

Rebozo Technique And Nipple Stimulation On The Length Of Labor In Period I In Maternity

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ABSTRACT

Childbirth is the process of movement of the fetus, placenta and membranes from the uterus through the birth canal. This process starts from the opening and dilation of the cervix caused by uterine contractions with regular frequency, duration, and strength. The Maternal Mortality Rate (AKI) in maternity reached 189 per 100 thousand live births, Indonesia ranked second highest in ASEAN. The cause of maternal death is 80% caused by direct factors (partus congestion, bleeding, eclampsia, sepsis, hypertension in pregnancy, and complications of abortion. To reduce AKI, pain management and appropriate childbirth care efforts are needed, namely pharmacological methods and non-pharmacological methods. The rebozo technique and nipple stimulation are non-pharmacological methods of complementary therapy in childbirth. Method: The purpose of this study is to determine the effectiveness of the rebozo technique and nipple pacifier stimulation on the duration of labor I. Type of experimental quantitative research with a case control design. The sampling technique in this study is purposive sampling, which is based on inclusion and exclusion criteria, with an independent t test and a sample of 27 maternity mothers, from PMB Saumi Fijriyah, PMB Kuswantiningsih, PMB Emi narimawati. The research period is from September to October 2024. Results: The results of the One Way Anova Analysis test obtained a significance value of α 0.119. Because the significance value α 0.119 > α 0.05, H_0 was accepted and H_1 was rejected, meaning that there was no significant difference in the length of time during labor in the Rebozo Technique, nipple stimulation group and the control group. Conclusion: The conclusion of this study is that there is no significant difference in the length of the first stage of labor in the Rebozo technique group, nipple stimulation and the control group because it is influenced by many factors.

Keywords: duration of labor; rebozo technique; stimulation of nipples

INTRODUCTION

Maternal and infant mortality rates are two indicators that are commonly used to determine the degree of health in a country. In Indonesia, these two things are of concern to the government because the Maternal and Infant Mortality Rate (MMR) in the country ranks in the top three in ASEAN. Based on data from the 2020 Population Census, maternal AKI reached 189 per 100 thousand live births. This figure makes Indonesia rank second highest in ASEAN in terms of maternal mortality, much higher than Malaysia, Brunei, Thailand, and Vietnam which are already below 100 per 100 thousand live births (Afrilia & Suksesty, 2021). To reduce the causative factors of AKI, pain management and appropriate childbirth care efforts are needed. Efforts that can be made for care management in labor pain and optimization of labor duration can use 2 methods, namely pharmacological methods and non-pharmacological methods (Diastuti et al., 2024).

Pharmacological methods that can be used to minimize pain and optimize the length of labor time are narcotic analgesia, regional analgesia, and intra-theal labor analgesia or ILA. Nonpharmacological methods can be useful to release muscle tension, reduce physical tension and pain so that anxiety will reduce anxiety and pain during the delivery process. Non-pharmacological methods that can be carried out by midwives applying complementary therapy

in childbirth assistance. Complementary therapies that can be applied in childbirth help include relaxation techniques, acupressure, aromatherapy, massage pain management, and rebozo techniques (Diastuti et al., 2024). Rebozo is a technique to give space to the baby in a way that is fun for the mother. Rebozo can be used during labor to help the muscles and muscle fibers in the uterine ligament relax so that it can reduce pain when contractions occur (Hutabarat et al., 2022). The use of non-pharmacological therapy to shorten the duration of Phase I of labor is another stimulation of nipples. Nipple stimulation is one way that can be used to increase uterine contractions. This technique can stimulate the formation of natural oxytocin in the mother's body and is channeled into the uterus causing contractions. Oxytocin is a hormone released by the posterior pituitary gland by pulsing in response to stimulation (Bilqis Ida Fatmawati Weni Anggraini et al, 2021).

The rebozo technique and nipple stimulation is a non-pharmacological method as an effort that can be made for the management of labor pain care and the optimization of labor duration in helping to accelerate labor in the first period and can reduce the causative factors of AKI. The purpose of this study is to determine the effectiveness of the rebozo technique and nipple stimulation on the duration of labor in the first period.

