



The Effect Of Giving The Handheld Finger Relaxation On Anxiety Changes To The Patients With Coronary Heart Disease

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ABSTRACT

The prevalence of coronary heart disease has a tendency to raise up every year. The patient has an anxiety because of ineffective coping at the onset of the symptoms, insufficient knowledge about the disease and tendency of hearing the death threat. Research is to know the effect of giving the handheld finger relaxation on anxiety that changes to the patients with coronary heart disease at ICCU Room, Abdul Wahab Sjahranie Hospital.

This Study used Quasi Experiment pre-test and post-test without control. The sampling technique was Non-Probability sampling (Nonrandom sample), which was consecutive sampling typed.

The result of this study showed that there was the effect of giving handheld finger relaxation on anxiety that changes to the patients with coronary heart disease at ICCU Room, Abdul Wahab Sjahranie Hospital. It showed with p Value 0,000 ($p > 0,05$) where the mean value was 15,00 before the intervention showed the level of anxiety was medium, and the mean value 10,00 after the intervention showed the level of anxiety was low.

The handheld finger relaxation can reduce the anxiety of the patients with coronary heart disease.

INTRODUCTION

The prevalence of coronary heart disease rate in the world as much as 7.4 million and continue to increase, coronary heart disease (CHD) is one of the most common cardiovascular disease (around 43% of total cardiovascular disease (WHO, 2012) DataRiset Health Basic (Riskesdas) in 2013, the prevalence of coronary heart disease in Indonesia is 0.5% or an estimated 883,447 people. The prevalence of coronary heart disease in East Kalimantan is 13th in 33 provinces in Indonesia with 0.5% or estimated 13,767 people (Ministry, 2013).

Coronary heart disease data at RSUD Abdul Wahab Sjahranie in 2016 increased from the previous year, ie in 2015 as many as 869 people and in 2016 in January to September as 947 people. From these data the incidence rate of coronary heart disease in ICCU room is 260 people in January to September 2016.

Clinical manifestations of coronary heart disease are the occurrence of chest pain (Angina pectoris), dyspnea, dizziness, arrhythmia, prolonged fatigue, abdominal pain, nausea, vomiting and when the patient's coping response is ineffective, it causes anxiety, which if anxiously is not handled will result depression, suicide, decreased quality of life that will affect the delay of the healing process (Hermawati, et al. 2014).

The mechanisms that cause anxiety include increasing the risk of fatal coronary heart disease including hyperventilation. Hyperventilation that occurs during acute attacks can cause coronary spasm, ventricular failure that can lead to arrhythmias (Lestari, 2015). Nursing problems that may arise are pain, decreased cardiac output, activity intolerance, anxiety.

Anxiety can be done with pharmacology management ie Treatment of anti-anxiety benzodiazepine and non-benzodiazepine While non-pharmacological treatment of distraction and relaxation therapy (Isaacs, 2005).

Based on anxiety nursing issues related to lack of knowledge about disease, disease progression, death threat. The role of nurses in overcoming anxiety in patients with coronary heart disease is by implementing nursing care. The nursing care in question is that nurses need to intervene to reduce anxiety by increasing coping, providing emotional support, providing health education, and providing relaxation techniques (Wilkinson, Judith M & Ahern 2012).

Relaxation techniques are an attempt to improve control and self-confidence and reduce perceived stress (Stuart, 2007). One of the relaxation techniques used is the handheld relaxation technique of the fingers. Finger-handed relaxation can control and restore emotions that will make the body relax. In a relaxed state will naturally trigger the release of endorphin hormone, this hormone serves to cause feelings of pleasure and relieve stress (Sofiyah, 2014).

Based on previous research conducted by Revi, 2016, the effect of the handheld relaxation technique for decreasing anxiety in pre-operative patients sectio caesarea. The results of this study illustrate that there is an influence of handheld relaxation technique capable of giving effect of decreasing anxiety in patient's pre-surgery sectio caesarea.

This is what encourages researchers to conduct research to determine whether there is an effect of handheld relaxation techniques to change the anxiety of patients with coronary heart disease.

METHOD

The design of this research is a Quasi Experiment pre-test and post test without control (self control) with Handheld Relaxation intervention. According to (Dharma, 2011). Quasi-experimental research pre-test and post without control (self-control) is the researchers only intervene in one group without comparison by looking at changes in the level of anxiety before and after intervention.

The population in this study was patients with coronary heart disease who experienced anxiety in the ICCU room of RSUD Abdul Wahab Sjahranie. Sampling technique by using Non-Probability sampling (sample non-random) and Samples in this study were 10 samples of patients with coronary heart disease who experienced anxiety.

To give internally the technique of handheld finger relaxation using SOP (Standard Operational Procedure). As for the anxiety measurement before and after the intervention, the researcher uses the Hamilton Anxiety Rating Scale and HARS (Hamilton Anxiety Rating Scale) measurement with the result of measuring 0-56 with Ratio scale. The HARS Instrument Validity and Reliability Test is not performed because the instrument has been standardized and has been used in previous studies.

