# The Effect of Audio Distraction Technique Hearing The Murrotal Al-Qur'an on Anxiety in Pre-Operative Patients at Muhammadiyah Gresik Hospital

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#### Abstract:

Anxiety in pre-cesarean section patients can be due to fear of pain or death. One form of nurse intervention in reducing anxiety is by giving audio distractions namely diverting attention to other stimuli by listening to the audio of the Qur'an Murottal. The purpose of this study was to determine the patient's level of anxiety before and after audio distraction listening to The Qur'an Murottal. The study design used is Pre-Experiment one-group pre-test-post test design. The entire population studied patients who will face the first operation cesarean section and elective at the Hospital Muhammadiyah Gresik with a number of 41 patients. The number of samples that met the inclusion criteria as many as 37 patients. Collecting data anxiety level using the APAIS questionnaire before and after giving audio distraction techniques. Analysis using statistical tests Wilxocon Signed Rank Test with significance level  $\alpha$  <0.05. The result showed most of respondents experiencing severe anxiety 51.4% before doing audio distraction listening to the Qur'an murottal was as much as 54.1% are not worried. From the analysis of the statistical test obtained value  $\alpha$  = 0.001 which means that  $\alpha$  <0.05 then Ho is rejected and H1 is accepted, which means that there is an effect of audio distraction listening to the Qur'an murottal on the anxiety of preoperative cesarean section patients.

Keywords: Audio distraction, Murrotal Al-Qur'an, Anxiety, Pre-operation.

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## Introduction

Childbirth is a physiological process experienced by every pregnant woman and is the time that pregnant women look forward to being able to feel the happiness of seeing and hugging their baby. Every woman wants a smooth delivery and can give birth to a perfect baby, but it is not uncommon for the birthing process to experience obstacles and must be carried out by caesarean section. Cesarean section is a way to deliver a fetus by making an incision in the uterine wall through the abdominal wall (Nurarif & Kusuma, 2015).

Surgery or operations often cause anxiety. Anxiety is an unpleasant emotion, such as feeling uncomfortable, feeling confused, anxious, and is characterized by the terms worry, concern and fear which are sometimes experienced in different levels and situations, Atkinson in Ardiyanto (2012). This anxiety response can affect the anesthesia and the surgical process. One alternative to overcome this anxiety is the audio method, listening to music, songs and murottals

of the Al-Qur'an (Dita, 2014).

The procedure carried out to overcome the anxiety in pre-operative patients according to the SPO at Muhammadiyah Gresik Hospital is to provide techniques for reading Prayers and Dhikr for anxiety in pre-Cesarean Section patients. This procedure does not have maximum benefits in reducing anxiety levels in pre-Cesarean Section surgery patients, because from the results of the initial survey conducted by researchers on April 15 2022 in the Operating Room at Muhammadiyah Gresik Hospital, 30 patients found signs of anxiety in the form of: 75% of patients felt nauseous, 60% complained of dizziness, 70% had a lot of sweating and increased pulse and 90% of clients said they were afraid. This is included in the moderate to severe anxiety category. However, the influence of the audio distraction technique: listening to murottals of the Koran on the anxiety of pre-Caesarean section patients cannot yet be explained.

Based on World Health Organization (WHO) data on 2020, the number of caesarean sections in Mexico in 2019 has increased. The national rate of caesarean section delivery is 45.3% and the remainder is vaginal delivery. The cesarean section birth rate in Mexico increased from 43.9% to 45.5%. Based on the results of basic health research (Riskesdas) in 2018 the incidence of caesarean section deliveries in Indonesia was 17.6%, the highest in the DKI Jakarta area at 31.3% and the lowest in Papua at 6.7% (RI Ministry of Health, 2019).

Research on the effect of murrotal Al-Qur'an on post-operative pain has also been carried out by Nanik (2018) at Jombang Regional Hospital and the result shows that there is an influence of murottal Al-Qur'an on post-operative pain at Jombang Regional Hospital in 2018. Various reasons/factors that can cause anxiety in facing surgery are: fear, pain after surgery, fear of physical changes becoming ugly and non-functional (body image), fear of malignancy, fear of facing the operating room, equipment from the staff, fear of dying while in surgery. anesthesia or no longer conscious, afraid that the operation will fail (Brunner & Suddarth, 2013). Physiologically, the body's response to anxiety is to activate the autonomic nervous system, the sympathetic nervous system will activate body processes, while the parasympathetic system will minimize the body's response. When the brain cortex receives stimulation, it will be sent via the sympathetic nerves to the adrenal glands which will release adrenaline or epinephrine so that the effects include breathing becoming deeper, pulse increasing, blood pressure increasing. Blood will flow to the heart, central nervous system to muscles, with increased glycogenlysis, blood sugar will rise (Suliswati, 2014).

Audio distraction techniques can overcome anxiety based on reticular activation theory, namely inhibiting painful stimuli when receiving sufficient or excessive sensory input, thereby causing anxiety impulses to be blocked to the brain (anxiety is reduced or not felt). A pleasant sensory stimulus will stimulate the secretion of endorphins, so that the anxious stimulus felt by the client is reduced. Meanwhile, when you use the audio-visual distraction technique, namely switching to another stimulus, it will result in fewer anxious stimuli being transmitted to the brain so that it can influence the body's response, such as: blood pressure decreases or returns to normal, pulse is within normal limits, and breathing becomes regular (Suliswati, 2014)

Feelings of anxiety in preoperative patients are a psychological response to the operative action that will be carried out on the patient. If this psychological anxiety is not handled properly it will affect physical conditions such as motor coordination and reflexes which will worsen the patient's condition before surgery. To overcome this anxiety, there is a need for distraction techniques, especially audio distraction, namely diverting attention to other stimuli such as listening to music, listening to recitations and listening to murottals of the Koran. Providing this audio can reduce hormones related to anxiety, so that pre-operative patients can reduce anxiety



and obtain good physical condition before surgery.

