


Effect of SP6 Acupressure on First-Period Labor Pain

Wiwi Wardani Tanjung¹, Tetty Misbah², Eva Yusnita Nasution³

^{1,3}Midwifery Study Program STIKES Darmais Padangsidempuan, North Sumatra, Indonesia

²Midwifery, STIKES Namira Madina, North Sumatra, Indonesia

Article Info	ABSTRACT
<p>Article history:</p> <p>Received July 12, 2023 Revised July 27, 2023 Accepted July 30, 2023</p> <hr/> <p>Corresponding Author:</p> <p>Wiwi Wardani Tanjung Midwifery Study Program STIKES Darmais Padangsidempuan, North Sumatra, Indonesia Email: wiiwardani85@gmail.com</p>	<p>The process of labor begins with uterine contractions that cause pain and discomfort in laboring mothers. The main problem in laboring mothers is pain. Pain is a single sensation caused by a specific stimulus that is subjective and different for each individual. One of the non-pharmaceutical therapies for overcoming labor pain is acupressure. The aim is to determine the effect of SP6 acupressure on labor pain during the first stage at the Midwife Clinic Nelly M. Harahap Padangsidempuan City. This study was conducted using a quasi-experimental research method (pseudo-experiment) using a Pretest posttest only design. The number of samples in this study was 20 respondents. sampling method using a purposive sampling technique. Data were analyzed univariately and bivariately. The results of the study found labor pain before the SP6 Acupressure action in laboring mothers at time I with a mean of 6.65 and after the SP6 Acupressure action in laboring mothers at time I with a mean value of 3.05. This study concludes that there is an effect of Acupressure SP6 on labor pain at time I with a p-value of 0.002. It is recommended that laboring women gain knowledge and experience in the implementation of Acupressure SP6 on labor pain at stage I.</p> <p>Keywords: <i>Labor Pain, Stage I, SP6 Acupressure.</i></p> <p>This article is licensed under a Creative Commons Attribution 4.0 International License.</p> 

1. INTRODUCTION

According to the World Health Organization (WHO, 2019), maternal mortality rate is the number of maternal deaths resulting from the process of pregnancy, childbirth, and postpartum which is used as an indicator of women's health status. [1] Maternal mortality rate (MMR) is one of the global targets of Sustainable Development Goals (SDGs) in reducing maternal mortality to 70 per 100,000 live births by 2030 [2]. According to WHO (2019), the maternal mortality rate in the world is 303,000. The maternal mortality rate in ASEAN is 235 per 100,000 live births. [3]

In developing countries 20% to 50% of hospital deliveries are performed by Sectio Caesaria, the high rate of surgery is due to mothers who want to give birth preferring relatively painless surgery. [3]

According to data from the Indonesian Demographic and Health Survey (IDHS), the maternal mortality rate increased from 228 per 100,000 live births in 2002-2007 to 359 per 100,000 live births in 2007-2012. The maternal mortality rate decreased in 2012-2015 to 305 per 100,000 live births and the number of maternal deaths in Indonesia in 2019 was 4,221 cases out of 14,640 [4].

Renstra data from Lampung Provincial Health Office (2015) found that 15% of mothers gave birth with mild pain, 35% of labor was accompanied by moderate pain, 30% of labor was accompanied by severe pain, and 20% of labor with very severe pain [5].

The main problem in laboring mothers is pain. [Pain is a single sensation caused by a specific stimulus that is subjective and different between each individual because it is influenced by psychosocial factors and a person's endorphin culture so that the person feels more pain [7]. Pain that cannot be resolved will have an impact on prolonged labor. Long labor can have a negative impact, both on the mother and the baby she is carrying, and can increase maternal and child mortality rates. Long labor can cause impacts, such as dehydration, infection, fatigue in the mother, asphyxia in the baby, and fetal death in the womb [8].

The efforts that can be made to overcome labor pain in laboring mothers are by using pharmacy and non-pharmacy therapy [9] Pharmacy therapy which is usually given to overcome labor pain with analgesic drugs. While non-pharmacy therapy that can be given is acupressure, acupuncture, relaxation, hypnotherapy, hypnosis, and music [10].

The results of the preliminary survey at the Nelly M. Harahap Midwife Clinic in Padangsidimpuan City obtained the results of interviews from 7 mothers in labor all experiencing labor pain during the first stage. Then I asked the mother whether they knew about acupressure SP6, and of the 7 mothers I asked they all did not know about acupressure SP6 at all, 5 mothers experiencing labor pain did handling by including massaging the back of the mother and 2 respondents by walking. Then I asked the midwife, and the midwife said she had never done SP6 acupressure on laboring mothers.

The purpose of this study was to determine the effect of SP6 acupressure on labor pain during stage I at the Midwife Clinic Nelly M. Padangsidimpuan City in 2023.

2. METHOD

The type of research used is quasi-experimental research (pseudo-experiment) [11]. Pseudo-experimentation is experimental research that is not as strong as pure experimentation. called pseudo-experimentation because, in this type of experimental research, many variables cannot be controlled. (12) This research design uses a Pretest posttest only design to know the Effect of Acupressure SP on Period I Labor Pain at the Midwife Clinic Nelly M. Harahap Padangsidimpuan City in 2023 [13].

