

Original Articles: Case Study

**ANALYSIS OF NURSING CARE IN NSTEMI PATIENTS WITH THE
APPLICATION OF DEEP BREATHING RELAXATION AND MURATTAL
THERAPY TO OVERCOME THE PROBLEM OF ACUTE PAIN**

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Abstract

Introduction: Non-ST Elevation Myocardial Infarction is usually caused by severe narrowing of the coronary arteries, this can cause chest pain that can last long and intense, cold sweat, nausea and vomiting, and feeling as if you are facing death.

Objective: This study investigates the application of deep breathing relaxation and Murattal therapy in nursing care for NSTEMI patients experiencing acute pain. The research assesses their effectiveness in pain management, revealing significant reductions in pain levels post-intervention. These results suggest their potential integration into nursing practice and the need for further exploration into non-pharmacological pain management strategies.

Methods: This research uses a case study design with a nursing care process approach. The participant was a 55-year-old patient with a diagnosis of NSTEMI who experienced acute pain. The instrument used is an observation sheet with a measurement scale using a Numerical Rating Scale.

Results: Before deep breathing relaxation therapy and Murattal therapy, it was found that the patient experienced moderate pain with complaints of pain during strenuous activity, pain like stabbing, pain in the chest that penetrated the back, pain scale 5 (moderate pain), persistent pain frequency, whereas, after management pain relief, deep breathing relaxation therapy, Al-Qur'an Murattal therapy 1x/day for a total of 3 days with a total duration± 25 minutes, it was found that the patient's pain decreased to become lighter with complaints of pain during strenuous activities, the quality of pain was like stabbing, pain in the chest penetrated to the back, pain scale 2 (mild pain), the frequency of pain began to disappear.

Conclusions: The conclusion from the results of the case study shows that deep breathing relaxation therapy and Murattal therapy which are carried out routinely and according to the procedure are effective for reducing chest pain in Mr.I with NSTEMI. Suggestions for nurses to routinely provide deep breathing relaxation therapy and Murattal therapy to patients who experience NSTEMI.

INTRODUCTION

Cardiovascular disease is a major cause of death in developed countries and is estimated to range from unstable angina to myocardial infarction. Acute Myocardial Infarction (IMA) is a spectrum of Acute Coronary Syndrome (ACS) consisting of Unstable Angina Pectoris (APTS), STEMI, and NSTEMI. STEMI (ST-segment elevation myocardial infarction) is a total occlusion of the coronary arteries which causes a wider area of infarction covering the entire thickness of the myocardium which is indicated by the presence of ST-segment elevation on the EKG. Whereas NSTEMI (Non-ST segment elevation myocardial infarction) is a partial occlusion of a coronary artery without involving the entire thickness of the myocardium so that there is no ST segment elevation on the EKG (Ulinuha, 2017 in Yuvindanati, 2021).

Symptoms that can occur in classic myocardial infarction are chest pain that can last long and intense, cold sweats, nausea and vomiting, and a feeling as if you are facing death. International Pain Association (1997 in Sulastri et al., 2018) describes pain as an unpleasant feeling and emotional experience associated with actual or risk of tissue damage. Acute pain is a major problem in AMI patients. Acute pain is a sensory or emotional experience related to actual or functional tissue damage, with sudden or slow onset and mild to severe intensity lasting less than three months (SDKI DPP PPNI Working Group Team, 2017). NSTEMI is a cardiovascular disease that is one of the biggest causes of disability and death worldwide. NSTEMI causes death of 6% -14% of the total number of patient deaths caused by ACS. In Indonesia more than 3 million people per year are estimated to get STEMI and more than 4 million people experience NSTEMI (Pertiwi, 2020). In East Java, NSTEMI is one of the 20 most common diseases in hospitals in East Java province, which is around 1.45% (East Java Health Office, 2010 in Diamonds, 2019). Data obtained from the ICU room at BDH Hospital, the incidence of NSTEMI at BDH Hospital in the ICU room from June was 6 cases, NSTEMI is the main disease suffered by patients in the ICU room at BDH Hospital and based on data from the ICU room at BDH Hospital acute pain is a nursing problem which is a priority in NSTEMI disease.

