

## Application of Benson Relaxation in Managing Pain and Supporting Wound Healing in Post-Breast Cancer Surgery Patients

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### ABSTRACT

This study aims to determine the benefits of applying Benson relaxation in managing pain and supporting wound healing in post-breast cancer surgery patients in the Rajawali Ward of Dr. Kariadi Hospital, Semarang. This research method uses a descriptive design with a case study on post-breast cancer surgery patients. The results showed that post-breast cancer surgery patients before being given Benson relaxation had an average pain scale of 6.00 and after being given Benson relaxation had an average pain scale of 3.33. Based on these results, it can be concluded that the application of Benson relaxation is effective in managing pain and supporting wound healing in post-breast cancer surgery patients in the Rajawali Ward of Dr. Kariadi Hospital, Semarang. The application of Benson relaxation can be an effective nursing intervention in managing pain and supporting the wound healing process in post-breast cancer surgery patients. Therefore, nurses can consider implementing Benson relaxation as part of the care of post-breast cancer surgery patients.

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### INTRODUCTION

Breast cancer is a malignant tumor in the breast that spreads to the surrounding breast area and throughout the body. Breast cancer is one of the non-communicable diseases with a high prevalence worldwide and is a leading cause of death in women. (society, 2018). Based on data obtained from the World Health Organization (WHO), an estimated 18.1 million cases of breast cancer occurred in 2018, of which 9.6 million people died (Agustin, Endriyani, and Dilianasari 2022). In Indonesia, based on Global Burden of Cancer (GLOBOCAN) data, there were 396,914 new cancer cases in 2020. The International Agency for Research on Cancer (IARC) estimates that by 2040, the number of new cancer cases could reach 30.2 million cases, with a mortality rate of up to 16.3 million people, and the most common disease suffered is breast cancer at 11.7% (Astuti, Sjatar, and Saleh. 2022). Breast cancer is a dangerous disease that requires recovery through surgery. Pain in post-operative patients is severe suffering. In post-mastectomy patients, 61% of patients complained of pain in the surgical area, 41.5% experienced pain, and 34.1% experienced nausea. (Cahyawati, 2018) Other manifestations that further arise due to breast disease and its treatment include sleep disturbances, pain, fatigue,

loss of actual capacity, sarcopenia, cachexia, bone loss, and psychological barriers (Mustian, Cole, Lin & Asare, 2016).

Post-op breast cancer patients will experience pain in their breast area (acute). In surgical cases, about 80% of patients experience acute pain after surgery. Pain control is very important for post-surgical patients, aiming to prevent the side effects of pain, aid recovery, and reduce treatment costs by minimizing or controlling pain in patients (Muzaenah & Hidayati, 2021). There are several types of pain management that can be done to overcome or reduce pain, one of which is relaxation techniques as a non-pharmacological action performed to reduce pain. Therefore, post-operative care is very important, including the use of non-pharmacological interventions such as relaxation (Sitinjak et al., 2018). One relaxation technique that can be applied is Benson relaxation, which is a relaxation technique that combines elements of meditation and breathing exercises to lower the physiological stress response. Benson relaxation has been proven to reduce anxiety levels, improve sleep quality, and increase pain tolerance. In the context of wound healing, a stable mental condition greatly influences immunological processes and tissue regeneration. This study was conducted to determine the extent to which the application of Benson relaxation can help overcome pain and accelerate the wound healing process in post-breast cancer surgery patients. It is hoped that the results of this study can contribute to nursing practice and more holistic healthcare services.

## METHOD

The writing of this scientific paper in this case study uses a descriptive writing design, which describes the process of implementing nursing care by focusing on one important problem in the case taken, namely the Application of Benson Relaxation to Overcome Pain in Wound Healing in Post-Breast Cancer Surgery Patients at RSUP Kariadi Semarang. Participants in the preparation of the case report with breast cancer were patients who were willing to be respondents. The data analysis performed was to compare the responses of three patients who were respondents after nursing care was provided. Data analysis in this case study of nursing care, "Application of Benson Relaxation to Overcome Pain in Wound Healing for Post-Operative Breast Cancer Patients," was conducted descriptively and presented narratively. The analysis technique used to create the narrative was derived from the nursing care process, starting from assessment, diagnosis, intervention, implementation, to evaluation. (Hutahaean, 2020).

