





Effects of murottal al-qur'an therapy on anxiety and vital signs among primigravida pregnant women in pre-operation caesarean section

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ABSTRACT

Introduction: Anxiety in pregnant women before Caesarean Section (C-Section) surgery can cause changes in vital signs, thereby affecting the mother's readiness for childbirth, especially in primigravida mothers. This research aims to analyze the effect of Murottal Al-Qur'an Therapy on reducing anxiety and vital signs in primigravid pregnant women before C-Section surgery.

Methods: A quasi-experimental study on pregnant women who will undergo C-Section surgery at a hospital in Surabaya, Indonesia. A total of 84 respondents (42 in the intervention group and 42 in the control group) were recruited using purposive sampling. Anxiety variables were measured using the Zung Self-Rating Anxiety Scale (ZSRAS), and vital signs (pulse, blood pressure, respiration rate) were measured using a sphygmomanometer and a calibrated clock. Data analysis was used to test the Wilcoxon Signed Rank Test and the Mann-Whitney Test.

Results: The intervention group's vital signs for blood pressure decreased to 120.98 mmHg and diastolic blood pressure to 70.08 mmHg. The mother's pulse showed an average of 79.95 times per minute and respiration an average of 20 times per minute. Testing the effect of Murottal Al-Qur'an Therapy showed a significant effect on the Intervention group for anxiety ($p=0.001$), systolic pressure ($p=0.005$), diastolic pressure ($p=0.001$), pulse ($p=0.005$), and respiration rate ($p=0.001$), respectively. The difference test shows a significant difference after the intervention, with a p -value of <0.001 .

Conclusions: Murottal Al-Qur'an Therapy can reduce anxiety levels, systolic and diastolic blood pressure, pulse rate, and respiration rate in primigravida pregnant women who will undergo C-Section surgery. So, the results of this research can be applied by primary nurses in maternity rooms or operating rooms for primigravida pregnant patients who will undergo cesarean Section surgery.

Keywords: anxiety, caesarean section, murottal al-qur'an therapy, vital signs

Introduction

Anxiety has the potential to occur in mothers who will undergo caesarean Section (C-Section) surgery, especially primigravida mothers (Wulandari *et al.*, 2023). Primigravida mothers do not have much experience regarding pregnancy and childbirth preparation, so they need optimal health education to prevent anxiety during the birth process (Munkhondya *et al.*, 2020). C-Section deliveries in primigravida mothers are caused mainly by

maternal health factors such as pre-eclampsia, prominent fetal factors, lack of maternal readiness, lack of strength in pushing, and pathological factors such as placenta previa, uterine atony, and fetal emergencies (Mulugeta *et al.*, 2020). The invasive impact of C-Section deliveries in primigravida mothers who experience anxiety. It causes changes in vital signs, which are characterized by increased breathing frequency, heart rate, and blood pressure.



C-Section surgery, based on data from several countries in the world, since 2020, is a trend among primigravida mothers, with the United States occupying the highest percentage (36%), the Western Pacific (24%), and other regions such as Europe (23%) (Gedefaw *et al.*, 2020; Verma *et al.*, 2020). In Indonesia, based on the previous research, the number of women undergoing C-Section delivery reported an average of 17.6% in 2022 (Sungkar and Basrowi, 2020; Zahroh *et al.*, 2020), and 20% was reported in East Java, while in Surabaya, the number of women undergoing C-Section from 2016 to 2020 was 7,284 (3.9%) out of 187,000 deliveries (East Java Provincial Health Office, 2022). Based on hospital records, the preliminary data taken at hospitals in Surabaya in the last three months, 156 people underwent C-section in June–July 2022, and 78 mothers were primigravida. The anxiety commonly shown in the previous study had a majority of moderate anxiety, accounting for 44% (Ashar and Kusri, 2020; Dewi *et al.*, 2022; Pulungan, Harahap and Hasibuan, 2022).

