

The Effectiveness Of Acupressur And Rebozzo Techniques In Preparation For Delivery In Mandiri Midwife Practices, Gowa Regency

Sri Wahyuni Bahrums^{1*}, Irma Sri Rejeki², Fadlyatul Fajri³

^{1,2,3}Lecturer Of Three Midwifery Diploma,STIKES Gunung Sari,Sulawesi Selatan, Indonesia

*Corresponding Author:

Email : swbahrun@gmail.com

Abstract

Uterine contractions play a very important role in the smooth delivery process. However, some mothers experience problems in uterine contractions which will result in the length of the labor process. So in some cases need induction assistance. Advances in medical science in terms of acupressure and rebozzo have become several solutions for certain treatments without involving chemistry in it. This study aims to be applied directly to mothers in labor in this case to help reduce contraction pain during the labor process. This study used the independent t-test of Mann Whitney which was previously tested for normality. The test results showed that acupressure and rebozzo were effective in reducing labor pain in mothers who were facing labor at the Independent Midwife Practices in Gowa district, as seen from the results of the independent t-test, which was obtained p-value = 0.000 (0.05). This study is useful for mothers to reduce labor pain by means of acupressure and rebozzo therapy.

Keywords: Acupressure, rebozzo and labor pain.

I. INTRODUCTION

Labor is the stage that ends in the expulsion of the products of conception. The stage of labor is divided into 4 stages. The first stage or commonly referred to as stage 1 begins when the cervix is dilated or dilated until the baby is born [1], [2]. WHO (World Health Organization) stated that between 2000 and 2017 the ratio of maternal deaths to the number of maternal deaths per 100,000 live births decreased by about 38%. 94% of all maternal deaths occur in low- and middle-income countries. Skilled care during pregnancy, childbirth and the puerperium is considered capable of saving the lives of mothers and babies [3]. In Indonesia alone, throughout 2021, an increase of 3794 women died. Meanwhile, in 2020 there were 3074 cases of maternal deaths. In some cases, this is due to the COVID-19 pandemic period, which makes mothers afraid to come to the hospital and choose to come to the midwife or need midwife home care services [4], [5]. This makes the visits of pregnant and maternity women to the practice of midwives increase, so it is considered important for midwives to know and learn techniques that are able to help smooth non-pharmacological deliveries according to the function of midwives as care givers. Uterine contractions play a very important role in the smooth delivery process. However, some mothers experience problems in uterine contractions which will result in the length of the labor process. So in some cases need induction assistance. Advances in medical science in terms of acupressure and rebozzo have become several solutions for certain treatments without involving chemistry in it. The history of acupressure is a traditional medicine originating from Japan and has grown to the Asian continent more than 5000 years ago. The working principle of acupressure is to stimulate 14 meridian systems. Acupressure works by identifying a disease based on meridian flow.

It has also been proven that just touching can relieve fatigue in the body, improve blood circulation and remove toxins [6], [7]. The Ministry of Health of the Republic of Indonesia also explained that acupressure can be used to increase body stamina, improve blood circulation, improve sleep quality and reduce stress or calm the mind [5]. The acupressure meridian pathways include the SP6 point which functions to help smooth uterine contractions and relieve pain in laboring mothers. Giving SP6 acupressure performed at the SP6 point, also known as san yin jiao, is a channel that runs dermatomically L2 and L1 then goes to T12 and T5. The sympathetic nerves controlling the uterus through the pelvic plexus receive preganglionic

fibers out of T5 to T4 so that stimulation of this acupressure point can change the physiological function of the uterus. The location of the Sp6 point is 3 cun (4 fingers) above the inner ankle, massaged clockwise. Stimulation at this point can increase the concentration of yin yang energy that can start work. The Yin energy effect of acupressure can increase uterine contractions because it has been shown to increase the hormone oxytocin. During childbirth, there is a blockage of the meridians which causes obstruction of the flow of the meridians flowing through the body. Stimulus at SP 6 or LI 4 points can open blockages and facilitate meridian flow. It also makes the mother calmer during labor. Stimulus at this point can also increase the hormone oxytocin from the pituitary gland which causes increased uterine contractions during labor. SP6 acupressure stimulates the body to release endorphins, which are natural pain relievers. Endorphins also create feelings of comfort and well-being [8]. Acupressure can increase uterine contractions in preparation for labor. This acupressure method certainly does not cause side effects or harm to the patient so that this can be the care provided by the midwife during delivery and delivery assistance. While the rebozo technique using the help of a long scarf/shawl in the mother's position is also a technique that has been popularly used by health workers in developed countries as a non-pharmacological technique [9]. The technique will result in the length of the labor process. So in some cases need induction assistance.

