

The Effect of Deep Breath Relaxation Technique Towards Painful Scale Reduction On Post Appendectomy Patient In Male Surgery Room Of RSUD (Local Public Hospital) Dr. M. Haulussy Ambon 2016

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Abstract

Appendicitis is a common causal factor of acute inflammation at under right quadrant of abdomen cavity, and the common causal to emergency abdomen surgery. In 2013, appendicitis occurrence is placed the high rate among other emergency abdomen cases. This study aims to figure out the effect of deep breath relaxation technique towards painful scale reduction on post appendectomy patient in male surgery room of RSUD Dr. M. Haulussy Ambon. It is a quassy experimental study by using one group pre-posttest design approach. The samples are 3 persons applying accidental sampling technique. The research instrument used is observation sheet, in processing the data, this study uses SPSS using Wilcoxon test with the significant level of 0.05. The result shows that the significant value of deep breath relaxation technique towards painful scale reduction is 0.10. From these result, it can be concluded that is no effect of deep breath relaxation technique towards painful scale reduction on post appendectomy patient in male surgery room of RSUD Dr. M. Haulussy Ambon.

Keywords: Deep Breath Relaxation, Painful Scale

I. INTRODUCTION

Community health status is influenced by four main factors, such as: environment, behavior, health service, and offspring (hereditary). Thus the efforts to maintain and improve public health level should be aimed at the four main factors all together (Notoatmodjo, 2012). One of the diseases that often occur in Indonesia is appendicitis. Appendicitis is the most common cause of acute inflammation in the right lower quadrant of abdominal cavity, the most common causes of emergency abdominal surgery (Mary, 2014). Complaints of appendicitis usually begin with pain in the umbilicus or periumbilicus area accompanied by vomiting. In 2-12 hours the pain will shift to the right lower quadrant, which will be settled and worse if walking. There are also complaints of anorexia, malaise, and a fever which is not too high. Usually there are also constipation, but sometimes diarrhea, nausea, and vomiting. At the onset of the disease there has not abdominal complaint yet persistently. But within a few hours of lower abdominal pain will be more progressive, and with overhaul will be shown one point with maximal pain. Mild percussion at the right lower quadrant can help to determine pain location. Free pain and spasm usually also appear (Mansjoer, 2000 in Nugrohoningsih, 2014). According to the International Association for Study of Pain (IASP) pain is an unpleasant subjective and emotional sensory that obtained associated with actual or potential tissue damage, or described the condition of the damage (Tamsuri, 2007 in Nursalam, 2014). Nurses could not see and feel the pain experienced by the client, because the pain is subjective (between one individual with another is different in addressing the pain) (Ghandi, 2010 in Terry 2014). Postoperative pain may be caused by injury of surgery, but the possibility of other causes should be considered. We recommend that prevention of pain before the operation was planned so that patients are not bothered by the pain after surgery. The prevention way depends on the cause and location of the pain and the condition of the sufferer (Sjamsuhidajat, 2002 in Mary, 2014). Pain management can be done pharmacologically, namely the provision of painkillers drugs and sedatives. While non-pharmacologically is through distraction, relaxation, warm or cold compresses, aromatherapy, hypnosis, and so forth (Rezkiyah 2011 in Terry, 2013). The combination of non-pharmacological and pharmacological techniques are an effective way to eliminate pain mainly the great one, especially pain that lasts for hours or even days (Smeltzer and Bare, 2002 in Mary, 2014).

Pain management with non-pharmacological techniques is the main capital towards convenience (Chess, 2005 in Mary, 2014). In terms of costs and benefits, the use of non-pharmacological management is more economical and there are no side effects when compared to the use of pharmacological management. In addition it also to decrease dependence of patients on drugs (Burroughs, 2001 in Lyndon, 2014). Nursalam (2014) explains that most nurses carry out the treatment program the results of collaboration with physicians to eliminate or alleviate pain in patients. The treatments are analgesics giving such as mefenamic acid, which is easily and quickly in its giving than non-pharmacological pain management interventions. If the non-pharmacological pain management has not diminished or lost yet, then analgesics. Analgesic giving must also comply with the prescription, as analgesics in the long term can cause patient to dependence condition. In addition to the pharmacological treatment, the other way is with non-pharmacological pain management with relaxation techniques, which is an external action that

affects an individual's internal response to pain. Pain management with relaxation action includes muscle relaxation, deep breath, massage, meditation and behavior. Deep breath relaxation technique is a form of nursing care, which in this case nurse teaches clients how to perform a deep breath, slow breath (hold inspiration to the fullest) and how to breathe slowly. Besides being able to reduce pain intensity, deep breath relaxation techniques can also improve lung ventilation and increases blood oxygenation (Smeltzer & Bare, 2002 in Lyndon, 2014).

