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THE EFFECT OF BENSON RELAXATION ON PAIN LEVELS IN BREAST CANCER PATIENTS AT EDUARDO XIMENES GENERAL HOSPITAL, BAUCAU, TIMOR-LESTE

PENGARUH RELAKSASI BENSON TERHADAP TINGKAT NYERI PADA PASIEN KANKER PAYUDARA DI RUMAH SAKIT UMUM EDUARDO XIMENES BAUCAU TIMOR-LESTE

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Abstract

Pain in breast cancer is one of the most common and significant problems experienced by patients. The impact of cancer-related pain can lead to further treatment complications and affect the patient's overall quality of life. This study aims to determine the effect of Benson relaxation on pain levels in breast cancer patients. A quantitative research method was employed using a pre-experimental one-group pre-test and post-test design. The sample consisted of 17 patients selected through purposive sampling. The data were collected using the Numeric Rating Scale (NRS). The average pain score of respondents during the first measurement (pre-test) was 6.12, and during the second measurement (post-test) it decreased to 3.12. The difference in average pain levels between the first and second measurements showed a reduction of 3.00 points. The statistical test results revealed an Asymp. Sig (2-tailed) p-value of 0.000, indicating a significant effect of Benson relaxation on reducing pain in breast cancer patients. Benson relaxation can significantly help lower pain levels after therapy. This relaxation technique plays an important role by inhibiting sympathetic nerve activity, which in turn reduces oxygen consumption by the body and relaxes the muscles, leading to a sense of calm and comfort.

Keywords: Breast cancer, pain, Benson relaxation

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Abstrak

Nyeri pada kanker payudara menjadi salah satu masalah utama yang paling umum dirasakan pada penderita kanker payudara. Dampak dari nyeri akibat kanker dapat menyebabkan masalah pengobatan lebih lanjut dan kualitas hidup pasien itu sendiri. Penelitian ini bertujuan untuk mengetahui pengaruh relaksasi benson terhadap tingkat nyeri pada pasien kanker payudara. Penelitian ini merupakan penelitian kuantitatif dengan pre eksperimen *one group pre test post test* desain, Jumlah sampel sebanyak 17 pasien yang dipilih dengan Teknik *Purposive sampling*. Pengumpulan data menngunakan *Numeric rating Scale*. Rata-rata nyeri responden pada pengukuran pertama (*pre-tes*) adalah 6,12 dan pada pengkuran nyeri kedua (*post test*) 3,12. Sedangkan perbedaan rata-rata nyeri pada pengukuran pertama (*pre test*) dan pengukuran kedua (*post test*) terdapat penuruan nyeri adalah 3.00. Hasil uji stastistik nyeri responden didapatkan Asimp.Sig (2 tailed) pada tabel p-value adalah 0,000 maka dapat disimpulkan ada pengaruh pemberian relaksasi benson terhada nyeri pada pasien kanker payudara. Relaksasi benson dapat membantu penurunan tingkat nyeri yang signifikan setelah diberikan terapi. Terapi relaksasi ini mempunyai peran penting dengan cara menghambat aktifitas saraf simpatis yang dapat menurunkan konsumsi oksigen oleh tubuh dan otot-otot tubuh menjadi relaks sehingga menimbulkan perasaan tenang dan nyaman.

Kata kunci : Kanker payudara, nyeri, relaksasi benson

1. INTRODUCTION

Pain in breast cancer is one of the most common and significant issues experienced by patients. If not properly managed, the impact of breast cancer-related pain can contribute to increased morbidity and a poor quality of life. Pain in cancer patients is a subjective phenomenon that combines both physical and non-physical factors, often persisting over an extended period. This prolonged experience of pain can lead to further consequences for patients, such as limitations in physical activity and emotional stress caused by chronic pain, especially if not adequately addressed. Patients often attempt to minimise their pain through various coping mechanisms, such as clenching their teeth, tightly closing their eyes, biting their lower lip, furrowing their brows, grimacing, holding the painful area, or taking painkillers.

