



THE EFFECT OF EARLY MOBILIZATION ON PAIN INTENSITY IN PATIENTS POST APPENDICectomy IN THE IN PATIENT ROOM TK.III. DR. REKSODIWIRYO HOSPITAL PADANG

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ABSTRACT

Reksodiwiry Hospital data in 2017 the of post appendectomy pain incidence was 371 patients with details of 237 moderate pain and 134 with mild pain. So the pain appea Hospital in patients post surgery. The purpose of this study is to know the influence of early mobilization of pain intensity in Post appendectomy patients in the inpatient room HOSPITAL TK. III Dr. Reksodiwiry Padang Year 2019. This type of research is pre-experimental with the design of One Group Pre-Post Test Design, this research was conducted in the room of Hospital tk III Dr. Reksodiwiry Padang. The population in this study was a post-appendectomy patient in the surgical stay room of Hospital Dr. Reksodiwiry Padang in September with 132 patients with 16 people sampled. Data analysed univariate with distribution and bivariate with T-test of dependent $p = \text{value of } < 0.05$. The results of the study obtained an average pain intensity in post-patient appendectomy before early mobilization was 5.56, the average pain intensity in patients post appendectomy after early mobilization was 2.50 and there was an early mobilization influence To pain intensity in post-appendectomy patients in hospital Dr. Reksodiwiry Padang in 2019. $p = 0,000$ $p = 0,000 < 0.05$. The conclusion of the study proved that there was an early mobilization influence on the intensity of pain in post-appendectomy patients in the hospital Dr Surgery room. Reksodiwiry Padang in 2019. Expected for nurse are expected to further improve the quality of healthcare services by providing early mobilization of surgery post especially an appendectomy so that it can be one of the interventions to reduce non pharmacological pain.

Keywords: *Intensity of pain, Early Mobilization, Post-patient Appendectomy*

INTRODUCTION

The appendix is a small, finger-like auxiliary organ attached to the cecum which is located under the ileocecal valve. The appendix is prone to obstruction and is prone to infection (appendicitis). Appendicitis is the most common cause of acute inflammation, right quadrant of the abdominal cavity and the most common cause of emergency abdominal surgery. (Brunner & Suddarth, 2010).

Appendectomy is a surgery to remove the infected appendix. Appendectomy surgery is a surgery to reduce the risk of perforation (Jitowiyono, 2010). Appendectomy is surgery by removing the appendix, although this surgery can also be performed for tumors

(Nainggol 2013). In Indonesia, appendicitis is the fourth disease from 2010. Annually 700,000 patients with appendicitis or appendicitis in the emergency room for treatment including appendectomy (Wijaya 2012). In non-pharmacological interventions, nurses play a very large role in pain management because they are the nurse's independent actions. Non pharmacological management can reduce pain with low risk for the patient and does not cost money. One of the non-pharmacological therapies that nurses can do independently in relieving or reducing pain is by mobilizing to relieve post appendectomy pain, namely by doing early mobilization. Early mobilization has an



important role in reducing pain by eliminating the patient's concentration at the pain site or operation area, reducing the activity of chemical mediators in the inflammatory process that increases the pain response and minimizing the transmission of pain nerves to the central nerve (Warthonah, 2014).

According to Brunner and Suddarth, 2010, postoperative patients are expected to be able to mobilize as soon as possible. The benefits of early mobilization are increased blood circulation which can lead to reduced pain, prevent thrombophlebitis, provide nutrition for healing in the injured area, and improve the smooth functioning of the kidneys. Early mobilization is a person's ability to move freely, easily, and regularly so that he can move to meet the needs of a healthy life (Widuri, 2010).

Mobilization is a major factor in speeding up recovery and preventing post-

surgical complications. Mobilization is very important in accelerating the day of hospitalization and reducing the risk of prolonged bed rest, such as the occurrence of pressure sores, stiffness or tension in the muscles throughout the body, impaired blood circulation and respiratory disorders and peristalsis and urinary disorders. Infection occurs due to inadequate mobilization so that circulation to meet the nutritional needs of the incision area has not been fulfilled, as a result cell repair is hampered and this is one of the reasons that causes length of hospital stay and in the end can cause an impact on the increase in cost of care and impact of hospitalization. Mobilization can support the patient's wound healing process because moving the limbs will prevent muscle and joint stiffness, thereby reducing pain and increasing blood circulation to those who have been injured so that the wound healing process can also be fast.

