

Effectiveness Of Relaxation Techniques To Decrease Handheld Finger Pain Intensity Post Cesarean Section At Dr. H. Moch. Ansari Saleh Hospital In Banjarmasin

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ABSTRACT

Objective: To analyze Effectiveness Relaxation Techniques To Decrease Handheld Finger Pain Intensity Post Sectio Caesarea.

Method: This research uses pre-group experimental method pre and post-test design. The population in this study was a post-cesarean section as many as 116 patients. The sampling technique used purposive sampling, with a sample size of 30 people. Data collection uses questionnaires and standard operational procedures. The analysis was done with Wilcoxon Signed Ranks test ($p = 0,05$).

Results: After 10 minutes of administration of relaxation techniques of handheld fingers mostly with mild pain, most with a pain scale of 2 was felt by 11 respondents (36,7 %) and a fraction with a pain scale of 1 was felt by 1 person of 5 respondents (3,4 %) and there is the effectiveness of relaxation techniques of handheld in order to reduce pain intensity post-cesarean section at the hospital of Dr. H. Moch. Ansari Saleh Banjarmasin with the result that the $p\text{-value} < \alpha$ ($0,000 < 0,05$), which is the result of Wilcoxon Signed Ranks.

Conclusion: There is a handful effectiveness of relaxation techniques to decrease pain intensity post-cesarean section at Dr. H. Moch. Ansari Saleh Hospital, Banjarmasin.

Keywords: Pain, Post-cesarean section, Relaxation, Techniques of Handheld Finger

I. INTRODUCTION

Surgery is one form of a therapeutic treatment and can also cause damage to the integrity of the body. Until now a lot of various kinds of surgery, one of them is a cesarean section. Cesarean section is one used to save babies and their mothers in labor [1].

Pain is the nursing problem of post-appendectomy patients. They have a less pleasant experience due to inadequate pain management. This pain may have impacts that present as not only reduce the ability and willingness of individuals to recover, but also the ability of individuals to maintain self-care, resulting in fatigue due to pain sensation among patients [2]. Pain is defined as a state affects a person and its existence is know when someone has experienced it [3].

World Health Organization (WHO) estimates that the number of deliveries with cesarean section is about 10% to 15% of all deliveries. In developed countries such as the United Kingdom the incidence of cesarean section by 20% and in the United States by 23%. The development of cesarean sections in Indonesia based on a simple survey conducted by Gilardi and Basalamah, on 64 hospitals in Jakarta in 1993 resulted in 17.665 births as many as 35,7-55,3% gave birth by cesarean section [4].

Cesarean section pain is usually felt during postpartum because at the time of surgery cesarean section doctors have done anesthesia. The effect of the anesthesia will usually disappear about 2 hours after delivery

is completed. After the anesthetic effect is exhausted, the pain in the abdomen begins to feel because of the injury that is in the abdomen. Post-surgical pain will cause physical and psychological reactions in postpartum mothers such as disturbed mobilization, lazy activity, difficulty sleeping, no appetite, do not want to care for the baby so there is a need to control the pain so that it can adapt to postoperative pain Cesarean section and accelerate the puerperium [4].

Postoperative patient's recovery takes an average of 3 days so that patients will experience great pain on average in the first two hours after surgery because the effects of anesthetic agents are gone. Pain management with nonpharmacological techniques is the main capital convenience. In terms of costs and benefit, the use of nonpharmacological 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. Explains that most nurses carry out the treatment program the results of collaboration with physicians to eliminate or alleviate pain in patients. The treatment is analgesics giving such as mefenamic acid, which is easily and quickly in its giving than nonpharmacological pain management interventions. If the nonpharmacological pain management has not diminished or lost yet, then analgesics. Analgesic giving must also comply with the prescription, as analgesics in the long term cab 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 [5]. Post section Caesarea women experience pain due to operative trauma. Pain sensation can be reduced by pain management. Pharmacological and nonpharmacological treatments can be used [6].

One of the non-pharmacological treatments that can be done is a handheld relaxation technique. Relaxation is a mental and physical freedom from tension and stress because it can change the perception of cognitive and affective motivation patients. Relaxation techniques makes patients can control themselves when the discomfort or pain, physical and emotional stress on pain [7].

