

# THE EFFECTIVENESS OF THE REBOZO TECHNIQUE ON THE PROGRESS OF THE 1st CAGE OF LABOR

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**Abstract.** Generally, the progress of labor depends on the interaction of 3 variables, namely power, birth canal, and fetus. The progress of labor begins with the onset, which is also known as the first stage of labor. In this case, it is marked by the start of regular contractions, discharge of bloody mucus (bloody show), and the opening of the cervix. The first stage is complete when the dilatation of the uterine cervix is complete, in primigravidas it lasts about 13 hours (latent phase 7-8 hours, active phase 5-6 hours), while in multipara it lasts about 7 hours (latent phase + 4 hours, active phase active + 3 hours) (Hanifa, W. 2002). One of the efforts to deal with the prolonged first stage during labor can be done with pharmacological and non-pharmacological methods. One of the non-pharmacological methods is by using the Rebozo technique. Rebozo helps provide a wider pelvic space for the mother so that it is easier for the baby to descend the pelvis and the delivery process will be faster. The purpose of this study was to determine the effectiveness of rebozo on the progress of the active phase of the first stage of labor. The method in this study used a quasi-experimental design with one group pre-test and post-test. This research was conducted on women in the first stage of labor. This research had abnormal data distribution so it used the Wilcoxon test with a p-value = 0.000 < 0.05, which means that there were differences in the progress of labor in birthing mothers before and after being given the rebozo technique.

**Keywords:** Rebozo, Labor Progress, Kala I

## INTRODUCTION

The high national maternal mortality rate, which is 390/per 100,000 live births, is one of the problems faced by Indonesia, especially health workers. This fact ranks highest in ASEAN where efforts to reduce maternal mortality are placed as a top priority in health development. Based on data on the Maternal Mortality Rate (MMR) in Central Java Province in 2017, there were 88.58 per 100,000 live births (475 cases), a decrease compared to 2016, which was 109.62 per 100,000 live births (602). Causes of maternal death were bleeding (19.09%), hypertension in pregnancy (32.97%), others (30.37%), circulatory system disorders (12.36%), metabolic disorders (0.87%) infection (4.34)%. (Central Java Provincial Health Office, 2017). The first stage of labor begins when there are sufficient contractions and cervical dilatation and ends with complete dilation (10 cm) (Pusdiknakes, WHO, JHPIEGO, 2001).

The woman secretes mucus mixed with blood (bloody show), this mucus mixed with blood comes from the mucus of the cervical canal because the cervix begins to open or widen. While the blood comes from the capillaries around the cervical canal, it ruptures because of the shifts when the cervix opens. The mechanism of cervical opening differs between primigravidas and multigravidas. The duration of the first stage for primigravidas lasts 12 hours while for multigravidas it is around 8 hours. Based on the Friedman curve, it is calculated that the primigravida opening is 1 cm/hour and the multigravida opening is 2 cm/hour. In the process of labor, if there is weakness in uterine contractions, there will be an elongated opening of the cervix. The elongated cervical opening phase can be caused by weakness of the uterine muscles in contracting. In addition, the elongated opening of the cervix can also be caused by the pushing force possessed by the mother, fetal factors, birth canal factors, and maternal psychological factors which consist of the level of anxiety and fear experienced in facing labor. And if there is an elongated opening of the cervix, it will cause an extension of the first stage, which is called the lengthened first stage. (February 2018)

The results of the 2018 Riskesdas show that the maternal mortality rate (MMR) in Central Java Province is 421. If seen from these figures, the MMR in 2018 has decreased from 2017 totaling 475, and in 2016 amounting to 602. According to Munafiah (2017), one of the efforts to deal with the elongated first stage during labor can be carried out using pharmacological and non-pharmacological methods. One of the non-pharmacological methods is by using the Rebozo technique. Rebozo helps provide a wider pelvic space for the mother so that it is easier for the baby to descend the pelvis and the delivery process will be faster. Government policy through midwifery professional organizations

in improving the quality of service and competence of health workers, especially midwives in delivery assistance with the latest increase in knowledge in midwifery, namely delivery assistance with gentle birth, one of which is the rebozo technique. Rebozo is a technique for giving space to babies in a way that is fun for mothers. Rebozo can be used during labor to help the muscles and muscle fibers in the uterine ligaments relax to reduce pain during contractions (Cohen, Celeste 2015).