## RESULTS

### Study Results

#### 1. Case 1

The first respondent, Ms. T, Age: 40 years, Gender: Female, Last Education: Elementary School, Occupation: Housewife, Date of Hospital Admission: September 5, 2024. The patient stated pain in the right breast. P: Pain due to post-op MRM wound Q: Like being sliced R: Right breast S: Scale 5 T: Frequent.

#### Evaluation

Sunday, October 13, 2024, 10:00 AM

S: The patient stated no signs and symptoms of heat, itching in the post-operative area.

O: Wound appears red.

- No signs and symptoms of infection.

- Patient appears to wince.

A: Nursing problem not yet resolved.

P: Continue intervention.

Monday, October 14, 2024, 05:00 AM

S: The patient stated pain in the post-operative area, scale 5.

O: Patient appears to wince and is restless.

A: Problem not yet resolved.

P: Continue intervention.

Tuesday, October 15, 2024, 05:30 AM

S:

- The patient stated the post-operative wound still feels painful but has decreased from 5 to 3.
- The patient and patient's family stated they understand the signs and symptoms of infection.
- The patient stated they will perform wound care regularly.

O:

- No signs and symptoms of infection felt.
- Patient's general condition improved.

A: Nursing problem not yet resolved.

P: Continue intervention.

## 2. Case 2

The assessment was conducted on Tuesday, October 22, 2024, in the Rajawali Room of RSUP Dr. Kariadi Semarang. The second respondent, Ms. A, Age: 29 years, Gender: Female, Religion: Islam, Last Education: High School, Occupation: Housewife, Date of Hospital Admission: October 12, 2024. The patient stated chest pain on the right side (breast cancer wound), pain when the wound dressing is changed and when the right hand is moved. P: Pain when moving, Q: Stabbing pain, R: Right breast S: Scale 7, T: Intermittent.

### Evaluation

Monday, October 23, 2024, 11:30 AM

S: The patient stated pain in the right breast (breast cancer wound), pain when the wound dressing is changed & when the right hand is moved.

P: Pain when moving.

Q: Stabbing pain.

R: Right chest/breast area pain.

S: 7

T: Intermittent.

O: Patient appears to wince, there is a breast cancer wound on the right side of the chest.

A: Chronic pain problem not yet resolved.

P: Continue intervention.

Tuesday, October 24, 2024, 06:00 AM

S: The patient stated a new wound appeared on the old surgical scar.

O: Wound appears open.

A: Risk of infection problem not yet resolved.

P: Continue intervention.

Wednesday, October 25, 2024, 11:30 AM

S: The patient stated pain in the right chest (breast cancer wound), pain when the wound dressing is changed & when the right hand is moved.

P: Pain when moving.

Q: Stabbing pain.

R: Right chest/breast area pain.

S: 4

T: Intermittent.

- The patient stated still feeling pain in the breast wound area.

O:

- Patient appears to wince, there is a breast cancer wound on the right side of the chest.
- There appears to be seepage on the wound dressing.

A: Nursing problems of pain and risk of infection not yet resolved.

P: Continue intervention.

## 3. Case 3

The assessment was conducted on Thursday, November 7, 2024, in the Rajawali Room of RSUP Dr. Kariadi Semarang. The third respondent: Ms. E, Age: 51 years, Gender: Female, Religion: Islam, Last Education: Elementary School, Date of Hospital Admission: October 30, 2024. The patient stated pain, P: Post-operative Q: Stabbing R: Right breast S: 6 T: Intermittent.

## Evaluation

Tuesday, November 7, 2024, 08:00 AM WIB

S: The patient stated pain in the right breast (breast cancer wound), pain when the wound dressing is changed & when the right hand is moved.

P: Pain when moving.