A preliminary study at the ICU of the Bhakti Dharma Husada Regional General Hospital in Surabaya, in June 2023, found the observation that 3 out of 4 patients were suffering from NSTEMI. The results of the researcher's interviews with (3 or 4) NSTEMI patients, said that they often felt pain for 10-15 minutes, the pain was sometimes intermittent and persisted according to each patient's complaints in the left chest. The pain is like being stabbed, and some feel like they are being pressed by a heavy object. Pain is usually felt together with cold sweat, feeling like nausea and vomiting, feeling weak, dizzy, feeling floating. In the end, the patient will refuse to eat and the patient will feel anxious and restless.

In a normal heart, the need for oxygen will be met as needed. The presence of coronary artery blockage causes impaired tissue perfusion so that it cannot meet the oxygen supply according to the body's demand resulting in ischemia and triggering the occurrence of anaerobic metabolism. This condition will produce lactic acid which can cause pain in the myocardial muscles. In this condition,

the heart should rest, but as long as humans are still alive, the heart will continue to work and this condition will exacerbate myocardial infarction (Sulastri et al., 2018).

This condition will show signs and symptoms of chest pain such as being hit by a heavy object, nausea, vomiting accompanied by cold sweat, and shortness of breath. Shortness of breath arises due to a blockage in the blood vessels which results in cell damage so that the heart does not work optimally and is unable to provide oxygen supply which is characterized by shortness of breath, increased heart rate, there are signs of heart failure, shock then a decrease in oxygen saturation <90% (Hidayati, 2021).

Pain management must be done as quickly as possible to prevent sympathetic nerve activation because this sympathetic nerve activation can cause tachycardia, vasoconstriction, and increased blood pressure which in later stages can exacerbate the burden on the heart and expand myocardial damage. The goal of pain management is to reduce cardiac oxygen demand and to increase oxygen supply to the heart. The initial pharmacological therapy given to AMI patients is Morphine, Oxygen, Nitrates, and Aspirin, abbreviated as MONA, which do not have to be given all or together according to the patient's response (Isriani, 2018).

Pharmacological pain management is an effort or strategy to cure pain using drugs. In addition, non-pharmacological management can also be given, namely several actions to treat pain through physical stimulation or cognitive behavior such as relaxation. This relaxation is an action to free physically and mentally from tension and stress which in turn can increase tolerance to pain. One simple relaxation technique is through abdominal breathing with a slow frequency with a regular rhythm. The patient breathes slowly and regularly with a comfortable feeling while closing his eyes. To maintain a regular and constant rhythm, the patient is encouraged to count silently slowly on inspiration ("inhale, two, three"), as well as on expiration ("exhale, two, three") (Sofiah and Roswah, 2022).

Meanwhile, according to research by Isriani (2018), Al-Qur'an reading therapy is proven to activate body cells by converting sound vibrations into waves that are captured by the body, reducing pain receptor stimuli and the stimulated brain secretes endogenous natural opioid analgesics to block pain nociceptors. Therefore, the application of deep breathing relaxation and Murattal therapy to NSTEMI patients who experience acute pain is expected to make patients feel more comfortable.

METHODS

Study Design

This research is a descriptive study that describes case management in applying evidence-based nursing practice using the nursing care process approach.

Settings

The location of this case study was carried out in the ICU Room of the Bhakti Dharma Husada Hospital, Surabaya, held on June 20-22, 2023, the application of occupational therapy was carried out for 3 days.

Research subject

The participant used was a 55-year-old patient with a diagnosis of NSTEMI who experienced acute pain in the ICU Room of the Bhakti Dharma Husada Hospital, Surabaya.

Instruments

The instrument used is an observation sheet with a measurement scale using a Numerical Rating Scale.

Data collection

Before administering the deep breathing relaxation and the Murratal therapy, the researcher measured the pain level of the participants. After that, the researcher administered the deep breathing relaxation and the Murratal therapy once a day with a duration of ± 25 minutes for each administration. The intervention was given for 3 days. After administering the intervention, the researcher evaluated the pain level of the participants.

Data Analysis

The research employed qualitative methods for data analysis, including in-depth interviews, patient observations, and documentation of medical records.

Ethical Consideration

This research has obtained implementation permits from Universitas Nahdlatul Ulama Surabaya and the Bhakti Dharma Husada, Surabaya.

RESULTS

The results after 3 days of pain management interventions, the client's complaints of pain decreased, grimacing decreased, protective attitude decreased, anxiety decreased, sleep patterns improved and blood pressure improved. The results of the analysis of the application of deep breathing relaxation therapy and Murattal Al-Qur'an with a numeric rating scale, before therapy, the results showed a pain scale of 5 and after therapy, the pain scale dropped to number 2, which means there was a decrease in the patient's pain level after it was done deep breathing relaxation therapy and the Murattal Al-Quran.

