

Nursing care for acute pain with benson therapy pain management and early mobilization in post-section caesarean patients: case report

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Abstract

A cesarean section (CS) is a common surgical intervention conducted to ensure the well-being of both the mother and baby when vaginal birth is not feasible. This surgery frequently results in postoperative discomfort and limited mobility, which could slow down maternal recovery. Non-pharmacological therapies, such as Benson relaxation therapy and early movement, are crucial nursing strategies for reducing pain. The objective of the study is to assess the efficacy of Benson relaxation therapy and early mobilization in reducing acute pain and improving physical mobility for patients after cesarean delivery. This research employed a prospective case study methodology, using data collection approaches such as observation, interviews, and analysis of medical records. The findings indicated that patients reported a reduction in pain severity from a score of 5 to 3 after Benson relaxation therapy. The capacity for mobilization improved from a score of 1 to 3 after early mobilization. Patients could independently move their positions and understand relaxation techniques as a method for reducing discomfort. The results of the research highlight the value of nursing interventions that focus on mobility support and pain management in reducing the severity of pain

Keywords: acute pain; benson therapy; early mobility; post sectio caesarea

1. Introduction

Labor is when a woman gives birth to a fetus, starting with uterine contractions and lasting for 12 to 14 hours until the baby is expelled from the uterus and the placenta and amniotic fluid are expelled. There are two methods of delivery: normal delivery and cesarean section. A cesarean section is a surgical procedure that involves opening the abdominal wall and uterus to remove the fetus. In recent years, cesarean section has emerged as an alternative option during labor for some women, as normal delivery is considered a dangerous and difficult method of delivery (Sudarsih et al., 2023).

World Health Organization (WHO) data, the average rate of cesarean section is around 5-15%. Data from the 2011 WHO Global Maternal and Perinatal Survey shows that 46.1% of all births were by cesarean section (WHO, 2019). Based on data from the 2018 Basic Health Survey (RISKESDAS), the number of deliveries performed by cesarean section in Indonesia was 17.6% (Ministry of Health of the Republic of Indonesia, 2019). A cesarean section is a surgical procedure in which the fetus is delivered through an incision in the abdominal wall and uterus. Caesarean section delivery is performed based on medical indications for both the mother and the fetus, including placenta previa, abnormal fetal position, and other signs that could endanger the lives of the mother and fetus (Nisak et al., 2023).

Long labor, history of previous cesarean section, preeclampsia, placenta previa, difficult labor, multiple pregnancies, fetal risk, delayed labor, abnormal fetal position, and premature rupture of membranes are factors that cause cesarean delivery. The high risk in mothers with preeclampsia can endanger both mother and baby, so optimal treatment is needed to prevent these risks. If the mother is unable to give birth vaginally within 24 hours, then one alternative action is to perform a cesarean section. (Siagian et al., 2023).

The causes of cesarean delivery can be due to problems with either the mother or the baby. There are two types of cesarean delivery decisions. First, a pre-diagnosed cesarean delivery decision. Causes include an imbalance between the size of the baby's head and the mother's pelvis (narrow pelvis, large baby, forehead position, face position, etc.), severe pregnancy poisoning, severe preeclampsia or eclampsia, abnormal fetal position (breech, transverse), some cases of placental obstruction (placenta previa), multiple births, pregnancy in older mothers, a history of cesarean delivery in previous pregnancies, maternal illnesses, infections of the birth canal, and so on. Second, a sudden decision is made due to an emergency. Even if there are no problems from the start and the delivery is predicted to proceed normally, sometimes, for one reason or another, complications arise during the delivery process.

A cesarean section is an alternative for women choosing a birthing process, despite medical and non-medical indications. A cesarean section will disrupt the continuity or connection of tissue due to the incision that releases pain receptors, causing the patient to experience pain, especially after the effects of anesthesia wear off. Pain is a sensory and emotional stressor, an uncomfortable sensation resulting from tissue damage. Pain is measured using the Numeric Rating Scale. (NRS) can be divided into no pain (0), mild pain with a scale of (1-3), moderate pain with a scale of (4-6) and severe pain with a scale of (7-10) (Metasari & Sianipar, 2018).