According to data from the World Health Organization (WHO, 2018), breast cancer is one of the leading causes of cancer-related deaths, accounting for approximately 627,000 deaths globally. Although North America (the US and Canada) represents only 5% of the world's population, it accounts for 15% of new cases, 9% of deaths, and 17% of the global prevalence. In contrast, Africa, which comprises 15% of the world's population, accounts for 8% of new cases, 12% of deaths, and 7% of the prevalence. Asia, home to 59% of the global population, contributes 39% of new cases, 44% of deaths, and 37% of the prevalence (De Santis et al., 2015). In Indonesia, treatment types for breast cancer patients recorded in 2018 show the highest proportion undergoing surgery at 61.8%, followed by chemotherapy at 24.9%, and radiotherapy at 17.3% (Riskesdas, 2018). In Timor-Leste, data from Fundasaun Alola reported 1,710 breast cancer patients between 2019 and 2021, with numbers increasing each year. In 2019, there were 325 patients; in 2020, the figure rose to 444; and in 2021, it jumped to 941. That same year saw a significant rise in breast cancer cases among women aged between 19 and 65. In Baucau Municipality, medical record data shows 52 breast cancer patients in 2020, increasing to 80 in 2021.

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The significant issue of discomfort caused by pain and the resulting impact of breast cancer necessitates various proactive measures. Pain management in breast cancer patients can be addressed through both pharmacological and non-pharmacological approaches. Pharmacological cancer pain management typically involves the administration of analgesic medications (Scarbrough B. M., 2018). Another approach is the use of non-pharmacological techniques or complementary therapies, which serve as potential alternatives to enhance pain management. Several such therapies can improve patient comfort, including music therapy, meditation techniques, reflexology massage, herbal remedies, hypnosis, touch therapy, and massage. Among the non-pharmacological interventions, Benson relaxation therapy can be employed to enhance the effectiveness of pharmacological treatments.

Benson relaxation therapy is a breathing-based relaxation technique that incorporates elements of belief or faith, leading to reduced oxygen consumption by the body and muscle relaxation, which in turn produces feelings of calm and comfort. This state of relaxation is transmitted to the hypothalamus, which stimulates the production of corticotropin-releasing factor (CRF). CRF then triggers the pituitary gland to increase the production of proopiomelanocortin (POMC). The pituitary gland also produces β-endorphins, which act as neurotransmitters. Endorphins influence pain impulses by inhibiting the release of neurotransmitters at the presynaptic level or by blocking impulses at the postsynaptic level. As a result, pain stimuli are prevented from reaching conscious awareness, and the sensory experience of pain is diminished (Yustiana, 2015).

A study conducted by Maurung (2019) examined the effect of Benson relaxation technique on reducing post-appendectomy pain levels at Porsea Regional General Hospital (RSUD Porsea). The Benson relaxation was administered three times, each session lasting 15–30 minutes. In the control group of the pre-experimental design, the results showed that 6 respondents (66.7%) experienced a pain score of 7, 2 respondents (22.2%) reported a pain score of 8, and 1 respondent (11.1%) had a pain score of 6. In the intervention group of the pre-experimental design, 6 respondents (66.7%) also reported a pain score of 7. The t-test analysis of the control group's pre- and post-experimental data yielded a p-value of 0.000, indicating $p < 0.05$. This suggests that there was a significant difference in post-appendectomy pain scale after the Benson relaxation technique was applied. Likewise, the t-test analysis for the intervention group also produced a p-value of 0.000, confirming a statistically significant difference in pain levels following the application of the Benson relaxation technique.