DISCUSSION*Description of Nursing Care**Nursing Assessment*

At the time of assessment, Mr. I's general condition appeared weak, the patient general condition was weak, GCS 4/5, BP: 144/92 mmHg, N: 79x/minute, S: 36°C, RR: 20x/minute, SPO₂: 99% of patients had O₂ installed nasal 4 Lpm. With complaints of chest pain 1 day ago pain felt when the patient was active, pain like being stabbed, pain in the chest translucent to the back, a pain scale of 5, and complaints of persistent pain, the patient looked grimacing in pain, the patient seemed difficult to sleep, the patient appeared restless and the position of the patient seemed to avoid pain. EKG results in

ER/20/6/2023 at 16.19: normal sinus rhythm 93x/m, right bundle branch block, left anterior fascicular block, abnormal ECG, ICU EKG 20/6/2023 at 22.00: Conclusion Deep breathing relaxation and Murattal therapy significantly reduce acute pain in NSTEMI patients. These findings underscore the importance of integrating non-pharmacological interventions in cardiovascular nursing care. Further research should examine their scalability across diverse populations and clinical settings.: Sinus rhythm 68x/min, frontal axis RAD, high lateral anteroseptal NSTEMI, results of serological laboratory tests: Troponin I 4063.

In line with the results of Pertiwi's research, 2020 which said that at the time of pain assessment, complaints of pain were usually found for a long time, namely at least 30 minutes, chest pain that occurs suddenly or spontaneously and does not subside continuously, usually over the lower sternal region and upper abdomen, this is the main symptom. Pain and pressure in the chest can be accompanied by cold sweats or feelings of fear. Usually, chest pain radiates to the left arm, shoulder, and neck to the epigastrium, but in certain people, the pain is felt only slightly (Pertiwi, 2020).

The author assumes that the condition of pain in NSTEMI patients occurs due to coronary artery blockage causing impaired tissue perfusion so that it cannot meet the oxygen supply according to the body's demand resulting in ischemia and triggering anaerobic metabolism. This condition will produce lactic acid which can cause pain in the myocardial muscles.

Nursing Diagnoses

From the study above, it was found that Mr. I was an NSTEMI patient with priority nursing problems that emerged, namely marked acute pain by complaining of pain in the past 1 day ago, looking grimacing, appeared restless and the position of the patient seemed to avoid pain. insomnia and blood pressure increased by 144/92 mmHg. Acute pain is related to a physiological injurious agent (ischemia). This is to the theory contained in the IDHS book with major and minor criteria, namely complaining of pain, grimacing, difficulty sleeping, anxiety, positions to avoid pain, and increased blood pressure (SDKI DPP PPNI Working Group Team, 2017).

In line with Nugraha and Trihartanto (2021), NSTEMI is defined as an ECG picture of ST segment depression or prominent T wave inversion with positive biomarkers of necrosis (e.g. troponin) with no ST segment elevation on the EKG and consistent with the clinical picture (discomfort in the chest or according to angina). The main symptom of NSTEMI is angina or chest pain. Coronary artery blockage results in impaired tissue perfusion so that it cannot meet the oxygen supply according to the body's demand. This results in ischemia and triggers anaerobic metabolism. This condition will produce lactic acid which can cause pain in the myocardial muscles (Nugraha and Trihartanto 2021).

According to the author, in the initial assessment conducted on Mr. I, there was pain in the chest that penetrated the back, which was characterized by pain felt when the patient was doing strenuous activities, pain like stabbing, pain in the chest translucent to the back, pain scale 5, and complaints pain

persists, the patient looks grimacing in pain, the patient looks difficult to sleep, the patient looks restless and the patient's position seems to avoid pain, so this is closely related to the problem of acute pain.

