JKM (Jurnal Kebidanan Malahayati),Vol 10, No. 5. Mei 2024,
ISSN (Print) 2476-8944 ISSN (Online) 2579-762X, Hal 533-542

FFECTIVENESS OF DEEP BREATH RELAXATION AND HAND MASSAGE TOWARDS A DECREASE IN PAIN SCALE POST-CAESAREAN PATIENTS

Nova Mega Rukmana[1], Mariyo[2]

[1]Health Faculty, Mitra Indonesia,University, Bandar Lampung
e-mail: novamegarukmana@umitra.ac.id

ABSTRAK : EFEKTIVITAS RELAKSASI PERNAPASAN DALAM DAN PIJAT TANGAN TERHADAP PENURUNAN SKALA NYERI PASIEN PASCAESAREAN

Latar Belakang: Angka persalinan SC di provinsi Lampung menurut Riskesdas tahun 2018 adalah 4,5%, angka kejadian SC di kota Bandar Lampung adalah 3.401 dari 170.000 persalinan (20%) dari seluruh persalinan.

Pada pembedahan SC, rasa nyeri biasanya dirasakan pasca melahirkan karena hilangnya pengaruh pembiusan. Pengaruh obat bius biasanya akan menghilang sekitar 2 jam setelah proses persalinan selesai, rasa nyeri pada bagian perut mulai terasa karena luka yang terdapat pada bagian perut. Nyeri pasca bedah akan menimbulkan reaksi fisik dan psikologi pada ibu postpartum seperti mobilisasi terganggu, malas beraktifitas, sulit tidur, tidak nafsu makan, tidak mau merawat bayi sehingga perlu adanya cara untuk mengontrol nyeri agar dapat beradaptasi dengan nyeri post operasi SC dan mempercepat masa nifas.

Tujuan : Mengetahui efektivitas relaksasi nafas dalam dan pijat tangan terhadap penurunan skala nyeri pasien post operasi *sectio caesarea* di Ruang Cempaka Rumah Sakit X

.Metode: Jenis penelitian ini adalah penelitian kuasi eksperimen, dengan *two group pre test post test design*. Penelitian ini dilakukan di Ruang Cempaka Rumah Sakit X pada 1-30 Juli 2021. Populasi dalam penelitian ini adalah seluruh ibu bersalin dengan rata-rata jumlah per bulan adalah 70 orang dengan jumlah sampel pada masing-masing kelompok adalah 30 orang. Variabel bebas (*independent*) yaitu relaksasi nafas dalam dan pijat tangan, sedangkan variabel terikat (*dependent*) yaitu skala nyeri pasca operasi *sectio caesarea*. Kuesioner pengukuran nyeri menggunakan *Numeric Rating Scale.* Analisis data menggunakan uji Wilcoxon.

Hasil: Pada kelompok relaksasi nafas dalam, nilai rata-rata skala nyeri sebelum dan sesudah dilakukan intervensi adalah 6,53 dan 5,37. Sedangkan Pada kelompok pijat tangan, nilai rata-rata skala nyeri sebelum dan sesudah dilakukan intervensi adalah 6,27 dan 4,07. Nilai p-value sebesar 0,000 yang berarti bahwa ada perbedaan nilai rata-rata skala nyeri sebelum dan sesudah intervensi relaksasi nafas dalam. Intervensi pijat tangan dan relasasi nafas dalam sama-sama efektif dalam menurunkan skala nyeri persalinan sectio sesarea.

Kesimpulan: Ada perbedaan nilai rata-rata skala nyeri sebelum dan sesudah intervensi relaksasi nafas dalam. Intervensi pijat tangan dan relasasi nafas dalam sama-sama efektif dalam menurunkan skala nyeri persalinan sectio sesarea.

Saran: Dapat di lakukan Intervensi pijat tangan dan relasasi nafas dalam dalam menurunkan skala nyeri persalinan sectio sesarea.

Kata Kunci : Nafas dalam,Nyeri, Pijat tangan,Post SC

ABSTRACT

Background: The SC birth rate in Lampung province according to Riskesdas in 2018 was 4.5%, the SC birth rate in Bandar Lampung city was 3,401 out of 170,000 deliveries (20%) of all births.

In SC surgery, pain is usually felt after delivery because the anesthesia disappears. The effect of the anesthetic will usually disappear around 2 hours after the birth process is complete, pain in the stomach will begin to be felt due to the wound in the stomach. Post-surgical pain will cause physical and psychological reactions in postpartum mothers, such as impaired mobility, laziness in activities, difficulty sleeping, no appetite, unwillingness to care for the baby, so there needs to be a way to control pain so that they can adapt to post-SC surgery pain and speed up the postpartum period.

Objective: To determine the effectiveness of deep breathing relaxation and hand massage in reducing the pain scale of patients post caesarean section surgery in the Cempaka Room, Hospital.

