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IMPLEMENTATION OF NURSING CLINICAL PRACTICES OF FINGER GRIP RELAXATION TECHNIQUE TO REDUCE PAIN LEVELS IN PATIENTS WITH POST APPENDECTOMY

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Abstract

Pain is a condition caused by a particular stimulus. Pain can be a physical or mental stimulus, while the damage can occur in the actual tissue of each individual. Appendicitis is the most common cause of abdominal surgery. Appendicitis is inflammation that occurs in the vermiform appendix and is the most frequent cause of acute abdomen. The finger grip relaxation technique is a relaxation therapy that balances the body and can help patients control themselves when unpleasant feelings arise that can cause pain, physical stress, and emotions. This study aims to analyze the intervention of non-pharmacological therapy, The Finger Grip Relaxation Technique, with a case study using the nursing care approach. The sample was two patients; both patients had the same level of pain, namely moderate levels 5 and 6, where both patients were given the same treatment, namely the Finger Grip Relaxation Technique for three days, which was performed by the patients 2-3 times a day for two days. The results of applying the Finger Grip Relaxation Technique can reduce pain levels from moderate to mild within three days. This was indicated by decreased Vas Scale value in patients who were given the intervention. This study can be concluded by the Applying the nursing clinic practice of the Finger Grip Relaxation Technique to Reduce Pain Levels in Patients with Post Appendectomy at RSUD dr. H Jusuf SK Tarakan.

Keywords: Appendectomy, finger grip relaxation technique, pain

INRODUCTION

Post Appendectomy Pain is found in patients with inflammation of the appendix caused by bacterial infection. Pain is often the primary complaint after surgery. Pain arises due to post-surgical wounds. Acute pain often occurs in clients during post-surgery. Acute pain also often occurs after the appendectomy process. The appendectomy process can be performed on uncomplicated Appendicitis. Management of clients with acute Appendicitis is Appendectomy surgery. Acute pain occurs in post-appendectomy clients with pain felt by the client with a time interval of less than 3 months or pain felt after experiencing post-surgery. This Appendectomy surgery can affect all ages, both men and women, but more often attacks men aged 10-30 years (Perdana, 2015). The incidence of Appendectomy in Indonesia ranks 2nd out of 193 countries among other abdominal emergencies, and Acute Appendicitis ranks 4th as the most common digestive system disease in Indonesia after Dyspepsia, Gastritis and Duodenitis, and other digestive system diseases with a total of 28,040 inpatients (Hanifah, 2019).

The incidence of Appendicitis is relatively high in the world. According to the World Health Organization 2018, in Wainsani and Khoiriyah 2020, in the United States, appendicitis is the most common abdominal surgical emergency, with the number of sufferers in 2017 as many as 734,138 people. Increasing in 2018 to 739,177 people; the mortality rate due to appendicitis is 21,000 people, where the female population is greater than the male population. Mortality Rate of Appendicitis is around 10,000 people in men and around 12,000 people in women. In the United States, there are 70,000 cases of Appendicitis each year. Meanwhile, appendicitis in Indonesia is ranked 39th in the world, while appendicitis is ranked 48th as the disease that causes the most deaths in Indonesia (World Health Data, 2010)

Management of clients with appendicitis includes pharmacological therapy and surgical therapy. The pharmacological therapies given are antibiotics, intravenous fluids, and analgesics. Antibiotics and intravenous fluids are given until surgery is performed, and analgesics can be given after the diagnosis is confirmed (Sofiah, 2017). Appendectomy is surgery to remove the appendix. Surgery is indicated when a diagnosis of appendicitis has been confirmed. This is done as soon as possible to reduce the risk of perforation. Pain occurs due to injury, pulling, and manipulation of tissue and organs. Severe postoperative pain is felt in intrathoracic, intra-abdominal, and major orthopaedic surgery. Post-surgery (post-surgery) patients experience severe pain, and 75% of sufferers have an unpleasant experience due to inadequate pain. If patients complain of pain, there is only one thing they want, namely to reduce the pain. This is natural because pain can be an unpleasant experience due to inadequate pain management (Sulung & Rani, 2017).

The impact of pain on postoperative patients will increase and affect post-surgery healing. Providing pharmacology (analgesics) and pain management for post-appendectomy clients. Moreover, the client's family should be encouraged to pay attention to the client's activity patterns. Every patient who feels pain will have a pain assessment, the most common of which are five, namely pain triggers, pain quality, pain location, pain intensity and attack time, which can be memorized or easily called pain triggers or factors that cause pain; what quality of pain is felt? Is it sharp or dull? The location where the pain comes from, the area of pain, the severity of pain or the pain scale where the client feels pain to what level on a scale of 1-10, and when the pain occurs (Saputra, 2019).

The development of non-pharmacological therapy methods in overcoming pain in adults is relaxation techniques. Relaxation is an act of relaxing skeletal muscles that is believed to reduce pain by relaxing muscle tension that supports pain. One of the non-pharmacological treatments that can be done is the Finger Grip Relaxation technique. This finger grip relaxation technique is an easy way to manage emotions and develop emotional intelligence; along our fingers, channels or energy meridians are connected to various organs and emotions (Astutik & Kurlinawati, 2017). This paper aims to analyze the Application of the Finger Grip Relaxation Technique intervention to Reduce Pain Levels in Patients with post-appendectomy.

