

MIDWIFERY CARE FOR ACTIVE PHASE FIRST-STAGE LABOR WITH MASSAGE COUNTER PRESSURE TO REDUCE CONTRACTION PAIN

Hardina Najwa Solissa¹, Sri Ernawati^{2*}, L.M. Zainal Abidin K³

^{1,2,3} Politeknik Baubau, Buabau, Indonesia

ARTICLE INFORMATION

Received: 5 August 2025

Revised : 9 September 2025

Accepted: 14 October 2025

DOI:

KEYWORDS

Keywords : Labor Pain, Active Phase of the First Stage Massage Counter Pressure

CORRESPONDING AUTHOR

Name : Sri Ernawati

Address: BTN Topaz 3 Blok C51 Kota Baubau

Email : sriernawati3mai5@gmail.com

A B S T R A C T

Background: Pain during the active phase of the first stage of labor is a physiological response to increasingly strong and regular uterine contractions. Inadequately managed pain may reduce maternal comfort and interfere with adaptation during labor. **Objective:** This case study aimed to describe intrapartum midwifery care for a woman experiencing contraction pain through the application of massage counter pressure. **Subject:** Mrs. "N", 35 years old, G7P1A5, at 42 weeks and 1 day of gestation, in the active phase of the first stage of labor at PMB Fatmawaty. **Methods:** A qualitative case study was conducted using interviews, observation, physical examination, and documentation. Midwifery care followed the seven-step Varney approach and was documented using SOAP. Pain intensity was assessed using the Numeric Rating Scale (NRS) before and after the intervention. **Results:** The initial assessment showed 6 cm cervical dilatation, four contractions per 10 minutes lasting 40–50 seconds, and a pain score of 8. Massage counter pressure was administered five times during contractions from 22:30 to 00:30 Central Indonesian Time. Following the intervention, the pain score decreased to 6. The mother appeared more relaxed, was able to regulate her breathing, and reported greater comfort. Cervical dilatation reached 10 cm at 01:00, and spontaneous vaginal birth occurred at 01:29. **Conclusion:** In this case, massage counter pressure was accompanied by a two-point reduction in pain intensity and improved maternal comfort. This technique may be considered as a non-pharmacological intervention while maternal and fetal conditions continue to be monitored.

INTRODUCTION

Labor is a physiological process characterized by the birth of the baby and the expulsion of the placenta. Although labor occurs naturally, each stage requires adequate monitoring because changes in maternal and fetal conditions may occur rapidly and may require further management. Quality intrapartum care should not only focus on maternal and neonatal safety but should also support a safe, comfortable, and positive childbirth experience while respecting the mother's needs and rights in decision-making throughout the labor process (Organization, 2018). Care that takes maternal needs into account is also an important component of quality maternity services, particularly in fulfilling the mother's need for comfort and support during labor (Rahakbauw & Ernawati, 2025).

Intrapartum midwifery care is a continuous service provided from the first stage through the fourth stage of labor to monitor maternal and fetal conditions, provide interventions according to clinical needs, and support safe childbirth (Altahira et al. 2025). The active phase of the first stage of labor is characterized by increasingly strong and regular uterine contractions accompanied by progressive cervical dilatation. Increasing contractions, cervical dilatation, and descent of the presenting fetal part may cause increasing pain intensity. Maternal responses to labor pain may vary among individuals due to previous childbirth experiences, psychological conditions, and parity (Huang et al., 2024). In addition, a mother's ability to cope with and manage pain sensations may influence how pain is perceived and responded to during labor (Tandon et al., 2025).

Poorly managed severe pain may lead to fear, anxiety, and tension in the mother. These conditions may make it difficult for the mother to regulate her breathing and maintain comfort during contractions. The resulting emotional and physiological responses may affect the mother's ability to adapt to the labor process (Haasyimiyah et al., 2025). Therefore, pain management should be adjusted to the condition and needs of each mother and may involve pharmacological and non-pharmacological approaches as part of intrapartum care (Sembiring, 2023).