The study population was all mothers who experienced labor pain during stage I at the Midwife Clinic Nelly M. Harahap Padangsidimpuan City in January - February 2023. The sample in this study was taken using the purposive sampling method technique. Purposive sampling is a sampling technique for certain considerations/criteria. [14], namely, mothers who experience labor pain during stage I, and mothers who do not use drugs to reduce pain, at the Midwife Nelly M. Harahap clinic in Padangsidimpuan City in January - February 2023 as many as 20 people.

Data analysis was carried out univariate and bivariate with paired sample t-tests to see the effect between one variable and another. [Before the data is analyzed, a data normality test is performed using Kolmogorov-Smirnov if the data is normally distributed. Then an independent test will be carried out to determine the effect of SP6 acupressure on labor pain in the first stage at the Nelly M. Harahap Midwife Clinic in Padangsidimpuan City in 2023. If p-value $\alpha \leq (0.05)$ then H_0 is rejected and H_a is accepted, which means that there is an effect of SP6 acupressure on labor pain during the first stage. If p-value $\alpha > (0.05)$ then H_0 is accepted and H_a fails to be accepted, which means that there is no effect of SP6 acupressure on labor pain during stage I.

3. RESULTS AND DISCUSSION

3.1 Result

Effect of SP6 Acupressure on First-Period Labor Pain

Table 1. Effect of SP6 Acupressure on First-Period Labor Pain

Variables	N	Mean	SD	Min	Max	Significant
Labor Pain Before Acupressure SP6	20	6,63	1,785	2	9	0,000
Labor pain after acupressure SP6	20	3,05	1,395	1	6	

Based on Table 1, it can be seen that the average (mean) of labor pain Kala I at the Midwife Clinic Nelly M. Harahap Padangsidimpuan City before the SP6 Acupressure is 6.63 with a minimum value of 2 and a maximum value of 9 and the average (mean) of labor pain after the SP6 Acupressure is 3.05 with a minimum value of 1 and a maximum value of 6. After conducting the Paired T-test, the results were obtained with a p-value of 0.000.

3.2 Discussion

Based on the results of research on the effect of Sp6 acupressure on labor pain during stage I at the Midwife Clinic Nelly M. Harahap Padangsidimpuan City, it shows that most of the decrease in labor pain was carried out to 20 respondents with an average difference in pain before acupressure SP6 with after acupressure was 3.58. The results of the study found that the p-value was 0.002, indicating the effect of sp6 acupressure on labor pain in the first stage. The level of labor pain after acupressure sp6 has decreased compared to the level of labor pain before acupressure sp6 is performed, and it is proven that acupressure sp6 given to laboring mothers in stage I has a significant benefit to reduce pain during labor. It can be seen that the mean value before acupressure sp6 was 6.63 and after acupressure SP6 the mean value became 3.05.

Kusmiran Eni (2014) states that pain arises due to hormone imbalance, namely an increase in prostaglandin hormone which will cause excess uterine contractions. [16] In a relaxed state, the body also stops the adrenaline hormone and all the hormones needed when we are stressed [17] because the hormones estrogen and progesterone and the adrenaline hormone are produced from the same chemical building blocks, [18] when we reduce stress, we have also reduced the production of these hormones and by doing acupressure sp6 will release the endorphin hormone to reduce pain during labor [19].

Pain in labor is a subjective experience [20] arising from changes in the function of organs seen in determining the progress of labor through the birth canal [21]. The intensity of the pain depends on the sensation of severity of the pain itself [22].

The results of this study are supported by previous research conducted by Ghina Ayu Ariesty et al (2020), the average research results of labor pain before being given the SP6 Acupressure technique 7.3 and after being given the SP6 Acupressure technique were 5.47. There is an effect of the SP6 acupressure technique on labor pain during the active phase I at Airan Raya Hospital, South Lampung in 2020 (p-value 0.002) with a decrease of 1.83 [23].

Research according to Calik & Komurcu, 2014 In his research entitled The Effect of SP6 Acupuncture Stimulation on Labor Pain and Labor Duration, stated that acupressure treatment at point SP6 proved effective in reducing the intensity of labor pain and shortening labor time [24].

According to the researcher's assumption, there is an effect of Acupressure SP6 on labor pain during stage I, this can be seen from the results of the study which show a decrease in the labor pain scale seen from respondents before acupressure SP6 and after acupressure SP6. One way to reduce labor pain during the first stage is by doing massage movements [25] 4 fingers above the ankles, focus and concentration when doing acupressure, then psychologically the birth mother already has confidence in herself that acupressure can reduce labor pain during the first stage.