Method: This type of research is quasi-experimental research, with a two group pre test post test design. This research was conducted in the Cempaka Room, Hospital The independent variable is deep breathing

relaxation and hand massage, while the dependent variable is the pain scale after caesarean section surgery. The pain measurement questionnaire uses the Numeric Rating Scale. Data analysis used the Wilcoxon test.

Results: In the deep breathing relaxation group, the average pain scale scores before and after the intervention were 6.53 and 5.37. Meanwhile, in the hand massage group, the average pain scale scores before and after the intervention were 6.27 and 4.07. The p-value is 0.000, which means that there is a difference in the average value of the pain scale before and after the deep breathing relaxation intervention. Hand massage and deep breathing interventions are both effective in reducing the pain scale of caesarean section labor.

Conclusion: There is a difference in the average value of the pain scale before and after deep breathing relaxation intervention. Hand massage and deep breathing interventions are both effective in reducing the pain scale of caesarean section labor.

Suggestion: You can intervene with hand massage and deep breathing to reduce the pain scale of caesarean section labor.

Keywords: Deep breathing, Pain, Hand massage, Post SC

INTRODUCTION

Partus is the process of movement out of the fetus, placenta and membrane from the womb through the birth canal. Various changes occur in the female reproductive system in a matter of days and weeks before labor begins. There are five essential factors that affect labor, namely the fetus, the birth canal, mother's strength, mother's position and psychological response (Fitriahadi & Utami, 2019). One method of childbirth carried out besides normal delivery is the Sectio Caesarea (SC) method. This method is a medical procedure that aims to remove the fetus through the incision in the stomach and uterus of the mother. This operation is carried out with an epidural anesthesia or spinal anesthesia which keeps the mother aware during surgery. The majority of mothers can undergo treatment at home after from the hospital 3-5 days after surgery (Antoine & Young, 2020).

The delivery rate in the Victoria Australia in the 1999-2007 period found 566,202 partus and 93,349 were done through caesarean delivery (16.48%) (Agius et al., 2018). Caesarean delivery in Malaysia during 2011-2015 obtained 608,747 birth (Karaalasingam et al., 2020). Caesarean delivery in China was obtained as many as 62,653 labor from January-June 2016 (Ming et al., 2019). Caesarean delivery in Bangladesh obtained 3.5% in 2004 and 23% in 2014 (Khan et al., 2017).

SC figures in Indonesia are also still high, one of which is in the city of Makassar by 26% (Nurdianty et al., 2020). Post SC incision wound can cause pain where the incidence of Post SC pain is 15%. The results of the Basic Health Research (Riskesdas) in 2018, showing the prevalence of fault actions in labor in Indonesia is 17.6%, the highest number in the DKI Jakarta region (31.3%) and the lowest figure in Papua (6.7%). SC action causes an incision wound that can cause pain. The incidence of Post SC pain according to the results of Riskesdas in 2018 is 22.5% where the pain arises after the anesthesia drug has expired and the patient began to carry out early mobilization (Ministry of Health of the Republic of Indonesia, 2018).

SC delivery rate in Lampung Province according to Riskesdas in 2018 is 4.5%, the incidence of SC in Bandar Lampung City is 3,401 out of 170,000 labor (20%) of all labor (Lampung Provincial Health Office, 2020). Based on delivery data at Hospital X obtained the number of SC labor in 2020 as many as 1,121 SC delivery. While the number of SC delivery in January-February 2021 was 141 SC delivery. So that the average SC delivery is 70 SC delivery (RS X, 2021).

Pain due to incision wounds in SC actions can be overcome by pharmacological and non - pharmacological management methods. Pharmacological pain management is done by administering analgesics, which is to reduce or relieve pain. While the non -pharmacological method can be done by relaxation using deep breathing techniques, hand massage, foot massage, movement or changes in position, acupressur, heat therapy, cold therapy, hypnobirthing, music, transcutaneous electrical nerve stimulation (Tens) and aromatherapy administration (Potter & Perry, 2010).

Based on the observations that researchers made at RS X, data were obtained in Post Operation SC patients as many as 10 people, as many as 10 people (100%) they complained of pain in the incision wound after two hours of surgery. They say that pain will increase if they move or change position. The pain they feel varies, some feel pain at mild to severe levels. As many as 1 person (10%) feel pain like lies, as many as 6 people (60%) feel pain like being pricked and 3 people (30%) feel pain like being hit by heavy objects. The pain they feel

 DOI 10.33024, http://ejurnalmalahayati.ac.id/index.php/kebidanan

must be handled by minimizing side effects. One of them is by non -pharmacological therapy, namely by using massage and touch, movement and maternal position, breathing techniques with relaxation, hot or cold applications, music and audio -teak, deep breath relaxation and hand massage.

