

Guided Imagery Relaxation for Acute Pain in Pre-Operative Paralytic Ileus Patient: A Case Study

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ABSTRACT

Patients with paralytic ileus generally have complaints of abdominal pain of uncertain duration. The pain that appears can get worse with anxiety about something being experienced, such as a surgical action plan. Feelings of anxiety can be a stressor and cause nursing problems in the form of anxiety. Guided imagery therapy is known to be a non-pharmacological therapy in dealing with pain and feelings of anxiety in preoperative patients. This study aims to analyze the administration of guided imagery relaxation therapy to the problem of acute preoperative pain in patients with paralytic ileus. The research method used in this study was a descriptive case study. The research was conducted for three days on one patient with preoperative paralytic ileus in the Mawar Room at RSD dr. Soebandi Jember. Guided imagery therapy is carried out twice daily for 20-30 minutes. The results obtained from this study were that after pain management was carried out with guided imagery therapy, the patient's pain level decreased from the NRS 6 scale to the NRS 5 scale, respiratory frequency 20x/minute, SpO₂ 96%, blood pressure 130/100 mm Hg, pulse rate 101x/minute. Reducing the pain scale results indicate that guided imagery therapy can be applied to treat pain and anxiety in preoperative patients to improve their condition. respiratory frequency 20x/minute, SpO₂ 96%, blood pressure 130/100 mmHg, pulse rate 101x/minute. Reducing the pain scale results indicate that guided imagery therapy can be applied to treat pain and anxiety in preoperative patients to improve their condition. respiratory frequency 20x/minute, SpO₂ 96%, blood pressure 130/100 mmHg, pulse rate 101x/minute. Reducing the pain scale results indicate that guided imagery therapy can be applied to treat pain and anxiety in preoperative patients to improve their condition.

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I. INTRODUCTION

Pain is a complaint often experienced in patients with various cases, including the case of paralytic ileus (Safik, 2018). This includes physically and emotionally unpleasant feelings due to damage to the network (Amalia, 2021). Pain can be felt by patients with a medical diagnosis of paralytic ileus, namely intestinal peristaltic which stops due to inflammation of the nerve lesions, which triggers the nerves to experience paralysis (Nisa, 2021). Patients with paralytic ileus generally complain of abdominal pain of uncertain duration, fever, and tense and stiff abdomen (Marhamah, 2021).

Patients who will be given surgery require special attention, such as providing non-pharmacological therapy so that the patient can feel calmer and pain can be reduced when the pharmacological effects have been reduced in the body (Roswati, 2022). Pain management can be done with pharmacological and non-pharmacological therapy. Both of these are seen in terms of costs and benefits. Non-pharmacological management is more economical and has no side effects compared to pharmacological management. It can also reduce patient dependence on drugs (Potter & Perry, 2005).

According to WHO, 1998 stated that gastrointestinal tract diseases were

included in the top 10 diseases that cause death in the world in 2020. Gastrointestinal diseases were ranked 7th in Malaysia in 2007 with a total of 1809 cases. (WHO, 2007). In Indonesia, gastrointestinal diseases are ranked 3rd out of the 10 leading causes of death in hospitals, data from the Directorate General of Health Services, the Ministry of Health of the Republic of Indonesia, shows a total of 6,590 deaths out of 225,212 cases in 2007 and 2008 there were 6,825 total deaths out of 234,536 cases (Ministry of Health RI, 2009). Acute pain in the abdomen is a problem that is often complained to the doctor. Approximately 60% - 90% of cases of ileus cause acute abdominal pain that is not acute appendicitis. Of all ages, 1 in 1000 people is diagnosed with Ileus every year. In 2001-2002 data from Australian hospitals said that patients hospitalized for cases of paralytic ileus were estimated to be 6.5 per 10,000 population (Risqullah, 2022). According to data from the Ministry of Health RI, 200 in Indonesia reported 7,059 cases of paralytic ileus in 2004. (Ministry of Health RI, 2005). The incidence of Ileus disease at DR Soegiri Lamogan Regional General Hospital in 2016 recorded 23 cases of paralytic ileus, in 2017 there were 20 cases of paralytic ileus and in 2018 there

were 17 cases of paralytic ileus (Wati, 2019).

