

MIDWIFERY CARE FOR MULTIGRAVIDA PREGNANT WOMEN WITH LOWER BACK PAIN

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ABSTRAK

Nyeri punggung bawah merupakan salah satu ketidaknyamanan yang sering dialami oleh ibu hamil, terutama pada trimester ketiga, dan dapat mengganggu aktivitas serta kualitas hidup ibu. Permasalahan dalam laporan ini adalah bagaimana penerapan asuhan kebidanan komprehensif pada seorang ibu hamil usia 24 tahun G3P1A1 dengan usia kehamilan 32–33 minggu yang mengalami nyeri punggung bawah. metode yang digunakan adalah studi kasus dengan pendekatan manajemen asuhan kebidanan Varney, yang meliputi pengkajian, interpretasi data, identifikasi masalah dan diagnosis potensial, perencanaan, pelaksanaan, serta evaluasi asuhan. Pengumpulan data dilakukan melalui anamnesis, pemeriksaan fisik, dan pemeriksaan penunjang di Puskesmas Ngadiluwih. Hasil penelitian menunjukkan bahwa nyeri punggung bawah yang dialami ibu berkaitan dengan perubahan fisiologis selama kehamilan, peningkatan berat badan, serta perubahan postur tubuh. Asuhan kebidanan yang diberikan meliputi edukasi, kompres hangat, latihan gym ball, senam hamil, penggunaan kinesio taping, serta akupresur. Evaluasi menunjukkan adanya penurunan keluhan nyeri punggung serta peningkatan kenyamanan ibu setelah diberikan asuhan secara berkelanjutan. **Kesimpulan** dari laporan ini adalah bahwa penerapan asuhan kebidanan komprehensif sesuai dengan manajemen Varney efektif dalam membantu mengurangi nyeri punggung bawah pada ibu hamil trimester ketiga serta meningkatkan kesejahteraan ibu selama kehamilan.

Kata Kunci : Kehamilan; Nyeri Punggung Bawah

ABSTRACT

Lower back pain is one of the discomforts often experienced by pregnant women, especially in the third trimester, and can interfere with the mother's activities and quality of life. The problem in this report is how to implement comprehensive midwifery care for a 24-year-old G3P1A1 pregnant woman with a gestational age of 32–33 weeks who experiences lower back pain. The method used was a case study with a Varney midwifery care management approach, which includes assessment, data interpretation, problem identification and potential diagnosis, planning, implementation, and evaluation of care. Data collection was carried out through anamnesis, physical examination, and supporting examinations at the Ngadiluwih Community Health Center in Kediri Regency. The findings showed that the lower back pain experienced by the mother was related to physiological changes during pregnancy, weight gain, and changes in posture. The midwifery care provided included education, warm compresses, gym ball exercises, pregnancy exercises, the use of kinesio taping, and acupressure. The evaluation showed a decrease in back pain complaints and an increase in maternal comfort after continuous care was provided. The conclusion of this report is that the application of comprehensive midwifery care in accordance with Varney's management is effective in helping to reduce lower back pain in pregnant women in the third trimester and improving maternal well-being during pregnancy.

Keywords : pregnancy; low back pain

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INTRODUCTION

Pregnancy is the process of fetal growth and development, beginning with the release of an ovum that will be fertilized by sperm (conception) to form a zygote, followed by continuous division into an embryo that will implant (nidation) in the uterus (Safitri, 2022). Pregnancy is classified into three trimesters: the first trimester lasts 12 weeks, the second trimester from week 13 to week 27, and the third trimester from week 28 to week 40. The third trimester is the final month/third of pregnancy, beginning at week 27 and lasting until full term at 38 to 40 weeks (Anggraini, 2022).

During pregnancy, a woman's weight increases by an average of 11 to 12 kg, and hormonal and biomechanical changes in the mother's body make her susceptible to various musculoskeletal problems, such as back pain, pelvic pain, sciatica, tailbone pain, carpal tunnel syndrome, and restless leg syndrome (Salari, 2023). During pregnancy, as the uterus enlarges, the center of gravity shifts forward, and this shift causes the mother to adjust her standing position. This posture will depend on muscle strength, weight gain, joint relaxation, fatigue, and pre-pregnancy posture. These changes often, but not

always, trigger lumbar curvature (lordosis) and compensatory thoracic spinal curvature (kyphosis). This mechanism occurs between the 4th and 9th months of pregnancy and continues until 12 weeks postpartum. (Agustina Bakara, 2024; Arummega et al., 2022 in Alvionita, 2025).

