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# The Application of Benson Relaxation Therapy Technique to Reduce Pain in Post-Cesarean Section Patients in the Mawar Ward of Bengkalis Regional General Hospital

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***Abstract***. *Cesarean section (Sectio Caesarea) is a surgical procedure performed by making an incision in the anterior wall of the uterus to assist the childbirth process. This study aims to examine the application of Benson relaxation technique in reducing the intensity of pain scale in post-cesarean section mothers at Bengkalis Regional General Hospital (RSUD Bengkalis). This research is a quantitative study using a quasi-experimental design. The study was conducted from November to December 2024, involving a sample of 15 respondents. Data were analyzed using univariate and bivariate analysis, with the Chi-Square test applied. All respondents were post-cesarean section mothers. The findings showed that before the intervention, all 15 respondents (100%) experienced severe pain. After receiving the Benson relaxation intervention for 10–15 minutes, a decrease in pain scale was reported. The data indicated that the majority of respondents (86.7% or 13 respondents) experienced a reduction from severe to moderate pain. The statistical test results yielded a p-value of 0.000, indicating a significant effect of Benson relaxation therapy on pain reduction in post-cesarean section patients in the Mawar Ward of RSUD Bengkalis. It is recommended that RSUD Bengkalis consider adopting this technique as an innovation in health services, particularly in nursing care, to help reduce pain in post-cesarean section mothers.*

***Keywords:*** *Benson Relaxation Therapy Technique, Pain Reduction, Post-Cesarean Section*

## 1. BACKGROUND

Sectio caesarea is a surgical procedure performed by making an incision on the uterine wall to assist childbirth and save the lives of both mother and baby (Nurjaya et al., 2022). After undergoing a cesarean section, mothers often experience difficulty moving independently due to postoperative pain. Pain at the incision site can limit the mother's movements and delay the initiation of breastfeeding, which ultimately may reduce the success rate of breastfeeding after surgery (Hu et al., 2020).

In addition to physical effects, a cesarean section also impacts the psychological condition of the mother, who may feel fear and anxiety when the analgesic effects begin to wear off and pain starts to be felt again (Ratnawati & Utari, 2022). According to Devi (2022), pain at the surgical wound following a cesarean section causes discomfort that can disturb the mother’s thoughts and activities, thus requiring effective pain management to help alleviate this discomfort. The goal of pain management is to reduce or eliminate pain to achieve a comfortable condition for the individual. Pain management can be carried out through two main approaches: pharmacological and non-pharmacological therapies (Haryanti, 2021).

Post-cesarean section pain can cause discomfort that affects various bodily systems such as pulmonary, cardiovascular, gastrointestinal, endocrine, and immune systems. This condition also increases stress levels, which can lead to depression and disrupt the mother’s ability to

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perform daily activities. If left untreated, this pain can develop into chronic pain that lasts a long time. Therefore, proper and effective pain management after cesarean section is very important to prevent complications and reduce maternal mortality rates (Napisah, 2022).

Post-cesarean section pain can be managed using both pharmacological and non-pharmacological approaches. Pharmacological therapy involves the use of chemical pain-relieving medications, such as ketorolac and paracetamol, which are typically provided through healthcare services. However, long-term use of these medications may increase the risk of kidney impairment (Haripuddin et al., 2021). Therefore, it is important to combine non-pharmacological therapy with pharmacological therapy to reduce the pain sensation experienced by the patient and accelerate the recovery process. Examples of non-pharmacological therapies include placebo therapy, music therapy, deep breathing relaxation techniques, and Benson relaxation therapy (Solehati et al., 2022).

Benson relaxation therapy is one of the non-pharmacological methods effective in reducing post-cesarean section pain. The reduction in pain intensity experienced by respondents occurs because this technique helps increase focus on deep breathing relaxation, which distracts attention from the pain sensation. This process increases oxygen supply to body tissues and allows the brain to become more relaxed. A relaxed brain then stimulates the production of endorphin hormones that inhibit the transmission of pain impulses to the brain, thereby reducing the perception of pain and lowering the intensity of pain felt by the patient (Kasrin et al., 2024).

## 2. THEORETICAL STUDY

The Benson Relaxation Technique is a widely recognized non-pharmacological intervention developed by Herbert Benson in the 1970s. This method emphasizes eliciting the "relaxation response," a physiological state opposite to the stress-induced fight-or-flight reaction, characterized by decreased heart rate, muscle tension, and respiratory rate (Benson, 1975). The technique typically involves sitting quietly, focusing on a repetitive word, sound, phrase, or prayer, and adopting a passive attitude towards intrusive thoughts (Benson & Klipper, 1975).

Several studies have demonstrated the efficacy of the Benson Relaxation Technique in reducing various symptoms such as anxiety, stress, and pain. The practice enhances parasympathetic nervous system activity, leading to increased oxygenation and improved circulation, which contribute to pain modulation (Sharma et al., 2018). In particular, the release

of endorphins stimulated by relaxation can inhibit the transmission of pain signals to the brain, thus reducing perceived pain intensity (Kasrin et al., 2024).

Cesarean section (C-section) is a common surgical procedure involving an incision in the uterine wall to deliver a baby when vaginal birth is contraindicated or poses risks to mother or child (Nurjaya et al., 2022). Postoperative pain following C-section can be intense and multifaceted, impacting physical recovery and psychological well-being. Pain at the incision site often restricts movement, delays breastfeeding initiation, and may lead to increased maternal stress and anxiety (Hu et al., 2020; Ratnawati & Utari, 2022).