Q: Stabbing pain

R: Pain in the right chest/breast area

S: 6

T: Intermittent

O: Patient appears to wince, there is a CA mammae wound on the right side of the chest

A: Chronic pain problem not resolved

P: Continue intervention

Wednesday, November 8, 2024 at 08:00 WIB

S: Patient says a new wound has appeared on the old surgical scar

O: Wound appears open

A: Risk of infection problem not resolved

P: Continue intervention

Thursday, November 9, 2024 at 12:30 WIB

S: Patient says the pain has significantly decreased from before, pain scale 3

O: Patient looks fresher than yesterday, no leakage from the post-operative right breast incision

A: Problem partially resolved

P: Maintain intervention

Thursday, November 9, 2024 at 12:30 WIB

S: Patient says the wound is quite dry

O: No leakage from the post-operative right breast incision

A: Problem partially resolved

P: Continue intervention

Results of pain scale before and after the Application of Benson Relaxation to Overcome Pain in Wound

Healing for Post-Breast Cancer Surgery Patients		
Respondents	Pain scale	
	Before	After
Ny. T	5	3
Ny. A	7	4
Ny. E	6	3
Mean	6,00	3,33

From the data above, it can be concluded that Post-Breast Cancer Surgery Patients in Rajawali Room, RSUP dr. Kariadi Semarang, before being given Benson relaxation, had an average pain scale of 6.00, and after being given Benson relaxation, had an average pain scale of 3.33. It can be concluded that the Application of Benson Relaxation can Overcome Pain in Wound Healing for Post-Breast Cancer Surgery Patients in Rajawali Room, RSUP dr. Kariadi Semarang.

## DISCUSSION

The assessment was conducted on Sunday, October 13, 2024. The first respondent was Ms. T, Age: 40 years, Gender: Female, Last Education: Elementary School, Occupation: Housewife, Date of Hospital Admission: September 5, 2024. The patient reported pain in the right breast. P: Pain due to post-op MRM wound. Q: Like being sliced. R: Right breast. S: Scale 5. T: Frequent. The assessment was conducted on Tuesday, October 22, 2024, in Rajawali Room, RSUP Dr. Kariadi Semarang. The second respondent was Ms. A, Age: 29 years, Gender: Female, Religion: Islam, Last Education: High School, Occupation: Housewife, Date of Hospital Admission: October 12, 2024. The patient reported chest pain on the right side (CA mammae wound), pain when the wound dressing was changed and when the right hand was moved. P: Pain when moving. Q: Stabbing pain. R: Right breast. S: Scale 7. T: Intermittent. The assessment was conducted on Thursday, November 7, 2024, in Rajawali Room, RSUP Dr. Kariadi Semarang. The third respondent was Ms. E, Age: 51 years, Gender: Female, Religion: Islam, Last Education: Elementary School, Date of Hospital Admission: October 30, 2024. The patient reported pain. P: Post-Operation. Q: Stabbing. R: Right breast. S: 6. T: Intermittent.

Results of pain scale before and after the Application of Benson Relaxation to Overcome Pain in Wound Healing for Post-Breast Cancer Surgery Patients In Rajawali Room, RSUP dr. Kariadi Semarang. From the data above, it can be concluded that Post-Breast Cancer Surgery Patients in Rajawali Room, RSUP dr. Kariadi Semarang, before being given Benson relaxation, had an average pain scale of 6.00, and after being given Benson relaxation, had an average pain scale of 3.33. It can be concluded that the Application of Benson Relaxation can Overcome Pain in Wound Healing for Post-Breast Cancer Surgery Patients in Rajawali Room, RSUP dr. Kariadi Semarang. From the discussion of the results obtained from this case study, nursing problems were found in the three patients, Ms. T, Ms. A, and Ms. E, with a diagnosis of acute pain caused by post-operative pain. After the administration of Benson relaxation technique, the results showed that the Benson relaxation technique was able to reduce pain, make the body relaxed, eliminate stressful thoughts, and relax body muscles. Benson Relaxation is one of the simple relaxation techniques, easy to implement, and does not require much cost. Benson Relaxation is a relaxation that involves effective deep breathing techniques and words or phrases that a person believes can reduce the burden felt or can improve health. This relaxation can reduce the burden felt or can improve health (Fathia 2023). The reduction in pain by the Benson relaxation technique is caused when a person performs deep breathing to control the pain felt, the body will stimulate the parasympathetic nervous component, which causes a decrease in cortisol and adrenaline levels in the body that affect a person's stress level, thereby increasing concentration and making the client feel calm to regulate breathing rhythm to become regular. This method is very effective and easy to do (Pristiyanti 2022).