Relaxation of deep breathing and hand massage proved effective for reducing the pain operating pain scale SC. Previous studies found that deep breathing relaxation techniques were able to reduce the intensity of pain in postoperative patients sectio caesarea (Suhartiningsih, 2019). Previous studies also found that there was a decrease in the Post SC pain scale after giving deep breathing relaxation (Lailiyah, 2019), (Ningsih, 2018). Research on the effect of breathing relaxation techniques has a decrease in pain intensity after breath relaxation is carried out (Amita et al., 2018). Research (Mampuk & Mokoagow, 2017) Getting breathing relaxation techniques in reducing post SC pain. Research on hand massage to reduce post - fault pain found that there was a decrease in pain after giving hand massage (Lailiyah, 2019); (Yunitasari et al., 2018); (Yuniwati, 2019).

Based on the description above the researcher is interested in examining the effectiveness of deep breath relaxation and hand massage to the reduction in pain scale of postoperative patients sectio cesarean in the Cempaka room RS X in 2021.

RESEARCH METHODS

The research design used was a two group pre test post test design. This study looked for the effect of deep breathing relaxation and hand massage on reducing the pain scale of patients after caesarean section surgery. This research was conducted in the Cempaka Room at RS The sampling technique used was accidental sampling. Inclusion Criteria: Mothers who had a cesarean delivery, mothers who were willing to be respondents in the study. Post-SC mother 3-4 hours (assuming the effect of the anesthesia has disappeared, adjusting to the time of antibiotic administration). Mother Pain scale is moderate. Exclusion Criteria: Mothers who have complications during cesarean delivery. Mother does not consume anti-pain medication, whether medical or herbal. The measuring instrument uses a numeric rating scale sheet and a method for measuring pain using a pain scale of 1-10. Activities for relaxation using deep breathing techniques by inhaling deeply from the nose and exhaling from the mouth slowly, after 3-4 hours post-surgery, and carried out for 15 minutes twice, for one day and carried out for two consecutive days. The massage that researchers gave to mothers who had had a cesarean section lasted 3-4 hours, on the hands for 15 hours
minutes by pinching the client's hand (supinated position) using the gap between the ring finger and little finger, massaging the client's palm in circles from the inside out using the thumb 30 times, clamping the client's hand (pronated position) using the gap between the ring finger and little finger, massaging circle the back of the client's hand from the inside out using the thumb 30 times and do this for two consecutive days.

RESEARCH RESULT AND DISCUSSION

Table 1
Characteristics of Post Operation *Sectio caesarea* Respondents

Characteristic	Category	Number	Persentage
Age	<20 year	2	3,3
	20-35 year	49	81,7
	>35 year	9	15,0
Parity	Primipara	39	65,0
	Multipara	21	35,0
Education	SD	6	10,0
	SMP	5	8,3
	SMA	39	65,0
	College	10	16,7
Work	Housewife	39	65,0
	Private	5	8,3
	PNS	16	26,7

The characteristics of the respondents in the table above can be seen that the majority of respondents aged 20-35 years were 49 people (81.7%), the majority of respondents were primiparous, 39 people. (65.0%), the majority of respondents had a high school education, 39 people (65.0%) and the majority of respondents were housewives, 39 people (65.0%).

Table 2
Average Postoperative Pain Scale for Sectio Caesarea Before and After Deep Breath Relaxation

Variabel	*Mean*	*SD*	*Min-Max*	*95;CI*		N
				Lower	*Upper*	
Pain Scale Post Sectio Caesarea Surgery Before Deep Breathing Relaxation	6,53	0,629	5-8	6,30	6,37	30
Pain Scale Post Sectio Caesarea Surgery After Deep Breathing Relaxation	5,37	0,765	4-7	5,08	5,65	30

Based on the table above, it can be explained that before the deep breathing relaxation treatment, the average pain scale after caesarean section surgery was 6.53 with a standard deviation of 0.629, the lowest pain scale was 5 and the highest was 8. In the confidence interval 95% believe that the average pain scale after caesarean section surgery before deep breathing relaxation treatment is between 6.30 up to 6.37. Data after deep breathing relaxation treatment, the average pain scale after caesarean section surgery was 5.37 with a standard deviation of 0.765, the lowest pain scale was 4 and the highest was 7. At a 95% confidence interval it was believed that the average The average pain scale after caesarean section surgery before deep breathing relaxation treatment was between 5.08 to 5.65.