METHOD

This type of experimental quantitative research is based on a case control design. The sampling technique in this study is purposive sampling, which is based on inclusion and exclusion criteria, with an independent t test and a sample of 27 maternity mothers, from PMB Saumi Fijriyah, PMB Kuswantiningsih, PMB Emi narimawati. The research period is from September to October 2024.

RESULT AND DISCUSSION

The research has been carried out during September 2024 with the number of samples for each group is 9 people, so the total sample is 27 people. The sample in this study was divided into 3 groups, namely the Rebozo group, the nipple putting stimulation group, and the control group. Based on the data obtained, it is then tabulated and presented in a table based on the length of delivery. The results of the One Way Anova Analysis test obtained a significance value of $\alpha 0.119$. Because the significance value $\alpha 0.119 > \alpha 0.05$, H_0 was accepted and H_1 was rejected, meaning that there was no significant difference in the length of time during labor in the Rebozo Technique, Nipple nipple stimulation group and the control group.

The length of labor is the time needed during the labor process, where the normal time of labor in multigravida during active phase 1 ranges from 6-8 hours or 360-480 minutes. This can be influenced by factors such as productive age, multigravida and physiological parity such as cervical portion thickness, his and maternal strength in straining during childbirth (Ita Ayu Agustin, 2023). The rebozo technique group had a shorter average time compared to the nipple nipple group and the control group, which was 3.7 hours, which means 1 hour faster than the nipple nipple stimulation group and 1.3 hours faster than the control group. The results of this study are in accordance with several previous studies. According to Munafiah et al., n.d., 2020) the rebozo technique is useful for shortening the time of childbirth in Phase I. Rebozo helps provide more pelvic space so that the baby can descend the pelvis more easily and the delivery process becomes faster. The rebozo technique is a non-pharmacological therapy to accelerate the opening of the cervix of pregnant women.

According to Yulidian Nurpratiwi, Muhammad Hadi, 2020 that the rebozo technique helps give birth more comfortably. Rebozo is a technique to give space to the baby in the womb in a way that is pleasant for the mother. This Rebozo technique can be used during labor to help the muscles and muscle fibers in the uterine ligament relax so that it can reduce pain when there are contractions. Rebozo has been popularly used in developed countries by health workers in performing childbirth assistance as a non-pharmacological method. The rebozo technique is a practical non-invasive technique that is carried out when the mother gives birth in a standing, lying or kneeling position and both palms touching the floor. It involves gently controlled movement of the mother's hips from side to side using a special woven scarf, and is performed by a midwife or delivery companion (Iversen et al., 2017). The rebozo technique functions as an optimization of the position of the fetus because the pelvic and uterine ligament muscles are in a tense position so that the fetus in the uterus is in an unoptimal position. In this study, the researcher used a combination of 2 types of rebozo techniques, namely shifting and shaking apple trees. Rebozo shifting is useful for helping the ligament muscles in the uterus while the apple tree is more to the pelvic muscle ligaments. If the mother's ligament muscles are tense and in a poor delivery position, it will result in the uterus in an inclined position so that it is difficult for the baby to descend to the pelvis. Where it should be at 38 weeks gestation, the fetus has descended to the pelvis. So the rebozo technique is very helpful for mothers in the delivery process (Afrilia & Suksesty, 2023).

The nipple stimulation group had a mean time value of 4.7 hours while the control group had a mean time of 5 hours. Judging from the mean of the two groups, there was a difference in the length of labor time during phase I. The nipple stimulation group had an average faster time than the control group with a time gap of 0.3 hours. According to research from Bilqis Ida Fatmawati Weni Anggraini et al, 2021 nipple stimulation is proven to shorten the duration of labor I. Stimulation of nipples is one way that can be used to increase uterine contractions. Stimulation of nipples can stimulate the production of the natural hormone oxytocin. The hormone oxytocin has a large function in the occurrence of childbirth according to the theory of childbirth. The hormone oxytocin produced by hipofises pars posterior has the function of increasing uterine contractions so that labor occurs. When nipple stimulation is not supported by physical factors and a good psychological state, uterine contractions will not be adequate. Recommendations during childbirth such as eating, drinking, mobilizing, adjusting position and deep breathing need to be done by the maternity mother so that it can support uterine work. Another effort that can be made by the family is to provide support, accompany and meet the needs of the mother during childbirth. In addition, midwives need to provide support by providing childbirth care that is in accordance with the mother's condition so that uterine contractions can increase.