Massage counter pressure is one non-pharmacological method that can be applied to help mothers cope with pain during labor. This technique is performed by applying pressure to the sacral area or lower back during contractions. The pressure may help reduce the perception of painful stimuli while providing comfort and relaxation during contractions (Budiarti, 2020). The application of counter pressure massage during the active phase of the first stage has also been reported to help reduce pain intensity in laboring women (Nasution & Batubara, 2021). Other research has shown that massage techniques may be used as an alternative non-pharmacological intervention to help reduce labor pain (Yuliza et al., 2022).

The application of massage counter pressure is relevant to the case of Mrs. "N", a multigravida with an obstetric history of G7P1A5 and a gestational age of 42 weeks and 1 day. This condition requires care that prioritizes maternal and fetal safety while also addressing maternal comfort due to contraction pain. Previous research has shown that massage may help control pain and support relaxation during labor (Fitria et al., 2025). Other research has also demonstrated the benefits of massage interventions in supporting pain management among laboring women (Yusmaharani et al., 2025). However, the characteristics of subjects in previous studies may not be identical to those of Mrs. "N". Therefore, this case study aimed to describe the implementation of intranatal midwifery care during the active phase of the first stage of labor in Mrs. "N" with contraction pain through the application of massage counter pressure and to describe the mother's response after the intervention.

METHODOLOGY

This study used a qualitative method with a case study approach to describe in depth the implementation of intranatal midwifery care for Mrs. "N" through the application of massage counter pressure as an effort to reduce contraction pain during the active phase of the first stage of labor. Case management referred to the seven steps of Varney's midwifery care management, consisting of basic data assessment, data interpretation, identification of actual diagnoses or problems, identification of potential problems, determination of the need for immediate action, care planning, implementation, and evaluation. The entire care process was documented using the SOAP format. The case study was conducted at PMB Fatmawaty, Central Buton Regency, during the period from December 2025 to April 2026. The subject was Mrs. "N", 35 years old, G7P1A5, at 42 weeks and 1 day of gestation, who was in the active phase of the first stage of labor and experienced contraction pain.

The data consisted of primary and secondary data. Primary data were obtained directly from the subject through interviews and observation, whereas secondary data were obtained from medical records, service records, and midwifery care documentation related to the case. Data collection included anamnesis, measurement of vital signs, physical and obstetric examinations, vaginal examination, observation of the frequency and duration of uterine contractions, fetal heart rate monitoring, and documentation of labor progress. Labor pain intensity was assessed using the Numeric Rating Scale (NRS) before and after the administration of massage counter pressure to determine changes in the mother's perceived pain intensity.

Care was implemented systematically based on the assessment findings and the seven steps of Varney's midwifery management. Massage counter pressure was administered during contractions by applying pressure to the sacral area as a non-pharmacological intervention to help reduce labor pain. In Mrs. "N", the intervention was administered five times from 22:30 to 00:30 Central Indonesian Time. During the intervention, maternal and fetal conditions were continuously monitored through observation of the mother's response, uterine contractions, fetal heart rate, and cervical dilatation. Pain intensity was reassessed after the intervention using the NRS as part of the care evaluation.

Data were analyzed descriptively by processing information obtained from interviews, observations, examinations, documentation, and monitoring of labor progress. The data were then interpreted and organized according to the stages of Varney's midwifery care management and documented using the SOAP format. Changes in pain intensity were analyzed by comparing NRS scores before and after the administration of massage counter pressure. The results of the case study were presented narratively to describe the subject's characteristics, assessment process and care provided, implementation of massage counter pressure, maternal response to the intervention, and maternal and fetal conditions throughout labor. The subject's identity was protected by using the initials "Mrs. N" throughout the presentation of the case.

RESULTS & DISCUSSION

Subjective

Mrs. “N”, aged 35 years, G7P1A5, came to PMB Fatmawaty on January 1, 2026, at 10:00 PM Central Indonesia Time, with complaints of abdominal pain radiating to the back that became increasingly intense during contractions, accompanied by the discharge of blood-stained mucus.

Objective

The examination results of Mrs. “N” showed that the condition of the mother and fetus during the first stage of labor was good. Blood pressure of 110/80 mmHg, a pulse rate of 80 beats/minute, a respiratory rate of 20 breaths/minute, and a body temperature of 36.8°C indicated that the mother's general condition was stable. Vaginal examination showed a soft cervix, 70% cervical effacement, 6 cm cervical dilatation, intact membranes, and descent of the fetal head at Hodge II. During monitoring, the fetal heart rate ranged from 135–150 beats/minute. Uterine contractions also progressed from 4 times in 10 minutes with a duration of 40–45 seconds to 5 times in 10 minutes with a duration of 45–50 seconds. These changes indicated progress in the labor process during the first stage.

