



## Murotal Al-Quran therapy on decreasing labor pain and anxiety in maternity mothers first phase<sup>☆</sup>



Rosmiarti<sup>a,\*</sup>, Gustirini Ria<sup>a</sup>, Aminah Maya<sup>a</sup>, Sarina Binti Jamalluddin<sup>b</sup>

<sup>a</sup> Lecturer of Midwifery, STIKes Muhammadiyah Palembang, Indonesia

<sup>b</sup> Lecturer, Faculty of Nursing, Lincoln University College, Malaysia

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### KEYWORDS

The effectivity;  
Labor mother;  
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### Abstract

**Background:** Childbirth is a physiological event in every development of a woman to become a mother. This event can cause trauma because of the pain she experienced. The main factors in labor are passage, passager and power, psychological (psychological factors) and childbirth helpers. A woman needs physical, emotional, psychosexual and psychosocial maturity before marriage and becomes pregnant. Feelings of anxiety, fear of pain will make women uneasy facing pregnancy, childbirth and childbirth, non-pharmacological therapy that can be given in various ways, namely; acupressure, acupuncture, cold compresses, warm compresses, hydrotherapy, hypnotherapy, endorphin massage, relaxation and distraction techniques. The effectiveness of giving murotal Al-Quran audio will increase the power of faith and provide peace of mind.

**Objectives:** The purpose of this study is to determine the effectiveness of Murotal Al Quran Therapy on Decreasing Labor Pain and Anxiety in Maternity in the First Phase in Maternity Clinic Ar-Rahmah Indralaya Ogan Ilir. The population of this research was maternity inpartu when I was an active phase which amounted to 20 people.

**Methods:** The type of research used in this study was quasi-experiment. The research design used was one group comparison pretest–posttest design to test the intensity of pain intensity using Shapiro–Wilk.

**Result:** From the results of the study obtained the normality test obtained  $p = 0.039$  and  $0.069$  which showed the data did not normally distribute, the difference between before and after being given Murotal Al-Quran  $0.30$  with  $p = 0.008$  showed that there was a difference in pain scale before and after therapy Murotal Al-Quran, for the anxiety of the difference between before and after being given therapeutic Murotal Al-Quran  $0.021$  with  $p = 0.025$  which shows that there are differences in pain scale before and after the Murotal Al-Quran is concluded.

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\* Corresponding author.

E-mail address: [rosmiarti\\_5474@yahoo.com](mailto:rosmiarti_5474@yahoo.com) (Rosmiarti).

*Conclusion:* It can be concluded that Murotal Al-Quran can reduce pain and anxiety in maternity when I was an active phase. It is expected that midwives can improve services through the development of midwifery care, especially for women who experience severe pain.  
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## Introduction

The main factors in labor are passage, passager and power, psychological (psychological factors) and delivery assistance. A woman needs physical, emotional, psychosexual and psychosocial maturity before marriage and becoming pregnant. Feelings of anxiety, fear of pain will make women uneasy facing pregnancy, childbirth and childbirth.<sup>1</sup>

Pain in labor, in this case, is the pain of uterine contractions that can result in increased activity of the sympathetic nervous system, changes in blood pressure, heart rate, breathing and if not treated immediately will increase feelings of worry, tension, fear and stress. Pain in childbirth also causes increased levels of catecholamines or stress hormones such as epinephrine and cortisol. Increased levels of catecholamines or stress hormones can reduce the body's ability to withstand pain. Pain during labor generally feels great, and only 2–4% of mothers who experience mild pain during labor. Pain at the time of labor ranks 30–40 out of 50 scores set by Wall and Mellzack. The score is higher than clinical pain syndromes such as chronic back pain, cancer pain, leg pain, and so on. Pain and fear cause stress. Stress results in increased adrenaline secretion. One of the effects of adrenaline is the contraction of blood vessels so that oxygen supply and the fetus decreases. Decreased blood flow also causes weakening of uterine contractions and results in prolonged labor. Not only does the secretion of adrenaline increase, but the secretion of adrenocorticotrophic hormone (ACTH) also increases, causing an increase in serum cortisol levels and blood sugar. All of the above effects have the potential to endanger the mother and fetus, especially mothers and fetuses with high risk. For the reasons mentioned above, the management of labor pain is not just for pleasure, but it is a fundamental need to break the cycle of pain and all its consequences.