According to WHO, the incidence of appendicitis in Asia in 2008 was 4.8% of the total Asian population? According to the Ministry of Health of Indonesia in 2012 appendicitis ranks four main diseases after dyspepsia, gastritis, duodenitis, by the number of hospitalized patients as much as 2840. In addition, in 2013 the incidences of appendicitis in Indonesia were the highest among the other abdominal urgency cases. The incidence of appendicitis in developed countries is higher than the developing countries, while in Indonesia appendicitis was a disease with the fourth highest in 2010. The data released by the Ministry of Health of Indonesia in 2011 the number of patients with appendicitis in Indonesia reached 591.819 people and increased in 2012 amounted to 596.132 people. The age groups that generally experiencing appendicitis at the age of 10-30 years and man's number is higher than women (MoH RI, 2013). Preliminary study that researcher did in dr. M. Haulussy Ambon from Medical Record (MR) note which visits the last 3 months, namely in February-April 2016, found the number of patients diagnosed with appendicitis are 45 persons and appendicitis were the dominant disease in male surgery room dr. M. Haulussy Ambon. Based on the observation in surgical room, there are 18 patients, 6 of them were post appendectomy, each 4 of them experienced severe pain and two patients suffered mild pain. The patients said that they get medication to reduce pain after surgery, yet after taking the medication, four people said that there still remain pain and two patients said the pain was reduced slightly. If the pain is not well resolved then it would give effect to a patient such as increased blood pressure, tachycardia, could not sleep / rest, anxiety and others. Several studies have shown that deep breath relaxation is very effective in reducing postoperative pain (Brunner & Suddart, 2002 in Marry, 2014). The research of Tunner and Jansen (1993), Almatsier et al (1992) in Vishnu (2015), concluded that progressive muscle relaxation can reduce pain by relaxing muscle tension that can support the pain. This is evidenced in patients with back pain that relaxation techniques are effective in reducing pain. On the post-surgery, the patient is placed in a comfortable position as possible. This position reduces the strain on the abdominal organs incisions that reduce pain.

The research of Lorenzi (1991) Miller & Perry, (1990) in Vishnu (2015), have shown that relaxation techniques can reduce postoperative pain effectively, it is happening because of the relatively small role of muscle skeletal on postoperative pain or the patient's needs for relaxation techniques to be effective. The research that has also proved the success of deep breath relaxation techniques and massage that reduce pain are Maulana's study (2003) in Nurty (2014) who studied the "Effect of Deep Breath Relaxation Techniques toward Post-Partum Pain Level at Bantul Hospital". The results of these studies indicate that there is a significant influence in the giving of breath relaxation techniques to decrease of post-partum pain level in Bantul Hospital. Based on interviews with three nurses, they know that deep breath relaxation techniques and massage can reduce pain, yet they have not been willing to implement relaxation techniques, because they assume that the use of the analgesic can make it faster than using relaxation techniques or non-pharmacological actions. Based on the above phenomenon, the researches interested to conduct research on the influence of deep breath relaxation techniques to decrease pain scale in patients with post- appendectomy in Surgery Male room dr. M. Haulussy Ambon in 2016.

II. RESEARCH METHODS

This research is a quasi-experimental research (quasy-experimental) with one group pre-post-test design approach (Notoatmodjo 2013). In this study, the researcher observed the process of pain experienced by patients after appendectomy. Before performing deep breath relaxation techniques, the pain scale is also observed after giving deep breath relaxation techniques. According to Arikunto (2013) population is the whole subject of research. The population in this study is all patients of post appendectomy at room Surgery Male dr. M. Haulussy Ambon. The sample is part of the population which is the object of a study (Notoatmodjo, 2012). The sampling in this research using accidental sampling which is conducted shortly, so that the samples obtained are samples of shortly exist / available at that time. The data that obtained by researcher from the hospital is medical records. It is the data derived from the respondents who have been measured the pain scale before being given a deep breath relaxation techniques (pre-test value) and measured the pain scale after being given a breath relaxation techniques in the post-appendectomy patients (post-test values). Furthermore, the value of each respondent were compared between before being given a deep breath relaxation techniques (pre-test) and after being given the breath of relaxation techniques (post-test). The data and each analyzes group being treated the test normality to see whether the data were normally distributed or not. It is conducted to see the relationship between the variables using the Shapiro-wilk normality test, and the result data showed that it is unidentified normal with the value ≤ 0.05 , so that the test used is Willcoxon.

