THE EFFECT OF DEEP BREATHING RELAXATION EDUCATION USING LEAFLET MEDIA ON THE ANXIETY LEVEL OF PREOPERATIVE PLASTIC SURGERY PATIENTS AT ARIFIN ACHMAD HOSPITAL RIAU PROVINCE

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Abstract

The deep breathing relaxation technique is a form of nursing care, in which the nurse teaches the client how to take deep breaths, slow breaths (holding inspiration to the maximum) and how to exhale slowly. Apart from reducing pain intensity, deep breathing relaxation techniques can also increase lung ventilation and increase blood oxygenation. The aim of the research was to determine the effect of deep breathing relaxation using leaflet media to reduce the anxiety level of preoperative plastic surgery patients at Arifin Achmad Hospital, Riau Province. This type of quantitative research uses a pre-experimental design approach. This research will be carried out at Arifin Achmad Regional Hospital, Riau Province. The sample used in this research was 30 respondents. The sampling technique at Arifin Achmad Hospital was carried out using a total sampling technique. The results and discussion show that there is an effect of deep breathing relaxation education using leaflet media on the anxiety level of preoperative plastic surgery patients with p value = 0.000. The conclusion is that there is an influence of deep breathing relaxation education using leaflet media on the anxiety level of preoperative plastic surgery patients at Arifin Achmad Hospital, Riau Province.

Keywords: *Deep breathing relaxation, the anxiety Level Of preoperative Plastic Surgery*

1. INTRODUCTION

Advances in world science and technology (IPTEK) have brought about very sophisticated new changes in the health sector, especially in the field of surgery. Surgery has become a form of expertise since the mid-19th century. Surgery is a medical procedure that aims to save lives, prevent disability and complications (WHO in Miftahurrahmi, 2016).

The prevalence of patients with surgery provides quite significant data. It is estimated that at least 11% of the world's disease burden comes from diseases or conditions that can be treated with surgery. In its report, the incidence of patients with surgical procedures from WHO data shows that from year to year the number of surgical patients has increased, there are 148 million patients in all hospitals in the world who have undergone surgical procedures. In Indonesia, the Indonesian Ministry of Health stated that surgical cases are a public health problem, as many as 1.2 million patients underwent surgery and ranked 11th out of the first 50

disease treatments in hospitals throughout Indonesia with surgical patients. (Rizki, Hartoyo, & Sudiarto, 2019)

In Indonesia, plastic surgery is actually not something new anymore. According to Irene, a doctor at Darmais Cancer Hospital, plastic surgery is defined as an action carried out to improve the appearance of an already good body for the better. According to the Complete Indonesian Dictionary, plastic surgery is the operation of adding a deformed or damaged body part to make it closer to normal.

Preoperative or pre-surgical procedures are the period before surgery which starts from the time the preparations are determined until the patient is on the operating table. Surgery has several degrees of risk that cause anxiety or worry, where nurses as educators can reduce anxiety by providing intervention in the form of health education (Fadli, Toalib, & Kassaming, 2019).

Anxiety is an emotional condition characterized by excessive worry about various events experienced in life. The anxiety experienced is difficult to control, the symptoms that arise are related to muscle tension, irritability, difficulty sleeping, and restlessness. Surgery is a stressful experience for some patients, due to fears such as fear of anesthesia, fear of feeling unbearable pain, fear of death, which causes anxiety. In the preoperative stage, patients can experience anxiety as a response to an action that will be experienced and considered a threat (Smeltzer & Bare, 2011).

Surgical procedures will provide emotional reactions for patients such as anxiety before surgery or before surgery. Preoperative patient anxiety can be caused by the threat of death, the possibility of disability, anxiety or fear of post-operative wound pain, fear of anesthesia, even anxiety or fear of the danger of post-operative complications. One action to reduce anxiety levels is to mentally prepare the patient. One of the ways that mental preparation can be done is through health education or education (Kardewi, 2014).

Health education can be carried out in many ways, techniques or media in its delivery with the aim of conveying important information regarding a problem, one of which is the problem of pre-operative anxiety. Pre-operative anxiety is very dangerous for patients, one of the causes is lack of information. Technological sophistication makes it possible to present health education not only in the form of images but audio-visual with moving images accompanied by music and sound. Health education using this media will have a positive impact or a good atmosphere for patients (Nugroho, Sutejo, & Prayogi, 2020).

