

Antenatal midwifery care for Mrs. A with G1P0000 of 11-12 weeks of pregnancy with morning sickness at the KIA Polyclinic, Sambu Community Health Center, Kediri Regency

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Abstract:

Nausea and vomiting in pregnancy (NVP) is one of the most common complaints experienced by pregnant women during the first trimester. Although often considered physiological, this condition can significantly affect maternal health, quality of life, and nutritional intake, which may impact fetal growth. This study aimed to describe comprehensive midwifery care for a pregnant woman with first-trimester NVP. A descriptive case study design was applied using Varney's midwifery management approach, conducted on Mrs. A, G1P0000, at 11 weeks and 2 days of gestation at Sambu Community Health Center, Kediri. Data were collected through interviews, observations, physical examinations, medical records, and literature review. The results showed that NVP can be managed through non-pharmacological interventions, including dietary counseling, vitamin B6 supplementation, the use of aromatherapy, and family support. Evaluation demonstrated improvements in maternal condition, knowledge, and awareness regarding the importance of adequate nutrition during pregnancy. In conclusion, comprehensive and collaborative midwifery care is effective in helping women cope with NVP and in preventing further complications.

Keywords

NVP; emesis gravidarum; pregnancy; midwifery care; first trimester

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INTRODUCTION

Nausea and vomiting of pregnancy (NVP) are common complications, particularly in the first trimester, and affect approximately 60–90% of pregnant women. The main symptoms include nausea, vomiting, and recurrent vomiting. In a small proportion of cases, this condition persists until the end of pregnancy and can progress to hyperemesis gravidarum, which has serious physical and psychological consequences, even affecting the decision to continue the pregnancy. Severe NVP is also associated with clinical complications, such as esophageal rupture, pneumothorax, and Wernicke's encephalopathy, and potentially poses long-term risks to the fetus, including psychiatric disorders, cardiovascular disease, and respiratory problems (Zou et al., 2024).

Nausea and vomiting in pregnancy (NVP) is a common condition experienced by pregnant women, with varying degrees of severity, ranging from mild to severe. Although NVP generally does not increase the risk of adverse pregnancy outcomes, it significantly impacts quality of life by disrupting daily activities, work, and social and family life. In more severe cases, NVP can cause high morbidity, lead to functional limitations, and even influence future reproductive decisions. The resulting physical and psychological impacts underscore the importance of addressing and managing this condition effectively (Alkhubair et al., 2023).

Nausea and vomiting of pregnancy (NVP), often mistaken for morning sickness, can occur throughout the day and generally improves after the first trimester, although about a quarter of women continue to experience it into the third trimester. This condition is usually considered normal, but in severe cases with dehydration, weight loss, and ketosis, it can progress to hyperemesis gravidarum, with a prevalence of 0.3–10.8%. NVP significantly impacts quality of life, increases the risk of depression, and causes economic losses due to work absence. Some evolutionary theories propose that NVP serves as a protective mechanism for both mother and fetus, characterized by an aversion to risky foods such as meat, alcohol, and caffeine. Research evidence suggests that NVP is associated with a reduced risk of miscarriage and better pregnancy outcomes, including full-term births and higher birth weights, suggesting that this condition has adaptive value for reproductive success (Emmott, 2024).

Nausea and vomiting in pregnancy (NVP), also known as emesis gravidarum (EG), is a common discomfort experienced by approximately 70–80% of pregnant women. Symptoms typically appear at 6–8 weeks of gestation and generally subside by 20 weeks, although severe cases may require intensive treatment, including hospitalization and enteral or parenteral nutritional support. Overall, approximately 88% of pregnant women report experiencing NVP with varying degrees of severity: 6.4% severe, 52.2% moderate, and 29.4% mild. This condition significantly impacts the physical and psychological health, as well as the quality of life, of both mother and fetus. The term morning sickness is often used, but it is inappropriate because symptoms can persist throughout the day, especially in more severe cases (Study et al., 2025).

Nausea and vomiting in pregnancy can occur simultaneously or separately, likely triggered by different pathophysiological mechanisms. Modern pharmacological therapies, such as 5-HT₃ and NK1 receptor antagonists, have been shown to be effective in reducing vomiting but are still less than optimal in treating nausea. The mechanism of these symptoms is controlled by the vomiting center in the medulla, which is considered a functional area rather than a single anatomical structure. This center encompasses the reticular formation and the nucleus tractus solitarius, receiving stimuli from various pathways, including gastrointestinal vagal afferents, the cerebral cortex (psychogenic),

the vestibular and visual systems, and the chemoreceptor trigger zone (CTZ). The CTZ, located in the area postrema outside the blood-brain barrier, is highly sensitive to various endogenous and exogenous chemicals, including medications, and plays a key role in triggering the nausea and vomiting response (Heckroth et al., 2021).

