Implementation Of Benson Relaxation Therapy for Pain Reduction in Post-Caeserean Patient Section in the An-Nisa Ward at Bakti Timah Hospital Pangkal Pinang

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Sectio caesarea is a surgical delivery procedure that may cause acute pain in the abdominal incision area. If not managed properly, pain may inhibit mobilization, disturb rest, reduce comfort, and slow the recovery process of post sectio caesarea mothers. One non-pharmacological intervention that can be used to help reduce pain is Benson relaxation therapy. This case study aimed to describe the implementation of maternity nursing care using Benson relaxation therapy to reduce pain in post sectio caesarea patients in the An-Nisa Ward of Bakti Timah Hospital, Pangkalpinang. This study used a descriptive case study method involving two patients, Mrs. B and Mrs. R, who met the criteria of being post sectio caesarea patients aged 21-40 years, fully conscious, able to communicate verbally, cooperative, and willing to participate. Data were collected through interviews, observation, physical examination, documentation review, and pain intensity measurement using the Numeric Rating Scale (NRS). Benson relaxation therapy was provided for three days, twice daily, for approximately 10 minutes each session. The results showed a gradual decrease in pain intensity. In Mrs. B, the initial pain score of 6 decreased to 3 on the third day after the intervention. In Mrs. R, the initial pain score of 5 decreased to 3 on the third day after the intervention. Both patients appeared more relaxed, more comfortable, and were able to begin light mobilization. This case study concludes that Benson relaxation therapy can help reduce pain intensity in post sectio caesarea patients and can be applied as a safe, simple, and easy non-pharmacological nursing intervention.

Keywords: Benson relaxation, pain, post sectio caesarea, nursing care, Numeric Rating Scale.

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1. Introduction

Older Childbirth is a physiological process experienced by women involving the delivery of the products of conception (the fetus and placenta) at term (37–42 weeks of gestation). There are two methods of delivery: vaginal birth, commonly referred to as normal delivery, and cesarean section (C-section). Cesarean section has become the primary option for healthcare professionals when it is necessary to ensure the safety of both the mother and the fetus . A cesarean section is a surgical procedure performed to deliver a baby through incisions made in the abdominal wall and uterine wall, provided that the uterus remains intact and the fetal weight exceeds 500 grams [1].

According to the World Health Organization **(**WHO**)**, the recommended rate of cesarean section in most countries is approximately 10–15% of all births. Based on WHO data published in 2021, the number of cesarean deliveries has increased worldwide, with more than one in five births (21%) being performed by cesarean section. This trend is expected to continue over the next decade. By 2030, nearly one-third (29%) of all births are projected to be delivered by cesarean section, indicating a continuous global increase in cesarean deliveries. According to the Indonesia Health Survey **(**Survei Kesehatan Indonesia/SKI), the

prevalence of cesarean delivery in Indonesia reached 25.9%. This figure represents an increase compared with the 2018 SKI data, which reported a prevalence of 17.6% [2].

Similarly, the most recent Basic Health Research **(**Riskesdas**)** conducted in 2018 reported that the prevalence of cesarean delivery in Indonesia was 17.6%. Although cesarean section is often a life-saving surgical procedure, it is also associated with increased maternal risks that may adversely affect maternal health in both the short and long term, as well as negatively impact neonatal morbidity and mortality. According to the Indonesian Ministry of Health report in 2022, the incidence of postpartum infections following cesarean section was recorded at 34.28%. In the same year, infections occurring at cesarean section incision sites decreased to 22.8%. Other postoperative complications included endometriosis (20.7%) and pain at the surgical incision site (13.2%). To date, no official data have been released regarding the prevalence of cesarean deliveries in Bangka Belitung Islands Province in 2026. However, the most representative data available from the Ministry of Health's Basic Health Research (Riskesdas) reported a cesarean delivery rate of 17.6% in Bangka Belitung, ranking 29th nationally. Local trends indicate a yearly increase, with cesarean delivery rates in several regional hospitals reaching approximately 51% [3].