Primigravida mothers who will undergo pre-operative C-section may experience anxiety about anesthesia (Pervez, 2021; Wulandari *et al.*, 2023) due to unfamiliarity with the procedure and the threat of surgical danger. Excessive anxiety often causes changes in vital signs and, as a result, has the potential to delay surgery (Hunter *et al.*, 2023; Lupu *et al.*, 2023). So far, handling anxious patients before C-Section surgery has been carried out by providing health education, explaining the actions taken before surgery, what the patient will experience during the operation process, and providing psychosocial support and empowering the role of the client and family, and skills training (Fentie, Yetneberk and Gelaw, 2022; Aker, Cengiz and Sezer, 2024; Alsufyani *et al.*, 2024). Nursing interventions that can be carried out to reduce the patient's anxiety level can be provided through pharmacological Therapy and non-pharmacological Therapy, one of which is by giving murottal Therapy (Anggara, Triyudono and Suryani, 2024). The Murottal Al-Qur'an Therapy is a relaxation Therapy that uses holy Quran citations (Ab Rahman *et al.*, 2021; Ismayanti *et al.*, 2021; Nurhasanah, Yushida and Yuniwati, 2022). Murottal Al-Qur'an Therapy recitation has relaxation effects and brings calmness to the reciter. Practicality is essential in adherence (Nurhasanah, Yushida and Yuniwati, 2022). Based on previous research, the standard of Murottal Al-Qur'an Therapy underlines that religious practices such as listening to the Qur'an are related to physical and mental health (Ab Rahman *et al.*, 2021). Through spiritual Therapy, it can provide a relaxing effect on the patient, thereby reducing tension and anxiety (Khosravi *et al.*, 2022). Other studies also suggest listening to more recitation of the Qur'an to improve relaxation techniques with meditation training (Ghorbani *et al.*, 2021).

This Murottal Al-Qur'an Therapy enhances the relaxation training, aiming to help patients feel balanced and connected with tremendous energy, so that it can provide benefits in several aspects, including assisting patients to achieve spiritual tasks (Subhi, Budiono and Wijayanti, 2023). This Murottal Al-Qur'an Therapy can have a relaxing impact through the sound received by the brain, stimulating the parasympathetic system to activate alpha waves, which influence the patient's mood (Hamranani *et al.*, 2023). Various studies have proven that Murottal Al-Qur'an Therapy can reduce anxiety, especially in Muslim patients, but not many studies have focused on evaluating the anxiety of primigravida patients. Murottal Al-Qur'an Therapy can calm the soul so that anxiety can be reduced. The patient's greatest hope and expectation is that the operation will go smoothly and the patient can recover as before. Therefore, one of the things the patient needs is spirituality, namely believing in the greatness and help of God Almighty, through this belief, it can create strength to lead to healing. This awareness will cause the patient to surrender to God; in this state, the brain is in alpha waves (frequency 7-14 Hz) (Ghorbani *et al.*, 2021; Khosravi *et al.*, 2022). The activation of these alpha waves triggers a relaxed state in the body and mind, focuses emotions and calms oneself, reduces tension and stress, reduces anxiety, and causes the production of the hormone serotonin and endorphins, which can create feelings of comfort and peace, so that people can easily relax (Anggara, Triyudono and Suryani, 2024). This is what attracts researchers to analyze the effect of Murottal Al-Qur'an Therapy on reducing anxiety and vital signs in primigravida pregnant women before performing C-Section surgery.

Materials and Methods

Study design

This research method uses a quasi-experimental design with a pre-post control group to compare primigravida mothers after C-Section surgery who are given Murottal Al-Qur'an Therapy. Data collection techniques in this study used purposive sampling and divided them into intervention and control groups. The intervention group, who were given Murottal Al-Qur'an Therapy for two days before surgery, and the control group, which only received intervention from the treatment room. The intensity of Therapy was 15 minutes of listening to Holy Quran recitation (HQR) Surah al-Rahman, respondents were using headphones while listening and enhancing their relaxation meditation with their eyes closed (Rozali *et al.*, 2022; Nazir, 2023).

Population, Sample, and sampling

The population in this study was 156 pregnant women hospitalized in the hospital who were going to undergo a C-section. The hospital used in this study is a private

Table 1. Demographic Data Characteristics of Primigravida mothers before C-Section procedure, August 2022 (n=82)

