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The Effect of The Rebozo (OLeS) Technique on The Low Back Pain of Pregnant Women at Aikmual Public Health Center

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Abstrak

Data survei awal di Puskesmas Aikmual didapatkan bahwa 90% ibu hamil trimester III mengalami nyeri pinggang. Hampir seluruh ibu hamil diberikan pijat tradisional dari dukun yang disebut Orah Lempot Sasak (OLeS) dan teknik tradisional yang disebut Rebozo. Pada penelitian ini peneliti akan memberikan kombinasi Teknik Rebozo dengan tradisi Orah Lempot Sasak yang biasa dilakukan oleh belian atau dukun beranak pada suku Sasak. Penelitian ini bertujuan untuk menganalisis pengaruh kombinasi Teknik Ribozo dan tradisi Orah Lempot Sasak terhadap penurunan nyeri pinggang pada ibu hamil trimester III. Penelitian ini merupakan penelitian pra eksperimen dengan kelompok kontrol. Responden yang digunakan adalah ibu hamil trimester III yang mengalami nyeri pinggang sebanyak 30 orang. Kelompok kontrol diberikan senam hamil biasa, sedangkan kelompok intervensi diberikan Rebozo yang dikombinasikan dengan Orah Lempot Sasak (OLeS). Hasil penelitian menunjukkan bahwa penggunaan kombinasi Rebozo Orah Lempot Sasak memiliki pengaruh yang signifikan terhadap penurunan nyeri pinggang bawah pada ibu hamil trimester III dengan nilai P sebesar 0,001. Pengobatan berbasis tradisional yang merupakan kombinasi Rebozo dan Orah Lempot Sasak efektif dalam menurunkan nyeri pinggang bawah pada ibu hamil trimester III.

Kata kunci: Rebozo, OLeS; pijat; tradisional; ibu hamil; nyeri pinggang

Abstract

Initial survey data at the Aikmual Public Health Center found that 90% of pregnant women in the third trimester experienced low back pain. Almost all pregnant women were given a traditional massage from a shaman which is called Orah Lempot Sasak (OLeS) and a traditional technique called Rebozo. In this study, researchers will provide a combination of the Rebozo Technique with the Orah Lempot Sasak tradition which is usually carried out by belian or birth attendants in the Sasak tribe. This research aims to analyze the effect of the combination of the Ribozo technique and the Orah Lempot Sasak tradition on reducing low back pain in third trimester pregnant women. This study is a pre-experimental study with control group. The respondents were 30 pregnant women who were in 3rd trimester and experience low back pain. The control group was given common pregnancy exercise, while the intervention group was given the Rebozo combined with Orah Lempot Sasak (OLeS). The research results showed a significant effect of using the Rebozo Orah Lempot Sasak combination on reducing low back pain in pregnant women in the third trimester with a P value of 0.001. The traditional based treatment, which is combination of Rebozo and Orah Lempot Sasak effective in reducing low back pain in third trimester pregnant women.

Keywords: *Rebozo; OLeS*; massage; traditional; pregnant; back pain

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 including nausea, heartburn, joint pain, back pain, dyspnea, nasal congestion, varicose veins, leg cramps (Susanti and Putri 2019).

Low back pain is a very common problem in pregnancy, especially in the third trimester of pregnancy. The phenomenon of pain has now become a complex problem which is defined by the international society for the study of pain as "unpleasant sensory and emotional experiences resulting from tissue damage, both actual and potential" (Burns et al, 2018). The phenomenon of pain in the back/waist of pregnant women is a complaint that is often reported among pregnant women, varying from 50% to 70%, according to previous studies in various countries (Yan et al, 2014), even 8% of them result in severe disability (Lee, 2016).

Based on an initial survey conducted by interviewing one of the midwives at the Aikmual Community Health Center, which is the planned location for the research, it was found that of the 10 third trimester pregnant women who came for an examination to the community health center, 90% experienced low back pain. The efforts made to overcome this include massage from a shaman or Orah Lempot Sasak (OLeS) and using ointments.

