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CASE REPORT: LACK OF KNOWLEDGE ABOUT ANTI-HYPERTENSIVE MEDICATIONS DURING PREGNANCY WITH CHRONIC HYPERTENSION

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Abstract

***Introduction**: Fatal maternal and perinatal complications're often triggered by chronic hypertension. Successful blood pressure control is highly influenced by appropriate pharmacotherapeutic management. However, concerns regarding fetal safety often trigger non-adherence due to a knowledge deficit among pregnant women regarding antihypertensive medications. This case study aims to describe the implementation of comprehensive midwifery care in a pregnant woman with chronic hypertension experiencing medication non-adherence due to a lack of knowledge. **Methods**: The design of the research is case report utilized a midwifery management and documentation of SOAP. The study subject was Mrs. "A" (26 years old, G1P0A0) at 20 to 30 weeks of gestation, monitored through regular antenatal care and home visits in Magetan in 2026. **Results and Discussion**: At the initial assessment, the patient's blood pressure was uncontrolled (142/92 mmHg) due to non-adherence to antihypertensive medication, influenced by a lack of knowledge. Following structured health education using leaflets and counseling, the knowledge score increased from 55% to 80%, medication adherence improved, and blood pressure decreased to 138/90 mmHg without any danger signs of preeclampsia.**Conclusion and Suggestions**: The provision of health education successfully improved knowledge and adherence to antihypertensive medication in the pregnant woman. Healthcare facilities are recommended to optimize interactive counseling media and involve family support to ensure long-term therapeutic compliance.*

***Keywords**: Pregnancy, Hypertension, Knowledge, Antihypertensive, Drugs*

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INTRODUCTION

Indonesia is still facing a major national health issue, one of which is Non-Communicable Diseases (NCDs). Hypertension is part of NCDs and is marked by a condition where systolic blood pressure is ≥140 mmHg and diastolic ≥90 mmHg repeatedly. In Indonesia, hypertension still has a high prevalence. According to the 2023 Indonesian Health Survey (SKI), hypertension cases continue to rise and trigger increased rates of illness and death from cardiovascular diseases. Even though various hypertension control programs have been carried out through primary healthcare services, many patients still haven't reached their blood pressure targets. One of the reasons is the low level of patient knowledge about using antihypertensive medications.

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The use of antihypertensive drugs aims to control blood pressure so that it stays within the target range, minimizing the risk of complications. Successful antihypertensive therapy depends on several factors, including the accuracy of drug administration by healthcare professionals, but it is also influenced by patients' knowledge about the benefits of the medication, how to use it, the duration of therapy, possible side effects, and the importance of taking the medication regularly as advised by healthcare providers (Ministry of Health of Indonesia, 2019; Katzung, 2021). Lack of knowledge makes patients unaware that hypertension is a chronic disease that requires long-term treatment, so many patients stop taking their medication once their blood pressure drops or when symptoms are no longer felt. In addition, some patients still don't understand when to take the medication, the correct dosage, possible side effects, or the importance of routine check-ups at healthcare facilities. This condition leads to low adherence to medication, making the therapy less effective and increasing the risk of complications (Ministry of Health of the Republic of Indonesia, 2023).

Various studies in Indonesia over the past five years show that patients' knowledge about antihypertensive drugs is still considered low to moderate. Research by Putri, Septyasari, and Noni (2023) in Klaten Regency shows that there are still hypertensive patients with limited knowledge about antihypertensive drugs, especially regarding usage rules and therapy goals. Yulianto's study (2024) explains that knowledge about antihypertensive therapy is significantly related to medication adherence. This is reinforced by other studies indicating that the low understanding of the benefits of antihypertensive therapy is one of the main reasons for not taking medication regularly. These research results suggest that knowledge is the most important factor influencing therapy success.

Lack of knowledge about antihypertensive drugs has a pretty big impact on the success of treatment. Patients with low knowledge tend to stop their medication without consulting healthcare professionals, change their doses on their own, not understand the importance of lifelong therapy, and pay little attention to side effects that require medical attention, such as various cardiovascular complications. Based on this explanation, there is still a problem with patients having low knowledge about using antihypertensive drugs, which affects treatment adherence and therapy success.