Monitoring of vital signs, contractions, fetal heart rate, and cervical dilatation needs to be carried out continuously during the provision of care to ensure that maternal and fetal conditions remain good and to detect signs of complications at an early stage (Rahakbauw & Ernawati, 2025). In the case of Mrs. “N”, the monitoring results showed that maternal and fetal conditions remained stable throughout the labor process. Therefore, massage counter pressure was provided as a supportive intervention to help reduce discomfort caused by contraction pain, rather than as a replacement for obstetric monitoring and management (Herlina et al., 2025).

Table 1. Progress of the First Stage of Labor and Maternal Response to Massage Counter Pressure

Time	Cervical Dilatation/Contractions	FHR	NRS	Maternal Response
22:00	6 cm; 4 contractions/10 min, 40–45 sec	143 beats/min	8	Severe pain
22:30	4 contractions/10 min, 40–45 sec	140 beats/min	Not measured	Massage initiated
23:00	4 contractions/10 min, 45 sec	150 beats/min	Not measured	More relaxed
00:00	5 contractions/10 min, 45–50 sec	138 beats/min	Not measured	Improved breathing control
00:30	5 contractions/10 min, 45–50 sec	135 beats/min	6	Pain reduced
01:00	10 cm; 5 contractions/10 min, 45–50 sec	137 beats/min	Not measured	Complete dilatation

Analysis

Diagnosis, Potential Problems, and Immediate Management

Based on the overall assessment findings, the midwifery diagnosis for Mrs. “N” was G7P1A5 at 42 weeks and 1 day of gestation, with a live singleton intrauterine pregnancy, longitudinal lie, left fetal back, and cephalic presentation. The fetal condition was good, and the mother was in the active phase of the first stage of labor. The actual problem identified was the mother's inability to optimally tolerate contraction pain. At the time of assessment, no condition indicating an emergency was identified; therefore, immediate action was not required. However, the gestational age, which had reached the post-term period, as well as the obstetric history of recurrent abortions, were considerations for conducting closer observation of the maternal and fetal conditions and the progress of labor.

Based on the assessment findings, no potential problems requiring specific management were identified during the initial assessment. The maternal and fetal conditions were good; therefore, care was focused on monitoring the progress of labor and managing discomfort caused by contraction pain. Continuous monitoring was performed on the mother's general condition, vital signs, uterine contractions, fetal heart rate, and the progress of cervical dilatation to detect possible changes in condition during the labor process.

Under these conditions, the care plan was directed toward improving maternal comfort in coping with contraction pain without neglecting the monitoring of obstetric conditions. Massage counter pressure was selected as one of the complementary non-pharmacological interventions,

provided together with relaxation, breathing regulation, support for the mother, and continuous monitoring of labor progress.

Management

Intervention and Implementation of Massage Counter Pressure

The care plan for Mrs. "N" focused on pain management, improving comfort, providing support during contractions, and monitoring maternal and fetal conditions. The mother was provided with an explanation regarding her condition and was guided to perform relaxation techniques and breathing regulation during contractions. The family was also provided with an explanation regarding massage counter pressure and was involved in providing support to the mother throughout the labor process.

Massage counter pressure was administered by applying pressure to the sacral area during contractions. In Mrs. "N", the intervention was performed five times from 22:30 to 00:30 Central Indonesia Time. After receiving the intervention, the mother appeared more relaxed, was better able to control her breathing during contractions, and stated that the pain she experienced had decreased. Based on measurement using the Numeric Rating Scale (NRS), pain intensity decreased from a score of 8 to a score of 6.

DISCUSSION

Subjective

The findings in Mrs. "N" showed characteristics of the active phase of the first stage of labor, marked by increasingly strong and regular uterine contractions accompanied by changes in the cervix. The pain experienced by the mother was a physiological response to uterine contractions and the process of cervical dilatation (Lestari & Rosdiana, 2025). The sensation of pain radiating from the abdomen to the back may also occur during labor, with varying intensity among mothers due to the influence of physical and psychological factors (Tandon et al., 2025).

