# The Effect of Benson Relaxation on Anxiety Levels in Major Surgical Preoperative Patients

Agus Setiyono<sup>1\*</sup>, Yeni Kartika Sari<sup>2</sup>, Yohanes Kusuma Pribadi<sup>3</sup>

<sup>1</sup>Surgical nursing, Mardi Waluya Houspital, Indonesia <u>aguslughendher1984@gmail.com</u>

#### **ABSTRACT**

Surgery can cause excessive fear and anxiety which can lead to complications. One non-pharmacological technique to reduce anxiety is Benson Relaxation Therapy which is carried out using deep breathing accompanied by the patient's beliefs to achieve a relaxed state. The aim of this study was to identify the influence of the Benso Relaxation Technique on patient anxiety before major surgical operations. This research was conducted in the operating room of Mardi Waluya Hospital, Blitar City with a sample size of 22 respondents taken by purposive sampling. Quasy Experimental research design with One Group Pre-Test Post-Test with the Amsterdam Preoperative Anxiety and Information Scale (APAIS) Instrument. The research results were analyzed using the Wilcoxon Sign Rank Test, it was found that the p-value = 0.000, which shows the influence of Benson Relaxation on the preoperative anxiety level of major surgical patients, so this research can be used as a basis for modifying standard operational procedures to reduce preoperative patient anxiety.

**Keywords:** Surgery, Benson Relaxation Technique, Anxiety

# **Background**

Surgery is all treatment using invasive procedures with the stages of opening or displaying the body part to be treated. The opening of the body part that is carried out surgically is generally done by making an incision, after the handled is visible, repairs will be made, and ends with closing and sewing the wound (1). Surgery is broadly divided into two, namely minor surgery and major surgery, surgical action begins with the provision of anesthesia, both local and general. Surgery is one of the medical actions that aims to save the patient's life, prevent disability and complications. However, surgery can cause complications that can endanger the patient's life (2).

Surgery is a potential or actual threat to one's integrity that can evoke both physiological and psychological stress reactions. The psychological problem that is often experienced by individuals who will undergo surgery is the anxiety (3). Anxiety is an emotion and subjective experience of a person based on a situation that makes a person feel uncomfortable and is divided into several levels ranging from mild, moderate, severe anxiety, to panic. The World Health Organization (WHO) states that the overall number of surgery cases is increasing every year worldwide, while more than 40 million patients are undergoing major surgery and it is estimated that 50% to 75% of them experience anxiety during the preoperative period. Anxiety

<sup>&</sup>lt;sup>2</sup>Department of nursing, , Patria Husada Blitar College of Health Sciences, Indonesia

<sup>&</sup>lt;sup>3</sup>Management of nursing, Mardi Waluya Houspital, Indonesia



is considered a public health problem, given that it affects 15% of the global morbidity rate(4). In Indonesia, the prevalence of anxiety is estimated at 9%-21% of the general population, while the population rate of preoperative patients who experience anxiety is 80%, of which 65% experience severe anxiety, and 35% experience moderate anxiety (5). From the data for the last 6 months (July-December 2022) in the Dahlia Room (Surgical Room) of the Mardi Waluyo Regional General Hospital in Blitar City, most patients planning elective surgery with major surgery or major surgery experience anxiety. Of the total 628 operations, of which 296 cases (47.2%) were major operations, the remaining 332 cases (52.8%) were minor operations or with local anesthesia.

Anxiety is a psychological response to stress (6). Psychological stress reactions have a direct relationship with the surgery itself, the more extensive the surgery, the greater the psychological response that may be caused. Patients who will undergo surgery, especially major surgery, for example laparatomy, colon resection, mastectomy, amputation, and trauma surgery, will certainly experience different levels of anxiety.

