

The Effect of Zikr Meditation on Post-Operative Pain Among Women Post Cesarean Section

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ABSTRACT

Pain is the most common adverse effects in the early postoperative period. Routine pharmacologic Methods may impair the recovery of patients for their sedative and emetic effects. Therefore, patients' relaxation is necessary for a successful post-operative pain managements and it is among the interventions addressed to improve physiologic response. The aim of this study was to examine the effects of zikr meditation on post-operative pain among post cesarean section women. This is a quasy experimental research with control group pre-test post-test. A total of 30 muslim post cesarean section women were included in the study. Medical information form, Numeric Rating Scale, and Interument Guideline are used to collect the data. The results show that there is a significant difference of pain between experiment and control group ($p = .012$), there is a significant difference of pain before and after intervention in the experiment group ($p = .00$). Nurses/ midwives can combine the practice of Zikr meditation with pharmacological intervention to help women who have undergone cesarean section to reduce their pain.

Keywords : Pain, Post Cesarean Section, Zikr Meditation.

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BACKGROUND

There were 18.5 million cesarean sections procedures are carried out annually worldwide and around 10% of the countries in the world have CS rates of 10-15% (WHO, 2010 as cited in Novelia, Sia, & Songwathana, 2017). The World Health Organization (WHO) estimates caesarean labor to be approximately 5-15% for every country (Suryati 2013 as cited in Novelia *et al.*, 2017). However, the CS procedure was increased by 30% of all hospital births in some countries such as Australia and New Zealand (Brown *et al.*, 2013). Pain and anxiety are the most common distressing effects in the early postoperative period. Particularly, severe pain after upper abdominal surgeries can impact to respiratory functions and mobilization of the patient owing to the proximity of the incision site to the diaphragm (Richards & Hubbert, 2007).

Pain management is necessary for surgical patients. Postoperative pain management strives to prevent the side effects of pain, improve recovery, and reduce treatment costs by minimizing or eliminating the patient's distress. The previous research shows that the use of pharmacological therapy together with non-pharmacological therapy helps patients adapt to their pain so that it can improve the quality of life, reduce the use of analgesics, patients can return to work, and provide different views about pain and its impact on patients' lives (Henrikse *et al.*, 2014). One of non-pharmacology intervention is meditation.

Meditation was originally created to overcome suffering, find a deeper meaning in life, and connect to a higher reality (Dienstmann, 2018). The common meditation practice by Hindu/ Budha People in Indonesia is Yoga relaxation. Yoga has a good effect to reduce anxiety among pregnant women (Novelia, Sitanggang, & Yulianti (2018). Muslim people in Indonesia also have meditation which is zikr meditation. It has psychological and spiritual benefits, psychologically, gives a sense of comfort and spiritually provides a sense of being closer to God/ Allah (Aliasari, 2019). Zikr means to remember Allah, remember this is not just mentioning the name of Allah in verbal or mind and heart, but the zikr in question is to remember the substance, its nature and actions then submit life and death to Him.

Holistic nursing always correlates with religion or belief system. In Indonesia, Islam as a holistic view provides spiritual tenets, which can be applied in nursing care. Spirituality intervention comprises of the Islamic tenets based on the holy Qur'an (Syed, 2003), prophet Muhammad's life ways (Loukas, Saad, Tubbs, & Shoja, 2010), and modified conventional intervention. Spirituality intervention is carried in many fields of nursing especially surgical. Zikr meditation is usually followed as an Islamic prayer. Zikr therapy is performed twice a day wherever it is convenient to perform in the morning or the evening (Syed, 2003). Zikr impacts to peaceful body mind spirit to promote harmonization, which improve psychological, social, spiritual, and physical health status (Syed, 2003). Original Islamic relaxation technique usually utilizes Zikr therapy. Zikr therapy is the remembrance of God/ Allah, and requires one to sit or lie comfortably, with eyes closed, and practice remembrance of God/ Allah through recitation of: "Subhanallah, alhamdulillah, allahu akbar" "Glorious is Allah, praise to Allah, Allah is the greatest" for 20 to 30 minutes (Sitepu, 2009). Previous studies had showed that zikr meditation was effective to reduce post-operative pain, but they were conducted in post abdominal surgery (Mardiyono *et al.*, 2007; Sitepu, 2009; Soliman, Hanan, & Salwa Mohamed, 2013). Limited study conducted in post cesarean section patients. Thus, this study aims to determine the effect of Zikr meditation on post-operative pain among cesarean section patients.

This study aims to determine the effect of Zikr meditation on post-operative pain among women post cesarean section.