A study conducted by Dewiyanti (2021) investigated the effect of Benson relaxation therapy on pain levels in post-operative breast cancer patients. The study involved 19 respondents at Sultan Agung Islamic Hospital in Semarang, with samples selected using a consecutive sampling technique. The analysis revealed that prior to the therapy, the average pain level was in the severe category, reported by 47.4% of patients (9 individuals). After the therapy, the average pain level decreased to the moderate category, with 52.6% (10 patients) reporting moderate pain. The Wilcoxon test comparing pain levels before and after the intervention showed a p-value of 0.003, indicating a statistically significant effect. This demonstrates that Benson relaxation therapy has a significant impact on reducing pain in post-operative breast cancer patients.

A preliminary study conducted on 24 January 2022 at Eduardo Ximenes General Hospital in Baucau, through an online interview with the Head of the Chemotherapy Unit, revealed that pain is the most frequently reported complaint among breast cancer patients. Based on information obtained from a nurse at Eduardo Ximenes General Hospital, Timor-Leste, pain

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assessments were carried out on five patients undergoing treatment. The findings showed that 3 patients (60%) reported experiencing severe pain, while 2 patients (40%) reported moderate pain.

Based on the issues outlined above, the researcher is interested in conducting a study to examine the effect of Benson relaxation on pain levels in breast cancer patients at Eduardo Ximenes General Hospital in Baucau, Timor-Leste. The aim is to enable breast cancer patients to better manage and control their pain.

2. RESEARCH METHOD

The research employed in this study is a pre-experimental design using a **one-group pre-test–post-test design**. This design involves conducting a pre-test before the intervention is administered, followed by a post-test after the intervention, without the inclusion of a control or comparison group. In this approach, a single experimental group is measured for the dependent variable, then given the intervention, and the dependent variable is measured again, with no comparative group involved. The population consisted of **breast cancer patients undergoing chemotherapy** at Eduardo Ximenes General Hospital in Baucau, totalling 60 individuals. The **sample size** for this study was **17 participants**.

3. RESULTS AND DISCUSSION

Characteristics of Research Subjects

The data on sample characteristics were collected through direct measurement and interviews with the respondents. The instrument used was an **observation sheet**. The characteristics of the respondents that were studied were then organised and presented in a distribution table as follows:

Table 1
Characteristics of Respondents Based on Age and Education Among Breast Cancer Patients at Eduardo Ximenes General Hospital, Baucau, Timor-Leste Year 2023

Age	Frequency	Percentage (%)
21-30 years	2	11,8
40-60 years	14	82,4
≥60 years	1	5,9
Total	**17**	**100**
Education Level	**Frequency**	**Percentage (%)**
Primary School	4	23,5
Junior High School	3	17,6
Senior High School	10	58,8
Higher Education	0	0
Total	**17**	**100**

Based on the data obtained from the study, the majority of respondents were aged between **40 and 60 years**, accounting for **14 individuals (82.4%)**. In terms of educational background, the

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highest proportion of breast cancer patients had completed **senior high school**, with **10 respondents (58.8%)** holding this level of education.

Data Analysis

Data analysis was conducted to assess the effect of Benson relaxation on pain levels in breast cancer patients. A normality test was performed using the **Shapiro-Wilk test** to determine whether the data were normally distributed.

Table 2
Normality Test Analysis

Benson Relaxation	Shaphiro-wilk		
	Statistik	df	Sig
Pre-test	0.917	17	0.131
Post-test	0.912	17	0.107

Based on the results of the Shapiro-Wilk normality test shown in Table 2, the significance values for both the pre-test and post-test are greater than 0.05. This indicates that the data are **normally distributed**, and therefore, the appropriate statistical test used is the **paired t-test**, with a **95% confidence level** ($\alpha = 0.05$).

Overview of Average Pain Levels Before Benson Relaxation

Table 3

Distribution of Average Pain Levels Before Intervention at Eduardo Ximenes General Hospital, Baucau, Timor-Leste Year 2023

Group	Minimum Value	Maximum Value	N	Mean	±	SD
Pre-test	3	8	17	6,12	±	1,36

Based on the table above, the average pain score of respondents before the intervention was **6.12** with a standard deviation of **1.36**, indicating that the respondents were experiencing **moderate pain**.