III. RESULT

A. The Overview of Research Location

Public Hospital dr. M. Haulussy Ambon belongs to Maluku Province Government located at Jl dr. Kayadoe, Kudamati Village, sub district Niusaniwe, Municipality of Ambon. dr. M.Haulussy Ambon serves outpatient and inpatient. Male Surgery Room dr. M. Haulussy Ambon is one of the inpatient rooms located in dr. M. Haulussy Ambon serves as inpatient unit specifically to man with pre and post-surgery indications.

1. Emergency installation, an emergencies service that is equipped with the proper equipment, open 24 hours a day 7 weeks.
2. Hospitalization Installation with a capacity of 353 beds.
3. Outpatient Installation, with the number of 11 specialist clinics.
4. Central surgical installation with 6 operation rooms, ICU and ICCU with a capacity of 8 beds.
5. Radiology installation, with CT-Scan
6. Laboratory Installation
7. Medic rehabilitation installation
8. Nutrition installation
9. Pharmacy installation
10. Hospital facilities maintenance Installation
11. Medical Record Installation

Public Hospital dr. M. Haulussy Ambon is huge, provided 346 inpatient beds more in the appeal every hospital in Maluku provided an average 52 inpatient beds.

B. Distribution of Respondents' Age

Table 1. Distribution of respondent characteristics by client's age in doing deep breath relaxation techniques in Male surgery room dr. M. Haulussy Ambon 2016.

No.	Age	Number	%
1	28 years old	1	33,3
2	40 years old	1	33,3
3	52 years old	1	33,3
Total		3	100

Table 1 shows that respondents with elderly categories numbered 1 person, early adult 1 person and late adult 1 person with their mean values 33.3% respectively.

C. Distribution of Respondents Education

Table 2. The distribution of respondent's characteristics based on client's education level.

No.	Education	Total	%
1	Primary School	1	33,3
2	Secondary School	1	33,3
3	Primary School	1	33,3
Total		3	100

Table 2 described that the respondents have completed primary education amounted to 2 people and those who graduated from junior high school numbered 1 person with their mean values 33.3% respectively.

D. Distribution of Respondents' Job

Table 3. The distribution of respondent's characteristics based on the kind of client's job.

No.	Job	Total	%
1	Employees	1	33,3
2	Entrepreneur	1	33,3
3	Employees	1	33,3
Total		3	100

Table 3. It is explained that the respondents work as employees amounted to 2, and self-employed just 1 person with their mean values 33.3% respectively.

E. The scale of pain before and after giving deep breath technique

Table 4. Distribution of the pain average scale pre-test post-test in male surgery room dr. M. Haulussy Ambon 2016.

Painful Scale	(n)	Median (minimum-maximum)
Pre	3	400(3-4)
Post	3	200(1-2)

Table 4. Explain that the scale of the pain that is felt when pre (before giving relaxation technique) with the number of 3 respondents by 400 median value with a minimum of 3 and a maximum value of 4. When the post (after giving relaxation technique) with the same number of respondents, median decreases to 200 with a minimum value of 1 and a maximum of 2. Which means that the researcher getting on doing a research regarding deep breath relaxation techniques in patients post appendectomy in male surgery room dr. M. Haulussy Ambon.

F. Shapiro Wilk normality test

Table 5. The analysis of the statistical results of data normality in male surgery room dr. M. Haulussy Ambon.

Painful Scale	(n)	Median (minimum-maximum)	P value
Pre	3	400(3-4)	0.00
Post	3	200(1-2)	0.00

Table 5 illustrates that with sample size of less than 50 thus the normality data test uses Shapiro Wilk. From these results indicate that when pre with a sample of 3 respondents the median value of 0.60 with a minimum of 48 and maximum of 60 with p value 0.00. When post with the same number of samples the median value of 0.30 with a minimum of 00 and maximum of 30 with p value 0.00.