Table 3
Average Postoperative Pain Scale for Sectio Caesarea Before and After Hand Massage

Variabel	*Mean*	*SD*	*Min-Max*	*95;CI*		N
				Lower	*Upper*	
Pain Scale Post Sectio Caesarea Surgery Before Hand Massage	6,27	0,691	5-8	6,30	6,37	30
Postoperative Sectio Caesarea Pain Scale After Hand Massage	4,07	0,980	2-6	5,08	5,65	30

Based on the table above, it can be explained that before hand massage treatment, the average pain scale after caesarean section surgery was 6.27 with a standard deviation of 0.691, the lowest pain scale was 5 and the highest was 8. At a 95% confidence interval it is believed that the average The pain scale after caesarean section surgery before hand massage was between 6.30 and 6.37. Data after hand massage treatment, the average pain scale after caesarean section surgery is 4.07 with a standard deviation of 0.980, the lowest pain scale is 2 and the highest is 6. At the 95% confidence interval it is believed that the average pain scale after caesarean section surgery before treatment hand massage is between 5.08 to 5.65.

Bivariate Analysis

Differences in the Effectiveness of Deep Breathing Relaxation and Hand Massage in Reducing the Pain Scale of Patients Post Sectio Caesarea Surgery .

After carrying out the normality test, the significance value for both groups of data was $p<\alpha 0.05$, thus hypothesis testing was continued using non-parametric statistics. To determine the difference in the pain scale before and after treatment, the Wilcoxon test was used with a significance level of $p<\alpha$ 0.05 as can be seen in the following description:

 DOI 10.33024, http://ejurnalmalahayati.ac.id/index.php/kebidanan

Table 4
Differences in the Effectiveness of Deep Breathing Relaxation and Hand Massage in Reducing the Pain Scale of Patients Post Sectio Caesarea Surgery

Variabel		*Mean± SD*	Selisih *Mean±SD*	*95%CI of the Difference*		*t*	*p-value*
				Lower	*Upper*		
Deep Breathing Relaxation Before		6,53±0,629	1,16±0,461	0,994	1,339	13,857	0,000
	After	5,37±0,765					
Hand MassageBefore		6,27±0,691	2,20±0,610	1,972	2,428	19,746	0,000
	After	4,07±0,980					

Based on the table above, it can be seen that the average pain scale after caesarean section surgery before giving deep breathing relaxation was 6.53±0.629 and after giving deep breathing relaxation was 5.37±0.765 with a difference in the average pain scale.

post caesarean section operation is 1.16±0.461. The results of the Wilcoxon test showed a p-value of 0.000 (p<α0.05), meaning that there was a significant difference in the post-caesarean section pain scale between before and after treatment, or in other words, there was

The effect of providing deep breathing relaxation on reducing the pain scale after caesarean section surgery.

The average pain scale after caesarean section surgery before hand massage was 6.27±0.691 and after hand massage was 4.07±0.980 with the difference in the average pain scale after caesarean section surgery being 2.20±0.610. The results of the Wilcoxon test obtained a p-value of 0.000 (p<α0.05), meaning that there was a significant difference in the pain scale after caesarean section surgery between before and after treatment or in other words, there was an effect of giving hand massage on reducing the pain scale after caesarean section surgery.

Based on the table above, it can be explained that before the deep breathing relaxation treatment, the average pain scale after caesarean section surgery was 6.53 with a standard deviation of 0.629, the lowest pain scale was 5 and the highest was 8. At a 95% confidence interval, it is believed that the average The average pain scale after caesarean section surgery before deep breathing relaxation treatment was between 6.30 and 6.37. Data after deep breathing relaxation treatment, the average pain scale after caesarean section surgery is 5.37 with a standard deviation of 0.765, the lowest pain scale is 4 and the highest is 7. At the 95% confidence interval it is believed that the average pain scale after caesarean section surgery Caesarean area before deep breathing relaxation treatment was between 5.08 to 5.65. Pain is the body's defense mechanism, it occurs when tissue is damaged and this will cause the individual to react by moving the painful stimulus. Often described in terms of destructive processes, tissue like being pricked, burning hot, wrapped around, like emotions, feelings of fear, nausea and dread (Lailiyah & Pertiwi, 2017).

scale before and after the deep breathing relaxation intervention. This is in line with research by Lailiyah and Pertiwi (2017), who found that after carrying out deep breathing relaxation techniques the majority of post-SC postpartum mothers in IRNA room C, Syarifah Ambami Rato Ebu Bangkalan Regional Hospital, the intensity of the pain is light. The results of this research also showed that after the massage technique was carried out, the majority of post-SC postpartum mothers in the IRNA C room at Syarifah Ambami Rato Ebu Bangkalan District Hospital had mild pain intensity. There was no difference in pain intensity between deep breathing relaxation techniques and massage techniques for post-SC postpartum women in the IRNA C room at Syarifah Ambami Rato Ebu Bangkalan Hospital.

According to the theory of Smeltzer & Barre (2014), about breath relaxation in explaining that the rhythm of breathing is very important to achieve relaxation during maternity. Labor pain, especially during the latent phase, can decrease with this breathing technique. The technique used is usually with a slow rhythm (6-12 breath/minute) to moderate (30-60 breath/minute), without hyperventilation. The breathing rhythm must adapt to the intensity of the patient's contraction. A study shows that compared to other techniques, breathing techniques are the most widely used non-pharmacological methods in reducing pain (Smeltzer & Barre, 2014).