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Overview of Average Pain Levels After Benson Relaxation

Table 4

Distribution of Average Pain Levels After Intervention at Eduardo Ximenes General Hospital, Baucau, Timor-Leste Year 2023

Group	Minimum Value	Maximum Value	N	Mean	±	SD
Post-test	`1	5	17	3,12	±	1,21

Based on the table above, the average pain score of respondents after receiving Benson relaxation therapy was **3.12**, with a standard deviation of **1.21**, indicating that respondents were experiencing **mild pain**.

Difference in Pain Levels Before and After Benson Relaxation

Table 5

Distribution of Differences in Average Pain Scores (Pre-Test and Post-Test) at Eduardo Ximenes General Hospital, Baucau, Timor-Leste Year 2023

Pain Level	N	Mean	p-value
Pre –tes		6,12	
Post –tes	17	3,12	0,000
Difference Pre-post tes		3.00	

Based on the table above, the average pain level of respondents during the first measurement (pre-test) was **6.12**, and during the second measurement (post-test) it was **3.12**. The difference between the pre-test and post-test pain scores showed a reduction of **3.00** points. Referring to the results of the statistical test, the **Asymp. Sig. (2-tailed)** or **p-value** is **0.000**, which is less than 0.05. This indicates that there is a **significant effect** of Benson relaxation on reducing pain levels in breast cancer patients.

Discussion

Respondent Characteristics Based on Age and Educational Level of Breast Cancer Patients

The characteristics of the respondents in this study, conducted at Eduardo Ximenes General Hospital, Baucau, Timor-Leste, show that breast cancer patients were categorised into three age groups: early adulthood (21–30 years), late adulthood (40–60 years), and elderly (60 years and above). Based on the data collected, the majority of respondents fell into the **late adulthood** category, aged **40–60 years**, accounting for **14 individuals (82.4%)**. This suggests that breast cancer in this setting most commonly affects women in the later stages of adulthood.

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The risk of developing breast cancer increases with age, as abnormal cell changes become more likely to occur over time (Fischer et al., 2018). This indicates that the older a woman is, the higher her risk of developing breast cancer. Among women over the age of 40, particularly those who are still in their reproductive years and menstruate monthly without ovulation, the body does not produce sufficient levels of progesterone. This imbalance means that progesterone is not able to counteract the effects of oestrogen, a hormone known to trigger breast cancer. Several factors influence the prognosis of breast cancer, including tumour size, metastasis, degree of differentiation, and histopathological type. In terms of histological subtype and cancer stage, the **survival rate** for women under the age of 40 is generally lower compared to women over 40. In younger women, this is often due to hormonal instability. This risk factor is closely associated with the length of exposure to **endogenous estrogen and progesterone**, both of which play roles in regulating the development and growth of breast tissue (Di Sibio A, et al., 2016).

Hormonal imbalance plays a crucial role in the progression of breast cancer. Several risk factors—such as prolonged reproductive age, nulliparity (never having given birth), and having a first child at an older age—are associated with increased exposure to high levels of oestrogen during the menstrual cycle. Oestrogen functions by stimulating growth factors in both normal breast epithelial cells and cancerous cells. The prevailing hypothesis suggests that oestrogen and progesterone receptors, which are normally present in breast epithelium, may interact with growth promoters such as **transforming growth factor-α** (linked to epithelial growth), **platelet-derived growth factor**, and **fibroblast growth factor**, all of which are secreted by breast cancer cells. This interaction is thought to establish an **autocrine mechanism** that facilitates tumour development and progression (Nadeak, 2014).

The results of this study are consistent with research conducted by Harisa Mardiah et al. at Haji Adam Malik General Hospital in Medan, which found that the age group most affected by breast cancer was **41–50 years**, with a prevalence rate of **36.9%** (Harisa Mardiah et al., 2021).

