

## THE EFFECT OF MUROTTAL AL-QUR'AN THERAPY ON PAIN IN POST-SECTION CAESAREAN PATIENTS WITH SPINAL ANESTHESIA

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### Abstract

*Pain in post-cesarean section patients with spinal anesthesia remains a major problem that can hinder maternal recovery, early mobilization, and breastfeeding. This study aims to determine the effect of Quranic recitation therapy on pain in post-cesarean section patients with spinal anesthesia at Banjarnegara Islamic Hospital. This study used a quantitative method with a pre-experimental one-group pretest-posttest design. The study population was all post-cesarean section patients with Caesarean section at Banjarnegara Islamic Hospital, with a sample of 40 respondents selected using purposive sampling. The research instrument used a Numerical Rating Scale and a respondent characteristics sheet. Data analysis was performed using a paired sample t-test. The results showed that the average pain before the intervention was in the moderate pain category, while after the intervention it decreased to mild pain. There was a significant effect of Quranic recitation therapy on reducing pain in post-cesarean section patients with spinal anesthesia. In conclusion, Quranic recitation therapy is effective as a non-pharmacological intervention to reduce post-operative pain.*

**Keywords:** *Caesarean Section, Murottal Al-Qur'an, Non-Pharmacological Therapy, Pain, Spinal Anesthesia.*

### INTRODUCTION

Maternal and child health is a key pillar in national development, with childbirth being a crucial moment in a mother's life. Clinically, childbirth can occur naturally or through surgery, one of which is a cesarean section (CS). Cesarean delivery is increasingly selected as a preferred alternative intervention in circumstances where vaginal birth proves unfeasible, owing to a range of specific medical indications. These indications include acute fetal compromise such as fetal distress, severe hypertensive disorders of pregnancy like preeclampsia, placenta previa in which the placenta obstructs the birth canal, and prolonged labor characterized by arrested or inadequate progress; collectively, these clinical scenarios prompt clinicians to opt for surgical delivery to safeguard maternal and fetal well-being (Sukmawati, 2018; Alomedika, 2022). With technological advances and increased access to healthcare, the rate of births by cesarean section in various parts of the world continues to show significant increases, with a global average rate of 21% in 2023 and projected to reach 29% by 2030 (WHO, 2023; De Jonge et al., 2021). In Indonesia, the prevalence of CS delivery increased from 17.6% in 2018 to 21.7% in 2023, and in certain districts reached around 25% of total deliveries in 2024 (Dinkes, 2024; Suciawati et al., 2023), including in Banjarnegara Regency, one of which is reflected in the data from Banjarnegara Islamic Hospital (2025) with an average of 58 CS patients per month in the period June–August 2025.

This phenomenon indicates that CS delivery under spinal anesthesia is a routine procedure but still has the potential to cause significant post operative pain. Patients undergoing CS often experience incision pain and uterine contractions after the effects of spinal anesthesia begin to wear off, which can affect early mobility, breastfeeding, sleep quality, and increase the risk of postpartum depression (Nurangreni et al.,

2024; Nurhayati et al., 2020). In the Inpatient Ward of Banjarnegara Islamic Hospital, almost all post-CS patients complained of wound pain with varying degrees of pain, despite being given analgesic therapy three times within 24 hours after the first eight hours post operatively (Banjarnegara Islamic Hospital, 2025). Recent studies have shown that acute pain after CS remains a dominant complaint and requires a more comprehensive pain management approach, especially considering the risk of side effects from opioid and non-opioid analgesics (Prasetya et al., 2023; Hadaya et al., 2023).

The main problem in this study is the low effectiveness of holistic post operative pain management in CS patients with spinal anesthesia, where clinical practice still tends to rely solely on pharmacological therapy. Most CS patients at Banjarnegara Islamic Hospital reported pain that recurred after the effects of spinal anesthesia wore off approximately six hours after surgery, requiring additional interventions to achieve comfort (Yani, 2024; Hadaya et al., 2023). Although pain management was provided based on pharmacological protocols, pre-survey results indicated that post operative pain levels remained moderate to severe, necessitating additional non-pharmacological and spiritual-based strategies. Several studies have found that non-pharmacological interventions such as relaxation, warm compresses, and distraction can reduce pain intensity, but the application of spiritual-based therapies such as Quranic recitation in CS patients in Indonesia is still limited and not standardized (Setiawan et al., 2023; Dewi & Wahyuni, 2023).