Characteristics	Intervention Group		Control Group		Homogeneity Test
	n	%	n	%	
Age					0.059
22 Years	12	28.57	10	23.81	
23 Years	13	30.95	12	28.57	
24 Years	8	19.05	10	23.81	
25 Years	5	11.90	6	14.29	
27 Years	4	9.52	4	9.52	
Education					0.181
Elementary School	3	7.14	5	11.90	
Junior High School	12	28.57	10	23.81	
Senior High School	17	40.48	16	38.10	
Higher Education	10	23.81	9	21.43	
Husband Education					0.131
Elementary School	5	11.90	7	16.67	
Junior High School	8	19.05	10	23.81	
Senior High School	20	47.62	18	42.86	
Higher Education	9	21.43	7	16.67	
Occupation					0.974
Private employees	7	16.67	12	28.57	
Civil servant	8	19.05	4	9.52	
Entrepreneur	12	28.57	13	30.95	
Housewife	15	35.71	13	30.95	
Husband Occupation					0.131
Private employees	17	40.48	19	45.24	
Civil servant	8	19.05	6	14.29	
Entrepreneur	10	23.81	14	33.33	
Army	3	7.14	0	0.00	
Teacher	4	9.52	3	7.14	
Family Income					0.490
≤ Regional minimum wage Rp 3,871,000	23	54.76	24	57.14	
> Regional minimum wage Rp 3,871,000	19	45.24	18	42.86	

hospital located in East Surabaya, East Java, Indonesia. The study was conducted in a special room for mothers about to give birth. The inclusion and exclusion criteria in determining the sample were primigravida patients, Muslim, able to communicate well, have mild to severe anxiety levels measured using the initial instrument, namely the Zung Self-Rating Anxiety Indonesian Version (Kamila and Mutianingsih, 2021) and do not experience mental disorders based on the patient's medical records and the patient's previous medical history. Based on the sample size calculation results, 84 respondents were obtained and divided into 42 intervention and 42 control groups using purposive sampling to become respondents in this study. In selecting research respondents, although the researcher determined the respondents' criteria, the researcher ensured that the respondents did not have a close relationship with the researcher. The researcher first explained the purpose, procedures, benefits, and risks of providing Murottal Al-Qur'an Therapy, then the

respondents signed an informed consent form indicating their willingness to become research respondents.

Variables and Instruments

This study used an independent variable, namely Murottal Al-Qur'an Therapy. Murottal Al-Quran Therapy uses Surah Ar-Rahman, a letter chosen because it shows the meaning of God Almighty as the Most Gracious and Most Merciful, so that it can heal patients. The Therapy used a frequency of 15 minutes, given three times a day, before the patient underwent surgery. Murottal Al-Qur'an Therapy was given for two days until the patient entered the operating room. The study's dependent variables were the patient's anxiety level and vital signs: systolic blood pressure, diastolic blood pressure, pulse, and respiration rate. Respondents' anxiety levels were measured using the Zung Self-Rating Anxiety Scale (ZSRAS) Indonesian Version (Kamila and Mutianingsih, 2021). This scale is valid and reliable for the Indonesian population. The researcher first conducted a

Table 2. Anxiety Level of Primigravida mother before C-Section procedure (n=82)

Anxiety	Before Intervention (Pretest)		After Intervention (Posttest)	
	n	%	n	%
Intervention Group				
Normal	0	0.0	11	26.2
Mild Anxiety	4	9.5	17	40.5
Moderate Anxiety	13	31.0	14	33.5
Severe Anxiety	7	16.7	0	0.0
Control Group				
Normal	0	0.0	0	0.0
Mild Anxiety	4	9.5	8	19.0
Moderate Anxiety	31	73.8	23	54.8
Severe Anxiety	7	16.7	11	26.2
Normality Test	0.100		0.129	

Table 3. Vital Signs of Primigravida mother before C-Section procedure (n=82)

Vital Sign	Before Intervention (Pretest)			After Intervention (Posttest)			Normality Test
	Mean	Min	Max	Mean	Min	Max	
Intervention Group							
Systolic pressure	138.17	92	196	120.98	85	177	0.783
Diastolic pressure	76.02	57	105	70.05	54	92	0.085
Pulse	92.67	54	142	79.95	48	130	0.080
Respiration Rate	21.29	20	22	20.19	20	21	0.075
Anxiety Level	67.17	57	77	53.52	31	74	0.129
Control Group							
Systolic pressure	113.33	74	169	111.76	70	150	0.087
Diastolic pressure	68.88	58	106	66.64	41	90	0.064
Pulse	104.50	74	155	96.05	75	149	0.100
Respiration Rate	21.62	20	24	20.90	20	24	0.213
Anxiety Level	66.83	57	77	66.69	57	77	0.100

validity test, with the r table > 0.359 results, and the reliability test showed Cronbach's alpha of 0.88. The scale of the ZSRAS questionnaire (Shimano *et al.*, 2021) consists of 20 questions using a Likert Scale with four categories. Value 4 = never, value 3 = sometimes, value 2 = some of the time, and value 1 = almost all the time for positive and negative questions. The opposite applies. Interpretation of the scale shows normal (20–44), mild anxiety (45–59), moderate anxiety (60–74), and severe anxiety (75–80). Vital signs and blood pressure were measured using a sphygmomanometer, while pulse and respiration rates were calculated manually for 60 seconds.