Regarding the nursing problems of Mrs. M and Mrs. N, the author carried out a nursing action plan for 3 days. The author plans to overcome the problem of acute pain with the expected goal of decreasing pain levels based on the Indonesian Nursing Outcome Standards (SLKI, 2019) as the primary outcome. The Indonesian Nursing Outcome Standard (SLKI, 2019) used is the Decreased Pain Level with Code L.08066, where this outcome has decreased and improved expectations, the expected outcome criteria are Decreased pain complaints, Decreased grimacing, Decreased protective attitudes, Decreased restlessness, Decreased difficulty sleeping, Decreased withdrawal, Decreased self-focus, Decreased diaphoresis, Decreased feelings of depression, Decreased fear of repeated injury, Decreased anorexia, Decreased perineum feels pressured, Decreased rounded uterus, Decreased muscle tension, Decreased pupil dilation, Decreased vomiting, Decreased nausea, expectation scoring 1 (Increased), 2 (Quite Decreased), 3 (Moderate), 4 (Quite Increased), 5 (Decreased).

The criteria for improving expectations have the following results: Improved pulse rate, Improved breathing pattern, Improved blood pressure, Improved thinking process, Improved focus, improved urinary function, Improved behaviour, Improved appetite, Improved sleep pattern, expectation scoring 1 (Worsening), 2 (Quite worsening), 3 (Moderate), 4 (Quite improving), 5 (Improved). The above outcome criteria found in patients Mrs M and Mrs N are complaints of pain, grimacing facial expressions, increased blood pressure, and increased pulse. All actions nurses take to help patients move from their current health status to the health status described in the expected results (Gordon, 1994).

The care plan is organized so that each nurse can quickly identify the care actions given. A properly formulated nursing care plan facilitates continuity of care from one nurse to another. As a result, all nurses have the opportunity to provide high-quality and consistent care. A written nursing care plan regulates the exchange of information by nurses in the exchange of duties report. The written care plan also includes the long-term needs of the patient. The Indonesian Nursing Intervention Standard (SIKI, 2018) is used in pain management with diagnosis code I.08328, which includes the intervention categories: observation, therapeutic, education and collaboration.

It is an initiative of an action plan to achieve specific goals. The implementation stage begins after the action plan is prepared and is aimed at nursing orders to help patients achieve the expected goals. Therefore, a specific action plan is implemented to modify the factors influencing the patient's health problems. Implementation of pain management includes observation, therapeutic, education and collaboration. Observations consist of Identification of location, characteristics, duration, frequency, quality, intensity of pain, Identification of pain scale, Identification of non-verbal pain responses, Identification of factors that aggravate and alleviate pain, Identification of knowledge and beliefs about pain, Identification of cultural influences on pain responses, Identification of the influence of pain on quality of life, Monitor the success of complementary therapies that have been given, Monitor the side effects of using analgesics.

Therapeutic consists of Providing non-pharmacological techniques to reduce pain (e.g., TENS, hypnosis, acupressure, music therapy, biofeedback, massage therapy, aromatherapy, Guided imagery techniques, warm/cold compresses, play therapy), Controlling the environment that aggravates pain (e.g., room temperature, lighting, noise), Facilitating rest and sleep, Consider the type and source of pain in choosing a pain relief strategy. Education consists of explaining the causes, periods, and triggers of pain, pain relief strategies, independent pain monitoring, the appropriate use of analgesics, and recommending non-pharmacological techniques to reduce pain. Collaboration in pain management has only one intervention, namely providing analgesics if necessary. In contrast, for the author's innovation intervention, the Finger Grip Relaxation Technique is used according to previous journals, one of which is the application of finger grip relaxation to reduce pain levels in patients with post-operative appendicitis.

METHODS

The results of the analysis of the implementation of the Finger Grip Relaxation Technique intervention are good for reducing the level of pain in patients with post-appendectomy in Mrs M and Mrs N, as evidenced by the results of providing nursing care to Mrs M and Mrs N with post-appendectomy with the innovation of the finger grip relaxation technique intervention which is good for reducing the level/scale of pain from moderate pain with Mrs M's pain scale of 5 to 2 and Mrs N's pain scale of 6 to 3.

DISCUSSION

Both patients had the same diagnosis of appendicitis based on inflammation of the vermiform appendix, which is the most common cause of acute abdomen. The appendix is also called the appendix of worms. The term appendicitis, which has been known and used in society, is not quite right because what the appendix has been known and used in society is the cecum. (Wijaya & Putri, 2013)

The implementation of the identity assessment obtained data from Mrs M and Mrs N with acute appendicitis with the same nursing problem, namely moderate acute pain with the criteria of Mrs M and Mrs N, aged 37 years and 34 years. This is due to previous studies reporting that the distribution of appendicitis patients based on age is highest in the 30-38-year age group, 34.2%. Acute appendicitis is a case of acute abdomen that can occur in all age groups, from young children to the elderly, with a higher prevalence of acute appendicitis in men than women. The research subjects who suffered from appendicitis were mostly aged 21-60 years, and the prevalence was higher in women than men, Amalia (2016). Surgery or surgery is all medical procedures that use invasive methods by opening or displaying the body part to be treated. Surgical or surgical procedures can cause various complaints and symptoms. Frequent complaints and symptoms are pain (Sjamsuhidajat & Jong, 2017).