The causative factor of paralytic ileus is the existence of various postoperative actions such as prolonged abdominal/pelvic, lower gastrointestinal (GI) and retroperitoneal spine. In addition, the factors for the occurrence of paralytic ileus can also be caused by the use of opioids, intra-abdominal inflammation (sepsis/peritonitis), peritoneal carcinoma, perioperative complications (pneumonia, abscess), bleeding (intraoperative or postoperative), hypokalemia and enteral nutrition or improper placement of a nasogastric tube. The pain felt by patients with paralytic ileus is caused by peristaltic paralysis which causes abdominal distension, then causes stimulation of the pain nerves so that pain is perceived and can be felt by the patient (Widyawati, 2019).

In addition to the disease factors experienced by a person, pain can also be caused by anxiety about something that is being experienced such as a surgical action plan. This can cause fear and anxiety in patients who can associate surgery with pain, possible disability, becoming dependent on others and possibly death (Wijayanati, 2019). According to Khirfiyah, 2019 someone who is going to get surgery and anesthesia can think that

surgery with anesthesia will cause a person to experience a decrease in consciousness, can experience memory loss and may not even wake up at all. This stressor can increase stress reactions in the form of anxiety which can cause pain in patients.

Guided imagery therapy is a complementary action with techniques to guide a person in imagining or imagining with the five senses to imagine what is seen, felt, heard, smelled and touched or imagined pleasant experiences to bring about the desired physical response (reducing pain intensity) (Wardana, 2021). Guided imagery therapy aims to provide a relaxing effect by reducing muscle tension so that pain will decrease. Patients who do Guided imagery must concentrate on the preferred imagination led by the nurse. Guided imagery is hoped to increase patient relaxation (Wardhana, 2021). The benefit of this therapy is that it makes the patient imagine what he wants to increase relaxation for physical and mental disorders (Dewanti, 2021). Guided imagery therapy apart from being easy and not requiring much money, this therapy has become standard therapy for reducing complaints of pain and providing relaxation for both adults and children, it can also reduce chronic pain and lower blood pressure (Adawiyah, 2021).

2. METHODS

This research method uses case studies that focus on a problem or problem using a variety of information in data collection. The data were taken directly from the condition of the response to surgical patients with complaints of pain due to a preoperative diagnosis of Paralytic Ileus in the Mawar room of RSD dr. Soebandi Jember.

This research was conducted in the Mawar room at RSD Dr. Soebandi Jember 2 times per shift for three days of treatment. On the first day, the researchers conducted a focused assessment of the patient, continued to analyze the data, and obtained several nursing diagnoses, namely acute pain, constipation, anxiety, disturbed sleep patterns and risk of infection (SDKI POKJA Team, SLKI, SIKI DPP PPNI, 2018). From the diagnoses that appear in patients, researchers are interested in re-evaluating and providing special treatment to nursing diagnoses of acute pain by providing interventions in the form of Guided Imagery relaxation therapy. Patients are given relaxation therapy according to the procedure using media such as cell phones by playing videos that emit melodious and soothing sounds for patients in the hope of reducing the complaints of pain they feel.