Procedure

The study was conducted after the researcher obtained ethical approval from the health research ethics committee and a research permit at one of the hospitals in Surabaya, East Java. Prospective respondents were given information about the purpose, benefits, and procedures of the study, and were given informed consent incognito, and then the prospective respondents agreed to consent. Prospective respondents who were divided into intervention and control groups were not combined in the study, and were blinded to avoid the intervention group changing the actual conditions. The researcher conducted the intervention independently, and a nurse assisted in measuring vital signs in the room after coordinating with the researcher. The intervention was carried out after the morning Subuh prayer, at noon, at 1 pm, and at night, before going to bed, and the specified time had been agreed upon in advance with the patient. Data was not collected in the same room because the researcher provided a privacy partition to avoid disturbing other patients. Before the intervention was given, both groups were given an anxiety questionnaire, and vital signs (blood pressure, pulse, respiration rate)

were measured as a pretest. After the intervention was carried out, the same thing was done to measure the changes that occurred in the patient. Post-intervention measurements were taken 10 minutes after the intervention was given to primigravida mothers who would undergo a C-section operation, and the control group was evaluated after 10 minutes of deep breathing exercise. Outcome measurements consisting of vital signs and post-test anxiety levels were taken at the last session on the third day after the intervention was given to the patients. Researchers also noted the patient's response, whether the patient experienced contractions or not, and other conditions that negatively impacted the mother and fetus.

Data Analysis

This study uses an ordinal data scale for anxiety levels and a ratio data scale for vital signs. Researchers analysed the research data using SPSS version 21 software. The author used the Paired t-test to measure the pre- and post-tests for each group and to test the difference between the pre-test and post-test of the two groups we analyzed using an Independent t-test. The researcher's level of significance uses $\alpha \leq 0.05$.

Ethical Clearance

This research has received ethical approval from the research ethics commission of the Airlangga University Faculty of Nursing with certificate number 2606-KEPK. Researchers also adhere to ethical principles in health research. Researchers respect patient rights by not violating the principle of autonomy; researchers provide justice to both the intervention and control groups by giving the same intervention to the control group after completing the study. Researchers also pay attention to aspects of generosity and do not harm patients, so no adverse events arise after the survey is completed.

Table 4. The Effect of Murottal Al-Qur'an Therapy on Anxiety and Vital Signs of Primigravida Mother Before C-Section Procedure (n=82)

Variable Test (Pre and Post Test)	Intervention Group			Control Group		
	(Mean \pm SD)	Effect size	p	(Mean \pm SD)	Effect size	p
Anxiety	13.64 \pm 11.6	1.17	0.001	0.14 \pm 4.56	0.03	0.840
Systolic pressure	17.19 \pm 13.2	1.36	0.005	1.57 \pm 14.87	0.11	0.497
Diastolic pressure	5.98 \pm 8.92	0.67	0.001	2.24 \pm 10.85	0.21	0.189
Pulse	12.7 \pm 11.29	1.12	0.005	8.45 \pm 15.26	0.55	0.145
Respiration Rate	1.09 \pm 1.008	1.08	0.001	0.71 \pm 1.15	0.62	0.239

Table 5. Independent T-Test Murottal Al-Qur'an Therapy to Anxiety and Vital Signs of Primigravida Mother before C-Section procedure (n=82)

Variable	Before Intervention (Pretest)			After Intervention (Posttest)			p-value
	Mean	Min	Max	Mean	Min	Max	
Control Group							
Anxiety	67.17	57	77	53.52	31	74	0.313
Systolic pressure	138.17	92	196	120.98	85	177	0.422
Diastolic pressure	76.02	57	105	70.05	54	92	0.107
Pulse	92.67	54	142	79.95	48	130	0.832
Respiration Rate	21.29	20	22	20.19	20	21	0.118
Post-test							
Intervention Group	66.83	57	77	66.69	57	77	0.001
Systolic pressure	113.33	74	169	111.76	70	150	0.005
Diastolic pressure	68.88	58	106	66.64	41	90	<0.001
Pulse	104.50	74	155	96.05	75	149	0.005
Respiration Rate	21.62	20	24	20.90	20	24	<0.001

Results

Data on the demographic characteristics of primigravida mothers before undergoing C-Section surgery shows that the intervention and control groups were, on average, at the age of 22 or 23 years, as much as 28.57% and 30.95%. The highest level of education in primigravida mothers is high C-Section School, respectively in the intervention and control groups, namely as much as (40.48%) and (38.1%). Most husbands' education is high S, with as (4.62%) and (4.86%). The occupation of primigravida mothers is the most significant percentage of homemakers (35.71%) and (30.95%) respectively in the intervention and control groups. The most common occupation of husbands in the intervention and control groups was private employees, with a percentage of 40.48% and 45.24%, respectively. The highest level of family income in the control and intervention groups was \leq Regional minimum wage (IDR 3.871.000) (Table 1).

