

Effectiveness of “Naik Becak” Song as Music Therapy for Preoperative Anxiety by Nursing Approach

Riksa Wibawa Resna^{1*}, Muslika Linda Suwarno²

¹Research, development and community service department, Banten School of Health Science

²Nursing department, Banten School of Health Science

*Corresponding author

Riksa Wibawa Resna, Research, development and community service department, Banten School of Health Science, Email: riksawibawa@stikesbanten.ac.id.

Submitted: 10 Nov 2017; Accepted: 16 Nov 2017; Published: 22 Nov 2017

Abstract

Statement of the Problem: Surgery is an experience that can cause anxiety that usually associated with a variety of foreign procedures that will be undertaken by the patient during surgery and various threats to life safety procedures and the actions resulting from anesthesia. Anxiety that occurs in patients with pre-surgery may have an impact on the physical changes that would hold over the implementation of surgery such as increased blood pressure and emotional instability. Music is one way that is believed to lower anxiety levels. Indonesia has a wealth of cultural songs that very much. One of the songs known by Indonesian people is the delightful children's song known as “naik becak”. This song describe the picture of how fun the mood of a child when doing recreation using a pedicab. With the theme song that describes the fun atmosphere, the researchers hope to bring the mood of patients who will undergo surgery to be happy. This study is intended to look at the effectiveness of music medicine to decrease the patient's level of anxiety in facing surgery.

Methodology & Theoretical Orientation: Using an experimental quasi design with a one group pre-test and post-test design, the researchers conducted anxiety-level assessment to all patients who would perform elective surgery.

Findings: From total patients undergoing elective surgery showed that 96% patients had decreased anxiety level with mean rank 23.81, sum-rank 1071.5 and p-value 0.000. Patients who experienced an anxiety drop felt that the song “naik becak” was played out to make them feel good and bring fond memories of their pleasant childhood.

Conclusion & Significance: subjects feel the benefits of melody medicine is conducted in the form of a decrease in the level of anxiety before undergoing surgery. Recommendations are using music medicine in the management of patients with anxiety.

Keyword: Music therapy, preoperative anxiety, naik becak song

Introduction

Surgery is a medical action that brings stressors to one's integrity. Surgery will cause stress reactions both physiological and psychological. One of the psychological responses that can be experienced by patients who will undergo surgery is anxiety. Anxiety is a normal response to events that threaten or stressful and usually short-lived and can be controlled. Anxiety serves as an alarm mechanism to prepare an individual in an effort to respond physically to perceived danger. Anxiety in the surgery process is usually associated with all kinds of foreign procedures that must be lived patients and also threats to life safety due to surgery procedures and acts of anesthesia.

Based on preliminary study at Mardi Rahayu Kudus Hospital said that patients who experience anxiety get 80% of patients experiencing delayed surgery due to anxiety is very heavy [1].

The same thing happens to mothers undergoing caesarean section in a hospital Usada Insani Tangerang that some 80% of women will undergo cesarean anxiety. based on patients who will undergo surgery at RSUD Karanganyar 53% of patients experience moderate anxiety and 47% of patients experience severe anxiety [2].

Based on early identification conducted by researchers at the study site data found that 83.3% of patients who will undergo surgery experience anxiety. Most patients are worried and afraid of the pain they will feel when surgery and afterwards, others are worried about the healing process after the surgery and others are worried about the financing problem that should be issued after surgery.

Anxiety in patients undergoing surgery process may result in changes in the body's response such as increased pulse, blood pressure, temperature and nausea and excessive sweating. Changes in the state of the body, can result in the possibility of delayed operation process to be done. Nurses as one of the service providers are required to be

able to help lower anxiety levels in patients who will undergo the operation process. Giving therapy music as one method to reduce anxiety is a step that can be done by a nurse independently. The effectiveness of the provision of music as a therapy has been proven by some previous researchers as in a study conducted by Lee (2012) showed that music therapy can significantly lower anxiety levels of patients before surgery [3].

Selection of the type of music as a therapy to be performed to patients should be tailored to the characters and cultures that are in the area where the patient is located. In addition to performing music therapy, the role of nurses in conducting interpersonal communication with a touch of affection and caring is expected to be able to play a role in reducing the anxiety experienced by patients who will perform the operation. In this study, researchers tried to combine the two methods of interpersonal approach method that is done by the nurse with music therapy in an effort to reduce anxiety experienced by patients who will undergo surgery.