3. RESULTS

Based on the nursing care assessment results, the patient who was studied on July 5 2022 was 59 years old, female, unable to defecate and unable to eat normally for five days after massaging someone with a gas-holding condition. Because of this, the family brought the patient to the Lung Hospital for an X-ray and the results showed that the patient had intestinal disorders, the patient said that the family and the patient said that their family had no history of chronic diseases or infectious diseases. Families and patients also said that before the patient had difficulty defecating, the patient rarely ate vegetables and fruit. In addition, the patient also has difficulty swallowing food or does not eat at all, only drinks a type of Vegeta and a solution. The patient's job is to be a housewife doing housework such as sweeping, mopping, washing dishes, washing clothes, etc. and working as a masseuse. Treated patients complained of preoperative pain due to a diagnosis of paralytic ileus. Pain Management is the main nursing problem taken in acute pain with nursing intervention given to patients. The patient said that the pain felt after being given pharmacological and non-pharmacological pain management interventions was slightly reduced. Non-pharmacological therapy given to patients

is guided imagery relaxation therapy. The parameters resulting from the evaluation of the implementation of relaxation therapy were reducing grimacing expressions, reducing the frequency of blood pressure and pulse, increasing appetite and sleeping patterns. etc. as well as working as a masseuse. Treated patients complained of preoperative pain due to a diagnosis of paralytic ileus. Pain Management is the main nursing problem taken in acute pain with nursing intervention given to patients. The patient said that the pain felt after being given pharmacological and non-pharmacological pain management interventions was slightly reduced. Non-pharmacological therapy given to patients is guided imagery relaxation therapy. The parameters resulting from the evaluation of the implementation of relaxation therapy were reducing grimacing expressions, reducing the frequency of blood pressure and pulse, increasing appetite and sleeping patterns. etc. as well as working as a masseuse. Treated patients complained of preoperative pain due to a diagnosis of paralytic ileus. Pain Management is the main nursing problem taken in acute pain with nursing intervention given to patients. The patient said that the pain felt after being given pharmacological and non-pharmacological pain management interventions was slightly reduced. Non-

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reducing the frequency of blood pressure and pulse, increasing appetite and sleeping patterns.

4. DISCUSSION

Analysis of Patient Characteristics

According to WHO, the age of 59 years is included in the middle age group (middle age adult). According to the Promkes Team at RSUP dr. Soeradji Tirtonegoro Klaten, 2022 states that paralytic ileus can be experienced by anyone, especially someone who has undergone abdominal surgery. The most commonly affected age group is 20-60 (Dewi, 2020). Based on Nisa's research results, in 2021 from a total of 17 respondents, 14 people were <65 years old and three people were > 65 years old (Nisa, 2021). Meanwhile, in the results of research conducted by Prawira, 2022, out of 50 respondents, 26 people were <65 years old and 24 were > 65 years old (Prawira, 2022). Paralytic ileus can be at greater risk in an older person who uses drugs that can reduce bowel movements or has experienced injury and bleeding in the abdominal cavity (Mandini, 2022). Based on the statement above, it can be concluded that those aged <65 years are at risk of experiencing paralytic ileus.

Based on the results of Dewi's research, 2020 cases of acute intestinal

obstruction in India were diagnosed as many as 9.87%, it was seen that the male sex was 276 patients (75.20%) more than the female sex, namely 91 patients (24.79%). In the results of a study conducted by Mira, et al, 2022 that out of a total sample of 25 patients who underwent laparotomy surgery with paralytic ileus, nine were male and 16 were female. In another study, the results showed that the majority of those who experienced paralytic ileus were male, namely 19 people, while 11 people were female (Wahyudi, 2020). Based on the statement above, it can be concluded that gender is not a contributing factor to the occurrence of paralytic ileus.

Based on the results of research conducted by Andrian, et al, 2022 that there are patients who experience paralytic ileus with a history of abdominal pain due to not defecating for two days and not farting as long as the stomach hurts for three days (Andrian, et al, 2022). Based on the results of other studies, it was found that ileus occurs due to hypomotility of the gastrointestinal tract without any mechanical intestinal obstruction. presumably, the intestinal wall muscles are compromised and fail to transport intestinal contents. Lack of coordinated propulsive action causes the accumulation

of gas and fluids in the intestine (Mau, 2019).