Assessment of the reasons for hospitalization found the same complaint, namely complaining of lower right abdominal pain. Specifically, signs and symptoms of acute pain in patients with appendicitis, according to (Wijaya & Putri, 2014) signs and symptoms of acute pain that appear subjective data such as pain in the navel area spreading to the lower right abdomen, nausea, vomiting, bloating, loss of appetite, fever, the right leg cannot be straightened, diarrhoea or constipation, objective data such as tenderness at the Mc. Burney point, muscle spasms, tachycardia, tachypnea, pale, restless, reduced or absent bowel sounds, fever 38-38.5 ° C. In this case, it can be concluded that lower right abdominal pain precisely at the Mc. Burney point is a sign of appendicitis.

In the implementation of the assessment, data were obtained from Mrs M and Mrs N with acute appendicitis with the same nursing problem, namely acute pain that lasted <6 months. According to Afriani (2023), signs and symptoms that reflect acute pain are divided into significant symptoms, namely grimacing, being protective, restless, increased pulse rate, difficulty sleeping and minor symptoms, namely increased blood pressure, changed breathing patterns, changed appetite, disturbed thinking processes, withdrawing, focusing on oneself, diaphoresis.

The assessment of the medical history found that the main complaint before being admitted to the hospital in Mrs M and Mrs N was acute pain. According to Wijaya and Putri (2013), the initial symptoms of appendicitis are pain or discomfort around the umbilicus, followed by anorexia, nausea and vomiting, which lasts more than 1 or 2 days. This proves that the patient's main complaint, namely lower right abdominal pain, is an early manifestation of infection in the appendix.

The assessment of diagnostic support examinations found that Mrs M's leukocyte levels were 19.9 10^3 cells and Mrs N's were 20.00 10^3 cells; this statement is by the research (Nasution, 2013). Acute appendicitis patients with leukocyte counts of 5,000-10,000 cells/mm3 were found in 20 patients (33.33%), 10,000-18,000 cells/mm3 were found in 38 patients (63.33%), and >18,000 cells/mm3 were found in 2 patients (3.34%). Perforated appendicitis patients with leukocyte counts of 5,000-10,000 cells/mm3 were found in 7 patients (17.5%), 10,000-18,000 cells/mm3 were found in 16 patients (40%), and >18,000 cells/mm3 were found in 17 patients (42.5%). This proves that there is a relationship between increased leukocytes and appendix infection.

Based on the results of the assessment and diagnosis, it was found that both patients, Mrs. M and Mrs. N, had the same medical diagnosis and nursing diagnosis, namely post-appendectomy appendicitis with a nursing diagnosis of Acute Pain, where the data used in establishing the nursing diagnosis was more focused on the examination of both patients and the results obtained in patients showed subjective data characteristics of complaints of postoperative pain with objective data of grimacing, increased blood pressure, increased pulse, focusing on oneself.

The results of the three-day evaluation showed a decrease in pain levels. Based on the results obtained, there was a decrease in Mrs M's pain scale from a pain scale of 5 to 2 and Mrs N's from a pain scale of 6 to a scale of 3; this was evidenced by the patient verbally expressing that the pain had decreased and stating that the pain scale had decreased from before and was also marked by the

patient's non-verbal response, namely appearing relaxed and improving vital signs. The evaluation contains criteria for the success of the process and nursing actions. The success of the process can be seen by comparing it with the guidelines/plans. Meanwhile, the success of the action can be seen by comparing the level of patient independence in daily life and the level of patient health progress with the previously formulated goals Takaredas (2021).

CONCLUSION

The results of the analysis of the Application of the Finger Grip Relaxation Technique intervention to Reduce the Level of Pain in Patients with Post Appendectomy in Mrs. M and Mrs. N showed the effect of the Finger Grip Relaxation Technique to Reduce the Level of Pain. The results of providing nursing care to Mrs. M and Mrs. N with post appendectomy with the innovation of the finger grip relaxation technique intervention are good for reducing the level/scale of pain. The results of providing the Finger Grip Relaxation Technique intervention for Mrs. M and Mrs. N can reduce pain gradually as a non-pharmacological therapy given to patients with Post Appendectomy. The results of the identification before the application of the Finger Grip Relaxation Technique intervention showed moderate pain levels with a pain scale of Mrs. M is 5 and Mrs. N a pain scale of 6. The results of the identification after the application of the Finger Grip Relaxation Technique intervention in the pain management intervention for 3 days during which the observation was carried out for 2 days showed a decrease in the level of pain from moderate to low with a pain scale of Mrs. M is 2 and Mrs. N a pain scale of 3.

CONFLICT OF INTEREST

Authors declare no conflict of interest.

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