Finger hand relaxation techniques are an easy way to manage emotions and develop emotional intelligence. Along with our fingers there are channels or energy meridians that connect with different organs and emotions. The points of reflection on the hand give stimulation reflex (spontaneous) at the time of grip. The stimulus will drain a wave of shock or electricity to the brain. The wave is received by the brain and processed rapidly forwarded to the nerves in the body organs that are impaired so that the blockage in the energy path becomes smooth [8]. Energy will be absorbed by the human body and capable of breathing, heart rate, blood pressure, muscle tension, skin temperature, pain [9].

Based on the previous research entitled Influence Relaxation Technique Handheld Finger Against Decrease Intensity of Pain In Post Patient Laparotomy surgery done [10] with result of influence of handheld relaxation technique of finger to decrease of pain intensity in postoperative patient of laparotomy at the Hospital of PKU Muhammadiyah Gombong and Influence Hand-held Relaxation Technique on Pain Scale Changes in Post-Operation Patients Cesarean section at Prof. Dr. Margono Soekardjo Hospital, Purwokerto done [4] with the result there is influence of handheld relaxation technique of change of pain scale in patients of post-cesarean section of Prof. Dr. Margono Soekardjo Hospital, Purwokerto.

This handheld finger technique is very useful for everyday life. When we cry, feel angry, or anxious because of difficult situations, this technique can help us to become calmer and focused so that we can take appropriate action or response in dealing with the situation [11].

II. RESEARCH METHOD

The population taken in this research is as many as 116 mothers of post-cesarean section of Dr. H. Moch. Ansari Saleh Hospital in Banjarmasin as many as 116 people.

The samples in this study were all post-cesarean section mothers in Dr.. H. Moch. Ansari Saleh Banjarmasin. For this study the amount used is a minimal sample of 30 patients with the following criteria:

1. Patients with first CS
2. Aged 20 - 40 years
3. Patients of post-CS on 1st day
4. 6 - 7 hours after administration of analgesics
5. Patients who get analgesic therapy with the same composition and dosage
6. The patients who are conscious and willing to be respondents

The sampling technique used purposive sampling technique, based on the characteristics or nature of the population that has been known before [12]. This study was conducted from June 6 to June 30, 2016, in Dr. H .. Moch Ansari Saleh Banjarmasin.

This research uses pre-group experimental pre and post-test design method by using one group of respondents in which the respondent group in which the group is given treatment. Measurements were made before and after the admission, the difference in measurement results was considered as the effect of the treatment [12].

The dependent variable in this research is the intensity of post-cesarean section pain. Independent variable in this research is handheld relaxation technique of finger. This research uses Quantitative data type. Data collection conducted by giving questionnaires and Procedures Management Handheld Relaxation Techniques of Handheld [12].

Data Analysis uses test:

1. Shapiro-Wilk Normality Test

Normality test aims to determine whether the research data is normally

distributed or not. For in the parametric statistics the normal distribution of data is a necessity and an absolute requirement that must be met. Basic decision making in Shapiro-Wilk Normality test if sig value > 0,05 then normal distributed data, if sig value < 0,05 then data not normally distributed.

2. Paired T-test

After the data collected statistical analysis used in this study is Paired Sample t-test or paired sample T-test explains this test does not have the function to know the difference before and after doing a certain treatment on the sample [12].

Tailed Test Formula

$$t = \frac{\bar{x} - \mu_0}{S / \sqrt{n}}$$

Information:

t: value t count

x: group average 1

μ_0 : group average 2

S: standard deviation of measurement increments 1 & 2

n: number of samples.

3. Interpretation of Data Processing Results

In this study, the value of $p < \alpha$, then H_0 rejected which means there is effectiveness of handheld relaxation technique to decrease the intensity of post-cesarean section pain and if the value $p > \alpha$, then H_0 is accepted which means there is no effect of handheld relaxation techniques to

decrease the intensity of pain post section
Caesarea.

