



THE EFFECTIVENESS OF PSYCHORELIGIOUS THERAPY: MUROTTAL AL QUR'AN ON CHEST PAIN LEVEL OF THE PATIENT IN INTENSIVE CARE UNIT

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ABSTRACT

Chest pain is the main complaint felt by patients with coronary heart disease. Chest pain occurs during a heart attack when oxygen supply to the myocardium is decreased. Psychoreligious therapy: murottal Al-Qur'an is a psychoreligious therapy given to patients by listening to verses of the Qur'an for a few minutes to have a positive impact on the patient's psychological condition, thereby providing a relaxing effect to reduce pain. This study aims to determine the effectiveness of psychoreligious therapy: murottal Al-Qur'an on the level of chest pain. This research design used pre-experimental method with one group pre and post-test design. The population of this study were patients with coronary syndrome acute who were treated in the Intensive Care Unit of the Tidar General Hospital Magelang. The sampling technique used accidental sampling, with a total of 34 respondents. The research instrument used the Numeric Rating Scale to measure the scale of chest pain before and after therapy. Psychoreligious therapy: murottal Al-Qur'an given according to standard operating procedures for 20 minutes. The statistical test used paired t test. The results showed that there was a significant difference from chest pain level before and after psychoreligious therapy: murottal Al-Qur'an with p-value 0.000 ($p < \alpha$ (0.05)). Psychoreligious therapy: murottal Al-Qur'an can effectively reduce the scale of the patient's chest pain. There is a need for socialization and application of psychoreligious therapy: murottal Al-Qur'an as a therapeutic modality and further research is needed on various psychoreligious therapies that are useful in nursing care services in hospitals.

Keywords: chest pain; psychoreligious therapy: murottal Al-Qur'an

INTRODUCTION

According to WHO in 2012, it showed that deaths from cardiovascular disease reached 17.5 million people per year, it means that this figure reached 31 percent of the 56.5 million deaths all the world. Cardiovascular diseases including coronary heart disease and stroke are the first in the list of chronic diseases in the world. More than three quarters of deaths from cardiovascular disease was occurred in developing countries and low income. All the deaths due to cardiovascular disease, 7.4 million (42.3%) were caused by coronary heart disease (CHD) and 6.7 million (38.3%) caused by stroke.

In Indonesia, coronary heart disease is the highest cause of death for all ages after stroke, namely 24.9% (Indonesian Ministry of Health, 2018). In Central Java, the estimated number of coronary heart disease in 2013 based on a doctor's diagnosis was 0.5% or an estimated 240,447 people, while based on a doctor's diagnosis/symptoms was 1.4% or an estimated 337,252 people.

Coronary heart disease is a dysfunction of the heart where the heart muscle lacks blood supply caused by narrowing of the coronary arteries. Coronary heart disease is clinically characterized by chest pain (angina) or chest pressure when do activity. Angina pectoris is a clinical syndrome characterized by episodes or paroxysms of pain or pressure in the front chest. The cause is thought to be reduced coronary blood flow, causing inadequate oxygen supply to the heart or in other words, the heart's supply needs to increase. Angina is usually caused by atherosclerotic disease and is almost always associated with blockage of the main coronary arteries (Barbara, 2010).

Chest pain is a major problem that must be treated because it can disturb the patient physically and psychologically. The physiological response to pain results in sympathetic stimulation, which will cause the release of epinephrine, an increase in epinephrine resulting in a fast heart rate, rapid and shallow breathing, increasing pressure in the arteries. The psychological response arises feelings of anxiety and fear in carrying out activities. If the pain is left untreated or not reduced in intensity, it can significantly threaten a person's life (Potter & Perry, 2010).

Murottal Al-Qur'an is a recording sound of the Al-Qur'an recite by a Qori '(Al-Qur'an reader). The chanting of the Qur'an physically contains elements of the human voice, the human voice is a wonderful healing instrument and one of that is easiest to reach. Sound can activate natural endorphins, increase feelings of relaxation, and divert attention from pain. A spiritual approach can help speed up a patient's recovery or healing. The results of this study show that listening to the holy verses of the Qur'an has the effect of bringing calm and reducing pain (Babaii, 2015).

