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The Effect of Music Therapy on Anxiety in Pre-Anesthesia in the Operation Room of Genteng Hospital Banyuwangi

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ABSTRACT

Background: Pre-anesthesia preparation is very important to minimize risks during surgery. This is because the outcome of surgery depends on the assessment of the patient's condition and the preoperative preparation performed on the pre-anesthetized patient. Music has many benefits for human health and can provide good mental strength for listeners.

Purpose: Analyzing anxiety before and after music therapy intervention in pre-anesthesia in the operating room and health education with music therapy for anxiety in pre-anesthesia in the operating room.

Methods: The research design was quasi-experimental with a pre and post-approach. The population of all patients who underwent surgery under spinal anesthesia. The samples taken in this study were 15 samples of patients who underwent surgery under spinal anesthesia. The independent variable is music therapy. The independent variable is music therapy. The dependent variable is anxiety. The analysis used is univariate and bivariate.

Results: Based on the results of data collection conducted by researchers, there are six subject that represent the results of the study, age, gender , marital status, last education, profession, type of surgery.

Conclusion: This study concludes that music therapy can reduce the patient's level of anxiety so that it will divert attention to anxiety (distraction) and provide a sense of relaxation before the patient undergoes spinal anesthesia.

Keywords: education, good mental, operating

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BACKGROUND

Pre-anesthesia is a further step from the results of the pre-operative evaluation, especially anesthesia to prepare the patient, both psychologically and physically so that the patient is ready and optimally to undergo anesthetic and diagnostic procedures or the planned surgery (Erhan & Aryan, 2020). Pre-anesthesia care begins when the patient is in the treatment room or can also begin when the patient is handed over to the operating room and ends when the patient is transferred to the operating table (Majid et.al. 2011). Pre-anesthesia preparation is very important to minimize risks during surgery. This is because the outcome of surgery depends on the assessment of the patient's condition and the preoperative preparation performed on the pre-anesthetized patient.

Music and sounds are amazingly stimulating. Music is a harmonic air vibration, the nerves in the ear catch it, transmitted to the central nervous system in the brain, giving rise to a certain impression on a person. Musical harmony that is equivalent to the body's internal rhythm will give a pleasant impression on a person. In addition, music also greatly affects the human physique, as long as the right vibration and harmony are used, the listener will feel comfortable and relaxed (Mehtap et, al. 2019). The advantages of using music therapy are that music is not harmful, inexpensive, safe, has no negative side effects, can lower blood pressure, pulse and respiration. The disadvantage is that you have to use media so you can't do it anytime and anywhere (Dana et, al. 2021).

Lack of preparation in pre-anesthesia can cause a threat to the body, integrity, and soul of a person so the patient becomes anxious pre-anesthesia. Anxiety experienced can be sourced from fear of pain, physical changes, disability, surgical equipment, operating personnel, unconscious after being sedated, and' surgery failure (Artini, 2015). Surgery or surgery is a stressor for the patient which can evoke stress reactions both physiologically and psychologically. Preoperative anxiety generally occurs in patients who will undergo elective anesthesia and surgery procedures(Juan et, al. 2019). Anxiety that arises before the anesthetic action will interfere with the operation process.

Music has many benefits for human health and can provide good mental strength for listeners. People who listen to music will have a strong mentality, calm emotions, live more comfortably and relaxed and make their lives more confident by developing intellectual knowledge for them. Music can also affect depression reduction (Andriyani, 2019). Music therapy in its application can increase the production of the four positive hormones in the human body, namely endorphins, dopamine, serotonin, and oxytocin. The function of the four positive hormones can make the body more relaxed, reduce anxiety or stress, increase happiness, increase intelligence, and increase self-confidence (Situmorang, 2017). Music therapy is a nursing intervention, where music is used as a medium for therapeutic activities to maintain, improve, and develop mental health, physical health, and emotional health (Padila et, al 2020). The growing evidence-based nursing practice shows progress in helping patients reduce anxiety, namely through music therapy (Quanman, et. al 2019).

Based on this description, researchers are interested in researching "The Effect of Giving Music Therapy to Anxiety in Pre Anesthesia in the Operating Room of Genteng Hospital Banyuwangi".