Another concrete problem is the lack of specific empirical evidence regarding the effectiveness of Quranic recitation therapy in reducing pain in post-CS surgery patients under spinal anesthesia at Banjarnegara Islamic Hospital. Although several studies report pain reduction with murottal therapy in general post-surgery patients (Nuzulullail et al., 2023; Permana et al., 2021), and other studies demonstrate the psychoreligious effectiveness of Quranic recitation in bone cancer patients (Priyanto et al., 2020; Priyanto et al., 2022), the context and characteristics of acute CS patients differ significantly. These studies generally focus on chronic pain, oncology patients, or non-maternity populations, so they cannot be fully generalized to post-CS patients. In Indonesia, several recent studies have shown that murottal Al-Qur'an therapy is effective in reducing pain levels in post-CS patients in other contexts, but is still limited to case study or observational designs without strict control (Effectiveness of Providing Murottal Al-Qur'an on Reducing Pain Levels in Post-CS Surgery Patients, 2023; Implementation of Murottal Al-Qur'an Therapy on Reducing Pain Scales in Post-CS Patients, 2024).

The purpose of this study was to determine the effect of Quranic recitation therapy on reducing pain levels in post-cesarean section patients with spinal anesthesia at Banjarnegara Islamic Hospital. Specifically, this study aimed to identify patient characteristics (age, previous pain experience, and education level), This study aims to quantify patients' pain intensity at two distinct time points prior to the application of murottal therapy and following its administration and to conduct a thorough analysis of the degree to which the intervention can attenuate post operative pain levels. Pain assessments will be carried out using appropriate measurement instruments to gather quantitative data on changes in perceived pain, which will then be analyzed to ascertain the magnitude of the murottal therapy's effect on improving post operative pain outcomes. The urgency of this study lies in the need for safe, effective, and spiritually based pain management strategies, considering the risk of side effects of analgesic drugs that can interfere with breastfeeding and maternal recovery after CS (Prasetya et al., 2023; Nuzulullail et al., 2023). In addition, the results of this study are expected to strengthen evidence-based practice in maternity nursing, contributing to the development of Standard Operating Procedures (SOP) for non-operative pain management.-pharmacological in hospitals, as well as reducing the length of hospital stay and cost burden due to the use of analgesic drugs (Dewi & Wahyuni, 2023; Permana et al., 2021).

The novelty of this study lies in the specificity of the population and clinical context, namely post-cesarean section patients under spinal anesthesia in the Banjarnegara Islamic Hospital setting, which has not been systematically studied, despite the increasing number of CS in Indonesia. Unlike previous studies that focused on chronic pain, back pain, or oncology patients (Nuzulullail et al., 2023; Permana et al., 2021; Priyanto et al., 2020), study directly examines acute pain after CS surgery in a Muslim population familiar with the Quran. Furthermore, this study integrates Quranic recitation therapy as a non-invasive intervention.-spiritually based pharmacological approach in the context of maternity anesthesia nursing,

so that it can enrich the literature on the bio-anesthesia approach.-psycho-socio-spiritual aspects in pain management (Marlina & Fajriyah, 2021; Priyanto et al., 2022). Thus, this study not only complements the findings of previous studies but also provides a more specific scientific basis for the development of holistic and patient-centered nursing interventions.-centered in a hospital with an Islamic feel.

## **METHOD**

This study used an experimental research type with a pre-experimental design, namely a one-group pretest-posttest design involving one sample group given an intervention before and after the measurement (Sugiyono, 2017; Donsu, 2022). This study was designed quantitatively with a focus on measuring the effect of Al-Qur'an recitation therapy on reducing pain scales in post-cesarean section patients with spinal anesthesia at Banjarnegara Islamic Hospital. This design was chosen because it allows researchers to observe changes in pain in the same patients before and after the intervention without a control group, thus aligning with the quantitative research paradigm that emphasizes measurement and hypothesis testing (Creswell, 2021; Sudaryono, 2018).