METHODS

This is a quasy experimental research with control group pre-test post-test. Population is all the women who were undergoing cesarean section and believe to Islam. The research conducted in Post Natal Room of Bekasi Regional Hospital. A total of 30 women were included in this study. They are divided into 15 women in experimental group and 15 women in control group. Inclusion criteria are: 1) women who experienced CS pain in the first 24 hours; 2) Muslim 3) Getting same analgesics; 4) fully conscious, well oriented, and able to communicate verbally. There is no conflict of interest in conducted this study. The instruments used for data collection are:

1. Background data and Medical Information Form: this included sex, age, educational status, occupation, religion, marital status, medical illnesses and history of previous surgery. The medical information form included the information of diagnosis, type of operation, type of anesthesia, site of surgical pain, and pain control analgesia used.
2. Pain Intensity Collection Form: The pain intensity was access by the Numeric Rating Scale (NRS) which ranged from 0 to 10. Where "0" indicates no pain and "10" indicates worse pain.
3. Experimental Instrument: The Zikr meditation practice guidelines: guidelines were developed by the researcher based on the Holy AL- Quran guideline for muslim. It consisted of the meaning, the benefits, and guidelines for practicing Zikr meditation for the women post cesarean section. The practice of Zikr meditation was started by undertaking deep breath for 5 minutes for relaxation, then remembrance of Allah for 25 minutes in according with the practice of Zikr meditation. The whole practice session lasted 30 minutes.

Intervention procedures in the experiment group including:

1. Pain was measured before intervention and recorded
2. Set a comfortable position for the client;
3. Read the basmalah "Bismillahirrahmanirrahim" (In the name of Allah, the most loving, the most merciful);
4. Close your eyes then inhale-hold-exhale 3 times to relax
5. Reading the forgiveness of "Astaghfirullahal'adziim" (I ask forgiveness from the almighty God) 3 times;
6. Reading "Sallamun qoulam mir rabbir Rahim" (to them it is said) "greetings," as a blessing from a merciful God 19 times;
7. Read Yes Hafidz (please take care) Yes Nasiru (ask for help) Allahusyafi (great healer) Yes Allah (allah substance) 33 times;
8. Inhale - hold - exhale once;
9. Read the Hamdallah "Allhamdullilahirrabil'alamin" (praise be to the Lord of the worlds)
10. Zikr performed 1 session.
11. Respondents slowly open their eyes and are allowed to recite zikr if it still feels painful.
12. Conduct a post-test for the intervention and control groups by reviewing the patient's pain or by measuring a second pain scale using an NRS pain measuring instrument.

The subjects in the control group received routine care similar to the experimental group except that they were not provided with the procedure for Zikr Meditation practice

or the handbook and guidelines. Routine nursing cares included pain medication around the clock and wound dressing.

RESULTS

1. Normality Test

1.1 Experiment Group Normality test

Table 1. Normality Test of *Pre-test* dan *Post-test* Data of Experiment Group

No	Group	<i>p</i>
1	Pretest	0,72
2	Posttest	1,02

The table above shows that Kolmogorov-Smirnov normality test obtained the *p*-value of 0.72 for pretest and 1.02 for posttest. It can be concluded that the data are normal distributed since *p* value > .05.

1.2 Control Group Normality test

Table 2. Normality Test of *Pre-test* dan *Post-test* Data of Control Group

No	Group	<i>p</i>
1	Pretest	.80
2	Posttest	.11

The table above shows that Kolmogorov-Smirnov normality test obtained the *p*-value of .80 for pretest and .11 for posttest. It can be concluded that the data are normal distributed since *p* value > .05.

2. Pain Level before and after Zikr Meditation.

Table 3. Pain Level before and after Intervention in Both Group

Group	Eksperimen				Kontrol			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
Pain Level	f	%	f	%	f	%	F	%
No pain	-	-	2	13.3	-	-	-	-
Low	-	-	8	53.3	-	-	-	-
Moderate	7	46.7	4	26.7	7	46.7	7	46.7
Severe	8	53.3	1	6.7	8	53.3	8	53.3

Based on the table 3 above, it can be concluded that 8 women (53.3%) had severe pain level and 7 women (46.7%) had moderate pain level before intervention in the experiment group. The pain level decrease after intervention as following: 8 women (53.3%) had low level of pain; 4 women (26.7%) had moderate level of pain; 2 women (13.3%) had no pain, and only a woman (6.7%) had severe level of pain. In addition the results in the control group either in pre or post intervention as following; 7 women (46.7%) had moderate level of pain and 8 women (53.3%) had severe level of pain. It seems that there is no pain level changes in the control group.

3. The Differences of Pain Score within Experiment Group**Table 4. Mean Difference of Pain Score within Experiment Group**

Group	Mean	SD	<i>t</i>	<i>p</i>
Pretest	6,73	2,19	7,13	0.000
Posttest	2,87	2,07		

Based on the table above, it can be concluded that the mean of pain score before intervention was 6.73 ($SD = 2.19$) and it was decreased to be 2.87 ($SD = 2.07$) after intervention. The Paired Sample *t* test shows that *p* value = .000 which means that there is a significant difference of pain before and after intervention.

