

# The Effect of Guide Imagery Relaxation Techniques on Anxiety Levels of Pre-Op Vitrectomy Patients at Smec Eye Specialist Hospital Medan in 2021

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**ABSTRACT**

Anxiety is an emotional reaction to the perception of danger, either real or imagined. Anxiety is a common reaction to disease because disease is perceived as a general threat to life, health, and the integrity of the body. Anxiety can result in an increase in blood pressure or blood sugar in surgery patients. This type of research is a quasi experiment with a one group pre-post test design. With the aim of knowing to identify the effect of the guide imagery relaxation technique on the anxiety level of pre-op vitrectomy patients at the SMEC Medan Special Eye Hospital in 2021. The population is all pre-op vitrectomy patients at the Medan SMEC Eye Specialist Hospital in 2021, as many as 15 people. Based on the results of the study showed that the anxiety level of pre-op vitrectomy patients before the guide imagery relaxation technique was performed, the majority of respondents experienced severe anxiety (Score 28-42) as many as 8 people (53.3%), and the minority experienced Panic (Score 43-56) as many as 1 person. (6.7%). Then after the guide imagery relaxation technique was performed, the majority of mild anxiety (score 14-20) were 9 people (60%), minority moderate anxiety (score 21-27) were 6 people (40%). The results of the statistical test showed that the mean value of the pre-test was 3.93 and the post-test was 2.33 so that a difference of 1.6 was obtained, then the standard deviation of the pre-test was 1.280 and the post-test value was 0.488, so the difference was 0.792 with a significant p-value of 0.000.

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## 1. Introduction

Anxiety is an emotional reaction to the perception of danger, either real or imagined. Anxiety is a common reaction to disease because disease is perceived as a general threat to life, health, and the integrity of the body. Anxiety can result in an increase in blood pressure or blood sugar in surgery patients. Good preparation during the operative period helps reduce the risk of surgery and improve postoperative recovery. Preoperative preparation is very important to reduce risk factors, because the final outcome of a surgery is very dependent on the assessment of the patient's condition. Mentally, the patient must be prepared for surgery, because there is always a sense of anxiety or fear of injections, wound pain, even the possibility of disability or death (Antoro & Amatiria, 2003).

Surgery is a form of therapy and efforts that can pose a threat to a person's body and soul. Planned surgery can cause physiological and psychological responses in patients, the range of response due to surgery depends on the individual, past experiences, coping patterns and limitations. Most patients who will undergo surgery experience anxiety because they think surgery is a scary experience. Preoperative patients will experience affective disorders which are characterized by feelings of fear or worry that are deep and ongoing, causing disturbances in assessing reality, intact personality, behavior can be disrupted but still within normal limits, this indicates that they are experiencing symptoms of anxiety. romedoni,

Based on WHO data (World Health Organization) that for more than a century, surgical treatment has been an important component of health care around the world. It is estimated that every year 230 million surgeries are performed worldwide. Data from the National Tabulation of the Ministry of Health of the Republic of Indonesia in 2016, describes that surgery ranks 11th out of 50 disease patterns in Indonesia with a percentage of 12.8% and it is estimated that 32% of them are major surgery, and 25.1% have mental conditions and 7 % experienced anxiety (Ministry of Health, 2016).

The effect of anxiety in preoperative patients has an impact on the course of surgery. For example, a patient with a history of hypertension if experiencing anxiety will have an impact on his cardiovascular system, namely his blood pressure will be high so that the operation can be canceled. In women the effects of anxiety can affect their menstruation to be more, it also allows surgery to be postponed until the patient is really ready for surgery. Anxiety in preoperative patients can be prevented by using relaxation techniques. According to researchers, the number of preoperative patients who experience anxiety is because in preoperative patients anxiety is a felt concern, this concern arises because patients do not know about the consequences of the surgery process, and what will happen during surgery as well as postoperatively.

Guided imagery is a technique that uses individual imagination with directed imagination to reduce stress. One of the relaxation techniques used to overcome anxiety in patients is guided imagery therapy, because relaxation techniques are actions to divert attention and reduce anxiety experienced by patients. The guided imagery stage involves identifying the source

problems with self-recording after listening to music in a relaxed state and eyes closed the next stage, building positive images with guided imagery which is done every day. By replacing illogical thinking, individuals will be better able to assess the situation they face more objectively (Sumariadi, Simamora, Nasution, Hidayat, & Sunarti, 2021).