The results of Rilla's (2014) study regarding murottal therapy were effective in reducing pain levels than music therapy in post-surgical patients. It can be concluded that music and murottal therapy have an effect on reducing pain levels but do not have a significant effect on the stability of vital signs in postoperative patients. The results of Faridah's (2016) study regarding murottal Al-Qur'an therapy were able to reduce anxiety levels in pre-laparotomy patients in the Bougenville Room, Dr. Soegiri Lamongan, with the results that most of the preoperative laparotomy patients experienced moderate anxiety before listening to the verses of the Alquran. Some preoperative laparotomy patients experience mild anxiety after listening to the verses of the Alquran. Research by Siswanti & Kulsum (2016) on the effect of murottal therapy on the pain of post-cesarean section patients at RSI Sunan Kudus shows that the results of sample tested has a significant effect.

Based on a preliminary study conducted at the Tidar Magelang Regional Hospital, there were 5 patient respondents with chest pain complaints who were treated in the ICU room at the Tidar General Hospital Magelang. The preliminary study was conducted by observing, interviewing and measuring the chest pain scale using the Numeric Rating Scale. The results of observations of 5 patients with acute coronary syndrome showed that 1 patient complained of severe chest pain, 3 patients complained of moderate chest pain, and 1 patient had mild chest pain. From these observations, the average chest pain experienced by patients was moderate. Therefore, the role of nurses here is needed in handling chest pain. Pain management must cover the entire patient's pain, whether physical, psychological, social, spiritual, and cultural. Pain management, nurses play an important role in assessing, providing appropriate interventions, and documenting.

One form of chest pain that is often found is angina pectoris, which is a symptom of coronary heart disease. This symptom of chest pain can be progressive and fluctuating or intermittent chest pain means that it can be calm without symptoms and does not interfere with the patient's activities, but it can also be occurred if the situation worsens with symptoms of mild, moderate, severe chest pain that can cause death. Based on phenomenon above, the researcher was interested in conducting a study with the title " The Differences from the chest pain level before and after psychoreligious therapy: murottal Al-Qur'an in the ICU room at Tidar General Hospital Magelang ".

METHOD

This research design used pre-experimental method with one group pre and post-test design. The sampling method that was used was accidental sampling. The population of this study were patients with coronary syndrome acute who were treated in the Intensive Care Room of Tidar General Hospital Magelang, with total sample 30 respondents. The research instrument used Numeric Rating Scale to measure the scale of chest pain, before and after therapy. Psychoreligious therapy: murottal Al-Qur'an given according to standard operating procedures for 20 minutes. The statistical test used paired t test.

RESULTS AND DISCUSSION

The Description of Chest Pain Levels before Psychoreligious Therapy: Murottal Al-Qur'an in the ICU Room at Tidar General Hospital Magelang

Table 1.
Frequency distribution of chest pain levels before psychoreligious therapy: murottal Al-Qur'an (n=34)

Pain level	f	%
Mild	10	29,4
Moderate	24	70,6

Table 1, it shows that the level of chest pain before psychoreligious therapy: murottal Al-Qur'an in the ICU room at Tidar General Hospital Magelang who experienced moderate pain levels were 24 respondents (70.6%) and those who experienced mild pain levels were 10 respondents (29.4%).

The Description of Chest Pain Level after Psychoreligious Therapy: Murottal Al-Qur'an in the ICU Room at Tidar General Hospital Magelang

Table 2.
Frequency distribution of chest pain levels after psychoreligious therapy: murottal Al-Qur'an (n=34)

Pain level	f	%
Mild	24	70,6
Moderate	10	29,4

Table 2, it shows that the level of chest pain after psychoreligious therapy: murottal Al-Qur'an in the ICU room at Tidar Magelang Hospital who experienced moderate pain levels were 10 respondents (29.4%) and those who experienced mild pain levels were 24 respondents (70.6%).

The differences from chest pain level before and after psychoreligious therapy: murottal Al-Qur'an in the ICU Room at Tidar General Hospital Magelang.

Table 3.
 The differences from chest pain level before and after psychoreligious therapy: murottal Al-Qur'an (n=34)

Pain level	N	Mean	SD	<i>p</i> <i>value</i>
Before therapy	34	4.23	1.20	
After therapy	34	3.05	1.09	0.000

Table 3, the results of data analysis using paired sample T-test obtained a p value of 0.000 <0.05, so it can be concluded that there is a significant difference from chest pain level before and after psychoreligious therapy: murottal Al-Qur'an in the ICU Tidar General Hospital Magelang.

