# MUROTTAL AL-QUR'AN STIMULATION FOR REDUCING **ANXIETY LEVEL ON ACUTE CORONARY SYNDROME PATIENT:** A PRACTICE BASED ON EVIDENCE

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#### **Abstract**

The need to get help (diagnostic of nursing) generally happened to patients, i.e.: decreased of cardiac output, impaired gas exchange, ineffective airway clearance, risk of hemorrhage, acute pain, and risk for infection. This scientific work is report from Implementation of nursing practical based on evidence, has to done to reducing patient anxiety Acute Coronary Syndrome with Intervention was done Al-Qur'an stimulation up to 30 minutes. This is quasi experiment study using pre and post test non equivalent control group design. Sample of 10 Acute Coronary Syndrome patient recruited using NNT (Number Needed to Treat). The result shows significant differentce on level of anxiety on esperimental group before Murottal Al-Qur'an intervention (mean = 40,80) and after Murottal Al-Qur'an intervention (mean = 31,00), and different between level of anxiety before Murottal Al-Qur'an intervention in control groups (mean=34,60), and after intervention (mean=34,60). Murottal Al-Qur'an stimulation gave positive influence in reducing level of anxiety on Acute Coronary Syndrome Patient. Based on this study it is recommended to nurse? To apply Murottal Al-Qur`an stimulation to Acute Coronary Syndrome Patient patient to improve level of anxiety. Implementation of evidence based nursing practice at patient with Cardiovascular's system disorder in cardiovascular Hospital Harapan Kita Jakarta.

**Keywords**: Acute Coronary Syndrome (ACS), Al-Qur`an Stimulation, Anxiety

# **BACKGROUND**

Inability of the heart to perform its function will cause damage anatomically and physiologically. This can be caused by problems with other body systems or vice versa so that ultimately interfere with the function and adaptation of humans as a system.Such damage triggers the emergence of various diseases of the cardiovascular system (Price & Wilson, 2006).

Risk factors that may affect the incidence of coronary heart disease are diabetes mellitus. dyslipidemia, hypertrigliseridimia, smoking and diabetes disease in the family. Phenomena that have occurred since the 20th century, heart disease and blood vessels have replaced the role of pulmonary tuberculosis as a disease epidemic in developed countries, especially in males. At this time, heart disease is the number one cause of death in the world.In 1999, at least 55.9 million, equivalent to 30.3% of deaths worldwide are caused by heart disease. According to the World Health Organization (WHO), 60% of all causes of death of heart disease is coronary heart disease (Soepriyono, 2008). The most cardiovascular frequent disease hypertension, dysrhythmias, coronary heart disease (CHD) and ends in heart failure.In Indonesia Cardiovascular disease is also increasing, as evidenced by the data recorded by the Cardiovascular and Vessels Hospital Harapan Kita Jakarta is one of the national reference, so it can represent the incidence of cardiovascular disorders in Indonesia.In 2013, the highest figure being treated at the Cardiovascular and Vessels Hospital Harapan Kita Jakarta was the ACS as many as 3186 people where the data is coming in through the ER, with details of UAP in 1206 cases, 719 cases of NSTEMI, STEMI APS 896 and 456 cases, followed by failure heart consisting of CHF 662 cases then ADHF 1932 cases.

Management of Coronary Hart Disease can be through drugs to increase the supply of oxygen such as nitrate and antiplatelet, then the actions are invasive percutaneous coronary intervention (PCI) and coronary bypass surgery through intervention Corronary Artery Bypass Graft (CABG) (Ignativicius & Work, 2010). The main role of the author / nurse is to provide nursing care that comes with the application of Evidence Based Nursing Practice. The expectation is that through the application of Evidence Based Nursing Practice nurse's role as a provider of holistic care can be achieved and is able to be applied easily and continuously.

# CRITICAL REAVIEW

Implementation of Evidence Based Nursing is based on research conducted by Dedi Supriadi, Elly Nurachmah and Dewi Gayatri. The study examined the effect of therapeutic interventions using murottal Qur'an to anxiety in patients with acute coronary syndrome in the General Hospital Hasan Sadikin. While the purpose of the study was to identify the effect of therapeutic interventions murottal Qur'an to anxiety in patients with Acute Coronary Syndrome (ACS). The method used is quantitative research that uses experimental design quasy pre-post test with control group and the measured results is the level of anxiety in patients with acute coronary syndrome using the State-Trait assessment instrument Anxiety Inventory (STAI). The sample in this study using a non-probability sampling technique with a consecutive sampling method. There 30 were

