

THE APPLICATION OF MIDWIFERY CARE TO REDUCE DISCOMFORT CAUSED BY FREQUENT URINATION IN THIRD- TRIMESTER PREGNANT WOMEN AT THE MITRA HUSADA CLINIC MEDAN IN 2026

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ABSTRACT

Background: Frequent urination is a physiological discomfort experienced during the third trimester due to mechanical pressure from the fetal head, which reduces bladder capacity by up to 50%. If left untreated, this condition can lead to insomnia and increase the risk of urinary tract infections (UTIs). Objective: To implement and evaluate comprehensive midwifery care to reduce the discomfort of frequent urination in third-trimester pregnant women at the Mitra Husada Clinic in Medan in 2026. Methods: This study employed a descriptive case study design, utilizing Helen Varney's 7-Step Midwifery Care Management and SOAP documentation. The study subject was Mrs. M, G1P0A0, at 31 weeks of gestation, who complained of frequent urination. The intervention was conducted over 14 days and included nighttime fluid restriction (the 8-2-1 regimen), the double voiding method, and self-administered Kegel exercises. Data were analyzed descriptively and comparatively. Results: Objective evaluation showed significant changes after two weeks of intervention. The frequency of nighttime urination (nocturia) decreased from an average of 8.5 ± 0.5 times to 3.0 ± 0.2 times per night. Effective sleep duration increased from an average of 4.0 ± 0.5 hours to 7.0 ± 0.5 hours without any complaints of physical fatigue. Clinical evaluation also showed no symptoms of urinary tract infection (UTI). Conclusion: The implementation of midwifery care based on Helen Varney's 7-step approach-which focuses on adjusting fluid intake and strengthening the pelvic floor muscles-has been shown to be effective in reducing the frequency of urination and optimizing sleep quality in pregnant women in their third trimester.

Keywords: Midwifery Care, Helen Varney, Frequent Urination, Third Trimester, Sleep Quality.

Introduction

Pregnancy is a dynamic physiological process that brings about significant changes throughout a woman's entire body, especially as she enters the third trimester. This period is a crucial phase during which the fetus undergoes rapid growth, requiring extraordinary physical and psychological adaptation from the mother (Siska Suci Triana Ginting et al., 2025).

Various global health organizations emphasize the importance of high-quality antenatal care during this final phase to ensure early detection of any anomalies. pregnant women in their third trimester also often experience various uncomfortable symptoms that are physiological in nature but significantly interfere with their daily quality of life (Pregnancy et al., 2026).

As pregnancy enters its final phase the third trimester the intensity of changes in the mother's organ systems actually reaches its peak to facilitate the increasingly complete maturation of the fetus's organs. During this transitional period, there is a surge in peripheral blood volume (hypervolemia) as well as fluctuations in progesterone and estrogen levels, which affect the flexibility of the connective tissue around the pelvis (Retnonongtias & Dewi, 2021).

These changes in the body's biomechanics and the shifting positions of internal organs trigger a series of characteristic and interrelated physical discomforts, ranging from back pain and mild shortness of breath to changes in bowel and bladder habits. These various functional adaptations require proper understanding and management, given that the line between purely physiological conditions and early pathological symptoms in the third trimester is often very fine (Redowati & Af'idah, 2025).

One of the most common physical complaints among pregnant women as they approach labor is an increased frequency of urination, or frequent urination. Anatomically, this condition is triggered by the enlargement of the uterus and the descent of the lowest part of the fetus-usually the head-into the lesser pelvic cavity. This phenomenon exerts direct mechanical pressure just above the dome of the bladder, which drastically reduces the organ's functional capacity to half its normal volume. As a result, even though the accumulated urine volume is small, receptors in the bladder wall already send signals to the brain to initiate emptying immediately (National Development Planning Agency, 2023).

Although frequent urination symptoms are classified as normal changes, their impact on the well-being of pregnant women should not be underestimated. When the frequency of nighttime urination (nocturia) increases sharply, a woman's sleep cycle becomes repeatedly fragmented. This chronic sleep disturbance leads to insomnia, extreme physical fatigue during the day, and emotional instability. Furthermore, the reluctance to get up to urinate at night often leads pregnant women to hold their urine. This behavior, when combined with urinary stasis caused by the hormone progesterone, becomes a major risk factor for urinary tract infections

(UTIs), which can trigger premature labor (Sutarto et al., 2025).

