

The effectiveness of al-qur'an healing with audio-visual methods in reducing pain in the active phase of the first stage of labor

Suri Salmiyati^{1,*}, Yulia Fauziah Amizuar²

^{1,2}Aisyiyah University, West Ringroad 63 Nogotirto Gamping Sleman 55292, Yogyakarta, Indonesia

¹suri_salmiyati@unisayogya.ac.id*

* corresponding author

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Abstract

Pain that occurs during labor is caused by the activity of uterine contractions. Uncontrolled pain can cause stress that will inhibit the release of the hormone oxytocin so that the labor process is disrupted. Labor pain can be decreased by pharmacological methods (drugs) or non-pharmacological ones, such as Al-Qur'an Healing with audio-visual methods. This study aims to determine the effect of Al-Quran Healing with audio-visual methods on the level of pain in the active phase of the first stage of labor. This study was an experimental quantitative research with one group pretest-posttest research design. The sampling technique was accidental sampling technique with the total of 12 samples. The research instruments were the videos of Al-Qur'an Surah Al-Insan, Al-Mulk, Maryam and Al-Kahf. The pain assessment instrument used Numeric Rating Scales. The data analysis in this study used univariate and bivariate analysis. Based on the univariate test, it was found that the respondents' characteristics were ages that were not at risk and multiparous parity. Most respondents were high-school graduates and were assisted by their husbands during the labor. The results of data analysis using Wilcoxon obtained p-value 0,035 ($p < \alpha$) meaning that there was difference in the level of labor pain before and after the intervention. It could be concluded that there was a significant effect of giving Al-Qur'an Healing therapy to the level of labor pain in the active phase of the first stage of labor. This method of therapy is recommended to be used by the mothers during labor, and it is expected that the health services and the health workers can facilitate it.

Keywords: *Al Qur'an healing, audio-visual methods, labor pain*

INTRODUCTION

Labor pain is a physiological sensation caused by the activity of muscle contractions of the uterus that tighten and compress strongly on the bladder, rectum, spine and pubic organs (Danuatmaja and Bonny, 2008). Pain during labor is strongly associated with uterine contractions. The contractions in normal labor generally have a pause. Everyone feels different levels of pain and different way to overcome the pain even in the same stage of labor (Posner et al., 2013). Great pain can affect the increase in heart rate, respiratory system, blood pressure, and it can also cause stress. If stress occurs, it can inhibit the release of oxytocin hormones which function for uterine contractions during labor, so that contractions are inadequate, and there is disruption of cervical dilatation (Rahayu, 2014). Prolonged delivery is one of the contributors to the Maternal Mortality Rate (MMR). Efforts to overcome labor pain can be done by pharmacological or non-pharmacological ways. One of the non-pharmacological efforts



is to provide Qur'an healing therapy with audio-visual methods during the process of childbirth in the first active phase. Non-pharmacological treatment of Qur'an healing with audio-visual method is a concept to shift focus and distraction. It is an effective way to relieve the degree of labor pain (Albers, 2007 in Lowdermilk, Perry and Cashion, 2010). Al-Qur'an healing with audio methods is done by listening to the sound of murrotal chants of the holy verses of the Qur'an recited by a qori. Providing Qur'anic reading therapy has been shown to activate body cells by converting sound vibrations into waves captured by the body, reducing the stimulation of pain receptors so that the brain secretes endogenous natural opioids. This opioid is permanent to block pain nociceptors (Rilla, Ropi and Sriati, 2014). Visual healing method of the Qur'an by showing the translation of the letter and giving an illustration of the translation of the each verse. The brain as an imaging nerve in a technological concept gives meaning to a material that is obtained as a source of rhetoric, and provides diagnostic imaging that gives a meaning to the mind (Buchbinder, 2015).

Based on this phenomenon, the author was interested in using the concept of non-pharmacological distraction of the Qur'an healing with audio-visual methods to determine the effect on the level of pain in delivery process during the active phase. The purpose of this study was to investigate the effect of the Qur'an healing with audio-visual methods on the level of pain in labor during first active phase.

RESEARCH METHODS

The study applied a pre-experimental study, with the design of one group pretest-posttest. The sample in this study used non-probability accidental sampling technique and obtained as many as 12 respondents. The study was conducted at the Bina Sehat Clinic and Appi Amelia Maternal Clinic in Kasihan Bantul Yogyakarta. The instruments in this study used murotal videos from Taddabur Daily and pain assessment instruments using the Numeric Rating Score. Data analysis in this study used univariate and bivariate analysis; the bivariate analysis used Wilcoxon test.