The Description of Chest Pain Levels before Psychoreligious Therapy: Murottal Al-Qur'an in the ICU Room at Tidar General Hospital Magelang

The level of chest pain before psychoreligious therapy: murottal Al-Qur'an in the ICU Room of the Tidar Hospital Magelang obtained an average of 24 respondents (70.6%) experiencing moderate pain levels and 10 respondents (29.4%) experiencing mild pain level. This is in line with research conducted by Khasinah (2015), where the results showed that post ORIF patient respondents at Muhammadiyah Yogyakarta Hospital based on the average pretest results before being given Murottal Juz 'Amma therapy on the first and second days experienced moderate pain (50%) and some have severe pain (50%).

The average of the respondent's chest pain scale was moderate. It is because patients who were treated on the first day in the ICU had previously received sublingual 5 mg ISDN tablet therapy before. Meanwhile, respondents experienced mild pain, it was because the patient experienced moderate initial symptoms of pain and then received sublingual 5 mg ISDN tablets before. The results of the average chest pain level were taken from the pretest data which was carried out when the patient felt chest pain, namely before consuming ISDN. According to MIMS Drug Reference (2015), sublingual ISDN has a fast onset of 2 to 3 minutes and a duration of action of 1 to 3 hours. Researchers recorded the pretest data by measuring the scale of chest pain using the NRS (Numeric Rating Scale).

Chest pain can be influenced by several things, one of them is the age factor. Age has an important role in perceiving and expressing pain. Age can change perceptions and experiences of pain (Black & Hawks, 2014). The results showed that most of the respondents who had chest pain before psychoreligious therapy: murottal Al-Qur'an, namely 70.6% experienced moderate pain scale, mostly at the age of 61-70 years. These results are consistent with a study conducted

by Danny (2009) in the Indonesian Journal of Cardiology, which states that the incidence of pain in NSTEMI is 61-69 years old.

It is known that the age of patients with coronary heart disease in the ICU room at the Tidar Hospital Magelang, most of the respondents were 61-70 years old, namely 16 people (47.1%), respondents aged 51-60 years were 8 people (23.5%) respondents aged 40-50 years were 10 people (29.4%). Apart of age, a factor that may affect chest pain is gender. The majority of patients treated in the ICU room at RSUD Tidar Magelang that experiencing chest pain are male. This is in line with the Muttaqin theory (2014) that women are relatively immune to this disease until they experience the menopause phase, after that they become as vulnerable as men, because the hormone estrogen protects women's immunity at the age before menopause.

The Description of Chest Pain Level After Psychoreligious Therapy: Murottal Al-Qur'an in the ICU Room at Tidar General Hospital Magelang

The level of chest pain after psychoreligious therapy: murottal Al-Qur'an in the ICU room at Tidar Hospital Magelang, it was found that 10 respondents (29.4%) experienced moderate pain levels and 24 respondents (70.6%) had mild pain levels. This is in line with research conducted by Khasinah (2015), where the results of the study showed that post-ORIF patient respondents at Muhammadiyah Yogyakarta Hospital based on the average posttest results after being given Murottal Juz 'Amma therapy on the first and second days were known to have moderate pain (70%) and some experienced mild pain (30%).

The results of the average level of chest pain were taken from the post test data recorded by researchers by measuring the chest pain scale using the NRS (Numeric Rating Scale) after the murottal therapy was carried out decreased, due to the effect of psychoreligious therapy: murottal Al-Qur'an. With this psychoreligious therapy: murottal Al-Qur'an, respondents can reduce nerve tension and stress hormones, activate natural endorphins, increase feelings of relaxation and divert attention from pain, anxiety and tension. When the respondent listens to the recitation of the holy Qur'an well and concentrates, it can certainly cause a feeling of comfort, calm for the patient, so that the pain can be reduced or decreased. Besides being able to reduce pain, listening to the murottal Al-Qur'an can also get peace of mind, and patients can get closer to God.