Several studies have examined various techniques for reducing low back pain in pregnant women. In this research, the researcher will provide a combination of the Ribozo Technique with the Orah Lempot Sasak tradition which is usually carried out by belian or birth attendants in the Sasak Tribe. The Ribozo technique is a non-pharmacological (traditional) technique that has been introduced by the hypnobirthing and prenatal gentle birth development team and has been widely applied by midwives to clients to help with complaints of low back pain during pregnancy and childbirth where this technique uses a scarf to gently shake the pregnant woman's hips. regularly, the aim is for the mother to feel relaxed, comfortable, reduce low back pain and optimize the position of the fetus (Simbolan and Siburian, 2021).

Meanwhile, Orah Lempot Sasak (OLeS) is a massage using a typical Sasak cloth, the technique is similar to the ribozo technique which is usually done by belian or dukun beranak. Sasak tribal society is still characterized by the presence of traditional birth attendants or belians. Pregnant women often go to traditional healers to have an orah/massage done with Sasak lempot to overcome the discomfort of their pregnancy. Pregnant women are accustomed to going to traditional healers for healing to treat low back pain at the end of pregnancy. Researchers assume that the ribozo technique combined with Orah Lempot Sasak (OLeS) will be easily accepted by pregnant women. Thus, the aim of this research is to identify the effect of the combination of the Ribozo technique and the Orah LEmpot Sasak (OLeS) tradition on reducing low back pain in third trimester pregnant women.

METHOD

The research was conducted using a quasi-experimental post test design with a statistical group comparison design approach, namely a pre-experimental design by adding a control group. The respondents of this study were 30 pregnant women taken from the population of pregnant women who made initial visit (K1) in 2022 at the Aikmual Public Health Center. The respondents were divided into two groups; 15 people in intervention (Rebozo Technique and OLes Tradition) and 15 people in control group (Pregnancy exercise). The sampling technique used was purposive sampling, following these criteria: inclusion criteria including third trimester of pregnancy, experiencing low back pain, not experience pregnancy complications and willing to participate in the research; and excluding criteria including pregnant women with physical disabilities and pregnant women who did not complete the intervention. When the respondents who met the criteria more than 30 respondents, than, they will be chosen randomly.

Instruments used in this research was questionnaire for respondents details including age, gestational age, occupation, education and NRS questionnaire for collecting data of low back pain before and after intervention. Prior to data collection, all respondents were asked to signed the informed consent. The control group were given treatment in the form of conventional exercise during the mother's class program carried out by midwives three times in every other day in a week. The measurement of low back pain was carried out before and after the series of the exercise. For the intervention group, the treatment of a combination of Ribozo and Orah Lempot Sasak (OLeS) techniques was provided in class for 1 week with 3 treatments at one-day intervals. The measurement of low back pain was carried out before and after the series of the treatment. Researchers are assisted by enumerators, namely midwifes, cadres and midwifery students who have previously been given an explanation of the stages of research activities and the standard operating procedure of the treatments. The data of parity, age, gestational age, education and occupation of the respondents was analyzed descriptively by calculating percentages and data on a numerical scale (ratio) was presented using a measure of central tendency. Bivariate analysis using the Mann Whitney non-parametric test.

RESULTS

Respondent characteristics: The ages of respondents in this study were between 19 and 43 years. The age of 19 is considered young, although this is a healthy age for pregnancy, and the age for 43 is considered high risk for complication in pregnancy. In the control group the mean age of respondents was 31.06 years (SD ± 2.87) while in the intervention group the mean age of respondents was 22.2 years (SD ± 3.19).