Using non-pharmacological methods, namely pain is reduced gradually and does not cause side effects in the long term or short term, the appropriate non-pharmacological method to reduce pain intensity is by training patients to relax (Dwi Yanti & Kristiana, 2019). The Benson relaxation technique is one type created by Herbert Benson, which studies the effectiveness of prayer and meditation. Certain words are said repeatedly that include elements of faith in religion and God Almighty to become a relaxed and comfortable relaxation when compared to relaxation without including elements of faith. Success in performing the Benson relaxation technique has 4 underlying elements: there is a quiet environment (quiet), the patient can relax the body's muscles for 10-15 minutes and think positively so that the combination of relaxation and a combination of physiological factors or beliefs. This relaxation method is to express certain words that can have a regular rhythm and can be done repeatedly by surrendering to God Almighty, these words are to calm the mother Post Sectio Caesarea (Febiantri & Machmudah, 2021).

Early mobilization techniques are effective in reducing pain through several mechanisms, including eliminating patient concentration on the painful location of the surgical area, reducing the activity of chemical mediators in the inflammatory process that increases the pain response, and minimizing the transmission of pain nerves to the central nervous system. The mobilization carried out in the control group was mobilization carried out 6-8 hours after surgery where the implementation coincided with the decreasing effect of the spinal anesthetic drug, however, with family support and motivation from the staff, respondents were willing to carry out despite the pain they felt, where the average pain scale felt by respondents before mobilization was higher, namely an average pain scale of 7 (controlled severe pain level) and after early mobilization interventions 1 and 2 the average pain decreased to a pain scale of 4 (moderate pain level) (Santoso et al., 2022). Based on patient registration book data in February at the An-nisa ward of PKU Muhammadiyah Bantul Hospital, patient Mrs. T underwent a cesarean section with an indication of DKP (Cephalopoc Disproportion). During the post-cesarean section assessment, the client complained of pain on a scale of 5 and experienced impaired physical mobility.

Based on this background, the author is interested in further studying psychiatric nursing care for patients with post-cesarean section, Mrs. T, in the An-nisa ward, PKU Muhammadiyah Bantul Hospital.

2. Method

This study used a prospective case study, which is a research approach that collects data over time to understand the relationship between risk factors and the effectiveness of implemented interventions (Creswell, 2021).

Subject in study This is Mrs. T, a patient with post section Caesarea on indication DKP (Cerebral Pelvic Disproportion) who underwent treatment in the An-Nisa ward of PKU Muhammadiyah Bantul Hospital. The selection subject done based on criteria inclusion that is patient post section Caesarea on indication disproportion of the head and pelvis to diagnosis acute pain based on Standard Diagnosis Indonesian Nursing (SDKI), patients and families willing become subject study as well as give information verbally. The exclusion criteria were patients who had post- cesarean section complications.

The primary data in this study were obtained through direct observation of patients while they were in the An-Nisa ward at PKU Muhammadiyah Bantul Hospital. The authors conducted direct observations of patients and also conducted brief interviews with patients and their families to further explore the feelings experienced by patients and to identify complaints both verbally and non-verbally. The authors obtained secondary patient data through patient medical records in the An-Nisa ward at PKU Muhammadiyah Bantul Hospital to deepen information regarding the patient's condition. The authors also documented information in the form of documents, both official and unofficial, such as notes in reports.

The author conducted data reduction since the collection stage by selecting information related to acute pain diagnoses from patient registration data in the An-Nisa ward of PKU Muhammadiyah Bantul Hospital. After screening, Mrs. T was selected as the research subject because she was a new patient undergoing a cesarean section for the first time and did not know how to reduce post-operative pain. This study aims to explore Mrs. T's complaints, post-operative pain, post-operative mobility disorders, and the risk of bleeding experienced by the patient.

The data presentation in this study is in the form of narrative text with notes on the results of the assessment interviews and implementation evaluations that the researcher has conducted with patient Mrs. T during her stay in the An-Nisa ward at PKU Muhammadiyah Bantul Hospital. The results of observations and records of the patient's routine medication are attached as structured information that provides the possibility of drawing conclusions and verification.

Conclusions were drawn by processing and summarizing the overall results of the observations the researcher had conducted on patient Mrs. T for 2 days in the An-Nisa ward at PKU Muhammadiyah Bantul Hospital. Data analysis in this study was an interactive process between the three data analysis steps and was a cyclical process until the research activity was completed.

3. Results and Discussion

3.1. Results

The results of the assessment showed that Mrs. T said she was pregnant with her first child UK 39+3 weeks, planned cesarean section due to DKP (Cephalopapular Disproportion), The patient was planned cesarean section due to cephalopelvic disproportion. Indications of cephalopelvic disproportion are associated with the cesarean section surgery performed, as explained by Mulyainuningsih et al., (2021) and proven by Maryani's research, (2017) with a p-value of 0.002. This condition can endanger the baby because it can cause the head to be pressed and the baby's skull bones to be compressed, thus triggering brain hemorrhage. Prolonged labor also risks causing fetal distress. In addition to being dangerous for the fetus, mothers with a history of narrow pelvis are also at risk of experiencing various complications during normal delivery, heavy bleeding and uterine injury. Because of the great risk that can endanger the fetus and the mother, mothers who have narrow pelvis are advised to give birth by cesarean section.

