Nursing Care for Mrs. W P3A0 with Post Sectio Caesarea Indication Severe Pre-Eclampsia in the Rose Chamber: A Case Study

Umi Najihah[1], Nonok Karlina[2], Yulianingsih[3], Dian Budiati[4]
[1,2,3,4]**Institut Teknologi dan Kesehatan Mahardika, Cirebon, West Java, Indonesia**
Email: uminajihah151020@gmail.com[1], nonok.karlina@mahardika.ac.id[2],
yulianngsi@gmail.com[3], dianbudiati9@gmail.com[4]

Abstract

Severe pre-eclampsia is one of the causes of complications in pregnancy, which is characterized by an increase in blood pressure > 160/110 mmHg, so delivery must be carried out by cesarean section. According to WHO, the incidence of pre-eclampsia in the world is around 0.51--38.4%. Pre-eclampsia cases in Indonesia are around 1.8%--18% and rank second as the cause of death in Indonesia. The purpose of this case study is to provide nursing care to patients with severe pre-eclampsia. This research method uses a qualitative approach with case studies as the main method, using observation sheets, interviews, and documentation studies. The case study was chosen by one patient as the study subject, namely a patient with severe pre-eclampsia in the rose room of Waled Cirebon Hospital. The management of nursing care is based on meeting the needs of patients within three days. The results of the evaluation were that acute pain was resolved, ineffective breastfeeding was resolved, and physical mobility disorders were resolved. The conclusion is that nursing care is effective in providing severe pre-eclampsia patients in meeting patient needs. It is recommended that nurses be able to make this report as one of the reference sources in implementing nursing care for post-SC mothers with PEB.

Keywords: Nursing Care, Post Sectio Caesarean, Severe Pre-Eclampsia.

INTRODUCTION

Severe pre-eclampsia is one of the causes of complications in pregnancy, which is characterized by an increase in blood pressure > 160/110 mmHg, so delivery must be carried out by cesarean section (SC), and even death can occur if not treated immediately (Garrido-Gomez et al., 2017; Kumar et al., 2014; Qiu et al., 2021; Tolcher & Aagaard, 2024). According to the World Health Organization (WHO) (2019), the incidence rate of pre-eclampsia in the world is around 0.51--38.4%; women living in developing countries have a higher risk of developing pre-eclampsia. Pre-eclampsia has an impact on pregnant women, mothers giving birth, and also causes postpartum problems due to dysfunction of various organs such as the heart, kidneys, liver and brain (Retnowati, 2021). Maternal death is caused by disturbances during pregnancy or during childbirth. In Indonesia, the maternal mortality rate (MMR) reached 305 per 100,000 live births in 2019. Pre-eclampsia is the second highest cause of maternal mortality after hemorrhage, which is 26.47% (76.97 per 100,000 live births) (Ministry of Health of the Republic of Indonesia, 2019).

There are several risk factors that affect the occurrence of pre-eclampsia, such as age (> 35 years), having a history of hypertension, first pregnancy, and obesity. Other factors that can affect the risk of pre-eclampsia are diabetes mellitus, multiple pregnancies, previous history of pre-eclampsia and a family history of pre-eclampsia (Mohanty et al.,

2019). The management of pre-eclampsia depends on the mother's gestational age. Actions carried out by performing SC operative actions or by normal childbirth (Tiruneh et al., 2024). One of the indications of SC is a severe pre-eclampsia disease, which requires SC delivery for several reasons, including accelerated birth due to seizures in the mother.

SC is a medical procedure that is necessary when normal delivery is not possible due to maternal health problems or fetal conditions. The SC procedure involves surgery to open the abdominal wall and uterine wall to deliver the fetus from within the uterus (Lupu et al., 2023; Mylonas & Friese, 2015; Ningsih & Rahmadhani, 2022; Zuhana et al., 2020). According to Basic Health Research (2018), births with the SC delivery method in Indonesia are around 17.6% of all births. SC section is associated with short-term and long-term risks that continue for many years after delivery and affect the health of the mother, baby and future pregnancies. SC surgery is also often associated with pain in the abdominal wall and uterus after surgery, which can delay recovery to return to daily activities, have an impact on the mother's psychological well-being, and can make breastfeeding difficult (Haarman et al., 2021).