The level of chest pain after murottal therapy showed a decrease. The results of this study support the results of the first experiment which proved that 97% of respondents, both Muslim and non-Muslim, both understood Arabic or not, experienced some physiological changing. It indicates the level of tension in these nerves. This fact was accurately recorded by Ahmed Elkadi in a computer-supported electronic detector system to measure any changes in the physiology (organs) of the body (Mahmudi, 2011). Ahmed Elkadi's research conducted in 1985 revealed that nerve tension has the potential to reduce body resistance due to disruption of the balance of organs in the body to fight pain or help the healing process. For the second experiment, the relaxation effect caused by the Al-Qur'an on nervous tension and physiological changing (Mahmudi, 2011).

The Differences from chest pain level before and after psychoreligious therapy: murottal Al-Qur'an in the ICU room at Tidar General Hospital Magelang

Based on the results of the paired sample T-test, the sig. (2-tailed) value of $0.000 < 0.05$, it can be concluded that there is a significant difference in the scale of chest pain before and after psychoreligious therapy: murottal Al-Qur'an in ICU room at Tidar General Hospital Magelang.

The results of this study are supported by the results of Eldessa Vava Rilla's (2014) study of effective murottal therapy in reducing pain levels compared to music therapy in post-surgical patients. Based on the research music therapy and murottal therapy have an effect on reducing pain levels but do not have a significant effect on the stability of vital signs in postoperative patients. The results of a study by Siswanti & Kulsum (2016) on the effect of murottal therapy on pain in post-cesarean section patients at RSI Sunan Kudus showed that the samples tested had a significant effect.

Murottal Al-Qur'an therapy is therapy by listening a recorded voice of the al-Qur'an that is recite by a qori / al-Qur'an reader (Siswanti & Kulsum, 2017). The murottal recitation of the Qur'an has a constant, regular rhythm and does not change suddenly. The tempo of the murottal al-Qur'an is short, and the tone is low so that it has a relaxing effect and can reduce pain. The decrease in pain intensity in this study was due to the relaxing effect of murottal therapy. According to the opinion of Alkahel (2011), which states that the Qur'an that is heard will provide a relaxing effect of 65%. The Qur'an recitation therapy has been shown to activate body cells by converting sound vibrations into waves captured by the body, reducing pain receptor stimuli and stimulating the brain to release endogenous natural opioid analgesics. These opioids are permanent to block pain nociceptors.

Physiologically, the sound vibrations of the Al-quran recitation will be captured by the earlobe which will be diverted to the ear hole and hit the tympanic membrane (membrane that is in the ear) so that it makes it vibrate. These vibrations will be transmitted to the hearing bones which are linked to one another. This physical stimulation is converted by the difference from potassium ions and sodium ions into electricity through the N.VII (Vestibule Cochlearis) nerves to the brain, precisely in the auditory area. This area is responsible for analyzing complex sounds of short-term memory, pitch comparison, inhibiting desired motor responses, serious hearing and so on.

From the secondary listening area (auditory interpretation area) the Al-quran reading signal will be transmitted to the posterotemporalis part of the temporal lobe of the brain known as the wernicke's area. This area that the signals from the somatic, visual, and auditory association areas meet one another. This area is often referred to various names which indicate that this area has overall importance, the area of general interpretation, the diagnostic, knowledge and the tertiary association area. Wernicke's area is an area for interpretation (interpreting or giving an impression) of language and is very closely related to the primary, secondary listening area. This close relationship may be due to hearing-initiated language recognition events. After being processed in the Wernicke's area, through a file that connects to the prefrontal association area (meaning of events), the signals in the Wernicke's area are sent to the prefrontal association area. Meanwhile, besides being delivered to the primary auditory cortex of the thalamus. The thalamus as the transmitter of pain impulses will continue the stimulation to the spinal cord to the brain to

continue running so as to produce natural opioids. This opioid is permanent to block pain nociceptors (Sherwood, 2011).

CONCLUSION

Description of chest pain level before being given psychoreligious therapy: murottal Al-Qur'an, the level of chest pain was moderate, namely 70.6%, decreased to 29.4% thereafter. There was a significant difference from chest pain level before and after psychoreligious therapy: murottal Al-Qur'an in the ICU Room at Tidar General Hospital Magelang. It is hoped that murottal Al-Qur'an therapy will be one of the psycho-religious therapies that can be used to reduce chest pain in patients in the ICU Room at Tidar General Hospital Magelang. It is hoped that more research development will be carried out on various psychoreligious therapies that are beneficial to patients in nursing services.

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