RESULTS AND DISCUSSION

Based on the age of the respondents, eleven of the twelve respondents (92%) were at no risky age, and eight respondents (66,67%) were multiparous. Based on the education status of respondents, high school graduates dominated, and all respondents had a childbirth companion; the husband was the dominant companion.

Table 1. Characteristics of respondents

Variables	Total (N=12)	%
Maternal Age		
Risky (≥ 35 years old)	1	8
Not risky (20-35 years old)	11	92
Parity		
Primipara	4	33,33
Multipara (1-3 Delivery)	8	66,67
Education		
Primary School	1	8,33
Junior High School	4	33,33
Senior High School	7	58,33
University	0	0
Companion		
Traditional helper of delivery	0	0

Friend	0	0
Husband	7	58,33
Core family	5	41,67
Pain level before intervention		
No pain	0	0
Mild pain	0	0
Moderate pain	4	33,33
Severe pain	4	33,33
Very severe pain	4	33,33
Pain level after the intervention		
No pain	0	0
Mild pain	2	16,67
Moderate pain	3	25
Severe pain	7	58,33
Very severe pain	0	0

The comparison result of the number of respondents given Al-Qur'an Healing therapy with audio-visual method on 12 respondents obtained an average value of 7,50 pain level in pretest. A minimum score of 4 showed moderate pain intensity, and a maximum value of 10 showed very severe pain intensity. Meanwhile, the posttest score with an average of 6,75 had a minimum value of pain 3 which showed mild pain and a maximum value of 9 which indicated severe pain. Statistical test results using Wilcoxon showed asymp sign (2-tailed) $0,035 < 0,05$ so it could be concluded that H_0 was rejected, and H_a was accepted. It meant that there was influence of the Qur'an Healing with audio-visual methods on the level of labor pain during I active phase.

Table 2. Cross tabulation between age and delivery pain before intervention

Age Characteristics	Moderate Pain	Severe pain	Very Severe Pain	Total
Risky age	1 8,3%	0 0%	0 0%	1 8,3%
No risky age	3 25%	4 33,3%	4 33,3%	11 91,7%
Total	4 33,3%	4 33,3%	4 33,3%	12 99,9 %

Among 12 respondents, no risky age showed severe and very severe pain with the same percentage of 4 respondents (33,3%), and one respondent (25%) with risky age experienced moderate levels of pain before the Qur'an healing intervention with the method audio visual.

Table 3. Cross tabulation between age and delivery pain after intervention

Age Characteristics	Mild pain	Moderate pain	Severe pain	Total
Risky age	1 8,3%	0 0%	0 0%	1 8,3%
No risky age	1 8,3%	3 25%	7 58,3%	11 91,7%
Total	2 16,7%	3 25%	7 58,3%	12 99,9%

Seven respondents (58,3%) at no risky age experienced severe pain, and one respondent with risky age (8,3%) experienced mild pain after intervention.

Table 4. Cross tabulation between parity and pain level before intervention

Parity Characteristics	Moderate pain	Severe pain	Very severe pain	Total
Primiparous	1 83%	1 8,3%	2 16,7%	4 33,3%
Multiparous	3 25%	3 25%	2 16,7%	8 66,7%
Total	4 33,3%	4 33,3%	4 33,3%	12 99,9%

Very severe pain felt by multiparous and primiparous respondents before intervention was as many as 2 respondents (16,7%), and the comparison between moderate pain and very severe pain for primiparous and multiparous respondents had a 1:3 proportion.

Table 5. Cross-tabulation between parity and pain level after intervention

Parity characteristics	Mild pain	Moderate pain	Nyeri Berat	Total
Primiparous	0 0%	0 0%	4 33,3%	4 33,3%
Multiparous	2 16,7%	3 25%	3 25%	8 66,7%
Total	2 16,7%	3 25%	7 58,3%	12 99,9%

Severe pain after intervention was felt by primiparous respondents as many as four respondents (33,3%), and only multiparous respondents felt mild pain after the intervention of Al-Qur'an Healing audio-visual method as many as two respondents.