Objective

This monitoring was necessary because pain management during labor must be carried out concurrently with monitoring of obstetric conditions. Monitoring vital signs, contractions, fetal heart rate, and changes in cervical dilatation helps ensure that the mother's response remains within physiological conditions and is not accompanied by signs of complications (Rahakbauw & Ernawati, 2025). Therefore, in this case, massage counter pressure was positioned as a supportive intervention to reduce discomfort and not as a substitute for monitoring or obstetric interventions when a condition requires further management (Herlina et al., 2025).

Assessment

Based on the assessment findings, Mrs. "N" was consistent with the characteristics of the active phase of the first stage of labor. This was indicated by regular uterine contractions accompanied by cervical dilatation of 6 cm at the initial assessment. Maternal and fetal conditions were good, and no signs indicating an emergency were identified; therefore, immediate action was not required. The problem identified was pain caused by contractions, which required management to improve maternal comfort during the labor process.

The gestational age of 42 weeks and 1 day and the obstetric history of G7P1A5 were considerations for conducting closer monitoring of maternal and fetal conditions and labor progress. Pain management still needed to be provided together with monitoring of obstetric conditions so that the intervention could provide comfort without disregarding maternal and fetal safety.

Based on the problem identified, the administration of massage counter pressure was selected as one of the complementary non-pharmacological interventions to help the mother cope with contraction pain during the active phase of the first stage of labor. The intervention was provided as a supportive measure in intrapartum care while continuing to consider the mother's condition and comfort throughout the process.

In addition to pain management, the mother's needs during labor also included accompaniment, breathing regulation, and continuous monitoring of labor progress. Therefore, the care provided was not only directed toward reducing discomfort caused by contractions but also toward monitoring maternal and fetal conditions and the progress of labor until the labor process was completed.

Management

Physiologically, applying pressure to the sacral area may provide sensory stimulation that helps alter the perception of painful stimuli (Budiarti, 2020). In addition, the sensation of pressure and the relaxation process during massage may help reduce bodily tension, allowing the mother to regulate her breathing more effectively during contractions. The ability to regulate breathing during labor may help the mother cope with pain and improve comfort during contractions (Haasyimiyah et al., 2025). Various studies on massage interventions during labor have also shown a tendency toward a reduction in pain intensity after massage, although each mother's response may vary depending on individual characteristics and the technique applied (Sembiring, 2023).

In the case of Mrs. "N", changes in pain intensity based on the NRS showed a decrease from a score of 8 to a score of 6, representing a reduction of two points. This change was supported by the mother's response, stating that the pain she experienced had decreased; the mother appeared more relaxed, and her ability to regulate breathing during contractions improved. These findings showed a similar direction to the studies of (Haasyimiyah et al., 2025) and (Ma'rifas, 2025), which positioned counter pressure as one of the alternative non-pharmacological interventions to help manage labor pain.

During the implementation of care for Mrs. "N", massage counter pressure was administered five times during the active phase of the first stage of labor, from 22:30 to 00:30 Central Indonesia Time. The intervention was performed during contractions by applying pressure to the sacral area as an effort to help the mother cope with pain radiating to the back. During the implementation of the intervention, the mother was also accompanied and guided to regulate her breathing and perform relaxation according to the condition she experienced during contractions.

The application of massage counter pressure in this case was part of comprehensive midwifery care. Therefore, during the intervention, observation was not limited to the mother's response to pain but also included monitoring maternal condition, fetal condition, uterine contractions, and labor progress. Continuous implementation of care was necessary to ensure that maternal comfort was maintained without disregarding maternal condition and the progress of labor.

In addition to changes in pain intensity, the mother's response after the intervention was also reflected in a more relaxed condition and an improved ability to regulate breathing during contractions. This indicates that the outcomes of care can be assessed not only based on changes in the NRS score but also through the mother's response to contractions and her ability to adapt during the labor process. Thus, massage counter pressure in the case of Mrs. "N" was used as one form of complementary care to help improve maternal comfort when coping with contraction pain during the active phase of the first stage of labor.