Relaxation is a form of activity that can help overcome stress. This relaxation technique involves the movement of limbs easily and may be done everywhere. In relaxation can be added by visualizing. Visualization is a way to release

disturbances in the mind by imagining the disturbance as something, and then we release it. Benefits of deep breathing relaxation techniques include peace of liver, reduced anxiety, worry and anxiety, lower pressure and tension, lower heartbeat, reduce blood pressure, greater resistance to disease, sleeping sleep, mental health. , better memory, increase logical thinking power, increase creativity, beliefs, will, intuition, improve the ability to relate to others (Smeltzer & Barre, 2014).

The principle that underlies the decrease in pain by relaxation techniques lies in the physiology of the autonomic nervous system which is part of the peripheral nervous system that maintains the hometost of the individual internal environment. During the release of chemical mediators such as bradykinin, prostaglandin and substance, it will stimulate sympathetic nerves, causing vasocostriction which ultimately increases muscle tone which causes various effects such as muscle spasm which ultimately suppress blood vessels, reduce blood flow and increase the speed of muscle metabolism which causes impulse delivery Pain from the spinal cord to the brain and is perceived as pain (Smeltzer & Barre, 2014).

The results of this study are in accordance with the theory put forward by Smeltzer & Barre (2014), which states that relaxation of deep breathing can reduce pain, one of which is post sectio caesarea pain. This study also received statements from respondents who said the pain they felt was reduced after relaxing deep breathing. Respondents also said that with deep breath relaxation exercises can benefit them when experiencing pain due to post *sectio caesarea*.

Based on the table above, it can be explained that before the hand massage treatment, the average postoperative caesarea post surgery scale is 6.53 with a standard deviation of 0.629, the lowest pain scale is 5 and the highest is 8. In the 95% confidence interval it is believed that the average Post -Caesarea Postoperative Pain Scale before hand massage treatment is between 6.30 to 6.37. Data After hand massage treatment, the average postoperative caesarea postoperative pain is 5.37 with a standard deviation of 0.765, the lowest pain scale is 4 and the highest is 7. In the 95% confidence interval it is believed that the average postoperative pain operational scale is cesareana Before the treatment of hand massage was between 5.08 to 5.65.

Pain is an unpleasant multidimensional experience due to tissue damage. Some state that pain is an unpleasant condition, very subjective that can be different in everyone, only that person can explain or evaluate the pain they experience. Stimulus that can cause or almost cause tissue damage is pain. Pain stimulus can cause various changes, such as increased heart frequency, increased blood pressure, release of adrenaline (epinephrine) into the bloodstream and increased blood glucose levels. In addition, pain can result in decreased gastric motility and decreased skin supply of the skin that causes sweating (Smeltzer & Bare, 2014).

Management of non-pharmacological in labor pain, in addition to reducing pain, can also increase comfort in patients during labor. The non-pharmacological approach has been widely used to reduce labor pain. Both pharmacological and non-pharmacological therapy has been applied to maternity patients. Non-pharmacological management in reducing pain has advantages, where this therapy can reduce side effects in mothers and infants caused by drugs. In addition, it can also give a pleasant sense to the mother and fetus. In mothers who have cardiorespirator and also mothers who are allergic to drugs, non-pharmacological methods can be an option during labor. Some non-pharmacological therapy methods that can be selected, including hand massage and deep breath relaxation (Smeltzer & Bare, 2014).In the hand massage group, the average pain scale value before the intervention is 6.27 with a standard deviation of 0.691. While the average pain scale value after intervention is 4.07 with a standard deviation of 0.980, and a difference of 2.2. P-value value of 0,000 which means that there is a difference in the average pain scale value before and after hand massage intervention. Hand massage is the most effective step to increase relaxation and be used as palliative therapy. Hand massage means stimulating under the skin tissue by providing a touch and soft pressure to provide a sense of comfort. Previous research on the effect of hand massage on pain after surgery found that hand massage for 5 minutes before surgery can reduce pain. Therefore, this method can be used to increase patient comfort and reduce surgical pain. It also can reduce anxiety (Tiffany et al, 2011).

Research on the effect of hand massage on Post Sectio Caesarea pain, found that the intensity of post sectio caesarea pain can be reduced after hand massage (p-value = 0,000). According to this finding, hand massage can be considered a complementary method to reduce pain from cesarean section effectively and to reduce the number of drugs and side effects (Abbaspoor et al, 2014).

