



THE EFFECT OF REDUCING PAIN WITH CLASSIC MUSIC THERAPY IN CA MAMAE PATIENTS POST-MASTECTOMY

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ABSTRACT

Ca Mamae or breast cancer is a malignant tumor that grows in the breast tissue, and one of the medical procedures that can be performed on Ca Mamae sufferers is mastectomy surgery. Surgical patients usually feel pain, and the therapy or action given to patients with post-operative pain to reduce pain is music therapy. Objective to describe the application of efforts to reduce pain with classical music therapy in post-operative ca mae patients in Ward Cendana 1 Dr Sardjito Hospital. The method used is a descriptive method with case studies to obtain an overview by observing and analyzing accurate data. After classical music therapy was carried out on post-operative ca mammae patients at DR Sardjito Yogyakarta Hospital with a frequency of 2-3 times a day for 3 days, the results showed that pain in post-operative ca mammae patients decreased from scale 6 (moderate pain) to scale 1 (pain light). Based on the results of a case study conducted at DR Sardjito General Hospital, Yogyakarta for 3 days with a duration of 15-20 minutes, it can be concluded that classical music therapy can reduce the pain scale in post-operative ca mamae patients.

Keywords: ca mamae; classical music therapy; pain

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INTRODUCTION

Cancer is not a disease contagious where growth occurs and very fast development, without controlled by cells and tissues

Cancer is a large group of diseases that can start in almost any organ or body tissue, abnormal cells that grow uncontrollably or even go beyond their usual limits to attack adjacent parts of the body or spread to other organs. Meanwhile, ca mammae occurs when several cells in the breast grow and develop uncontrollably (Miftahurrahmah, 2021). Breast cancer in Indonesia is 0.5 per 1000 women. According to the World Health Organization (WHO) (Fajri et al., 2022) around 8-9% of women have the potential to experience breast cancer (WHO, 2018). Based on WHO data, in 2020 (Titik Rusmiati & Lisda Maria, 2023) breast cancer had the highest number of new cases in Indonesia at 65,858 cases or 16.6% of the total 396,914 cases (WHO, 2020). According to (Anisa & Suminar, 2023) the Yogyakarta Special Region Province has a fairly high prevalence of breast cancer, namely 2.4%.

Breast cancer is cancer which is most often found in women in worldwide (22% of all new cases cancer in women) and become a sequence second as a cause of related deaths cancer

after lung. Breast cancer incidence rate. The highest is found at the age of 40-49 years, while for ages under 35 years the incidence is only less than 5%. Cancer breasts in men are rare and uncountable as much as 1% of all cancer cases breast. Increased cases of breast cancer significantly caused by changes in people's lifestyles, as well as their existence advances in technology for diagnosis of malignant breast tumors. Monica (2023) Or breast cancer is a malignant tumor that grows in breast tissue so that it can result in loss of control and normal function of cells with rapid, uncontrolled and abnormal growth which will then divide from normal cells and will gather to form a lump or mass.

The most significant difference between tumors and cancer is their nature. Tumors can be benign or malignant. Benign tumors usually only occur in one part of the body and are not life-threatening. Meanwhile, cancer, which is a malignant tumor, can grow quickly and can spread to other parts of the body. Ca mammae or breast cancer often occurs in women due to genetic factors, and one of the medical procedures that can be performed on patients suffering from ca mammae is mastectomy surgery. So that post-mastectomy can have a painful effect that interferes with the sufferer's activities (Nida Fitriani, Suci Khasanah, n.d.). Genetics and family history is a major risk factor for cancer breast. This is related to change genetic, namely proto-oncogene gene mutations (HER2) and tumor suppressor genes (BRAC1 and BRAC2) in breast epithelium. This mutation causes cells to reproduce continuously without control, so that cancer arises (Cardoso et al., 2019; Heroes, 2021).

According to (Nugraha et al., 2023) surgical patients usually feel moderate to severe pain. The duration of the pain can last for 24 hours or even up to 48 hours. But it can also last even longer depending on how a person can endure and respond to the pain. Pain can be defined as one of a person's predisposing factors as well as a sensory and emotional experience. Likewise, comfort caused by potential or even actual tissue damage is described in the form of such damage. To reduce pain, namely by taking non-pharmacological and pharmacological measures. Pharmacological measures can be done by administering analgesics, while non-pharmacological ones can be carried out in the form of interventions such as relaxation techniques, deep breathing and other therapies (Kusniarti, 2023). Taqiyatun (n.d.), music therapy applied to patients complaining of pain after breast cancer surgery showed that there was a difference in pain between before the therapy was carried out and after the therapy was carried out. The aim of the research is to determine the effectiveness of applying distraction therapy to post-operative breast cancer patients who complain of pain marked decrease in the pain scale. Complaints of pain often lead to disturbances in a person's sense of comfort after doing it.