respondents to the division of 15 respondents in the intervention group and 15 respondents in the control group. The results of the study showed that the Mean anxiety in patients with ACS after the intervention in the intervention group is 20.67 with a standard deviation of 3.395 and a standard error of 0.877. While the Mean anxiety in patients with ACS after the intervention in the control group was 46.40 with a standard deviation of 4.852 and a standard error of 1.253. This study shows that the level of anxiety Acute Coronary Syndrome patients given murottal Qur'an stimulation decreased significantly in the intervention group compared with the control group with p-Value = 0.001. There is a significant difference in the Mean anxiety in patients with ACS after therapy using Qur'anic murotal in the intervention group and the control group.

#### **METHODS**

Intervention is to provide stimulation using Qur'anic murotal for 30 minutes using the earphones/mp3. This intervention is very affordable and has effectiveness in itsapplication. These interventions are also safe and convenient to do on patients with Acute Coronary Syndrome that intervention is not a high-risk invasive measures. The design used in the research that was fundamental to doing this Evidence Based Nursing is Quasiexperimental design with an experimental group and a control group in which the samples taken consecutively. were Instruments of the State Trait Anxiety Inventory (STAI) was used to measure the level of anxiety. If the calculation is done using the formula NNT (Number Needed to Treat), it could be concluded that in the application of this EBNP, minimum of 3 participants is required to get intervention. Patients in the implementation plan Evidence Based Nursing Practice are all clients who have Acute Coronary Syndrome (ACS) who were treated in the IWM, ICVCU observed since entry of Emergency Unit of the Cardiovascular and Vessels Hospital Harapan Kita. EBNP Inclusion criteria were: Willing to be a respondent, patients with acute coronary syndrome (STEMI, non-STEMI, UAP) Non-PCI. Islamic Religion, Time hospitalization in the first 24 hours, compost mentis awareness and cooperative, minimal level of pain 'moderate': 4-6 (assessment of pain intensity scale), good hearing function. While the exclusion criteria Narcotic Analgesic therapy (such as: Morphine).

### **RESULTS**

Table 1 Characteristics of respondents by age in Cardiovascular and Vessels Hospital Harapan Kita Jakarta

Variable	Mean	SD	SE	Minimum- Maximum	95 % CI
Age	60,80	7,815	2,741	50-76	

From the above table it is known that the Mean patient age 60.80 years or 61 years with a minimum age and maximum age is 76 years.

Table 2 The mean hemodynamic (BP, MAP, HR, RR) of respondents in the intervention and comparison groups before and after intervention in the Cardiovascular and Vessels Hospital Harapan KitaJakarta

Variable	Intervention	Comparison	
	(n=5)	(n=5)	
Systolic			
(mmHg)			
■ Pre	139,00	127,60	
■ Post	131,20	126,00	
Diastolic			
(mmHg)			
■ Pre	80,80	87,80	
■ Post	77,20	79,80	
MAP (mmHg)			
■ Pre	95,20	95,60	
■ Post	90,60	92,80	
HR (x/minute)	,		
■ Pre	89,80	93,60	
■ Post	86,80	89,20	
RR (x/minute)			
■ Pre	27,40	24,40	
■ Post	20,60	24,00	

Hemodynamic physiological responses (BP, MAP, HR and RR) obtained from 10 patients with ACS vary although granting equal treatment of the ACS patients. Based on the data obtained in the intervention group, the Mean systolic blood pressure before stimulation with Qur'anic murottal was 139 mmHg, decreased after stimulation becomes 131.20 mmHg. Diastolic blood pressure before intervention was 80.80 mmHg after stimulation decreased to 77.20 mmHg. While MAP before intervention was 95.20 mmHg decreased to 90.60 mmHg. Mean pulse rate

before intervention was 89.80 min and after the intervention decreased to 86.80/min. Like wise, the Mean respiratory rate before stimulation 27 x / min is to be 20.60 x/min after the intervention. It is not much different in the comparison group or a comparison group that Mean systolic blood pressure 127.60 mmHg before was intervention decreased after the intervention to 126 mmHg.The Mean diastolic blood pressure was 87.80 mmHg before intervention becomes 79.80 mmHg after the intervention. While blood pressure MAP before intervention was 95.60 mmHg be 92.80 mmHg after the intervention. Mean heart rate of the respondents before intervention was 93.60 x / minute to 89.20/min. Similarly, the Mean respiratory rate before intervention was 24.40 x/min to 24/min. In other words, given stimulation between groups using Qur'anicmurottal and who those obtained the appropriate management interventions in the room decreased hemodynamic equally (BP, MAP, HR and RR).

