

## Research Article

# Implementation Education Maintenance Rope Center in NY. S G1P1A0 *Post Sectio Caesarea* with Knowledge Deficit in Dewi Sartika Room, RSUD Arjawinangun Cirebon Nengsih Yulianingsih<sup>1\*</sup>, Tasya Widia Putri<sup>2</sup>

<sup>1</sup> Politeknik Negeri Indramayu ; Email : [yulianikodim@polindra.ac.id](mailto:yulianikodim@polindra.ac.id)<sup>2</sup> Politeknik Negeri Indramayu

\* Corresponding Author : Nengsih Yulianingsih

**Abstract:** The postpartum period, which typically lasts for six weeks, is crucial for the recovery of the mother after childbirth. Special care is required during this time to ensure the health and well-being of both the mother and the baby. Cesarean section (CS) deliveries require more intensive care due to the increased risk of complications. Additionally, newborns are particularly vulnerable to health risks, including infections of the umbilical cord. Proper care of the umbilical cord is essential to prevent infections that can harm the baby's health. The objective of this study is to implement education on umbilical cord care for patients experiencing nursing problems related to knowledge deficits regarding umbilical cord care. This scientific paper uses a descriptive case study design, involving one patient (US) as the subject, and data was collected through interviews and observations. The results of the assessment revealed that the patient had limited knowledge about proper umbilical cord care. After two educational sessions, the patient's understanding improved. On the first day, the patient was able to answer 7 out of 10 questions related to umbilical cord care, while on the second day, the patient could answer 10 questions correctly, demonstrating a significant increase in knowledge. In conclusion, education on umbilical cord care proved effective in improving the patient's knowledge, although further reinforcement is necessary. More interactive media could be utilized in future interventions to enhance understanding and ensure optimal care for the newborn. These findings underscore the importance of providing targeted education to new mothers to prevent potential health risks to their babies.

**Keywords:** Chronic Low Self-Esteem, Diversity Therapy, Mental Disorders, Psychological Well-being, Therapeutic Intervention.

Received: May 30, 2025;

Revised: June 30, 2025;

Accepted: July 28, 2025;

Published: July 30, 2025

Curr. Ver.: July 30, 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license

(<https://creativecommons.org/licenses/by-sa/4.0/>)

## 1. INTRODUCTION

The postpartum period is the period of recovery of the mother after giving birth, which lasts for approximately six weeks until the reproductive organs return to their pre-pregnancy state (Yulianingsih, 2024). Delivery by *the cesarean section* (CS) method is a surgical procedure performed through an incision in the abdominal wall and uterus, generally performed for certain medical indications such as placenta previa or fetal distress (Siagian et al., 2023). This procedure requires more intensive attention and care, both for the mother and the baby being born. Neonates or newborns (aged 0–28 days) are in a transition period critical from life intrauterine to extrauterine, Which involving physiological changes big on almost all over system body (Yulianingsih, 2024). Wrong One important aspect of neonatal care is umbilical cord care. The umbilical cord is an important channel during pregnancy, and after birth, this area becomes susceptible to infection if not properly cared for. Umbilical cord infections, such as omphalitis or neonatal tetanus, can pose a risk of death to the baby (Riskani, 2012). According to the World Health Organization (2021), around 1.3 million infant deaths are caused by umbilical cord infections each year worldwide. UNICEF (2022) also noted that 2.6 million babies die in the first 28 days of life, and most of these deaths can be prevented through appropriate care interventions. In Indonesia, low maternal awareness of the importance of umbilical cord care is one of the main risk factors for neonatal infections. Therefore, health education regarding umbilical cord care is an important intervention that needs to be implemented effectively for mothers. postpartum. Media education like leaflet And audio visual has proven effective in delivering health information in a concise, interesting, and easy-to-understand manner (WHO, 2020; Kurniasih & Sani, 2017). Providing

education is expected to increase maternal knowledge, encourage correct care behavior, and reduce the risk of complications in neonates. This study aims to implement umbilical cord care education in post- *cesarean section patients* with a diagnosis of knowledge deficit, and to evaluate the extent to which this education can improve maternal understanding and skills in performing standard umbilical cord care.

## 2. METHOD

This research uses a descriptive case study design conducted on Mrs. S, a Mother post *section caesarean* with deficit knowledge regarding umbilical cord care, took place in the Dewi Sartika Room of Arjawinangun Hospital, Cirebon for two days (14–15 November 2024), with interventions in the form of education using leaflets and audio-visual media that included material on the definition, function, dangers of infection, and steps for umbilical cord care, data was obtained through interviews, observations, and *pre-test* and *post-test questionnaires*, then analyzed descriptively to evaluate changes in the level of patient knowledge after education was carried out.

