

Management of pain comfort disorders in post laparotomi patients

Abstract

Laparotomy is a surgical procedure in the abdominal area by opening the abdominal wall to reach the contents of the abdominal cavity that are experiencing problems such as bleeding, perforation, cancer, and obstruction. The Case numbers of laparotomy each year increase by 15% in Indonesia. South Sulawesi is one of the province that the number of laparotomy cases increasing significantly. The general purpose of this study was to determine the description of the implementation of nursing care in post-laparotomy patients in the treatment of discomfort and pain disorders. From the results of the case studies, it is known that nursing actions teach breathing relaxation techniques in providing effectiveness in reducing pain intensity in both patients; this is in line with existing theory.

Keywords: nursing care for pain relief, post-laparotomy patients

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Preliminary

Laparotomy is a surgical procedure in the abdominal area by opening the abdominal wall to reach the contents of the abdominal cavity which are experiencing problems such as bleeding, perforation, cancer, and obstruction.¹ According to WHO laparotomy patients increase by 15% each year, in England according to the National Emergency Laparotomy Audit.² There are around 30,000 laparotomy actions every year. Meanwhile, according to data from the National Tabulation of the Ministry of Health of the Republic of Indonesia in 2016, laparotomy surgery reached 32%, ranking 11th out of 50 first disease patterns in hospitals throughout Indonesia. Report of the Ministry of Health of the Republic of Indonesia³ regarding the incidence of laparotomy increased from 162 in 2013 to 983 cases in 2015 and 1,281 cases in 2017, surgery ranks 11th out of the first 50 diseases in hospitals throughout Indonesia with a percentage 12.8%, an estimated 32% of which are laparotomy surgery.⁴ After a laparotomy surgery is performed in the form of an incision in the abdominal or abdominal area, there will be changes in the continuity of the tissue. The most common problem in post-laparotomy patients is pain stimulation, complications that can occur in post-laparotomy patients are weakness so that patients are not tolerant of their daily activities, the risk of infection due to post-laparotomy incisions and monitoring of nutrition and diet after undergoing surgery.⁵ Research conducted by David⁶ found that 57.70% of post-laparotomy patients complained of moderate pain, 15.38% complained of severe pain and 26.92% complained of mild pain.

Laparotomy is a surgical procedure that involves an incision in the abdominal wall down to the abdominal cavity. Most of the deaths of patients undergoing surgery occur postoperatively. In about 1860, Florence Nightingale proposed continuing the close intraoperative monitoring of patients by anaesthetists into the postoperative period. Starting around 1942, the Mayo Clinic created a special room where postoperative patients were collected and monitored until they were

conscious and stable in their vital functions, and free from the effects of residual anesthetic drugs. The success of the conscious recovery unit was the beginning as it was deemed necessary to continue similar services not only during the conscious recovery period but also during the surgical period. Postoperative pain is often a problem for patients and is the most disturbing thing. Pain in post-laparotomy surgery is often felt after the operation is complete because the effects of the anesthetic drugs used during the operation begin to disappear.

Although acute pain is a normal response due to tissue damage, it can cause physical, psychological and emotional disturbances and without adequate management it can develop into chronic pain. Therefore, nurses are expected to be able to manage any problems that arise in a comprehensive manner consisting of biological, psychological, social, and spiritual through the process of nursing care including assessment, analysis, diagnosis, intervention, implementation and evaluation. Efforts that can be made to treat pain are pain management which is divided into two actions, namely pharmacological and non-pharmacological actions.⁷ One of the non-pharmacological therapies that can be used is aromatherapy. Aromatherapy is the use of plant essential oil extracts to improve mood and health.⁸

The distraction technique of listening to the holy verses of the Koran can also be given to patients to reduce pain intensity. Giving Al-Quran reading therapy has been shown to activate body cells by converting sound vibrations into waves that are captured by the body, reducing pain receptor stimuli and stimulating the brain to excrete endogenous natural opioid analgesics. These opioids permanently block pain nociceptors. Reading the Koran also provides a distraction and relaxation effect postoperatively as well as music therapy.⁹

Method

In this case a comparative descriptive case study method was used, in which the events that occurred were described systematically and

compared the patient's condition before and after nursing actions were carried out. In preparing scientific papers, data collection methods are carried out by:

A. Primary data

Primary data is data obtained directly from research subjects, in this case the researcher obtains data or information directly from the first source or the location of the research object.

B. Secondary data

Secondary data is data that is already available in various forms collected from various sources with the aim of solving the problem at hand. In this research that becomes Secondary data sources are articles, journals and sites on the internet related to the research being conducted.

