Technology, Health, and Agriculture Nexus: Conference Series
https://journal.ummat.ac.id/index.php/tcs
Vol. 2 No. 3, November 2026, Hal. 201-207

Non-pharmacological Pain Management: Backmassage and Deep Breathing Techniques During Labor – A Case Study Continuity of care (CoC) for Mrs. U in the Sungai Tabuk 3 Community Health Center (Puskesmas) Area

Ernawati[1], Rizki Amalia[2], Nelly Mariati[3], Afiatun Rahmah[4]
[1]Midwifery Diploma Three Study Program, Muhammadiyah University Banjarmasin, Indonesia
[1]naerna424@gmail.com

***Keywords*:**
Labor Pain Management, Backmassage, Deep Breathing Techniques, Continuity Of Care.

ABSTRACT

Abstract: *Childbirth is a physiological process that often causes pain due to uterine contractions, cervical dilation, and the descent of the fetal head. Anxiety, stress, and various physical and psychological factors can exacerbate pain and hinder the progress of labor. Back massage and deep breathing techniques are non-pharmacological methods that can help alleviate labor pain. To determine the effectiveness of applying back massage and deep breathing techniques in reducing pain intensity and enhancing comfort for the laboring mother. This final project report employs a case study design using a qualitative observational approach within a Continuity of care framework. The subject was Mrs. U (26 years old, G2P1A0), observed from 27 weeks of gestation through her fourth postpartum visit between September and December 2025. Data were collected via interviews, observation, physical examinations, and documentation. During the active phase of the first stage of labor, Mrs. U experienced pain accompanied by anxiety and tension. Following the administration of back massage and deep breathing techniques, she appeared more relaxed, was able to control her breathing, remained more cooperative during contractions, and experienced reduced pain intensity, resulting in a more comfortable labor experience. Back massage and deep breathing techniques are effective in reducing labor pain and increasing maternal comfort. Providing education during pregnancy is expected to improve the mother's readiness for childbirth. These methods offer a practical, non-pharmacological pain management alternative that midwives can easily implement to enhance the quality of maternal care through a Continuity of care approach.*

Kata Kunci:

Penanganan Rasa Sakit Saat Persalinan,
Pijatan Punggung,
Teknik Pernapasan Dalam,
Kelangsungan Perawatan.

Abstrak: Persalinan adalah proses fisiologis yang sering menimbulkan rasa sakit akibat kontraksi rahim, pelebaran serviks, dan turunnya kepala janin. Kecemasan, stres, serta berbagai faktor fisik dan psikologis dapat memperparah rasa sakit dan menghambat jalannya persalinan. Pijatan punggung dan teknik pernapasan dalam merupakan metode nonfarmakologis yang dapat membantu meringankan rasa sakit saat persalinan. Untuk menentukan keefektifan penerapan pijatan punggung dan teknik pernapasan dalam dalam mengurangi intensitas rasa sakit dan meningkatkan kenyamanan ibu yang sedang melahirkan. Laporan proyek akhir ini menggunakan desain studi kasus dengan pendekatan observasional kualitatif dalam kerangka kerja Continuity of Care. Subjek penelitian adalah Ibu U (26 tahun, G2P1A0), yang diamati sejak usia kehamilan 27 minggu hingga kunjungan pascapersalinan keempatnya antara bulan September dan Desember 2025. Data dikumpulkan melalui wawancara, observasi, pemeriksaan fisik, dan dokumentasi. Selama fase aktif tahap pertama persalinan, Ibu U mengalami nyeri yang disertai kecemasan dan ketegangan. Setelah penerapan pijat punggung dan teknik pernapasan dalam, beliau tampak lebih rileks, mampu mengendalikan napasnya, tetap lebih kooperatif selama kontraksi, dan mengalami penurunan intensitas nyeri, sehingga menghasilkan pengalaman persalinan yang lebih nyaman. Pijat punggung dan teknik pernapasan dalam efektif dalam mengurangi nyeri persalinan dan meningkatkan kenyamanan ibu. Penyuluhan selama kehamilan diharapkan dapat meningkatkan kesiapan ibu dalam menghadapi persalinan. Metode-metode ini menawarkan alternatif penanganan nyeri yang praktis dan nonfarmakologis, yang dapat dengan mudah diterapkan oleh bidan untuk meningkatkan kualitas pelayanan kebidanan melalui pendekatan kontinuitas pelayanan.