## 3. RESULTS AND DISCUSSION

Nursing assessment in this case was conducted in the Dewi Sartika Room of Arjawinangun Hospital, Cirebon, using interview, observation, and physical examination methods. The subject in this assessment was Mrs. S, a postpartum mother who showed signs of knowledge deficit regarding umbilical cord care for her baby. From the interview results, complaints were obtained main patient that is No understand And No know How how to do proper umbilical cord care, as well as the benefits and impacts if the care is not done properly. This is reinforced by the patient's inability to explain the procedure or basic principles of care rope center. in process recovery post labor And maintenance new baby born, understanding Mother about maintenance rope center is aspect important to prevent infection or other complications.

To understand the patient's condition thoroughly, a physical examination was carried out which showed vital signs within normal limits: blood pressure. blood 120/70 mmHg, pulse 100x/minute, frequency breath 22x/minute, oxygen saturation 99%, and body temperature 36.5°C. Although physically Mrs. S is in good condition stable, but aspect psychosocial And cognitive patient show there is a gap in information, especially regarding knowledge of infant care. Therefore, structured and ongoing education is needed to improve patient understanding.

Based on the results of the assessment, a nursing diagnosis was formulated, namely: Deficit Knowledge Which relate with lack of exposure information, proven by the patient's statement that he did not know how to perform the treatment. rope center, benefit from action the, as well as impact negative If are not done in a way Correct. Diagnosis This in harmony with definition from Standard Indonesian Nursing Diagnosis (SDKI, 2017), which states that there is a knowledge deficit is condition absence or lack of information cognitive about a particular topic.

In compiling nursing interventions, the author involves family members as the main supporters in the education and care process, with the hope of being able to create a supportive environment for patients. This is reinforced by the theory of Setyowati (2019), which states that family support is very influential to quality maintenance And level of success in nursing actions, especially in terms of newborn care. The intervention designed focused on health promotion, namely through education about umbilical cord care with a two-session meeting approach. The purpose of this action is to increase the patient's knowledge and verbal ability in explaining and understanding the topic. The intervention plan includes building a trusting relationship, conducting vital sign checks, provide umbilical cord care education, and assess the patient's level of knowledge on the topic provided.

The implementation of nursing was carried out for two consecutive days. The first day implemented on date 14 November 2024 o'clock 09.00 in Room Dewi Sartika RSUD Arjawinangun. The activity began by building a relationship of mutual trust and re-assessing the patient's condition. The patient again said that he did not understand how to care for the umbilical cord and did not know the risks if he did not care for it properly. After that, at 09.40, education was carried out using leaflets for 20 minutes. The material provided included the definition of umbilical cord care, correct care steps, and prevention of complications such as infection or unpleasant odors.

The second day of implementation was carried out on November 15, 2024 at 14.00, in where Mrs. S show readiness For accept information Furthermore. Education given use media visual in the form of video educative with a duration of 20 minutes. This visual media was chosen to improve patient understanding through an audio-visual approach that has proven to be more effective in conveying information to patients with low to moderate health literacy levels. The entire education process is carried out with health promotion stages, namely opening (greeting, introduction, conveying objectives, time contract), core activities (delivering material), and closing (questions and answers, clarification, and conveying conclusions). The interactive lecture and discussion methods are the main approaches in this activity.

Nursing evaluation is done to assess the success of the intervention. On the first day, after education, the patient showed a positive response, conveying that He start understand about importance maintenance rope center. The evaluation was conducted by giving 10 questions related to the material that had been delivered, and the patient was able to answer 7 questions correctly. These results indicate that the problem of knowledge deficit has not been fully resolved, so the intervention was continued to the second day. On the second day of evaluation, after being given education using videos, Mrs. S said that her understanding had increased, and she felt more confident in performing umbilical cord care on her baby. When an evaluation was conducted with the same questions, the patient was able to answer all 10 questions correctly, show that problem deficit knowledge has resolved completely. In addition, nonverbally the patient showed a happy expression and smiled, which indicated comfort and acceptance of the education provided.

Nursing documentation is carried out systematically using the SOAP format (*Subjective, Objective, Assessment, Planning*). Every process starting from assessment, diagnosis, intervention planning, implementation of actions, to evaluation is recorded in detail every day for two days of implementation. care nursing, that is from date 14 until 15 November 2024. This documentation is real evidence that the nursing process has been carried out. in accordance with procedure And standard service nursing Which oriented on the achievement of output, in this case increasing patient knowledge.