Nursing Intervention

Interventions to address acute pain nursing problems with pain management, deep breathing relaxation therapy and Murattal therapy. After 3 days of action pain management, deep breathing relaxation therapy, and Murattal therapy with the actions of the first intervention, namely: identification of location, characteristics, duration, frequency, quality, pain intensity, identification of pain scale, identification of aggravating and alleviating factors of pain, provide non-pharmacological techniques to reduce pain, control the environment that aggravates pain, collaborate with analgesics. The actions of the second intervention are: create a calm and undisturbed environment with comfortable lighting and room temperature, if possible, provide written information about preparation and procedures for relaxation techniques, use loose clothing, use a soft tone of voice with a slow and rhythmic rhythm, use relaxation as a Supportive strategy with analgesics or other medical measures, if appropriate. The actions of the third intervention are: position in a comfortable position and environment, Limit external stimuli during therapy (e.g. lights, sounds, visitors, telephone calls), make sure the volume used is according to the wishes of the patient, play the recording that has been set,) with a total duration of + 25 minutes it is expected that the pain level will decrease with the outcome criteria: decreased pain complaints, decreased grimacing, decreased protective attitude, decreased anxiety, improved sleep patterns, and improved blood pressure.

This is to Isriani's research (2018) that interventions that can be carried out in acute pain patients are pain management by administering initial pharmacological therapy consisting of Morphine, Oxygen, Nitrates, and Aspirin abbreviated as MONA which does not have to be given all or simultaneously according to the patient's response and the administration of therapy nonpharmacological for the patient. In line with the opinion of Sofiah and Roswah (2022) interventions performed in acute pain patients viz through physical stimulation or cognitive behavior such as relaxation. This relaxation is an action to free physically and mentally from tension and stress which in turn can increase tolerance to pain. One simple relaxation technique is through abdominal breathing with a slow frequency with a regular rhythm. The patient breathes slowly and regularly with a comfortable feeling while closing his eyes. To maintain a regular and constant rhythm, the patient is advised to count slowly silently on inspiration (“inhale, two, three”), as well as on expiration (“exhale, two, three”). According to research by Isriani (2018) Pain is also carried out by giving Murattal Al-Qur'an therapy, Al-Qur'an reading therapy is proven to activate body cells by converting sound vibrations into waves that are captured by the body, reducing pain receptor stimuli and the stimulated brain secretes endogenous natural opioid analgesics to block pain nociceptors (Isriani, 2018).

According to the authors, the interventions performed on clients are pain management, deep breathing relaxation therapy, and Murattal therapy. Pain management that can be given as initial therapy for patients with angina includes aspirin, oxygen, nitroglycerin, and morphine sulfate. Usually

abbreviated as MONA it stands for morphine, oxygen, nitroglycerin, aspirin (although not according to the actual order). Oxygen is administered via nasal cannula at a rate of 2-4 L/min to maintain O₂ saturation over 90%. By increasing the amount of oxygen delivered to the myocardium, the addition of oxygen will reduce the pain associated with myocardial ischemia.

Non-pharmacological therapies such as deep breathing relaxation can also accelerate healing because deep breathing relaxation can increase the concentration of oxygen in the blood and provide a sense of calm so that you become more relaxed and help stretch your muscles which will make your mood calmer and also more relaxed and therapeutic. The Murattal which is carried out will stimulate the brain to produce chemicals, namely neuropeptides which function to strengthen receptors in the body and provide feedback so that it will create a feeling of pleasure and comfort. These three therapies can be used as a combination of pharmacological therapy and non-pharmacological therapy and can accelerate the healing of clients with pain.

Nursing Implementation

The implementation carried out on Mr. I was by existing interventions, namely by carrying out pain management, deep breathing relaxation therapy, and Al-Qur'an Murattal therapy carried out 1x/day for 3 days with a total duration of $\pm$ 25 minutes. Implementation is carried out by the interventions made and adapted to the nursing problems found in the client.

The implementation carried out by the EBN by doing with the implementation of pain management, deep breathing relaxation therapy, and Murattal therapy with the actions of the first intervention, namely: Identification of location, characteristics, duration, frequency, quality, pain intensity, identification of pain scale, identification of aggravating and alleviating factors of pain, provide non-pharmacological techniques to reduce pain, control the environment that aggravates pain, collaborate with analgesics. The actions of the second intervention are: create a calm and undisturbed environment with comfortable lighting and room temperature, if possible, provide written information about preparation and procedures for relaxation techniques, use loose clothing, use a soft tone of voice with a slow and rhythmic rhythm, use relaxation as a Supportive strategy with analgesics or other medical measures, if appropriate. The actions of the third intervention are: position in a comfortable position and environment, Limit external stimuli during therapy (e.g. lights, sounds, visitors, telephone calls), make sure the volume used is according to the wishes of the patient, play the recording that has been set, complaints of decreased pain, decreased grimacing, decreased protective attitude, decreased anxiety, improved sleep patterns, improved blood pressure.