Article History:

Received : 01-10-2026
Accepted : 30-11-2026

A. INTRODUCTION

The physiological process of childbirth, occurring at the end of pregnancy, is characterized by uterine contractions that dilate and thin the cervix, thereby enabling the delivery of the baby and placenta. Mothers often experience varying degrees of discomfort during this process. Strong uterine contractions, cervical dilation, and reduced blood flow to uterine tissues are the primary causes of labor pain (Norhapifah et al., 2024). Women in labor may experience pain and anxiety due to this situation, particularly during the active phase of the first stage of labor. Appropriate pain management is essential to ensure the mother undergoes labor more comfortably and the delivery proceeds smoothly (Christiani et al., 2022).

Data obtained from the Sungai Tabuk 3 Community Health Center (Puskesmas) in 2025 recorded a total of 330 births. Of this total, 50% of the women gave birth in hospitals either via Cesarean section or normal delivery while 30% were recorded through the health center's monitoring and services. The remaining 20% gave birth at independent midwife practices. The data suggests that pain management techniques, such as back massage and deep breathing exercises, may reduce the severity of discomfort during labor. Notably, 10% of mothers utilized pain management techniques assisted by midwives, enabling them to undergo labor comfortably and ensuring a smooth delivery process. Additionally, data from independent midwife practices in 2025 shows 13 instances where non-pharmacological pain management specifically back massage and deep breathing techniques was applied. These methods aim to reduce the intensity of pain experienced during labor. Pain management using back massage and deep breathing techniques has been shown to promote relaxation, improve oxygen flow, and control pain responses, thereby optimizing the labor process (Palilingan et al., 2023).

During labor, a series of bodily changes occurspecifically involving the uterus and cervix, which undergo contractions, thinning, and dilation to facilitate the delivery of the fetus. Feelings of fear, anxiety, and stress arising during labor can trigger muscle tension and the constriction of blood vessels. Such conditions can impact the labor process, for instance, by slowing its progression due to reduced uterine contraction effectiveness. Therefore, adequate pain management is essential to make the birthing process more comfortable for the mother. Non-pharmacological methods exist to manage labor pain; these approaches employ various strategies to enhance maternal comfort and promote relaxation without the risk of side effects (Putri et al., 2022).

Fundamentally, there are two ways to manage labor pain: pharmacological and non-pharmacological. Pharmacological strategies involve the administration of analgesic medications such as opioids or epidural anesthesia that act on the central nervous system to reduce pain perception. Although effective, these techniques have drawbacks, including nausea, altered consciousness, and potential impacts on maternal and fetal health. Consequently, non-pharmacological approaches offer a safer alternative, as they do not involve medication and carry minimal risk. In midwifery practice, non-pharmacological therapies such as deep-breathing relaxation and back massage are frequently utilized. By stimulating the skin and muscle tissue, back massage can increase blood flow and trigger the release of endorphins the body's natural painkillers thereby reducing the perception of pain. Meanwhile, deep-breathing relaxation techniques help the mother regulate her breathing patterns, improve oxygenation, and alleviate physical and psychological tension during contractions (Wahyuni et al., 2024). Combining these two techniques can produce a synergistic effect by reducing pain intensity, enhancing comfort, and enabling the mother to better control her response to pain during labor; the technique involving skin stimulation helps reduce pain perception and promotes relaxation, while deep breathing helps the mother control her breathing, reduce tension, and maintain a sense of calm during contractions (Rahmania et al., 2026).