Guided imagery is a pain distraction technique that can be used in pain management, lowering blood pressure, lowering cholesterol, glucose levels and increasing cell activity. By encouraging the patient to divert his mind to something beautiful in accordance with the instructions from the nurse so that the pain experienced by the patient will be lost or reduced. Guided imagery relaxation techniques include non-pharmacological techniques in pain management because with guided imagination it will form a shadow that will be accepted as a stimulus by various senses, so by imagining something beautiful the feeling will feel calm. Muscle tension and discomfort will be released so that the body becomes relaxed and comfortable (Shaddri, Dharmayana, & Sulian, 2018).

Someone who experiences anxiety will experience a physical imbalance and trigger several physical sensations and changes, including increased blood flow to muscles, muscle tension, accelerated and slowed breathing, increased heart rate and decreased digestive function. Anxiety is caused by a thought pattern that leads to a depressed or depressed mood. Negative thoughts about self (self criticism), about the world (general negativity), and about the future (hopelessness) are factors that cause anxiety. Most people experience high to very very high levels of anxiety (Mardiani & Hermawan, 2019).

The results of a preliminary survey conducted through interviews with 10 pre-op vitrectomy patients, there were 8 people (80%) experiencing symptoms of anxiety such as palpitations, anxiety, feeling tense, and frequent urination, while 2 people (20%) did not feel the symptoms of anxiety. when it comes to planning operations. Then based on the results of interviews with nurses in the room, that anxiety management has not been optimally carried out with non-pharmacological actions, one of which is the guide imagery relaxation technique. From this background, the researcher is interested in conducting a study entitled "The effect of guided imagery relaxation techniques on the anxiety level of pre-op vitrectomy patients at the SMEC Medan Special Eye Hospital in 2021".

## **2 Method**

### **2.1 Research design**

The study used a quasi-experimental design aimed at testing a causal relationship or knowing the effect of one variable. The research design is one group pre-post test design where research is carried out on one group of subjects who are treated to identify the effects before and after (Notatmodjo, 2017).

**Table 1**

Research design one group pre-test, post-test one group pre-test, post-test		
<i>Pre-test</i>	<i>Treatment</i>	<i>Post-test</i>
O1	X	O2

This study, using a quasi-experimental study with one group pre and post test design, the study was conducted on one group of subjects who were treated to identify the effect before and after. This type of research aims to identify the effect of the guide imagery relaxation technique on the anxiety level of pre-op vitrectomy patients at the SMEC Medan Special Eye Hospital in 2021.

### 2.2 Research Location and Time

The study was conducted at the SMEC Eye Specialist Hospital Medan in 2020, because the results of interviews from several patients concluded that the guide imagery relaxation technique was not optimally implemented on the anxiety level of pre-op vitrectomy patients at the Medan SMEC Eye Specialist Hospital in 2021. This study was carried out in January 2021

### 2.3 Population and Sample

The population is the entire research subject (Notoatmodjo, 2017). The population in this study were all pre-op vitrectomy patients at the SMEC Medan Special Eye Hospital in 2021, as many as 15 people. The sample is part or representative of the population studied (Notoatmodjo, 2017). The sampling technique, namely Total Sampling, is a sampling technique by taking the entire population as a sample (Notoatmodjo, 2017). So the number of samples in this study were 15 people.

## 3 Results and Discussion

### 3.1 Univariate

Characteristics of respondents measured in this study include age, gender, education, occupation, length of stay. The respondent's characteristic data is described as follows

**Table 1**

Characteristics of Respondents Based on Age, Gender, Education, Occupation			
No.	Characteristics of Respondents	F	Percentage (%)
1.	<b>Age</b>		
	1. 0-10 years	1	6.7
	2. 11-25 years old	2	13.3
	3. 26-45 years old	5	33.3
	4. 46-65 years old	4	26.7
	5. 66 years and over	3	20
	Total	15	100
2.	<b>Gender</b>		
	1. Man	6	40
	2. Woman	9	60
	Total	15	100
3.	<b>Education</b>		
	1. SD	1	6.7
	2. JUNIOR HIGH SCHOOL	2	13.3
	3. SENIOR HIGH SCHOOL	5	33.3
	4. Diploma	3	20
	5. Bachelor	4	26.7
	Total	15	100
4.	<b>Work</b>		
	1. Housewife	3	20
	2. PNS / TNI / Polri	1	6.7
	3. Self-employed	6	40
	4. Etc	5	33.3
	Total	15	100
5.	<b>Length of Days of Care</b>		
	1. 1-5 Days	10	66.7
	2. 6-10 Days	2	13.3
	3. 11-15 Days	2	13.3
	4. > 16 Days	1	6.7
	Total	15	100