Evaluation and Labor Progress

Monitoring after the intervention showed that the labor process continued to progress. Cervical dilatation progressed from 6 cm at 22:00 Central Indonesia Time to complete dilatation of 10 cm at 01:00 Central Indonesia Time. Subsequently, the second stage lasted for 29 minutes, and a female baby was born spontaneously at 01:29 Central Indonesia Time. During the third stage, uterine contractions were palpated as good, and the placenta was delivered completely at 01:39 Central Indonesia Time. During the fourth stage, the mother's condition continued to be monitored, and uterine contractions remained good, with a relatively small amount of blood loss recorded during the observation period.

Continuous monitoring from the first stage through the fourth stage was part of the evaluation of care to assess maternal condition, response to the intervention, and the progression of labor. Evaluation was not only directed toward changes in pain intensity after the administration of massage counter pressure but also included monitoring maternal and fetal conditions and labor progress until all stages of labor were completed.

The progression of cervical dilatation in the case of Mrs. "N" occurred progressively during labor and was accompanied by reduced pain intensity and an increased ability of the mother to relax. Massage counter pressure may be considered one of the factors supporting maternal comfort and coping ability while facing contractions. However, because this study used a case study design involving only one subject and no comparison group, the progression of cervical dilatation cannot be directly attributed to the administration of massage counter pressure. Labor progress may also be influenced by various other factors, including contraction characteristics, parity, cervical condition, fetal position, support from accompanying persons, and the physiological process of labor itself

(Santiasari et al., 2018). Therefore, the findings in this case are more appropriately understood as a description of the clinical response in one woman in labor rather than evidence of a cause-and-effect relationship (Yussie Ater Merry et al., 2021).

In the case of Mrs. “N”, evaluation after the administration of massage counter pressure showed a change in the response to pain. Pain intensity decreased from a score of 8 to a score of 6. In addition to changes in the pain score, the mother appeared more relaxed and demonstrated an improved ability to regulate her breathing during contractions. These changes formed part of the evaluation results of the care provided during the active phase of the first stage of labor.

Overall, the evaluation results showed that the main goal of care, namely helping reduce pain and improve maternal comfort, was achieved in Mrs. “N”. The two-point decrease in the NRS score after the intervention was accompanied by a more relaxed maternal condition and improved ability to control breathing. At the same time, the maternal condition remained stable and labor proceeded spontaneously without major complications. Massage counter pressure may be considered one form of complementary intervention in midwifery care to help manage labor pain (Bahasoan et al., 2022). The application of massage counter pressure should remain adapted to the mother’s clinical condition and be performed alongside standard obstetric monitoring (Mutiah, CutOrganization, W. H. (2018). Kurniarum et al., 2023).

Based on the overall evaluation, the administration of massage counter pressure in this case formed part of complementary non-pharmacological care provided to help reduce discomfort caused by contraction pain. The intervention was implemented together with relaxation, breathing regulation, support for the mother, and continuous monitoring of labor conditions. Therefore, the care provided was not only oriented toward reducing the pain score but was also directed toward helping improve maternal comfort and the mother's ability to cope with the labor process.



Figure 1. Application of Massage Counter Pressure



Figure 2. Labor Process

CONCLUSION

The implementation of intrapartum midwifery care for Mrs. “N” was carried out comprehensively using the seven steps of Varney's management and documented in the SOAP format. Mrs. “N”, aged 35 years, G7P1A5, at 42 weeks and 1 day of gestation, was in the active phase of the first stage of labor with the main complaint of contraction pain. Based on the assessment and monitoring performed, maternal and fetal conditions were good, allowing care to be provided according to the mother's needs throughout the labor process.

Efforts to help manage discomfort caused by contraction pain were carried out through the application of massage counter pressure. The intervention was administered five times during contractions from 22:30 to 00:30 Central Indonesia Time and was accompanied by relaxation exercises, breathing regulation, emotional support, and accompaniment of the mother. Throughout the care process, monitoring of uterine contractions, fetal heart rate, vital signs, and the progression of cervical dilatation was continuously performed as part of labor monitoring.

The evaluation findings showed changes in the response to pain after the provision of care. The pain score based on the Numeric Rating Scale (NRS) decreased from a score of 8 to a score of 6. In addition to changes in pain intensity, the mother appeared more relaxed and demonstrated a better ability to regulate her breathing when facing contractions. These findings indicate that massage counter pressure may be used as one form of complementary non-pharmacological care to help improve maternal comfort during the active phase of the first stage of labor.

