



## Case Study: Deep Breathing Relaxation Intervention to Reduce Pain in Post Sectio Caesarea Client

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### ABSTRACT

**Objective:** To determine the implementation of deep breathing relaxation techniques in clients with post operative section caesarea.

**Methods:** The method used is descriptive qualitative with a case study approach using nursing care that refers to the SDKI and SIKI books. The subject in this study was 1 sectio caesarea client with a diagnosis of acute pain who was treated in Teratai Room 2 BLUD Banjar City General Hospital. The data collection techniques included interviews, observations, physical examinations and documentation.

**Results:** From nursing care for postoperative sectio caesarea clients, the symptoms that appear during the assessment are pain in the lower abdomen. The nursing problem that arises is acute pain related to physical injury agents referring to the SDKI book. Interventions carried out to reduce pain are deep breathing relaxation techniques. During the intervention process, the action went smoothly until the evaluation. In this study, there was a decrease in the pain scale from 3 to 0.

**Conclusion:** After the intervention of breathing relaxation techniques on the client's pain scale was reduced from 3 to 0, while the subjective data from the anamnesis results, the client said the pain was reduced.

**Keywords:** pain, relaxation, sectio caesarea

### Introduction

Sectio caesarea is a process of delivery through surgery (Hanso, 2016). Another definition explains that sectio caesarea is a surgical procedure by removing the baby through an incision in the abdominal wall and uterus (Astuti & Sukesu, 2017). From some opinions about the definition

of sectio caesarea, it can be concluded that sectio caesarea is a surgical delivery of the fetus through the abdominal wall and uterus to keep the fetus intact. The World Health Organization (WHO) states that the sectio caesarea rate, the incidence of maternal childbirth has increased from an average of 5% to 15% per 1000 of the number of births in the world, currently government hospitals are around 11%, and private hospitals are more than 30% (Astuti & Sukesi, 2017). From year to year in Indonesia, sectio caesarea is increasing. According to the data, it is known that the prevalence of sectio caesarea in Indonesia is 6,8% and those who have medical indications for sectio caesarea are 4,2% (Mutia et al., 2021).

Delivery by cesarean section will experience higher complications than normal delivery. One of the complications that mothers usually experience after sectio caesarea is pain (Tri & Niken, 2019). Pain is an unpleasant sensation because it signals a problem. And pain if not treated will cause physiological and psychological harm to health growth (Hidayah, 2019). In addition, pain can cause discomfort to the mother after giving birth to a cesarean section (Hanso, 2016).

Pain after cesarean section usually occurs 18 hours after birth with severe pain. If pain is not treated, it can cause discomfort and can affect the pulmonary, endocrine, cardiovascular, digestive, immune systems and stress systems that can lead to depression and disability. This inability begins with limiting a person's ability to meet daily needs (Hanso, 2016). The impact of pain that arises after surgery if not treated will result in chronic pain that lasts longer than 3 to 6 months and is difficult to identify the cause. Chronic pain can have negative effects such as increasing hospitalization time, complications due to immobilization and uncontrolled emotions so that the healing process is hampered (Amalia & Agustina, 2021). The non-pharmacological therapy used to treat pain is deep breathing relaxation techniques (Tri & Niken, 2019).

Deep breathing relaxation technique is one of the non-pharmacological therapies to treat pain because relaxation techniques can prevent excessive postoperative errors (Kairupan & Lopian, 2018). Deep breathing relaxation is not difficult for post sectio caesarea mothers to learn, namely by inhaling for 3 seconds from the nose then holding for 5-10 seconds and exhaling slowly through the mouth. The perfect deep breathing relaxation technique can relieve muscle tension, boredom, and anxiety to prevent an increase in pain intensity (Astuti & Sukesi, 2017). In addition, there are several benefits of deep breathing relaxation techniques, which can lead to inner peace, lower heart rate, better disease resistance, reduced anxiety, reduced blood pressure, better memory, and better mental health (Metasari & Sianipar, 2018). Based on the results of research according to (Setiarini, 2018) post sectio caesarea pain after the intervention of deep breathing relaxation techniques there is a change in the pain scale.

Based on the explanation above, the researcher is interested in conducting a case study on the implementation of the use of deep breathing relaxation techniques to reduce pain in Ny. R with a medical diagnosis of post sectio caesarea in class 3A.1 Lotus Room 2 BLUD Banjar City RSU.

## **Objective**

This case study aims to determine the implementation of deep breathing relaxation techniques in clients with postoperative sectio caesarea.