Based on table 4.1 shows that the majority aged 26-45 years are 5 people (33.3%), and the minority aged 0-10 years are 1 person (6.7%) and based on gender, the majority of respondents are women as many as 9 people (60%) , and male minority as many as 6 people (40%). Then based on the last education, the majority of SMA were 5 people (33.3%) and the minority of SD was 1 person (6.7%). Based on occupation, the majority of respondents were entrepreneurs as many as 6 people (40%), and a minority of civil servants (PNS/TNI/Polri) as many as 1 person (6.7%), then based on the length of days of care the majority of respondents were treated for 1-5 days as many as 10 people (66.7%), and minorities were treated for > 16 days as many as 1 person (6.7%).

### 3.2 Anxiety levels of pre-op vitrectomy patients before the guide imagery relaxation technique was performed

**Table 2**

ANXIETY LEVEL OF PRE-OP VITRECTOMY PATIENTS BEFORE GUIDED IMAGERY RELAXATION TECHNIQUE WAS PERFORMED.			
No.	Anxiety level before relaxation guide imagery	F	Percentage (%)
1.	Pre-Test		
	1) Mild anxiety (Score 14-20)	2	13.3
	2) Moderate anxiety (Score 21-27)	4	26.7
	3) Severe anxiety (Score 28-42)	8	53.3
	4) Panic (Score 43-56)	1	6.7
	Total	15	100

Based on table 4.2 shows that the anxiety level of pre-op vitrectomy patients before the guide imagery relaxation technique was carried out, the majority of respondents experienced severe anxiety (score 28-42) as many as 8 people (53.3%), and a minority experienced panic (score 43-56) as many as 1 person. (6.7%).

### 3.3 Anxiety levels of patients with pre-op vitrectomy after guided imagery relaxation techniques

**Table 3**

Anxiety levels of patients with pre-op vitrectomy after guided imagery relaxation techniques			
No.	Anxiety Level After relaxation guide imagery	F	Percentage (%)
1.	Post Test		
	1) Mild anxiety (Score 14-20)	9	60
	2) Moderate anxiety (Score 21-27)	6	40
	3) Severe anxiety (Score 28-42)	0	0
	4) Panic (Score 43-56)	0	0
	Total	15	100

Based on table 4.3. showed that the anxiety level of pre-op vitrectomy patients after guided imagery relaxation technique obtained the majority of mild anxiety (score 14-20) as many as 9 people (60%), minority moderate anxiety (score 21-27) as many as 6 people (40%).

### 3.4 Bivariate

**Table 4**

The results of the t-test of the effect of the guide imagery relaxation technique on the anxiety level of pre-op vitrectomy patients.

No.	Guide imagery relaxation techniques on anxiety levels	mean	Standard Deviation	p-value
1.	Pre-Test	3.93	1,280	0.000
	Post Test	2.33	.488	

Based on table 4.4, it shows that the pre-test mean value is 3.93 and the post-test is 2.33 so that a difference of 1.6 is obtained, then the standard deviation of the pre-test is 1.280 and the post-test value is 0.488, so the difference is 0.792 with a significant p-value of 0.000.

### 3.5 Discussion

#### a. Anxiety levels of pre-op vitrectomy patients before the guide imagery relaxation technique was performed

Based on the results of the study showed that the majority aged 26-45 years were 5 people (33.3%), and the minority aged 0-10 years were 1 person (6.7%) and based on gender, the majority of respondents were women as many as 9 people (60%) , and male minority as many as 6 people (40%). Then based on the last education, the majority of high school students were 5 people (33.3%) and elementary school minorities were 1 person (6.7%) then the anxiety level of pre-op

vitrectomy patients before the guide imagery relaxation technique was obtained, the majority of respondents experienced severe anxiety (score 28-42) as many as 8 people (53.3%), and the minority experienced Panic (Score 43-56) as many as 1 person (6.7%).