Table 1. Respondents based on age, gestational age, education, occupation, weight, height and parity

No	Variabel	Group	
		Intervention (n: 15) %	**Control (n=15) %**
1.	Age (year)		
	a. < 20	0 (0,0)	1 (6,7)
	b. 20-35	13 (86,7)	10 (66,7)
	c. > 35	2 (13,3)	4 (26,6)
	d. Mean±SD	28,9±5,06	31,06±4,10
	e. minimum-maximum	22-38	19-43
2.	Gestasional Age (week)		
	a. Mean±SD	31,8±3,10	31,9-3,1
	b. minimum-maximum	28-36	28-36
3	Education		
	a. Elementary school	2 (13,3)	2 (13,3)
	b. Junior Highschool	3 (20,0)	5 (33,3)
	c. Senior high school)	7 (36,7)	3 (20,0)
	d. Higher education	3 (20,0)	5 (33,3)
4	Occupation		
	a. Housewife (IRT)	13 (86,7)	15 (100)
	b. Worker	2 (33,3)	0 (0,0)
5	Weight		
	a. Mean±SD	59,2±5,89	60,7±7,29
	b. minimum-maximum	49 – 72	49 – 75
6	Height		
	a. Mean±SD	152,7±4,29	152,4±4,45
	b. minimum-maximum	148 – 163	148 – 163
7	Parity		
	Primipara	2 (13,3)	1 (6,7)
	Multipara	13 (86,7)	12 (80,0)
	Grande Multi Para	0 (0,0)	2 (13,3)

Results showed that there was no significant difference in the mean of gestational age between the two groups. In the intervention and control group the mean gestational age was 31.8 and 31.9 weeks respectively and the standard deviation in both groups was 3.1. This shows that the control and intervention groups based on gestational age are relatively homogeneous, which is in the 3rd trimester between 28 and 32 weeks of gestation. The education level of respondents varies from elementary school, junior high school, senior high school, and higher education. In the intervention group, the highest level of education was secondary or high school, 7 people (36.7%), overall, most of the respondents were high school graduates. In the control group, all 15 respondents were houswives, while in the intervention group there were 2 respondents who did not work (13.3%).

Table 1 also showed that the weight of pregnant women in the intervention group has an average value of 59.2 and 60.7 and a standard deviation of 5.89 and 7.29 as well as a minimum body weight. and the maximum ranges from 49-75 kg so that the mother's weight data in the two groups is relatively not homogeneous, while the mother's height data in the intervention group and the control group has the same average value, that is 152.4 cm, while the standard deviation is different, is 4.29 and 4.45, while the minimum and maximum height between the control and intervention groups was the same, is 148–167 cm. The results of the study showed that parity in the intervention group varied, there

were primipara and multipara, while in the control group there were 2 (13.3%) pregnant women who had grandemulti para parity.

Analysis of the effect of the combination of Rebozo and OLes on reducing low back pain in pregnant women using Mann Whitney Test.

Table 2. Results of Mann Whitney Test on the low back pain of pregnant women

No	Variable	Group		*P Value*
		Intervention(n=15)	Control (n=15)	
1.	Back Pain			0,001*
	a. Mean±Sum	20,5 ±307	10,5±158	
	b. minimum-maximum	2 – 6	1 – 2	

On table 2, it can be seen that there is a significant effect with P Value = 0.001 in the control and intervention groups regarding the Rebozo OLeS combination on reducing low back pain in third trimester pregnant women. In the control group, the average reduction in low back pain was 10.5, while in the intervention group it was 20.5, so it is very clear that there is a significant influence between the combination of rebozo OLeS on reducing low back pain in third trimester pregnant women. Low back pain is a normal thing felt by pregnant women. Low back pain arises due to the influence of hormones. The cause of low back pain is multifactorial and is often associated with biomechanical, hormonal and vascular changes, educational age, occupation, gestational age, height, weight and parity.