## **Method**

The method used is descriptive through a structured case study approach based on the results of nursing care reports starting from studies conducted by interviewing clients or their

families. Nursing diagnoses are sourced from SDKI based on analysis of existing data, while nursing plans are from SIKI-SLKI, nursing implementation is adjusted based on the facts of nursing plans, and evaluations are documented with SOAPIER and the researchers measured the pain scale using the Numerical Rating Scale (NRS) measurement design.

This case study was conducted on a client post surgery sectio caesarea at the BLUD RSU Banjar City in Room Teratai 2 in class 3A1 for 2 days starting on May 25-26 2022 and continued with home care (home visite) for 1 day on May 27 2022. Before the action is given, the researcher explains in advance about the action to be taken. And after being given an explanation, the client is willing to become a respondent by giving an informed consent verbally. Implementation is carried out for 15 minutes by placing the client as comfortable as possible, namely in a position supination. Starting with the client inhale for 3 seconds from the nose and then hold for 5-10 seconds and exhale slowly through the mouth. And repeat the technique for 3-5 times.

## Result

### Assessment

The results of the study obtained on Mrs. R aged 31 years, a Muslim woman, married, an honorary teacher, S1 education and located in Sidamulih, Kalijati, Pangandaran with a postoperative medical diagnosis of sectio caesarea. All information was obtained from clients and families with in charge of Mr. D as husband. The client's main complaint on May 25, 2022 at 09.00 WIB, the patient said pain from sectio caesarea surgery in the lower abdomen, stabbing pain, increased pain when the client moved a lot and disappeared when resting with a pain scale of 3 (0-10). The client's past medical history said that his family did not have the same disease and also did not have genetic diseases such as DM and cancer. Menstrual history of mearche at the age of 13 years, with a cycle of 28-30 days and a duration of 6-7 days accompanied by simenorrhoea at the beginning of every day during menstruation. Pregnancy history is G3P2A1 with HPHT 28 August 2021 and HPL 04 May 2022. During her first pregnancy the client had an abortion which lasts 2 months. Pharmacological therapy given by the doctor is ketorolac through intravenous injection. From the results of complete blood laboratory examinations there are types of abnormal tests, namely hemoglobin 9.3, leukocytes 14.9, platelets 135, hematocrit 27, erythrocytes 3.0.

### Nursing Diagnoses

The formulation of the problem or diagnosis that is established is the result of analyzing the data obtained during the assessment, where the diagnosis has been determined according to PPNI (Indonesian National Nurses Association) in the IDHS book (Indonesian Nursing Diagnosis Standards).

Table 1. Nursing Diagnoses

Data Analysis	Etiology	Diagnoses
DS: - The client complains of pain in the area surgery scars - P : When moving	Postoperative wound on day 3 ↓ Incision in the abdomen above the symphysis pubis ↓	Acute pain related to physical injury agent

Q: As pressed                      Disconnected network continuity  
 R: In the stomach  
 area  
 S : scale 3                                  ↓  
     Painful  
 T: Disappearing  
 - The client says the  
 pain is felt when  
 you move a lot

DO:  
 - There are  
 postoperative  
 wounds in the  
 abdominal area  
 - Client grimacing  
 while moving  
 - Pain scale 3 (0-10)  
 - TTV  
 BP=110/90 mmHg  
 P = 98x/minute  
 R=22x/minute  
 S = 36.5

**Intervention, Implementation and Evaluation**

After finding nursing problems that arise, researchers determine nursing interventions that can be carried out on acute pain which are taken in the Indonesian Nursing Intervention Standards book.

Tabel 2. Nursing Intervention

Diagnoses	Intervention	Done/No
Acute pain related to phisycal injury agent	1. Identify the location, characteristics, scale, frequency, intensity of pain 2. Observation TTV 3. Identify the factors that cause pain 4. Provide a comfortable position 5. Teach deep breathing relaxation techniques	Conducted

In carrying out nursing implementation, the procedures carried out to clients are with a focus on implementation by teaching deep breathing relaxation techniques with the results and responses of clients understanding how to do deep breathing relaxation techniques.