Managing labor pain through back massage and deep breathing techniques is an effective non-pharmacological approach to enhancing maternal comfort during childbirth. Implementing these

methods focuses not only on reducing pain intensity but also on promoting relaxation, alleviating anxiety, and improving oxygenation for both the mother and the fetus. Within the Continuity of Care (CoC) framework, care is provided seamlessly from pregnancy through labor and the postpartum period, ensuring the mother receives prior education and practice. Consequently, when labor begins, she is well-prepared to utilize deep breathing techniques and effectively receive back massages. This CoC approach enables healthcare providers to deliver consistent care, build trust, and continuously monitor the effectiveness of pain management strategies, thereby improving service quality and fostering a more positive childbirth experience for the mother (Azhara et al., 2024).

In the context of midwifery, the Continuity of Care approach entails continuous support provided by the midwife from pregnancy through delivery and the postpartum period, allowing for a comprehensive assessment of the mother's physical and psychological well-being. Through this ongoing support, the mother receives not only medical care but also education and encouragement to prepare for childbirth. This approach is closely linked to the use of non-pharmacological pain management such as back massage and deep breathing which are typically introduced during pregnancy. Continuous care enables the mother to better understand how to manage pain and anxiety during labor. Furthermore, midwives can tailor techniques in real-time based on the mother's responses and needs during the birthing process. Thus, Continuity of Care not only facilitates the monitoring of the mother's condition but also enhances the effectiveness of natural pain management techniques, leading to a more comfortable and controlled childbirth experience (Wati et al., 2025).

Implementing "Continuity of Care" offers numerous benefits in midwifery services, particularly in enhancing maternal and infant health outcomes. Through this approach, mothers receive comprehensive and continuous support, fostering a trusting relationship with healthcare providers. Furthermore, Continuity of Care enables routine monitoring of the mother's condition, early detection of complications, and the timely delivery of interventions (Amalia et al., 2025). Additionally, the emotional support and education provided from pregnancy through the postpartum period can improve a mother's ability to cope with childbirth including surgical delivery and care for her infant. Consequently, the application of Continuity of Care contributes to increased maternal adherence to healthcare services and reduces the risk of complications that could impact maternal and infant mortality rates (Widyawati, 2024).

The objective of this research is to determine the effectiveness of using back massage (specifically targeting the lower back) and deep breathing techniques as non-pharmacological methods to reduce labor pain intensity and enhance maternal comfort throughout the birthing process. Based on this rationale, the author intends to implement a midwifery practice initiative titled "Implementation of Non-Pharmacological Pain Management (Back Massage and Deep Breathing Techniques) During Labor." This activity is designed to apply the theoretical knowledge and practical skills previously acquired. It is anticipated that the guidance provided will improve the quality of aspiring healthcare professionals and enhance maternal and infant health in Indonesia.

B. METHOD

This case study employed an observational method with a qualitative approach, analyzing data narratively based on direct assessment, documentation, and relevant theories within the framework of Continuity of Care. The study utilized a case study design, involving direct and comprehensive observation and analysis of a specific case. The research aimed to examine midwifery practices for a woman experiencing labor pain, specifically utilizing non-pharmacological techniques: back massage and deep breathing relaxation.

The subject of this case study was a pregnant woman (Mrs. U), who was observed from the 29th week of gestation through the completion of the fourth postpartum visit. The study was conducted between September and December 2025, with data collection beginning upon Mrs. U's arrival in the active phase of the first stage of labor (7 cm dilation). Data were gathered through interviews (anamnesis), observation, physical examinations, and documentation throughout the labor process. The collected data were subsequently compiled into a midwifery care report. The study was carried out on November 23, 2025, at Midwife S's Independent Practice, located within the service area of the Sungai Tabuk 3 Community Health Center (Puskesmas).