Changes from relaxation techniques are: lowering blood pressure, lowering heart rate, reducing muscle tension, increasing alpha brain waves, which occur when the client is aware, does not focus attention and relaxes, increases concentration, improves the ability to cope with stressors. Guided imagery is a process that uses the power of the mind to direct the body to heal itself, maintain health/relaxation through communication within the body involving all the senses (visual, touch, guidance, sight and hearing). Guided imagery technique Guided imagery is a process that uses the power of the mind by directing the body to heal itself, maintain health/relaxation through communication within the body involving all senses (visual, touch, guidance, sight and hearing).

Anxiety arises because of a danger that threatens a person. Anxiety can take the form of fear of what other people think of us or other things that make us worry. The anxiety experienced by participating in group counseling activities needs to be overcome so that it does not become another problem. Overcoming students' anxiety problems participating in group counseling activities is useful in helping students become more open individuals and can share stories or problems which will later be discussed through group dynamics. Anxiety occurs as a result of threats to self-esteem that are very basic to individual existence. Some of the symptoms of anxiety as cited by, based on the Hamilton Anxiety Rating Scale (HARS), are: (a) Psychological symptoms: anxiety includes restlessness,

The effect of guided imagery technique on the anxiety level of students participating in group counseling activities. The method in this study was an experimental method with one group pretest-posttest. The population in this study were students of class VII H SMP N 5 Bengkulu City, totaling 28 students. The data from this study were analyzed using the z test. The results showed that the level of anxiety of students participating in group counseling activities decreased after being given guided imagery techniques, this was indicated by the value of  $z = 2.521$  with a significance level (2-tailed) of 0.012, which means  $0.012 < 0.05$ . This finding shows that there is an effect of using guided imagery techniques on the level of anxiety of students participating in group counseling activities at SMP N 5 Bengkulu City (Gonzales & Ledesma, 2017).

Anxiety following student group counseling activities is caused by several factors, such as physical factors (sweating profusely, heart palpitations, dry mouth, cold hands, disturbed digestion) and psychological factors (low self-esteem, emotionality, fear, nervousness, impaired concentration). Based on the results of the pre-test, 8 students who had a high level of anxiety were taken to be given treatment. Furthermore, the results of the comparison of students' anxiety level scores before and after being given treatment. As can be seen in Table 2, the comparison of pre-test and post-test scores of students' anxiety following group counseling activities. It can be seen that in the pre-test scores there is no significant difference between students. Likewise with the post-test scores.

In this study, the anxiety experienced by each respondent is certainly different, there are many factors that influence anxiety in each respondent ranging from age, gender, education level, occupation and operating experience. Most of the respondents in this study did not have surgery experience and tended to have a severe level of anxiety. From the guided imagination relaxation technique given to the respondents, there was a change in the level of anxiety. Respondents said they felt calmer, more comfortable and could control their anxiety after doing guided imagination relaxation techniques. This proves that the guided imagination relaxation technique has an effect on the anxiety level of preoperative patients (Carter, 2016).

The results showed that before being given guided imagery relaxation therapy, most respondents had a relatively mild level of anxiety, as many as 13 respondents (50%). Anxiety is a subjective emotional and feeling condition of a person that causes an uncomfortable situation so that he is in a state of helplessness and even experiences an uncertain situation. The level of anxiety in preoperative abdominal surgery patients before being given deep breathing relaxation therapy had an average anxiety index score of 54.59 (moderate anxiety) (Purnama, 2015).

Based on research data, patients who will be operated on experience a level of anxiety in the category of mild to mild, but there are some who experience moderate and severe anxiety. The patient experienced a mild level of anxiety (44.7%). Mild anxiety conditions can be experienced by individuals because it refers to a person's personal maturity or ability and positive coping in dealing

with a problem. Individuals with a mature level of maturity and are accustomed to dealing with almost the same problems have a better problem-solving ability than someone who is not experienced in dealing with anxiety (Hawari, 2016).