A cesarean section is a surgical procedure performed by making incisions in the abdominal wall and uterus to deliver the fetus. It is considered an effective intervention for managing abnormalities during labor and may be performed either electively or as an emergency procedure, depending on the clinical indications. Cesarean section is a medical intervention indicated for specific maternal or fetal conditions that require surgical delivery. This procedure causes postoperative pain due to disruption of tissue integrity resulting from the surgical incision. Pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, which can significantly interfere with daily functioning. Pain is subjective, meaning that each individual experiences and responds to pain differently [4].

Post-cesarean section pain commonly occurs at the abdominal incision (laparotomy) site due to tissue injury involving both the abdominal wall and the uterus (hysterotomy). This pain often causes considerable discomfort for mothers following childbirth [5]. Severe postoperative pain generally occurs within the first two hours after cesarean delivery. Post-cesarean pain may impair pulmonary, cardiovascular, gastrointestinal, endocrine, and immune system functions, increase stress levels, contribute to depression, and limit the mother's ability to perform daily activities. If not managed appropriately, acute pain may develop into chronic persistent pain. Therefore, effective pain management is essential to prevent complications and reduce maternal morbidity and mortality [6] .

Post-cesarean section pain can be managed through both pharmacological and non-pharmacological approaches. Pharmacological management involves administering analgesic medications, such as ketorolac and paracetamol, which are commonly prescribed in healthcare settings. However, prolonged use of these medications may increase the risk of adverse effects, including renal impairment. Therefore, combining pharmacological treatment with non-pharmacological interventions is recommended to optimize pain relief and accelerate recovery. Examples of non-pharmacological interventions include placebo therapy, music therapy, deep breathing relaxation techniques, and Benson relaxation therapy [7].

Benson relaxation therapy is a relaxation technique that incorporates deep breathing exercises and is commonly used in hospitals for patients experiencing pain. Compared with other relaxation techniques, Benson relaxation is relatively simple to perform and has no known adverse effects. Benson relaxation therapy is considered one of the effective non-pharmacological interventions for reducing post-cesarean section pain. The reduction in pain intensity is attributed to the patient's ability to shift attention from the pain toward controlled deep breathing. This process enhances tissue oxygenation and promotes relaxation of the brain. Brain relaxation stimulates the release of endorphins, which inhibit the transmission of pain

impulses to the brain, thereby reducing pain perception and decreasing pain intensity. According to, Benson relaxation techniques are highly effective in reducing pain intensity while providing calming and positive psychological effects for post-cesarean mothers. These findings are consistent with those reported. Their case analysis demonstrated that mothers with an initial pain score greater than 4 experienced a significant reduction in pain intensity by the third postoperative day [8].

[9] also reported that Benson relaxation therapy, performed for approximately 10–15 minutes daily over three consecutive days, effectively reduced pain intensity in post-cesarean patients. Following the intervention, participants' pain scores decreased from moderate pain (4–6) to mild pain (2–3). Hospital data from RS Bakti Timah indicate a continuous increase in cesarean section procedures: 196 cases in 2021, 226 cases in 2022, 319 cases in 2023, 377 cases in 2024, and 453 cases in 2025. Based on observational data and interviews conducted in the An-Nisa Maternity Ward of RS Bakti Timah Pangkal Pinang on June 8, 2026, the patient reported experiencing pain at the post-cesarean surgical incision site. The patient stated that this was her second cesarean section and the birth of her second child. She described the pain as aching and stabbing in nature. When assessed using the Numeric Rating Scale (NRS), she rated her pain intensity as 7. She also reported that the pain became more severe during movement and when changing body positions. Therefore, based on the background described above, the author conducted the implementation of Benson relaxation therapy as a non-pharmacological intervention to reduce pain in post-cesarean section patients [10].

2. Literature Review and Problem Statement

Old A cesarean section (CS) is a surgical procedure performed to deliver a baby through incisions in the abdominal and uterine walls to save the lives of both the mother and the fetus. This procedure is indicated for various medical conditions, including placenta previa, cephalopelvic disproportion, dystocia, uterine dysfunction, and a previous history of cesarean section. Although cesarean delivery is an effective method for managing obstetric complications, it has several contraindications, such as fetal death or severe maternal infection that makes surgery inappropriate.