According to Widyawati, 2019 the causative factors for paralytic ileus are various postoperative actions such as prolonged abdominal/pelvis, lower gastrointestinal (GI) and retroperitoneal spine. In addition, the factors for the occurrence of paralytic ileus can also be caused by the use of opioids, intra-abdominal inflammation (sepsis/peritonitis), peritoneal carcinoma, perioperative complications (pneumonia, abscess), bleeding (intraoperative or postoperative), hypokalemia and enteral nutrition or improper placement of a nasogastric tube. Meanwhile, according to Marhamah, 2021 Paralytic ileus is not a primary disease of the intestine but the result of various primary diseases such as actions (surgeries) related to the abdominal cavity, toxins and drugs that can affect intestinal smooth muscle contractions.

One of the causes of paralytic ileus is individuals who have a habit of consuming low-fiber foods, from this habit problems will arise in the lack of ability to form fecal masses that connect to intestinal peristaltic stimulation, then when the ability of intestinal peristalsis decreases, constipation will occur which leads to feces that are hardens and can block the

intestinal lumen, causing paralysis (Mau, 2019).

Several risk factors for constipation that can reduce bowel movements include gastrointestinal motility, inadequate fiber and fluid intake, abdominal muscle weakness, psychological risk factors including confusion, depression, emotional disturbances, and situational risk factors, among others, inadequate toileting, lack of daily physical activity from what is recommended, the effects of pharmacological agents, irregular bowel habits and the habit of holding back urges to defecate (Herni, 2022).

Analysis of Major Nursing Problems

The main nursing problem is acute pain (D.0077), defined as 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 (PPNI, 2017). Another diagnosis experienced by patients under management is sleep pattern disturbance (D.0055) which means that there is a disturbance in sleep quality and quantity due to external factors. One of the causes of disturbed sleep patterns is the pain experienced by patients. The pain felt by patients with a medical diagnosis of paralytic ileus is due to intestinal peristalsis which has stopped due to

inflammation of the nerve lesions which triggers the nerves to experience paralysis (Nisa, 2021). Patients with paralytic ileus generally complain of abdominal pain of uncertain duration, fever, tense and stiff abdomen (Marhamah, 2021). Suppose the problem of acute pain nursing is not resolved properly. In that case, it can affect aspects of sleep disturbance, psychological and unstable hemodynamic status which can be fatal such as decreased immunity, and can even result in death (Septa., 2022).

Nursing Intervention Analysis on Primary Nursing Diagnoses

The nursing intervention given to patients is Pain Management (I.08238). The definition of pain management measures is identifying and managing sensory or emotional experiences related to tissue or functional damage with sudden or slow onset and mild to severe and constant intensity (PPNI, 2017). Intervention activities to overcome acute pain nursing problems in patients include observation, therapy, education and collaboration. Observations aim to determine changes in clinical manifestations that appear in patients and any new problems. Observational actions that can be carried out according to the SIKI Indonesian Nursing Intervention Standards, (2017) include; identifying the location,

characteristics, duration, frequency, quality, intensity of pain,

Intervention actions carried out independently by nurses to their patients are teaching and training patients to do Guided imagery relaxation therapy. Guided imagery therapy is a technique to guide a person in imagining or imagining with the five senses to imagine what is seen, felt, heard, smelled, and touched or imagined pleasant experiences to bring the desired physical response (reducing pain intensity) (Wardhana, 2021). Guided imagery therapy aims to provide a relaxing effect by reducing muscle tension so that pain will decrease. Patients who do Guided imagery are required to concentrate on the imagination that they like led by the nurse (Wardhana, 2021).

According to Ramdhonia, 2022 Guided imagery is more accessible to apply than other techniques such as relaxation or other hypnosis. Psychologically Guided imagery will lead individuals to present mental images that are reinforced with pleasant feelings when individuals imagine these images; with Guided imagery individuals will more easily pay attention to the mental images that appear. (Dewanti, 2021).