And in this research, all data of research result analysed by using the software Statistic Computer program. Data analysis was done systematically, among others: Test of data normality, univariate test, and bivariate test using a parametric test that is Paired T-Test to see the difference of the change between before and after finger hand relaxation.

RESULTS AND DISCUSSIONS

Characteristics of Respondents Based on Demographic Data

Table 4.1 Frequency Distribution Based on Respondents' Characteristics of Hand, Finger Relaxation Technique in ICCU Room RSUD Abdul Wahab Sjahranie Samarinda Year 2017.

No.	Characteristic	n	(%)
1.	Gender		
	Male	6	60,0
	Female	4	40,0
	Total	10	100,0
2.	Education		
	Elementary	4	40,0
	Junior High School	3	30,0
	Secondary School	1	10,0
	Uneducated	2	20,0
	Total	10	100,0

Source: Analysis of primary data, 2017

Based on table 4.1 shows that the characteristics of respondents based on sex obtained by most men as many as 6 people (60.0%). While the respondent's karektrisktik based on the last education obtained almost half of respondents with last elementary school education as many as 4 people (40.0%).

Table 4.2 Average Distribution Based on Respondent Age Characteristics Finger Hand Relaxation Technique in ICCU Room RSUD Abdul Wahab Sjahranie Samarinda Year 2017.

	Mean	Elementary School
Age	58,20	8,244

Source: Analysis of primary data, 2017

Based on Table 4.2 shows that the characteristics of respondents by age is with the average age of 58 years with a standard deviation of 8.244. And based on result of normality test using Shapiro wilk age data with normal distribution with p value 0,776 ($p > 0,05$).

Identifying the Patient Anxiety Levels Before the Intervention

Table 4.3 Distribution of Respondents Anxiety Score Before the Intervention Finger, Hand Relaxation Technique in ICCU Room RSUD Abdul Wahab Sjahranie Samarinda Year 2017

Variabel	Score Anxiety	Mean	Elementary School	p
Anxiety score before the intervention	15-27	15,00	4,922	0,269

Source: Analysis of primary data, 2017

Table 4.3 above shows the results of test results Shapiro Wilk normality Test anxiety score before the intervention techniques handheld relaxation. After the analysis obtained variable anxiety scores respondents before the intervention is normally distributed. It has been seen from a p value before $0,269 > 0,05$ with mean value 15,00 that is with medium anxiety and standard deviation 4,922

which where mean of deviation standard is higher than the standard deviation value after giving the intervention.

Identifying the Patient Anxiety Levels After Intervention

Table 4.4 Distribution of Respondents Anxiety Score After Intervention of Handheld Relaxation Technique in Face Room ICCU RSUD Abdul Wahab Sjahranie Samarinda Year 2017

Variabel	Anxiety Score	Mean	Elementary School	P
Anxiety Score after the intervention	7-14	10,00	4,346	0,148

Source: Analysis of primary data, 2017

Table 4.4 above shows the results of test results Shapiro Wilk normality Test anxiety score after intervention techniques handheld relaxation. After the analysis obtained variable anxiety scores respondents after the intervention is normally distributed. It is seen from the p-value after intervention $0,148 > 0,05$ with mean value 10,00 that is with mild anxiety and standard deviation 4,346 with meaning there is a decrease of standard deviation before giving the intervention.

Results of Bivariate Analysis

Anxiety Differences Before and After Intervention

Based on table 4.3 and table 4.4 shows Normality Test results data is normally distributed, then T-Paired Test.

Table 4.5 Result of T-Paired Test of Respondents Anxiety Finger, Hand Relaxation Technique in ICCU Room RSUD Abdul Wahab Sjahranie Samarinda Year 2017

Anxiety	Mean	Elementary School	P
Before intervention	15.00	4.922	0.000
After Intervention	10.00	4.346	

Source: Analysis of primary data, 2017

Based on Table 4.5 indicates a decrease in the mean and standard deviation scores of anxiety scores after a handheld relaxation intervention with 10 respondents. From the T-Paired test results show that p-value 0,000 ($p < 0.05$) thus there is a significant difference of anxiety score between before and after given intervention.

This indicates that there is an effect of the handheld relaxation technique on the change of anxiety level of patients with coronary heart disease.

Respondent's Characteristics

Table 4.1 shows patients with coronary heart disease who experience more male-dominated anxiety. This is consistent with studies conducted by (Lestari, 2015) suggesting men have a higher risk of early karsiovascular disease. Men also have a greater risk of morbidity, cardiovascular mortality and men are at risk for anxiety (Lestari, 2015).

Table 4.2 shows that patients with coronary heart disease who experienced an average anxiety aged 58 years. In an elderly person, a person experiences, concerns about his fear of death, loss of

family, social standing. This is due to the lack of adaptability based on psychological barriers, namely fear and fear (Maramis, 2004).

Table 4.1 shows that patients with coronary heart disease who experience anxiety are dominated by the last elementary school. One of the factors that affect the anxiety of knowledge, because the higher the level of education it will be easier for someone to accept new things which will easily adjust and receive information and eventually the more knowledge it has (Notoatmojo, 2010). Thus, it can be concluded that the lower the educational level of a person, the more difficult to receive information and eventually the less knowledge, it has and result in the level of anxiety a person himself.