METHOD

Research design. This research is descriptive research in the form of a case study. The descriptive method is a research method that aims to obtain an overview by observing and analyzing accurate data according to the facts so that it is easy to understand. The design of this paper uses a descriptive study which aims to describe the application of classical music therapy to reduce the pain scale in post-mastectomy ca mammae patients in the Cendana 1 ward of RSUP Dr. Sardjito. Location and Subject. This research was carried out in the Cendana 1 ward of Dr. RSUP. Sardjito. The subjects of this research were post-mastectomy or breast surgery patients who experienced pain. The inclusion criteria used in this study included: patients who were willing to become research respondents, patients with composmentis awareness aged 25-60 years, post-operative ca mae patients starting on day 0 who experienced pain on a scale of 4-6.

The data collection methods used in this research are: the first one is Observation, the researcher made observations for 5 minutes before starting the music therapy relaxation technique using the Numeric Rating Scale (NRS) observation sheet. Second is Interview, the results of the interview are the result of anamnesis, patient identity, main complaint, previous medical history, other data sources (family). Researchers explained the objectives, benefits and informed consent to respondents and met face to face and the last is Rating Scale, In this study, the data collected relates to evaluation data before and after the application of music therapy to reduce pain in post-operative camaae patients, by providing a Numeric Rating Scale (NRS) evaluation sheet. Sampling Procedure. The selection of respondents in this study was carried out by considering previously determined inclusion and exclusion criteria. Respondents in this study met the inclusion criteria, the respondents taken were 51 years old, respondents with composmentis awareness, respondents on post-operative day 0 and felt pain on a moderate scale (6) and were willing to be respondents at the time this research was conducted.

RESULTS

Table 1.

explains the results of pain scale measurements before and after classical music therapy

Date and Time	Implementations Hours	Pain Scale	
		Before Action	After action
Thursday, 14 March 2024	07.00	6	6
	11.00	6	5
	19.00	5	4
Friday, 15 March 2024	11.00	4	3
	19.00	3	2
Saturday, 16 March 2024	11.00	2	1

After Taking Action

Based on the table and graph above, it shows that there is a decrease in the pain scale before and after classical music therapy. On Thursday, March 14 2024, at 07.00 WIB, classical music therapy was carried out on the patient. Previously, pain intensity was measured, the result was a pain scale of 6, after that, music therapy was carried out for 30 minutes and evaluated, the pain scale result was 6, when carrying out music therapy the client was in the position semi-fowler. Classical music therapy was carried out again at 11.00 WIB. Previously, the patient said the pain scale was 6. After classical music therapy was carried out for 25 minutes, the client said the pain had decreased with a pain scale of 5. Classical music therapy was carried out 3 times, the third implementation was carried out at 19.00 WIB before it was carried out. client therapy said the pain scale was 5 and after 30 minutes of therapy the pain scale dropped to 4.

On Friday, March 15 2024, at 11.00 WIB, classical music therapy was carried out on the patient. Previously, pain intensity was measured, the result was a pain scale of 4, after that, music therapy was carried out for 25 minutes and the results were evaluated, the pain scale was 3. When carrying out music therapy, the client was in the position semi-fowler. Classical music therapy was carried out again at 19.00 WIB, before the patient said the pain scale was 3. After classical music therapy was carried out for 30 minutes, the client said the pain had decreased with a pain scale of 2. On the second day, classical music therapy was carried out twice. On Saturday or the last day, March 16 2024 at 11.00 WIB, classical music therapy was carried out on the patient. Previously, pain intensity was measured, the pain scale result was 2,

after that, music therapy was carried out for 30 minutes and evaluated, the pain scale result was 1 or the patient said the pain was mild.

Pain scale graph before and after classical music therapy

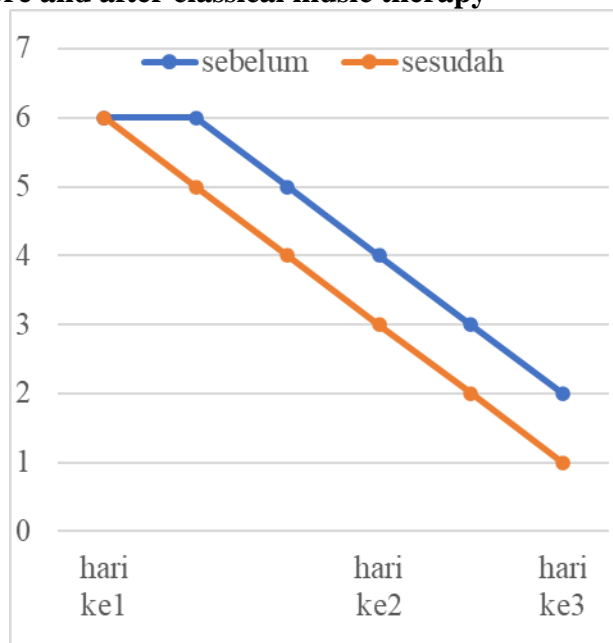


Figure 1. Pain Measurement Chart Before and

The graph shows that there was a decrease in the pain scale before classical music therapy was carried out and after classical music therapy was carried out. Which shows a blue line before the action is taken and a red line after the action is taken. In the graph above, the first day shows a pain scale of 6 and on the third day it shows a pain scale of 1.