 DOI 10.33024, http://ejurnalmalahayati.ac.id/index.php/kebidanan

The results of this study are in accordance with the theory put forward by Smeltzer & Barre (2014), which states that hand massage can reduce pain, one of which is post sectio caesarea pain. This study also received statement from respondents who said the pain they felt was reduced after doing hand massage. Respondents also said that the presence of hand massage given by nurses can benefit them when experiencing pain due to post *sectio caesarea*.

Differences in the effectiveness of deep breath relaxation with hand massage in reducing the Postoperative Pain Scale *Sectio Caesarea*

Based on the table above, it can be seen that the average postoperative caesarea postoperative pain before giving deep breath relaxation is 6,530.629 and after giving deep breath relaxation is 5.37±0.765 with an average scale difference is 1,167±0,461. Wilcoxon test results obtained P-value 0,000 ($p < \alpha 0.05$) means that there is a significant difference in the post operating pain section sectiona between before and after treatment or in other words there is an effect of giving deep breath relaxation on a decrease in the post operating pain section cesarean.

The average postoperative pain section of Caesarea before hand massage is 6,27±0,691 and after hand massage administration is 4.07±0.980 with an average difference in the postoperative caesara post operational pain is 2,200±0.610. Wilcoxon test results obtained P-value 0,000 ($p < \alpha 0.05$) means that there is a significant difference in the Postoperative Caesarea Post Operation Scale between before and after treatment or in other words there is the effect of giving hand massage on a decrease in the post operating pain scale Sectio Caesarea.

The results showed that a decrease in the postoperative pain surcan cesareana in the hand massage group was more than the group of deep breathing relaxation. In the hand massage group, a decrease in pain scale was 2.2, whereas in the group of deep breath relaxation there was a decrease in pain scale by 1,167. That is, hand massage is more effective in reducing the Postoperative Pain Scale Sectio Caesarea.

The benefits of hand massage include relieving stress, making the body relaxed, launching blood circulation, massage therapy can facilitate blood flow, blood pressure can move blood through blocked areas, mechanical massage effects have the ability to train nerves and body muscles that lead to The brain so that it can make the body healthier and fitter, reduce pain or pain, massage helps maintain relaxation in the optimal stage, accelerate recovery after pain and massage helps the body pump more oxygen and network nutrition and vital organs by increasing circulation and relaxing muscles.

The results of this study are in line with previous research. Research on the Effect of Hand and Foot Massage on Post-Cesarean Pain and Anxiety, getting the intensity of pain and anxiety Post Sectio Caesarea can be reduced after hand and foot massage (P-value = 0,000). This study is also a very effective complementary method applied to reduce anxiety and pain in postoperative patients.

This study indicates that between deep breath relaxation and hand massage can reduce the scale of postoperative caesarea postoperative pain. In the relaxation of breath in the patient still feels pain when doing relaxation techniques because the relaxation uses the abdominal part so that the decrease in the level of pain is less, because there are incision wounds. While the respondent's hand massage gets a direct hand massage from the researcher so that the reduction in pain is more. According to the researcher, the hand massage is more effective than the relaxation of deep breathing because hand massage is the most effective step to increase relaxation and used as palliative therapy.

Hand massage means stimulating under the skin tissue by providing a gentle touch and pressure to provide a sense of comfort. With the effect of relaxation due to hand massage, providing comfort so as to reduce the scale of postoperative caesarea postoperative pain. This study also received statements from respondents who said the pain they felt was reduced after doing hand massage, respondents said they were relaxed, comfortable, and calm after hand massage and really reduced stress. From the beginning the pain felt pain was becoming mild pain. Respondents also said that the presence of hand massage given by nurses can benefit them when experiencing pain due to post sectio caesarea.

CONCLUSIONS

The characteristics of the respondent are known that most of the respondents were 20-35 years old as many as 49 people (81.7%), the respondent parity had mostly 39 children (65.0%), most of the respondents had 39 high school education (65, 0%) and most of the respondents are housewives of 39 people (65.0%).

The average pain scale before being given a deep breath relaxation in postoperative patients sectio caesarea is 6.53 with a standard deviation of 0.629, while the average pain scale after breath

relaxation in post operational caesarean is 5.37 with a standard deviation of 0.765.

The average pain scale before being given a hand massage in postoperative patients sectio caesarea is 6.53 with a standard deviation of 0.629, while the average pain scale after hand massage in post posting sectional post operations is 5.37 with a standard deviation of 0.765.

Hand massage is more effective in reducing the Postoperative Pain Scale Sectio Caesarea than deep breathing relaxation (decreased pain scale in the hand massage by 2.20 while a decrease in pain scale in the relaxation of deep breath is 1.16).