A cesarean section disrupts tissue integrity, triggering the release of inflammatory mediators such as histamine and prostaglandins, which result in acute postoperative pain. In addition to pain, patients are at risk of complications including hemorrhage, surgical site infection, urinary tract infection, impaired lactation, thrombophlebitis, and limitations in performing daily activities. Therefore, comprehensive preoperative and postoperative care is essential, including monitoring vital signs, fluid management, analgesic administration, early mobilization, wound care, and breastfeeding support.

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Pain perception is influenced by several factors, including age, gender, culture, environmental conditions, family support, anxiety, and stress. Based on its duration, pain is classified as either acute or chronic. Pain intensity can be assessed using validated instruments such as the Visual Analog Scale (VAS), Numeric Rating Scale (NRS), and Faces Pain Rating Scale (FPRS). Pain management consists of both pharmacological interventions, such as analgesics, and non-pharmacological approaches, including relaxation techniques.

Benson relaxation therapy is a non-pharmacological intervention that combines deep breathing exercises with the repetition of words or phrases based on the patient's personal beliefs to promote a relaxation response. This technique helps reduce sympathetic nervous system activity, thereby decreasing stress, anxiety, blood pressure, heart rate, muscle tension, and pain intensity. The therapy is performed in a quiet

environment for approximately 5–20 minutes while the patient focuses on breathing and a chosen calming phrase. It may be practiced twice daily until pain and anxiety improve.

Nursing care for post-cesarean section patients begins with a comprehensive assessment, including the patient's health history, pregnancy and delivery history, infant condition, physical examination, nutritional status, activity level, elimination patterns, rest, and psychosocial status. Common nursing diagnoses include acute pain, risk of infection, ineffective breastfeeding, risk of hypovolemia, and self-care deficit. Nursing interventions focus on pain assessment, implementation of non-pharmacological pain management, patient education, infection prevention, breastfeeding support, fluid balance monitoring, and assistance with self-care activities.

The implementation of nursing care is carried out according to the established care plan, emphasizing patient-centered care, therapeutic communication, and interdisciplinary collaboration. Nursing evaluation is conducted through observation, interviews, physical examination, and comparison of patient outcomes with the predetermined goals. This evaluation determines the effectiveness of nursing interventions and provides the basis for planning further care to promote optimal recovery in post-cesarean section patients..

3. Method

This study employed a descriptive case study design to describe the implementation of nursing care using Benson relaxation therapy for reducing post-cesarean section pain in patients treated in the An-Nisa Ward of RS Bakti Timah Pangkal Pinang. Two post-cesarean section mothers aged 21–40 years who met the inclusion criteria were recruited as respondents. Eligible participants were hospitalized, fully conscious, able to communicate verbally, willing to participate, and capable of following the intervention, while patients who refused to participate or were uncooperative were excluded. The independent variable was Benson relaxation therapy, whereas the dependent variable was post-cesarean section pain.

The study utilized several research instruments, including a Standard Operating Procedure (SOP) for Benson relaxation therapy, nursing care documentation forms based on the Indonesian Nursing Standards (SDKI, SLKI, and SIKI), pain observation sheets, and an intervention schedule. Benson relaxation therapy was administered for approximately 10 minutes twice daily for three consecutive days. Data were collected through interviews, direct observation, physical examination, and documentation review, including medical records and relevant literature. The study was conducted at RS Bakti Timah Pangkal Pinang from January 19 to January 21, 2026..

The collected data were analyzed using descriptive analysis by classifying the findings into subjective and objective data obtained from interviews, observations, physical examinations, and supporting documents. The results were presented systematically according to the descriptive case study design and compared with previous research findings and relevant nursing theories to draw conclusions using an inductive approach. Throughout the study, ethical principles were strictly maintained by obtaining informed consent, protecting participants' identities through anonymity, and ensuring the confidentiality of all personal and clinical information.

4. Results And Discussion

Results

Two post-cesarean section patients participated in this case study: Mrs. B (30 years old) and Mrs. R (33 years old). Both patients underwent cesarean delivery due to different obstetric indications and were admitted to the An-Nisa Maternity Ward at RS Bakti Timah Pangkal Pinang. The primary complaint in both

cases was intermittent pain at the lower abdominal surgical incision. The initial pain intensity was assessed using the Numeric Rating Scale (NRS), with Mrs. B reporting a pain score of 6 and Mrs. R reporting a pain score of 5. Both patients had stable medical histories, regular antenatal care, and no history of chronic illness or hereditary disease.