DISCUSSION

Low back pain is a common complaint experienced by pregnant women. This is generally characterized by axial or para-sagittal discomfort in the lower waist area and is musculoskeletal in nature (Burns et al, 2018). This can be caused by a combination of mechanical, hormonal, circulatory and psychosocial factors (Burns et al, 2018). The rebozo technique is a non-pharmacological therapy to reduce low back pain during pregnancy. Research has proven the effectiveness of the rebozo OLeS technique for low back pain so that it can reduce low back pain in pregnancy (Simbolan and Siburian, 2021). The rebozo technique functions to optimize the position of the fetus because the ligament muscles in the pelvis and uterus relieve pressure on the sacroiliac joints and provide stability and reduce weakness in the pelvis as well as increasing vascularization in the pelvic muscles (Simbolan and Siburian, 2021).

In this research, researchers used 3 types of rebozo techniques, namely shifting, Rebozo Sifting While Down and shaking apple tree. Rebozo shifting is useful for helping the ligament muscles in the uterus, while apple tree is more about pelvic muscle ligaments. If the mother's ligament muscles are tense and the uterus is in a tilted position making it difficult for the baby to experience low back pain (Purnamasari dan Widyawati), then the rebozo technique is very helpful for the mother during the birthing process. Researchers conducted research using a pre-experimental method which concluded

that there were differences in low back pain between the treatment group (Rebozo OLeS technique) and the control group.

This study results showed the effect of the Rebozo technique combined with OLeS for low back pain in the third trimester of pregnancy. Some researchers stated that rebozo can create positive psychological effects from the feelings and support that pregnant women get from the birth support team such as midwives, husbands and families when they use rebozo (Simbolon and Siburian, 2020). In this study the Mann - Whitney Test showed that there was a difference in the pain level between intervention and control group. The mean rank value of the rebozo technique intervention is 20.05, which is greater than the control value, namely 10.05, which means that the rebozo OLeS technique is more effective in reducing low back pain.

US homebirth midwife Gail Tully points out that tension in the pelvic ligaments can impact the space the baby has to travel in the womb, this technique is Shifting which is done in rebozo by asking the mother to be on all fours, or laying down her body while hugging the birth ball (Yan et al, 2014). The companion/midwife will pull the cloth and gently shake the mother's stomach like a sifting motion. This movement can reduce pain in the first stage because it relaxes the lower abdomen and makes you feel more comfortable. The right twist will make the mother feel hugged and trigger the release of the hormone oxytocin or the happy hormone so that the waist feels very comfortable, and even reduces low back pain. The next rebozo technique is the shake the apple tree technique, which tends to target the pelvic muscle ligaments so that it can reduce pain in the waist. This technique is done by slowly moving the mother's buttocks according to comfort using a scarf and supporting both hands on a gym ball or you can use a sofa chair covered with pillows. Lamaze in Bobak states that 85-90% of births take place with pain, and only 10-15% of births take place without pain (Nanji and Carvalho (2020). According to the article Rebozo Technique: Helping Childbirth to Be More Comfortable with Jarik Cloth, to get a comfortable birth, use the Rebozo technique where the partner will Wrap a cloth around the mother's stomach when the mother starts to feel contractions, the birth attendant will pull the cloth and gently shake the cloth on the mother's stomach. The right twist will make the mother feel like she is being hugged and trigger the release of the hormone oxytocin which can make the waist very comfortable. Not only limited to comfort during pregnancy, Rebozo also helps provide wider pelvic space for the mother so that the baby can descend the pelvis more easily and the birth process is faster.

CUNCLUSION

Based on the results of the research and discussion regarding the Effect of CS Pregnancy Exercises on the Smoothness of the Childbirth Process, conclusions can be drawn, namely the average age of respondents is 28.2 - 23.0 years with the youngest age range being 16 - 31 years, the average gestational age being 29.3 - 29.4 weeks with a gestational age range of 28 – 32 weeks, the level of formal education that respondents had was mostly high school or secondary education, most of the respondents

did not work or were housewives. In the Newborn Baby Weight Variable, a homogeneity test was carried out, there was a difference, namely the mean was higher in the intervention group compared to the control group. There is an influence of Creating Space pregnancy exercise on the smoothness of the delivery process (P value 0.000).

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