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The effect of Benson relaxation technique to reduce acute pain in postoperative patients: A case report

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Abstract

Background: Pain can be relieved through medical and nonmedical approaches. The provision of analgesic drug therapy is a collaborative nursing practice that can significantly improve patient care through the use of opioids, nonopioids, and nonsteroidal anti-inflammatory drugs. Benson relaxation can reduce the problems experienced by patients which have an impact on reducing the cost of care.

Purpose: to prove that the application of Benson relaxation therapy can reduce acute pain in postoperative patients.

Method: This study uses a case report method with a nursing care approach by applying evidence-base nursing practice to 5 managed patients, namely patients with postoperative treated in the lotus surgical room at RSUD dr. Soehadi Prijonegoro Sragen. The instrument used in this nursing care report is a numeric scale to measure the intensity of patient pain with an interval of 0-10. Value 0 does not feel pain while 1-3 mild pain, 4-6 moderate pain and 7-10 shows severe pain.

Results: Showed that there were significant changes in the patient's pain scale after performing benson relaxation therapy.

Conclusion: it was concluded that interventions carried out using Benson therapy in postoperative patients can reduce pain intensity.

Keywords: Benson Therapy; Pain Management; Pain Scale.

INTRODUCTION

Pain is a condition that is common to every patient who performs surgical procedures (Lindberg, Franklin, Svensson, & Franklin, 2020). Unresolved acute pain can lead to worse effects such as the occurrence of heart disease, respiratory (loss of functional capacity of the lungs, ineffective coughing), digestive system (constipation, frequent nausea and vomiting), and urinary complications (retention); deep vein thrombosis due to immobility; psychological complications such as anger, anxiety and fear; skin complications (bed sores); and prolonged duration of hospitalization (Jelita, & Hakam, 2023; Rosyid, 2022). Pain can be relieved through both medical and nonmedical approaches.

The administration of analgesic drug therapy is a collaborative nursing practice that can significantly improve patient care through the use of opioids, nonopioids, and nonsteroidal anti-inflammatory drugs. Although drug therapy is the most powerful tool available, studies show that 9% to 15% of drug use is related to anti-pain drug reactions of which 2.5% can cause side effects in patients (Shah, Guidry, Kumar, White, King, & Heffernan, 2020).

Pain, hemodynamic instability, anxiety, and sleep disturbances are the most postoperative complaints after spinal surgery. Benson's relaxation technique (BRT) is one of the non-pharmacological strategies supposed to reduce postoperative complaints after

spine surgery. the Benson relaxation technique after spinal surgery has a positive statistically significant effect on improvement of intensity of pain, reduction of vital signs mean values, severity of anxiety and quality of sleep among the study group who applied BRT as compared to control group which support study hypothesis (Ebraheim, & Ibrahim, 2022).

Psychological therapy, music therapy, hypnosis, therapeutic touch, warm and cold compress therapy, massage therapy, and transcutaneous electrical nerve stimulation are some of the nonmedical interventions commonly used to improve the physical and mental comfort of patients (Hudiyawati, Rosyid, Pratiwi, Sulastri, & Kartinah, 2023); Simpson, Bao, & Agarwala, 2019). In addition, other complementary therapies for pain control, including aromatherapy, herbs, homeopathy, reflexology, and muscle relaxation, can help relieve pain with minimal risk to the patient. Relaxation aims to reduce anxiety, reduce muscle and bone tension, and indirectly relieve pain and reduce tension related to the physiological status of the body (Melastuti, Fatmawati, & Wahyuningsih, 2021). Clinically effective nonpharmacological treatments can improve sleep quality and psychological disorders, stress management, lower anxiety levels, mood disorders, and body discomfort. One of these types of therapy is relaxation therapy using the Benson method (Efendi, Syatriani, Amir, Alam, Nurdin, Batara, & Ikhtiar, 2022).