Based on the educational characteristics of respondents at Eduardo Ximenes General Hospital in Baucau, Timor-Leste, the highest proportion of breast cancer patients **10 individuals (58.8%)** had completed **senior high school education**. According to Notoatmodjo (2015), the higher a person's level of education, the more easily they are able to receive and process information, which in turn can influence their behavior positively or negatively and affect their overall health status. Educational attainment plays an important role in determining a person's competency to access and interpret information. Individuals with higher education are generally more likely to obtain health-related information, whether from others or from mass media sources. Ideally, a higher level of education is associated with broader knowledge and understanding. However, it is important to note that **having a lower level of formal education does not necessarily equate to having low knowledge**. Knowledge acquisition is not solely dependent on formal education; it can also be gained through **non-formal education**, personal experience, and community-based learning.

The results of this study are in line with research conducted by Theresia (2014) on the relationship between education level and knowledge level of women aged 20-40 years regarding breast self-examination (sadari) as an effort to detect breast cancer early in the village

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of Namosuro, Birubiru District, Deli Serdang Regency, North Sumatra Province, showing that the level of education obtained that the most respondents had a high school education level of 57.9%. And the least had an education level of no schooling of 2.6%.

Average Pain Overview Before Benson Relaxation

Benson relaxation therapy is a non-pharmacological treatment technique that is an option as an effort to reduce pain. The results of research at the Eduardo Ximenes Baucau General Hospital, Timor-Leste, the average pain of respondents before treatment was 6.12 with a standard deviation of 1.36 or the patient's pain was in the moderate pain range.

The most common problem in breast cancer patients is pain. This occurs because of the presence of incision wounds that release various intracellular substances released into the extracellular space, which will irritate nociceptors. These nerves will stimulate and move along nerve fibers or neotransmitters such as prostaglandins and epinephrine, which carry pain messages from the spinal cord transmitted to the brain and perceived as pain. There are no two individuals who experience the same pain and no two incidents of the same pain produce identical responses or feelings in individuals because pain is complex and can be influenced by physiological, social physiological and environmental factors. In this study, pain measurement was carried out using a pain scale of 0-10 and gave different results between individuals. This is because of the possibility of differences in each individual's response to the existing pain stimulus which is influenced by emotions, level of awareness, cultural background, understanding of experience and past experiences about pain.

The results of this study are in accordance with the theory explained (Potter & Perry, 2013) that pain is a sensory and emotional experience related to actual or functional tissue damage with sudden or slow onset. On the other hand, factors that influence pain are culture, age, gender, attention and anxiety and previous pain experiences. Some cultures believe that showing pain is something natural. Other cultures tend to train closed (introverted) behavior. Cultural socialization determines a person's psychological behavior. Thus, this can affect the physiological output of endogenous opial so that pain perception occurs. On the other hand, age is also a factor that influences pain because younger ages will be able to control pain better and easier compared to older ages because at older ages they will be afraid to express the pain they are experiencing and the care and actions they will receive later (Sholiah, 2019)

Breast cancer patients will experience pain when the cancer cells have enlarged, wounds have appeared, or when metastases have appeared to the bones. Pain in cancer is a subjective phenomenon that is a combination of physical and non-physical. Pain comes from various parts of the body or as a result of therapy and procedures including chemotherapy and radiotherapy. The pain experienced by breast cancer patients is caused by a direct effect on the affected organ and a direct effect on the affected soft tissue (Sitinjak et al., 2018). Similarly, research conducted by Solehati, et al. (2013) explained that the average pain score of post-mastectomy patients at RSHS Bandung before the Benson relaxation technique was performed was 6.20. This study is also in line with that conducted by Rasubala, G. F, Kumat, L.T, (2017) that before being given the Benson relaxation technique, the average pain scale of post-appendicitis surgery patients was 6.62.