Despite the recognition of nurses' roles in providing post-cesarean care, there is a lack of detailed studies focusing specifically on the unique challenges and strategies employed by nurses in managing patients with severe pre-eclampsia. Most existing research broadly addresses post-operative care without delving into condition-specific protocols and the impact of specialized nursing interventions. This study aims to fill this gap by exploring the specific roles, practices, and challenges faced by nurses in handling post-cesarean patients with severe pre-eclampsia. The novelty of this research lies in its targeted examination of the critical role of nursing care in improving patient outcomes in this high-risk group, providing insights that could inform future clinical practices and policies.

Based on these data and information, the author is interested in conducting a case study by providing nursing care to severe pre-eclampsia patients in meeting patient needs. In accordance with the background that has been stated, the objectives of this study include being able to explain the basic concept of nursing care in Mrs. W P3A0 with post-SC indications of severe pre-eclampsia in the rose room. This research contributes to the understanding and improvement of nursing care practices for post-cesarean section patients with severe pre-eclampsia, aiming to enhance patient outcomes and provide a framework for similar cases in clinical settings.

RESEARCH METHODS

This study uses a case study approach. A case study is a study conducted by conducting an in-depth study of a specific case whose conclusions are limited or applicable to a specific case only (Bass et al., 2018; MARIOTTO et al., 2014; Rashid et al., 2019; Welch et al., 2020). This case study was conducted with the aim of exploring nursing care in patients with post-SC section indications of severe pre-eclampsia. The collection of this case was carried out in the rose room of Waled Cirebon Hospital on December 30th, 2023. The data collection carried out by the researcher in managing this case study includes observation, interviews, and documentation studies. Data analysis is carried out from the time the researcher is in the research field, during the data collection, until the data is collected. Then by observation by the researcher, conducting interviews with patients, and documentation studies that produce data for the researcher to subsequently collect. The data collected is in the form of objective data and subjective data, then the researcher prepares a nursing care plan and implements and evaluates the nursing care that has been provided to patients using summative and formative evaluations.

RESULTS AND DISCUSSION

The results of the assessment were obtained by a patient named Mrs. W, 38 years old, with a medical diagnosis of P3A0 with PEB + history of SC 17 years ago + MOW. The date of admission to the hospital is December 29th, 2023, and the date of the assessment is December 30th, 2023. The main complaint during the assessment was post-SC pain. Provocation (P): the patient said pain, the pain arose when doing movements and the pain disappeared when resting. Quality (Q): the patient said the pain was like being stabbed. Radiation (R): the patient said pain in the abdomen post-SC. Severity (S): the patient said pain on a scale of 5 (0--10). Time (T): The patient says the pain disappears. Menstrual history: menarche age 12 years, length of menstruation for one week, cycle 28 days, HPHT March 23rd, 2023, estimated delivery December 30th, 2023. The type of contraception used before pregnancy is three-month injectable birth control for one year. Current delivery history: delivery date December 30th, 2023, at 10.45 WIB, type of SC delivery, phase I: 8 hours opening 1--10, phase II: 1 hour of baby delivery, phase III: 5 minutes of placental discharge, phase IV: 2 hours of post-SC observation, amount of bleeding 300 ml, gender of a baby boy weighing 3.4 kg and height 50 cm. Physical examination results: moderate condition of the patient, basic composment, TD 130/80 mmHg, pulse 101 x/min, respiration 20 x/min, temperature 36.8 °C, reproductive system: nipple formed, mama's areola is black, no lump on the mamae, no milk output, no varicose veins, there is lochia rubra, there is tenderness in the abdomen post-SC. Laboratory examination results: Hemoglobin 11.9 gr%, leukocytes 10.3/mm³. The patient was given an infusion of RL 20 tpm, ketorolac 3x1 gr, metronidazole 2x500 mg, ambacim 2x1 gr.

The nursing diagnosis raised by Mrs. W is acute pain, B.D post-SC wounds, ineffective breastfeeding, B.D inadequate breast milk supply, impaired physical mobility B.D pain.