Benson's relaxation techniques are included in the relaxation therapy identified by Benson by developing a method of relaxation meditation with confidence (Keihani, Jalali, Shamsi, & Salari, 2019). Benson's relaxation can reduce patient problems resulting in reduced treatment costs. Benson's relaxation technique is known to reduce pain, stress, and anxiety and can also help to improve sleep quality, another benefit of this therapy can help provide the best and effective results against the pulse, respiratory function, and workload of the heart (Hapsari, Rosyid, & Irianti, 2022). Benson's relaxation technique is very simple, easy to learn, and apply because it only needs to focus on two

things to create a relaxation response, namely meditation and the repetition of words, phrases, prayers and Movements (Daneshpajoo, Ghezalje, & Haghani, 2019). Benson's relaxation technique is more widely used to deal with pain and stress because it can be used in everyday life. The results of research conducted by (Jelita et al., 2023) show that Benson relaxation therapy can be proven to reduce pain and improve sleep quality in patients who have acute pain.

RESEARCH METHOD

The method used was a case report type with a nursing care approach by applying evidence-based nursing practices to 5 patients who were managed, namely post-operative patients who were treated in the lotus surgery room at RSUD dr. Soehadi Prijonegoro Sragen. The patient is willing to be given intervention. The instrument used in this nursing care report is a numerical scale to measure the patient's pain intensity with intervals of 0-10. A value of 0 means no pain, while 1-3 indicates mild pain, 4-6 indicates moderate pain, and 7-10 indicates severe pain.

The assessment method uses a numeric scale before and after the intervention. The intervention given is Benson therapy, namely by inhaling and exhaling slowly accompanied by reading istigfar or sholawat for Muslims and for non-Muslims according to their beliefs. After the therapy is finished, they are then asked again with the numerical scale whether there are any changes or not.

Before providing the Benson relaxation therapy intervention, researchers conducted an assessment of the patient and measured the intensity of pain felt by the patient. Added to this is the data that has been obtained for the nursing plan. Next, the patient is given an explanation regarding the interventions that will be provided by Benson relaxation therapy. The patient will be given Benson relaxation therapy intervention for 5 to 10 minutes. After therapy, the patient will then be evaluated by measuring the pain scale to see the effectiveness of the therapy that has been given.

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RESEARCH RESULTS**Table Pain Score 0-10 Numerical Rating**

Variables	Day	Pain Scale	
		Pre-test	Post-test
Patient (1)	First Day	5	5
	Second Day	5	4
	Third Day	4	3
Patient (2)	First Day	6	6
	Second Day	6	5
	Third Day	5	3
Patient (3)	First Day	6	6
	Second Day	6	4
	Third Day	4	3
Patient (4)	First Day	6	5
	Second Day	5	3
	Third Day	3	3
Patient (5)	First Day	4	4
	Second Day	4	3
	Third Day	2	2

In table the first patient aged 53 years with a diagnosis of CF Mandibull, CF Claviculla, and CV maxilla on the first day with complaints of continuous frequency pain in the left shoulder on a scale of 5. After being given intervention with relaxation therapy, Benson patients said complaints of pain had not decreased in the left shoulder with a continuous frequency and the pain scale was on a scale of 5. On the second day the patient was willing to do Benson relaxation therapy and the result was that the patient's left shoulder pain scale decreased to a scale of 4 with continuous frequency. On the third day, patients were given Benson's relaxation therapy and the results of the patients said pain decreased from a scale of 4 to 3.

The second patient aged 19 years with a diagnosis of CF tibia dextral on the first day with complaints of continuous frequency pain in the right

leg on a scale of 6. After being given intervention with relaxation therapy, Benson patients said complaints of pain had not decreased in the right leg with a frequency of continuous and the pain scale was on a scale of 6. On the second day the patient was willing to do Benson relaxation therapy and as a result the pain scale in the patient's right leg decreased to a scale of 5 with continuous frequency. On the third day the patient was given Benson's relaxation therapy and the patient said pain decreased from a scale of 5 to 3.