Previous research explained that Benson's relaxation technique has gained attention as a beneficial intervention to improve quality of life. This is consistent with the results of research conducted by (Permatasari & Sari, 2022) which stated that pain has an impact on a person's psychological state, such as anxiety, stress, sleep disturbances, and excessive fear. This Benson relaxation technique is a deep breathing technique performed by patients by closing their eyes while breathing slowly and comfortably. Respiratory muscle relaxation can have an effect on ventilator weaning. The sensation of inspiration and respiratory drive being imbalanced with the strength of inspiratory muscles can explain why MIP (Maximal Inspiration Pressure) increases. After 2 days of Benson relaxation therapy intervention, it was found that there was a decrease in pain scale. This is because Benson's relaxation technique can inhibit sympathetic nerve activity, which can cause a decrease in oxygen consumption, making body muscles relaxed and creating a feeling of calm and relaxation. Pain is the main complaint in post-operative breast cancer patients caused by tissue damage, inflammation, and stimulation of nociceptive receptors in the wound area. In all three patients in this case study, pain was present in the chest and arm on the operated side, with moderate to severe intensity. Patients also showed physiological responses such as grimacing facial expressions, increased blood pressure, increased heart rate, and discomfort when moving. According to Smeltzer & Bare (2010), acute post-operative pain occurs due to the activation of the sympathetic nervous system, which triggers the body's stress response in the form of increased heart rate, respiration, blood pressure, and muscle tension.

Research conducted by (Febiantri & Machmudah, 2021) showed that Benson's relaxation technique is effective in reducing pain in post-operative wounds, demonstrating a decrease in pain after implementation. Benson's relaxation technique is used as a non-pharmacological method to control pain. The principle of this technique is to activate the parasympathetic nervous system and suppress the stress response, so that the body enters a calm state and the release of stress hormones (cortisol, adrenaline) is suppressed. The results of their research show that Benson Relaxation Therapy, once performed, will result in a reduced pain scale and make patients more relaxed and comfortable (Ko et al. 2019). From the data above, with research conducted by Irpan & Rena (2023) which explains that combining pharmacological and non-pharmacological techniques is the most effective way to relieve pain, in addition to efforts to reduce pain levels in breast cancer patients with spiritual needs, one of which can be through Benson's relaxation technique.

## CONCLUSION

Based on the results of case studies and literature reviews on the Application of Benson's Relaxation to Overcome Pain in Wound Healing in Post-Operative Breast Cancer Patients, it can be concluded that:

1. Post-operative breast cancer pain is a common problem that can affect wound healing, quality of life, and patient comfort.
2. The application of Benson's Relaxation technique has been proven to have a positive effect in reducing pain intensity in post-operative breast cancer patients. This technique works by calming the nervous system, lowering stress hormones, and increasing the release of endorphins as the body's natural analgesic.
3. The application of Benson's Relaxation technique has been proven effective in helping to overcome these disturbances by reducing pain, increasing tissue oxygenation, and lowering anxiety levels and fear of movement (kinesiophobia).
4. After Benson's relaxation intervention, patients showed improvement in their ability to move, reduced pain, and appeared calmer and more cooperative in undergoing the rehabilitation program.
5. Benson's Relaxation is a safe, inexpensive, easy-to-apply, non-pharmacological intervention that provides significant physical and psychological benefits in supporting the post-operative wound healing process.
6. This technique is simple, safe, and easy to apply, both in hospitals and at home. This makes Benson's relaxation one of the important interventions in holistic nursing practice, especially to support wound healing and physical function recovery after surgery.

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