Patient Anxiety Before Intervention

The results showed that before the intervention of the handheld relaxation technique, the average respondents experienced moderate anxiety level.

The emergence of anxiety in patients with coronary heart disease is a result of lack of knowledge about the disease and from the clinical manifestations that arise. This is in accordance with the explanation of (Hermawati, Risa & Dewi, 2014) Clinical manifestations of coronary heart disease, namely the onset of chest pain (Angina Pectoris), dyspnea, dizziness, arrhythmia, prolonged fatigue, abdominal pain, nausea, vomiting and when changing response, the patient is ineffective then causing anxiety. Anxiety occurs because the individual is unable to make adjustments to himself in the environment he faces. Anxiety arises because of the manifestation of the mix of various emotional processes (Revi Diana Kurnia Sari, 2016).

This is in line with research conducted by (Lestari, 2015) who suggested that most respondents with coronary heart disease experienced moderate anxiety by 75% and 25% experienced severe anxiety.

Patient Anxiety After Intervention

The results showed that after the intervention of handheld relaxation technique, the average respondent experienced a mild anxiety level.

The results describe respondents who experience anxiety and have been given relaxation handheld technique of anxiety levels tend to go down to the level of mild anxiety and potentially not anxious. This gives information that handheld relaxation techniques fingers able to give the effect of reducing anxiety.

According to Stuart (2007) relaxation techniques help the body, mind and spirit to achieve relaxation. Relaxation techniques are also an action to free the mental and physical from tension and stress, so as to increase tolerance. Various relaxation methods are used to reduce anxiety and muscle tension so that a decrease heart rate, decreased respiration and decreased muscle tension.

Effect of Handheld Relaxation Techniques on Changes in Anxiety Levels in Patients with Coronary Heart Disease.

After the intervention of handheld relaxation technique on the respondents who experienced anxiety T-Paired test with the result, there is a significant decrease with the results of hypothesis testing ($p < 0.05$) proved handheld relaxation technique significantly lower the anxiety score in patients with coronary heart disease.

The decrease in anxiety scores in patients with coronary heart disease is due to the relaxation of the fingers. Each finger is related to everyday attitude. The thumb is associated with worry, the index finger is associated with fear, the middle finger is associated with anger, the ring finger is associated with sadness and the little finger is associated with low self-esteem and discouragement (Hill, 2011).

Grasping fingers can reduce physical and emotional strain because finger grips will warm the incoming and outgoing points of energy at the meridians (energy channels) associated with the organs in the body that lies in the fingers. The points of reflection on the hand provide stimulation reflex (spontaneous) at the time of grip. The stimulus will drain a wave of shock or electricity to the brain and then processed quickly and forwarded to the nerves in the body organs that have interference so that the blockage in the energy path becomes smooth (Pinandita, 2012). The blockage in the energy path is an unbalanced feeling such as worry, anxiety, anger, fear and sadness that can block the flow of energy that can lead to feelings of discomfort in the body (Hill, 2011).

In the process the hormone endorphin will be issued, which the finger grip is done will occur emphasis on the nervous point of worry, fear, anger, sadness and stress so that at the time of suppression occurs descending nerve receptors send the stimulus to the hypothalamus and forwarded to the punch, then proceed to the gray part of the midbrain (periaqueductal), the stimulus received by the periaqueductal is conveyed to the hypothalamus then the hypothalamus stimulates the pituitary gland to secrete the endorphin hormone. Endorphin hormone restores emotions that will make the body relax. When the body is relaxed, the tension in the muscle is reduced which then reduces anxiety (Sofiyah, 2014).

The results of this study were supported by research (Revi Diana Kurnia Sari, 2016) entitled "The influence of handheld relaxation techniques on the decrease of anxiety in patients with preoperative section Caesarea". The results of this study illustrate that there is an influence of handheld relaxation techniques that can give the effect of anxiety reduction in the patient's pre-surgery sectio Caesarea.

So, when the patient is given finger, hand relaxation can minimize the work of the brain and mindset that is negative thinking so as to relax the body and make the body into balance and comfortably. And improve blood circulation is inhibited due to the tension that occurs from the anxiety of the patient.

CONCLUSION AND SUGGESTION

Based on the results of the research can be formulated conclusions that are at the level of anxiety before handed relaxation intervention handheld respondents average average experiencing moderate anxiety level with mean value = 15.00 and the standard deviation value 4.922. While on the level of anxiety after handed relaxation intervention handheld respondents' average average experiencing a mild anxiety level that is with mean = 10.00 and the standard deviation value 4,346. Hence, it can be seen there are differences of anxiety before and after hand-held relaxation techniques to change the anxiety of patients with heart disease coronary. It can also be seen from the result of T-Paired test that is p value = 0,000 ($P < 0,05$).

For further research results of this study are still needed further with more samples and use the control group so that the expected results can be more leverage and also expected to add the frequency of a handheld relaxation techniques finger.

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