4. CONCLUSION

From the results of research on the effect of Acupressure SP6 on labor pain during the first stage, the following conclusions were obtained: The average labor pain before the SP6 Acupressure action in laboring mothers at stage I was 6.65. The average labor pain after the SP6 Acupressure action in laboring mothers in the first stage is 3.05. There is an effect of Acupressure SP6 on labor pain during the first stage with a p-value of 0.000. For Respondents, it is hoped that the birth mother will gain knowledge and experience in the implementation of Acupressure SP6 on labor pain during the first stage. The research site is expected to provide useful information about the effect of Acupressure SP6 on labor pain during the first stage and can provide facilities such as telon oil, and so on. For education, it is hoped that the results of this study will become a reference for midwifery in devoting themselves to the community, and also students can conduct counseling in the community so that everyone knows that SP6 acupressure can reduce pain during labor.

REFERENCES

- [1] World Health Organization (WHO, 2019). Maternal Morbidity Through: <https://.who.int/news room/fact-sheets/detail/maternal-morbidity>, accessed February 18, 2019.
- [2] Sustainable Development Goals SDGs (2017). SDGs Health Indicators in Indonesia
- [3] ASEAN Secretariat, (2020) experience. Poltekkes Jogja. ac. Id
- [4] Indonesian Demographic and Health Survey, (2017). Central Bureau of Statistics, Ministry of Health of the Republic of Indonesia. Via: <https://www.bps.go.id>.
- [5] Ministry of Health of Lampung Province, (2015). Renstra of Lampung Provincial Health Office, Bandar Lampung.
- [6] Tanjung, Wiwi Wardani. Antoni A. 2019. Effectiveness of Endorphin Massage on Period I Labor Pain Intensity in Maternity. Indonesian Health Scientific Journal
- [7] Potter, P. A (2009). Fundamentals of Nursing (7th ed. Vol. Volume 1). Jakarta: Salemba Medika.
- [8] McMahan, S. B., Koltzenburg, M., Tracey, I., and Truk, D. C. (2013). Wall & Melzack's Textbook of Pain, Expert Consult -Online and Print.
- [9] Wulandari, Ratna & Nainggolan, Ramadhani & Harahap, Riska & Harahap, Ica. (2022). The Effectiveness of Oxytocin Massage Towards Increasing Breast Milk Production in Aek Haruaya Village, Portibi District. International Journal of Public Health Excellence (IJPHE). 1. 174-178
- [10] Supliyani, Elin. (2017). "The Effect of Back Massage on the Intensity of Pain of First Period Labor in Bogor." Midwife 3(1): 22-29.
- [11] Tanjung, Wiwi Wardani. 2021. The Effect of Rolling Massage Technique on the Smoothness of Milk Expulsion in Pregnant Women in Trimester Iii. PANNMED Scientific Journal (Pharmacist, Analyst, Nurse, Nutrition, Midwifery, Environment, Dentist). Volume 16 No 1, pp 220-223.. <http://ojs.poltekkes-medan.ac.id/pannmed/article/view/1060>
- [12] Notoatmodjo, S 2012, Health Research Methodology, Jakarta: PT Rineka Cipta.
- [13] Rostina Sundayana. (2018). Education Research Statistics. Bandung: CV. Alfabeta.

- [14] Sugiyono. (2016). *Quantitative, Qualitative, and R&D Research Methods*. Bandung: PT Alfabet.
- [15] Siregar, Nurelilasari & Batubara, Rini & Pohan, Sakinah. (2022). The Effect of Self Hypnosis on the Reduction of Anxiety of Pregnant Women in Trimester III Practice Midwife Anni Rizkiah. *International Journal of Public Health Excellence (IJPHE)*. 1. 74-79. 10.55299/ijphe.v1i2.34.
- [16] Kusmiran, (2014) *Reproductive Health of Adolescents and Women*. Jakarta. Selemba Medika.
- [17] Lowdermilk, D. L., Perry, S. E., and Cashion, K. R., and Olshansky, E. F., (2016) *Maternity & women's health care (11th edition .ed.)*.
- [18] Lowdermilk, et al (2014) *Maternity nursing (8th edition, revised reprint. ed.)*.
- [19] Cunningham, et al. 2013. *Williams Obstetrics 23rd Edition Volume 1*. Jakarta: EGC.
- [20] Maryunani, A. (2010). *Pain in labor*. Jakarta: CV. Trans Info Media
- [21] Rezeki, S., Nurullita, U., and Krestanti, R. (2013). Level of Pain in the First Period of Labor through Back - Effleurage and Counter Pressure Techniques. *Journal of Maternity Nursing*
- [22] Kozier, B. (2011). *Fundamentals of Nursing: Concepts, Process, and Practice*: Pearson Education, Limited.
- [23] Ghina Ayu Aristya, et al (2021). SP6 Acupressure on Active Phase I Labor Pain. *MJ (Midwifery Journal)*,
- [24] Calik KY, Komurchu N. (2014). Effects of SP6 Acupuncture Point Stimulation on Labor Pain and Duration of Labor. *Iran Red Crescent Med J*. 2014 October: 16 (10): e16461
- [25] Supliyani, Elin. (2017). "The Effect of Back Massage on the Intensity of Pain of First Period Labor in Bogor." *Midwife* 3(1): 22-29.