Research design

Case study research was carried out in the operating room of the Arifin Nu'mang Rappang Hospital. Implementation of case study research will begin in the period from March to April 2022. The design used is a case study in the form of a nursing care approach focused on nursing interventions which aims to describe nursing care in handling pain discomfort disorders in post-laparotomy patients. This case study uses a descriptive observational method with a case study approach focusing on handling pain discomfort disorders in post-laparotomy patients. Analysis of data in case study research by way of analyzing study research data by presenting facts, then comparing with existing theories, then setting it down and explaining it in the discussion.

Presentation of research data is carried out by Rare-Rare determining research problems, analyzing problem intervention and collaborate, as well evaluation intervention . After data collection, processing and data analysis, the authors present the research data presented in narrative or textual form, patient confidentiality is guaranteed and the patient's identity is written with initials.

Results

The results of research with case studies at the Arifin Nu'man Hospital, Pangkajene City, obtained the following results: Mrs. S and Mr F were treated in the same room in the cempaka room, Ny. S is cared for by his mother and family with adequate facilities such as fans, chairs, cupboards, television and toilet Mr. n. F was looked after by his wife and child in the same room and both were carried out in research with the management of discomfort from post-laparotomy pain

- a. Client identity, Client named Mrs.S and Mr.F, client 1 (Ny.S) With No.RM 210623, 21 years old, female, Muslim, street address using kanie, junior high school education, housewife job with medical diagnosis post op laparotomy. Meanwhile, client II (Tn.F) with No. RM 110623, 45 years old, male, Muslim, address Mario Jl. Poros Enrekang, junior high school education, farmer, with post-op medical diagnosis of laparotomy
- b. Assessment of nursing history, the main complaint felt by both clients is lower right abdominal pain due to the former operation. Client I (Ny.S) said that he entered the hospital on May 28, 2022 when he was examined, the patient complained of pain in the postoperative wound, like being stabbed with a pain scale of 6. With vital signs, blood pressure 110/80 mmHg, temperature 36.8°C, respiration : 24×/minute, pulse : 84×/minute. Client II (Mr. F) said he entered the hospital on May 30, 2022 with complaints of lower right abdominal pain. When examined,

the client appeared to be grimacing in pain, pain scale 6, the client looked nervous, the surgical scar appeared bruised, the client appeared to be holding the stomach after surgery. . With vital signs blood pressure: 120/70 mmHg, temperature: 37.2°C, respiration: 20×/minute, pulse: 86×/minute.

- c. The main nursing problem for both patients is pain discomfort associated with surgical incisions. With subjective data the client says pain when moving, pain feels hot and stabbed, pain is felt in the lower right abdomen, pain scale is 6, pain arises continuously. The objective data is that the client is grimacing with pain, there is a surgical wound in the lower right abdomen, with vital signs for client I (Mrs.S) blood pressure: 110/80 mm Hg, temperature: 36.8°C, breathing: 24×/minute , pulse : 84×/minute, and client II vital signs blood pressure : 120/70 mm Hg, temperature : 37.2°C, respiration : 20×/minute, pulse : 86×/minute
- d. Nursing action planning with a diagnosis of pain security disorder in connection with surgical incisions, namely with the aim that after the nursing action is carried out, it is hoped that the pain will decrease or disappear with the outcome criteria, namely the client can withstand pain, the face looks relaxed, the client says pain is reduced or pain scale 2, signs vitals within normal limits of 100/80 mmHg, respiration: 16-24×/minute, pulse: 60-100×/minute, temperature: 36.5-37.5°C. Nursing actions have been planned for both patients, namely monitoring the pain scale (P, Q, R, S, T) rationally to find out the extent of pain and is an early indicator to be able to provide further action teach deep breathing relaxation techniques with rational breathing that can inhale oxygen adequately so that the muscles become relaxed so as to reduce pain.
- e. Implementation of nursing carried out for the diagnosis of handling pain comfort disorders in connection with surgical incisions on Mrs.S and Mr.F Tuesday 7 June 2022 client I (Mrs.S) conducted an assessment to help patients mobilize and teach deep breathing relaxation techniques, mobilization also has an important role in reducing pain by eliminating concentration on the location of pain or the area that has been operated on. After being carried out for 3 consecutive days the client said the pain had decreased slightly on a pain scale of 3, the patient seemed still careful when moving. Whereas client II (Tn.F) conducted an assessment teaching deep breathing relaxation techniques, because deep breathing relaxation techniques also have an important role in reducing pain levels to increase alveoli ventilation, maintain gas exchange relax muscle tension, increase cough efficiency, reduce stress both physical stress and emotional, namely reducing pain intensity (controlling or reducing pain) and reducing anxiety. After doing it for 3 consecutive days the client and family say the pain has decreased on pain scale 2 and looks more relaxed.
- f. Evaluation after nursing actions for 3 days, namely the application of deep breathing relaxation techniques, client I (Mrs. S) and client II (Mr. F) said that when the client was trained in mobility movements and deep breathing relaxation every day the family said the client still seemed to be helped, pain occurs when moving scale 3, the patient looks grimacing in pain. Compared to client II (Ny.F) she felt the change so quickly because the family was very involved in providing deep breathing relaxation techniques.