SUGGESTIONS

Research that gets the influence of non -pharmacological therapy on decreased postoperative caesarea postoperative pain, can be used as one of the policies about the application of non -pharmacological therapy to reduce pain, especially deep breath relaxation and hand massage. Services in Hospital X especially in the Cempaka room can apply non -pharmacological therapy such as deep breathing and hand massage to reduce pain in postoperative patients sectio caesarea. For the research site, in order to use non -pharmacological therapy such as deep breathing relaxation and hand massage to reduce the pain of post -cesarean postoperative patients before being given pharmacological therapy.

REFERENCES

Abbaspoor Z, Akbari M, Najar S. (2014). Effect of foot and hand massage in post-cesarean section pain control: a randomized control trial. Pain Manag Nurs. 2014 Mar;15(1):132-6. doi: 10.1016/j.pmn.2012.07.008. Epub 2013 Jan 24. PMID: 23352729.

Adam, Jusri & Umboh J. M. L (2015). Hubungan antara Umur, Parietas dan Pendampingan Suami dengan Intensitas Nyeri Persalinan Kala I Fase Aktif Deselarasi di Ruang Bersalin RSUD Prof. Dr. H. Aloei Saboe Kota Gorontalo. JIKMU, Vol 5 Nomor 2 April 2015.

Agius, P. A., Davey, M. A., & Small, R. (2018). Risk of unplanned caesarean birth in Vietnamese-born women in Victoria, Australia: A cross-sectional study. Women and Birth, 31(6), 496–504. https://doi.org/10.1016/j.wombi.2018.02.001

Amita, D., Fernalia, & Yurlendasari, R. (2018). Pengaruh teknik relaksasi nafas dalam terhadap intensitas nyeri pada pasien post operasi sectio caesarea di rumah sakit bengkulu. Jurnal Kesehatan Holistik, 12(1), 26–28. http://ejurnalmalahayati.ac.id/index.php/holistik/article/download/124/69

Antoine, C., & Young, B. K. (2020). Cesarean section one hundred years 1920-2020: The Good, the Bad and the Ugly. Journal of Perinatal Medicine, 49(1), 5–16. https://doi.org/10.1515/jpm-2020-0305

Bobak, I. M., Lowdermilk, D. L., Jensen, M. D., & Perry, S. E. (2012). Buku Ajar Keperawatan Maternitas. Penerbit Buku Kedokteran EGC.

Dahlan, M. S. (2011). Besar sampel dan cara pengambilan sampel dalam penelitian kedokteran dan kesehatan. Salemba Medika.

Dinas Kesehatan Provinsi Lampung. (2020). Angka Persalinan. Dinas Kesehatan Provinsi Lampung.

Fitriahadi, E., & Utami, I. (2019). Buku Ajar Asuhan Persalinan & Managemen Nyeri Persalinan. Universitas Aisyiyiah Yogyakarta, 284 hlm.

Gedefaw, G., Demis, A., Alemnew, B., Wondmieneh, A., Getie, A., & Waltengus, F. (2020). Prevalence, indications, and outcomes of caesarean section deliveries in Ethiopia: A systematic review and meta-analysis. Patient Safety in Surgery, 14(1), 1–11. https://doi.org/10.1186/s13037-020-00236-8

Hastono, S. P. (2014). Analisis Data Kesehatan. Fakultas Kesehatan Masyarakat Universitas Indonesia.

Karalasingam, S. D., Jeganathan, R., Jegasothy, R., & Reidpath, D. D. (2020). Caesarean section rates from Malaysian tertiary hospitals using Robson's 10-group classification. BMC Pregnancy and Childbirth, 20(1), 1–8. https://doi.org/10.1186/s12884-020-2760-2

Kemenkes RI. (2018). Riset Kesehatan Dasar. Kementerian Kesehatan Republik Indonesia.

Khan, M. N., Islam, M. M., Shariff, A. A., Alam, M. M., & Rahman, M. M. (2017). Socio-demographic predictors and average annual rates of caesarean section in Bangladesh between 2004 and 2014. PLoS ONE, 12(5), 1–15. https://doi.org/10.1371/journal.pone.0177579

Lailiyah, S. R. (2019). Efektifitas Teknik Relaksasi Nafas Dalam dan Pijatan Effleurage terhadap penurunan skala nyeri pada post sectio

caesarea. NURSING UPDATE : Jurnal Ilmiah Ilmu Keperawatan P-ISSN : 2085-5931 e-ISSN : 2623-2871, 1(1), 61–69. https://doi.org/10.36089/nu.v1i1.37

Mampuk, V. S., & Mokoagow, F. (2017). Pengaruh Teknik Relaksasi Nafas Dalam Terhadap Penurunan Intensitas Nyeri Post Operasi Sectio caesarea Di Ruangan Maria RS Pancaran Kasih Gmim Kota Manado. Journal Of Community & Emergency, 5(1), 1–10.