This study aims to see the effectiveness of the use of music therapy to decrease anxiety preoperative patients by approaching nursing and local culture.

Materials and Methods

In this study, researchers used one group pre-posttest design research by conducting preliminary testing on a group of patients to be performed surgery in one private hospital type C in the area of South Tangerang City. The hospital where the research was conducted was a secondary service hospital that became the referral of the Community Health Centre (Puskesmas) as primary health care.

This study emphasizes the identification of anxiety of all patients who will undergo the operation process at the hospital as well as efforts to reduce the anxiety of these patients. Efforts to decrease anxiety is done by doing a combination of nurse approach in the form of interpersonal communication with music therapy typical of Indonesia is by using the song “Naik Becak”.

Basic selection of the song is because the song is a very popular Indonesian children’s songs in the 80’s to 90’s. The song tells of the happy moments of a child who was invited to go sightseeing around the city by his parents by riding a rickshaw. A carefree rhythm and easy-to-understand text are the unique characteristics of this song, so researchers feel interested in using the song in an effort to lower anxiety in patients who will undergo surgery.

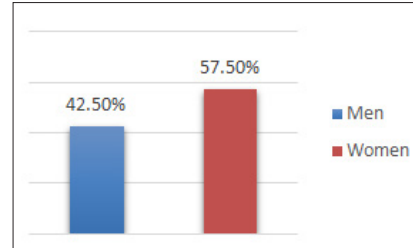
The method used by researchers is at the beginning of the researcher to identify the anxiety of patients by using HARS measuring instrument that has been adjusted to the condition of patients who will undergo the operation process. Then after that researchers explore the feelings of anxiety felt by the patient with a brief interview. Having obtained a description of the level of anxiety felt by patients, the researchers enjoy songs that are given to patients for 15 minutes through headphones while asking the patient to imagine the wonderful memories of his childhood most remembered by the patient.

The sample in this study is the total of patients who will be in operation at the hospital where the study lasted for a month, amounting to 47 patients from the total average patient per month

61 people using purposive sampling method. Samples taken are the patient that have been in the inpatient room at least 2 hours before the operation with age 14 years and above and in a conscious state and have a good prognosis.

Results

Based on the result of the research, the description of gender frequency of the sample in this research is as shown in the graph 1



Graph 1: Frequencies distribution of gender

The large number of cesarean operation that occurred during the study resulted in the frequency of female patients more than the male patients. The data can also be seen from the majority of patients who undergo surgery are patients who are in the productive age.

Table 1: Frequency of ages

Age (in years)	Percentage
<17	6.4
17-35	57.4
36-45	6.4
46-55	17
56-65	6.4
>65	6.4

From the table 1 can be seen that the majority of patients who underwent surgery were at the age of 17-35 years of 57.4%. The high incidence of surgery at that age because the majority of patients who perform surgery is a patient with fault and fracture due to accidents and appendicitis. Based on the national health survey data conducted by the Central Bureau of Statistics of the Republic of Indonesia shows the number of productive age reaches 44.98% and 25.92% of the total productive age is in the age range 17-35 years who live in urban areas [4]. The number of productive ages will continue to increase until 2025 [5].

Table 2: Anxiety level on preoperative

Anxietylevel	Before	After
No anxiety	19.1	55.3
Mild	29.7	31.9
Moderate	31.9	12.8
Severe	17	0
Panic	2.12	0

Based on the findings data in the study sites showed that 31.9% of patients experienced moderate anxiety levels. This happens because the majority of patients still feel anxious about the process that they will live is a new thing that happens in their lives so they

fear if the implementation and post-surgery will feel great pain. Postoperative pain is one of the factors that can cause anxiety in patients who will undergo surgery. In addition to pain, some other factors that may cause anxiety in patients who will undergo surgery include complications from the surgery and their family concerns that excessive to the patient so that the family as a support system that can help reduce the anxiety of patients to be not working properly [6].

Through the process of nursing approach and song therapy conducted by nurses to patients who will undergo the operation process showed that there is a significant change. The first changes occurred in patients who initially were at panic anxiety levels, decreased anxiety levels to moderate anxiety levels after 15 minutes of therapy. This success occurs because the patient feels that the song is played fun and reminds him of his childhood when on an excursion with his parents. Using a simple songs, cheerful and fun is an exceptional feature of music therapy performed on this research. Music therapy is believed to reduce the level of anxiety in general, only the selection of music used will certainly be able to influence the success of this therapy in reducing anxiety [7]. Choosing the right song to listen can lower an anxiety level of 65% and can reduce a person's physical fatigue by 35% [8].