Anxiety is a threat whose source is unknown, internal, ambiguous or conflictual. Anxiety can be caused by several factors including pathophysiological and situational. Anxiety was identified into 4 levels, namely mild, moderate, severe and panic. Each individual has a different level of anxiety, this is marked by differences in integrity and the level of existing conditions. The higher the level of individual anxiety, it will affect the physical and psychological conditions. Preoperative is the initial stage of perioperative nursing. When facing surgery, the client will experience various stressors. Expected surgery will cause fear and anxiety in clients who associate surgery with pain, possible disability,

Operations / surgical procedures will provide an emotional reaction for the patient. Whether the reaction is obvious or hidden, normal or abnormal. Anxiety can cause physical and psychological changes which will eventually activate the sympathetic autonomic nerves thereby increasing heart rate, increasing blood pressure, increasing respiratory rate and generally reducing energy levels in the patient and ultimately can harm the patient himself because it will have an impact on the operation. In this study, there were 12 (40%) respondents who previously had operating experience and the remaining 18 (60%) respondents did not have operating experience (Antoro, Budi, Amatiria & Gustop, 2018).

The assumption of the researcher is that the research conducted is in line with the research conducted by previous studies and the existing theory that the respondent's anxiety is experiencing stress before surgery and has excessive fear and anxiety.

#### **b. Anxiety levels of patients with pre-op vitrectomy after guided imagery relaxation techniques**

Based on occupation, the majority of respondents were entrepreneurs as many as 6 people (40%), and a minority of civil servants (PNS/TNI/Polri) as many as 1 person (6.7%), then based on the length of days of care the majority of respondents were treated for 1-5 days as many as 10 people (66.7%), and minorities were treated for > 16 days as many as 1 person (6.7%). Then the anxiety level of pre-op vitrectomy patients after guided imagery relaxation technique obtained the majority of mild anxiety (score 14-20) as many as 9 people (60%), minority moderate anxiety (score 21-27) as many as 6 people (40%).

Anxiety if not addressed will cause problems and disrupt the ongoing operation process or can also occur cancellation of operations. This condition requires an effort to reduce anxiety which can be done by teaching the patient about relaxation techniques, for example: deep breathing, listening to music, massage and guided imagination. This action aims to increase control and self-confidence and reduce perceived stress and anxiety (Gonzales, Ledesma, McAllister, Perry, Dyer, & Maye, 2016).

Anxiety needs attention and nursing intervention because the patient's emotional state will affect the patient's body functions before surgery. High anxiety can have an effect on affecting the physiological functions of the body which is characterized by an increase in blood pressure, an increase in pulse rate, an increase in breathing frequency. Due to the presence of these signs, the doctor will usually delay the operation, thereby hampering the healing of the disease in the client. Here the role of nurses is needed to intervene to patients from pre to post surgery. Nurses can perform therapies such as relaxation therapy, distraction, meditation, imagination (Issrahli, 2018).

A simple and effective way to manage symptoms of anxiety or stress is through relaxation techniques. Guided imagery is a non-pharmacological relaxation technique that is useful for reducing anxiety, muscle contraction, and facilitating sleep. Guided Imagery is an easy and simple relaxation technique that can help you deal with stress quickly and easily and reduce tension in the body. This technique can help to better access inner wisdom. Guided imagery technique can reduce anxiety levels in clients with insomnia aged 20-25. After using the guided imagery technique, 81% of the research subjects experienced a decrease in their anxiety level and 19% of the research subjects had a constant level of anxiety.

Guided imagery can be done by someone by saying and giving direction to someone with a sentence that leads to a fantasy, for example a place so that feelings will follow that imagination to a deep and calm stage. This condition, if supported by good breathing techniques and trying to empty the mind and focus on breathing at night, will gradually reach a state of relaxation. This is supported by research that with directed and guided relaxation will reduce anxiety. Guide imagery relaxation techniques cause the release of 'happiness' hormones (betaendorphins) to increase

production so as to reduce feelings of stress or anxiety.

Applying guided imagery to children or adolescents must use concrete everyday examples that can be understood, for example imagining they are playing a kite, enjoying eating delicious ice cream. When the situation is afraid of something can be taught as if they have powers like superman, the black knight of steel, who is able to overcome his fear. In addition, setting a comfortable position for the client is important in helping the client imagine his imagination. With a soft voice, clients are taken to a special place in their imagination (eg to white sand beaches, waterfalls, flower gardens, and mountains). Guided imagery helps fight rigid, automatic, and hopeless thoughts. This understanding helps strengthen self-esteem and personal transcendence. Self-esteem and transcendence contribute to a more positive experience. Imagination creates a bridge between mind and body, connecting perceptions, emotions, and psychological, physiological, and behavioral responses. The purpose of this study was to describe the effect of guided imagery on the anxiety level of students participating in group counseling activities (Khusana, 2017).