The instruments employed in this study comprised a set of complementary measurement tools designed to capture both pain intensity and participants' personal characteristics. Primarily, a pain assessment form incorporating the Numerical Rating Scale (NRS) was utilized as the standardized tool to quantify the severity of pain experienced by patients at two distinct time points: prior to the intervention and following its application. Additionally, a patient identity questionnaire was administered to collect detailed individual-level data, including age, prior pain history, and educational attainment. The combined use of these quantitative instruments aimed to produce a more nuanced and comprehensive profile of pain outcomes and the personal factors that could influence patients' responses to the intervention. The NRS was chosen because it has been proven to have high validity and reliability in measuring post operative pain, with a correlation coefficient of approximately  $r = 0.90$  for validity and  $r > 0.95$  for reliability on the post operative pain scale (Swarihadiyanti, 2014; Emzir, 2021). The NRS instrument was administered face-to-face to respondents, who were asked to rate the intensity of pain from 0 (no pain) to 10 (very severe pain), with clear instructions, so that the results were representative and easy to re-measure after the intervention (Hadaya et al., 2023; Nursalam, 2019).

Data collection was conducted through direct observation and structured interviews following the therapeutic protocol of murottal Al-Qur'an. The intervention of murottal Al-Qur'an therapy was given to post-CS patients twice, namely at 6 hours post-surgery before administering analgesics and at 24 hours post-surgery, each with a duration of 15 minutes listening to Surah Ar-Rahman verses 1–78 through earphones, then re-measuring the pain scale with NRS after completion (Nurangreni et al., 2024; Suciawati et al., 2023). The data analysis technique began with the editing and coding stage, namely checking the completeness of the questionnaire, converting qualitative data into numbers, and then entering the data into the SPSS for Windows program. The data analysis in this study encompassed multiple complementary stages designed to yield a comprehensive understanding of the findings. Initially, a univariate analysis was performed to characterize the respondents and to detail the pain scale measurements recorded both before and after the intervention, thereby revealing the distribution and baseline attributes of the sample. Subsequently, to evaluate whether there was a statistically significant change in mean pain scores between the pre-intervention and post-intervention conditions, the researchers conducted a bivariate analysis employing a paired-sample t-test, an appropriate statistical technique for comparing two related measurements from the same subjects. This analytical strategy follows methodological guidance from Sugiyono (2017) and Creswell (2021) and aims to determine the significance of any change in pain intensity following the administration of murottal Al-Qur'an therapy. The paired t-test was chosen because the data were in the form of paired measurements on the same subject, with the decision-making criteria being that if the probability value  $p < 0.05$  then there is a significant difference in pain.

The population in this study was all post-cesarean section patients with spinal anesthesia at the Islamic Hospital of Banjarnegara during the period of 9 December 2025 – 7 January 2026, which refers

to the pre-survey trend of June–August 2025 with an average of 58 patients per month, consisting of 70% with conventional spinal anesthesia techniques and 30% with the ERACS method (Banjarnegara Islamic Hospital, 2025; Dinkes, 2024). A sample of 40 patients was taken using a purposive sampling technique, namely a combination of purposeful sampling based on inclusion criteria and random sampling within eligible groups. Inclusion criteria included: adult patients aged 17–45 years, treated at Banjarnegara Islamic Hospital, ASA status 1–2, experiencing moderate pain after CS, and willing to be respondents, while exclusion criteria included patients with pain not post CS, patients without pain complaints, hearing or mental disorders, and patients with the ERACS anesthesia method (Nurhayati et al., 2020; Donsu, 2022). This sampling technique ensures that the sample is homogeneous and relevant to the characteristics of the target population, thus supporting the generalizability of the findings to conventional spinal SC patients.