III. RESULTS

Table 1. Distribution of Pain Scale Before Perform Handheld Relaxation Technique.

| Pain Scale | Pain Intensity | % |
|------------|----------------|------|
| | Pre Test | |
| 0 | - | - |
| 1 | 3 | 10 |
| 2 | 5 | 16,7 |
| 3 | 2 | 6,6 |
| 4 | 12 | 40 |
| 5 | 8 | 26,7 |
| 6 | - | - |
| 7 | - | - |
| 8 | - | - |
| 9 | - | - |
| 10 | - | - |
| amount | 30 | 100 |

Based on the results from table 1 can be seen the results of the scale of pain before handheld relaxation techniques on 30 respondents obtained most with 4 pain scale is 12 respondents (40%) and a small part of the pain scale 3 is 2 respondents (6,6%).

Table 2. Pain Scale Distribution After Performed a 10 Minute Handheld Relaxation Technique, Measurement Time of Pain After 30 Minutes Performed Relaxation Technique

| Pain Scale | Pain Intensity | % |
|------------|----------------|------|
| | Pre Test | |
| 0 | 9 | 30 |
| 1 | 2 | 6,6 |
| 2 | 11 | 36,7 |
| 3 | 5 | 16,7 |
| 4 | 2 | 6,6 |
| 5 | 1 | 3,4 |
| 6 | - | - |
| 7 | - | - |
| 8 | - | - |
| 9 | - | - |
| 10 | - | - |
| Amount | 30 | 100 |

Based on the result from table 2 can be seen the result of pain scale after hand-held relaxation technique for 10 minutes on 30 respondents obtained mostly with pain scale 2 is 11 respondents (36,7%) and a small part of pain scale 5 is 1 respondent (3,4%).

Table 3. Results of Shapiro Wilk Normality Test Analysis.

| | Kolmogorov-Smimov ^a | | | Shapiro-Wilk | | |
|--------|--------------------------------|----|------|--------------|----|------|
| | Statistics | df | Sig. | Statistics | df | Sig. |
| Before | .294 | 30 | .000 | .840 | 30 | .000 |
| After | .208 | 30 | .002 | .886 | 30 | .004 |

a. Lilliefors Significance Correction

Based on table 3 it can be seen that the results of the Shapiro Wilk Test show that Asymp. Sig (2-tailed) on before and after is 0,000 and 0,004, so Sig <0,05 means that the data obtained is not normally distributed. Therefore the statistical test using Wilcoxon test The results of the study can be concluded in the table below:

Table 4. Results of Wilcoxon Signed Ranks Descriptive Statistics

| | N | Mean | Std. Deviasi | Minimum | Maximum |
|----------------------|-------------------|-----------------|-----------------|-------------|---------|
| after | 30 | 1.73 | 1.413 | 0 | 5 |
| before | 30 | 3.57 | 1.331 | 1 | 5 |
| | | N | Mean Rank | Sum Of Rank | |
| Before - after | Negative Ranks | 0 ^a | .00 | .00 | |
| | Positive Rank | 26 ^b | 13.50 | 351.00 | |
| | Ties | 4 ^c | | | |
| | Total | 30 | | | |

a. Before <After

b. Before > After

c. Before = After

Test Statistik

| Before-after | |
|------------------------|---------------------|
| Z | -4.544 ^a |
| Asymp. Sig. (2-tailed) | .000 |

a. Based on negative ranks

b. Wilcoxon Signed Ranks Test

Based on the result from table 4 it is known from the descriptive box Statistics seen N is the number of respondents is 30 people, Mean is the average value of the pain scale before the relaxation technique is 1,73 and after the relaxation technique is 3,57, the standard deviation from before the relaxation technique is 1,413 and after the relaxation

technique is 1,331, the minimum value before the relaxation technique is 0 and after the relaxation technique is 1, the maximum value before the relaxation technique is done 5 and after the relaxation technique is 5.

Ranks 0 Negative Ranks 0 means no increase in pain, Positive Ranks 26 means 26 people have decreased post-cesarean section pain, and Ties 4 means 4 people are unchanged and $P = 0,000$ ($P < 0,05$), so H_0 is rejected and H_a accepted that there is effectiveness of handheld relaxation technique of the fingers on the post-cesarean section mother in the postpartum room of Dr. H. Moch. Ansari Saleh Hospital, Banjarmasin.