METHOD

This research is a type of qualitative research. This study uses a case report method. The subject in this case report is Mrs. "A", a pregnant woman diagnosed with chronic hypertension who has limited knowledge about the use of antihypertensive drugs during pregnancy, according to the obstetric pathology issues to be discussed. The obstetric management in this case report uses the Subjective, Objective, Assessment, and Plan (SOAP) approach. The midwifery intervention is focused on providing education and a questionnaire about chronic hypertension in pregnancy and the use of antihypertensive medications. Location of the research was PMB Midwife Lilis Ratnawati, S. Tr.Keb, office and patient's home during February to March 2026 (±2 weeks).

RESULT AND DISCUSSION

The self-managed healthcare facility that serves as the site for this case study is the Independent Midwife Practice (PMB) of Midwife "L," located on Kelud Street, Magetan Regency.

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This independent practice is professionally run by Midwife "L" and provides comprehensive midwifery services, including antenatal care, childbirth, postpartum care, newborn care, family planning, and women's reproductive health.

This assessment was conducted on March 16, 2026, at 5:00 PM at TPMB Midwife Lilis. Mrs. A, 26 years old, and her husband Mr. G, 28 years old, came to TPMB. She reported occasionally feeling dizzy when doing heavy activities, which has been happening for 2 days. The dizziness improves after resting and is not accompanied by blurred vision, severe headache, upper abdominal pain, or seizures. She was first diagnosed with chronic hypertension before getting married at the age of 23 (3 years ago) with a blood pressure of 140/90 mmHg when checked at the community health center. She was prescribed antihypertensive medication nifedipine 10 mg three times a day, but medication adherence was not optimal because she did not have any symptoms. She has a family history of hypertension from her mother and does not have a history of other hereditary diseases such as diabetes mellitus, chronic illnesses, heart disease, or infectious diseases like HIV/AIDS, tuberculosis, or Hepatitis B. There's no history of gemelli pregnancies or birth defects.

The mother admitted that she often misses her medication schedule because she forgets, fears the medicine might harm the baby, and doesn't fully understand the importance of antihypertensive therapy during pregnancy. Medication adherence is influenced by knowledge level, beliefs, family support, access to healthcare services, and communication with healthcare workers. Low adherence increases the risk of hypertension complications for both mother and baby (WHO, 2023). Facts show that lack of knowledge is the main factor affecting the mother's adherence, so continuous education is needed.

A first-time pregnant mother who has never had an abortion had one ANC visit and one ANCT visit with blood pressure of 142/90 mmHg and lab results showing Hemoglobin: 12.0 g/dl, Blood type: O, Random blood sugar: 102 mg/dl, HbsAg: Negative, HIV: Non-reactive, Syphilis: Non-reactive, Urine Protein: -. She saw an OB-GYN twice, with the first ultrasound showing a gestational sac and the second ultrasound showing a gestational sac and embryo. High blood pressure was detected since 6 weeks of pregnancy, leading to a diagnosis of chronic hypertension and treatment with Aspilet 100mg once a day. The mother said she does not yet understand the benefits, how it works, the safety, or the importance of using antihypertensive drugs during pregnancy. She has never experienced side effects, has no difficulty getting the medication, but sometimes forgets to take it as scheduled. She last received the medication on March 10, 2026, with 10 tablets and still had 6 left at the time of the visit, indicating that her medication adherence is not yet optimal.

Every day, Mom does household chores like cooking, sweeping, mopping, washing, and ironing. She avoids very strenuous physical activities because she sometimes feels dizzy while doing things, so she's advised to rest if she feels unwell. Before pregnancy, Mom didn't follow a low-salt diet. She drinks 7-9 glasses of water a day. After becoming pregnant, she eats three meals a day with moderate portions. Mom says her sleep quality is pretty good and she doesn't have trouble sleeping. During pregnancy, she started taking naps for about an hour a day. She sleeps at night from 8:00 PM to 4:00 AM (around 8 hours). Mom doesn't rely on over-the-counter medications, herbal remedies, alcohol, or cigarettes. She gets antihypertensive therapy as advised by her doctor, but admits she doesn't take her medicine regularly.

Mom, her husband, and the family really hope that the pregnancy and delivery go smoothly. Mom admitted that she had felt anxious about her hypertension and whether antihypertensive medication is safe for the baby, which made her skip taking the medicine

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sometimes. Her anxiety came from not really understanding how safe it is to use antihypertensive drugs during pregnancy and worrying that the medication could harm the baby. In my mom's neighborhood, there's a belief that eating cucumbers can help lower blood pressure. She says she follows that advice and believes cucumbers can help control her blood pressure. Because of that belief, she sometimes didn't take her prescribed blood pressure medication regularly, thinking that just eating cucumbers was enough to lower her blood pressure.