Table 1.
Respondent characteristics (n=1)

Respondent characteristics	f	%
Age 50	1	100
Gender Woman	1	100

DISCUSSION

Breast cancer is the most common cancer in women. Breast cancer often occurs in women over the age of 40-50 years, and around 80% of breast cancer cases are diagnosed in women aged >50 years. The respondents taken in this research were based on predetermined inclusion criteria. The selected respondents were aged 20-60 years (older adults), female and also post-operative patients on day 0 who were conscious, experiencing pain on a moderate scale (6). Respondents who have agreed to participate as respondents in this research are given an Informed Consent sheet which is then filled in and signed by the family and respondent. (Fadia, 2023) Informed Consent is very important when conducting research, especially in the health or medical field. Giving informed consent to medical research is very mandatory because this does not only involve personal data and the prospective patient's willingness to participate, but also concerns health and even life. Apart from that, Informed Consent also functions for informants if something undesirable happens.

Respondents who have agreed to participate as respondents in this research are given an Informed Consent sheet which is then filled in and signed by the family and respondent. Respondents who had signed the Informed Consent sheet had their pain scale measured using the Numerical Rating Scale (NRS), then the respondent stated the scale of pain they felt and recorded it on the observation sheet. In carrying out this research, classical music therapy was carried out 3-4 hours after administering analgesics. According to research (Nurdiansyah, 2014), a person's pain response can be measured after 30 minutes of administering Ketorolac therapy 30 mg per intravenous drip, showing a significant reduction in pain response because the Ketorolac administration route per intravenous drip provides a faster effect. As is known, Ketorolac plasma concentration time is approximately 55 minutes after oral administration, and 40 minutes after intramuscular administration. Therefore, the half-life of Ketorolac is 4-6 hours.

The provision of classical music therapy in this study was carried out for 3 days or 6 procedures. In research (Sesrianty et al., 2018) it is stated that ideally music therapy can be done for approximately 30 minutes to 1 hour, but if you don't have enough time, this therapy can be done for 10 minutes or 15-30 minutes. However, due to time constraints, the time used during the research was one action carried out in approximately 15-20 minutes. Taqiyatun, (n.d.), music therapy applied to patients who complained of pain after breast cancer surgery showed that there was a difference in pain between before the therapy was carried out and after the therapy was carried out, with a marked decrease in the pain scale. Complaints of pain often trigger a disturbance in a person's sense of comfort after medical treatment, resulting in a decrease in physical activity. However, research conducted revealed that using music therapy as an intervention showed significant results related to reducing the pain scale. Postoperative pain can be evaluated through the patient's facial expressions or direct expressions from the patient (Yanti & Susanto, 2022). The resulting effect of music therapy is that it can reduce pain and relax the body. Because stimulation from music can increase the release of endorphins. This hormone acts as a natural pain reliever in times of illness and also provides a feeling of joy. Apart from that, music can also reduce the perception of pain because pain impulses sent to the brain can be inhibited by impulses from music that will be sent to the brain (Nazira et al., 2024).

In this study, the results of classical music therapy to reduce post-mastectomy cancer pain showed a decrease in the pain scale. Namely before it was carried out on scale 6 and after action was carried out on scale 1. Actions were carried out within 3 days. In this study, non-pharmacological measures were used, namely classical music therapy techniques. As in previous research, classical music therapy can reduce pain in post-mastectomy surgery patients. Through music therapy, pain is reduced through physical and mental relaxation associated with changes in the autonomic nervous system. Music serves as a focal point and has a calming effect. Musical signals are responsible for regulating the activity of certain limbic and paralimbic structures in our brain and subsequently produce GABA and dopamine, two endogenous opioids. This substance has the ability to reduce pain by inhibiting the transmission of electrical impulses between neurons at synapses and increasing relaxation and calm. Therefore, in this study it was found that respondents who felt post-operative pain experienced a decrease in pain after carrying out music therapy for 3 days or 6 procedures. Taqiyatun (nd) Music therapy applied to patients who complained of pain after breast cancer surgery showed that there was a difference in pain between before therapy and after therapy.

CONCLUSION

The conclusion of this study is that it can describe the implementation of music therapy to

reduce pain in post-operative patients. The pain felt by the patient slowly decreased after 6 music therapy procedures from the initial pain scale of 6 (moderate pain) and after music therapy the pain scale felt decreased to scale 1 (mild pain). So it can be concluded that music therapy is effective in reducing the pain scale in post-operative patients.

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