The results of this study are not in accordance with the results of previous studies due to various factors. One of the factors that caused the lack of time difference between the rebozo technique, nipple stimulation group and the group without treatment was the time of the start of observation during the first period of delivery. All respondents were observed not at the same time (the opening of the same cervix). Respondents came to the delivery site at different times and in different openings between respondents so that the start time of the long monitoring of childbirth in Phase I could not be at the same time. In the research conducted at PMB Saumi, there were 3 multigravida mothers and 6 primigravida mothers. The long duration of labor when given the rebozo technique has less than maximum progress because in childbirth, primigravida has a less soft birth canal so that it can cause head drops to occur for a rather long time compared to multigravida mothers. This

is one of the reasons why there is no influence of the rebozo technique on the length of labor. The inclusion criteria of the respondents were 20-35 years old. This factor also affects the length of childbirth in phase I. Age 20-35 years is a healthy reproductive age which is the best time to reproduce healthy and safe. The condition of the mother's body and reproductive organs is still in a healthy state so that it can facilitate the delivery process. According to Nursalam, the older you are, the more mature and strong a person will be in thinking and working, while according to Hurlock, the age of 20-35 years is said to be adulthood and reproduction, where at this time psychologically it is expected to be able to face problems during childbirth.

CONCLUSION

The mean value in the Rebozo technique group was 3.77 hours, in the nipple stimulation group was 4.7 hours and in the control group was 5 hours. From the mean value, it can be concluded that there is an average difference between the rebozo technique group, nipple stimulation and the control group. The α value was $0.119 > \alpha 0.05$ which means that there was no significant difference in the length of time during labor in the Rebozo Technique, Nipple stimulation group and the control group.

REFERENCES

- Afrilia, E. M., & Successty, C. E. (2021). The Effect of the Rebozo Technique On Lama. 5(1).
- Afrilia, E. M., & Successty, C. E. (2023). The Effect of the Rebozo Technique on the Length of Time I in Vaginal Delivery. *IMJ (Indonesian Midwifery Journal)*, 5(1), 28. <https://doi.org/10.31000/imj.v5i1.6010>
- Bilqis, Ida Fatmawati, Weni Anggraini, et al. (2021). Effect of Nipple Stimulation on Uterine Contraction in Active Phase I Childbirth at Aura Syifa Hospital. *Health Care*, 12(2), 20–23.
- Diastuti, V. S., Hartati, D., Meihartat, T., & Purwanti, H. (2024). Effectiveness Of The Rebozo Method And Zilgrei Method On The Duration Of The First Stage In Vaginal Delivery. *JKM (Jurnal Kebidanan Malahayati)*, 10(5), 409–417. <https://doi.org/10.33024/jkm.v10i5.14440>
- Hutabarat, J., Suryani, S., & SN, T. M. (2022). Rebozo relaxation in pregnant women in the third trimester at the Tanjung Pratama & Pmb Asni Sitio Clinic. *Journal of BINAKES*, 3(1), 21–25. <https://doi.org/10.35910/binakes.v3i1.589>
- Ita Ayu Agustin. (2023). The Effect of the Rebozo Technique on Pain and Duration of Labor During 1 Active Phase. *WOMB Midwifery Journal*, 2(2), 42–49. <https://doi.org/10.54832/wombmidj.v2i2.125>
- Iversen, M. L., Midtgaard, J., Ekelin, M., & Hegaard, H. K. (2017). Danish women's experiences of the rebozo technique during labour: A qualitative explorative study. *Sexual and Reproductive Healthcare*, 11, 79–85. <https://doi.org/10.1016/j.srhc.2016.10.005>
- Munafiah, D., Puji, L., Mike, A., Parada, M., Rosa, M., & Demu, M. (n.d.). The benefits of the Rebozo technique on the progress of childbirth. 1(3), 23–27.
- Yulidian Nurpratiwi, Muhammad Hadi, I. (2020). Rebozo Technique on Pain Intensity During Active Phase I and Duration of Labor in Multigrvida Mothers. 4, 293–304.