The research procedure began with a research ethics application through the Health Research Ethics Commission (KEPK) of the LPPM Harapan Bangsa University with the ethical approval letter number B.LPPMUHB/1253/11/2025, followed by a research permit application to the Dean of the Faculty of Health and Management of Banjarnegara Islamic Hospital in accordance with institutional protocols (Notoatmodjo, 2018; Cresswell, 2021). The research was conducted in the inpatient postpartum ward of Banjarnegara Islamic Hospital from 9 December 2025–7 January 2026, after the application of informed consent, explanation of the research objectives and procedures, and confirmation that respondents were free to withdraw at any time without discrimination. Throughout the research, the researcher maintained the ethical principles of beneficence (doing good), nonmaleficence (doing no harm), anonymity, and confidentiality, including the use of identity codes and guarantees of data confidentiality, in accordance with research ethics on human subjects (Notoatmodjo, 2018; Emzir, 2021). All research procedures are planned systematically, starting from collecting characteristic data, measuring pre-intervention pain, providing Al-Quran murottal therapy, measuring post-intervention pain, to documentation and data analysis, so that the research process can be scientifically and ethically accounted for.

## RESULTS AND DISCUSSION

### Respondent Characteristics

**Table 1. Frequency Distribution of Respondent Characteristics**

No	Category	Amount	Percentage
1	Education		
	No school	0	
	Basic Level	3	7.5%
	Intermediate Level	27	67.5%
2	College	10	25%
	Age		
	<20 Years	1	2.5%
	21-35 Years	34	85%
3	36< Years	5	12.5%
	ASA Status		
	ASA 1	35	87.5%
	ASA 2	5	12.5%
4	SC Experience		
	Once	10	25%
	Never	30	75%

Based on the data in Table 1 regarding the Frequency Distribution of Respondent Characteristics, it is known that of the total of 40 respondents, the majority have a secondary education level of 27 people (67.5%), The age distribution shows that most respondents are in the range of 21-35 years as many as 34 people (85%). Reviewed from medical characteristics, the majority of respondents have ASA Status 1 as

many as 35 people (87.5%), Meanwhile, regarding the experience of Sectio Caesarea (SC) surgery, the data shows that most respondents have never undergone the procedure, as many as 30 people (75%).

### Characteristics of pain pre-test and post-test

**Table 2. Pain Characteristics**

Pain Level	Test 1				Test 2			
	Pre-Test		Post Test		Pre-Test		Post Test	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
No Pain	0	0	0	0%	0	0	0	0%
Mild pain	0	0%	26	65%	4	10%	40	100%
Moderate Pain	40	100%	14	35%	36	90%	0	0%
Total	40	100%	40	100%	40	100%	40	100%

Based on Table 2 regarding pain characteristics, it is known that there were 40 respondents (100%). In Test 1, before the intervention (pre-test), all 40 respondents (100%) experienced moderate pain, and there were no respondents with mild or no pain. After the intervention (post-test), there was a decrease in pain levels, with 26 respondents (65%) experiencing mild pain.

The findings from Test 2 during the pre-intervention assessment indicated that the vast majority of participants experienced moderate pain, with 36 individuals representing 90% of the sample. Following the intervention, the post-test results demonstrated a marked shift: all participants reported only mild pain, totaling 40 individuals or 100% of the study sample.

### Paired T-test

**Table 3. Average Pain Level and Paired T-Test Analysis 1**

Pain Level	Min	Max	Mean	Std deviation	P-Value
Before Action	4	6	5.2	0.76753	0.001
After Action	2	4	3.0		

Table 3 shows the average pain level and paired t-test analysis. Before the procedure, the pain level experienced by respondents varied between 4 and 6 with an average (mean) of 5.2. After the procedure, the pain level ranged between 2 and 4 with an average of 3.0. The results of the paired sample t-test analysis obtained a P Value of 0.001, which means that it can be concluded that there is an effect of the combination of Al-Qur'an murottal therapy in patients with post-caesarean section surgery with spinal anesthesia for the first procedure.

**Table 4. Average Pain Level and Paired T-Test Analysis 2**

Pain Level	Min	Max	Mean	Std deviation	P-Value
Before Action	3	5	4.4	0.60764	0.001
After Action	1	3	2.2		

Table 4 shows the average pain level and Paired t Test analysis. Before the procedure, the level of pain experienced by respondents varied between 3 to 5 with an average (mean) of 4.4. After the procedure, the pain level ranged between 1 and 3 with an average of 2.2. The results of the paired sample t-test analysis obtained a P Value of 0.001, which means that it can be concluded that there is an effect of the combination of Al-Qur'an murottal therapy actions on post-caesarean section patients with spinal anesthesia for the second procedure.