Prior to the intervention, the author explained the purpose and procedure of the planned measures to the mother. She was given the opportunity to understand the explanation and express

her consent to the procedure. The author also ensured the confidentiality of the mother's identity and data, using them solely for research purposes.

The interventions employed were deep breathing techniques and back massage. The deep breathing technique involved slowly inhaling through the nose and exhaling slowly through the mouth during contractions. The back massage was performed on the lower back, applying gentle pressure during contractions to help alleviate pain. The intervention was administered from the time of the mother's arrival through the labor process. Data analysis employed a descriptive approach to observe changes in pain levels and the mother's responses during labor, comparing her condition before and after the intervention.

C. RESULTS AND DISCUSSION

An initial assessment of Mrs. U (26 years old, obstetric status G2P1A0) was conducted one day prior to delivery; she presented at an independent midwifery practice on November 22, 2025, complaining of irregular abdominal pain. Obstetric examination revealed no cervical dilation, indicating she was in the latent phase; she was advised to return home and monitor for signs of labor. The following day, November 23, 2025, Mrs. U returned in the afternoon reporting intensified pain and more regular contractions. Examination showed 7 cm of cervical dilation, signifying that she had entered the active phase of the first stage of labor. Compassionate support was provided throughout this time by offering encouragement, creating a comfortable atmosphere, and staying with the mother during the birthing process. Furthermore, the author implemented non-pharmacological pain management interventions, specifically back massage and deep breathing relaxation techniques. Back massage was applied to the lower back to alleviate pain, while deep breathing techniques were taught to help the mother control her breathing during contractions (Rambe, 2021).

"Mother-friendly care" refers to midwifery services oriented toward meeting the mother's physical and emotional needs during labor; healthcare providers are expected to offer emotional support and effective communication while creating a safe, comfortable environment (Bemj, 2026). This approach emphasizes that childbirth is not merely a physiological process but also involves psychological and social aspects that shape the mother's experience; thus, the quality of care provided determines her comfort levels, anxiety, and overall response during labor. In practice, mother-friendly care also encompasses respect for the mother's rights including maintaining privacy, allowing freedom of choice regarding birthing positions, and permitting the presence of a support person during labor. Consequently, the implementation this care is expected to enhance comfort, facilitate the labor process, and contribute to better maternal and neonatal outcomes (Amir et al., 2021).

Labor pain is a physiological process resulting from uterine contractions, cervical dilation, and the descent of the fetal head into the birth canal (Astuti et al., 2022). The pain experienced by a woman in labor is subjective, depending on both physical and psychological conditions (Mutiah et al., 2022). If pain is not managed appropriately, anxiety and stress can escalate, potentially rendering uterine contractions ineffective and prolonging the labor process (Septiani & Agustia, 2021). In the case of Mrs. U, the labor pain experienced during the active phase of the first stage caused her to appear anxious and tense, and she struggled to control her breathing during contractions. Consequently, the author provided care involving non-pharmacological pain management through back massage and deep breathing relaxation techniques. Following the intervention, Mrs. U showed a positive response; she appeared more relaxed, was able to regulate her breathing effectively, and no longer exhibited excessive anxiety during contractions. The perceived pain intensity also appeared to decrease, allowing Mrs. U to participate more cooperatively in the labor process.

Non-pharmacological pain management is a safe and effective method for reducing labor pain without side effects for the mother or fetus (Yunika et al., 2022). One applicable method is the back massage technique. Back massage works by stimulating nerve receptors to block pain impulses from reaching the brain and by triggering the production of endorphins, which act as the body's natural painkillers. In other words, back massage can reduce pain intensity during the active phase of labor. Mothers receiving back massage may experience reduced pain levels and appear more relaxed throughout the labor process. These results align with the author's field observations, where mothers appeared more comfortable and better able to cope with contractions (Putri et al., 2022).