General examination results indicate that overall condition is good, fully conscious. Blood pressure 142/92 mmHg, pulse 88 beats/min, respiratory rate 18 breaths/min, temperature 36.6°C, MAP: (((2x92)+142)/3) = 109 mmHg (increased, shows average arterial pressure above normal), height 151 cm, pre-pregnancy weight 62 kg, current weight 64 kg, weight gain 2 kg, recommended weight gain: 11.5-16 kg, MUAC: 28 cm, pre-pregnancy BMI: 27.2 (overweight), current pregnancy BMI: 28.1 (overweight). Objective data in pregnant women with chronic hypertension include checking vital signs, blood pressure, general condition, physical examination, lab tests if needed, and evaluation of therapy adherence (ACOG, 2022). The examination results show that besides elevated blood pressure, assessing the mother's understanding of the treatment is also important to determine education needs.

Based on the assessment results, the established midwifery diagnosis is a pregnant woman with chronic hypertension who has limited knowledge about antihypertensive medication. This diagnosis is based on subjective data showing that the mother does not understand the purpose of using the medication, its benefits, dosage, schedule, or the risks if the medication is not taken as directed. Additionally, she admitted to often forgetting to take her medication and is worried that it might harm the baby. Objective data showed a blood pressure of ≥140/90 mmHg, indicating that chronic hypertension still needs to be managed with proper therapy. According to the theory, midwifery diagnoses are made based on a thorough analysis of subjective and objective data to identify actual problems as well as risk factors.

The midwife provides health education about the meaning of chronic hypertension, its causes, risk factors, complications, and its impact on both the mother and the fetus. Health education is a key intervention to increase the mother's knowledge so she can understand the disease, prevent complications, and adopt healthier behaviors (Ministry of Health of Indonesia, 2022; POGI, 2023). The education given is tailored to the mother's needs as it serves as a foundation for improving understanding of chronic hypertension during pregnancy. The midwife encourages the mother to take her medication regularly, attend prenatal check-ups on schedule, and keep track of her blood pressure readings. She also provides counseling on healthy lifestyle habits, such as reducing excessive salt intake, eating a balanced nutritious diet, getting enough rest, doing light physical activity according to her condition, and avoiding smoking and alcohol.

Based on the results of the midwifery care management, the interventions provided have been tailored to the needs of pregnant women with chronic hypertension and a lack of knowledge about antihypertensive medication. According to the evaluation results, the midwifery care given has shown good outcomes. The mother has improved her understanding of chronic hypertension and the use of antihypertensive drugs, shown by her ability to explain the benefits of the medication, the correct way to use it, and the risks if the medication is not taken as recommended. During the evaluation period, the mother's blood pressure has been more controlled, and no signs of complications were found in either the mother or the baby. This success is influenced by increased adherence to taking antihypertensive medication, adopting a healthy lifestyle, as well as support from family and regular antenatal monitoring.

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CONCLUSION AND SUGGESTION

Based on the results of midwifery care, it can be concluded that providing health education, counseling, using leaflets, giving medicine intake checklists, and conducting regular evaluations can improve mothers' knowledge and compliance in taking antihypertensive medication during pregnancy. Evaluation of compliance using the Morisky Medication Adherence Scale (MMAS-8) shows that mothers' adherence to taking antihypertensive drugs has increased to a high category. Mothers reported that they have been taking their medication according to schedule, no longer often forgetting to take it, and receiving support from their husbands to remind them of the medication schedule. These behavioral changes are also supported by the adoption of a healthy lifestyle, such as reducing high-salt foods, doing light physical activities according to ability, and maintaining sufficient rest.