Effective management of post-C-section pain is essential to prevent complications such as chronic pain development, impaired maternal-infant bonding, and reduced quality of life. Pain control strategies generally encompass pharmacological treatments (e.g., NSAIDs, acetaminophen, opioids) and non-pharmacological approaches including relaxation techniques, music therapy, and breathing exercises (Haryanti, 2021; Solehati et al., 2022). The combination of these modalities can optimize pain relief while minimizing side effects associated with long-term drug use (Haripuddin et al., 2021).

## 3. RESEARCH METHODS

This study employs a qualitative approach aimed at exploring and understanding the meanings perceived by individuals or groups related to social or humanitarian issues. Qualitative research focuses on comprehensively understanding phenomena experienced by research subjects, such as behaviors and perceptions, through descriptive language within a natural context utilizing various scientific methods (Hengki, 2020). Meanwhile, the research design applied is quantitative, using a One Group Pre-Test - Post-Test method. In this design, the sample is observed before the intervention and then observed again after the intervention. The study begins with an initial measurement (pre-test) of pain scores in post-cesarean section patients before the Benson relaxation technique is applied, followed by a second measurement (post-test) to assess pain score changes after the Benson relaxation technique is implemented. This study was conducted at RSUD Bengkalis in the Mawar ward from November to December 2024. The population in this study consisted of all mothers who gave birth by cesarean section in the Mawar ward, totaling 15 individuals. The sampling technique used was total sampling, so the sample size in this study was 15 people. Data analysis included univariate and bivariate analysis. The statistical test used was the Wilcoxon test.

## 4. RESULTS AND DISCUSSION

Table 1 shows post-cesarean section pain before and after Benson relaxation.

**Table 1. Post-Cesarean Section Pain Before and After Benson Relaxation**

| No | Pain Level Before Intervention | | |
|---|---|---|---|
| | **Category** | **N** | **%** |
| 1 | Severe | 15 | 100 |
| 2 | Moderat | 0 | 0 |
| 3 | Mild | 0 | 0 |
| | **Pain Level After Intervention** | | |
| 1 | Severe | 2 | 13.3 |
| 2 | Moderat | 13 | 86.7 |
| 3 | Mild | 0 | 100 |

Based on the table above, it shows that out of 15 respondents, before the Benson relaxation intervention, all respondents (100%) experienced severe pain. After the intervention, the data showed that the majority of respondents (86.7% or 13 respondents) experienced a decrease in pain from severe to moderate.

The effect of Benson relaxation on post-cesarean section mothers in the Mawar Ward of Bengkalis Regional Hospital using the Wilcoxon test can be seen in Table 2.

**Tabel 2. The Effect of Benson Relaxation on Post-Cesarean Section Mothers in the Mawar Ward of Bengkalis Regional Hospital**

| Kelompok | Mean | Standar Deviasi | *P value* |
|---|---|---|---|
| pre test | 7.80 | .862 | |
| post test | 6.00 | .535 | .000 |

Based on the data presented in the table above, among the 15 respondents interviewed, the average pain score before the Benson relaxation intervention was 7.80, indicating that most respondents experienced pain in the severe category. After undergoing the Benson relaxation intervention for 10–15 minutes, the average pain score decreased to 6.00, which falls into the moderate pain category. Statistical analysis using the Wilcoxon test showed a *p-value* of 0.000 ($p < 0.05$), indicating a significant effect of the Benson relaxation technique in reducing pain intensity in post-cesarean section mothers.

This decrease in pain level is consistent with the physiological theory behind how Benson relaxation works. This technique is a form of mind-body therapy that combines progressive muscle relaxation, breathing regulation, and focused attention on a calming word or phrase. When the body is in a relaxed state, the parasympathetic nervous system is activated, which reduces heart rate, lowers blood pressure, slows respiration, and decreases the release of stress

hormones such as adrenaline and cortisol. The reduction of these stress hormones contributes to a lower perception of pain.

These findings are supported by a previous study by Wulandari (2020), which showed that Benson relaxation is effective in reducing pain levels in postoperative patients, including those who underwent cesarean sections. Another study by Arifianti and Lestari (2019) found that patients who performed Benson relaxation twice a day during postoperative care experienced significant reductions in perceived pain and anxiety compared to the control group.

Furthermore, the Gate Control Theory of pain by Melzack and Wall (1965) explains that non-painful sensory input, such as relaxation and breathing techniques, can inhibit pain signals transmitted to the brain through the spinal cord. In this context, Benson relaxation acts as a stimulus that "closes the pain gate," thereby reducing pain perception.

The researcher assumes that all respondents were in a similar postoperative condition in terms of the type of surgery (cesarean section), timing of the relaxation intervention, and basic psychological factors such as stress and anxiety. Therefore, the observed reduction in pain is believed to be a result of the Benson relaxation intervention rather than external factors such as analgesic administration.

Overall, this study indicates that Benson relaxation can serve as an effective and non-invasive complementary intervention in pain management for post-cesarean section mothers, especially during the acute postoperative phase. This intervention can be easily implemented in various healthcare settings as part of a holistic nursing and midwifery care approach.

## 5. CONCLUSION

Before the implementation of the Benson relaxation intervention, all respondents (100%) experienced severe pain. After the intervention, the majority of respondents (86.7% or 13 respondents) reported a reduction in pain level from severe to moderate. However, 13.3% of respondents did not experience any decrease in their pain scale. In the bivariate analysis using the Chi-Square test, a p-value of 0.000 was obtained, indicating a significant effect of the Benson relaxation therapy on pain reduction in post-cesarean section patients in the Mawar Ward of Bengkalis Regional Hospital

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