Tabel 3. Nursing Evaluation

Day/Date/Hour	Evaluation	Initials
Friday, May 27, 2021	<p>S: the client complains of reduced pain in the area of the surgical wound,</p> <p>O: There is a postoperative wound in the abdominal area, pain scale 0 (0-10), blood pressure = 110/70mmHg, pulse = 95x/minute, respiration = 20x/minute, temperature = 36.0°C</p> <p>A: The problem of acute pain is resolved</p> <p>P : Stop Intervention</p>	Anisa Azmi

### Discussion

After carrying out the nursing process on 31-year-old Mrs. R with postoperative sectio caesarea in Lotus Room 2 BLUD RSU Banjar City from 25-26 May 2022 and continued home care (home visite) for 1 day on 27 May 2022. when implementing the client and family cooperatively in carrying out the action making it easier to take action. The first stage, namely assessment, is the initial stage of the nursing process which aims to find out the problem which includes data collection activities, grouping data and formulating nursing diagnoses as statements about client problems (Dermawan, 2020).

Based on the results of the assessment on Mrs. R, aged 31, the client said that the postoperative pain from sectio caesarea in the lower abdomen, stabbing pain, increased pain when the client moved a lot and disappeared when resting with a pain scale of 3 (0-10). The client's past medical history said that his family did not have the same disease and also did not have genetic diseases such as DM and cancer. Menstrual history of mearche at the age of 13 years, with a cycle of 28-30 days and a duration of 6-7 days accompanied by simenorrhoea at the beginning of every day during menstruation. Pregnancy history is G3P2A1 with HPHT 28 August 2021 and HPL 04 May 2022. During her first pregnancy the client had an abortion which lasts 2 months.

These data when compared with the problems that arise in theory do not show any gaps. This is according to the theory of residual pain that occurs due to sectio caesarea surgery is something that the client feels after surgery. Overall, postoperative sectio caesarea clients complain of pain in the area of the surgical wound. Clients who have severe pain around 60%, moderate pain 25%, and mild pain 15%. According to the researchers according to the theory of pain, if you have performed a cesarean section, it will result in injuries (SDKI, 2019).

The second stage is the determination of nursing diagnoses which are carried out after collecting assessment data on Mrs. R based on the analysis of the data obtained, the diagnosis that emerged the researchers found in the review of real cases in Mrs. R with post sectio caesarea on day 3 is acute pain associated with the agent. physical injury characterized by the client complaining of pain in the area of the postoperative sectio caesarea wound in the abdominal area. The results of the facts found are based on existing theories where there is a link between

the diagnosis in the case of postoperative sectio caesarea. The results of the facts found at the assessment stage appear nursing problems, namely acute pain associated with physical injury agents because the pain felt after sectio caesarea surgery comes from the wound. which is in the stomach (Mahmuda & Masnina, 2015).

The third stage is nursing planning, which is carried out after collecting data and establishing a diagnosis, then planning the actions to be carried out. Nursing planning is carried out according to the theory on pain problems, namely identification of location, characteristics, frequency, pain intensity, observation of vital signs, identification of factors causing pain, providing a position as comfortable as possible, teaching deep breathing relaxation techniques. In this case study, researchers focus on deep breathing relaxation interventions to relieve pain. The nurse teaches the client by inhaling from the nose for 3 seconds then holding for 5-10 seconds and exhaling through the mouth (Setiarini, 2018). The purpose of giving deep breath relaxation is to control gas exchange, increase alveolar ventilation, prevent complications in the respiratory system, reduce pain intensity and feelings of anxiety (Utami, 2016). In research according to (Tri & Niken, 2019) deep breath relaxation is very influential to relieve pain in post sectio caesarea clients.

Nursing implementation is the fourth step after giving and implementing a nursing care plan that has been prepared in the planning phase to describe the expected outcome criteria (Ili & Pustaka, 2014). The implementation of nursing in this case is carried out with a plan that has been prepared previously.

The fifth stage is an evaluation carried out to monitor the nursing process and assess the nursing actions that have been determined. The evaluation results obtained after being given a deep breathing relaxation technique to reduce pain for 3 days in postoperative sectio caesarea clients said that pain was reduced from a pain scale of 3 to 0. And the problem was resolved according to the desired outcome criteria.

## Conclusion

After the researchers carried out nursing care for Mrs. R with acute pain in Teratai Room 2 BLUD Banjar City General Hospital on May 25-26 2022 and continued care at home (home visit) on May 27 2022, the researchers concluded that there was a decrease in scale pain after being given deep breathing relaxation techniques to clients who experience postoperative pain sectio caesarea. Pain scale before intervention is pain scale 3, and after nursing intervention becomes pain scale 0 using Numeric Rating Scale (NRS). In the nursing process the implementation is also Cooperative client does whatever the nurse recommends.

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