The deep breathing relaxation technique is a form of nursing care, in which the nurse teaches the client how to take deep breaths, slow breaths (holding inspiration to the maximum) and how to exhale slowly. Apart from reducing pain intensity, deep breathing relaxation techniques can also increase lung ventilation and increase blood oxygenation (Smeltzer & Bare, 2002)

2. METHODOLOGY

This type of quantitative research uses a pre-experimental design approach to determine the extent of the influence of the independent variable on the dependent variable. In this research, a one group pretest-posttest design approach was used. This research will be carried out at Arifin Achmad Regional Hospital, Riau Province. This research was conducted from September to December 2023. The sample used in this research was 30 respondents. The sampling technique at Arifin Achmad Hospital was carried out using a total sampling technique.

3. RESULTS

3.1 Univariate Results

Univariate analysis is analysis used to obtain data regarding respondent characteristics including age, gender, education, occupation. The univariate results obtained in this study are as follows:

3.1.1 Age

Table 1: *Characteristics of Respondents Based on Age*

Age	Frequency	Percent (%)
< 25 years	6	20
26-35 years	7	23.3
36-45 years	8	26.7
46-55 years	5	16.7
56-65 years	3	10
>65 years	1	3.3
Total	30	100

Source : Primary Data (2023)

Based on table 1, it can be seen that of the 30 respondents, the majority of respondents were aged 36-45, namely 8 people (26.7%).

3.1.2 Gender

Table 2 : *Characteristics of Respondents Based on Gender*

Gender	Frequency	Percent (%)
Female	17	56.7
Male	13	43.3
Total	30	100

Source : Primary Data (2023)

Based on table 2, it can be seen that of the 30 respondents, the majority of respondents were women, namely 17 people (56.7%).

3.1.3 Education

Table 3 : *Characteristics of Respondents Based on Education*

Education	Frequency	Percent (%)
SD	3	10
SMP	9	30
SMA	16	53.3
D III	2	6.7
Total	30	100

Souce: Primary Data (2023)

Based on table 3, it can be seen that of the 30 respondents, the majority of respondents had a high school education, namely 16 people (53.3%).

3.1.4 Work

Tabel 4: *Characteristics of Respondents Based on Education*

Work	Frequency	Percent (%)

Etc	5	16.7
Self-employed	13	43.3
IRT	10	33.3
PNS	2	6.7
Total	30	100

Souce: Primary Data (2023)

Based on table 4, it can be seen that of the 30 respondents, the majority of respondents work in self-employment, namely 13 people (43.3%).

3.1.5 Respondents Anxiety Level Who Will Undergo Plastic Sugery

Tabel 5 : *Distribution of Anxiety Levels in Plastic Sugery Patients Before and After Being Given Preoperative Education*

Anxiety Level	Frequency	Percent (%)
	(Pre Test)	
Moderately Anxious	2	6.7
Very Worried	7	23.3
More very worried	21	70
Total	30	100
	(Post Test)	
Mild Anxiety	3	10
Moderately Anxious	4	13.3
Very Worried	10	33.3
More very worried	13	43.4
Total	30	100

Source : Primary data (2023)

Based on table 4.5, it can be seen that the anxiety level of 30 respondents before being given preoperative education, the majority of respondents experienced very severe anxiety, namely 21 people (70%), severe anxiety, namely 7 people (23.3%) and moderate anxiety, namely 2 people (6.7%). Meanwhile, after being given preoperative education, there was a decrease in anxiety levels, of the 30 respondents who experienced very severe anxiety, namely 13 people (43.4%), severe anxiety, namely 10 people (33.3%), moderate anxiety, namely 4 people (13.3%) and mild anxiety 3 people. people (10%).