Rebozo has been popularly used in developed countries by health workers in assisting deliveries as a non-pharmacological method. The rebozo technique is a non-invasive technique, practically performed when the mother is in a standing, lying down, or kneeling position and both palms touch the floor. This involves gently controlled movement of the mother's hips from side to side using a specially woven scarf and is performed by a midwife or birth attendant (Dekker, 2018) In Indonesia, this technique has never been studied in labor mothers. The Rebozo technique is a traditional scarf or piece of cloth used by midwives in Iceland to help mothers give birth. With the Rebozo technique wrapped around the pelvis and buttocks, then gently rocking it, this movement can be done from the third trimester until delivery and is believed to relax pregnant women and help the baby find the birth canal. This technique can be done for pregnancy, childbirth, postpartum, and even for fertility (Dekker, 2018). In the last 2 years, some have started researching rebozo in Indonesia.

Based on research by Iversen, et al (2017) regarding the Rebozo technique for overcoming fetal malposition, there were 7 respondents, PROM was 3 respondents, the fetal decline was 3 respondents, pain relief was 1 respondent, strengthening contractions was 2 respondents, and dystocia was 1 respondent. Rebozo technique with standing, hands, knees, and lying down the experience of women with the Rebozo technique as a whole is very positive, one of which increases the feeling of comfort during labor. Cohen and Thomas' research (2015) describes three different techniques that can be used with Rebozo to correct fetal malposition during labor, carried out for 5-10 minutes, helping to relax the pelvic muscles and ligaments, allowing the fetus to rotate more freely according to its position, resulting in an unhindered birth. (Dekker, 2018). From the research of Khalimatussakdiah, N (2017) that in multigravida mothers with the duration of the first stage of labor, there were 18 respondents (51.4%) with a duration of 9 hours of labor. While the duration of labor in the second stage was 29 people (82.9%) with a duration of 61-100 minutes.

Based on data from mothers who gave birth at the Lydia Syfra Clinic in 2020 there were 102 mothers. From a preliminary study on 10 primigravida pregnant women who gave birth at the Lydia Syfra Kudus clinic, it was found that 6 mothers said that the progress of labor took a long time and the mother had attended yoga classes for pregnant women although not routinely, 4 mothers stated that the delivery process did not wait long and the mother attended yoga routine. The purpose of this study was to determine the effectiveness of the rebozo technique on the progress of the first stage of labor. This research has an outcome target as a complementary or natural therapy. The level of technology readiness (TKT) in this study is the rebozo technique for pregnant women before delivery as a complementary treatment.

## **METHODS**

The population in this study was 30 pregnant women giving birth in the first stage. The side technique uses total sampling. This type of research is a quasi-experimental research conducted at the Lydia Syfra Clinic in Kudus. The design of this study used a pre and posttest only control group design.

## **RESULTS AND DISCUSSION**

### **Results**

#### **1. Characteristics of Research Subjects**

Table 1 shows that the prevalence of the age of the majority of pregnant women aged 24-29 years is 12 (80%). For education, the majority graduated from tertiary institutions, as many as 12 (80%). For jobs, most of them work in the private sector at as many as 6 (40%).

**Table 1.** Frequency Distribution Based on Characteristics Research Subjects

Characteristics Research Subjects	Amount & %	
	N	%
<b>Age</b>		
24-29 Years	12	80%
30-36 Years	3	20%
<b>Education</b>		
junior high school	0	0%
high school	3	20%
PT	12	80%
<b>Work</b>		
Private	6	40%
Self-employed	5	33.33%
Country	1	6.67%
IRT	3	20%

Source: Primary Data of Research Subjects

## 2. Univariate analysis

Table 2 shows the data before the rebozo technique of labor progress as many as 12 (80%) were in the first stage of the 3-4 opening accelerated phase. However, after the rebozo technique, the progress of labor showed that 13 (86.66%) were in the first stage of the accelerated opening phase 4-9.

**Table 2.** Description of Labor Progress Before and After the Rebozo Technique

Labor Progress	Before		After	
	n	%	N	%
When I Phase Acceleration opening 3-4	12	80%	2	13.33%
When I Phase Dilatation maximum opening is 4-9	2	13.33%	13	86.66%
Kala I Opening Desclerasi Phase 9-10	1	6.67%		

Source: Primary Data of Research Subjects

## 3. Bivariate Analysis

In Table 3. Lower back pain in third-trimester pregnant women in the rebozo technique group using the Wilcoxon test. Based on this test, it shows a  $p\text{-value} = 0.000 < 0.05$ , which means that there are differences in the progress of labor in women giving birth before and after the intervention. The average value before the rebozo technique was  $1.33 \pm 4.93$  and after being given the rebozo technique the average pain decreased to  $1.15 \pm 2.20$ .