The most tiring and severe time and most mothers begin to feel pain or pain during labor is the first phase of the active period. In this phase, most mothers experience severe pain because uterine activity begins to be more productive. In this phase, contractions are getting stronger and more frequent.<sup>2</sup>

Actions that can be taken to overcome labor pain that can be done with pharmacological and non-pharmacological therapy. Pharmacological action that can be done is to provide drug therapy such as analgesics, non-narcotic analgesics. While non-pharmacological techniques can reduce pain and have no side effects, non-pharmacological therapy can be given in various ways, namely; acupressure, acupuncture, cold compresses, warm compresses, hydrotherapy, hypnotherapy, endorpine massage, relaxation

and distraction techniques. Distraction can be done by visual distraction (Visual) and auditory distraction (Audio).<sup>3</sup>

Music distraction can divert attention from pain and can also reduce the level of pain experienced by the client. Distraction techniques are very effective and provide the best effect for slowly overcoming intensive pain. One effective distraction technique therapy is by listening to music that can reduce physiological pain, stress and anxiety that can distract someone from pain.<sup>4</sup>

The effectiveness of giving murotal audio Al-Quran will increase the strength of faith and provide peace of heart.<sup>5</sup> Results of the Sodikin research in 2007. The results of the study showed differences in pain scale ( $p=0.008$ ;  $\alpha=0.05$ ) and pulse rate ( $p=0.001$ ;  $\alpha=0.05$ ) before and after TBA. The provision of Al-Quran reading therapy can cause peace of mind and soul, changes in body cells and the body can trigger the release of endogenous opioids and can heal physical and spiritual ailments.<sup>6</sup> The formulation of the problem in this study is there a difference in the effectiveness of Al-Quran Muratal therapy on the reduction of Labor Pain and Anxiety in the First Stage of Active Maternity Mothers at the Ar-Rahmah Indralaya Ogan Ilir Clinic.

Research Objectives to Determine the Effectiveness of Murotal Al Quran Therapy Against Reduction in Labor Pain and Anxiety in First Stage Active Maternity Women Active Phase at the Ar-Rahmah Indralaya Maternity Clinic, Ogan Ilir Palembang in 2018.

## Methods

This type of research used in this study is a quasi-experiment. The research design used was one group of comparative pretest–posttest design.

## Population and sample

The population in this study were all primigravida and multi-gravida normal delivery mothers who were being treated at the Ar-Rahmah Indralaya Maternity Clinic Ogan Ilir in April–June 2018. The sampling procedures and techniques were carried out using consecutive sampling. The sample used in this study is the sample that was found when conducting research that met the inclusion criteria of 20 respondents. Research instruments are tools when research uses a method. Data collection tools used in this study were a questionnaire about pain using the Numeric Rating Scale (NRS) and the level of anxiety facing childbirth. Questionnaires consisted of 14 questions adopted from the Hamilton Rating Scale Anxiety (HRS-A).<sup>7</sup>

**Table 1** Normality test effectiveness of Murotal Al-Quran therapy against decreased labor pain and anxiety.

	Kolmogorov–Smirnov			Shapiro–Wilk		
	Static	Df	Sig	Static	Df	Sig
Pain before intervention	0.211	20	0.021	0.899	20	0.039
Pain after intervention	0.194	20	0.047	0.912	20	0.069
Anxiety before intervention	0.188	20	0.061	0.884	20	0.021
Anxiety after intervention	0.130	20	0.200	0.956	20	0.473

**Table 2** Differences in the effectiveness of murotal therapy on the reduction of labor pain and anxiety in the active phase I at the Ar-Rahmah Indralaya Maternity Clinic, Ogan Ilir Palembang.

Variables	Median	P-value
Pain before intervention (n = 20)	6.00 (2–10) 4.50 (1–6)	0.008
Pain after intervention (n = 20)		
Anxiety before intervention (n = 20)	26.00 (17–42)	0.002
Anxiety after intervention (n = 20)	24.00 (9–41)	

Data analysis, to identify differences in pain intensity and anxiety before and after the intervention was given, Paired T-test was performed.

## Results

Respondents in this study were both primary and multiparous maternity mothers who met the study inclusion criteria at the Ar-Rahma Indralaya Maternity Clinic, Ogan Ilir. The data collection was carried out from April to July in 2018. The number of respondents in this study was 20 people. The results of the characteristics of respondents can be seen as follows.

Based on Table 1, in the normality test the effectiveness of murotal al-quran therapy for labor pain before being given an intervention using the Shapiro Wilk test  $p$ -value = 0.039, this means that  $p < 0.05$  indicates that the data is not normally distributed then the transformation of the information is done so that the data turns into normal, but after changing and testing for normality, the data remains abnormal with  $p$ -value = 0.014. So that the test carried out is the Wilcoxon test.

Based on Table 2, it can be seen that the pain before and after the intervention with  $p$ -value = 0.008, while for anxiety before and after the intervention with a value of  $p$ -value = 0.002.

