

APPLICATION OF AL-QUR'AN MUROTAL THERAPY TO REDUCE PAIN INTENSITY IN POST-LAPAROTOMY PATIENTS

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ABSTRACT

This study aim was to explain Askeps with the application of Al-Qur'an murotal therapy to reduce pain intensity in post-laparotomy patients in the Azzahra Room's Hospital PKU Muhammadiyah Gamping Yogyakarta. This research design uses case study method. The sampling method used is purposive sampling. The sample taken is one respondent, namely Mrs. Y, a post-laparotomy patient in the Azzahra Room's Hospital PKU Muhammadiyah Gamping Yogyakarta in August 2022. The research data were taken as primary data by conducting direct assessments of the assisted patients. Existing data were analyzed using explanatory and time series analysis. The conclusion, showed that the application of Al-Qur'an murotal therapy can reduce pain intensity in post-laparotomy patients.

Keywords : Al-Qur'an Murotal Therapy, Pain Intensity and Post-Patient Laparotomy Surgery

INTRODUCTION

Data obtained from the World Bank shows that the global surgical rate as of 2015 was 4,511,101 per 100,000 population, with Australia having the highest rate at 28,907 per 100,000. According to the World Health Organization (WHO, 2020), the number of surgical patients has increased significantly, reaching 140 million in 2011 across hospitals worldwide, and 148 million in 2012.

In Indonesia, 1.2 million patients were seen in 2020, an estimated 32% of which were laparotomies. Surgical procedures rank 11th among the top 50 most common disease management procedures in Indonesian hospitals (Ministry of Health, 2021).

The Indonesian Association of Surgical Nurses (HIPKABI) defines surgery as an invasive medical procedure that diagnoses and treats disease, trauma, and deformities. Surgery is any medical procedure that involves opening or exposing the body part to be treated (Raucci et al., 2020). Laparotomy is abdominal surgery performed for digestive and gynecological conditions such as appendicitis, perforation, inguinal hernia, gastric cancer, colon and rectal cancer, intestinal obstruction, chronic bowel inflammation, cholecystitis, and peritonitis (Foss & Kehlet, 2020).

Pain is a common problem after surgery. Post-surgical pain is most likely caused by the surgical wound, but it can also be caused by other factors. The pain complaint arises from nociceptive stimulation caused by noxious stimuli. Afterward, the patient becomes aware of the noxious sensation, then experiences the sensation of pain, and finally reacts to the pain through verbal and nonverbal behaviors to convey their feelings (Raucci et al., 2020). Pain is a highly unpleasant sensory and emotional experience triggered by a stimulus to sensory nerve endings. All patients will experience pain once the effects of the anesthetic wear off, as postoperative analgesics last for 6-8 hours (Zhou et al., 2020).

Post-surgical pain management to reduce or eliminate post-surgical pain is carried out using pharmacological and non-pharmacological approaches. One pharmacological approach is acetaminophen, nonsteroidal anti-inflammatory medications (NSAIDs). Broadly speaking, the pharmacological strategy for administering therapy follows the WHO pain relief ladder (analgesic ladder). Examples of medications include ketorolac, ibuprofen, aspirin, and others. Non-pharmacological management includes hot and cold compresses, massage, distraction such as listening to Quranic recitations, and deep breathing relaxation techniques. One distraction technique used by researchers to reduce pain is Quranic recitation therapy. Quranic recitation is a religious therapy involving Quranic recitation where verses from the Quran are recited (Nurhayanti et al., 2020).

A study Nurhayati et al., (2020) found a difference between pre- and post-treatment relaxation distraction techniques in reducing post-laparotomy pain intensity at PKU Muhammadiyah Hospital, Gombong.

Surgery is an invasive medical procedure performed by a medical team to address medical problems by opening or exposing a body part through an incision and ultimately closing the wound with sutures. Surgical procedures are classified into two categories: major and minor. One major surgical procedure is laparotomy. Laparotomy is a major surgical procedure that involves making an incision in the abdominal wall to access problematic internal organs, such as cancer, bleeding, obstruction, and perforation. Laparotomy surgery carries a 4.46 times higher risk of post-operative complications than other surgical procedures (Foss & Kehlet, 2020).