## Discussion

Based on results studies case Which done to Mrs. S, patient with the problem of nursing knowledge deficit related to umbilical cord care, it is known that education health own influence Which significant towards increasing knowledge and changing patient attitudes, especially postpartum mothers. In the initial assessment, it was found that patients did not fully understand how to properly care for the umbilical cord, and did not know benefit And impact if maintenance the No done appropriately. This indicates a lack of cognitive information that the patient has. about Topic certain, in accordance with definition deficit knowledge according to the Indonesian Nursing Diagnosis Standards (SDKI, 2017). Based on research by Syahfitrih Umamity (2024), it was stated that health education plays an important role in disseminating information that can increase literacy and individual awareness of the importance of preventive measures, such as umbilical cord care. The mother's attitude in providing care will be greatly influenced by the level of understanding and acceptance of health information that given. Through the nursing implementation approach in the form of education for two sessions, each lasting 20 minutes, it was proven that there was an increase in knowledge scores. patient, from mark beginning 4 on day First become 7 after education, and achieved a maximum score of 10 on the second day. This increase not only shows the effectiveness of education as an intervention strategy, but also reflects the achievement of nursing outcome criteria based on the Indonesian Nursing Intervention Standards (SIKI, 2017), namely increased behavior according to recommendations, the ability to explain knowledge about a topic,

and behavior based on experience. In addition, according to Wahyuningsih (2017), proper umbilical cord care, such as maintaining cleanliness, keeping it dry and sterile, and using antiseptic materials such as 10% povidone-iodine or letting rope center open, can prevent infection And complications other like release rope center Which pending or emergence smell No delicious. By Because that, health education about maintenance rope center is intervention nursing that effective And application in increase knowledge And to form positive patient attitude, so that it can overcome the problem of knowledge deficit and prevent complications that may arise due to lack of understanding in neonatal care.

#### 4. CONCLUSION

Based on the results of the implementation of umbilical cord care education on Mrs. S G1P1A0 post *sectio caesarea* with knowledge deficit, it can be concluded that providing education using leaflets and audio visual media is effective in increasing patient knowledge, which is indicated by an increase in the ability to explain and apply umbilical cord care independently, this intervention has been proven to be able to modify patient behavior in a more appropriate direction, at a time strengthen role Mother in prevent infection neonatal since early.

#### BIBLIOGRAPHY

1. Abata, Q. 'A. (2015). *Caring for newborns*. Pustaka Pelajar.
2. Amin, H. (2013). *Nursing care based on medical diagnosis & NANDA NIC-NOC*. Mediction.
3. Anwar, C., & Safitri, F. (2022). Maintenance time postpartum in House Sick Bhayangkara. *Community Service (Health)*, 4(1), 61-69.
4. Astuti, E., & Dinarsi, H. (2022). Analysis of the uterine involution process in postpartum mothers day to three in practice midwife independent Lystiani Gresik. *Journal of Midwifery*, 11(1), 22-26. <https://doi.org/10.47560/keb.v11i1.342>
5. Fitri, L. D., Marlindawani, J., & Purba, A. (2018). Compliance with taking medication in patients with pulmonary tuberculosis. *Journal of Public Health Sciences*, 7(1), 33-42. <https://journals.stikim.ac.id/index.php/jikm/article/view/50/42>
6. Dear, S. (2014). *Management Post Op Sect. Caesarea on Mother* [Thesis]. University Muhammadiyah Purwokerto.
7. Kurniasih, I., & Sani, B. (2017). *Variety of learning media*. Yrama Widya.
8. Moore, K. L., Persaud, T. V. N., & Torchia, M. G. (2015). *Before we are born: Essentials of embryology and birth defects* (9th ed.). Elsevier.
9. Nengsih, Y. (2023). *Basic concepts of maternity nursing*. Trans Info Media.
10. Nengsih, Y. (2024). *Maternity nursing care: Complete with competency test practice questions*. Trans Info Media.
11. Nuryaman, I., Kristanto, D., & Darmini. (2022). *Android mobile-based radiotherapy education model for patients undergoing external radiation therapy*. Pustaka Rumah Cinta Publisher.
12. Purwoastuti, E., & Wali, E. S. (2015). *Science obstetrics & gynecology social for midwifery*. Pustaka Baru Press.
13. SDKI DPP PPNI Working Group Team. (2017). *Indonesian nursing diagnosis standards: Definition and diagnostic indicators*. PPNI Board of Directors.
14. SDKI DPP PPNI Working Group Team. (2018). *Indonesian nursing intervention standards: Definition and nursing actions*. PPNI Board of Directors.
15. SDKI DPP PPNI Working Group Team. (2019). *Indonesian nursing diagnosis standards: Definition and nursing outcome criteria*. PPNI Board of Directors.

16. SOP Guidelines Working Group Team of the DPP PPNI. (2021). *Nursing standard operating procedures*. PPNI Board of Directors.
17. World Health Organization. (2020). *Health promotion: Tools and materials*.
18. Yulianingsih, K. (2018). *Basic concepts of nursing* (revised ed.). Trans Info Media.