83. file:///C:/Users/ASUS/Downloads/120-Article Text-219-1-10-20210503.pdf

Sst, D. S., Komariah, S., & Afni, R. (2022). *Current Midwifery Journal Warm water compresses to reduce labor pain during the first active phase at PMB Dince Safrina SST, 2021*. *2*, 44–50.

Sulistiawati. (2020). *Effectiveness of warm compresses on pain intensity during 1 phase of active normal labor at the Sungai Durian Health Center in Kubu Raya district*. *6*.

Surbakti, I. S., Sinaga, K., & Sitorus, R. (2023). *Education on Warm Compresses on the Reduction of Labor Pain in Phase I of the Active Phase at PMB Pera Simalingkar B Medan Tuntungan in 2023*. *1*(4), 156–162.

Suyani, S. (2020). Effect of warm compresses on the intensity of labor pain during the active phase I. *Journal of Midwifery*, *9*(1), 39. https://doi.org/10.26714/jk.9.1.2020.39-44

Wahyuni, S. at al. (2023). *Textbook for obstetrics, childbirth and newborn care*. CV. Science Techno Direct.

Wiladatil. (2021). *The effect of the rebozo technique on the level of stage 1 pain in Primipara maternity* mothers.

Yulizawati. (2019). *Textbook for Midwifery Care in Childbirth*. Indomedia Pustaka.

Za, E. 2011 in Z. 2020. (2020). *Textbook on Physiology of Pregnancy, Childbirth, Postpartum and Newborn* (M. K. Zahrah Zakiyah, S.SiT. (ed.)). Respati Press, Respati University, Yogyakarta. https://repositori.respati.ac.id/dokumen/R-00001467.pdf