METHODS

The population in this study were all patients who underwent surgery under spinal anesthesia. The sample in this study amounted to 15 people who underwent surgery with spinal anesthesia in the operating room of the Genteng Banyuwangi General Hospital. 15 people who underwent surgery under spinal anesthesia were treated with music therapy. The sample has

inclusion criteria in the form of Adolescent and adult patients aged 17-45 years; Patients undergoing surgery for the first time; Patients who underwent surgery under spinal anesthesia (SAB); Patients with compliments consciousness; No hearing loss and exclusion criteria: patients with cito/emergency surgery. This sampling technique uses incidental sampling. the independent variable in this study was music therapy. the dependent variable in this study is the level of anxiety.

This research was conducted at the Genteng General Hospital in Banyuwangi in August 2022. The type of research is that observations were carried out twice before the experiment and after the experiment. Observations made before experiment (0) are called pre-test and observations after the experiment (01) are called post-tests. The difference between 0 and 01, namely 01 - 0 is assumed to be the effect of treatment or experiment.

In this study, the measuring instrument used was a questionnaire. The data collection procedure was carried out by covering several stages, including Explanation and confirmation of the respondent's willingness; Pre-test; Providing health education through music therapy; post-test. Processing of research data includes editing; coding; scoring; tabulating. The research data that has been collected were analyzed by univariate test to see the characteristics of respondents using frequency distribution and descriptive statistical results which include mean, median, standard deviation, minimum and maximum values , and bivariate test to prove the research hypothesis. The criteria set are as follows:

1) If the p-value is 0.05 then H1 is accepted or H0 is rejected, meaning the effect of music therapy on reducing anxiety in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital.
2) If the p-value > 0.05 then Ho is accepted and H1 is rejected, meaning that there is no effect of music therapy on reducing anxiety in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital.

RESULTS

The results of data collection regarding the characteristics of respondents based on Music Therapy intervention group:

Table 4.1 Characteristics of Research Subjects Based on Age, Gender, Marital Status, Last Education, Profession, Type of Surgery

Characteristics	Music Therapy	
	n	%
Age		
18-25	6	40,0
26-35	6	40,0
36-45	3	20,0
Gender		
Male	7	46,7
Female	8	53,3
Marital Status		
Not Married Yet	5	33,3
Married	10	66,7
Last Education		
Elementary School	0	0
Junior High School	3	20,0
Senior High School	6	40,0
Diploma Degree	2	13,3

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Characteristics	Music Therapy	
	n	%
Bachelor Degree	4	26,7
Master Degree	0	0
Profession		
Student	1	6,7
Housewife	5	33,3
Government Employees	0	0
Entrepreneur	9	60,0
Laborer	0	0
Type of Surgery		
Urology	3	20,0
General Surgery	6	40,0
Ob-gyn	6	40,0

Source: Primary Data, 2021

Table 4.1 shows the results of the characteristics of research subjects based on age, sex, status, last education, occupation, and type of surgery. the age category of respondents showed that most of the respondents were aged 26-35 years (early adults), namely 8 respondents (53.3%). The gender of the respondents showed that most of the respondents were female, namely 8 respondents (53.3%). The marital status variable is mostly high school respondents, namely 10 respondents (66.7%). In the last education category, it was found that almost half of the SMA respondents were 6 respondents (40.0%). The job variable found that most of the respondents were in the self-employed category, namely 9 respondents (60.0%). almost half of the respondents fall into the category of general surgery ob-gyn, namely 6 respondents (40.0%).

Specific data contains the characteristics of the findings of the focus of research on the effect of music therapy on reducing anxiety in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital, as follows:

Table 4.2 Characteristics of Specific Data for Research Subjects

Characteristics	Music Therapy	
	n	%
Pre Anxiety		
No Anxiety	0	0
Mild Anxiety	1	6,7
Moderate Anxiety	3	20,0
Severe Anxiety	11	73,3
Panic	0	0
Post Anxiety		
No Anxiety	10	66,7
Mild Anxiety	5	33,3
Moderate Anxiety	0	0
Severe Anxiety	0	0
Panic	0	0

Source: Primary Data, 2021

Table 4.2 shows the results of the characteristics of the research variables based on pre-anxiety. The pre-anxiety variable obtained results that most of the respondents were in the category of severe anxiety, namely 11 respondents (73.3%). Post-anxiety variables showed that most of the respondents were included in the not anxious category, namely 10 respondents (66.7%).