The third patient with the age of 47 years with a diagnosis of close fracture of manus dextra on the first day of the patient with complaints of continuous frequency pain in the right hand on a scale of 6. After being given intervention with relaxation therapy, Benson patients said pain complaints had not decreased in the right hand with a continuous

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frequency and the pain scale was on a scale of 6. On the second day the patient was willing to do Benson relaxation therapy and the result was that the pain scale in the patient's right hand decreased to a scale of 4 with continuous frequency. On the third day the patient was given Benson's relaxation therapy and the result was that the patient said the pain decreased from a scale of 4 to 3.

The fourth patient aged 60 years with a diagnosis of open fracture and antebrachia sinistra. On the first day With complaints of continuous frequency pain in the left hand on a scale of 6. After being given intervention with relaxation therapy, Benson patients said pain complaints decreased slightly in the left hand with a continuous frequency and pain scale was on a scale of 5. On the second day the patient was willing to do Benson relaxation therapy and the result was that the pain scale in the patient's left hand decreased to a scale of 3 with continuous frequency. On the third day the patient was given Benson's relaxation therapy and the patient said pain decreased from a scale of 3 to 3.

The fifth patient with the age of 23 years with a diagnosis of cf clavícula dextra. On the first day With complaints of continuous frequency pain in the part of the surgery site with a scale of 4. After being given intervention With relaxation therapy, Benson patients said pain complaints have not decreased with a continuous frequency and the pain scale is on a scale of 4. On the second day the patient was willing to do Benson relaxation therapy and as a result the patient's headache scale decreased to a scale of 3 with continuous frequency. On the third day, the patient had Benson's relaxation therapy and the patient said pain decreased from a scale of 3 to 2.

DISCUSSION

Patient 1

A 53-year-old man complained of dizziness, abrasions on his left chest, bleeding in his ears, mouth and temples after falling from a height. The patient also complained of not being able to open his mouth and move his left shoulder. The patient was diagnosed with CF Mandibull, CF Claviculla, and CV maxilla. The test results were obtained BP: 110/70 mmHg, P: 80 x/min, RR: 20x/min, T: 36°C with CM awareness. The patient also complained of continuous pain in the left side of the body and mouth with a pain scale of 5.

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Patient 2

A 19-year-old woman complained of pain in her right leg after being hit by a motorcycle. The patient was diagnosed with CF tibia dextra. The test results were obtained PB: 127/70 mmHg, P: 87 x / min, RR: 20x / minute, T: 36.10C with CM awareness. The patient complained of continuous pain in the right leg with a pain scale of 6.

Patient 3

A 47-year-old man complained of pain in the finger of his right hand that was torn to the bone after being hit by a mixer. The patient was diagnosed with fracture digitii 2 manus dextra. The test results were obtained PB: 186/106 mmHg, P: 108 x/min, RR: 20x/min, T: 37.8 °C with CM awareness. The patient complained of continuous pain in the right hand with a pain scale of 6.

Patient 4

A 60-year-old man with a left hand that could not be moved and felt pain after a motorcycle accident. The patient was diagnosed with open fracture and antebrachia sinistra. The results of the physical examination showed abrasions on the cheek, nose and right arm, and lacerations on the elbow and left finger, and an open fracture on the left hand of the ulna. PB: 150/90 mmHg, P: 112 x/min, RR: 20x/min, T: 36 °C with CM awareness. Patients also complain of continuous pain in the part of the body where there is a wound with a pain scale of 6.

Patient 5

A 23-year-old man complained of dizziness, nausea and stitches on his right shoulder after falling down the stairs 2 days ago. The patient also complained of pain in the injured part of the head. The patient was diagnosed cf clavícula dextra & mild brain injury. The test results were obtained PB: 100/60 mmHg, P: 100 x / min, RR: 22x / minute, T: 36.2 °C with CM awareness. The patient complains of continuous pain in the right shoulder and head with a pain scale 4.