3.2 Bivariate Analysis

Bivariate analysis was used to see the influence of the anxiety level of patients who will undergo plastic surgery before (pretest) and after (posttest) being given preoperative education. The results of this research are said to be effective if the p value <0.05. In this research a normality test and homogeneity test were carried out. Data is normally distributed if a > 0.05 and is said to be homogeneous if a > 0.05. The normality test results show that the data is normally distributed with a sig value. pre test 0.229 and sig.post test value 0.381, so this research used the Paired Samples T-Test. Based on the results of data processing using the SPSS (Statistical Program for Social Science) program, the following results were obtained:

3.2.1 The Influence of Preoperative Education on the Anxiety Level of Patients Who Will Undergo Plastic Surgery

Tabel 6: *Analysis of the Effect of Preoperative Education on the Anxiety Level of Preoperative Plastic Surgery Patients at Arifin Achmad Regional Hospital*

Anxiety	Mean	SD	P-*Value*
Pretest	21.43	3.431	0.000
Posttest	17.20	5.013	

Based on table 4.6, the results of statistical tests using the Paired Sample T-Test show that the P value = 0.000 < α = 0.05 so that Ha is accepted, which means that there is an influence of preoperative education on the anxiety level of preoperative plastic surgery patients at Arifin Achmad Hospital, Riau Province.

4. DISCUSSION

4.1 Characteristics Based on Age

Based on data on the distribution of preoperative plastic surgery patients at Arifin Achmad Regional Hospital, it is known that of the 30 respondents studied, the majority of respondents were in the age category (36-45) years, namely 8 respondents (26.7%). The results of this research are in line with research conducted by Stuart G.W & Laraia M.T (2007) which states that an individual's maturity or maturity will influence a person's ability to cope with mechanisms so that more mature individuals find it difficult to experience anxiety because individuals have a greater ability to adapt to anxiety compared to younger people. mature. It has been proven in research that mature ages, namely adults, have a lower prevalence of anxiety levels compared to teenagers. This proves that mature people have sufficient coping abilities to overcome anxiety. According to researchers' assumptions, the older a person is, the greater their knowledge, experience and perspective on living their life.

4.2 Characteristics Based on Gender

The majority of respondents were female, namely 17 people (56.7%). associated with anxiety in women and men. The results of this study are in line with a study conducted by Maryam and Kurniawan A (2008) stating that gender factors can significantly influence the patient's level of anxiety. In this study it was also stated that women are more at risk of experiencing anxiety compared to men. . According to researchers' assumptions, men have stronger mental resilience than women, so men can immediately accept situations that will happen to them compared to women.

4.3 Characteristics Based on Education

The majority of respondents had a high school education, namely 16 people (53.3%). Education level can influence the learning process for each person. The results of this research are in accordance with the concept which states that an individual's level of education influences thinking ability. The higher the level of education, the easier it is for individuals to think rationally and capture new information, so that the higher a person's education, the higher a person's knowledge (Stuart G.W & Laraia M.T, 2007).

According to Notoadmojo (2000), education for each person has its own meaning. Education is generally useful in changing patterns of thinking, behavior and decision

making. A high level of education will make it easier to overcome internal and external stressors. According to the researcher's assumption, a person with a high level of education can easily understand and accept events that happen to him and can make good decisions about the actions he will take.

4.4 Job Based Characteristics

The research results showed that the majority of respondents were employed as entrepreneurs, namely 13 people (43.3%). This shows that socioeconomic status is closely related to patterns of psychiatric disorders. Based on the results of research by Salmawati (2010) which states that people with low or insufficient socio-economic class can influence increased anxiety in clients facing preoperative procedures. According to researchers' assumptions, someone who is in a low and middle socioeconomic status will experience higher concerns about themselves and their environment compared to someone with an upper middle economic status.

4.5 Frequency Distribution of Anxiety Levels in Preoperative Plastic Surgery Patients before being given Deep Breathing Relaxation Education

The research results showed that the majority of respondents experienced very severe anxiety, 21 people (70%). Potter and Perry (2010) stated that surgery will cause fear and anxiety in patients who will undergo surgery, while previous experience influences the client's physical and psychological response to surgical procedures. Surgery is a complex event that will be stressful, so apart from experiencing physical disorders it will also give rise to psychological disorders. This is in line with research conducted by Wijayanto (2015) which stated that before health education was carried out, results were obtained with a moderate anxiety level of (59.4%) and a severe anxiety level of (12.5%).