Back pain is pain that occurs in the lumbosacral area. Back pain usually increases in intensity with advancing pregnancy because this pain is the result of a shift in the center of gravity and changes in posture. Back pain is characterized by symptoms such as pain or other unpleasant sensations in the spine area, which can interfere with the activities of pregnant women (Nurhayati et al., in Alvionita, 2025).

Factors causing back pain in pregnant women in the third trimester include weight gain, rapid posture changes, previous back pain, repeated stretching, multiple children, high relaxin levels, and large babies (macrosomia, birth weight ≥ 4 kg) (Omoke, 2021). Postural changes and pelvic instability can cause back pain during and after pregnancy. The transversus abdominis is a stabilizing muscle of the trunk and is important for restoring trunk stability. A number of studies on pregnancy-related back pain range from 25% to 90%, with

most studies estimating that 50% of pregnant women will suffer from back pain. One-third of them will experience severe pain, which will reduce their quality of life. 80% of pregnant women who experience back pain during pregnancy report that the condition affects their daily routines, and 10% of them report that they are unable to work (Anggraini, 2022).

Management measures that can be taken to reduce and prevent back pain include exercises and sports such as gym ball, pregnancy exercises, gym ball exercises, or other physical exercises. The provision of complementary and alternative medicine in healthcare facilities in Indonesia is regulated by the Indonesian Minister of Health Regulation No. 1109/Menkes/Per/IX/2007, Article 3, which states that "complementary and alternative medicine is carried out as a continuous service effort, starting from health promotion (promotive), disease prevention (preventive), disease treatment (curative), and/or health recovery (rehabilitative)" (Anggraini, 2022).

Based on the above description, the researcher is interested in conducting a study with the title "Midwifery Care for Multigravida Pregnant Women with Lower Back Pain."

METHODS

The method used was a case study with Varney's midwifery care management approach, which includes assessment, data interpretation, identification of problems and potential diagnoses, planning, implementation, and evaluation of care. Data collection was conducted through anamnesis, physical examination, and supporting examinations at the Ngadiluwih Community Health Center in Kediri Regency.

RESULTS

The results of the first consultation on November 5, 2025, with Mrs. S, 32-33 weeks pregnant, showed that Mrs. S, aged 24, was experiencing discomfort in the form of lower back pain. Efforts to address the problems and discomfort experienced by the pregnant woman included providing education, warm compresses, gym ball exercises, pregnancy exercises, the use of kinesio taping, and acupuncture. After receiving midwifery care, the mother stated that she understood the explanation and was willing to follow the recommendations given. She appeared calmer and more motivated to perform exercises and self-care to reduce her lower back pain.

DISCUSSION

Back pain is pain that occurs in the lumbosacral area. Back pain usually increases in intensity with advancing pregnancy because this pain is the result of a shift in the center of gravity and changes in body posture (Nurhayati et al., in Alvionita, 2025).

Studies show that the prevalence of LBP in pregnancy is quite high, reaching more than 50% in most reports, and even increasing in the second and third trimesters of pregnancy. Predisposing factors associated with the occurrence of lower back pain include a history of LBP before or during previous pregnancies, younger maternal age, increased body mass index, and lack of physical activity (Bryndal, 2020).

These changes increase pressure on the lumbar lordosis and pressure on the paraspinal muscles. The enlargement of the uterus and increase in body weight cause the muscles to work harder, which can cause tension in the muscles and joints (Winarto, 2017 in Elkhapi 2023).

As the pregnancy progresses, the baby's weight increases, making it increasingly difficult for the pregnant woman to move (Elkhapi, 2023). Lower back pain is a discomfort that can occur in the second and third trimesters of pregnancy. Lower back pain is a common physiological complaint, but it can become pathological when not properly treated, which can

negatively impact sleep quality, work, and daily activities (Rahayu, 2023).