4. The Differences of Post Intervention Pain Score between Experiment and Control Group**Table 4. Mean Difference of Pain Score between Experiment and Control Group**

Group	Mean	SD	<i>t</i>	<i>p</i>
Experiment	2,87	2,07	-2,67	0,012
Control	4,87	2,03		

Based on the table above, it can be concluded that the mean of pain score after intervention in the experiment group was 2.87 ($SD = 2.07$), while the mean of pain score after intervention in the control group was 4.87 ($SD = 2.03$). The Independent *t* test shows that *p* value = .012 which means that there is a significant difference of pain score between experiment and control group after intervention.

DISCUSSION

The results of this study show that the subjects following the Zikr meditation practice had lower mean different in pain scores than those who did not practice Zikr meditation. Furthermore, the results also showed that there was a significant difference of pain score before and after zikr meditation in the experiment group. Zikr meditation could also play a role in the central nervous system. The activation of the higher brain centers can cause the gates of the spinal cord to close. This modulates and prevents the pain input to the higher brain centers to be interpreted as pain response (Melzack & Wall, 1999). Thus, it can be concluded that zikr meditation as a non-pharmacological intervention is able to reduce the level of pain experienced by post CS women.

The results of the study are related to research (Wahyudi, 2019) which determine the effect of dzikir meditation on post Cesarean Patients. He found that zikr tends to improve the perception of stress, so hypothalamic pituitary adrenal axis is balanced in producing stress hormones, endorphins and various neurotransmitters to reduce pain. Pain is the most common distressing adverse effects in the early postoperative period. Pain management is very important for surgical patients to decrease patient discomfort and also anxiety. In addition, another study found that the decrease of pain level in the experimental group was given analgesic therapy and zikr meditation greater than the control group who were given analgesic therapy (Misnawati, Wiwik & Chandra Bagus Ropyanto, 2015). They recommend that zikr meditation could be a reference/ consideration for nurse/

midwife to apply dzikir as a complementary therapy to diminish the pain level to the post-surgical operation patient's of ORIF. Another study which conducted in post cesarean section patients also found that zikr therapy could reducing post-sectio caesarean pain (Viviyani, Wulandari, & Rahmadani, 2019). According to Haruyama (2013) zikr meditation can reduce pain because it stimulates the release of the beta endorphin hormone from the body as a natural morphine.

A study by Mardiyono et al. (2007) found that practicing Zikr meditation would help patients to control their stress which, in turn, decreased the physiological responses before surgery. Therefore, the pre-operative teaching of the process of Zikr meditation should be taught to all patients who are undergoing cesarean section in order to help them to reduce the sensation of pain. Furthermore, a qualitative study conducted in Thailand which explored belief, perception, and health effects regarding Standing Zikr found that Standing Zikr was practiced since childhood with the support of family members and Muslim coordinators (Tangsangwornthamma, Ahmad, & Rattanamongkolgul, 2018). They had perceived benefits on physical and mental health, with reports of improved quality of life. There were some understanding in applying Standing Zikr for religion-related exercise (e.g., comparable sensitivity between exercise and Zikr). They concluded that Standing Zikr had positive outcomes on physical and mental health, while also improving the quality of life of Muslim participants.

According to this research, majority of respondents do not know how to relieve pain. Therefore, health workers especially midwife and nurses need to encourage post-partum women especially those who are Muslim to do zikr meditation. By doing zikr meditation would result in balancing body heart and mid and reduce pain.

The results of this study have important implications for the nursing/ midwife profession and other health care professionals. Nurses/ midwives can combine the practice of Zikr meditation with pharmacological intervention to help women who have undergone cesarean section to reduce their pain. Zikr meditation should be included in the nursing caring in general hospitals or Islamic hospitals. As majority of Indonesian are muslim, this intervention could be applicable. In addition, Zikr meditation practice should be included in the nursing curriculum/ midwifery curriculum in order to teach nursing/ midwifery students, how to use it to reduce pain after surgery.

CONCLUSION

This study concluded that zikr meditation as the non-pharmacological intervention is able to reduce the level of pain experienced by post Cesarean Section patients. It is expected that zikr meditation could be applied in nursing/ midwifery care in the hospital. Furthermore, by adding zikr meditation into nursing/ midwifery curriculum would enhance knowledge and skill of nursing/ midwifery students on how to reduce post-operative pain. This study has some weakness as following: there is no analysis for psychological response, and there is no matching technique for subject selection. Future study is needed to add analysis of psychological response including blood pressure, respiratory rate, and heart rate.

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