Nursing interventions carried out to overcome acute pain problems are the identification of general conditions, awareness and vital signs, identification of location, characteristics, quality, duration, frequency, intensity of pain, identification of pain scale, providing non-pharmacological techniques to reduce pain, teach non-pharmacological techniques to reduce pain, a collaboration of analgetic administration. Nursing interventions carried out to overcome ineffective breastfeeding problems are identifying breastfeeding goals or desires, supporting mothers to increase confidence in breastfeeding, providing breastfeeding counseling, explaining the benefits of breastfeeding and attachment correctly, teaching antepartum breast care by compressing with cotton swabs that have been given coconut oil, teaching postpartum breast care (breast care). Nursing interventions carried out to overcome the problem of physical mobility disorders are the identification of physical pain or complaints, identification of physical tolerance for movement, involvement of families to help patients in improving movement, and teaching simple mobilization that must be done.

Evaluation of the implementation of nursing for 3x24 hours. There were three nursing diagnoses that were resolved, namely acute pain, ineffective breastfeeding, and physical mobility disorders, with the results of the evaluation showing that the patient revealed that the pain was reduced on a scale of 3, breast milk had started to be produced and expressed, and mobilization had been smooth.

The patient said pain in the wound of the post-SC. This is in accordance with the theory that giving birth by SC section can cause pain because the tissue that undergoes an incision can cause a break in the continuity of the nerve endings that are removed during surgery or the occurrence of ischemic in the tissue due to the impaired blood flow to one part of the tissue (Tirtawati et al., 2020).

The administration of analgesics can lower or control pain after the SC section. The analgetic will immediately reach the center of pain, giving rise to more effective relief. During the evaluation on the second day after the intervention, the patient said that the

pain had begun to decrease, but moving was still painful; on the third day, the pain had reduced, and the patient was able to sit down, even when changing places, the pain was not so felt.

The implementation carried out is to carry out non-pharmacological techniques to facilitate breast milk with breast massage. In line with the research of Sandriani et al. (2023), to overcome breast milk problems in mothers giving birth, perform breast massage, which functions to provide comfort to the mother, reduce breast swelling, stimulate the release of the hormone oxytocin and maintain breast milk production when the baby and mother are sick.

In addition, breast care also has other purposes, namely preventing breast milk blockages, maintaining the flexibility of the nipples to prevent irritation or abrasions on the mother's nipples, and maintaining hygiene (Aeni et al., 2022). This theory is in accordance with the research of Lestari (2019) that after breast care interventions for three consecutive days with a frequency of 2 times per day for 30 minutes, it has proven to be effective in increasing milk production quantitatively. Evaluation on the third day after the intervention, the patient said that the body felt relaxed and comfortable during and after the breast care massage. The patient said that he had done breast care, such as cleaning the nipple with a cotton swab moistened with oil or baby oil; the breast milk had come out but only a little.

Physical mobility disorder intervention based on SIKI (2018), namely mobility support. According to research by Rottie & Saragih (2019), one of the mobilization supports carried out by nurses and families for physical mobility disorders is early ambulation, which is a movement that is carried out as early as possible in bed, namely on the first day after SC surgery by tilting right and left accompanied by nurses and families by training body parts to stretch which can help heal wounds in post-SC mothers.

The importance of early mobilization because it can accelerate the healing process of post-SC mothers so that patients can return to normal activities. If it is too late to mobilize early, it will slow down to worsen during the post-SC recovery period (Rottie & Saragih, 2019). The evaluation on the third day after the early ambulation intervention was that the patient said that he was able to move, such as sitting, walking and doing other activities after being accompanied by early ambulation and because the post-SC pain had decreased.

CONCLUSION

Based on the results of the study using the maternity case study method in Mrs. W patients with severe pre-eclampsia in the rose room of Waled Cirebon Hospital, it was concluded that nursing problems in patients were acute pain, ineffective breastfeeding, and impaired physical mobility. The implementation of nursing actions in this case was carried out in accordance with data analysis, established nursing diagnoses, and nursing interventions that had been made in accordance with the needs of severe pre-eclampsia patients. After the implementation of nursing for Mrs. W with severe pre-eclampsia for 3 x 24 hours, the final result of the nursing process is an evaluation of the nursing care provided. In the evaluation, there were three nursing diagnoses that had been resolved according to the plan and the intervention was stopped.