The fear and anxiety that patients may experience can be seen from signs and symptoms such as: increased heart rate, uncontrolled hand movements, moist palms, restlessness, asking the same question repeatedly, difficulty sleeping, frequent urination. The anxiety of respondents who have been given the guided imagery relaxation technique is known to have decreased. Guided imagery relaxation performed by patients before surgery can have a positive impact, namely the patient will divert fear and anxiety with things that make him happy and happy so that he forgets the anxiety he is experiencing. Guided imagery relaxation technique is a technique in which a person uses imagination that will have a positive impact.

The results showed that after the guided imagination relaxation technique was carried out, 20 respondents (66.67%) had mild anxiety and 10 respondents (33.33%) had moderate anxiety. The average value of anxiety after guided imagination relaxation technique is 18.93. Based on the results of the study that the level of anxiety before the guided imagery technique was carried out, most of them experienced moderate anxiety, namely 9 people (64%) while at least 5 people (36%) experienced mild anxiety (Ahsan, 2017).

The researcher's assumption is that the research conducted is in line with research conducted by previous studies and the existing theory that a simple and effective way to manage symptoms of anxiety or stress is through relaxation techniques. Guided imagery is a non-pharmacological relaxation technique that is useful for reducing anxiety, muscle contraction, and facilitating sleep. Guided Imagery is an easy and simple relaxation technique that can help you deal with stress quickly and easily and reduce tension in the body.

### **c. The effect of guided imagery relaxation techniques on the anxiety level of pre-op vitrectomy patients]**

Based on the results of the study, the mean value of the pre-test was 3.93 and the post-test was 2.33 so that a difference of 1.6 was obtained, then the standard deviation of the pre-test was 1.280 and the post-test was 0.488, so the difference was 0.792 with a significant p-value of 0.000.

Anxiety in preoperative patients can be prevented by using relaxation techniques. Some types of relaxation include guided imagination relaxation and deep breathing relaxation. Relaxation meditation (attention-focussing exercise) is a relaxation technique to clear the mind and drift away in the ongoing moment and behavioral relaxation is a psychotherapy based on observations, assumptions, beliefs and behaviors that affect emotions. One of the distraction techniques that can be used to reduce stress and increase feelings of calm and peace and is a sedative for difficult situations in life (Ahsan et al, 2017).

After the guided imagination relaxation technique was performed, the level of anxiety in preoperative patients decreased significantly. The average anxiety of respondents before the guided imagination relaxation technique was carried out was 25.67 to 18.93 after the guided imagination relaxation technique was carried out. The results of hypothesis testing ( $p < 0.05$ ) proved that the guided imagination relaxation technique was significantly able to reduce the patient's anxiety level. According to Gorman (2010), Guided imagery can be done by someone by saying and giving directions to someone with sentences that lead to fantasies such as places so that feelings will follow that imagination to a deep and calm stage. This condition, if supported by good breathing techniques and trying to empty the mind and focus on breathing at night, will gradually reach a state of relaxation. This is supported by research which states that directed and guided relaxation can reduce anxiety (Kadriye, 2019).

Guided imagery or guided imagery is a technique of creating an impression in the mind of the respondent, then concentrating on that impression so that it can gradually reduce the respondent's perception of pain. When the patient imagines it will reduce anxiety. Operations / surgical procedures will provide an emotional reaction for the patient. Anxiety can cause physical and psychological changes. This condition requires an effort to reduce anxiety, one of which is a guided imagination relaxation technique, this action aims to increase control and self-confidence and reduce stress and anxiety. This study aims to determine the effect of guided imagination relaxation techniques on anxiety in preoperative patients at Patut Patuh Patju Gerung Hospital (Jihan, 2016).

The guided imagination relaxation technique most of the preoperative respondents' anxiety levels were at the moderate level of anxiety as many as 20 respondents (66.67%) and after the guided imagination relaxation technique was carried out, it showed that most of the preoperative respondents' anxiety levels were experiencing changes in their anxiety levels. on the level of mild anxiety as many as 20 respondents (66.67%) Based on changes in anxiety levels before and after the guided imagination relaxation technique was carried out with statistical analysis, the value = 0.000 which means  $\alpha = 0.05$ , then  $H_0$  is rejected and  $H_1$  is accepted which means that there is an influence of guided imagination relaxation techniques on the level of anxiety in preoperative patients at Patut Patuh Patju Gerung Hospital in 2018 (Issrahli, 2018).