Most pregnant women tend to avoid pharmacological therapy due to concerns about the side effects of medication on the fetus. Therefore, non-pharmacological interventions are the primary choice for managing back pain during pregnancy. Various methods, such as physical exercise and kinesio taping, have been studied as efforts to reduce pain intensity and improve comfort for pregnant women (Sr, 2021). Management that can be done to reduce and prevent back pain includes Gym ball therapy is a physical exercise method that involves a large ball to improve posture, reduce muscle tension, and increase lower back comfort. Exercises such as sitting on a ball and rocking the pelvis are known to help reduce back muscle tension and increase spinal stability. Sitting upright while using a gym ball can also help reduce abdominal muscle tension and improve ventilation through chest wall expansion (Supardi, 2022 in Rohila, 2025).

Applying a warm compress is a good way to reduce or relieve pain. The advantages of applying a warm compress are that it is easy to do, does not require any costs, and can be done at any time. Warm compresses can cause a dilation phase (widening of blood vessels), thereby increasing the intake of oxygen, nutrients,

and blood leukocytes to body tissues. The positive effects are reduced inflammation, decreased muscle stiffness and pain, and accelerated healing of soft tissues (Yuliana, 2021).

Kinesio taping is a non-invasive therapy method using special elastic tape that is applied to the skin in an elastic weave pattern. It can be stretched up to 140% of its original length and can be used for up to a week (Xue, 2021).

Prenatal exercises with simple and light movements make it easy for pregnant women to perform and remember them, which makes them feel comfortable and able to feel the benefits of prenatal exercises. One of the benefits of prenatal exercises is that they can relieve back pain symptoms, because prenatal exercises include movements that can improve muscle elasticity for fitness (Bihalia, 2024).

Acupressure performed on pregnant women with back pain by massaging the bladder 23 point can reduce muscle tension, improve blood flow, and stimulate the release of endorphins, thereby reducing the intensity of lower back pain in pregnant women. Acupressure performed for 10 minutes a day for 7 consecutive days can reduce back pain. The hypothalamus stimulates nerves in the back within ten to twenty

minutes after receiving stimulation (Armayanti, 2023 in Husna, 2025).

CONCLUSION

The assistance provided to Mrs. S, aged 24, since her third trimester of pregnancy at 32-33 weeks was carried out in accordance with the theoretical concepts obtained, and no gaps were found in the implementation of the care provided. The continuous and comprehensive care provided to Mrs. S helped the client overcome problems and discomfort to prevent risks and complications for the mother and baby.

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REFERENCES

Alvionita, V., Erviany, N., Palin, N., Sri, A., Handayani, H., Ji, A., Lama, A., Amal, K. P., Timur, K. T., & Tarakan, K. (2025). Factors Causing Lower Back Pain in Pregnant Women in the Second and Third Trimesters at the Sumarorong Community Health Center, Mamasa Regency, in 2024