Based on the results of the study using the maternity case study method in Mrs. W, a patient with severe pre-eclampsia in the rose room of Waled Cirebon Hospital, it was concluded that nursing problems in patients included acute pain, ineffective breastfeeding, and impaired physical mobility. The implementation of nursing actions in this case was carried out in accordance with data analysis, established nursing diagnoses, and nursing interventions tailored to the needs of severe pre-eclampsia patients. After the implementation of nursing care for Mrs. W with severe pre-eclampsia for 3 x 24 hours, the final result of the nursing process was an evaluation of the nursing care provided. The

evaluation showed that three nursing diagnoses had been resolved according to the plan, and the intervention was stopped.

Future Research Directions

Long-term Outcomes

Investigate the long-term outcomes of patients with severe pre-eclampsia who receive specific nursing interventions. This could provide valuable insights into the sustained effectiveness of nursing care.

Comparative Studies

Conduct comparative studies between different nursing intervention strategies for severe pre-eclampsia patients to determine the most effective approaches in various settings.

Patient Education

Examine the impact of comprehensive patient education programs on the management of severe pre-eclampsia, particularly focusing on breastfeeding success and physical mobility post-delivery.

Technological Integration

Assess the role of technology and digital health tools in improving nursing care and patient outcomes in cases of severe pre-eclampsia.

Interdisciplinary Collaboration

Explore the benefits of interdisciplinary collaboration between nurses, obstetricians, and other healthcare professionals in managing severe pre-eclampsia to enhance patient care.

By addressing these areas, future research can contribute to a deeper understanding of effective nursing interventions for severe pre-eclampsia and improve overall patient care outcomes.

BIBLIOGRAPHY

Aeni, C. F., Purbaningsih, E. S., Khoerunissa, D. U., & Triyani, S. K. (2022). Pengaruh Teknik Perawatan Payudara Terhadap Kelancaran Pengeluaran Asi Pada Ibu Nifas: Studi Kasus. Coping: Community of Publishing in Nursing, 10(4), 407.

Bass, J. M., Beecham, S., & Noll, J. (2018). Experience in industry case studies. Proceedings of the 6th International Workshop on Conducting Empirical Studies in Industry, 13–20. https://doi.org/10.1145/3193965.3193967

Garrido-Gomez, T., Dominguez, F., Quiñonero, A., Diaz-Gimeno, P., Kapidzic, M., Gormley, M., Ona, K., Padilla-Iserte, P., McMaster, M., Genbacev, O., Perales, A., Fisher, S. J., & Simón, C. (2017). Defective decidualization during and after severe preeclampsia reveals a possible maternal contribution to the etiology. Proceedings of the National Academy of Sciences, 114(40). https://doi.org/10.1073/pnas.1706546114

Haarman, M. G., Lévy, M., Roofthooft, M. T. R., Douwes, J. M., Vissia-Kazemier, T. R., Szezepanski, I., Berger, R. M. F., & Bonnet, D. (2021). Upfront triple combination therapy in severe paediatric pulmonary arterial hypertension. European Respiratory Journal, 57(1), 2001120. https://doi.org/10.1183/13993003.01120-2020

Kumar, S., Bansal, D., Hota, D., Jain, M., Singh, P., & Pandey, B. (2014). Assessment of clinical outcomes and prescribing behavior among inpatients with severe preeclampsia and eclampsia: An Indian experience. Indian Journal of Pharmacology, 46(1), 18. https://doi.org/10.4103/0253-7613.125159

Lestari, M. L. (2019). HUBUNGAN PENGETAHUAN IBU PRIMIPARA TENTANG TEHNIK MENYUSUI DENGAN KEBERHASILAN PEMBERIAN ASI EKSLUSIF :STUDI LITERATUR. Jurnal JKFT, 4(2), 36. https://doi.org/10.31000/jkft.v4i2.2414