Throughout the labor process, labor continued to progress until cervical dilatation became complete at 01:00 Central Indonesia Time. Subsequently, labor continued until the baby was born spontaneously at 01:29 Central Indonesia Time. Monitoring was then continued during the third and fourth stages to ensure that the mother's condition remained good after delivery. This sequence of care shows that pain management was provided as part of comprehensive intrapartum care and continued to be accompanied by monitoring of maternal condition, fetal condition, and labor progress.

Although there was a reduction in pain intensity and a change in the mother's response after the administration of massage counter pressure, the findings of this study need to be understood according to the characteristics of the research design used. This case study involved only one subject and did not use a comparison group. Therefore, the changes in pain intensity cannot be completely separated from the physiological process of labor or other factors that may influence the mother's experience of pain during labor.

In addition, responses to pain and comfort during labor may differ among mothers. Differences in individual conditions, contraction characteristics, previous childbirth experiences, physical and psychological conditions, and the support received during labor may influence the mother's response to the intervention provided. Therefore, the findings in Mrs. "N" describe the response to care in one case and are not intended to be generalized to all women in labor.

Based on the findings of this case study, massage counter pressure may be considered as one of the complementary interventions in midwifery care to help mothers cope with discomfort caused by contraction pain. Its application still needs to be adjusted according to the mother's condition and needs and should be carried out together with appropriate obstetric monitoring. Further studies involving a larger number of subjects, stronger research designs, and standardized assessment instruments are needed to obtain more comprehensive evidence regarding the application of massage counter pressure in labor pain management.

ACKNOWLEDGMENTS

The author would like to express gratitude to Mrs. "N" and her family for their willingness to cooperate in the implementation of care, as well as to Bdn. Sri Ernawati, S.ST., M.Keb. and LM. Zainal Abidin K, S.KM., M.Kes. as supervisors who provided guidance during the preparation of the report and article. Appreciation is also extended to PMB Fatmawaty and the Diploma Three Midwifery Study Program, Politeknik Baubau, for their support in implementing this case study.

REFERENCES

- Aktif, K. I. F., Lestari, S. H., & Rosdiana, S. (2025). *Efektivitas Hypnobirthing dalam Menurunkan Skala Nyeri Persalinan*. 05(November), 8–16. <https://doi.org/10.53801/sjki.v5i2.298>
- Author, C. (2025). *INTRANATAL CARE FOR MRS . " T " WITH GRADE I PERINEAL RUPTURE AT. 1*, 2019–2024.
- Bahasoan, F. J. S., Andryani, Z. Y., & Syatirah. (2022). Manajemen Asuhan Kebidanan Intranatal Pada Ny "D" Dengan Anemia Di Rsia Sitti Khadijah I Muhammadiyah Makassar. *Jurnal Midwifery*, 4(2), 1–13. <https://doi.org/10.24252/jmw.v4i2.29623>
- Budiarti, A. (2020). Pengaruh Terapi Massage Counterpressure Terhadap Nyeri Kala I Pada Ibu Inpartu Di BPS Desa Durjan, Bangkalan. *Jurnal Ilmu Keperawatan Maternitas*, 3(1), 14. <https://doi.org/10.32584/jikm.v3i1.79>
- Fitria, Y. Y., Kartika, I., Meliyanti, M., & Suryani, I. (2025). *PENGARUH METODE COUNTERPRESSURE MASSAGE TERHADAP PENURUNAN TINGKAT NYERI PERSALINAN KALA I FASE AKTIF DI UPTD PUSKESMAS PADASUKA KOTA BANDUNG TAHUN 2025. 000*.
- Haasyimiyah, D. N., Kumalasari, D., & Yulianti, R. (2025). Pengaruh Teknik Pernafasan Dalam Mengurangi Nyeri Persalinan. *Jurnal Kebidanan Dan Kesehatan*, 3(1), 1–12. <https://doi.org/10.70683/jkk.v3i1.33>