4.6 Frequency Distribution of Anxiety Levels in Preoperative Plastic Surgery Patients after being given health education.

The research results showed that the majority of respondents experienced very severe anxiety, 13 people (43.3%). This shows that there was a decrease from the previous 21 people (70%) after health education was carried out. According to Kozier (2010), health education is the most important part of nursing care. Research that has been conducted has proven that health education has an effect on reducing the anxiety level of preoperative plastic surgery patients. Preoperative education will greatly help reduce anxiety resulting from patient ignorance.

This is in line with research conducted by Noor, et al (2023) entitled the influence of health education with educational media on the level of anxiety in pre-fracture surgery patients, which showed that the majority had a mild level of anxiety, namely 9 people with a percentage (39.1%). In this study, researchers believe that respondents experienced a decrease in anxiety after being given health education, influenced by various factors, one of which was knowledge. Many things influence a person's knowledge, such as mass media, information (health education). Structured and clear health education provided by health workers before preoperative procedures, including regarding procedures and preoperative preparations, can foster self-confidence and courage in patients so that they can reduce the anxiety previously felt by patients.

4.7 The influence of preoperative deep breathing relaxation technique education on the anxiety level of preoperative plastic surgery patients at Arifin Achmad Hospital, Riau Province

Based on the results of research conducted on 30 respondents by filling out questionnaires before and after being given preoperative plastic surgery education. Researchers proved that after being given preoperative plastic surgery education, there was a change in anxiety levels in preoperative plastic surgery patients. Patients who experienced very severe anxiety were 21 people (70%) to 13 people (43.3%), and an increase in anxiety in the mild category was 0 people (0%) to 3 people (10%). Statistical tests using the Paired Samples T-Test showed a value of $p = 0.000 < \alpha = 0.05$ so that Ha was accepted, which means that there was an influence of preoperative education on the anxiety level of preoperative plastic surgery patients at Arifin Achmad Regional Hospital, Riau Province.

Based on the results above, researchers can assume that there is an influence of preoperative education on the level of anxiety in preoperative plastic surgery patients.Surgical procedures will cause fear and anxiety in patients, although individual responses to these procedures vary. Some patients expressed fear and refused surgery but these clients did not know what was causing it, but there were several patients who expressed their fear clearly and specifically. Meanwhile, according to (Smeltzer and Bare, 2014) all surgical procedures are always preceded by the client's emotional reaction, whether hidden or obvious, normal or abnormal. Preoperative plastic surgery patient's anxiety is an anticipatory response to a life experience that is considered a threat to their life.

Plastic surgery can carry several degrees of risk for the patient who undergoes it, such as missing body parts resulting in changes in body shape. This high risk causes a psychological impact on preoperative patients, the psychological influence on surgical procedures can vary, but in fact there is always a general feeling of fear and anxiety including fear of the anesthesia, fear of pain due to wounds after surgery, fear of physical changes for the worse or not functioning. normal and others (Ahsan et al., 2017).

Khoizer (2010) in his research stated that one way to reduce the anxiety level of pre-operative patients is through health education and education for patients. For example, explaining surgical procedures before implementation, creating a warm atmosphere and building a relationship of mutual trust, showing a caring and empathetic attitude, accompanying patients as needed to increase safety and security and reduce fear, communicating with short but clear sentences, helping patients to determine the situation which triggers anxiety and identifies signs of anxiety, provides counseling or health advice to patients regarding surgical procedures.

Educational measures as one of the health education measures need to be emphasized in this phase so that patients feel they are given convincing information and avoid anxiety or worry. Health education activities such as explaining surgical procedures before implementation or action, creating a warm atmosphere and building a relationship of mutual trust, showing a caring and empathetic attitude, accompanying patients as needed to increase safety and security and reduce fear or worry, communicating in short but clear sentences , helping patients to determine situations that trigger anxiety and

identifying signs of anxiety, providing counseling or health education to patients regarding the surgical procedures they will undergo (Berman et al., 2016).

5. .CONCLUSIONS

There is an effect of deep breathing relaxation education using leaflet media on anxiety levels in preoperative plastic surgery patients at Arifin Achmad Hospital, Riau Province with p value = 0.000.

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