



## Case Study of Deep Breath Relaxation Intervention to Reduce Chronic Pain Scale in Post-Brachial Tumor Surgery Patients

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### ABSTRACT

**Objective:** This case study was conducted to describe deep breathing relaxation. intervention in reducing the pain scale in postoperative clients of brachial tumors

**Method:** This exploration uses an expressive contextual investigation plan with a nursing care approach. with participants based on inclusion and exclusion criteria. Gather information through interviews, perceptions, actual assessments, and documentation evidence-based practice focused on nursing interventions. The research was conducted at the BLUD RSU Banjar City on 27-31 May 2022. The participants in this study were Mr. W's client, 61 years old, male, complaining of postoperative pain. The process of assessment and diagnosis is focused on the main problem. Objective and subjective data become a reference for periodic evaluations of nursing implementation

**Results:** The results obtained from the nursing process which consisted of assessment, nursing diagnoses, interventions, implementation and evaluation for 4 days starting May 27-31 2022 the authors took one of the nursing diagnoses, namely pain, therefore the intervention carried out was deep breathing. Relaxation techniques to reduce pain, pain scale in postoperative brachial tumor patients with the result of reducing the pain scale from a pain scale of 5 to 2 pain scale.

**Conclusion:** Deep breathing relaxation intervention after the researcher carried out nursing care for Mr. W Pain Diagnosis there is a significant decrease in pain scale. To maintain the conditions that have been achieved, it is hoped that the role of Mr. W's family is to be able to follow the treatment thoroughly for the client's recovery and as an effort to prevent complications of diseases associated with brachial tumors.

**Keywords:** deep breath, pain scale, tumor

## Introduction

Soft tissue tumors are a heterogeneous group of benign and malignant lesions that develop from a variety of nonepithelial, extraskeletal elements, including adipose tissue, smooth and skeletal muscle, tendons, cartilage, fibrous tissue, blood vessels, and lymphatic structures (Anindhita, 2021). Based on data from the World Health Organization (WHO), it is estimated that there were 18.1 million new cases and 9.6 million deaths from tumors in 2018. The increasing number of growth patients can be caused by several elements, including population density, as well as over time and changes in the similarity of specific reasons for illnesses associated with alternating social and monetary events (Anindhita, 2021)

Based on Basic Health Research (Rikesdas) Indonesia itself has a high incidence of tumors, in 2018 it was stated that the quantity of medical action was 61.8%. (Ministry of Health, 2018). According to (Ministry of Health 2018). The prevalence of tumors by province shows that the prevalence of West Java Province is 5.47% prevalence 4.89-6.12 95% CI. Based on the type of tumor in Indonesia. It is known that there are 12 types of cancer, of which the largest OR is growth of the ovary and cervix (19.3) with a 95% CI 17.8–20.9. Meanwhile, the low ORs were cancer of the respiratory tract (0.6) and growth of the blood (0.9) with 95% CI 0.4-0.9 and 0.6-1.4% CI, respectively.

Based on the explanation above, the authors are interested in conducting a case study of deep breath relaxation technique intervention to reduce postoperative pain in Mr. W with a medical diagnosis of brachial tumor in the Orchid Room, RSU Banjar City.

## Objective

This case study was conducted to describe deep breath relaxation interventions in reducing and minimizing pain scale in clients after brachial tumor surgery.

## Methods

Research configuration is each cycle required in compiling and conducting research, starting from the readiness stage to the problem planning stage in research.

Contextual investigation is an inspection technique that is assisted by inspecting a problem through a case that consists of one unit. One unit here can mean one individual, a group affected by a problem. The unit at issue is dissected from top to bottom both insofar as they relate to actual cases, risk factors, impacts, events related to cases and activities and case responses to certain treatments or disclosures which generally use several information gathering techniques, such as meetings, field perceptions, and documentation (Pratama, 2018).

This observation uses a case study design with an evidence based practice implementation approach that focuses on nursing interventions. The research was conducted at the BLUD RSU Banjar City on 27-31 May 2022. The participants in this study were clients of Mr. W, 61 years old, male, complained of pain. The process of assessing and establishing a diagnosis is focused on the main problem. Objective and subjective data become a reference for evaluation of nursing implementation on a regular basis.

## Result and Discussion

The results obtained from a nursing system that combines evaluation, nursing analysis, intercession, implementation and assessment for 4 days starting May 27-31 2022 the creators take nursing findings namely chronic pain related to surgical incisions (surgical procedures), therefore deep breath technique interventions relaxation to reduce and minimize the pain scale in postoperative brachial tumor patients with the result of a decrease in the pain scale from a pain scale of 5 to a pain scale of 2.

### Assessment

The client is Mr. W, 61 years old, from Tambak Sari Village, Ciamis, was admitted to the emergency room at the Banjar Hospital on May 24 2022 with problems with pain and a lump in his hand. Previously the client did not have comorbidities and the family did not have a history of the same disease. The client is assisted by his family to the hospital in charge of Mr. W as son-in-law.

At the time of examining the client's awareness of *compos mentis* 15 with a quantity value of Eye 4, Motor 6, and Verbal 5, vital signs result in a respiratory rate of 20 times per minute, blood pressure 130/90 mmHg, temperature 36.50C, pulse rate 85. Psychosocial status The client shows anxiety obtained through the client's answers when interviewed by saying he is worried that he will not recover and is experiencing severity.

Spiritual data does not show a serious problem because the client says he is patient and trusts in his illness. Activity patterns are disrupted when sick because of an infusion so the client needs assistance in changing clothes, sleep patterns are disrupted because the client complains that it is difficult to rest. The therapy given to the client is RL infusion 20 tpm x200ml Ceftriaxone 2x1, ketorolac 3x1, omeprazole 2x1. A complete blood laboratory examination was carried out there were some that were not normal.