Furthermore, back massage techniques specifically deep back massage have proven effective in alleviating labor pain by regularly stimulating the sacral region during the active phase. A back

massage lasting approximately 20 minutes, utilizing rubbing motions and light pressure, can reduce pain levels from severe to moderate or mild, while also helping the mother feel more comfortable and calm during childbirth (Rahmawati et al., 2022). This pain reduction occurs because nerve stimulation blocks pain impulses from reaching the brain and boosts the production of endorphins, the body's natural painkillers. These findings align with other research demonstrating that back massage significantly reduces labor pain; beyond providing relaxation, the massage helps mothers manage anxiety and improves their ability to cope with pain during the birthing process (Febrina et al., 2022).

In addition to back massage, deep breathing relaxation techniques have also proven successful in reducing labor pain. This technique involves regulating breathing patterns to increase oxygen supply and promote physical relaxation. Controlled breathing can reduce muscle tension and help mothers shift their focus away from the pain, thereby supporting their ability to adapt to contractions during labor. Research confirms that deep breathing relaxation techniques significantly reduce labor pain, as mothers who employ this method tend to remain calmer and better able to control their response to contractions (Issac et al., 2023). This is consistent with the authors' own practical experience, where mothers taught deep breathing techniques appeared more cooperative and less prone to panic during the birthing process (Marsilia & Tresnayanti, 2021).

Combining back massage with deep breathing relaxation techniques yields optimal results in reducing labor pain. These two techniques work synergistically: back massage provides physiological benefits through nerve stimulation and endorphin release, while deep breathing offers psychological benefits by promoting relaxation and enhancing self-control over pain (Widaningsih & Sriyanti, 2024).

This is supported by research indicating that the combination of back massage and deep breathing relaxation is significantly more effective at reducing labor pain than no intervention at all (Nursafitri, 2022). Women in labor who receive both techniques demonstrate a reduction in pain levels and experience a smoother labor process (Sevtiani et al., 2025).

During the labor process, the author monitored Mrs. U's response to the pain experienced during contractions. Assessment results revealed that Mrs. U complained of intensifying pain as cervical dilation progressed, particularly during the active phase of the first stage of labor. The pain appeared to affect her psychological state; she appeared anxious and tense, and occasionally struggled to control her breathing when contractions occurred. To address this, the author provided non-pharmacological pain management in the form of back massage and deep breathing relaxation techniques. Back massage was administered gently to the lower back area during contractions. Additionally, Mrs. U was taught deep breathing techniques—inhaling through the nose and exhaling slowly through the mouth—to help alleviate tension and manage pain.

Following the intervention, Mrs. U showed a positive response; she appeared more relaxed, was able to regulate her breathing effectively, and no longer exhibited excessive anxiety during contractions. The perceived pain intensity also appeared to decrease, allowing Mrs. U to participate more cooperatively in the labor process. Based on the author's observations during the course of care, Mrs. U. Mrs. U appeared better able to manage her response to pain; she did not panic easily when contractions occurred and was able to follow instructions effectively. This indicates that the intervention helped Mrs. U cope with labor pain more effectively. This aligns with the use of back massage techniques, which may alleviate pain by stimulating the production of endorphins the body's natural painkillers. Furthermore, deep-breathing relaxation techniques help patients manage their reactions to labor pain by increasing oxygen supply and calming the body.

Mrs. U appeared calmer than before during the labor process after receiving a lower back massage during contractions. Based on the author's observations, she seemed more composed, less stressed, and better prepared to handle the contractions. Furthermore, Mrs. U stated that the lower back massage helped alleviate discomfort, making her appear more cooperative throughout the labor.

In addition to the back massage, the author taught Mrs. U deep-breathing relaxation techniques to help her manage her pain response during labor. After receiving instruction and practicing, Mrs. U was able to apply these techniques during contractions by inhaling through her nose and exhaling slowly through her mouth. Observations showed that she appeared calmer, maintained good breath control, and did not easily panic during contractions. These results demonstrate that deep-breathing exercises enhance a mother's ability to manage labor pain by reducing stress.