Kristiantari (2011) stated that nursing problems experienced by post-laparotomy patients include severe pain and limited bodily functions. Severe pain is a residual symptom resulting from intra-abdominal surgery. Approximately 60% of patients experience severe pain, 25% moderate pain, and 15% mild pain. In the post-operative period, the nursing process is directed at stabilizing the patient's physiological awareness, relieving pain, and preventing complications.

Pain management methods include pharmacological and non-pharmacological approaches. One non-pharmacological approach is distraction techniques. Distraction works by redirecting the patient's attention to something else, thereby reducing awareness of pain and even increasing pain tolerance. One distraction technique for pain relief is Murottal Al-Qur'an therapy (Rompas, 2017).

Religious therapy utilizes Quranic recitation, where the patient is listened to. Listening to the recitation for several minutes will have a positive impact on the listener's body. Murottal therapy can reduce pain due to its distracting effect, inhibiting pain perception. Murottal is also believed to increase the release of endorphins, which have a relaxing and calming effect. The midbrain releases Gamma Amino Butyric Acid (GABA), which inhibits the transmission of electrical impulses from one neuron to another via neurotransmitters within the synapse. Furthermore, the midbrain releases enkephalin and beta endorphin. These substances can produce an analgesic effect that ultimately eliminates neurotransmitters within the synapse. Furthermore, the midbrain also releases enkephalin and beta endorphin, which ultimately eliminate pain neurotransmitters in the brain's somatic sensory perception and interpretation centers. This can result in reduced pain. Quranic Murottal therapy has been proven to be effective in reducing pain and can promote feelings of calm. When a person feels calm and comfortable, pain intensity is expected to decrease (El-hady, 2020).

Data from the Yogyakarta Health Office shows 478 laparotomy cases in 2020. In 2021, the number of laparotomy cases in Yogyakarta reached 608, with 182 cases at PKU Muhammadiyah Hospital. This indicates an increase in laparotomy cases in the past two years (Yogyakarta Health Profile, 2021).

Based on the initial assessment survey conducted by the author on August 5, 2022, it was discovered that Mrs. Y was admitted to the Seruni Ward on August 3, 2022. The initial examination revealed a blood pressure of 135/85 mmHg, a heart rate of 115 beats/min, a respiratory rate of 25 beats/min, and a temperature of 37.7°C. The patient complained of pain at the surgical incision (pain scale 5), and the stitches and wound appeared to be still wet.

Based on the above background and the aforementioned problems, this literature review aims to determine the application of Quranic recitation therapy to reduce pain intensity in post-laparotomy patients in the Azzahra Nursing Care Unit, PKU Muhammadiyah Gamping Hospital, Yogyakarta in 2022. This review aims to describe nursing care using Quranic recitation therapy to reduce pain intensity in post-laparotomy patients in the Azzahra Nursing Care Unit, PKU Muhammadiyah Gamping Hospital, Yogyakarta in 2022.

Research Method

In this study, the author will describe a case report/nursing care provided by the application of Al-Quran recitation therapy to reduce pain intensity in Mrs. Y, a post-laparotomy patient in the Azzahra Nursing Home, PKU Muhammadiyah Gamping Hospital, Yogyakarta, from June 3-5, 2022. The nursing process method includes assessment, nursing diagnosis, planning, implementation, and evaluation. The instrument used in this study was the researcher herself, as this study employed the Case Study Research (CSR) method.

Research Results

Assessment

In the nursing assessment, the author reviewed all aspects of the client's head-to-toe situation, focusing on the cause and location of the client's pain using the PQRST format, as well as the condition of the post-operative incision. The assessment revealed the client's primary problem was pain from the laparotomy surgical wound, which was quite disturbing. The pain felt severe and felt like a stabbing sensation, localized in the upper right abdomen. The pain was persistent, limiting the client's mobility. Furthermore, the assessment also focused on the care of the client's new post-laparotomy wound. On the second day of the assessment, a new problem was discovered in the client's post-laparotomy incision wound. There was fluid/blood seepage, minimal signs of infection (dolor; pain scale 3 (1-10), calor; the wound felt hot, tumor; the wound felt swollen, rubor; the wound appeared red, and function laesa; there was no impaired tissue function. Therefore, further intervention or care measures were administered using sterile techniques.