Lupu, V. V., Miron, I. C., Raileanu, A. A., Starcea, I. M., Lupu, A., Tarca, E., Mocanu, A., Buga, A. M. L., Lupu, V., & Fotea, S. (2023). Difficulties in Adaptation of the Mother and Newborn via Cesarean Section versus Natural Birth—A Narrative Review. Life, 13(2), 300. https://doi.org/10.3390/life13020300

MARIOTTO, F. L., ZANNI, P. P., & MORAES, G. H. S. M. DE. (2014). WHAT IS THE USE OF A SINGLE-CASE STUDY IN MANAGEMENT RESEARCH? Revista de Administração de Empresas, 54(4), 358–369. https://doi.org/10.1590/S0034-759020140402

Mohanty, S., Mohanty, I., Das, A., & Mohanty, A. (2019). Clinico–Social Risk Factors For Pre Eclampsia: A Hospital Based Study.

Mylonas, I., & Friese, K. (2015). Indications for and Risks of Elective Cesarean Section. Deutsches Ärzteblatt International. https://doi.org/10.3238/arztebl.2015.0489

Ningsih, N. J. setia, & Rahmadhani, W. (2022). THE ROLE OF EARLY MOBILIZATION ON WOUND HEALING AFTER SECTIO CAESAREA. JOURNAL OF SEXUAL AND REPRODUCTIVE HEALTH SCIENCES, 1(1), 7. https://doi.org/10.26753/jsrhs.v1i1.698

Qiu, D., Wu, J., Li, M., Wang, L., Zhu, X., & Chen, Y. (2021). Impaction of factors associated with oxidative stress on the pathogenesis of gestational hypertension and preeclampsia. Medicine, 100(11), e23666. https://doi.org/10.1097/MD.0000000000023666

Rashid, Y., Rashid, A., Warraich, M. A., Sabir, S. S., & Waseem, A. (2019). Case Study Method: A Step-by-Step Guide for Business Researchers. International Journal of Qualitative Methods, 18, 160940691986242. https://doi.org/10.1177/1609406919862424

Retnowati, Y. (2021). The Determinants Of Preeclampsia In Pregnant Women Of Tarakan. International Journal of Science, Technology & Management, 2(5), 1808–1811.

Rottie, J., & Saragih, R. E. (2019). Pengaruh Mobilisasi Dini Terhadap Penyembuhan Luka Post Sectio Caesarea Di Irina D Bawah Rsup Prof Dr. RD Kandou Manado. Journal Of Community & Emergency, 7(3), 431–440.

Sandriani, S., Fitriani, R., & Rahayu, G. Z. (2023). Effect of Oxytocin Massage on Breast Milk Production in Postpartum Mothers: A Case Study. Genius Midwifery Journal, 2(1), 30–38. https://doi.org/10.56359/genmj.v2i1.237

Tirtawati, G. A., Purwandari, A., & Yusuf, N. H. (2020). Efektivitas Pemberian Aromaterapi Lavender Terhadap Intensitas Nyeri Post Sectio Caesarea. JIDAN (Jurnal Ilmiah Bidan), 7(2), 38–44. https://doi.org/10.47718/jib.v7i2.1135

Tiruneh, S. A., Vu, T. T. T., Moran, L. J., Callander, E. J., Allotey, J., Thangaratinam, S., Rolnik, D. L., Teede, H. J., Wang, R., & Enticott, J. (2024). Externally validated prediction models for pre-eclampsia: systematic review and meta-analysis. Ultrasound in Obstetrics & Gynecology, 63(5), 592–604. https://doi.org/10.1002/uog.27490

Tolcher, M. C., & Aagaard, K. M. (2024). Complications of Preeclampsia. In Critical Care Obstetrics (pp. 901–937). Wiley. https://doi.org/10.1002/9781119820260.ch49

Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2020). Theorising from Case Studies: Towards a Pluralist Future for International Business Research (pp. 171–220). https://doi.org/10.1007/978-3-030-22113-3_9

Zuhana, N., Prafitri, L. D., & Ersila, W. (2020). Descriptive Analysis Of Maternal Anxiety Before Sectio Caesaria Surgery. STRADA Jurnal Ilmiah Kesehatan, 9(2), 1329–1337. https://doi.org/10.30994/sjik.v9i2.406