The anxiety level of primigravida mothers in the control group before undergoing cesarean Section procedures showed 9.5% mild anxiety, 73.8% moderate anxiety, and 16.7% severe anxiety. After undergoing C-section, the anxiety level of primigravida mothers in the control group became 19.0% mild anxiety, 54.8% moderate anxiety, and 26.2% severe anxiety. While in the intervention group, primigravida mothers before undergoing cesarean Section had anxiety levels of 9.5% mild anxiety, 31% moderate anxiety, and 16.7% severe anxiety. While in the intervention group of primigravida mothers, before performing cesarean Section, their anxiety level was 9.5% mild anxiety, 31% moderate anxiety, and 16.7% severe anxiety. After performing cesarean Section on primigravida mothers in the intervention group, the anxiety level was 26.2% mild anxiety, 40.5% moderate anxiety, and 33.5% severe anxiety (Table 2).

The vital signs of the intervention group showed that there were differences before and after the treatment was given. The average systolic blood pressure decreased to 120.98 mmHg, and the diastolic blood pressure decreased to 70.08 mmHg. The mother's pulse was more stable, averaging 79.95 beats per minute. The control group showed a decrease, but not too much (Table 3). Testing

the effect of Murottal Al-Qur'an Therapy showed a significant effect on anxiety ($p=0.001$), systolic pressure ($p=0.005$), diastolic pressure ($p=0.001$), pulse ($p=0.005$), and respiration rate ($p=0.001$), respectively. Still, there was no significant effect in the control group, $P>0.05$ (Table 4). Test of the effect of Murottal Al-Qur'an Therapy on Anxiety and Vital Signs of Primigravida mothers before the C-Section procedure showed a significant difference after the intervention was given, with a p-value of <0.001 (Table 5).

Discussions

Murottal Al-Qur'an Therapy can reduce anxiety and vital signs in primigravida mothers before and after cesarean surgical procedures, showing a significant effect, with one showing systolic blood pressure 120.98 mmHg to 70.08 mmHg. Anxiety before Cesarean Section is caused by the level of maternal understanding of the actions and procedures of Cesarean Section and the side effects after Cesarean Section, so that primigravida mothers feel anxious and afraid of the Cesarean Section procedure itself. Due to this lack of knowledge, primigravida mothers feel anxious and fearful or uncomfortable with the addition of several things that support this level of anxiety, including anesthesia, finance, lack of family responsibility, pain or self-concept, and even the risk of death (Agrevita, 2021). Anxiety can cause some physical changes. This is evidenced by research based on psychoneuroimmunology, anxiety is a stressor that affects the limbic system as the center for regulating emotions, which occurs through a series of events mediated by the HPA-axis (Hypothalamus, Pituitary, and Adrenal) (Handayani *et al.*, 2014). This causes some physical changes and body responses, such as complaining of frequent urination or difficulty urinating, heartburn, diarrhea, bloating, pain in the stomach, cold sweat, palpitations, hypotension or hypertension, headaches, and shortness of breath (Handayani *et al.*, 2014). For pre-operative patients, especially for C-section procedures, relaxation exercises can be given before surgery to control anxiety. Relaxation Therapy comes in various types, one of which is listening to music, namely Murottal Al-Qur'an Therapy (Subhi, Budiono, and Wijayanti, 2023). Following the principal