The assessment revealed that Mrs. T complained of lower abdominal pain following a cesarean section. The pain was moderate (5 out of 10 on a pain scale). The patient reported that the pain occurred during movement, particularly when changing positions from lying down to lying on her right or left side, where the pain was continuous and disrupted restful activities. Meanwhile, when lying still, the pain diminished or disappeared. The patient described the pain as sharp and stabbing, coming and going depending on activity, with the pain focused in the lower abdominal area, directly around the surgical wound. Objectively, the patient appeared to be grimacing in pain and exhibiting a restless expression, indicating discomfort due to postoperative pain. This response indicates a disturbance in physical comfort that needs to be addressed immediately to prevent further impact on postoperative mobilization and recovery.

The results of the assessment identified three main diagnoses in Mrs. T, a post-cesarean section patient. First, acute pain (D.0146), which is related to physical injury agents (surgical incisions), characterized by complaints of lower abdominal pain on a scale of 5, grimacing facial expressions, and restless behavior when moving. Second, impaired physical mobility (D.0110), which is related to postoperative pain, characterized by difficulty changing body position independently and limitations in initial mobilization. risk of bleeding (D.0032), which is related to tissue trauma due to surgery, characterized by postpartum status on day 1, hemoglobin 11 g/dL, uterine fundus height 1 finger below the navel, strong uterine contractions, and lochea discharge of ± 15 cc.

The nursing care plan for Mrs. T's acute pain aims to reduce pain complaints and grimaces. Expected outcomes include a reduction in pain and a feeling of increased comfort with her condition. Several interventions implemented include identifying the location, characteristics, duration, frequency, quality, and intensity of pain. Non-pharmacological techniques to reduce pain, such as Benson relaxation therapy, are provided, according to Febiantri & Machmudah (2021). Benson's relaxation effect is by causing the body to produce endorphins, which are natural hormones produced by the body and function as natural pain relievers. Finally, by collaborating in providing analgesics, administering

ketorolac analgesics is one effort to relieve post-cesarean section pain, after the patient returns to the treatment room. Administration of ketorolac is the primary analgesic of choice for post-cesarean section patients at Palagimata Baubau Hospital (Rina Amelia, Slamet Triyadi, 2023). Based on the implementation of this evidence-based intervention, it is hoped that Mrs. T will be better able to manage the pain she feels and reduce pain levels effectively.

The nursing care plan for impaired physical mobility in Mrs. T aims to improve extremity movement and reduce pain during movement. The expected outcome is increased ability to independently move one or more extremities. The presence of surgical scars also causes pain in the mother, so she tends to prefer lying down and is reluctant to move her body, which causes stiff joints, poor posture, muscle contractures, and tenderness if early mobilization is not performed (Yantiet.al., 2019). Several interventions implemented include observing for pain or other physical complaints, identifying physical tolerance for movement, and monitoring general conditions during mobilization. Therapeutic measures include facilitating mobilization activities with assistive devices (e.g., bed rails), facilitating movement if necessary, and involving the family to help the patient increase movement. Early mobilization in post-cesarean section mothers is an activity carried out on the mother several hours after delivery. Early mobilization must be carried out immediately to prevent complications in the mother and help accelerate the mother's recovery. Mothers who do not perform early mobilization after a caesarean section can experience an increase in temperature due to poor uterine involution so that residual blood can be released and cause infection and one of the signs of infection is an increase in body temperature (Jaya et al., 2023).

3.2. Discussion

The implementation of nursing care for acute pain in Mrs. T focused on interventions based on the Indonesian Nursing Intervention Standards (SIKI) to reduce pain and reduce the patient's grimacing expression. One of the main steps taken is to identify the location, characteristics, duration, frequency, quality, and intensity of pain. As suggested by Ahmad & Taufik, (2021) the purpose of post-surgical pain monitoring is to provide comfort to the patient, inhibit nociceptive impulses, and collect neuroendocrine responses to pain, thereby accelerating the return of function. In addition, providing and teaching non-pharmacological techniques to reduce pain as explained by Astutiningrum & Fitriyah, (2019) by providing non-pharmacological Benson relaxation therapy, non-pharmacological Benson relaxation nursing actions can provide a sense of comfort and relaxation to the patient by diverting the patient's attention from pain to things that make them happy and happy so that the patient can forget the pain they are experiencing. Benson therapy is a breathing relaxation technique that involves beliefs that result in a decrease in oxygen consumption by the body and the body's muscles become relaxed, resulting in a feeling of calm and comfort. To help reduce the pain experienced, analgesics were also administered collaboratively. The results of this study also align with research by Rina Amelia (2023), who stated that the pharmacological therapy given to post-operative patients to manage pain is analgesics. Furthermore, post-surgical pain management aims to inhibit the stress response caused by surgery.