Besides being given Guided imagery relaxation therapy, patients are also given collaborative interventions to deal with

acute pre-operative pain. Collaboration giving the analgesic Metamizole 3 x lamp (500mg) is given by intravenous injection. Giving these injections can reduce the intensity of pain in pre-operative patients. The drug works by inhibiting the transmission of pain to the central and peripheral nervous system and is absorbed in the gastrointestinal tract. Metamizole has a half-life of 1-4 hours (Anwar, 2020).

Nursing Implementation Analysis on Primary Nursing Diagnoses

Nursing interventions that can be done to deal with acute pain can be done with pain management. Pain management itself has two actions, namely pharmacology and non-pharmacology. Pharmacological therapy is an effective therapy to reduce pain, but this therapy has side effects. Patients are given pharmacological therapy with Metamizole which has side effects of dizziness, nausea and vomiting (Mandini, 2022). The most effective pain management measure that can be used is a combination of pharmacological and non-pharmacological therapy. One non-pharmacological therapy that has proven to reduce pain is Guided imagery relaxation therapy (Wardhana, 2021).

Guided imagery therapy is a complementary action with techniques to

guide a person in imagining or imagining with the five senses to imagine what is seen, felt, heard, smelled and touched or imagined pleasant experiences to bring about the desired physical response (reducing pain intensity) (Wardana, 2021). Guided imagery therapy aims to provide a relaxing effect by reducing muscle tension so that pain will decrease. Patients who do Guided imagery must concentrate on the preferred imagination led by the nurse. Guided imagery is hoped to increase patient relaxation (Wardhana, 2021).

Guided imagery therapy is carried out before or 3-hours after an analgesic injection is given. This is accordance with the results of research from Maharani, 2017 guided imagery relaxation therapy was carried out at 13.00 after being given an injection of the analgesic ketorolac at 09.00. According to Nuraeni, 2022 Guided imagery therapy intervention is given for three days, carried out three times a day, once for approximately 10 minutes. However, due to the limitations of the researchers, Guided imagery therapy was carried out two times in 1 shift with a duration of 10-20 minutes based on Standard Operating Procedures (SOP) from a book entitled "Reducing Pain Intensity with Guided Imagery Techniques" by Siti Maryam Bachtiar.

Nursing Evaluation Analysis

Nursing evaluation of managed patients based on clinical conditions according to the Indonesian Nursing Outcome Standards (SLKI, 2017). The outputs set for acute pain nursing problems are expected to decrease pain levels with outcome criteria including decreased pain complaints, decreased grimacing, decreased protectiveness, decreased anxiety, decreased sleep

difficulties, improved pulse frequency, improved BP, improved appetite, improved sleep patterns, focusing on oneself decreases and the ability to use non-pharmacological techniques improves (PPNI, 2017). The parameters resulting from the evaluation of the implementation of relaxation therapy were reducing grimacing expressions, reducing the frequency of blood pressure and pulse, increasing appetite and sleeping patterns.

Table 1. Outcome Evaluation of Pain Complaints

Indicator	Pre-therapy score	Tuesday, 05 July 2022	
		Post therapy score 07.00	Post therapy score 12.30
Pain complaints	2 / Enough increase	2 / Enough increase	2 / Enough increase
grimace	2 / Enough increase	2 / Enough increase	3 / Currently
Trouble sleeping	2 / Enough increase	2 / Enough increase	3 / Currently
Pulse frequency	3 / Currently	3 / Currently	3 / Currently
Sleep patterns	3 / Currently	3 / Currently	3 / Currently
Wednesday, 06 July 2022			
Indicator	Pre-therapy score	Post therapy score	
		07.00	13.00
Pain complaints	2 / Enough increase	3 / Currently	3 / Currently
grimace	3 / Currently	3 / Currently	3 / Currently
Trouble sleeping	3 / Currently	4 / decreased	4 / Simply decreased
Pulse frequency	3 / Currently	3 / Currently	3 / Currently
Sleep patterns	3 / Currently	4 / Just getting better	4 / Just getting better
Thursday, 07 July 2022			
Indicator	Pre-therapy score	Post therapy score	
		18.00	20.00
Pain complaints	3 / Currently	3 / Currently	3 / Currently
grimace	3 / Currently	4 / Simply decreased	4 / Simply decreased
Trouble sleeping	4 / Simply decreased	4 / Simply decreased	4 / Simply decreased
Pulse frequency	4 / Just getting better	5 / getting better	5 / getting better
Sleep patterns	4 / Just getting better	4 / Just getting better	4 / Just getting better