Physical examination revealed that both patients were in stable general condition with normal vital signs and no evidence of postoperative complications. The surgical incisions, approximately 15 cm in length, were covered with sterile dressings and showed no signs of redness, drainage, or infection. Both patients demonstrated adequate uterine contraction, normal lochia, good breastfeeding initiation with colostrum production, and stable laboratory findings. However, movement remained limited because of postoperative pain, although early mobilization had already been initiated within the first few hours after surgery.

Based on the nursing assessment, three nursing diagnoses were established for both patients: acute pain related to physical injury caused by the surgical procedure, risk of infection related to the invasive procedure, and impaired physical mobility related to pain. Among these diagnoses, acute pain was identified as the primary nursing problem and became the main focus of the intervention. Nursing care included pain assessment, monitoring of vital signs, patient education, pharmacological management according to the physician's prescription, and the implementation of Benson relaxation therapy as a complementary non-pharmacological intervention.

Benson relaxation therapy was administered over three consecutive days, beginning on the day of surgery and continuing until the second postoperative day. Each patient received two therapy sessions per day in addition to routine nursing care. Throughout the intervention, pain intensity and vital signs were evaluated before and after each therapy session to determine the effectiveness of the relaxation technique. Both patients were also encouraged to perform the relaxation technique independently whenever postoperative pain occurred.

The intervention demonstrated a gradual reduction in pain intensity in both patients. Mrs. B experienced a decrease in pain from an initial NRS score of 6 to 3 by the third day of intervention, whereas Mrs. R's pain score decreased from **5**to **3** during the same period. Along with pain reduction, both patients appeared more relaxed, showed fewer facial expressions of discomfort, demonstrated improved mobility, and maintained stable vital signs throughout the observation period.

Overall, the nursing evaluation indicated that the planned outcomes were successfully achieved. Benson relaxation therapy effectively contributed to reducing postoperative pain when combined with standard pharmacological treatment and routine nursing care. Before discharge, both patients were instructed to continue practicing Benson relaxation therapy independently at home as part of their self-management strategy to control postoperative pain and promote recovery..

Discussion

Characteristics of Post-Cesarean Section Patients

No.	Patient	Age (years)	Parity	Occupation	Nutritional Status	Comorbidities	Family Support
1	Mrs. B	30	G2P1A0	Civil Servant	Good	None	Yes
2	Mrs. R	33	G4P2A1	Housewife	Good	None	Yes

This study involved two post-cesarean section patients, Mrs. B and Mrs. R. Mrs. B was a 30-year-old civil servant who underwent her second cesarean section, while Mrs. R was a 33-year-old housewife

undergoing her first cesarean delivery. Both patients had good nutritional status, no comorbidities, and received adequate family support.

These characteristics may influence pain perception and the response to intervention. Relatively young age and good nutritional status contribute to optimal wound healing. However, Mrs. B's previous cesarean experience may have influenced her anxiety level and pain perception, as patients with prior cesarean deliveries often have different expectations and concerns compared with first-time cesarean patients. Adequate family support also plays an important role in promoting a sense of security and comfort, thereby facilitating relaxation and reducing pain perception [8].

Acute pain was identified as the primary nursing problem in both post-cesarean section patients. Both participants reported moderate to severe pain (NRS score of 5–6) localized at the 15-cm surgical incision site, with intermittent characteristics. Subjective complaints of pain, together with objective findings such as facial grimacing during movement and stable vital signs, supported the diagnosis of acute pain related to surgical tissue injury. The primary nursing diagnoses included acute pain related to physical injury caused by the cesarean procedure, risk of infection, and impaired physical mobility related to pain, consistent with the Indonesian Nursing Diagnosis Standards and previous literature [11].