According to Isriani's research (2018), the intervention that can be carried out in acute pain patients is pain management by administering initial pharmacological therapy consisting of Morphine, Oxygen, Nitrates, and Aspirin abbreviated as MONA which does not have to be given all or together according to the patient's response. Oxygen is administered via nasal cannula at a rate of 2-4 L/min to maintain O₂ saturation over 90%. In line with the research of Sofiah and Roswah (2022), the patient has

taken action to reduce pain with deep breathing relaxation techniques. This technique was carried out for 3 meetings with a duration of 10 minutes each. The results obtained from the study (Sari, et al., 2023) were that there was a reduction in pain and a decrease in the pain scale and the administration of Murattal Al-Quran therapy which was carried out for 3 days with a duration of 15-20 minutes can also affect the level of pain in patients so that it does not interfere the patient's comfort while undergoing treatment besides that the Murattal Al-Qur'an also has a calming effect on the patient so that it can speed up recovery.

Based on this, the authors implemented pain management, deep breathing relaxation therapy, and Murattal therapy for patients which were carried out 1x/day for 3 days with a total duration of + 25 minutes according to the planned intervention. The implementation results obtained reduced pain, this is by previous research that a combination of pain management, deep breathing relaxation therapy, and Murattal can reduce pain levels.

Nursing Evaluation

The nursing evaluation was carried out for 3 days from 20-22 June 2023 on Mr. I, namely, there are no complaints of chest pain, the patient says they feel comfortable and relaxed when doing deep breathing relaxation, and feel more relaxed and calm when given Murattal Al-Qur'an therapy, P: pain during strenuous activity, Q: like being stabbed, R: pain in the chest translucent to the back, S: pain scale 2, T: the pain is starting to disappear, the patient no longer looks grimacing in pain when he feels pain, the patient can sleep. Complaints of pain from a scale of 4 (severely increased) to 2 (severely decreased), Grimace from a scale of 4 (moderately increased) to 2 (moderately decreased), Protective Attitude from a scale of 4 (slightly increased) to 2 (moderately decreased), Anxiety from a scale 4 (moderately improved) to 2 (moderately decreased), blood pressure from 2 (moderately worsened) to 4 (moderately improved).

According to Nurfatimah's research, (2022) evaluation of pharmacological therapy, namely giving antiplatelet drugs and aspirin to both patients. Treatment is aimed at restoring coronary vascular flow as much as possible to prevent further myocardial damage, and prevent sudden death by monitoring and treating it appropriately. As well as providing oxygen therapy at 3 Lpm. This therapy aims to increase oxygen saturation, prevent or improve tissue hypoxia, and maintain oxygenation to remain adequate (Nasanah, 2021).

In line with Majid's research (2020) when assessing the level of pain scale, a pain scale of 6 was obtained, but after being given therapy, giving breathing relaxation techniques, the pain scale was reduced by being measured with a numeric rating scale, a scale of 3 was obtained, so it can be concluded that there is an effect of providing relaxation techniques deep breath for pain The research results obtained from Agustin (2020) show that there is an effect of Al-Qur'an Murattal intervention on the pain intensity of coronary heart patients at Sultan Imanuddin Pangkalan Bun Hospital. Giving Al-Qur'an

Murotal intervention can provide a relaxing effect in that it stimulates the release of endorphins it can reduce pain intensity.

According to the authors, the acute pain nursing problem that has been resolved is by the expected outcome criteria at the PPNI SLKI (2018) the output of pain levels is decreased pain complaints, decreased grimacing, decreased protective attitude, decreased anxiety, improved sleep patterns, improved blood pressure. According to the author, this result can be achieved because the implementation is carried out correctly and routinely and for good cooperation between the author and Mr. I as a patient.

Analyzing the application of deep breathing relaxation therapy and Al-Qur'an Murattal therapy