## Discussion

### Respondent Characteristics

#### 1. Education

Based on the results of the univariate analysis in this study, the majority of respondents had a secondary education level of 27 people (67.5%). The public's view shows that the higher the education level, the better the literacy skills in understanding health information, including explanations of cesarean section procedures, post-operative pain management, and non-pharmacological interventions in the form of Al-Qur'an murrotal therapy. Based on research journals, patients with a higher level of education showed basic to advanced understanding of health information, especially those related to the surgical process and pain management. Pre-operative education in patients is associated with reduced post-operative pain, because this education increases patient understanding of pain management strategies and reduces anxiety related to the medical procedure to be undergone. (Wang et al., 2024).

Other research shows that respondents with secondary and higher education in this study supported their ability to accept and carry out interventions such as Al-Quran murrotal therapy, which in other studies has been found to be able to reduce pain scores through cognitive distraction and improved attitudes towards pain. (Brodersen et al., 2023)

#### 2. Age

The study results revealed that most respondents fell within the 21–35 year age bracket, accounting for 34 individuals (85%). This 21–35 age range corresponds to an active reproductive phase and is commonly the demographic most frequently undergoing cesarean section procedures. The predominance of this age cohort suggests that many participants are in a physiological stage characterized by relatively heightened nociceptive sensitivity.

This observation aligns with Kim et al. (2023), who reported that younger patients tend to indicate higher post operative pain intensities than their older counterparts; consequently, the preponderance of 21–35-year-olds in the present sample reinforces the rationale for employing adjunctive therapies, such as murrotal Al-Qur'an, to assist in reducing post operative pain severity. Corroborating evidence from the Acute Pain Management Profile Survey (2024) indicates that the majority of individuals experiencing post operative pain are young adults, underscoring age as a factor influencing self-reported pain intensity. The 21–35 cohort is regarded as a productive reproductive age for women, whereas those aged 36 and above or under 20 are considered to face higher pregnancy and childbirth risks (Sukarni et al., 2019).

#### 3. ASA

Most of the respondents in this study had ASA I status, as many as 35 people (87.5%). ASA status is an indicator of preoperative health assessment that describes the level of risk of chronic comorbidities in patients before surgery. Recent studies indicate that a higher American Society of Anesthesiologists (ASA) physical status classification correlates with an elevated risk of post operative pain and more severe complications. Suboptimal physical condition in patients with higher ASA status may amplify sensitivity to nociceptive stimuli, making these patients more susceptible to greater pain intensity and more significant post operative adverse outcomes. (Doyle, 2020).

#### 4. History of Caesarean Section

The results of the study showed that most of the respondents had never undergone a cesarean section before, namely 30 people (75%). The majority of respondents were primiparous patients or those undergoing a cesarean section for the first time, who psychologically have the potential to experience higher levels of anxiety and pain perception.

Research by Sunaryanti et al. (2022) suggests that previous surgical experience can influence pain perception through psychological mechanisms, such as pain memory and expectations regarding the surgical procedure. Patients who have never undergone surgery tend to have higher levels of anxiety, which can exacerbate post operative pain perception. This makes Quranic recitation therapy highly

relevant as a non-pharmacological intervention that can reduce both anxiety and pain through relaxation and spiritual effects.

Theoretically, anxiety and fear can increase sympathetic nervous system activity, which further amplifies the transmission of pain impulses. Quranic murrotal therapy helps reduce sympathetic activity and promotes a sense of calm, thus contributing to reduced post operative pain, particularly in patients who have not had previous surgical experience.(Sunaryati et al., 2022).