Benson relaxation therapy is a combination of progressive muscle relaxation and meditation that incorporates the repetition of a meaningful word or phrase to reduce stress and pain responses. The therapy was administered twice daily for three consecutive days, with each session lasting approximately **10** minutes. The intervention followed a standardized procedure, including patient education, selection of a calming word or phrase based on the patient's personal beliefs, positioning the patient comfortably, gradual muscle relaxation, deep breathing exercises, and maintaining a passive attitude toward distracting thoughts. The therapy aims to reduce sympathetic nervous system activity, promote muscle relaxation, and stimulate the release of endorphins, which function as natural analgesics [12].

Physiologically, Benson relaxation therapy decreases the secretion of stress hormones such as cortisol and adrenaline, thereby reducing muscle tension and pain perception. In addition, the technique helps patients divert their attention away from pain and enhances their ability to regulate pain responses. The following table presents the average pain scores before and after Benson relaxation therapy over the three-day intervention period.

Hari/Tanggal	Pasien	Rata-rata Termin 1 Sebelum	Rata-rata Termin 1 Sesudah	Rata-rata Termin 2 Sebelum	Rata-rata Termin 2 Sesudah
9/6/2026	Ny. B	6,0	5,0	-	-
10/6/2026	Ny. B	5,0	5,0	5,0	4,0
11/6/2026	Ny. B	5,0	5,0	4,0	3,0
12/6/2026	Ny. R	5,0	5,0	-	-
13/6/2026	Ny. R	5,0	5,0	5,0	4,0
14/6/2026	Ny. R	4,0	4,0	4,0	3,0

Average Pain Scores Before and After Benson Relaxation Therapy

The table demonstrates a gradual reduction in pain intensity in both patients following the intervention. Mrs. B's pain score decreased from **6 to 3**, whereas Mrs. R's pain score decreased from **5 to 3** over the three-day treatment period, indicating the consistent effectiveness of Benson relaxation therapy in reducing post-cesarean section pain. The following table summarizes the mean, minimum, and maximum pain scores before and after Benson relaxation therapy.

Pain Scores Before and After Benson Relaxation Therapy

Pasien	Skala Nyeri Sebelum (Mean)	Skala Nyeri Sesudah (Mean)	Skala Nyeri Sebelum (Min)	Skala Nyeri Sesudah (Min)	Skala Nyeri Sebelum (Max)	Skala Nyeri Sesudah (Max)
Ny.B	5.25	4.5	5	3	6	5
Ny. R	4.83	4.17	4	3	5	5

The consistent reduction in pain scores observed in both patients suggests that Benson relaxation therapy is an effective non-pharmacological intervention for managing post-cesarean section pain. Its mechanism of action includes reducing muscle tension, suppressing sympathetic nervous system activity, and stimulating endorphin release as a natural analgesic [13]. In addition to pain reduction, the therapy helped patients feel more relaxed and perform early mobilization, which is essential for promoting wound healing and preventing postoperative complications such as thrombosis and infection. These findings are consistent with previous studies demonstrating that Benson relaxation therapy effectively reduces postoperative pain following cesarean section. [14] reported significant pain reduction after three consecutive days of Benson relaxation therapy, while [15] found that the intervention also reduced anxiety and improved sleep quality among post-cesarean patients. Therefore, Benson relaxation therapy can be considered a safe, practical, and effective complementary intervention for postoperative pain management following cesarean section.

5. Conclusion

This case study demonstrated that the primary nursing problem experienced by both post-cesarean section patients was acute pain related to surgical tissue injury. Comprehensive nursing care focused on pain management, infection prevention, and gradual mobilization. Benson relaxation therapy was implemented as a complementary non-pharmacological intervention for 10 minutes twice daily over three consecutive days. The intervention consisted of comfortable positioning, progressive muscle relaxation, controlled deep breathing, and the repetition of calming words or phrases according to each patient's personal beliefs.

The evaluation results showed a reduction in pain intensity in both patients, with Mrs. B's pain score decreasing from **6 to 3** and Mrs. R's from **5 to 3**. Both patients also appeared more relaxed, comfortable, and were able to perform light mobilization more effectively. These findings indicate that Benson relaxation therapy is a safe, simple, and effective complementary intervention for reducing post-cesarean section pain. Furthermore, the technique is easy to teach, requires no special equipment, and can be practiced independently by patients as part of postoperative pain management..

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