Table 3 The mean level of anxiety of the respondents in the intervention and comparison groups before and after intervention in the Cardiovascular and Vessels Hospital Harapan Kita Jakarta

Level of Anxiety	Intervention (n=5)	Comparison (n=5)
■ Pre	40,80	34,60
<ul><li>Post</li></ul>	31.00	33,40

The above table illustrates the changes in the level of anxiety among respondents who received the intervention before

stimulation is 40.80 and decreased after stimulation becomes 31.00.While comparison group prior to the intervention of anxiety level of the respondents was 34.60 and dropped to 33.40 after the intervention.

# **DISCUSSION**

Evidence Based Nursing Practice concluded that stimulation by Qur'anic murottal affect physiological and psychological responses in patients with Acute Coronary Syndrome. Physiological responses include systolic blood pressure, diastolic blood pressure, MAP, pulse and respiration. While the psychological response is anxiety in patients with Acute Syndrome. Coronary Based the characteristics of the respondents, the mean age of patients with Acute Coronary Syndrome who participated the implementation of Evidence Based Nursing Practice was 60.80 years of age (61 years). These data showed that the mean age of the respondents is the age group at risk of Acute Coronary Syndrome. Increased age at someone is one risk factor for Coronary Heart Disease in which the signs and symptoms of Coronary Heart Disease occurs commonly in people aged over 40 years (Black and Hawks, 2009). The youngest age of this Eviden Based Nursing Practice is 50 years. Age is also one of the factors that affect pain, according to research by Li et al (2001) in Smeltzer, Bare, Hinkle, & Cheever (2010) states that the elderly (age> 65 years) will report less pain than younger people. Pain is a subjective complaint associated with an unpleasant sensory system of emotional experience accompanied by tissue damage actual or potential (Perry & Potter, 2006). In this Evidence Based Nursing Practice respondents pain on a scale of 4 (1-10). However, the pain is not the only variable affected by age, but rather the management of patients with Acute Coronary Syndrome in the Cardiovascular and Vessels Hospital Harapan Kita Jakarta have been very good, especially in the emergency room where the patient's continuing treatment prior to the next unit patients with acute coronary Syndrome has been confirmed free of pain.

Based on physiological responses, it is known that all hemodynamic variables decreased toward normal, whether conducted by the intervention or not. This suggests that the factors that influence the physiological response of Acute Coronary Syndrome patients consisted of more than a factor of which the main one is the treatment of management or Acute Coronary Syndrome patients, especially pain management in the acute phase.

With the good management of patients with Acute Coronary Syndrome, especially to pain, it is also affecting the patient's level of anxiety. From the results of this Evidence Based Nursing Practice, the level of anxiety in patients known to be at a moderate level, whether or not who given intervention. Only, in the group given stimulation using Qur'anic murottal decline better than the group who did not receive stimulation Our'anic murottal. This suggests that such stimulation therapy using the Qur'an murottal can affect a person's level of anxiety or stress patients, especially patients with heart attacks. In addition, they also feel the calmness when given a spiritual approach according to his especially convictions, in Evidence Based Nursing Practice to Muslim patients.

#### **CONCLUSION**

The implementation of the best evidence-based nursing practice (EBNP) stimulation using Qur'anic murottal to the ACS patients shows the effects in reducing patient anxiety disorders. especially cardiovascular Muslim patients. Stimulation therapy using Qur'anic murottal can effectively reduce the anxiety of patients suffering from Acute Coronary Syndrome. This complementary therapy is low cost and has a small risk and is easily integrated in the practice of nursing and holistic nursing care.

Spiritual care is an element of nursing care that can not be

abandoned.Cardiovascular disorder patients indicates critical life-threatening condition that certainly urgently need the highest power (spiritual dimension). Optimization spiritual care in patients with of cardiovascular disorders can be realized by spiritual facilitation having care instruments such as the format of spiritual assessment and spiritual care plan format along with a guide.

Stimulation using Qur'anic murottal is expected to be one of the policy as an independent nursing interventions, especially in the Cardiovascular and Vessels Hospital Harapan Kita Jakarta. Therapy with a spiritual approach can also be given to patients with a religion other than Islam, in a way adapted to the religious beliefs and religious activities respectively.

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