## Discussion

A. Statistical test results Effectiveness of Murotal Al-Quran Therapy on Decreasing Pain in Friendship in the First Stage is The Active Phase shows that  $p = 0.008$  ( $p < 0.05$ ) shows that  $H_0$  is rejected and  $H_a$  is accepted. From these results, it

was stated that there was a significant difference between before and after being given Murotal Al-Quran therapy in dealing with maternal pain during the Active Phase I phase.

The references<sup>8,9</sup> state that the intensity of pain after murottal therapy has an interval with a pain scale of 2–8, smaller than the interval before murottal therapy. The chanting of the Qur'an can reduce stress hormones, activate natural endorphins, increase feelings of relaxation, and divert attention from fear, anxiety and tension, improve the body's chemical system so that it lowers blood pressure and slows down breathing, heart rate, pulse and brain wave activity. Deeper breathing rate or slower is very good cause calm, emotional control, deeper thinking and better metabolism. Based on the results, the average pain scale in the first phase of active phase after it is done murottal therapy of 4.93. This value indicates a decrease in pain scale in the first phase of active phase after murottal therapy. The results of this study support the results of the first experiment which proved that 97% of respondents, both Muslim and non-Muslim, both who understand Arabic and not, have experienced some physiological changes that indicate the level of nerve tension. This fact was correctly recorded by Ahmed Elkadi in a computer-supported electronic detector system to measure any changes in the physiology (organs) of the body.<sup>10</sup> Ahmed Elkadi's research conducted in 1985 revealed that nerve tension has the potential to reduce the body's resistance due to disruption of the balance of organ function in the body to fight pain or help the healing process. For the second experiment on the relaxing effect of the Qur'an on nerve tension and physiological changes.<sup>10</sup>

Experiments carried out by Ahmed Elkadi revealed that the reading of the Qur'an could lead to the relaxation of nervous tension along with physiological changes. Researchers assess, only by reading the Qur'an can make a good effect for the body, even more so if the reading of the Qur'an is heard with a steady rhythm and carried out with a slow and harmonious tempo, it will bring calm to the listener and can be a cure for both physical and psychological disorders. Based on the results of this study, indirectly Murotal Al-Qur'an therapy can be used as a healer of pain,<sup>11</sup> that the Qur'an as a healer has been done and proven, people who read the Qur'an or listening will provide changes in electrical current in the muscles, changes in blood circulation, changes in heart rate and changes in blood levels in the skin<sup>12</sup> mentions reading or listening to the Qur'an will have a relaxing effect, so that the arteries and heart rate decrease. Al-Qur'an reading therapy when played on people or patients will carry sound waves and encourage the brain to produce chemicals called neuropeptides.

B. Statistical test results Effectiveness of Murotal Al-Quran Therapy on Decreased Anxiety in the First Stage of Active Phase shows that  $p=0.002$  ( $p<0.05$ ) so that the result is that  $H_0$  is rejected and  $H_a$  is accepted. From these results it was conveyed that there was a significant difference between before and after being given Murotal Al-Quran therapy in dealing with maternal anxiety when I Active Phase<sup>13</sup> stated that the mechanism of anxiety was psycho-neuro-immunology or psycho-neuro-endocrinologist. Psychological stressors that cause anxiety are marriage, parents, interpersonal, work, environment, finance, law, development, physical illness, family factors and trauma. However, not all people who experience psychosocial stressors will experience anxiety disorders, and this depends on the structure of one's personal personality development, namely age, level of education, experience, gender, social support from family, friends and community. Anxiety before delivery is often experienced by the mother, anxiety experienced by the mother giving birth will increasingly increase along with the more frequent contractions appear so that this situation will make the mother more uncooperative. Reflex labor stress causes an increase in maternal catecholamine levels well above levels found in women who are not pregnant or pregnant women before delivery.<sup>14</sup>

Anxiety experienced by mothers during labor especially in the first phase of the active phase will cause various complications during labor,<sup>15</sup> psychological stress and hypoxia associated with pain and anxiety increase adrenaline secretion. Increased adrenaline secretion can cause excessive uterine contractions resulting in vasoconstriction resulting in decreased uterine blood flow. Resulting in fetal hypoxia and bradycardia which will eventually result in fetal death and can inhibit contractions, thus slowing labor. It also stated that the last anxiety stage, the adaptation given by the body in the second stage, cannot be maintained.<sup>16</sup> If the adaptation cannot fight anxiety, the effect of anxiety will spread throughout the body. The end of this stage is the body will rest and will return to normal. The length of labor due to the influence of the mother feels fear and stress can result in delayed labor progress.