Comparisons were made on anxiety scores before and after treatment. To see the effect of the treatment given in reducing students' anxiety levels. This can be seen in Table 3 regarding the results of the z test calculation. Based on the results of the z test with  $z = -2.521$  and a significance (2-tailed) of 0.012, which means  $0.012 < 0.05$ . So it can be said that there is an effect of using guided imagery techniques on the level of anxiety of students participating in group counseling activities. The mechanism of decreasing students' anxiety levels during guided imagery begins by inviting respondents to reveal problems/things that bother them, which are then discussed together in the group counseling process. Guided imagery is effective in helping to reduce students' anxiety levels following group counseling activities. This is indicated by the results of descriptive analysis of the mean score before treatment 113.5 to 75.0 after treatment. From the results of the z test with  $z = -2.521$  and a significance (2-tailed) of 0.012, which means  $p < 0.05$ , it shows that there is an effect of using guided imagery techniques on the anxiety level of students participating in group counseling activities (Hasanah, 2017).

The emergence of anxiety before surgery is normal. Psychological response that usually occurs in preoperative patients is anxiety. Surgery has the potential to cause anxiety. Previous surgery experience also affects the patient's level of anxiety. This is indicated by the results of this study that most 18 (60%) of the 30 (100%) respondents who have never had surgery experience tend to have higher levels of anxiety. Anxiety that occurs is related to pain, possible disability, becoming dependent on others and possibly death. This is also supported by the theory that surgery is a difficult experience for all patients. People's anxiety levels are different even though they face the same problem. But there are several levels of anxiety, namely, mild, moderate, normal and panicked. This is supported that patients who will undergo surgery generally experience varying degrees of anxiety from mild to severe (Hawari, 2016).

The study was conducted using a questionnaire sheet to measure the scale of anxiety levels in the intervention group and control group, as well as intervention measures in the form of Guide Imagery in the experimental group. Bivariate analysis using statistical test paired t test. The results of the study in the control group did not experience a decrease in the level of anxiety at the time of the posttest with an average pretest value of 32.38 and a posttest value of 32.23. In the intervention group there was a decrease in the level of anxiety with an average pretest value of 29.23 and a posttest value of 22.08. The results of the paired t test analysis show the value of  $p = 0.000$ . The conclusion is that the guide imagery technique is effective on the level of anxiety in hemodialysis patients. This study obtained results in hemodialysis patients in the experimental group, the value of T count = 6.703 and the value of  $p = 0.000$ . With the research hypothesis  $T_{arithmic} > T_{table}$  ( $6.703 < 2,178$ ) and the value of  $\alpha$  ( $0.000 < 0.05$ ), it means that  $H_0$  is rejected and  $H_a$  is accepted. It can be interpreted that the experimental group with the guide imagery intervention experienced a significant decrease in anxiety levels so that there was a difference between the pretest and the posttest. It also means that guided imagery therapy is effective in reducing anxiety in hemodialysis patients in the hemodialysis room (Miftahudin, 2016).

Based on this, the researcher can draw the assumption that at the age of  $<50$  years the level of anxiety can occur more often than at the age of  $>50$  years. This, according to researchers, is caused

by the mindset and emotional control in older people compared to younger people. This is influenced by the experience factor in dealing with a problem, where of course older people will have more life experience than younger people. Someone who has a younger age turns out to be more prone to anxiety than someone who is older, but there are also those who think otherwise.

#### 4 Conclusion

The anxiety level of pre op vitrectomy patients before the guide imagery relaxation technique was obtained, the majority of respondents experienced severe anxiety (score 28-42) as many as 8 people (53.3%), and the minority experienced panic (score 43-56) as many as 1 person (6.7%). The anxiety level of pre-op vitrectomy patients after the guide imagery relaxation technique was obtained by the majority of mild anxiety (score 14-20) as many as 9 people (60%), minority moderate anxiety (score 21-27) as many as 6 people (40%). There is an effect of guide imagery relaxation technique on the anxiety level of pre-op vitrectomy patients with a significant value of 0.000 ( $\alpha < 0.05$ ).

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