REFERENCE

Alvionita, R., Samidah, I., & Murwati. (2022). Faktor-Faktor yang Berhubungan dengan Kejadian Hipertensi Kehamilan di RSUD Curup Tahun 2022. *Journal of Nursing and Public Health, 10(2)*.https://jurnal.unived.ac.id/index.php/jnph/article/view/3176

Amelia, K., Hutabarat, J., & Sitorus, S. (2023). Edukasi terhadap Pengetahuan Ibu Hamil tentang Hipertensi dalam Kehamilan. *Jurnal Ilmiah PANNMED, 18(3)*. https://repository.poltekkes-medan.ac.id/id/eprint/551/

American College of Obstetricians and Gynecologists. (2020). Practice Bulletin No. 222: Gestational Hypertension and Preeclampsia. *Obstetrics & Gynecology, 135(6), e237–e260.*

American College of Obstetricians and Gynecologists. (2023). *Chronic Hypertension in Pregnancy*. Practice Bulletin No. 203.

Astuti, E. R., & Claudia, J. G. (2024). Tinjauan Literatur: Penatalaksanaan Hipertensi pada Ibu Hamil. *Jambura Journal of Health Sciences and Research, 6(2)*. Jambura Journal of Health Sciences and Research

Bello, N. A., & Cushman, W. C. (2021). *Chronic hypertension in pregnancy: Epidemiology and outcomes*. Circulation, 143(6), 594–606.

Bone, J. N., Sandhu, A., Abalos, E., et al. (2022). Oral antihypertensives for nonsevere pregnancy hypertension: Systematic review, network meta-analysis, and trial sequential analysis. *Hypertension, 79(3), 614–628.* https://doi.org/10.1161/HYPERTENSIONAHA.121.18415

Cahya, V. T. R., & Masruroh. (2025). Pendidikan kesehatan terhadap peningkatan pengetahuan ibu hamil tentang hipertensi. *Journal of Holistics and Health Sciences, 7(2), 411–420.* https://doi.org/10.35473/jhhs.v7i2.634

Cameron, N. A., Everitt, I. K., Lee, K. A., Yee, L. M., & Khan, S. S. (2023). Chronic hypertension in pregnancy: a lens into cardiovascular disease risk and prevention. *Hypertension, 80*(6), 1162-1170.

Cunningham, F. G., Leveno, K. J., Bloom, S. L., et al. (2022). *Williams Obstetrics* (26th ed.). McGraw-Hill Education.

MEDIC NUTRICIA
Jurnal Ilmu Kesehatan
ISSN : 3025-8855

2026, Vol. 23 No. 4
Prefix DOI 10.5455/mnj.v1i2.644xa

Garovic, V. D., et al. (2022). Hypertension in pregnancy: Diagnosis, blood pressure goals, and pharmacotherapy. Cardiovascular Research, 118(9), 1914–1929.

Gholami, K., Norouzkhani, N., Kargar, M., et al. (2022). Impact of educational interventions on knowledge about hypertensive disorders of pregnancy among pregnant women: A systematic review. *Frontiers in Cardiovascular Medicine, 9, 886679.* https://doi.org/10.3389/fcvm.2022.886679

Handayani, S., Fajri, U. N., Fitriyani, T., & Zulfatunnisa, N. (2025). Asuhan Kebidanan Kehamilan. *Penerbit Tahta Media*.

Harkness, M., & Wallace, C. (2021). Exposing racial bias in midwifery education: a content analysis of images and text in Myles Textbook for Midwives. *medRxiv*, 2021-10.

Isnani, E., Pratiwi, W. N., Margareta, S. S., dkk. (2024). Pengaruh Pendidikan Kesehatan dengan Media Booklet terhadap Pengetahuan Ibu Hamil yang Mengalami Hipertensi dalam Kehamilan. *Nursing Sciences Journal*. https://ojs.unik-kediri.ac.id/index.php/nsj/article/view/5586

Katzung, B. G. (2021). *Basic & Clinical Pharmacology* (15th ed.). McGraw-Hill Education. https://accesspharmacy.mhmedical.com/book.aspx?bookID=2988

Kemenkes, R. I. (2010). Pedoman pelayanan antenatal terpadu. *Direktur Jenderal Bina Kesehatan Masyarakat Kementerian Kesehatan Republik Indonesia, Jakarta*.