Discussion

Explaining the discussion that will describe the results of the analysis and comparison between theory and applications found in the field. This discussion contains assessment, nursing diagnoses,

interventions, implementation, and evaluation. The results of the assessment of client I (Mrs. S) and client II (Mr. F) which were carried out from 7 to 9 June 2022 were that the client complained of lower right abdominal pain in connection with the surgical incision, the client seemed careful when moving, with signs Ny.S's vital signs, blood pressure: 110/80 mm Hg, temperature: 36.8°C, respiration: 24×/minute, pulse: 84×/minute. And Tn.F's vital signs blood pressure: 120/70 mmhg, temperature: 37.2°C, respiration : 20×/minute, pulse: 86×/minute.

Client I (Mrs. S) and client II (Mr. F) Appendicitis. Appendicitis is the most common cause of acute inflammation in the right lower quadrant of the abdominal cavity, the most common cause for abdominal surgery.⁶ Appendicitis is a condition where infection occurs in the appendix of the worm. Mild cases resolve without treatment, but many cases require a laparotomy with removal of the infected appendix. Appendectomy is surgery to remove the appendix as soon as possible to reduce the risk of perforation. The above study is in accordance with the theory that post op appendicitis patients experience pain in the lower right abdomen in connection with the surgical incision experienced by client I Ny.S and client II Tn.F.

I. Nursing diagnoses

Impaired sense of comfort and pain associated with a surgical incision. Signs and symptoms on client I (Mrs. S) and client II (Mr. F), namely the client feels lower right abdominal pain, pain scale is 6, the client looks grimacing in pain. From the data found in the land above, there is conformity with the existing theory. Among the diagnoses found in the field are in accordance with the diagnoses in the existing theory.

II. Nursing planning

The aim of intervention in nursing problems with post op appendicitis cases, namely after nursing actions 3 × 24 hours it is hoped that the pain will decrease or disappear with the outcome criteria that the client can control pain, the face looks relaxed, vital signs are within normal limits: 110/80 mmhg, RR : 16-24×/minute, pulse : 60-100×/minute, temperature : 36.5-37.5 °C. Based on the goals and criteria for these results, the authors arrange nursing interventions based on the NIC (Nursing Intervention Classification): examine complaints of pain, teach deep breathing relaxation techniques with rational breathing that can inhale oxygen adequately so that the muscles become relaxed so as to reduce pain.

According there is an action that can be taken by nurses in post-op appendicitis patients to reduce pain by implementing deep breathing relaxation techniques. With this action can reduce muscle tension, boredom, anxiety so as to prevent pain stimulation from increasing.

Priority measures for handling pain comfort in post-laparotomy patients have proven to be effective. With this research, it was found that there was a difference between before and after the application of deep breathing relaxation measures. The conclusion is that the implementation of deep breathing relaxation techniques can be effectively carried out in post op laparotomy appendixitis patients to reduce pain due to surgery experienced by patients.

III. Nursing implementation

In this implementation, the authors try to carry out the results of research on the application of deep breathing relaxation techniques to Mrs.S and Mr.F through various kinds of teaching the application of deep breathing relaxation techniques such as: instructing the patient to sit relaxed, instructing the client to take deep breaths slowly, hold for a few seconds, then release (blow through the lips) and when exhaling air encourage the client to feel relaxed.

IV. Nursing evaluation

Evaluation of client I (Mrs. S) and client II (Mr. F) was carried out using interviews and observation methods to determine the effectiveness of nursing actions carried out with due regard to the goals and criteria for the expected results according to the normal range. Evaluation after nursing actions for 3 days, namely the application of deep breathing relaxation techniques to reduce pain levels in Mrs.S and Mr.F clients, the client said the pain he felt was slowly starting to disappear.

Acknowledgments

None.

Conflicts of interest

The authors declares that there are no conflict of interests.

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