D. CONCLUSIONS AND SUGGESTIONS

The application of Continuity of Care (CoC) midwifery services for Mrs. U (26 years old, G2P1A0) during the active phase of the first stage of labor demonstrated that, prior to intervention, the mother experienced intense pain accompanied by tension and anxiety. Following the administration of deep breathing relaxation and back massage, she appeared more relaxed, was able to control her breathing, and remained calmer throughout the labor process. These findings are expected to benefit the author by enhancing knowledge and skills, the mother by alleviating pain, and healthcare professionals by serving as a reference for implementing non-pharmacological methods. Consequently, medical professionals particularly midwives should educate expectant mothers on pain management strategies during pregnancy, thereby ensuring they are better prepared and less anxious during labor. Therefore, it is recommended that mothers practice deep breathing techniques during labor and that healthcare professionals optimize the use of non-pharmacological methods for pain management.

ACKNOWLEDGMENTS

The author would like to express sincere gratitude to Universitas Muhammadiyah Banjarmasin, particularly the Diploma Three Midwifery Study Program, for the academic guidance and support provided throughout this study. The author also extends appreciation to the Sungai Tabuk 3 Community Health Center and the Independent Midwifery Practice (PMB S) for granting permission and facilitating the implementation of this case study.

The author sincerely thanks the academic supervisors for their invaluable guidance, constructive suggestions, and continuous encouragement throughout the completion of this research. Special appreciation is also extended to Mrs. U and her family for their willingness to participate and cooperate during the implementation of the Continuity of Care (CoC) midwifery services. Finally, the author gratefully acknowledges all healthcare professionals and individuals who contributed directly or indirectly to the successful completion of this study.

REFERENSI

Azhara, Kana, Siti Aisyah, Arie Anggraini, & Arif, A. (2024). Faktor yang Berhubungan dengan Pelaksanaan Continuity Of Care pada Pelayanan Kebidanan di Puskesmas. Lentera Perawat, 5(1), 103–109. https://doi.org/10.52235/lp.v5i1.270

Bemj, B. E. J. (2026). Bunda Edu-Midwifery Journal (BEMJ). 9, 548–555.

Christiani, R., Indrayani, T., & Widowati, R. (2022). Efektivitas Massage counterpressure terhadap Intensitas Rasa Nyeri pada Persalinan Kala 1 Fase Aktif di PMB Bidan Monika Jakarta Timur. Journal for Quality in Women's Health, 5(1), 107–113. https://doi.org/10.30994/jqwh.v5i1.145

Febrina, H., Ambarita, R., & Ulfah, K. (2022). EVIDENCE-BASED CASE REPORT (EBCR) PENGARUH METODE DEEP BACK MASSAGE TERHADAP. 2(3).

Issac, A., Nayak, S. G., Mishra, P., Vr, V., & Stephen, S. (2023). Effectiveness of breathing exercise on the duration of labour : A systematic review and meta-analysis. https://doi.org/10.7189/jogh.13.04023

Marsilia, I. D., & Tresnayanti, N. (2021). Pengaruh Teknik Relaksasi Nafas Dalam terhadap Intensitas Nyeri pada Persalinan Kala I Fase Aktif di PMB Y Karawang. Jurnal Akademika Baiturrahim Jambi, 10(2), 385. https://doi.org/10.36565/jab.v10i2.388

Mutiah, C., Lismawati, L., Putri, I., Dewita, D., & Abdurrahman, A. (2022). The Pengaruh Pendamping Persalinan terhadap Penurunan Intensitas Nyeri pada Ibu Primigravida. Jurnal Kebidanan, 12(1), 16–25. https://doi.org/10.35874/jib.v12i1.1012

Norhapifah, H., Keb, M., Isa, M. R., Abdullah, B., & Mohamed, S. (2024). Original Article The Impact of Shiatsu Massage on Labour Pain and Anxiety : A Randomized Controlled Trial. 12(4), 243–253. https://doi.org/10.30476/ijcbnm.2024.101509.2432.Copyright