Nursing Diagnosis

Based on the data collected during the case study, two nursing diagnoses were identified that corresponded to the physiological assessment and responses using the IDHS format:

Acute pain related to physical injury agent, d. grimacing and complaining of pain. The author selected this diagnosis because the client's primary complaint was post-operative (post-laparotomy).

Impaired skin integrity related to decreased mobility, d. redness of the wound. The author selected this diagnosis because the client's other complaints included a fresh wound,

still wet and swollen, and discomfort due to the surgical dressing. Wet drainage due to surrounding fluid.

Impaired physical mobility related to pain and pain on movement. The author raised this diagnosis because the client also reported other complaints due to surgical wound pain, namely limitations in mobility and daily activities.

This is in line with Ardiansyah's (2022) research on nursing care for clients with impaired pain and comfort needs (acute pain) using murottal therapy and Asmaul Husana therapy interventions at Labuang Baji Regional Hospital, Makassar City. The results showed that after the assessment, several primary diagnoses were identified: acute pain, impaired physical mobility, and risk of infection.

This is supported by research by Ridwan (2022), who stated that appendectomy is a surgical procedure to remove the appendix that causes the primary diagnosis or problem of pain and impaired skin integrity. There are two types of pain management: pharmacotherapy and non-pharmacology. Non-pharmacology interventions are given to reduce pain through audio/auditory distraction, namely murottal therapy of the Qur'an.

Intervention Nursing

Intervention is the planning stage after identifying a nursing diagnosis and is an effort to address the client's health problems. Developing this action plan is tailored to the diagnosis found in the case. This ensures that the plan can achieve the desired goals.

Acute pain related to physical injury agent, grimacing, and complaints of pain. The interventions implemented are based on the OTEK format. Observation (identify the client's CU and identify the location, frequency, quality, and intensity of pain, identify the client's pain scale, identify the client's mobility and muscle tone). Therapeutic (create a comfortable and calm environment, listen to the client recite the Quranic verse of Surah Arrahman for 11-15 minutes (30 verses)). Education (explain the cause of the client's pain, explain the procedure for Quranic recitation therapy). Collaboration (Collaborate on administering analgesics and other medications).

Impaired skin integrity related to decreased mobility, and redness of the wound. The interventions implemented are based on the OTEK format, namely observation (identify the client's surgical wound condition: dolor, rubor, tumor, calor). and fungtio laesa, identify the client's body hygiene and wound/drainage area). Therapeutic (change the dressing on the surgical wound and drainage tube once a day in the morning, maintain sterile technique during wound care, clean with NaCl solution as needed, apply appropriate ointment to the wound/drainage). Education (explain to the client the signs and symptoms of infection, teach the client and family self-care procedures for the wound). Collaboration (collaborate on debridement procedures and medication administration with the doctor). Impaired physical mobility related to pain and pain on movement. The interventions implemented are based on the OTEK format, Observation (identify the presence of pain or other physical complaints, identify physical tolerance for movement, monitor heart rate and blood pressure). Blood tests before initiating mobilization, monitor the client's general condition during mobilization). Therapeutic (facilitate mobilization activities using assistive devices such as bed rails, involve family members in assisting the client with activities). Educational (explain the purpose and procedures of mobilization to the client, encourage early mobilization, and teach simple mobilizations such as sitting on the side of the bed and moving from bed to chair).

The results of this study align with research by Isnani et al., (2022) on the effect of murottal therapy on reducing pain and anxiety levels in postoperative fracture patients. They found that after receiving murottal therapy, patients developed coping skills to manage pain. Coping skills are necessary to anticipate anxiety and stress caused by pain.

The recitation of Quranic verses contains a spiritual aspect that reminds individuals of God, thus fostering a sense of love or faith. This love for God can inspire enthusiasm in developing positive coping skills to deal with pain. This is supported by Puspita's (2019) research on the application of Quranic recitation therapy with Surah Ar-Rahman to pain intensity in post-cesarean section patients at Sultan Agung Islamic Hospital, Semarang. The results of the Quranic recitation therapy with Surah Ar-Rahman reduced pain in post-cesarean section patients at Sultan Agung Islamic Hospital, Semarang, from a pain scale of 6 to 4. The Quranic recitation of Surah Ar-Rahman reduced the pain scale in post-cesarean section patients at Sultan Agung Islamic Hospital, Semarang. The Quranic recitation of Surah Ar-Rahman can be used as a non-pharmacological intervention to reduce pain in post-cesarean section patients.