G. Effectiveness Analysis of giving deep breath relaxation techniques

Table 6. The results of the statistical test using willcoxon signed rank test in male surgery room dr. M. Haulussy Ambon.

Painful scale	(n)	Median (minimum-maximum)	Std. deviation	P value
Pre	3	400(3-4)	577	0.10
Post	3	200(1-2)	577	

Wilcoxon 3 test shows that the respondents decreased, 0 respondents increased and 0 respondents remain stagnant. Table 6 explains that when pre with the number of 3 respondents median value of 400 with a 3 minimum value, 4 maximum value, and the deviation standard of 577. When post with the same number of respondents, median value of 200 with a minimum value of 1 maximum 2, and the same value of the deviation standard, Thus it could indicate a reduction in pain intensity perceived by the respondents but yet the p value of 0.10, which means the value of $p \geq 0,005$ so it can be concluded that there is no significant impact on the effectiveness of deep breath relaxation technique to decrease pain scale in patients with appendicitis post-operative.

IV. DISCUSSION

Table 6 explains that when pre with the number of 3 respondents with a median value of 0 and a minimum value of 3, maximum value of 4. When the post with the same number of respondents, median value of 400 with a minimum value of 1 and a maximum of 2. Thus it can indicate that there is reduction in pain intensity perceived by respondents yet the p value is 0.10, which means the value of $p \geq 0,005$. Thus it can be concluded that there is no significant impact on the effectiveness of deep breath relaxation techniques to decrease pain scale in patients with appendicitis post-operative. But when seen from the results of the pain scale responses perceived by patients proved that the average value perceived by patients is decreased. This is contrasts with the results of a research conducted by Nugrohoningsih (2014) entitled "The Effect of Deep Breath Relaxation Technique Giving toward Pain Decrease in Patients with Below Knee Post Amputation on Indication of Multiple Fractures Region Cruris Sinistra in dr. Moewardi Surakarta Public Hospital "with a p value of 0.000, which means that there is significant influence. In addition, Vista (2013) has the same opinion about the "Influence of Deep Breath Relaxation Techniques toward Pain Intensity in Patients Sectio Caesaria Post Operation in public hospital of Prof. dr. Hi. Aloe Saboe Gorontalo City". Based on the result Wilcoxon Signed Rank statistical test data analysis that shows that the large value of Z (based of positive ranks) namely 5591 with a significant p value of 0.000 from t value <0.05 , thus with p value 0.000 smaller than $\dagger <0.05$, meaning that previous alternative hypothesis is acceptable. Therefore, based on the work, there is an influence of deep breath relaxation technique toward the decrease of pain intensity in patients with postoperative sectio Caesaria in Public Hospital Prof.Dr. Ha.Aloe Saboe Gorontalo.

Deep breath Relaxation technique is believed able to stimulate the body to release endogenous opooid ie endorphins and encephalins (Smeltzer & Bare, 2002 in Terry, 2014). When acute pain, heart rate, blood pressure, and respiratory rate are increasing, nurses comparing the vital signs with the basic values recorded before experiencing pain. If the client is experiencing the pain, so the nurse examines the spoken word, vocal response, facial and body movements as well as social interaction. Moaning, purring and crying is a vocalization that is used to express the pain. In the research process of pain scale experienced by patients decreased, but the statistics stating the opposite that is no significant effect on the giving of deep breath relaxation technique to decrease pain scale. Nugrohoningsih (2014), Vishnu (2015), Vista (2014) and Sumiati et al (2013) mention many factors that affect response to pain, such as: age, gender, culture, past experience with pain, concern, and anxiety. Based on the above description, the researcher concluded that although the results of the study revealed no significant influence between giving deep breath relaxation technique to decrease the pain scale, but based on the assessment results OPQRST when pre and post giving of deep breath relaxation technique proven that for each respondent perceived the reduction of pain scale. That's because many factors can influence pain responses, such as: age, gender, culture, past experience with pain, concern, and anxiety

V. CONCLUSION

There is no significant effect before and after giving deep breath relaxation technique to decrease pain scale in patients with post appendectomy in male surgery room dr. M. Haulussy Ambon with p value (0.10).

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