Nursafitri, I. A. (2022). Pengaruh Pemberian Terapi Non Farmakologi terhadap Nyeri Persalinan. Jurnal Kebidanan, 12(1), 81–92. https://doi.org/10.35874/jib.v12i1.1006

Palilingan, Cristifora, X., Irfana Tri Wijayanti, & Sariyani, D. (2023). Nyeri Persalinan Turun Dengan Metode Massage Ounterpresure. Jurnal Ilmu Kebidanan Dan Kesehatan (Journal of Midwifery Science and Health), 14(1), 7–12. https://doi.org/10.52299/jks.v14i1.145

Putri, E., Altika, S., Hastuji, P., S1, P., Stikes, K., & Pati, B. U. (2022). Terhadap Nyeri Persalinan. Journal Bina Cipta Husada, 74–88.

Rahmania, Nayla, Luluk Rosida, & Herfanda, E. (2026). Efektivitas Metode Teknik Nafas Dalam Dan Massage Effleurage Terhadap Pengurangan Intensitas Nyeri Pada Persalinan Kala I Di Rumah Sakit Sakinah Idaman. Borneo Nursing Journal (BNJ), 8(1), 2438–2447.
https://doi.org/10.61878/bnj.v8i1.392

Rahmawati, R., Sundari, S. W., & Patimah, M. (2022). PENATALAKSANAAN DEEP BACK MASSAGE UNTUK MENGURANGI INTENSITAS NYERI PADA PERSALINAN KALA I FASE AKTIF. c, 0–7.

Rambe, N. L. (2021). PENGARUH MASASE PUNGGUNG TERHADAP PENGURANGAN NYERI PERSALINAN : A SYSTEMATIC REVIEW. 7(2), 47–52.

Septiani, M., & Agustia, L. (2021). The Effect Of Deep Breathing Relaxation Techniques To The Reduction Of Pain In Maternal Stage I Of Activephase In The PMB Desita, S.SiT Pulo Ara Village Kota Juang Sub District Bireuen District. Journal of Healthcare Technology and Medicine, 7(2), 2615–109.
https://jurnal.uui.ac.id/index.php/JHTM/article/view/1618

Sevtiani, K., Suartini, N. W., Rahayu, S., Kala, B., & Aktif, I. F. (2025). Al-Insyirah Midwifery. 14, 29–37.

Wahyuni, R., Supriadi, S., Susanti, D., Syukur, N. A., & Ariefah, R. (2024). The effect of deep breath relaxation and counterpressure massage on pain reduction during labor m er om us e on m er al. 12, 203–206.
https://doi.org/10.4081/hls.2024

Wati, I., Suhartati, S., Devin, D., & Arbiyah, A. (2025). Peran Bidan dalam Mendukung Persalinan Aman dan Nyaman. RIGGS: Journal of Artificial Intelligence and Digital Business, 4(3), 8538–8544.
https://doi.org/10.31004/riggs.v4i3.3250

Widaningsih, N., & Sriyanti, C. (2024). 10.69677 Pengaruh Deep Back Massage dan Teknik Relaksasi Napas Terhadap Intensitas Nyeri Kontraksi Dalam Persalinan di Puskesmas Rancaekek DTP. Jurnal Penelitian Sains Dan Kesehatan Avicenna, 3(3), 227–232.

Widyawati, N. P. (2024). Asuhan Kebidanan Continuity of Care Pada Kasus Fisiologis Di Klinik Dan Rb Eva. Jurnal Medika Usada, 7(2), 62–68.
https://doi.org/10.54107/medikausada.v7i2.300

Yunika, R. P., Ulya, Y., & Herlina, S. M. (2022). the Effect of Non- Pharmacological Therapy on Pain in Childbirth of the Firsth Stage Active Phase. 10(2), 127–136.