This condition becomes much more complex when experienced by a primigravida, as seen in the case of Mrs. M (G1P0A0), who was 31 weeks pregnant. As a woman experiencing her first pregnancy, Mrs. M had no prior adaptive experience in managing the physical changes of the third trimester. Lack of knowledge about the physiological nature of these frequent urination symptoms often leads to subjective anxiety and misperceptions, in which mothers interpret their condition as a sign of a medical disorder. Therefore, primigravidas require more intensive attention in the form of education and adaptive care support (Manurung et al., 2024).

In addressing this issue, midwives play a central role by providing promotive and preventive midwifery care. To ensure that care is provided systematically and safely, the implementation of Helen Varney's 7-Step Midwifery Care Management serves as an ideal operational framework. Through a structured approach—ranging from basic data collection and thorough data interpretation to identifying potential problems, implementation, and evaluation—midwives can develop a rational, evidence-based intervention plan (evidence-based midwifery) that is truly tailored to Mrs. M's specific needs (Pregnancy et al., 2026).

Interventions that can be integrated into the implementation of self-directed midwifery care include several effective, non-pharmacological behavioral modifications. The first is the implementation of a nighttime fluid intake restriction regimen based on an ideal volume distribution scheme (the 8-2-1 pattern), without reducing the mother's total daily fluid requirements. Second is education on the double voiding method to ensure that the bladder is completely emptied every time you urinate. Finally, it is important to make a habit of doing Kegel exercises regularly to strengthen the pelvic floor muscles (pubococcygeus).

The Mitra Husada Clinic in Medan was selected as the site for this case study in 2026 because of its commitment to providing comprehensive maternal and child health services. As a science-based primary care institution, this clinic is an ideal setting for implementing evidence-based midwifery care. This case study is expected to make a tangible contribution in the form of a draft self-care guide that can be used by midwifery practitioners at the clinic in managing third-trimester complaints (National Development Planning Agency, 2023).

Based on the above discussion, the primary objective of this scientific article is to implement, analyze, and evaluate the success of comprehensive midwifery care using Helen Varney's management approach in reducing the discomfort caused by frequent urination in Mrs. M (G1P0A0) at the Mitra Husada Clinic in Medan in 2026. Through the presentation of objective quantitative evaluation data, it is hoped that this study will serve as a valid scientific reference, enrich the body of knowledge in midwifery, and effectively reduce the incidence of sleep disturbances among pregnant women in their third trimester (Nyeri et al., 2025).

Research Method

This study used a descriptive case study design to evaluate the effectiveness of a self-directed midwifery clinical intervention in reducing the frequency of urinary frequency in the third trimester. The care delivery process was entirely based on Helen Varney's Seven-Step Midwifery Care Management framework, documented using the SOAP format. The research subject was selected using purposive

sampling: Mrs. M, a primigravida (G1P0A0) at 31 weeks of gestation with complaints of physiological frequent urination and no accompanying complications, who attended an antenatal visit at the Mitra Husada Clinic in Medan in 2026. The primary data collection process was conducted over a 14-day period using structured interviews, clinical observation forms, a sleep quality questionnaire, and a voiding diary completed independently by the patients. The care protocol was implemented in stages, starting with baseline data collection (Step I) and proceeding systematically through to the evaluation phase (Step VII). The self-directed interventions provided included daily hydration regulation using a nighttime fluid restriction regimen (the 8-2-1 pattern), education on

complete bladder emptying through the double voiding technique, and instructions for self-directed Kegel exercises three times a day with 10 contraction repetitions. Data on patients' clinical progress were analyzed using a descriptive-comparative method by comparing quantitative parameters, namely the mean (Pregnancy et al., 2026).

frequency of nighttime urination (nocturia) and the number of hours of effective sleep, between the pre-intervention and post-intervention periods. The entire research procedure was conducted in accordance with the principles of medical ethics, including obtaining informed consent, maintaining anonymity, and ensuring beneficence for both the mother and the fetus (Anisah & Fatmarizka, 2025).

Result

The results of the evaluation of midwifery care based on Helen Varney's 7-Step Management and SOAP documentation for Mrs. M (G1P0A0) after the intervention days showed significant clinical changes. Prior to the intervention, during the baseline data collection phase, Mrs. M subjectively complained of a very high frequency of urination at night (nocturia), which disrupted her sleep patterns.

Objectively, initial data from the micturition diary showed that the frequency of nighttime urination averaged 8.5 ± 0.5 times, resulting in a low duration of effective sleep—an average of only 4.0 ± 0.5 hours per night. This condition led to complaints of physical fatigue and slightly anemic-looking conjunctiva due to lack of rest, although vital signs and urine test results were within physiological limits (Netty Julita Siahaan et al., 2022).