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The results of this study are in line with Hamranani's (2014) study which explains that the average pain score before the Benson relaxation technique was 4.81. Based on the researcher's assumption, providing non-pharmacological therapy is an option for breast cancer patients to overcome the pain that arises. The factors that differentiate the level of pain are the age of the respondents and the pain experience felt because younger respondents are able to withstand pain compared to older ages and the pain experience of respondents with long-standing cancer pain, respondents are able to control pain on the other hand, pain is a condition in the form of an unpleasant feeling that is very subjective because the feeling of pain is different for each person in terms of scale or level.

Average Pain Overview After Benson Relaxation Treatment

This study after conducting an intervention in the form of Benson relaxation techniques on respondents at the Eduardo Ximenes Baucau General Hospital, Timor-Leste, first measured the pain scale and then recorded it on the observation sheet. Benson relaxation was given three times to breast cancer patients with a duration of 10-15 minutes then given a break for 45 minutes. The results obtained from measuring the pain scale after the Benson relaxation technique were that the average pain was 3.12 with a standard deviation of 1.21 or mild pain.

Pain is an unpleasant sensation and emotional experience, a condition that shows subjective or individual discomfort, hurts the body and whenever the individual says it is real. Pain receptors are located on all free nerves located in the skin, bones, joints, arterial walls, membranes surrounding the brain, and intestines (Solehati T, 2015) The purpose of Benson relaxation is to create a comfortable internal atmosphere so that it can focus on the sensation of pain in the hypothalamus so that it can reduce the sensation of pain felt by the individual concerned. Benson relaxation in terms of playing a role in reducing the intensity of pain perception works by diverting a person's focus on pain and by creating a comfortable atmosphere (Purwanto, 2011).

Psychologically, Benson therapy is useful for reducing pain, Benson therapy will inhibit sympathetic nerve activity which can reduce oxygen consumption by the body and then make the body's muscles relax so that it creates a feeling of comfort and calm. Benson relaxation is a procedure to help individuals deal with stressful situations and efforts to eliminate stress and pain. Nociceptors (pain receptors) will be active when stimulated by chemical, mechanical and temperature stimuli. If these cells are damaged, these substances will be released to stimulate pain receptors while mechanical ones are generally due to muscle spasms and muscle contractions. Muscle spasms will cause pressure on blood vessels so that ischemia occurs in the tissue, while in muscle contractions there is an imbalance between nutritional needs and nutrient supply so that the tissue lacks nutrients and oxytocin which results in anaerobic mechanisms and produces residual iron, namely excessive lactic acid then the lactic acid stimulates pain fibers. One of the treatments that can be done to relieve or eliminate pain is Benson therapy (Solehati, T. Kaprudin, S & Lukman, 2015).

This study is in line with the study conducted by Sueb, (2016) namely Benson relaxation can reduce pain in patients with Trans Urethral Resection Of The Prostate (TURP), with an average of 1.43. Research conducted by Solehati T, (2013.) explains that the average pain score

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of post-mastectomy patients at RSHS Bandung after the Benson relaxation technique was performed was 2.71. Based on the opinion of researchers, the Benson relaxation technique is a relaxation technique combined with the beliefs held by the patient, Benson relaxation will inhibit sympathetic nerve activity which can reduce oxygen consumption by the body and then the body's muscles become relaxed so that it creates a feeling of calm and comfort. The effect of deep breathing relaxation on pain provides a relaxing effect by reducing muscle tension so that pain will be reduced.

Differences in Pre-test and Post-test Pain After Benson Relaxation

Pain measurement in breast cancer at the Eduardo Ximenes Baucau General Hospital, Timor-Leste, was carried out twice using a numeric pain scale, namely before being given Benson relaxation therapy, then Benson therapy was given three times with a duration of 10-15 minutes, then the second measurement was carried out. Based on the table above, the average pain of respondents in the first measurement (pre-test) was 6.12 and in the second pain measurement (post-test) 3.12. While the difference in the average pain in the first measurement (pre-test) and the second measurement (post-test) there was a decrease in pain of 3.00 or the patient's pain was in the mild range. When viewed from the results of the statistical test using the paired t-test of respondent pain, Asimp.Sig (2-tailed) in the p-value table was 0.000, it can be concluded that there is an effect of Benson relaxation on pain in breast cancer patients.