METHODS

This study employed a descriptive case study method, utilizing a comprehensive approach to midwifery care. The purpose of this method is to provide an in-depth description of the management of midwifery care for pregnant women with nausea and vomiting in pregnancy (NVP) during the first trimester of pregnancy at the Sambi Health Center, Kediri Regency, from September 8 to October 4, 2024. The subject of this study was Mrs. A, a G1P0000, with a Gestational Age of 11 - 12 Weeks, who was diagnosed with nausea and vomiting in pregnancy (NVP). Data collection was carried out through direct observation of the patient's condition, interviews with family members and healthcare workers, review of medical records, and a literature review to strengthen the theoretical and management approach. Instruments used for data collection included maternal and neonatal assessment forms, midwifery management process forms based on the seven Varney Steps, and patient progress notes that referred to the SOAP approach. Data analysis was conducted using descriptive and quantitative methods to describe the results of assessment, diagnosis, intervention, implementation, and evaluation, based on midwifery care standards and relevant literature.

RESULTS

The case study is conducted in accordance with Varney's Midwifery Management, from the assessment stage to the evaluation. This chapter also explains the congruence and unintentional mismatches between theory and practice. Each identified mismatch provides an opportunity for problem-solving efforts to enhance the quality of midwifery care. This case study was conducted on Mrs. A G1P0000, 11-12 weeks' gestation, who was diagnosed with nausea and vomiting in pregnancy (NVP) at the Sambi Community Health Center, Kediri Regency.

During the assessment, the author obtained subjective data. Subjective data was collected through interviews with the mother. Subjective data indicated that the mother experienced nausea and vomiting in pregnancy (NVP) in the first trimester.

Data interpretation includes diagnosis, problems, and obstetric needs. In the case of Mrs. A G1P0000, 11-12 weeks of gestation, the established obstetric diagnosis is nausea and vomiting in pregnancy (NVP):

- a. Problem: Nausea and vomiting in pregnancy (NVP)
- b. Needs: Providing IEC to mothers to overcome nausea and vomiting in pregnancy (NVP) during their pregnancy is recommended to:
 1. Meet her nutritional needs by consuming small portions of food frequently (6-7 times a day).
 2. Advise the mother to maintain good personal hygiene. After vomiting, rinse her mouth with water, brush her teeth with a mild, mint-flavored toothpaste, or use mouthwash.
 3. Advise the mother to continue taking vitamin B6 once a day.
 4. Inhale peppermint or lemon aromatherapy.
 5. Avoid foods containing saturated fat.
 6. Document all interventions and observations.

Implementation for Mrs. A was carried out efficiently and safely in accordance with the care plan. All interventions were carried out as planned, without any deviations. In Mrs. A's case, all planned interventions were implemented effectively. The evaluation results showed an improvement in the mother's understanding of the risks associated with inadequate nutritional intake.

DISCUSSION

Nausea and vomiting during pregnancy are the most common complaints experienced by pregnant women in the first trimester. This condition is often triggered by increased levels of human chorionic gonadotropin (hCG) and estrogen. This is consistent with the findings in the case of Mrs. A, who experienced mild physiological nausea and vomiting in pregnancy (NVP) at 11 weeks of gestation. Management of nausea and vomiting in pregnancy (NVP) in early pregnancy focuses on non-pharmacological approaches and nutritional education. This approach involves maintaining a pattern of eating small, frequent meals, avoiding fatty and strongly scented foods, and consuming vitamin B6, which has been proven effective in reducing nausea and vomiting. Furthermore, providing education about the warning signs of nausea and vomiting, such as persistent vomiting, dehydration, or drastic weight loss, is crucial so that mothers can seek prompt medical attention if needed.

Family and healthcare provider support play a crucial role in helping mothers cope with discomfort during pregnancy. The interventions implemented by the midwives in this case study demonstrated alignment with integrated midwifery care (ANC) standards and applicable theory. This

was evidenced by improvements in the mother's condition and her understanding of how to manage nausea and vomiting, and the danger signs to watch out for. Continued monitoring and follow-up are crucial to prevent complications that can arise from malnutrition or dehydration. Collaboration between midwives, doctors, and nutritionists can improve the quality of care and optimize pregnancy outcomes.

Overall, the comprehensive midwifery-based management approach, based on Varney's principles, applied to this case, successfully provided holistic support to the pregnant woman, enabling her to navigate the early stages of pregnancy comfortably and safely. These results are expected to serve as a reference for healthcare providers in providing appropriate and effective care to pregnant women with nausea and vomiting in pregnancy (NVP).