Table 3: Analysis of differences in level of anxiety using Wilcoxon match pair test

Categoryrank	N	Meanrank	pValue
Negative rank	45	23.81	0.000
Positive rank	1	9.50	
Ties	1		

Based on the data in Table 3 shows that statistically majority of patients experienced decreased preoperative anxiety level after the therapy of listening to the song for 15 minutes. This is also strengthened by the observation of the researcher in patients who do therapy. Majority of them express the feeling calmer, some of them also exist that can instantly smile when played songs, and some say such a moment forget the things that had made him anxious to know that they should undergo surgery process. Several factors may affect anxiety levels before surgery, such as the fear of pain after surgery, fear of facing the operating room or even fear that their surgery fails. These factors affect changes in physical response such as increased vital signs, muscle tension or even emotional responses such as feeling helpless and fearful. Giving music to patients before surgery can help to lower stress-related hormones, diverting our attention from fear, anxiety and tension, activating endorphin hormones and improving feelings of relaxation [9].

Changes in anxiety levels in patients undergoing surgery also show that there is a patient who does not experience anxiety level changes and a patient who has an increased level of anxiety. A patient who does not experience a decrease in anxiety level is possible due to an increase in somatic and gastrointestinal side. It is strengthened by the condition of patients with appendicitis. Patients who had appendicitis tend to have very great pain and difficulty to control on his abdomen. It is also evident from the increase in the sensation felt by the patient on the side of the somatic and gastrointestinal section.

One other patient based on the measurement of anxiety levels according to the anxiety level scale HARS indicates an increased

degree of anxiety on the autonomous part is possible because the patient is a cesarean patient with the first childbirth with umbilical cord indication. It can stimulate autonomic nervous function in the human body acting under human consciousness which, among other things, regulates the function and respiratory system, cardiovascular, vasomotor and some reflex movements so that the manifestation of the increased function of the autonomic nerves may be felt by the patient such as headache and sweating easily.

The success of music therapy cannot be separated from other factors that can influence it. Acute disease state or condition which is considered very threatening for patients who will undergo surgery process can affect the success of music therapy in reducing anxiety [10]. For that additional therapy is needed such as family support or even other therapies including pharmacological therapy.

Acknowledgement

This research is a study conducted independently by a team of researchers who work with hospital institutions where the implementation of research. In this study, the entire financing process was carried out by the research team as part of the three main task of university which is education, research and community service.

References

- Budianto M (2009) Pengaruh terapi religius doa kesembuhan terhadap penurunan tingkat kecemasan pasien preoperasi di ruang rawat inap rumah sakit mardih rahayu kudas. J. dakwah dan Komun 3: 55-62.
- Larasati Y I (2009) Efektifitas Preoperative Teaching. Undip 1-7.
- Lee KC et al. (2012) Evidence That Music Listening Reduces Preoperative Patients' Anxiety. Biol. Res. Nurs 14: 78-84.
- Badan Pusat Statistik. Statistik Pemuda Indonesia (2014).
- Ismail Fahmi. Penduduk Usia Produktif Indonesia Capai 44, 98%. Kabar 24 (2013) at <<http://kabar24.bisnis.com/read/20130823/79/158486/penduduk-usia-produktif-indonesia-capai-4498>>
- Jawaid M, Mushtaq A, Mukhtar S, Khan Z (2007) Preoperative anxiety before elective surgery. Neurosciences (Riyadh) 12: 145-148.
- Gutiérrez EOF, Camarena VAT (2015) Music therapy in generalized anxiety disorder. Arts Psychother 44: 19-24.
- Melanie Curtin. Neuroscience Says Listening to This Song Reduces Anxiety by Up to 65 Percent | Inc.com. Inc (2017). at <<https://www.inc.com/melanie-curtin/neuroscience-says-listening-to-this-one-song-reduces-anxiety-by-up-to-65-percent.html>>
- Brunges MJ, Avigne G (2003) Music therapy for reducing surgical anxiety. AORN J 78: 816-818.
- Gillen E, Biley F, Allen D (2008) Effects of music listening on adult patients' pre-procedural state anxiety in hospital. Int. J. Evid. Based. Healthc 6: 24-49.

Copyright: ©2017 Riksa Wibawa Resna. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.