Marwani (2019). GAMBARAN PENGETAHUAN IBU BERSALIN KALA I TERHADAP PEMBERIAN KOMPRES AIR HANGAT DALAM MENGURANGI RASA NYERI DI RB MITRA ANANDA PALEMBANG TAHUN 2018. Jurnal Ilmiah AVICENNA ISSN : 1978 ± 0664 EISSN: 2654 ± 3249 40 Vol. 14, No. 1, April 2019 : 1 - 59.

Ming, Y., Li, M., Dai, F., Huang, R., Zhang, J., Zhang, L., Qin, M., Zhu, L., Yu, H., & Zhang, J. (2019). Dissecting the current caesarean section rate in Shanghai, China. Scientific Reports, 9(1), 1–8. https://doi.org/10.1038/s41598-019-38606-7

Mochtar, R. (2013). Sinopsis Obstetri Ginekologi. Penerbit Buku Kedokteran EGC.

Muttaqin, A. (2012). Buku Ajar Asuhan Keperawatan Klien Dengan Gangguan Sistem Pernapasan. Penerbit Buku Kedokteran EGC.

Ningsih, D. A. (2018). Relaksasi Pernafasan Menurunkan Nyeri Pada Ibu Pasca Seksio Sesarea. Jurnal Media Kesehatan, 6(2), 117–121. https://doi.org/10.33088/jmk.v6i2.201

Nurdianty, Ansariadi, & Masni. (2020). Determinants of the indications of sectio caesarea in Makassar city hospital. Enfermeria Clinica, 30, 349–352. https://doi.org/10.1016/j.enfcli.2019.10.098

Potter, P. A., & Perry, A. G. (2010). Buku Ajar Fundamental Keperawatan. Konsep, Proses dan Praktik. Penerbit Buku Kedokteran EGC.

RSMW. (2021). Laporan Persalinan Tahun 2020. Rumah Sakit Mardi Waluyo.

Rahmawati (2014). Efektivitas Aromaterapi Lavender Dan Aromaterapi Lemon Terhadap Intensitas Nyeri Post Sectio Caesarea di Rumah Sakit Budi Rahayu Kota Magelang. Skripsi. Universitas Ahmad Dahlan.Yogyakarta.

Smeltzer, & Bare. (2014). Keperawatan Medikal Bedah Brunner & Suddarth's. Penerbit Buku Kedokteran EGC.

Siti Rochimatul Lailiyah & Henny Pertiwi (2017). Efektifitas Teknik Relaksasi Nafas Dalam dan Pijatan Effleurage terhadap penurunan skala nyeri pada post sectio caesarea. Jurnal Penelitian Kesehatan. Vol 1 No 1 Januari 2017.

Suhartiningsih, S. (2019). Teknik Relaksasi Nafas Dalam untuk Menurunkan Intensitas Nyeri Post Operasi Sectio caesarea di RSIA Melati Magetan. 2-TRIK: Tunas-Tunas Riset Kesehatan, 9(4), 364–368.

Tiffany Field, Miguel Diego, Jeannette Delgado, Daniel Garcia, C.G. Funk, Hand pain is reduced by massage therapy, Complementary Therapies in Clinical Practice, Volume 17, Issue 4, 2011, Pages 226-229, ISSN 1744-3881,

Waniala, I., Nakiseka, S., Nambi, W., Naminya, I., Osuban Ajeni, M., Iramiot, J., Nekaka, R., & Nteziyaremye, J. (2020). Prevalence, Indications, and Community Perceptions of Caesarean Section Delivery in Ngora District, Eastern Uganda: Mixed Method Study. Obstetrics and Gynecology International, 2020. https://doi.org/10.1155/2020/5036260

Whitburn, L. Y., Jones, L. E., Davey, M. A., & Small, R. (2017). The meaning of labour pain: How the social environment and other contextual factors shape women's experiences. BMC Pregnancy and Childbirth, 17(1), 1–10. https://doi.org/10.1186/s12884-017-1343-3

WHO. (2015). WHO Statement on Caesarean Section Rates.

Widiawati, Ida & Legiati, Titi (2016). MENGENAL NYERI PERSALINAN PADA PRIMIPARA DAN MULTIPARA.JURNAL BIMTAS Volume: 2, Nomor 1 FIKes-Universitas Muhammadiyah Tasikmalaya E-ISSN: 2622-075X 42

Yunitasari, E., Nursanti, I., & Widakdo, G. (2018). Efektivitas Hand Massage, Foot Massage Dan Kombinasi Terhadap Intensitas Nyeri Pasien Post Sectio caesarea. Jurnal Keperawatan Maternitas, 1–11.

Yuniwati, C. (2019). Efektifitas Teknik Relaksasi Pernapasan Dan Teknik Foot and Hand Massage Pada Pasien Pasca Persalinan Sectio caesarea (Sc) Di Rsud Langsa, Aceh. Indonesian Journal for Health Sciences, 3(1), 32. https://doi.org/10.24269/ijhs.v3i1.1611