Advances in medical science in terms of acupressure have become several solutions for certain treatments without involving chemistry in it. rebozo is used to help provide room for a wider pelvis so that the baby is easier to descend the pelvis and the delivery process is faster. With the rebozo technique, it is hoped that the first stage will be prolonged [2], [10]. The difference between this study and the previous one is that this study directly saw the effect of the two treatments between acupressure and the rebozo technique. Rebozo can be used during labor to help the muscles and muscle fibers in the uterine ligament relax so as to reduce pain during contractions [11]. Rebozo has been popularly used in developed countries by health workers in assisting childbirth as a non-pharmacological method. The rebozo technique is a non-invasive technique, practically done when the mother is giving birth in a standing, lying or knee position and both palms touching the floor. This involves gently controlled side-to-side movements of the mother's hips using a specially woven scarf, and is performed by a midwife or birth attendant [12]. The authors hypothesized that the rebozo technique relaxes the pelvic muscles and ligaments, allowing the fetus to more freely complete the main movements of birth unimpeded. Therefore, rebozo can be used without fear of causing the fetus to change from an optimal position to a malposition. The rebozo technique is not indicated in pregnancies with an anterior placenta that would lead to placental abruption. Rebozo is also not allowed to be done during contractions so as not to disturb or add more pressure to the uterus. The rebozo technique involves pulling the left and right ends of the scarf or shawl towards the companion and the mother pulling the part that is tied away. Kneeling position and arms folded on a gymball or chair [11], [13]. The goal to be achieved in this study is that it is expected to become new knowledge that can be applied directly to maternity mothers in this case helping contractions during the labor process.

II. METHODS

This study used a pre-experimental research design with a satisfic group comparison design approach to determine the effectiveness of SP6 acupressure and the rebozo technique on uterine contractions and reduction of labor pain in the treatment group and the control group. Test results in this study using the independent t-test Mann Whitney U test which was previously tested for normality. SP6 point acupressure techniques and rebozo were given as long as there were contractions during the first stage of labor. The location of the study was in the Independent Practice of Midwives in Gowa Regency with a total of 10 Independent Midwives Practices. The population in this study were Primigravida maternity mothers in PMB, Gowa Regency. The sample of this study was selected using the purposive sampling technique, with the inclusion criteria of primigravida maternity women who had no history of miscarriage, were willing to be respondents, fetal presentation was head, no history of placental abruption, term pregnancy.

III. RESULT AND DISCUSSION

Characteristics of Respondents

Respondents in this study (n=97) were given acupressure and rebozzo therapy.

Table 1. Distribution of Maternal Age and Gestational Age Given Acupressure and Rebozzo Technique in Independent Midwife Practice in Gowa Regency

Variable	Minimum	Maximum	Mean	N
Age	15.00	45.00	27.5876	97
Gestational Age	36.00	41.5	37.660	97

Source: Primary Data, 2022

The table above shows that of the 97 respondents, the average age of the mother is 27 years. The average gestational age of the mother is more than 37 weeks.

Table 2. Distribution of the Frequency of Pre- and Post-Test Childbirth Pain when Given Acupressure and Rebozzo Techniques in the Independent Midwife Practice of Gowa Regency

Variable	Pre Treatment of Acupressure and Rebozzo		Post Treatment of Acupressure and Rebozzo	
	F	%	F	%
Mild Pain	0	0	24	24.7
Moderate Pain	30	30.9	63	64.9
Controlled Severe Pain	63	64.9	10	10.4
Uncontrolled Severe Pain	4	4.2	0	0
Total	97	100	97	100

Source: Primary Data, 2022

From the table above, it can be seen that from before the acupressure and rebozzo treatment there were still 4 (4.4%) with uncontrolled severe pain and the high number of patients with controlled severe pain was 63 (64.9%). Then in the post acupressure and rebozzo treatment there were no more respondents who felt severe uncontrolled pain and the decrease in pain was reflected in the number of respondents who still felt mild pain as much as 24 (24.7%).

Table 3. Frequency Distribution of Mother's Readiness in Facing Childbirth After Acupressure Treatment and Rebozzo Technique in Independent Midwives Practice Gowa Regency

Variable	F	%
Ready	91	93.8
Not Ready	6	6.2
Total	97	100

Source: Primary Data, 2022

From table 3 above, it can be seen that the readiness of the mother after the acupressure and rebozzo treatment left 6 (6.2%) samples that were not ready and the rest of the samples were ready for childbirth.