- Herlina, N., Ekowati, E., Perwitasari, B. T., Johara, J., Ratnaningsih, T., Puspariny, C., Judijanto, L., & Maineny, A. (2025). *Asuhan Kebidanan Persalinan: Teori dan Implementasi*. PT. Sonpedia Publishing Indonesia.
- Huang, Y., Zhong, Y., Chen, Q., Zhou, J., Fu, B., Deng, Y., Tu, X., & Wu, Y. (2024). A comparison of childbirth self-efficacy, fear of childbirth, and labor pain intensity between primiparas and multiparas during the latent phase of labor: a cross-sectional study. *BMC Pregnancy and Childbirth*, 24(1), 1–10. <https://doi.org/10.1186/s12884-024-06571-3>
- Ma'rifas, atun raudotul. (2025). *Efektifitas Teknik Counter Pressure*. 244–253.
- Mutiah, CutOrganization, W. H. (2018). Kurniarum, R. (2016). A. K. pada P. J. E. W. H. O., Abdurrahman, A., Iswani, R., Putri, I., & Nazar, M. (2023). Implementation of Web-Based Case Midwifery Notes Documentation System (CMNotes) for Intra Natal Care. *Jurnal Penelitian Pendidikan IPA*, 9(3), 1320–1326. <https://doi.org/10.29303/jppipa.v9i3.3281>
- Nasution, A., & Batubara, N. S. (2021). Pengaruh Counter Pressure Massage Terhadap Penurunan Nyeri Bersalin Kala I Fase Aktif. *Jurnal Education and Development*, 9(Vol 9 No 4 (2021): Vol.9 No.4 2021), 638–641. <http://journal.ipts.ac.id/index.php/ED/article/view/3293/2113>
- Organization, W. H. (2018). Kurniarum, R. (2016). *Asuhan Kebidanan pada Persalinan*. Jakarta: EGC. World Health Organization.
- Rahakbauw, G. Z., & Ernawati, E. (2025). Standar Asuhan Persalinan Yang Bersih Dan Aman Mulai Dari Kala I Sampai Dengan Kala IV (Persalinan Normal) Terhadap Pelaksanaan Kepatuhan Bidan. *Barongko: Jurnal Ilmu Kesehatan*, 3(3), 643–648. <https://doi.org/10.59585/bajik.v3i3.680>
- Santiasari, R. N., Nurdianti, D. S., & Lismidiati, W. (2018). KEMAJUAN DILATASI SERVIKS PADA KALA I FASE AKTIF EFFECTIVENESS OF EFFLEURAGE AND COUNTERPRESSURE MASSAGE IN CERVICAL DILATATION. 7(3), 185–190.
- Sembiring, D. B. (2023). Endorphin Massage and Deep Back Massage for Pain During the Active Phase I of Maternity Mothers. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, 8(S1), 13–18. <https://doi.org/10.30604/jika.v8is1.1678>
- Tandon, A., Gujral, K., & Gupta, V. (2025). Labour Pain: A Comprehensive Review of Perceptions, Experiences, and Sociocultural Influences on Pain and Its Management Practices. *Cureus*, 17(6). <https://doi.org/10.7759/cureus.86540>
- Yuliza, Z., Novita, A., & Jayatmi, I. (2022). Pengaruh Teknik Couterpressure Massage Dengan Birth Ball Terhadap Penurunan Nyeri Persalinan Kala I Fase Aktif Di Pmb Wilayah Kelurahan Grogol Selatan Dan Grogol Utara Kota Jakarta Selatan Tahun 2022. *SENTRI: Jurnal Riset Ilmiah*, 1(1), 233–247. <https://doi.org/10.55681/sentri.v1i1.227>
- Yusmaharani, Y., Ratih, R. H., & Nurmaliza, N. (2025). Counter Pressure Massage With Pain In The First Stage Of Labor. *JKM (Jurnal Kebidanan Malahayati)*, 11(2), 91–96. <https://doi.org/10.33024/jkm.v11i2.19147>
- Yussie Ater Merry, Mardiani Bebasari, & Olana Rahma Ridanta. (2021). Pengaruh Massage Counter Pressure Terhadap Lama Kala 1 Fase Aktif Persalinan Normal. *Jurnal Ilmiah Kebidanan*, . 9(1), 38–45. <http://ejournal.poltekkes-denpasar.ac.id/index.php/JIK>