protocol of hearing the sound of music with Murottal Al-Qur'an Therapy (Rozali *et al.*, 2022), a harmonious air vibration. It contains religious and spiritual nuances so that the ear nerves, namely the cochlear nerve, catch it and then pass it on to the brain nerves. In the brain, the music of Murottal Al-Qur'an Therapy will be influenced by the pituitary to release endorphins. So it can reduce fear (Nuhan, Astuti and Murhan, 2018; Wigatiningsih, Hermawan and Elisa, 2020). Stimulation of Murottal Al-Qur'an Therapy also activates specific pathways in several brains, such as the limbic system, which is related to spiritual and emotional behavior. The limbic system is activated, and the individual becomes relaxed (Maulidia and Muladiatin, 2018). Thus, the anxiety that arises results from stressors that affect the individual's psychology and thoughts, so the individual's perception of the operation becomes negative. The individual's negative perception is due to fear of the surgical procedure that will result in effects after surgery (Ismayanti *et al.*, 2021; Khosravi *et al.*, 2022). This can be prevented and controlled with education and relaxation Therapy, one of which is using Murottal Al-Qur'an Therapy, which will impact relaxation, adaptation, and the effects of negative perceptions resulting from anxiety in the individual (Nazir, 2023).

The effect of Murottal Al-Qur'an Therapy on vital signs is also based on the concept of psychoneuroimmunology, where this condition will affect a person's psychology and immunology (Ismayanti *et al.*, 2021; Nurhasanah, Yushida and Yuniwati, 2022). It also impacts the body's vital signs, such as d, resulting in increased blood pressure and pulse. Through Murottal Al-Qur'an Therapy, the relaxed condition of the body can be increased, so critical signs such as blood pressure can also be decreased (Kamila and Mutianingsih, 2021). Based on the systolic blood pressure measurement results, the intervention group showed a more significant decrease to the normal range than the control group, from 138.17 mmHg to 120.08 mmHg. Diastolic blood pressure showed a reduction in both groups with almost the same results, namely around 76.02 mmHg decreasing to 70.05 mmHg, and this category was within normal limits. The Murottal Al-Qur'an Therapy intervention can increase the focus of patients who were previously worried and overly anxious about their condition while experiencing pain (De Paolis *et al.*, 2019). When someone feels anxious, the body's system will work by increasing the work of the sympathetic nerves as a response to stress. The sympathetic nervous system works through the activation of the adrenal medulla to increase the release of epinephrine, norepinephrine, cortisol, and nitric oxide (Emilia *et al.*, 2022; Safitri, Juwita and Apriyandi, 2022). This situation will cause changes in the body's response, such as increased heart rate, breathing, blood pressure, blood flow to various organs, and body metabolism (Subhi, Budiono and Wijayanti, 2023).

The Murottal Al-Qur'an Therapy carried out will stimulate the brain area, namely the prefrontal cortex, which is the center of emotional regulation and judgment, to instruct emotional reactions, which then the body will respond by feeling accepting and non-judgmental (Trisnawati, Suryati and Susilawati, 2022). Meanwhile, apart from regulating emotions, the hippocampus and amygdala are also areas of openness, suppression, and strengthening. These will provide instructions to open up more so that individuals can release themselves in awareness, restrain themselves from internal reactivity, and increase self-acceptance (Jaya and Kadhim, 2022; Ulfah, Fauziah and Sari, 2024). So that they can reduce vital symptoms in the patient, in line with research results which show that the adaptive response of Murottal Al-Qur'an Therapy has a positive effect on reducing systolic and diastolic blood pressure, pulse rate, and respiration rate.

The limitation of this study is that the physical and psychological conditions or anxiety of patients are different, and the stressors received by each individual are also different, so the response to the intervention given is different for each patient. Therefore, researchers need to dig deeper. Psychological problems in primigravida pregnant women who will undergo C-Section surgery, and the researcher suggests that future researchers research other interventions in diverse patient conditions and stress factors associated with pre-operative anxiety in primigravida mothers. The strength of this study is that the procedure used in the intervention showed significant results, so it can be used as a non-pharmacological intervention for supportive Therapy of anxiety in patients who will undergo C-section.

Conclusion

The level of anxiety in primigravida pregnant women who will undergo C-Section surgery shows a decrease to moderate and mild after being given the Murottal Al-Qur'an Therapy. Reading the Qur'an as a spiritual Therapy, can provide peace of mind, reduce fear and get closer to God and strengthen individual spiritual beliefs and in pregnant women Murottal Al-Qur'an Therapy influences anxiety levels and a decrease in systolic and diastolic blood pressure, pulse frequency and respiratory frequency which, if it rises, can risk pregnancy emergency. The use of Murottal Al-Qur'an Therapy can provide sound effects for pre- and post-C-Section surgery patients. Hence, it must be applied to patients to become an effective non-pharmacological Therapy for mothers.

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Declaration of Interest

The authors state that there is no conflict of interest in this paper.

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