Table 6. Cross tabulation between education and pain level before intervention

Education level characteristics	Moderate pain	Severe pain	Very severe pain	Total
Primary School	1 8,3%	0 0%	0 0%	1 8,3%
Junior High School	1 8,3%	1 8,3%	2 16,7%	4 33,3%
Senior High School	2 16,7%	3 25%	2 16,7%	7 58,3%
Total	4 33,3%	4 33,3%	4 33,3%	12 99,9%

Respondents with high school education had greater intensity of severe pain compared to respondents with junior and primary education, namely 3 (25%) respondents before intervention.

Table 7. Cross tabulation between education and pain level after intervention

Education level characteristics	Mild pain	Moderate pain	Severe pain	Total
Primary School	1 8,3%	0 0%	0 0%	1 8,3%
Junior High School	0 0%	1 8,3%	3 25%	4 33,3%
Senior High School	1 8,3%	2 16,7%	4 33,3%	7 58,3%
Total	2 16,7%	3 25%	7 58,3%	12 99,9%

Severe pain after the intervention felt by respondents with high school education was more dominant than the respondents with junior and elementary school education, namely 4 respondents (33,3%).

Table 8. Cross tabulation between delivery companion and pain level before intervention

Companion characteristics	Moderate pain	Severe pain	Very severe pain	Total
Suami	1 8,3%	2 16,7%	4 33,3%	7 58,3%
Family	3 25%	2 16,7%	0 0%	5 41,7%
Total	4 33,3%	4 33,3%	4 33,3%	12 99,9%

A total of 4 respondents (33,3%) who were accompanied by their husbands experienced very severe pain, while the respondents who were accompanied by family as many as 3 respondents (25%) experienced moderate pain.

Table 9. Cross tabulation between delivery companion and pain level after intervention

Companion characteristics	Mild pain	Moderate pain	Severe pain	Total
Husband	1 8,3%	2 16,7%	4 33,3%	7 58,3%
Family	1 8,3%	1 8,3%	3 25%	5 41,7%
Total	2 16,7%	3 25%	7 58,3%	12 99,9%

The intensity of severe pain felt after the intervention by respondents who were accompanied by the husband was more dominant by 4 (33,3%).

Age Characteristics and Pain Intensity

Based on the age characteristics of respondents, the most dominant one was in the range of 21 years to 33 years, as many as 11 respondents. They belonged to no risky age of reproductive activities. There was one respondent aged 40 years as in the group of risky age. The analysis based on the results of cross tabulation data between the intensity of labor pain levels and the characteristics of the age before and after childbirth in the age range of 20-35 years showed that they experienced severe pain intensity and very severe pain before the intervention of the Qur'an Healing. However, after being given the intervention of Al-Qur'an Healing, pain intensity reduced, and there was no more very severe pain intensity. Age is part of the response factor to pain intensity, as Melzack's theory states that young women feel more pain than old age. Melzack's theory is in line with Yanti's theory (2010 in Puspita, 2013) stating that pain control is difficult for young women under 20 years.

Parity Characteristics and Pain Intensity

Pain intensity in primiparous and multiparous respondents before the Qur'an intervention Healing was in the category of very severe pain, whereas the pain in primipara and multipara after the intervention was in the category of severe pain, but the proportion of severe pain in primipara was greater than the multipara with a percentage of 33,3% primiparous and 25% multiparous. Mild pain intensity 16,7% (2 of 8) of post-intervention was only felt by multiparous respondents. This is in line with Perry Potter's theory (2005 in Puspita, 2013) saying that there is an experience of pain in labor history.

This difference is due to the different cervical opening mechanisms between multiparous and primiparous. In primiparous, ostium uterus internum will open first so that the cervix will flatten and thin, whereas in multiparous internum uterine uterus has opened slightly, thinning and flattening of the cervix occur at the same time, so that multiparous labor pain tends to be milder than the primiparous (Wiknjosastro, 2005 in Magfuroh, 2012). It is also strengthened by the theory of Rusdiatin (2007 in Magfuroh, 2012) saying that a person who can cope with pain that recurs can easily face further pain.