Kementerian Kesehatan Republik Indonesia. (2019). *Pedoman Nasional Pelayanan Kedokteran Tata Laksana Hipertensi*. Jakarta: Kementerian Kesehatan RI. https://www.kemkes.go.id

Kementerian Kesehatan Republik Indonesia. (2023). *Survei Kesehatan Indonesia (SKI) 2023*. Jakarta: Badan Kebijakan Pembangunan Kesehatan. https://repository.badankebijakan.kemkes.go.id/

Kementerian Kesehatan Republik Indonesia. (2024). *Pedoman Pengendalian Hipertensi di Fasilitas Kesehatan Tingkat Pertama*. https://kesmas.kemkes.go.id

Khansha, L., & Yuniarni, U. (2023). *Evaluasi Penatalaksanaan Penggunaan Obat Antihipertensi pada Pasien Preeklampsia di Instalasi Rawat Inap*. Jurnal Riset Farmasi. https://journals.unisba.ac.id/index.php/JRF/article/view/3119

Perhimpunan Dokter Hipertensi Indonesia (PERHI). (2021). *Konsensus Penatalaksanaan Hipertensi 2021*. https://www.perhi.or.id

Prawirohardjo, S. (Ed.). (2020). *Ilmu Kebidanan* (Edisi ke-4). Jakarta: PT Bina Pustaka Sarwono Prawirohardjo.

Putri, A., Septyasari, A. F., Noni, M., & Haryanti, R. (2023). Gambaran Tingkat Pengetahuan Obat Antihipertensi di Desa Kujon Kecamatan Ceper Kabupaten Klaten. *CERATA Jurnal Ilmu Farmasi, 14(1), 21-27. DOI: 10.61902/cerata.v14i1.761.*(E-Journal UMG Klaten) https://ejournal.umkla.ac.id/index.php/cerata/article/view/761

Qomarasari, D., Pratiwi, L., Febrianti, C. P., & Sa'idah, S. N. (2024). *Asuhan Kebidanan Kehamilan*. Penerbit NEM.

QURANITA, P. (2025). Riwayat Hipertensi, Preeklampsia, Dan Dm Dalam Keluarga Dengan Kejadian Hipertensi Dalam Kehamilan. *Journal Of Midwifery*, *13*(1), 136-142.

Rahayu, S., Rahayuningsih, F. B., Oktaviana, W., dkk. (2024). Edukasi Kesehatan Tentang Hipertensi Pada Kehamilan. *I-Com: Indonesian Community Journal, 4(2), 859-864.* https://doi.org/10.33379/icom.v4i2.4490

MEDIC NUTRICIA
Jurnal Ilmu Kesehatan
ISSN : 3025-8855

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Prefix DOI 10.5455/mnj.v1i2.644xa

Rahmadini, A. F., Lestari, F., Nurjanah, I., Iklimah, I., & Salsabila, S. (2023). Faktor-faktor yang menyebabkan hipertensi pada ibu hamil. *Journal of Public Health Innovation*, *3*(2), 205-213.

Regitha, V. T. C., & Masruroh. (2025). Pendidikan Kesehatan terhadap Peningkatan Pengetahuan Ibu Hamil tentang Hipertensi. *Journal of Holistics and Health Sciences*.https://e-abdimas.unw.ac.id/index.php/jhhs/article/view/634

Sastri, R., Haskas, Y., & Hasnita. (2024). Hubungan pengetahuan dengan kejadian hipertensi pada kehamilan di wilayah kerja Puskesmas Tamalanrea Jaya. *Jurnal Ilmiah Mahasiswa & Penelitian Keperawatan*.

Septiasari, R. M., & Mayasari, D. (2023). *Buku Ajar Asuhan Kebidanan Kehamilan*. Rena Cipta Mandiri.

Sinuhaji, L. N., Sinaga, R., Ginting, S. S. T., Situmorang, F. N. S., & Dewi, E. R. (2024, July). Continuous Midwifery Care For Pregnant Women Ny D With Grade I Birth Canal Laceration At Roni Midwife Independent Practice Barus Sub-District Percut Sei Tuan Regency Deli Serdang Year 2024. In *Mitra Husada Health Internasional Conference (MIHHICo)* (Vol. 4, No. 1, pp. 310-316).

SUHARAINI, I. I., Dewi, A. S., & Tabatte, M. (2024). Faktor–Faktor Yang Mempengaruhi Kejadian Hipertensi Pada Kehamilan. *Prepotif: Jurnal Kesehatan Masyarakat Учредители: Universitas Pahlawan Tuanku Tambusai, 8(2), 2610-2618.*

Varney, H., Kriebs, J. M., & Gegor, C. L. (2007). *Varney's Midwifery* (4th ed.). Boston: Jones and Bartlett Publishers.