Anxiety that occurs in preoperative patients is influenced by various factors including fear of the appearance of pain and discomfort, ignorance of surgical procedures, the risk of postoperative disability, the risk of death, and fear of anesthesia during surgery. Factors that influence preoperative patient anxiety include age, experience of undergoing treatment or previous medical procedures and medical conditions experienced, level of education, lack of access to information, adaptation process, socio-economic level, and the type of procedure that the patient himself will undergo (7). Anxiety can cause physical and psychological changes which will ultimately affect and activate sympathetic autonomic nerves so that it can increase heart rate, blood pressure, breathing frequency, and in general will reduce the patient's energy level, thus having a negative impact on the patient's health during surgery (8). Anxiety if not treated quickly and appropriately can result in disruption of the surgery preparation process even though the operation has been planned, the effect of the delay will result in losses for the patient himself such as conditions that will worsen, the administrative process will be disrupted, and the treatment will be longer. In this case, nurses as care givers or nursing care providers are required to be able to carry out the best possible preoperative nursing process holistically in terms of both bio, psycho, social, spiritual and cultural aspects. Broadly speaking, the role of a nurse in the preoperative period is to prepare the patient's condition as well as possible, both mental and physical preparation to prepare the patient before entering the operating room. Management of anxiety in preoperative patients can be done in various ways, including pharmacological therapy, namely by administering sedatives, while non-pharmacological therapies include relaxation and distraction techniques such as musical relaxation, aromatherapy relaxation, and so on. Non-pharmacological therapies are currently widely researched and applied because they are proven to be more effective in reducing anxiety levels, one of which is Benson Relaxation therapy (9).

Benson Relaxation is a relaxation technique method created by Herbert Benson, a medical researcher from the Harvard Medical School who studied some of the benefits of prayer and meditation for health. Benson relaxation is a relaxation that combines relaxation response techniques and an individual's spiritual belief system, which focuses on certain expressions that can be in the form of the names of God Almighty or words that have a calming meaning for the patient himself, which are pronounced repeatedly with a regular rhythm accompanied by a resigned attitude while breathing deeply (10). Benson relaxation is believed to be able to suppress feelings of tension and create a relaxed state, this can activate the work of the parasympathetic nervous system which will suppress the work of sympathetic nerves and reduce the concentration of adrenaline in a person's body, so that it will cause stress and tension experienced by a person to decrease.

The results of previous research on the effect of Benson Relaxation on depression,



anxiety and stress in patients undergoing hemodialysis show that the majority of patients undergoing hemodialysis or dialysis experienced a reduction in stress, anxiety and depression after applying the Benson Relaxation technique. Meanwhile research shows that there is a significant difference in the level of anxiety or anxiety (p value = 0.000) by using the Benson Relaxation technique in cervical cancer patients (11). The advantages of Benson Relaxation also make it easier for nurses to take nursing actions in providing non-pharmacological therapy, besides being cost-effective and easy to do, it also does not require a long time, and has no side effects.

Research on the effect of Benson Relaxation on anxiety in patients this case major surgery has never been done so far. Based on the explanation and description of the facts and problems that exist, the researcher is interested in conducting research on the problem further by raising the research title The Effect of Benson Relaxation on Anxiety Levels in Major Surgical Preoperative Patients

#### **Methods**

The research design used was Quasy Experiment (One Group Pre-test Post-test). This research was conducted in the operating room of Mardi Waluya Hospital, Blitar City with a sample of 22 pre-major surgery patients taken using purposive sampling. The researcher identified the respondent's anxiety before being given the Benson Relaxation intervention for 10 minutes with the assistance of the researcher, then the respondent did it independently 1-2 times a day, then the researcher measured the respondent's anxiety again 2 hours before being taken to the operating room. The anxiety measurement instrument uses the Preoperative Anxiety and Information Scale (APAIS). The research results will be analyzed using the Wilcoxon Sign Rank Test.

# Results Demographic Characteristics of respondents

Table 1. Demographic Characteristics

No	Respondent Characteristics	f	%
1	age		
	teenager (17-25 <sup>th</sup> )	2	9,1
	adults (26-59 <sup>th</sup> )	16	72,7
	teenager (17-25 <sup>th</sup> ) adults (26-59 <sup>th</sup> ) elderly(>60 <sup>th</sup> )	4	18,2
2	Gender		
	Man	7	31,8
	Woman	15	68,2
3	Education		
	elementary school	1	4,5
	JHS	3	13,6
	SHS	16	72,7
	College	2	9,1



4	Work			
	Student	3	13,6	
	Self employed	10	45,5	
	private employee	2	9,1	
	government employees	4	18,2	
	others			
		3	13,6	

The characteristics of respondents, it was found that the highest frequency distribution was Adult Age (26-59th), namely 16 respondents (72.7%), Female Gender 15 people (68.2%), High School Education Level 16 people (72.7%), Self-employed 10 people (45.5%).

## **Anxiety Level Before and After Benson Relaxation**

Table 2. Anxiety levels before and after Benson Relaxation

Anxiety levels	N	%
Pre test		
light	10	45,5
currently	12	54,5
post test		
light	22	100

The level of anxiety before the Benson Relaxation intervention (pre test) from 22 respondents, there were 10 people with mild anxiety (45.5%) and 12 people with moderate anxiety (54.5%). Meanwhile, the level of anxiety after the Benson Relaxation intervention (post test), all respondents or 22 people (100%) experienced mild anxiety. The results of the data analysis above using the Wilcoxon Sign Rank Test show that the p-value = 0.000, so the research hypothesis is accepted. So it can be concluded that there is a significant influence of the Benson Relaxation Technique on the anxiety level of pre-major surgery patients.