IV. DISCUSSION

Research conducted on the effectiveness of handheld finger technique to decrease intensity post-cesarean section pain in RSUD. Dr. H. Moch. Ansari Saleh Banjarmasin has a weakness that is this experimental research does not separate the groups that are not given treatment so it can not distinguish between the respondents are given relaxation techniques handheld finger with which is not given technique handheld relaxation finger.

On the scale of post-cesarean section pain scale before hand-lifted relaxation technique, the post-cesarean section pain scale was obtained mostly with pain scale 4 was 12 respondents (40%) and a small part of pain scale 3 was 2 respondents (6,6%), with respondent measurements such as hissing, grinning, can indicate the location of pain, can

describe it, can follow the command well and removed using analgesic drugs or relaxation techniques and on the post pain scale scale measurement results cesarean section done handheld relaxation techniques finger for 10 minutes on 30 respondents obtained mostly with pain scale 2 was 11 respondents (36,7%) and a small part of pain scale 5 was 1 respondent (3,4%), with relaxation technique like handheld each finger starting from thumb for 2 -5 minutes, deep breath trick, exhale slowly and release regularly and feel the vibration or pain out of each end of the fingers. Category of pain scale according to (13) using a numerical scale with pain scale before the relaxation technique is done with a mild pain scale of 10 respondents (33,4%) and medium pain scale of 20 people (66,6%) and then performed relaxation techniques then pain scale with painless scale 9 people (30%), light pain scale 18 people (60%), medium pain scale 3 people (10%).

"The Effect of Handheld Relaxation Technique To Change Pain Scale On Patient Post Cesarean section RSUD Prof. DR. Margono Soekardjo Purwokerto" of the 32 respondents found in the experimental group mostly stated moderate pain that is 9 respondents (56,2%) and after handheld relaxation technique in the experimental group mostly stated mild pain that is 8 respondents (50%). The postoperative pain scale of cesarean section prior to the control group mostly stated moderate and severe pain that was 8 respondents (50%) and after control

group mostly stated severe pain 10 respondents (62,5%). There is the influence of handheld relaxation technique to change the scale of pain in postoperative patients cesarean section in RSUD Prof. Dr. Margono Soekardjo Purwokerto with a p-value of 0,000 ($p < \alpha$). Based on the result of this research can be seen that there is influence before and after giving handheld relaxation technique of finger [14].

Postoperative pain is a side effect that must be suffered by those who have had surgery, including a cesarean section. The pain may be caused by intercellular adhesions due to surgery. The pain is almost impossible to remove 100%, the mother will experience pain or disturbance, especially when an excessive activity or do sudden rough movements. Since the patient is aware within the first 24 hours the pain is still felt in the surgery area [15]. The investigators assessed post-caesarean section pain before hand-held relaxation technique was then observed for 30 minutes using a numerical scale that has levels of 0-10 and relaxation techniques performed for 10 minutes, with pain scale categories from painless to uncontrollable severe pain. The pain scale before the relaxation technique is with the light pain scale as much as 10 respondents (33,4%) and medium pain scale as many as 20 people (66,6%) then relaxation technique then pain scale with painless scale 9 people (30%), mild pain scale 18 people (60%), medium pain scale 3 people (10%) [9]. research entitled *"The Effect of Hand-Finger Relaxation Technique on Decreasing Intensity*

of Pain in Patient Post Laparotomy Surgery" in this study first assess the scale of pain experienced by respondents using a numerical scale that has levels 1-10, after this done observation for 1 hour. The handheld relaxation technique is given for 10 minutes. In this case, the difference is only found in the observation time only because the observation time that researchers do is 30 minutes.

It is expected to conduct research on the effectiveness of handheld technique to decrease the pain intensity in post- caesarian section mothers by using a case-control method so that it can distinguish between the result of treatment and treatment that is not given.

V. CONCLUSION

Based on the research that has been done on 30 post-caesarian section mothers, the results of the pain scale before the technique of hand-held finger relaxation as much as 40% or 12 people who have the scale of pain 4 then was given relaxation techniques ganggam finger for 10 minutes then observed for 30 minutes and the results obtained the scale of pain to 2 as many as 11 people (36,7%). So it can be concluded that there is the effectiveness of handheld relaxation technique to decrease the intensity of pain in Caesarea post section mother in RSUD. Dr. H. Moch. Ansari Saleh Banjarmasin.

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