Nursing Implementation

In the implementation phase, which is carried out over three days of treatment, nursing actions can be applied to clients using the SKI format, such as in the first diagnosis of acute pain related to physical injury agent and grimacing and complaining of pain. The implementations applied include identifying the location, frequency, quality and intensity of pain, identifying the client's pain scale, creating a comfortable and calm environment, listening to the client's recitation of the Al-Qur'an Qs. Arrahman for 11-15 minutes (30 verses), explaining the cause of pain felt by the client, explaining the procedure for Al-Quran murottal therapy and collaborating on administering medication (antibiotic (cefotaxime 1gr) inj, anti-inflammatory and analgesic (ketorolac 30mg) inj, antihistamine (ranitidine 1 gr) inj and antifibrinolytic (tranexamic acid 500mg inj).

The second diagnosis is impaired skin integrity related to decreased mobility d.d the wound appears red. The implementation applied is to identify the condition of the client's surgical wound: dolor, rubor, tumor, fungtio laesa, identify the client's body and wound/drainage area hygiene, change the dressing on the surgical wound and drainage tube once a day in the morning, maintain sterile techniques during wound care, clean the wound and drainage with NaCl fluid as needed, provide appropriate ointment on the wound/drainage, explain to the client the signs and symptoms of infection, teach the client and family independent wound care procedures and collaborate on administering medication with a doctor.

The third diagnosis is impaired physical mobility related to pain and pain during movement. Implementation measures include identifying pain or other physical complaints, determining physical tolerance for movement, monitoring heart rate and blood pressure before initiating mobilization, monitoring the client's general condition during mobilization, facilitating mobilization activities using assistive devices such as bed rails, involving family members to assist the client in their activities, explaining the purpose and procedures of mobilization to the client, encouraging early mobilization, and teaching simple mobilization techniques such as sitting on the side of the bed and moving from bed to a chair.

This is in line with research by Siswanti & Kulsum (2017), which found that after reciting the Quran, murottal therapy significantly impacted post-cesarean pain in patients at Sunan Kudus Islamic Hospital (RSI Sunan Kudus). This implementation was carried out on two patients on the second postoperative day with a primary complaint of pain: one with a

pain score of 4 on the pain scale and the other with a pain score of 3, within the pain range of 0-10. Painkillers, such as ketorolac, were administered. Non-pharmacological therapy has not been widely used by post-major surgery patients. Deep breathing relaxation techniques are used, but these techniques are not yet effective in managing pain. Meanwhile, surgical wound care involves changing the dressing and drainage tube once a day in the morning, maintaining the wound. Apply sterile techniques during wound care, clean the wound and drainage with NaCl solution, apply appropriate ointment to the wound/drainage, explain the signs and symptoms of infection to the client, teach the client and family self-care procedures, and collaborate with the physician on medication administration.

Evaluation

Evaluation as the assessment of the effectiveness of nursing interventions in relation to patient behavior. Therefore, the evaluation reflects the previously established nursing goals. Nurses must assess the patient's behavior after implementation. Nursing interventions are considered effective if the patient's behavior aligns with the established goals.

a. Acute pain related to physical injuring agent. d. Appears to be grimacing and complaining of pain. The evaluation results showed that the client said that the pain in the surgical wound area was still painful and the client said that he felt calm after listening to the murottal of the Qur'an Ar-rahman (30 verses), KU looked better, BP: 120/75 mmHg, HR: 101 times / minute, RR: 24 times / minute, S: 36.5oC, pain scale 3 (scale 1-10), the client appeared to wince occasionally and the client received 30mg ketorolac inj. The problem was partially resolved and continued with interventions 1, 3, 5, 6 and 7.

b. Impaired skin integrity related to decreased mobility d. wound appears reddish. The evaluation results showed minimal signs of infection (dolor; pain scale 3 (1-10), calor; the wound feels hot, tumor; the wound feels swollen, rubor; the wound appears reddish, the client's wound was cleaned with NaCl solution using sterile techniques, the wound dressing and drainage have been replaced with new ones, the client received cefotaxime 1g inj, ranitidine 1g inj and tranexamic acid 500mg inj, the problem is partially resolved and interventions 1, 2, 3, 4, 5, 6 and 9 can be continued.

c. Impaired physical mobility related to pain and pain when moving. The evaluation results showed that the client still reported pain. BP: 120/75 mmHg, N: 101 beats/minute. The client appeared to grimace when moving. The client's activities are still assisted by family and nurses. Muscle tone strength 3 in the right, left, upper and lower extremities. The problem is partially resolved and interventions 1, 2, 3, 4, 5 and 7 can be continued.