- Faculty of Health Sciences, University of Borneo Tarakan, Indonesia Faculty of Health, Mega Buana University Palopo, Indonesia. *Journal of Health and Medicine*.
- Anggraini, C. S., Dewi, N. R., Ayubbana, S., Keperawatan, A., Wacana, D., Kunci, K., & Punggung, N. (2022). Literature Review: Gym Ball Exercise for Lower Back Pain in the Third Trimester of Pregnant Women. *Jurnal Cendekia Muda*, 2, 168–172.
- Arummega, M. N., Rahmawati, A., & Meiranny, A. (2022). Factors Affecting Back Pain in Pregnant Women in the Third Trimester: A Literature Review. *Journal of Midwifery Science*, 9(1), 14–30.
- Bihalia, S. M., Zulala, N. N., & Dwihestie, L. K. (2024). The Effect of Pregnancy Exercise on Back Pain Reduction in the Second and Third Trimesters of Pregnancy at the Kasihan I Community Health Center in Bantul, Special Region of Yogyakarta. *Indonesian Midwifery Journal*, 15(1), 142–152.
- Bryndal, A., Majchrzycki, M., & Grochulska, A. (2020). Risk Factors Associated with Low Back Pain among A Group of 1510 Pregnant Women. *Journal of Personalized Medicine*.
- Elkhapi, N. (2023). The Relationship Between Gestational Age, Parity, and Activity with the Occurrence of Lower Back Pain in Pregnant Women in the Second and Third Trimesters at the Kemu Community Health Center, South Oku Regency, in 2023. *Journal of Social Science Research*, 3, 6411–6425.
- Herliani, Y., Efriani, R., Khodijah, U. P., Sundari, A., & Yolanda, S. (2024). *Midwifery Care During Pregnancy Textbook*. Nuansa Fajar Cemerlang.
- Husna, N., Zulisa, E., & Handiana, C. M. (2025). The Effect of Acupressure on Back Pain in Pregnant Women at the Bunda Ria Main Clinic in Banda Aceh City. *Jurnal Medicare*, 4, 569–577.
- Mardinasari, A. L., Dewi, N. R., Ayubbana, S., Nursing, A., Wacana, D., Kunci, K., & Punggung, N. (2022). Application of Kinesio Taping for Lower Back Pain in Pregnant Women in the Third Trimester in the Metro Public Health Center Work Area in 2021. *Jurnal Cendekia Muda*, 2(September), 302–307.
- Omoke, N. I., Amaraegbulam, P. I., Ugochukwu, O., Umeora, J., & Okafor, L. C. (2021). Prevalence and risk factors for low back pain during pregnancy among women in Abakaliki ,Nigeria. *Pan African Medical Journal*.
- Pisoh, D. W., Tsopa, N., Karelle, J., Nchufor, R. N., Ako, T. W., Ascensius, A., Mforteh, A., Boten, M., Tameh, T., Mbi-Kobenge, A. E., Samje, M., Sama, D. J., & Foumane, P. (2025). Low Back Pain During Pregnancy : Prevalence , Risk Factors And Clinical Profile In The Bamenda Regional Hospital. *Bmc Pregnancy And Childbirth*.
- Rohila, T., Besmaya, B. M., Dwi, Y., Ayu, J. D., & Agustina, R. (2025). The Effectiveness of Gym Ball Therapy as a Solution for Lower Back Pain in the Third Trimester of Pregnancy. *Journal of Nutrition and Health*, 1.
- Salari, N., Mohammadi, A., Hemmati, M., Hasheminezhad, R., & Kani, S. (2023). The global prevalence of low back pain in pregnancy : a comprehensive systematic review and meta - analysis. *BMC Pregnancy and Childbirth*, 1–13. <https://doi.org/10.1186/s12884-023-06151-x>
- Sr, I. K., Stamouli, A., Kolokotsios, S., Sr, M. P., & Mavrogiannopoulou, C. (2021). The Effectiveness of Non-Pharmaceutical Interventions Upon Pregnancy-Related Low Back Pain : A Systematic Review and Meta-

- Analysis. *Cureus*, 13(1), 1–11.
<https://doi.org/10.7759/cureus.13011>
- Susilawati, E., & Yanti. (2023). Antenatal Screening of Pregnancy Risk Using Kspr in High-Risk Pregnancy Women. *Journal of Health Protection*, 12(2), 177–183.
- Umma, W., Keb, S. T., & Kes, M. (2022). Textbook for Midwifery Students on Midwifery Care for Pregnant Women. Forind.
- Xue, X., Chen, Y., Mao, X., Tu, H., Yang, X., Deng, Z., & Li, N. (2021). Effect Of Kinesio Taping On Low Back Pain During Pregnancy : A Systematic Review And Meta-Analysis. *Bmc Pregnancy And Childbirth*, 1–11.
<https://doi.org/10.1186/S12884-021-04197-3>
- Yuliania, E., Sari, S. A., & Dewi, N. R. (2021). Back Pain Intensity in Pregnant Women in the Third Trimester in the Metro Community Health Center Work Area Implementation of Warm Compresses to Reduce Back Pain Intensity for Pregnant Women in the Third Trimester Yuliania, *Jurnal Cendekia Muda*, 1, 46–51.