Patients with pain are caused by various things. As with patients in the lotus inpatient ward of RSUD dr. Soehadi Prijonegoro Sragen in the case report, the background of pain onset in patients 1 to 5 has varied postoperative cases. After Benson's relaxation therapy intervention, the average patient

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experienced changes after the second day of Benson's relaxation therapy intervention. The process of pain reduction in each patient decreases by one to two scales.

In the first patient aged 53 years with a diagnosis of CF Mandibull, CF Claviculla, and CV maxilla on the first day With complaints of continuous frequency pain in the left shoulder with a scale of 5 decreased on a scale of 4, the second day after the intervention of Benson relaxation therapy. The second patient aged 19 years with a diagnosis of CF tibia dextra on the first day with complaints of continuous frequency pain in the right leg on a scale of 6 decreased on the second day to a scale of 5 after Benson's relaxation therapy. The first patient with the age of 47 years with a diagnosis of digitii fracture 2 manus dextra on the first day patients with complaints of continuous frequency pain in the right hand on a scale of 6, on the second day decreased on a scale of 4 after doing Benson relaxation therapy. In the third patient aged 47 years with a diagnosis of digitii fracture 2 manus dextra on the first day patients with complaints of continuous frequency pain in the right hand on a scale of 6 after Benson's relaxation therapy, on the second day decreased on a scale of 4. In the fourth patient aged 60 years with a diagnosis of open fracture and antebrachia sinistra On the first day With complaints of continuous frequency pain in the left hand on a scale of 6, decreased on the second day after Benson's relaxation therapy to a scale of 3. In the fifth patient aged 23 years with a diagnosis of cf clavícula dextra On the first day With complaints of continuous frequency pain in the surgical site with a scale of 4, decreased on a scale of 3 after Benson's relaxation therapy.

Benson relaxation is a way of reducing pain by distracting. The attention is done with relaxation so that the patient's awareness of pain decreases. Relaxation techniques are combined between relaxation carried out with the trust that the patient has. The focus of this relaxation is sentences that are spoken repeatedly in a regular rhythmic manner (Astutiningrum & Fitriyah, 2019). Benson relaxation is a relaxation procedure between beliefs or beliefs held by the patient, with the aim of minimizing the pain and anxiety suffered by the patient (Sariningih, & Pratiwi, 2022). The Benson technique is a non-pharmacological relaxation therapy that is able to reduce the pain scale to relax and adaptation by

patient pain (Ahmed, Gendy, & Mahrous, 2023). Benson's relaxation technique is a simple amalgamation that is easy to implement. This relaxation technique is a relaxation response with *faith factor* and the advantage of Benson's relaxation therapy is by using breathing techniques with the addition of sentences as a form of combining beliefs (Molazem, Alizadeh, & Rambod, 2021)

The application of Benson's relaxation therapy has been applied to previous studies. (Mustaqim, & Purwaningsih, 2022) have proven the application of Benson relaxation therapy in their research showing that *Low Back Pain* (LBP) preoperative patients are effective in reducing the acute pain scale from a scale of 6 to a scale of 3. (Macwan, Parmar, & Savaliya, 2022) have also proven in their research the effect of Benson's relaxation therapy on preoperative patients who experience anxiety (Zaghloul, Hassan, Saraya, Abd-Elmasieh, & Ali, 2022). conducted a study on changes in pain intensity before and after Benson's relaxation therapy from a pain scale of 10 to a pain scale of 4. In addition, (Jia, Haixia, Hongna, & Xueni, 2023). conducted a study for 3 consecutive days by giving benson relaxation therapy to three fracture patients with pain problems and showed results of pain reduction.

CONCLUSION

Based on the results of the intervention used using Benson therapy with the method of measuring pain scales using numeric scales, it was found that interventions carried out using Benson therapy in postoperative patients can reduce pain intensity.

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