Based on the results of research from Krisdayanti, 2021 Guided imagery relaxation therapy carried out on 35 respondents was proven to reduce the pain scale in pre-operative

paralytic ileus patients from the NRS scale of 6 to the NRS scale of 4 (Krisdayanti, 2021). Meanwhile, based on Ayu's research results, in 2021 Guided imagery effectively reduced the

NRS 5 pain scale to NRS 2 (Ayu, 2021). Based on the results of research conducted by Wardhana, 2021 Guided imagery therapy succeeded in reducing the NRS 3 pain scale to NRS 2 (Wardhana, 2021). Guided imagery relaxation therapy is effective in collaboration with pharmacological therapy, namely using anti-pain drugs in the form of intravenous or oral injections to reduce the intensity of mild to moderate pain (Roswati, 2022).

The final parameter obtained from the evaluation of data on pain complaints experienced by managed patients decreased with the criterion of pain complaints decreasing from scale 4 Sufficiently increased, decreased on a scale of 2, moderately decreased (NRS scale 6 to NRS scale 5), RR 20x/minute, SpO2 96 %, BP 130/100mmHg, N 10lx/minute. Based on the results of these data, the administration of guided imagery relaxation therapy can reduce the intensity of acute pain nursing problems by reducing the pain scale.

5. CONCLUSION

Based on the results of the application and analysis of Guided imagery relaxation therapy to the problem of acute preoperative pain in Mrs.S with paralytic ileus in the rose room at Dr.Soebandi Jember Hospital, it can be concluded that there are several factors such as age, previous medical history, activity patterns and diet or lifestyle. at risk for paralytic ileus. Based on the results of the physical examination, the patient looked grimacing

and complained of pain with an NRS scale of 6, the results of an examination of vital signs RR 20x/minute, SpO2 96%, BP 130/100mmHg, N 10lx/minute. Analysis of subjective data from Ny.S obtained patients complaining of pain due to paralytic ileus with pain like stabbing in the lower left abdomen with an NRS 6 pain scale that comes and goes. In addition, objective data was obtained, namely the patient's stomach felt hard/stiff, results of plain abdominal photos with the impression of paralytic ileus, the patient's expression is grimacing, the results of the patient's TTV Blood pressure: 150/100 mmHg, Pulse: 111x/min (N=60-100), RR: 24x/min, Temperature: 37.2 oC. The main nursing problem in Mrs.S preoperatively with paralytic ileus is acute pain due to symptoms of stopped intestinal peristalsis due to inflammation of the nerve lesions so that the intestine does not contract. Nursing interventions in acute pain nursing problems are pain management by making observations such as identifying location, characteristics, duration, frequency, quality, pain intensity, identifying pain scales, identifying non-verbal responses, providing non-pharmacological techniques with pharmacological combinations to reduce pain. One of the non-pharmacological interventions is guided imagery relaxation

therapy. The implementation was carried out to reduce the pain felt by preoperative patients with paralytic ileus by providing non-pharmacological therapy using Guided imagery relaxation therapy 2x/shift for three days. The results of the nursing evaluation after pain management using Guided imagery relaxation therapy found that the patient's pain level decreased from NRS 6 to NRS 5, RR 20x/minute, SpO2 96%, BP 130/100mmHg, N 101x/minute. The application of Guided imagery relaxation therapy which is carried out 2x/shift with a duration of 10-20 minutes for three days can overcome acute pain nursing problems in preoperative patients with paralytic ileus, so that it can help improve the patient's condition..

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