### **Pain Characteristics: Pain level before and after therapyrecitation of the Qur'an**

Based on the results of the research conducted, data obtained on the pain levels of post-cesarean section patients with spinal anesthesia before being given Al-Qur'an recitation therapy (pre-test) showed that all respondents in Test 1 experienced moderate pain as many as 40 people (100%). This condition illustrates that post-cesarean section pain is acute pain that commonly occurs due to tissue trauma, nerve irritation, and post-surgical inflammatory responses. Post-operative pain is also amplified by the decreasing effect of spinal anesthesia which causes pain impulses from the incision area to be transmitted through A-delta and C fibers to the central nervous system. This finding is in line with the theory of acute pain according to the International Association for the Study of Pain (IASP), which states that post-surgical pain is a combination of tissue damage, nociceptor activation, and a physiological stress response that increases in the first 24 hours post-surgery.(IASP, 2022).

Following the administration of Al-Qur'an murottal therapy in Test 1, post-intervention assessments revealed a substantial reduction in reported pain levels. The majority of participants 26 individuals (65%) reported only mild pain after the intervention, while the remaining 14 participants (35%) continued to report moderate pain. This observed decline suggests a beneficial effect of murottal Al-Qur'an therapy on patients' pain perception. Physiologically, murottal functions as an auditory distraction technique that redirects the patient's attention away from nociceptive sensations toward a soothing auditory stimulus. This attentional shift is thought to diminish the cortical transmission of pain signals, thereby lowering subjective pain perception. Additional studies have similarly found that murottal therapy significantly decreases post operative pain scores following cesarean delivery, likely by inducing relaxation and psychological comfort in patients (Pujiati & Haniyah, 2024).

The results of Test 2, the pre-test, showed that the majority of respondents still experienced moderate pain, as many as 36 people (90%). The results of the actions taken showed that without additional intervention, pain that is not optimally managed can delay early mobilization, interfere with the breastfeeding process, and increase stress and anxiety in postpartum mothers. This is in line with previous research which states that post-cesarean section pain is often persistent if only relying on pharmacological therapy without a complementary approach.(Yumni et al., 2025).

The post-test results in Test 2 showed a very significant change, where all 40 respondents experienced mild pain (100%), and no more respondents were found with moderate or severe pain. This finding strengthens the evidence that Quranic recitation therapy provides a consistent effect in reducing pain intensity. Neurophysiologically, listening to Quranic recitation can stimulate the limbic system and hypothalamus to release endorphins and enkephalins which act as endogenous analgesics. These endorphins work by inhibiting the release of substance P at neuronal synapses, thereby inhibiting the transmission of pain impulses to the brain.(Purnawan et al., 2022).

Quranic recitation therapy also provides significant psychological and spiritual effects. Quranic recitation has religious significance that can instill a sense of calm, surrender, and confidence in the healing process. A healthy spiritual state has been shown to reduce anxiety and stress, which indirectly contributes to a reduced perception of pain.(Salma et al., 2023)The pre-test and post-test design used in this study allowed researchers to objectively assess changes in pain levels before and after the intervention. The clear difference in results between the pre-test and post-test in Tests 1 and 2 indicates that the changes in pain were a direct effect of the Quranic recitation therapy. This finding aligns with the evidence-based nursing approach, which recommends the use of non-pharmacological interventions as complementary therapies in post-surgical pain management (IASP, 2022).

**Analysis of the Effect of Murottal Therapy**

The effect of murottal therapy was examined using a paired-sample t-test, a parametric statistical procedure appropriate for comparing two related measurements from the same participants. The analysis revealed that the pre-intervention mean pain score for post-cesarean patients who underwent spinal anesthesia fell within the moderate to severe pain range, with an average value of 5.2. This condition is in line with the theory of post-operative pain which states that surgical procedures cause tissue damage, inflammatory responses, and activation of peripheral nociceptors, thereby increasing the transmission of pain impulses to the central nervous system.(Perry, 2015)In post-cesarean section patients, pain is also exacerbated by uterine contractions, early post-operative mobilization, and anxiety that arises after the effects of spinal anesthesia wear off.