#### Methods

The design was used Pre-experimental with one group pre and post test design approach. The population of all patients who will face the first operation cesarean section and elective at the Hospital Muhammadiyah Gresik were 41 patients. This research uses purposive sampling. The samples size were 37 respondents. Research instrument using APAIS questionnaire. Analysis using statistical tests Wilxocon Signed Rank Test with significance level  $\alpha < 0.05$ .

## Results

The Anxiety level measurements were carried out pre and post intervention which are presented in the table below:

No	Description	Blood pressure			
		Before intervention		After	
				intervention	
		Total	%	Total	%
1.	Panic	5	13.	0	0
			5		
2.	Severe	19	51.	0	0
	anxiety		4		
3.	Moderate	3	8.1	3	8.1
	anxiety				
4.	Mile anxiety	10	27.	14	37.
5.	Not anxious	0	3	20	8
			0		54.
					1
Total		37	100	37	100
P Value		0,001			

**Table 1.** Pre test and post test

The patient's anxiety level before the intervention was carried out was mostly severe anxiety (51.4%) and after the intervention was carried out the majority were not anxious (54.1%).

## **Discussions**

Physiologically, the body's response to anxiety is to activate the autonomic nervous system, the sympathetic nervous system will activate body processes, while the parasympathetic nervous system will minimize the body's response. Nurses also have the potential to act as stressors, where the client loses physiological function, the client's emotions are very unstable. The nurse's interaction with the client will trigger an adaptation process of the coping abilities that have been managed by the nurse. The distraction process is to divert the client's attention to something else so that it can reduce awareness of anxiety. Audio visual media is an intermediary or use of material and its absorption through sight and hearing so as to build conditions capable of acquiring knowledge, skills or attitudes, thus directly providing contact and efforts to minimize stressors. Anxiety will stimulate the hypothalamus to secrete CRF.



CRF will induce the pitiutary to produce ACTH and increase the adrenal glands. As a result, ACTH produces large amounts of cortisol and is able to suppress T lymphocytes which results in decreased body resistance. One way for nurses to intervene to reduce anxiety is to use distraction techniques, one of which is audio-visual distraction.

Based on the reticular activation theory, audio administration can overcome anxiety, namely by inhibiting painful stimuli when receiving sufficient or excessive sensory input, thus causing anxiety impulses to be blocked to the brain (anxiety is reduced or not felt). From Prihananda's research, 2014 regarding music that can calm and reduce anxiety, listening to music can provide very effective results in reducing clients' post-operative anxiety and pain. Music provides pleasant sensory stimulation, causing the release of endorphins, so that the anxiety stimulus felt by the client is reduced. Focused thinking will stabilize the body's neurotransmitters. Information from the periphery is needed not only to respond to environmental changes but also to inhibit the continuation of neuroendocrine processes. The hippocampus, amygdala and septum are all involved in this process by providing input to the hypothalamus. This kind of relationship allows the hypothalamus to carry out an adaptive response by changing the release of hormones and carrying out autodynamic reactions in response to threatening danger. This communication and stable neurohormones will influence the body's resistance so that anxiety is reduced. (Obedient, 2012).

From theories and journals that are in line with the results of this research, it can be concluded that developmental stages influence anxiety levels. As people get older, they increasingly need audio distraction techniques to reduce anxiety. This is proven by the age of the patients, most of whom are adults, namely 26-35 years old (54.1%), which means the patients need this audio distraction technique. The higher the patient's education level, the greater the coping used in responding to the anxiety they experience, this is proven by the majority of patients' education being high school (56.8%). Providing audio distraction greatly influences the anxiety level of patients who will undergo surgery because facing surgery is something that is very worrying because there will be feelings between life and death. It is at that time that providing audio techniques is necessary because getting a diversion to another stimulus will result in fewer anxious stimuli being transmitted to the brain so that it can influence the body's response, such as: blood pressure decreases or returns to normal, pulse is within normal limits, and breathing becomes regular (Suliswati, 2014). The interaction between nurses and patients in providing audio-visual distraction techniques about Islamic studies will trigger an adaptation process of coping abilities that have been managed by the nurse. The adaptation process will trigger improvements in the body's immune system and nursing actions directly provide touch and efforts to minimize stressors so that the patient is able to accept his situation and be more patient and surrender to Allah SWT for what will happen to him, in this way the feelings of anxiety he experiences can be reduced and can be minimized so that operations can run well according to all of our expectations.

## Conclusion

The use of the audio distraction technique of listening to murottal Al-Qur'an has a notable impact on reducing anxiety levels among pre-caesarean section patients at Muhammadiyah Gresik Hospital. This approach provides a sense of calm and spiritual solace, helping patients manage their stress and anxiety more effectively before undergoing the surgical procedure. The soothing recitation of the Quranic verses serves as a comforting and therapeutic tool, contributing to a more positive mental state and potentially improving overall patient outcomes. Moreover, incorporating murottal Al-Qur'an into preoperative care aligns with the cultural and religious values of many patients, making it a culturally sensitive intervention. It not only helps in easing anxiety but also enhances the spiritual well-being of the patients, which is an important aspect of holistic healthcare. Studies have shown that such non-pharmacological interventions can be a valuable adjunct to medical treatment, offering a safe and accessible method to support emotional and psychological health. The positive feedback from patients at Muhammadiyah Gresik Hospital underscores the effectiveness of this technique and suggests it could be beneficially implemented in similar settings to improve patient care and satisfaction.

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