### Diagnosis

The results of the assessment were obtained with nursing problems that were psychologically assessed for chronic pain with the diagnosis number D.0077 on page 172 (PPNI, 2016).

### Intervention, Implementation, and Evaluation

Nursing interventions and exercises must be carried out to reduce, remove, and prevent client nursing problems with acute pain associated with surgical incisions (surgical procedures), namely as follows:

Table 2. Nursing Intervention

Outcome	Intervention
After 3x24 hours of nursing action, the pain problem is resolved, with the following criteria:	<b>Observation:</b>
1. Pain is reduced	1. Identification of location, characteristics, duration, frequency, quantity, pain intensity, pain scale
2. Patients express a sense of comfort after the pain is reduced	2. Identification of factors that aggravate and relieve pain
3. Able to control pain. Able to recognize pain	
4. TTV is normal	

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**Therapeutic:**

1. Create a quiet environment
  2. Position semi fowler or fowler
  3. Consider the type and source of pain in selecting pain relief strategies
  4. Relax and calm down
  5. Do the deep breath relaxation technique
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In implementation, there are procedures performed for clients with pain, positioning the client as comfortable as possible in a semi-Fowler's or Fowler's position and then giving a warm drink after that, do a deep breath relaxation technique. According to what has been done on the client, an evaluation is obtained: S: Pain is felt at any time, decreases when resting and increases when active with a pain scale of 2 (0-10), O: the client looks grimacing in pain, A: Chronic Pain, P: Suggests technique, deep breath relaxation, I: Doing technique, deep breath relaxation, E: The client understands the technique, deep breath relaxation, R: The intervention is stopped.

Nursing care for clients with postoperative pain disorders at BLUD RSU Banjar City has been carried out by researchers in a comprehensive manner based on theories found in various sources. Nursing care procedures are carried out in 5 stages including assessment, determination of diagnosis, intervention, implementation and evaluation of nursing.

Conducted a study on Mr. w on May 27, 2022, the initial steps carried out were vital signs examination with blood pressure results of 130/90 mmHg (pre hypertension), respiratory rate of 20 times per minute (tachypnea), while temperature and pulse frequency were within normal limits. According to (Kartikasari, 2018) on the physical examination of clients with pain several problems arise, especially vital signs and other examinations related to pain, pain is felt like in cuts, pain is felt in the Brachialis section radiating to the shoulders and back. Pain is felt at any time, decreases when resting and increases when active with a pain scale of 5 (0-10).

Pain Unpleasant sensory and emotional experience arising from actual or potential tissue damage or described as damage (International Association For The Study Of Pain), that is sudden or slow in intensity from mild to severe with an anticipated or predictable end (Lita , 2021). In clients post surgery tumor brachialis. The results of the study found that nursing problems were examined physiologically acute pain related to surgical incisions (operative procedures) with the diagnosis number D.0077 on page 172 (PPNI, 2016).

To overcome this problem, researchers conducted interventions and implemented nursing in accordance with Indonesian nursing intervention standards number I.08238 page 201, among others, examining pain, (Suprayitna et al., 2022). Therapeutically, namely Create a calm environment, Position semi-fowler or fowler, Consider the type and source of pain in selecting strategies to relieve pain, relax and calm. Do the deep breath relaxation technique. However, researchers need to add non-pharmacological interventions in the form of deep breath relaxation techniques.

Deep breath relaxation therapy is a procedure used to reduce pressure and pain levels (Richard, Ariyanto, & Setiawan, 2022). The deep breath relaxation therapy method allows the patient to control his body's reactions to tension and nervousness. Deep breath relaxation procedures can reduce oxygen use, digestion, respiratory rate, pulse, muscle tension, and circulatory tension (Anggraini, 2020).

Based on the papers, it was observed that the main tool used to treat postoperative pain in medical clinics is deep breath relaxation exercises. The advantage of deep breath relaxation is that it tends to be done anytime, anywhere and at any time, the technique is very simple and must be done freely by the patient, without media, can relax tense muscles, while the disadvantage is that those who suffer from respiratory diseases (Setiani, 2017)

Stating that deep breath relaxation can reduce pain in clients after brachial tumor surgery, so it is necessary to socialize it to clients and families so they can do it independently. According to the client's confession, pain is usually felt intermittently when doing activities feels painful, while at rest it doesn't. However, when confirmed on May 31 2020, the client's pain was reduced from a scale of 5 to a scale of 2. This shows that deep breath relaxation interventions can overcome pain.

This result is in line with the opinion that deep breath relaxation is used to treat postoperative pain in the hospital, namely deep breath relaxation exercises (Kurniawan & Setiawan, 2022). Deep breath relaxation treatment is a method based on the belief that the body responds to tension that refreshes the mind due to illness or disease. Deep breath relaxation procedures can reduce physiological tension (Hidayat et al., 2022). This procedure can be performed with the head upright in a lying position or sitting in a chair. The most important thing needed in carrying out the removal procedure is a client in a comfortable position, a client with a fresh brain, besides that, a calm environment (Setiani, 2017).

## Conclusion

The deep breath relaxation intervention should be suspected of being effective in overcoming pain based on subjective client recognition. In addition, the authors did not find a significant discrepancy between the hypotheses and facts that hindered the research results, so this writer did not struggle with research that had been completed by previous analysts. did not struggle with research that had been completed by previous analysts. that have been completed by previous analysts.

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