MATERIAL AND METHODS

This type of research is a pre experiment with a one group pretest-posttest design approach by observing (measuring) before and after being given treatment in one group (Notoatmodjo, 2012). Measurement of the level of pain before and after early mobilization was carried out. This study is to determine the effect of Early Mobilization on Pain Intensity in Post Appendectomy Patients in the Inpatient Room of hospital dr.Reksodiwiryo Padang in 2019. The independent variable in this study is post-op early mobilization with the dependent variable, namely post appendectomy pain intensity. This study used a pre-experimental research type with the design

used was one group pretest and posttest design to see a decrease in the intensity of post appendix pain. This research will be conducted in Dr. Reksodiwiryo Padang in September - November 2018, there were 132 post appendectomy patients. The total sample was 16 people who suffered from post appendectomy taken by purposive sampling technique according to the inclusion and exclusion criteria set by the researcher. Rate were collected using an observation sheet with a numerical rating scale (NRS). Rate processing was performed using a computerized system with univariate and bivariate analysis tests using the dependent sample t-test (paired t-test) or the two dependent mean.

RESULTS

This research was conducted on 23-29 September 2019, at Dr. Reksodiwiryo Padang. The number of respondents in the study was 16 people,

who have met the inclusion and exclusion criteria, with the One Group Pretest Posttest research design. The research data were collected



Table 1

The Effect of Early Mobilization on Pain Intensity in Post Appendectomy Patients in the Surgical Room at Dr.Reksodiwiry hospital Padang 2019

Pain Intensity	n	Difference		p-value
		Mean	95% CI	
Pre test-post test	16	1,62	1,295-1,955	0,000

Of the 16 respondents, the difference in the average value of pain intensity before and after early mobilization was 1.62. The results of statistical tests using the Paired sample t-test obtained the value of $p = 0.000$ ($p < 0.05$), so there is

an effect of early mobilization on pain intensity in post appendectomy patients in the surgical inpatient room of Dr.Reksodiwiry Hospital, Padang in 2019.

DISCUSSION

Based on the research, the results obtained from 16 respondents showed that the average pain intensity value before early mobilization was 6 and after early mobilization, the pain intensity decreased to 4.38. The results of statistical tests using the dependent t-test obtained a value of $p = 0.000$ ($p < 0.05$), so there is an effect of early mobilization on pain intensity in post appendectomy patients in the surgical inpatient room of Dr.Reksodiwiry Hospital, Padang in 2019.

The results of this study are supported by previous research conducted by Pristahayuningtyas, (2016) regarding the effect of early mobilization on changes in the pain level of post appendectomy surgery clients at Baladhika Husada Hospital, Jember Regency, which obtained an average pain level after early mobilization was 4.90 with standard deviation 1.071.

The decrease in the pain scale can be influenced by the distraction of the client's attention, which previously

focused on the pain experienced, but when early mobilization is carried out, the focus of attention on pain is shifted to early mobilization activities. Pain that occurs in a person due to certain stimuli such as surgery can be blocked when there is an interaction between the pain stimulus and the stimulus in the fibers that sends a painless sensation blocked in the inhibitor gate circuit (Ganong, 2008).

Early mobilization exercises can focus the client's attention on the movements being performed. This triggers the release of norepinephrine and serotonin. The release of these compounds stimulates or modulates the descending control system. In the descending control system, there are two things, the first is the release of substance P by delta-A and delta-C neurons. The second thing is that mechanoreceptors and beta-A neurons release endogenous opiate inhibiting neurotransmitters such as endorphins and dinorphins. This becomes more dominant to close the defense mechanism by inhibiting substance P.

Inhibition of substance P reduces nerv

transmission to the central nerve, thereby reducing pain perception (Ganong, 2008).



The researchers' analysis of the results showed that there was an effect of early mobilization on reducing pain intensity in post appendectomy patients, this was evident from the decrease in the average value before and after early mobilization. This is because the patient feels healthier and stronger. By moving, the abdominal and pelvic muscles will return to normal so that the abdominal muscles will return to strength and can reduce post appendectomy pain (pain). Early mobilization plays an important role in reducing pain by eliminating the patient's concentration at the site of pain or the area of operation, reducing the activation of chemical mediators in the inflammatory process that increase the pain response and minimizing the transmission of pain nerves to the central nerve.

CONCLUSION

Based on the results of research that has been carried out on the effect of early mobilization on pain intensity in post appendectomy patients in the surgical inpatient room of Dr.Reksodiwiryono Padang Hospital in 2019, the following conclusions can be drawn: There is an effect of early mobilization on pain intensity in post appendectomy patients in the surgical inpatient room of Dr.Reksodiwiryono Padang Hospital in 2019. $p = 0,000$.

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