Table 4. Frequency Distribution of Mother's Knowledge of Acupressure and Rebozzo on Mothers Facing Childbirth in the Practice of Independent Midwives in Gowa Regency

Variabel	Pre Test		Post Test	
	F	%	F	%
Acupressure				
Know	34	35.1	81	83.5
Don't know	63	64.9	16	16.5
Rebozzo				
Know	43	44.3	88	90.7
Don't know	54	55.7	9	9.3
Total	97	100	97	100

Source: Primary Data, 2022

Table 4 shows that respondents' knowledge of acupressure became known after being given therapy and explanation with a total sample of 81 (83.5%) knowing and 88 (90.7%) rebozzo knowing. The Effectiveness of Labor Pain on Acupressure and Rebozzo in Mothers Facing Labor in the Independent Midwife Practice of Gowa Regency. The pain scale used to assess maternal pain before and after

therapy is using the Bourbonis scale which consists of five criteria, namely no pain, mild pain, moderate pain, controlled severe pain and uncontrolled severe pain.

Table 5. Spearman's Test of Labor Pain Correlation in Pre and Post Maternal Treatment of Acupressure and Rebozzo on Mothers Facing Labor in Independent Midwives Practice Gowa Regency

Pre Test	Post Test				P Value
	Mild Pain	Moderate Pain	Controlled Severe Pain	Total	
Moderate Pain	13	17	0	30	0.000
Controlled Severe Pain	11	44	8	63	
Uncontrolled Severe Pain	0	2	2	4	
Total	24	63	10	97	

Source: Primary Data, 2022

Table 5 shows the correlation test between pre and post test there is an effect of changes in pain felt by the mother as seen from the test results $p\text{-value} = 0.000 (<0.05)$.

Table 6. The Effectiveness of Labor Pain on Acupressure and Rebozzo in Mothers Facing Labor in the Independent Midwife Practice of Gowa Regency

Kelompok Perlakuan	Mean Rank	Sum of Ranks	Mann-Whitney U	P Value	N
Pre Perlakuan	132.12	12419.50	1163.500	0.000	97
Post Perlakuan	60.99	5916.50			97
Total					194

Source: Primary Data, 2022

Table 6 shows that acupressure and rebozzo are effective in reducing labor pain in mothers who are facing labor at the Independent Midwife Practice in Gowa district as seen from the results of the independent t-test, which is obtained $p\text{-value} = 0.000 (0.05)$. In table 1 the average mother who became the respondent was 27 years old. This illustrates that the age of the mother who is the respondent is a mature age to face childbirth. According to research from [14] that the best age for pregnant women is the age of 20-30 years. Other studies also say that the age above 35 years is an age that is prone to complications so that pregnant women under 35 years of age are the best age to have a safe pregnancy [15]. So the researchers assume that pregnant women with an average age of 27 years is a safe age to undergo pregnancy and reduce the risk that can worsen the situation. Table 1 shows the gestational age or average maternal gestational age of >28 weeks, which is the gestational age entering the third trimester. Meanwhile, the average mother gave birth at 37 weeks of gestation, which is term or term. This is because researchers have selected mothers who are respondents in the third trimester. This is supported by the theory of [16] that the age of 36 to 38 weeks of normal gestation, the myometrium enters a period of preparation for childbirth.

Table 2 shows the frequency distribution of pre- and post-test labor pains when given acupressure and rebozzo techniques at the Independent Midwife Practice in Gowa Regency, there is a clear change that before being given treatment in the form of acupressure and rebozzo techniques, there are still mothers who feel severe uncontrolled pain. and the number of respondents who felt controlled severe pain dominated the 5 criteria or levels of pain felt by the mother. Then after being given treatment in the form of acupressure and rebozzo techniques, there were no more mothers who felt severe uncontrolled pain and a decrease in the number of patients who felt controlled severe pain decreased to the level of pain felt to moderate pain. This is also supported by the results of the correlation test before and after acupressure and rebozzo injuries to the pain felt by the mother during labor, namely getting a $p\text{-value} = 0.000 (<0.05)$. Table 4 shows the distribution of mother's knowledge before and after being given treatment. Seen a significant change between the mother's knowledge before treatment and explanation of acupressure with the results before treatment who did not know as many as 63 (64.9%) respondents to 16 (16.5%) respondents who knew. Then on the results of mother's knowledge of rebozzo, 54 (55.7%) before treatment got results and after treatment decreased drastically as many as 9 (9.3%) who did not know about rebozzo. The researcher assumes that knowledge is very important because everything can be known for good or bad depending on the knowledge that has been

possessed. This is in accordance with the theory of [17] that there are six levels of knowledge in the cognitive domain and the initial stage is Know.

Table 6 is the result of the independent t-test Mann Whitney-U which was previously tested for normality. In this test, it was found that mothers who were given acupressure and rebozzo at the time of delivery were effective in reducing the pain felt by the mother as seen from the significance result of 0.000 (<0.05). The researcher assumes that this happens because the mother who is the respondent feels a decrease in pain due to the rebozzo method which helps the mother's back up and is like being hugged tightly upwards, causing a sense of comfort. The rebozzo technique has long been proven to help mothers reduce pain when entering the labor preparation period and also helps reduce the latent phase of labor [18]. In addition to the rebozzo technique, this study also performed acupressure therapy on the SP6 point which is at the point of three fingers above the ankle. Mothers are given acupressure therapy when the pain or pain subsides. This is easy to do without disturbing the mother's activities when she feels pain during labor. The combination of these two non-pharmacological therapies has a good effect on the labor process. Acupressure which causes a good contraction effect and rebozzo which gives a comfortable and light feeling on the mother's back makes the delivery process fast and without feeling great pain felt by most of the respondents.