**Table 3.** The Effect of Labor Progress on Mothers Giving Birth Before and After in the Rebozo Technique Group

Variable	N	Mean $\pm$ SD	<i>P-value</i>
Before	15	$1.33 \pm 4.93$	0.000
After	15	$1.15 \pm 2.20$	

Source: SPSS Data Processing

## Discussion

Based on the results of the study, showed a  $p\text{-value} = 0.000 < 0.05$ , which means that there were differences in the progress of labor in women giving birth before and after in the intervention group. The average value before the rebozo technique was  $4.93 \pm 1.33$  and after the rebozo technique, the average progress of labor was  $1.15 \pm 2.20$ . According to Ahyar (2010) the duration of the active phase I stage of labor is divided into 3 phases, namely the 2-hour acceleration phase, 2-hour dilatation, and 2-hour deceleration phase. Based on the research of Khalimatussakdiah, N (2017) that in multigravida mothers with duration of the first stage of labor, there were 18 respondents (51.4%) with a duration of 9 hours of labor. While the duration of labor in the second stage was 29 people (82.9%) with a duration of 61-100 minutes. To overcome this need to do non-pharmacological therapy.

The rebozo technique is a non-pharmacological therapy to accelerate the opening of the cervix for birthing mothers. This technique originates from Mexico where women have a tradition of using rebozo before, during, and after giving birth. Rebozo is a long cloth that is usually used in everyday

activities. Wrap the rebozo around the pelvis and buttocks of the pregnant woman, then shake it during labor. This rebozo swing can relax the mother and help position the baby to be born into the birth canal. The results of the above study prove the effectiveness of the rebozo technique for opening the cervix to accelerate labor progress. The researcher conducted a study using the pre-experimental method which concluded that there were differences or discrepancies in the opening of the cervix in women giving birth before and after the rebozo technique was carried out compared to the control group. In this study, the control group underwent pelvic rocking. The results of Wulandary et al's research concluded that mothers in the first stage of labor who do pelvic rocking exercises can accelerate the progress of labor at the Ungaran Regional General Hospital (RSUD) (Wulandari, Wahyuni, 2019).

Some experts argue that rebozo provides the benefit of being able to relax more without the help of any medication. This makes this technique especially useful when labor is long and you start to feel uncomfortable about labor. In addition, this technique can also be used to provide space for the baby, so that the baby can be in the optimal position for delivery. This is in line with the results of a 2017 study by Iversen, et al in Denmark with a qualitative study, of 17 postpartum mother respondents who had used rebozo during labor, most of the respondents said that they used rebozo for fetal malposition because their baby was not in an optimal position. Only 1 in 17 took Rebozo for pain relief. Rebozo is done in a standing position, hands and knees, and lying down. Overall, respondents had a positive experience using rebozo, creating a sensation of pain reduction so that labor becomes more relaxed. Other results before 2014 the rebozo technique was only used in about 2% of planned normal births. However, after 2016, the rebozo technique was used by around 9% of Danish women (Iversen, et al, 2017).

In addition, according to Iversen, et al (2017) that the Rebozo Shake The Apples and Rebozo Sifting While Lying Down techniques also have a positive effect on childbirth, one of which is to increase the feeling of comfort during labor. As for Iversen's research, there is the Rebozo Shake The Apples technique and the Rebozo Sifting While Lying Down technique, which of the two techniques both provide patient comfort. Where the Rebozo technique can anatomically suppress the lumbar to a coccygeal area with striated or rebozo cloth, with the stimulus of the Rebozo technique it can stretch the pelvic muscles and release endorphins in the blood, and help regulate contractions and restore balance in the labor process.

## CONCLUSION

Based on statistical tests, it showed a p-value = 0.000 <0.05, which means that there were differences in the progress of labor in women giving birth before and after being given rebozo. The average value before the rebozo technique was  $1.33 \pm 4.93$  and after the rebozo technique, the average pain decreased to  $1.15 \pm 2.20$ .

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