After two days of intervention for Mrs. T in the An-Nisa ward of PKU Muhammadiyah Bantul Hospital, the evaluation results showed significant improvements in acute pain. Based on the measurement scale, there was a decrease in pain complaints and grimacing expressions, which previously pain complaints from a scale of 4 to a scale of 1 and grimacing expressions from a scale of 4 to a scale of 2. Positive changes observed included reduced pain intensity, decreased pain frequency and a pain scale that was previously on a scale of 5 decreased to a scale of 3 within 2 days after being given non-pharmacological and pharmacological therapy. The patient understood and practiced the non-pharmacological therapy taught, namely Benson relaxation therapy, and felt a significant change in pain after doing the therapy. This is also in line with the pharmacological therapy given, namely 30 mg ketorolac injections 3 times a day. As a follow-up, the nursing team will continue to evaluate the patient's ability to control their pain, as well as train the patient to apply pain management techniques when pain occurs.

The implementation of nursing care for physical mobility disorders in Mrs. T is focused on interventions based on the Indonesian Nursing Intervention Standards (SIKI) to reduce pain and increase extremity movement. One of the main steps taken is to identify physical tolerance for

movement, as recommended by. On the first day, Mrs. T was implemented early mobilization nursing 2 hours post-cesarean section. The author identified physical tolerance for movement before implementing early mobilization in the patient. The author implemented early mobilization nursing for 3 days to help accelerate recovery in carrying out normal activities as before. On the first day, the author recommends early mobilization by teaching the patient to mobilize hand and foot movements after 2 hours post-cesarean section, then teaching the patient to mobilize right and left tilts after 4 hours post-cesarean section, and positioning the patient half-sitting slowly for 8 hours while observing the pulse, if complaining of dizziness, lower the bed slowly and it was found that the patient was able to move her hands, tilt right and left, and half-sitting. On the second day, the patient does sitting exercises independently, if the patient does not feel dizzy, the patient is advised to lower his legs slowly and it is found that the patient is able to sit independently.

After two days of intervention for Mrs. T in the An-Nisa Ward of PKU Muhammadiyah Bantul Hospital, the evaluation results showed significant improvements in physical mobility disorders. Based on the measurement scale, there was a decrease in pain levels and increased limb movement, which previously complained of pain from a scale of 4 to a scale of 1 and limb movement from a scale of 1 increased to a scale of 3. Positive changes experienced included decreased physical complaints and pain, increased physical tolerance in performing movements after being given mobilization exercises with assistive devices, namely bed rails. Teaching simple mobilizations such as sitting in bed, tilting right and left and walking exercises on the side of the bed. Initial mobilization after a cesarean section operation in the first 2 hours is sitting then the next 2 hours tilting right and left after that 6 hours later the patient is taught to walk with the help of tools such as bed rails. Family support such as involving in mobilization exercises also helps patients in improving movement. As a follow-up, the nursing team will continue to evaluate the patient's ability to mobilize.

4. Conclusion

Based on the results of the nursing assessment and interventions that have been carried out for two days on Mrs. T, a post-cesarean section patient in the An-Nisa ward of PKU Muhammadiyah Bantul Hospital, it can be concluded that non-pharmacological interventions in the form of Benson relaxation therapy and early mobilization have proven effective in reducing pain levels and increasing the patient's ability to mobilize. The three main diagnoses identified are acute pain (D.0146), impaired physical mobility (D.0110), and the risk of bleeding (D.0032). Through an intervention approach in accordance with the Indonesian Nursing Intervention Standards (SIKI), a decrease in the pain scale was found from 5 to 3, as well as an increase in the ability to mobilize from a scale of 1 to 3. The application of Benson relaxation therapy can provide a calming effect, relax, and increase patient control over their pain perception. Meanwhile, early mobilization plays an important role in accelerating the physical recovery process and preventing complications.

Thus, the use of evidence-based interventions (evidence-based practice) in post-cesarean section pain management is highly recommended to be integrated into maternity nursing practice to improve the quality of care and patient comfort.

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