After being given Al-Qur'an murottal therapy in the first post-test, the results of the Paired Sample T-Test showed a decrease in the average pain level to 3.0 with a p-value of 0.001. This value obtained is smaller than  $\alpha$  (0.05), so it statistically shows a significant effect of Al-Qur'an murottal therapy on reducing pain. This decrease can be explained through the mechanism of the gate control theory of pain, where auditory stimuli in the form of rhythmic and harmonious recitation of Al-Qur'an murottal are able to inhibit the transmission of pain impulses in the spinal cord so that the perception of pain received by the cerebral cortex is reduced.(Perry, 2015).

Neurophysiologically, listening to Quranic recitation is also known to activate the parasympathetic nervous system, which plays a role in the body's relaxation response. This activation causes a decrease in heart rate, blood pressure, muscle tension, and levels of stress hormones such as cortisol, which overall contribute to a decrease in pain perception. Abdelkader et al. (2024) in a randomized controlled trial reported that post operative patients who listened to Quranic recitation experienced a significant reduction in pain compared to the control group, with a p-value <0.001.(Aburuz et al., 2023).

The results of the second post-test analysis again showed a greater decrease in the average pain level, from a mean of 4.4 before the procedure to 2.2 after the Quranic murottal therapy, with a p-value of 0.001. This consistent decrease indicates that Quranic murottal therapy has a cumulative effect when given repeatedly. This is in line with the research of Rahmawati and Putri (2024) which stated that providing Quranic murottal therapy continuously can improve the patient's psychological adaptation to pain so that the pain threshold increases and the subjective pain intensity decreases (Rahmawati and Putri, 2024).

The results of this study are also in line with several studies in Indonesia that show that Quranic recitation therapy is effective in reducing pain intensity in various clinical conditions, including labor pain, burn pain, and post-operative pain. Safitri and Dewi (2023) and Rantiyana et al. (2023) reported that patients who received Quranic recitation therapy experienced a statistically significant reduction in pain compared to before the intervention. Therefore, Quranic recitation therapy can be recommended as a complementary nursing intervention that is safe, easy to implement, and in accordance with a holistic nursing approach (Safitri et al., 2021).

Based on the results of the Paired Sample t-Test on the pre-test, first post-test, and second post-test, it can be concluded that Al-Quran murottal therapy has a significant effect on reducing pain levels in post-cesarean section patients with spinal anesthesia. The results of this study are supported by the findings of other studies conducted by Sudaningsih et al., (2025) Regarding non-pharmacological interventions in post-cesarean section patients, such as deep breathing relaxation techniques, which have also been shown to significantly reduce pain levels from predominantly moderate to mild pain after the intervention. These results align with findings from research on Quranic recitation therapy, which also showed a decrease in pain intensity after the intervention. Both methods have similar mechanisms: providing a relaxing effect, reducing muscle tension and anxiety, slowing breathing, increasing calmness, and modulating pain perception in the central nervous system. They also divert the patient's attention from pain, thereby reducing the transmission of pain impulses to the brain (Sudaningsih et al., 2025)

## CONCLUSION

This study shows that Al-Qur'an murottal therapy has a significant effect in reducing pain scale in post-cesarean section patients with spinal anesthesia at Banjarnegara Islamic Hospital. The results showed that before the intervention, all respondents experienced moderate pain, but after receiving Al-Qur'an murottal therapy twice, the majority of respondents experienced a decrease to mild pain, which was supported by a paired sample t-test with a p value <0.05 in both measurements. These findings confirm that Al-Qur'an murottal therapy functions as an effective non-pharmacological intervention in modulating pain perception through the mechanisms of distraction, relaxation, and improving psychological-spiritual conditions, while supporting a paradigm shift towards more holistic and evidence-based pain management in maternity nursing.

However, this study has several limitations, including a pre-experimental design without a control group, a sample size limited to one hospital, and the potential influence of confounding variables such as the use of additional analgesics and variations in previous pain experiences. Future studies are recommended to use a more robust experimental design (e.g., a quasi-experimental design with a control group) and involve a larger sample size and multiple settings to strengthen generalizability. The practical implications of this study are that Quranic recitation therapy can be integrated into the Standard Operating Procedures for non-pharmacological pain management in hospitals, especially in Islamic hospitals, to reduce the burden of analgesic medication use, accelerate early mobilization, facilitate breastfeeding, and improve the quality of care, making it more holistic and patient-centered.

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