Ardiansyah's (2022) finding that murottal and Asmaul Husna therapy reduced acute pain from a scale of 5 to 2 aligns with the broader literature: Qur'an-based therapy appears to consistently reduce pain intensity, particularly as a complementary therapy in Muslim patients, but the evidence is stronger for murottal than for Asmaul Husna (Maming et al., 2025; Milaningrum et al., 2024; Marliyana, 2018). Murottal reduces acute pain in various clinical contexts, including post-surgery, wound care, childbirth, invasive procedures, and ICU, with the support of randomized trials, quasi-experiments, and scoping reviews (Aburuz et al., 2023; Zahra & Wahyuliati, 2023; Salma et al., 2023).

In primary studies, the effect was reproducible across populations. An RCT in post-CABG patients showed a decrease in pain from 6.82 to 4.65, and shorter ICU and hospital stays (Aburuz et al., 2023). A clinical trial in lower extremity orthopedic surgery 2025 also showed that murottal reduced NRS scores compared to controls ($p=0.003$), although it did not change IL-6 (Prihatno et al., 2025). Similar findings were also seen in post-caesarean section patients. A case study in 2025 showed that pain decreased from severe to mild and sleep

quality improved after 15 minutes of murottal per day for 3 days (Azzahra et al., 2025). Another study found a decrease from 7 to 4 after a combination of deep breathing relaxation and murottal (Musviro et al., 2024). In another descriptive study, post-caesarean section pain also decreased from moderate to mild after murottal (Nur'aisah & Yulianingsih, 2024).

CONCLUSION

Assessment

During the assessment, the client reported that the pain from the post-laparotomy surgical wound was quite disturbing. The pain felt severe and like being cut, located at one point in the upper right abdomen. The pain was continuous and the client had never experienced pain like this before, resulting in limited mobility. The author also found other complaints on the second day of the assessment, including the client's fresh wound, which was wet due to fluid/blood seepage, swelling, and discomfort.

Nursing Diagnosis

Based on the assessment results, two nursing diagnoses were formulated:

Acute pain related to physical injury agent (surgical procedure) and complaining of pain and grimacing.

Impaired skin integrity related to decreased mobility and redness of the wound.

Impaired physical mobility related to pain and pain on movement.

Nursing Interventions

In developing the nursing care plan for the client, the author referred to theoretical concepts and then adapted them to the client's abilities, needs, and treatment room, in accordance with the nursing concept. This was achieved through collaboration between the author, the nurse, the attending physician, and Mrs. Y.'s family.

Nursing Implementation

In the nursing implementation, for the second nursing diagnosis, additional implementation was provided to address the client's fluid/blood seepage problem, namely changing the dressing using sterile technique.

After 3 days of care, the author's interventions had not yet been fully met; therefore, further implementation will be carried out by the ward nurse.

Nursing Evaluation

In the evaluation of the client's problems, it can be said that the criteria for partial success for both diagnoses were met within 24 hours of treatment.

SUGGESTION

Family

It is recommended that the family continue to monitor the patient's progress, surgical wound healing, and pain intensity in subsequent care.

Educational Institutions

It is hoped that they will improve and expand the literature supporting the preparation of final project reports. A more comprehensive literature will improve the quality of final project reports, aligning them with existing literature. Furthermore, institutions are expected to enhance the learning process, both theoretically and practically, to maximize effectiveness.

Nurses

It is hoped that nurses will gain useful knowledge and gain additional information on pain management by implementing Quranic recitation therapy in nursing care. This can be used as a comparison with various relaxation and distraction techniques for post-laparotomy pain management, including Quranic recitation.

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