Following the implementation of midwifery care focused on behavioral modification—including regulation of daily fluid intake (the 8-2-1 regimen), the double voiding technique, and self-directed Kegel exercises—the patient's progress was monitored periodically (Anisah & Fatmarizka, 2025).

Table 1. Comparison of Clinical Parameters for Frequent Urination and Sleep Duration in Mrs. M Before and After Midwifery Care

No	Clinical Evaluation Parameters	Before the Intervention (Pre-Care)	After the Intervention (Post-Care)	Percentage Change (%)	Health Status
1	Frequency of Urination at Night (Nocturia)	8.5 ± 0.5 times	$3,0 \pm 0,2$ times	A 64.7% decrease	Physiological / Normal
2	Effective Nighttime Sleep Duration	4.0 ± 0.5 hours	$7,0 \pm 0,5$ hours	A 75.0% increase	Adequate / Met
3	Complaints of Physical Fatigue During the Day	Present (Positive)	None (Negative)	-	Improving
4	Clinical Signs of a Urinary Tract Infection (Pain/Fever)	None (Negative)	None (Negative)	-	Infection-Free

Discussion

The reduction in Mrs. M's nighttime urination frequency from an average of 8.5 ± 0.5 times to 3.0 ± 0.2 times demonstrates the effectiveness of the combination of non-pharmacological interventions administered. Regular Kegel exercises successfully improved the tone of the pelvic floor muscles (pubococcygeus), thereby strengthening the urethral sphincter's ability to withstand the mechanical pressure of the fetal head. In addition, regulating daily fluid intake (the 8-2-1 regimen) effectively limits nighttime urine production without reducing the mother's daily fluid needs, while the double voiding technique ensures complete bladder emptying to prevent premature stimulation of urinary nerve receptors (Redowati & Af'idah, 2025).

The success of this care approach is supported by the systematic implementation of Helen Varney's 7-Step Management, which identifies and anticipates potential problems—such as insomnia and the risk of urinary tract infections (UTIs)—from the very beginning. As a primigravida (G1P0A0), supportive education regarding the physiological changes of the third trimester successfully reduced Mrs. M.'s anxiety. By reducing the frequency of nighttime urination, sleep fragmentation was minimized, resulting in an increase in the patient's effective sleep duration from an average of 4.0 hours to 7.0 hours per night, confirming that this evidence-based midwifery care is effective in holistically improving the mother's quality of life (Putri & Febrianti, 2022)

Conclusion and Suggestion

Based on the results and discussion regarding the application of midwifery care for Mrs. M (G1P0A0) at the Mitra Husada Clinic in Medan in 2026, it can be concluded that frequent urination (FU) in the third trimester is a physiological condition that was successfully managed using a non-pharmacological approach. Through the implementation of Helen Varney's structured Seven-Step Management, the root cause of the patient's problem could be thoroughly identified early on. Objective post-treatment monitoring results showed clear clinical success, marked by a significant reduction in the frequency of nighttime urination (nocturia) from an average of 8.5 ± 0.5 times to 3.0 ± 0.2 times per night, as well as the resolution of signs of physical fatigue and the risk of urinary tract infections (UTIs) (Nainggolan, 2024)

This reduction in the frequency of nighttime urination directly alleviated the sleep disturbances (sleep fragmentation) previously reported by the patient, a primigravida (Andriani, 2022). Restricting fluid intake using the 8-2-1 regimen, the technique of complete bladder emptying via double voiding, and strengthening pelvic floor muscle tone through Kegel exercises were proven to increase Mrs. M's effective sleep duration from an average of 4.0 hours to 7.0 hours per night. Thus, the implementation of evidence-based midwifery has not only successfully reduced urinary elimination disorders in quantitative terms, but has also effectively optimized the quality of rest and psychological well-being of pregnant women in their third trimester (Kesehatan & Buana, 2025)

As a recommendation, midwifery practitioners at the Mitra Husada Clinic in Medan are encouraged to incorporate this self-care protocol as standard material when providing Communication, Information, and Education (CIE) to expectant mothers, particularly starting at the beginning of the third trimester, to prevent complications related to chronic insomnia. For educational institutions, it is recommended that this draft case

study beused as an additional reference to enrich the literature on nursing management using the single-case design. Finally, for clinical institutions, it is recommended to facilitate the provision of structured informational materials, such as leaflets or fact sheets, regarding Kegel exercises and fluid intake guidelines to enhance patients' independence and adherence to home care regimens (Manurung et al., 2024).

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