IV. CONCLUSION

Acupressure and rebozzo therapy during labor preparation are very beneficial for mothers in reducing labor pain and assisting contractions during labor. Suggestions for future researchers are to compare the groups giving acupressure and rebozzo so that they can see which therapy is the best and most effective in reducing pain and improving contractions in the latent phase to the active phase.

V. ACKNOWLEDGMENTS

Acknowledgments to DIPA, Directorate of Research, Technology and Community Service, Directorate General of Higher Education, Research and Technology, Ministry of Education and Culture, Research and Technology because it has provided an opportunity for researchers to get research grants for novice lecturers.

REFERENCE

- [1] A. Kurniawati, D. Dasuki, and F. Kartini, "Efektivitas Latihan Birth Ball Terhadap Penurunan Nyeri Persalinan Kala I Fase Aktif pada Primigravida," *J. Ners dan Kebidanan Indones.*, vol. 5, no. 1, p. 1, 2017, doi: 10.21927/jnki.2017.5(1).1-10.
- [2] D. Munafiah, L. Puji, A. Mike, M. Parada, M. Rosa, and M. Demu, "Manfaat Teknik Rebozo Terhadap Kemajuan Persalinan," vol. 1, no. 3, pp. 23–27, 2020.
- [3] WHO, "Maternal Mortality," *WHO (World Health Organization)*, 2019. .
- [4] Kemenkes (Kementerian Kesehatan), "Angka Kematian Ibu dan anak meningkat pada tahun 2021," *Kementeri. Kesehat.*, 2021.
- [5] Natasya Maulidiawati, "Kemenkes: Angka kematian ibu dan anak tahun ini meningkat," *Alinea.id*, 2021. .
- [6] D Murdiyanti, *Terapi Komplementer Konsep Dan Aplikasi Dalam. Keperawatan*. Bantul Yogyakarta, 2019.
- [7] Y. A. Majid and P. S. Rini, "Terapi Akupresur Memberikan Rasa Tenang dan Nyaman serta Mampu Menurunkan Tekanan Darah Lansia," *J. Aisyah J. Ilmu Kesehat.*, vol. 1, no. 1, pp. 79–86, 2016, doi: 10.30604/jika.v1i1.11.
- [8] G. A. Ariesty, A. Mariza, N. Evrianasari, and N. Isnaini, "Akupresur Sp6 Terhadap Nyeri Persalinan Kala I Fase Aktif," *Midwifery J.*, vol. 1, no. 2, pp. 42–49, 2021, [Online]. Available: <http://ejurnalmalahayati.ac.id/index.php/MJ/article/view/3428>.
- [9] P. Yuriati and E. Khoiriyah, "Persalinan nyaman dengan teknik rebozo," vol. 12, no. 2, pp. 287–291, 2021.
- [10] D. Jaskara, "Healthy Pregnancy Gentle Birth and Mindful Parenting," *Child Birth Int.*, 2020.
- [11] Cohen and Celeste, "Rebozo Technique for Fetal Malposition in Labor," *Midwifery Women's Heal*, 2015.
- [12] R. Dekker, "Rebozo During Labor for Pain and Relief," 2018. .
- [13] heidi syndeburn, "Rebozo Technique," 2020.

- [14] C. Bellieni, "The Best Age for Pregnancy and Undue Pressures.," *J. Fam. Reprod. Heal.*, vol. 10, no. 3, pp. 104–107, 2016, [Online]. Available: <http://www.ncbi.nlm.nih.gov/pubmed/28101110><http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC5241353>.
- [15] Sukma dan Sari, "Pengaruh Faktor Usia Ibu Hamil Terhadap Jenis Persalinan di RSUD DR . H Abdul Moeloek Provinsi Lampung," *Majority*, vol. 9, no. 2, pp. 1–5, 2020.
- [16] J. K. Cunningham, F.G., S. L. Leveno, C. Y. Bloom, John c Houth., dwight j Rouse, and catherine y Spong, *Obstetri Williams*, 1st ed. Jakarta: EGC, 2014.
- [17] S. Notoatmodjo, *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta, 2018.
- [18] J. Davis, "Rebozo in an NHS setting," *AIMS a better birth*, vol. 26, no. 4, 2014, [Online]. Available: <https://www.aims.org.uk/journal/item/rebozo-in-an-nhs-setting>.