CONCLUSION

Comprehensive midwifery care for Mrs. A, a G1P0000 woman at 11 weeks and 2 days of gestation with nausea and vomiting in pregnancy (NVP), demonstrates the importance of a comprehensive approach to improving pregnancy outcomes. Interventions, including nutritional counseling, recommendations for consuming dry biscuits before waking, vitamin B6 supplementation, and aromatherapy, helped reduce nausea and vomiting and supported the mother's daily nutritional needs. Collaboration with a nutritionist played a significant role in optimizing nutritional strategies, enabling the mother to make more informed food choices tailored to her pregnancy. Evaluations showed an increase in the mother's knowledge, understanding, and awareness of the importance of nutritional intake and the risks associated with inadequate NVP management. These findings confirm that comprehensive midwifery care, coupled with interprofessional collaboration, focuses not only on symptom reduction but also on preventing complications and improving the well-being of pregnant women. These efforts align with midwifery professional standards, which prioritize the mother as the center of care and emphasize promotive and preventive aspects. The implementation of comprehensive and collaborative midwifery care can serve as a model for managing NVP cases. It is hoped that this practice can continue to be developed in various healthcare settings to improve the quality of midwifery services, support maternal health, and contribute to the success of healthy and high-quality pregnancies.

REFERENCES

- Alkhudair, N.A.... Alhossan, A. (2023). Nausea and Vomiting of Pregnancy in Saudi Females: A Cross-Sectional Study. *Saudi Pharmaceutical Journal*, 31(11), 101821. <https://doi.org/10.1016/j.jsps.2023.101821>
- Beyene et al. (2024). Prevalence and determinants of hyperemesis gravidarum (Ethiopia) PubMed
- de Vera et al. (2024). Risk factors for infusions, ER visits, and hospitalization in HG. PubMed
- Emmott, E. H. (2024). Re-examining the adaptive function of nausea and vomiting in pregnancy. *Evolution, Medicine and Public Health*, 12 (1), 97–104. <https://doi.org/10.1093/emph/eoae012>
- Gazal et al. (2025). What are the costs associated with NVP and hyperemesis gravidarum? A systematic review. *BMC Pregnancy Childbirth*. PubMed
- He et al. (2025). The potential dangers of high doses of vitamin B6 in pregnancy. PubMed
- Heckroth, M. ... Abell, T. L. (2021). Nausea and Vomiting in 2021: A Comprehensive Update. *Journal of Clinical Gastroenterology*, 55(4). <https://doi.org/10.1097/MCG.0000000000001485>
- Hu et al. (2022). Effect of ginger in the treatment of nausea and vomiting in pregnancy PubMed
- Jansen et al. (2023). Perinatal outcomes of infants born to mothers with hyperemesis gravidarum. PubMed
- Jin et al. (2025). Acupuncture for nausea and vomiting during pregnancy: systematic review/meta-analysis. PubMed
- Joshi et al. (2023). A critical analysis of hyperemesis gravidarum in the emergency setting. PubMed
- Khorasani et al. (2020). A systematic review of the efficacy of alternative medicine in the treatment of nausea and vomiting of pregnancy. *J Obstet Gynaecol*. PubMed
- Koren et al. (2021). Measuring the severity of nausea and vomiting of pregnancy. PubMed
- Liu et al. (2022). Emerging Progress in Nausea and Vomiting of Pregnancy. PubMed
- Lowe et al. (2022). Management of hyperemesis gravidarum and nausea. PubMed
- Maslin et al. (2021). What is known about the nutritional intake of women with hyperemesis gravidarum? PubMed
- Moberg et al. (2023). Placenta-associated adverse pregnancy outcomes in hyperemesis gravidarum. PubMed
- Nassif et al. (2022). Integrative and complementary practices to control nausea and vomiting in pregnancy. PubMed
- NGA UK. (2021). Management of nausea and vomiting in pregnancy. PubMed
- Nijsten et al. (2022). Long-term health outcomes of children born to mothers with HG. PubMed
- Rath et al. (2024). Hyperemesis Gravidarum — an interprofessional and multidisciplinary review. PubMed
- Tan et al. (2023). The efficacy and safety of complementary and alternative medicine in the treatment of nausea and vomiting during pregnancy: a systematic review & meta-analysis. *Front Public Health*. PubMed
- Vinnars et al. (2024). Treatments for hyperemesis gravidarum: A systematic review. PubMed

Zou, T. ... Yao, Q. (2024). Nausea and vomiting in pregnancy (NVP) in Chinese pregnant women: a cross-sectional study. *BMC Pregnancy and Childbirth*, 24(1), 1–11.
<https://doi.org/10.1186/s12884-024-06686-7>