The results of the study above are in line with the theory that the Benson relaxation technique can reduce pain in breast cancer patients because when the Benson relaxation technique is performed, long breathing will provide sufficient energy, because when exhaling, carbon dioxide (CO2) is released and when inhaling deeply, oxygen is obtained which greatly helps the body in cleaning the blood and can become relaxed so that it can reduce pain (Dervis, 2013) Benson Therapy is a breathing relaxation technique involving beliefs that result in a decrease in oxygen consumption by the body and the body's muscles become relaxed, causing feelings of calm and comfort. If O2 in the brain is sufficient, humans are in a balanced condition. This condition will cause a general state of relaxation in humans. The feeling of relaxation will be forwarded to the hypothalamus to produce conticothropin releasing factor (CRF). CRF will stimulate the glands under the brain to increase the production of proopiod melanocorthin (POMC) so that the production of enkephalin by the adrenal medulla increases. The pituitary gland also produces ß endorphine as a neurotransmitter (Yusliana, A., 2015)

Endorphine appears by separating itself from deyoxyribo nucleid acid (DNA), a substance that regulates cell life and gives orders for cells to grow or stop growing. On the surface of cells, especially nerve cells, there is an area that receives endorphine. When endorphine separates from DNA, endorphine makes life in normal situations not feel painful. Endorphine affects pain impulses by suppressing the release of neurotransmitters in the presynapse or inhibiting pain impulses in the postsynapse so that pain stimuli cannot reach consciousness and pain sensory is not experienced (Solehati & Kokasih, 2015).

The results of this study are also supported by research conducted by Yusliana (2015) entitled the effectiveness of Benson relaxation on reducing pain in postpartum caesarean section mothers in the results of the study showed that the average postpartum caesarean

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section pain after being given intervention in the experimental group was 2.86 with a decrease in pain of 1.53 and the control group was 3.76 with a decrease in pain of 0.30 from the data showed a greater decrease in pain in the experimental group compared to the control group. The dependent t test in the experimental group showed a p value (0.000) < a (0.05) and in the control group showed a p value (0.082) > a (0.05, so it can be concluded that there is a significant difference between the control and experimental groups.Various studies have proven that Benson relaxation is beneficial in reducing pain, namely research conducted (Hesti., et al. 2018) showed that Benson relaxation is beneficial for reducing pain in gastritis patients (p = 0.002). Sunaryo & Lestari (2014) showed that Benson relaxation has an effect on reducing the pain scale in patients with AMI (p = 0.004)

According to the researcher's opinion, the intensity of pain after the intervention decreased. This is because the provision of Benson relaxation techniques that are carried out correctly and repeatedly will cause a decrease in pain that is felt to be greatly reduced or optimal compared to previous breathing relaxation involving beliefs that cause a decrease in oxygen by the body and the muscles of the body to relax so that it creates a feeling of calm and comfort.

CONCLUSION

Based on the research above, the conclusion of this study is as follows: the average level of pain of respondents before treatment was 6.12 with a standard deviation of 1.36 or the respondent's pain was moderate. The average level of pain of respondents after being given Benson relaxation was 3.12 with a standard deviation of 1.21 or the respondent's pain was mild. The results of the Paired t test p value obtained Asimp.Sig (2 tailed) in the p-value table is 0.000, so it can be concluded that there is an effect of giving Benson relaxation on pain in breast cancer patients. Suggestions for Institutions This research is expected to be able to contribute to scientific knowledge, especially regarding the Effect of Benson Relaxation on pain levels in breast cancer patients. For hospitals, it is expected to be able to use the Benson Relaxation Standard Operating Procedure to reduce pain levels in breast cancer patients.

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