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Analysis of anxiety reduction before and after music therapy intervention in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital.

Table 4.3 Paired T-Test for Reducing Anxiety Before and After Music Therapy Interventions on Reducing Anxiety in Pre-Anesthesia in the Operating Room of the Banyuwangi Genteng General Hospital

Pre dan Post Anxiety	N	Mean	Sig (2-tailed)
Pre	15	291,67	
Post	15	136,67	0,000

Source: Primary Data, 2022

The results of the analysis showed that the mean value of the pre-test (291.67) for anxiety was higher than the post-test score (136.67) for anxiety. The p-value obtained was p = 0.000 (p < 0.05), which indicates that there is a decrease in anxiety before and after music therapy intervention in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital.

The results of the post-anxiety research showed that most of the respondents were in the non-anxious category, namely 10 respondents (66.7%). The results of the analysis showed that the mean value of the pre-test (291.67) for anxiety was higher than the post-test score (136.67) for anxiety. The p-value obtained was p = 0.000 (p < 0.05), which indicates that there is a decrease in anxiety before and after music therapy intervention in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital.

DISCUSSION

The decrease in anxiety levels in the intervention group can occur because of the music therapy intervention. Music therapy can help express feelings and have a positive influence on a person's mood and emotional state (Guangli, 2021). Music therapy can provide a calming effect for respondents, can reduce anxiety, make feelings become relaxed, relaxed, and can stabilize them emotionally. According Dave (2011) things that must be considered in giving music therapy are choosing the type of music that is not too fast and loud. Beat 60-80/minute that has a regular and steady tone, the patient chooses music with the direction of a therapist, a maximum volume of 60dB, harmonious harmonization, and is supported by a comfortable, quiet room, and away from the noise so that one can concentrate on the music which is given. Under the conditions in the field when the research was conducted, the patient was faced with the same situation, which was to undergo surgery (Astuti, 2019).

This has been proven in a 1996 study, the Journal of the American Medical Association reports on the results of a music therapy study in Austin, Texas which found that half of the pregnant women who listened to music during the birth of their child did not need anesthesia. Musical stimulation increases the release of endorphins and this reduces the need for medication. The release also provides a distraction from pain and can reduce anxiety (Fillipo, et. al, 2020).

Sedative music is not the only distraction effect in inhibiting the perception of anxiety (Siti, et. al, 2021). Music is believed to increase the release of endorphins (Siti, et. al, 2021). Endorphins are ejectors of the sense of relaxation and calm that arise, the midbrain secretes Gama Amino Butyric Acid (GABA) which functions to inhibit the conduction of electrical impulses from one neuron to another by neurotransmitters in the synapse. The midbrain

secretes enkephalins and beta-endorphins and these substances can cause a relaxing effect which ultimately eliminates anxiety neurotransmitters in the somatic sensory perception and interpretation center in the brain so that the effect that can appear is reduced anxiety (John, 2020).

The researcher concluded that the conclusion in this study was that music therapy could reduce the patient's level of anxiety so that it would divert attention to anxiety (distraction) and provide a sense of relaxation before the patient underwent spinal anesthesia.

CONCLUSION

The conclusion of this research are the results of the analysis showed that there was a decrease in anxiety before and after music therapy intervention in pre-anesthesia in the operating room of the Genteng Banyuwangi General Hospital. the results of the study on pre-anxiety showed that most of the respondents were in the category of severe anxiety. The results of the post-anxiety study showed that most of the respondents were in the category of not being anxious.

With the results of research on the effectiveness of spinal anesthesia video education and music therapy, it can add knowledge or input and consideration in research related to this further. It is suggested that the anesthesiologist can be used as a reference to reduce pre-anesthesia anxiety, namely non-pharmacological (psychological).

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