Level of Education Characteristics and Pain Intensity

Based on the result of cross tabulation between the level of education and the intensity of pain, before the intervention respondents with junior and senior high school education had the same proportion, namely 16,7% (2 respondents) experienced very severe pain. After the intervention, there was no level of very severe pain, and it decreased into severe pain with higher proportion in high school education compared to junior high school and elementary school as many as 33,3% (4 respondents). Based on the results of the test, it is not in accordance with the findings of Ye's research (2009 in Puspita, 2013), saying that women who have higher knowledge have a lower level of pain than those who do not have knowledge. Furthermore, Notoatmodjo (2003 in Magfiroh, 2012) also said that higher education of mothers are more able to tolerate pain because they have a lot of knowledge. The incompatibility of the results of this study with the results of past research is possible because of other factors that influence parity. It showed that four out of seven respondents with high school education had parity status in primiparous without the experience of labor pain at all.

Companion Characteristics with Pain Intensity

The results of the cross tabulation test between the companion and the intensity of pain before the intervention showed that very severe pain intensity was dominated by husband as the companion (4 of 7 respondents), while the respondents who were accompanied by the core family were dominated in the category of moderate pain (3 of 5 respondents). Furthermore, in the post-intervention it showed that the intensity of severe pain was on the respondents who were accompanied by the core family as many as three respondents, and the companion of the husband was four respondents, one point higher.

This showed that the group of respondents who had core family support had lower category pain intensity than the pain intensity felt in the group of respondents who were accompanied by their husbands alone. It happened because the mother who was accompanied by the core family received full support from the family. Hence, it has a positive effect on the emotional state that can reduce interference in the provision of pain control epidurals as stated by Albers, (2007 in Lowdermilk, Perry, and Cashion, 2010).

Pain intensity before and after intervention

The distribution of labor pain before intervention was moderate, severe and very severe pain which had a balanced percentage of 33,33%. After the intervention, the changes occur, the cases with mild pain and severe pain dominated. Al-Qur'an Healing with audio-visual method was a part of non-pharmacological psychotherapy techniques, which provided treatment on the approach of religious belief values. The concept of Al-Qur'an psychotherapy is a belief that Qur'an can provide happiness, calmness and is a continuous method of delivering harmonious personality / mentality, through exercise

and cognitive habits mentally and physically (Hakim, 2013) . The belief that the Qur'an can be a cure is based on the sura Al-Isra verse 82:

وَنُنزِّلُ مِنَ الْقُرْآنِ مَا هُوَ شِفَاءٌ وَرَحْمَةٌ لِّلْمُؤْمِنِينَ وَلَا يَزِيدُ الظَّالِمِينَ
إِلَّا خَسَارًا



"And we (Allah) send down in the Qur'an that which is healing and a mercy for those who believe; as for the veil-doers, it only increases their loss" (Qs.Al-Isra: 82).

The theory of endocrine psycho neuro immunology says that a calm heart will cause the glands to release endocrine hormones which strengthen immunity and physical health. Furthermore, an overview of the translation and visualization of the Qur'anic translation helps the brain to produce focus and understanding. According to Edgar Dale's theory, the human learning experience is obtained through 75% of the sense of sight, 13% of the sense of hearing and 12% of the other senses. Based on that theory, Al-Qur'an Healing with an audio-visual method utilized 88% understanding by combining vision and hearing. With the use of the two senses and the verses of the Qoran which contained positive messages, so it provided significant results on changes in the intensity of labor pain. The respondents who experienced conditions of increasing labor pain scores were three people. This could be caused by several factors that the researcher could not control. First, it was the body's tolerance for different levels of pain. Furthermore, the level of focus on the three respondents was low, so the transfer of concentration to pain using Al-Qur'an Healing with audio-visual methods was not optimal. This caused increasing pain intensity according to the opening phase of labor. Another factor that supported the result of the study was the existence of a state of exhaustion and emotional belonged to each individual. The researcher did not know whether the respondent had unresolved personal problems, and the heart was in an uneasy state which caused stress and inhibited the production of the hormone oxytocin while inhibiting the production of endocrine hormones so that there was a decrease in the level of immunity and physical endurance.

CONCLUSION

There was a statistically significant effect of giving the Qur'an healing with audio-visual methods on the level of labor pain with *p value* of 0,035. The level of labor pain after intervention using Al-Qur'an healing by audio-visual method had a varied distribution in the categories of mild, moderate and severe pain. The dominant pain level felt by respondents was severe pain. It is expected that this therapeutic method can be used for mothers during delivery, as one of the management of controlling pain, shifting focus from labor pain. The use of healing Al-Qur'an therapy with audio-visual methods can be facilitated by health workers, especially midwives and delivery services. In the future, the authors expect that there will be further researches on this therapeutic method by tightening the control over confounding variables, especially in psychological factors.

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