At the time of administering the implementation of the therapy according to the intervention on Tn. I that had been prepared and by the EBN he did with the implementation of pain management, deep breathing relaxation therapy, and Murattal therapy with the actions of the first intervention, namely: provide nonpharmacological techniques to reduce pain, control the environment that aggravates pain. The actions of the second intervention are: create a calm and undisturbed environment with comfortable lighting and room temperature, if possible, provide written information about preparation and procedures for relaxation techniques, use loose clothing, use a soft tone of voice with a slow and rhythmic rhythm, use relaxation as a Supportive strategy with analgesics or other medical measures, if appropriate. The actions of the third intervention are: position in a comfortable position and environment, limit external stimuli during therapy (e.g. lights, sounds, visitors, telephone calls), $\pm$ 25 minutes, according to SOP (Standard Operating Procedure) which refers to EBN (Evidence Based in Nursing). With the results Complaints of pain from a scale of 4 (severely increased) to 2 (severely decreased), Grimace from a scale of 4 (moderately increased) to 2 (severely decreased), Protective Attitude from a scale of 4 (moderately increased) to 2 (moderately decreased), Anxiety from a scale of 4 (moderately improved) to 2 (moderately decreased), blood pressure from a scale of 2 (moderately worsened) to 4 (moderately improved), sleep patterns from a scale of 2 (moderately worsened) to 4 (moderately improved).

In line with the research of Sofiah and Roswah (2022), the patient has taken action to reduce pain with deep breathing relaxation techniques. This technique was carried out for 3 meetings with a duration of 10 minutes each. According to research by Sumardi (2019), the evaluation obtained was deep breathing relaxation by reducing the frequency of breathing from 16-19 times in one minute to 6-10 times in one minute. Deep breathing relaxation will stimulate the emergence of nitric oxide which will enter the lungs and even the brain center which functions to make people calmer so that high blood pressure will decrease (Sumardi, 2019).

According to research conducted by Aziza (Aziza, 2019) states that Murottal Al-Quran AlRahman therapy has a relaxing effect when it is played to clients who are undergoing treatment, especially in the ICU. In Surah Ar-Rahman which has many verses when recited repeatedly, it has the

effect of diverting attention and functions as a hypnotic which lowers the patient's brain waves. Characteristics of the letter Ar-Rahman has a tempo of 79.8 bpm. This tempo category is included in a slow tempo and line with a normal heart rate so that the client's heart rate will be in sync with the Murattal tempo. The tempo of Murattal Al-Qur'an is also between 60-70/minute, and the tone is low so that it has a relaxing effect and can reduce stress and hypnosis to divert attention to painful conditions.

According to the author, Implementation carried out on Mr. I is by existing interventions, namely by carrying out pain management, deep breathing relaxation therapy, Al-Qur'an Murattal therapy carried out 1x/day for 3 days with a total duration $\pm$ 25 minutes, the acute pain nursing problem that has been resolved is by the expected outcome criteria at the PPNI SLKI (2018) the output level of pain is decreased pain complaints, decreased grimacing, decreased protective attitude, decreased anxiety, improved sleep patterns, improved blood pressure. According to the author, this result can be achieved because the implementation is carried out correctly and routinely and for good cooperation between the author and Mr. I as a patient. The implementation results obtained reduced pain, this is by previous research that a combination of pain management, deep breathing relaxation therapy, and Murattal can reduce pain levels.

LIMITATIONS

This study has several limitations. First, the sample size is relatively small, which may affect the generalizability of the findings. Second, the study does not account for potential confounding variables that could influence the outcomes of deep breathing relaxation and Murattal therapy. Third, the duration of follow-up is limited, making it difficult to assess the long-term effects of the intervention. Lastly, the study relies on self-reported pain assessments, which may introduce subjective bias. Future research with a larger sample size, longer follow-up periods, and objective pain measurement methods is recommended.

CONCLUSION

This study concludes that the application of deep breathing relaxation and Murattal therapy is effective in reducing acute pain in NSTEMI patients. These non-pharmacological interventions can serve as complementary approaches to conventional medical treatments, providing a holistic method for pain management.

The findings suggest that integrating these relaxation techniques into nursing care can enhance patient comfort and recovery. Healthcare providers, particularly nurses, should consider incorporating deep breathing relaxation and Murattal therapy as part of comprehensive pain management strategies. Additionally, further research with a larger sample size and longer follow-up is recommended to validate these results and explore the long-term benefits of these therapies.

AUTHOR CONTRIBUTION

Kartika Milaningrum: Perform nursing care with the application of free time occupational therapy to overcome low self-esteem.

Nur Ainiyah: Assist and direct the author in compiling the final scientific work.

Umdatus Soleha: Contribute to the improvement of the final scientific work.

Firdaus: Contribute to the improvement of the final scientific work.

ORCHID

Kartika Milaningrum : None.

Nur Ainiyah : None.

Umdatus Soleha : None.

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CONFLICT OF INTEREST

There is no conflict of interest in this research.

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