#### **Discussion**

Based on the results of the above research, it can be seen from the results of the Wilcoxon Sign Rank Test statistics that there is an effect of Benson Relaxation on the Anxiety Level of Major Surgical Preoperative Patients in the Dahlia Room at Mardi Waluyo Blitar Hospital. This is because the p-value significance value (0.000) is smaller than the alpha value <0.05. The p-value is used to determine whether the hypothesis is accepted or rejected. With the results of p-value =  $0.000 < \alpha = 0.05$ , research hypothesis is accepted.

This is evidenced by the tabulation calculation results obtained before and after giving Benson Relaxation. Where the anxiety level before giving Benson Relaxation (pre test) with 10 respondents (45.5%) experiencing mild anxiety and 12 respondents (54.5%) experiencing moderate anxiety, and there was a significant change in anxiety level after giving Benson Relaxation (post test) with the anxiety level of all or 22 respondents experiencing mild anxiety (100%). This shows a decrease in anxiety levels which is confirmed by the results of the calculation of the midpoint value (median) which was previously 13 to 9.5 with a standard deviation of 3.55 and the average value (mean) which was previously 12.7 to 9.5 with a standard deviation of 1.81. As well as the interpretation of moderate anxiety to mild anxiety.



The results of this study are the same as research with the title "Anxiety level of Orthopedic Preoperative Patients at the Haji Adam Malik Medan Central General Hospital (12). Surgery is a stressful event because it can cause physical disorders that affect individual psychology. The psychological problem that is often experienced by individuals who will undergo surgery is anxiety (13). Anxiety will increase as the time of surgery approaches (14). Management of anxiety in preoperative patients can be done in various ways, including pharmacological therapy, namely by administering sedatives, while non-pharmacological therapies include relaxation and distraction techniques such as musical relaxation, aromatherapy relaxation, and so on.

Non-pharmacological therapies have now been widely researched and applied because they have proven to be more effective in reducing anxiety levels, one of which is Benson Relaxation therapy. Benson Relaxation is a relaxation technique method created by Herbert Benson, a medical researcher from the Harvard Medical School who studied some of the benefits of prayer and meditation for health. Benson relaxation is a relaxation that combines relaxation response techniques and an individual's spiritual belief system, which focuses on certain expressions that can be in the form of the names of God Almighty or words that have a calming meaning for the patient himself, which are pronounced repeatedly with a regular rhythm accompanied by a resigned attitude while breathing deeply (9)

Benson relaxation is believed to be able to suppress feelings of tension and create a relaxed state, this can activate the work of the parasympathetic nervous system which will suppress the work of sympathetic nerves and reduce the concentration of adrenaline in a person's body, so that it will cause stress and tension experienced by a person to decrease.

#### **Conclusion and Recommendations**

The anxiety level of major surgical preoperative patients before Benson Relaxation (pre test) in the Dahlia Room of Mardi Waluyo Blitar Hospital was in the category of mild anxiety as many as 10 respondents (45.5%), moderate anxiety as many as 12 people (54.5%). While the anxiety level of major surgical preoperative patients after Benson Relaxation (post test) in the Dahlia Room of the Mardi Waluyo Hospital Blitar City is mild anxiety 22 people (100%). From the results of the Wilcoxon Sign Rank Test statistics, it can be concluded that there is an effect of Benson Relaxation on the Anxiety Level of Major Surgical Preoperative Patients in the Dahlia Room at Mardi Waluyo Blitar Hospital. This is because the p-value significance value (0.000) is smaller than the alpha value ( $\alpha$ ) <0.05. The p-value is used to determine whether the hypothesis is accepted or rejected. With the results in this study is p-value = 0.000 <  $\alpha$  = 0.05 then research hypothesis is accepted.

Hoped that nurses can provide education to patients about surgical procedures and be able to teach Benson Relaxation techniques to patients who will undergo surgery since the in the inpatient treatment room so that patient anxiety can be controlled. As for RSUD Mardi Waluyo Blitar, it is hoped that it can be an input and consideration in the issuance of SOPs on Benson Relaxation and apply it in effective non-pharmacological anxiety management that can be given to preoperative patients in particular and for all patients in treatment in general.

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