One way to avoid complications caused by anxiety is to use a method that can reduce the increase in the hormone adrenaline in the body of the mother, who is a cause of anxiety. The method is a distraction, and distraction is a method to eliminate anxiety by diverting attention to other things so that the patient will forget the anxiety experienced. Pleasant sensory stimuli cause a release of endorphins which can inhibit anxiety stimuli resulting in fewer stimuli anxiety transmitted to the brain.<sup>17</sup>

## Conclusions and suggestions

1. There is the effectiveness of Murotal Al-Quran Therapy on the Reduction of Labor Pain and Anxiety in First Stage Active Maternity Women Active Phase at the Ar-Rahmah Indralaya Maternity Clinic, Ogan Ilir Palembang in 2018.
2. Pain before being given intervention with mean–median (5.55–6.00) pain after being given mean median value (4.30–4.50), whereas for anxiety before being given

intervention for mean–median (29.05–26.00) and worry after being given intervention with a mean median value (22.25–24.00), so that there is a decrease in labor pain and anxiety in the first stage of labor during active mothers before and after given murotal Al-Quran therapy in the maternity clinic Ar Rahma in 2018.

3. Based on the results, the average pain scale in the active phase I after murottal therapy was 1.50. This value indicates a decrease in pain scale when the active phase I after murottal therapy.
4. Based on the average results of differences in maternal Anxiety, the first time active phase before and after given murotal Al-Quran by 2.00. This value indicates a decrease in Anxiety in the active phase I.
5. Statistical test results Effectiveness of Murotal Al-Quran Therapy on Reduction of Pain of Alignment and Anxiety in the First Stage of Active Phase results show that  $p=0.002$  and Statistical Test results of Effectiveness of Murotal Al-Quran Therapy on Reduction of Labor Pain and Anxiety in the First Stage of Active Phase obtained results that  $p=0.008$  From these results it was conveyed that there was a significant difference between before and after being given Murotal Al-Quran therapy in overcoming maternal Anxiety when active phase.

## Conflict of interest

The authors declare no conflict of interest.

## References

1. Manuaba IAC, Manuaba IBGF, Manuaba IBG. *Imu Kebidanan Penyakit Kandungan Dan KB Untuk Pendidikan Bidan*. 2nd ed. EGC; 2012.
2. Danuatmaja B, Meiliasari M. *Persalinan normal tanpa rasa sakit: Tidak harus sakit untuk menjadi seorang ibu*. 4th ed. Pustaka Swara; 2008.
3. Andarmoyo S. *Konsep dan Proses Keperawatan Nyeri*. 1st ed. Yogyakarta: Ar-ruzzmedia; 2013.
4. Potter, Perry. *Fundamental keperawatan konsep proses dan praktik*. EGC. 2006;2.
5. Izzat AM, Arif M. *Terapi ayat Al-Qur'an untuk kesembuhan: Keajaiban Al-Quran menyembuhkan penyakit*. Kafilah. 2011.
6. Elzaky J. *Mukjizat Kesehatan Ibadah*. Zaman; 2011. p. 601.
7. Alimul Aziz. *Riset keperawatan dan teknik penulisan ilmiah*. Jakarta: Salemba Medika; 2003.
8. Heru. Ruqyah syari' l berlandaskan kearifan lokal. Diperoleh dari. (2008). Available from: <http://trainermuslim.com/feed/rss>.
9. Siswantinah. Pengaruh terapi murottal terhadap kecemasan pasien gagal ginjal kronik yang dilakukan tindakan hemodialisa di RSUD Kraton Kabupaten Pekalongan. Semarang: Skripsi, Universitas Muhamadiyah Semarang. 2011. Available from: <http://lib.unimus.ac.id/file/digital/pengaruhterapi-full/text.pdf>.
10. Saeedi A, Mahmoodi I. Capital structure and firm performance: evidence from Iranian companies. *Int Res J Finance Econ*. 2011;70:21–8.
11. Wahyudi A. *Manfaat Mendengarkan Al-Quran Bagi Kesehatan*. Diunduh dari. 2012. Available from: <http://www.manfaat-mendengarkan-al-quran.com/html>
12. Alkahel A. *Al-Qur'an's the healing*. Jakarta: Tarbawi Press; 2011.
13. Hawari D. *Dimensi religi dalam praktik psikiatri dan psikologi*. Jakarta: Balai Penerbit UI; 2011.

14. Coad Jane. Anatomi dan fisiologi untuk bidan. Jakarta: EGC; 2006.
15. Chapman AL. Dialectical behavior therapy: current indications and unique elements. *Psychiatry (Edgmont)*. 2006;3:62–8.
16. Kartono, Kartini. Pemimpin dan Kepemimpinan (Apakah Kepemimpinan Abnormal Itu), P.T. Raja Grafindo Persada. Jakarta. 2003.
17. Potter J. Making psychology relevant. *SAJE J*. 2005;16.