

Effectiveness of Finger Held Relaxation on the Decrease in Intensity of Pain in Patient of Post-Section Caesarea in RSUD Sorong Regency

Ariani Pongoh^{1*}, Adriana Egam², Rizqi Kamalah³, Anwar Mallongi⁴

^{1,2,3} Poltekkes Kemenkes Sorong, Indonesia

⁴ Environmental Health Department, Faculty of Public Health, Hasanuddin University, Makassar Indonesia

Corresponding Author: Ariani Pongoh
Poltekkes Kemenkes Sorong, Indonesia
Email: Ani.pongoh@yahoo.co.id

ABSTRACT

Post-section caesarea patient often experience pain due to surgical incision. Finger held relaxation is a non-pharmacological technique that can reduce of pain. The purpose of this study was to determine the effectiveness of finger held relaxation on the decrease in intensity of pain in patient of post-section caesarea. This study design uses a pre-experimental approach to the one group pre and posttest design. The population in this research was post-section caesarea mothers who was treated for a month. The research using purposive sampling with a sample size of 30 respondents. There are 2 variables, independent variable with finger held relaxation and dependent variable with decrease in intensity of pain. Data collection uses Numerik Raitting Scale (NRS). Statistical analysis using Wilcoxon with significance level 0,05. The results of the study indicate that prior to finger held relaxation the experienced moderate pain of 26 respondents (86,7%). After giving finger held relaxation most of them experience mil pain of 28 respondents (93,3%). Obtained p value = 0,000 \leq α = 0,05. Of the finger held relaxation effective against decreasing the intensity of pain in patient of post-section caesarea.

Keywords: Caesarean section, pain, finger held relaxation

Correspondence:

Ariani Pongoh
Poltekkes Kemenkes Sorong, Indonesia
Email: Ani.pongoh@yahoo.co.id

INTRODUCTION

Caesarean section is the act of giving birth to a baby through an incision (making in incision) in front of the uterus ⁽¹⁾. Some indications of caesarean section are long normal delivery, complications of hypertension, pre-eclampsia and failure during induction labor. The risk of death by delivery of caesarean section 1 to 2500 who live it, so caesarean section is safe enough to do. According to World Health Organization (WHO) labor rates with caesarean section are around 10 – 15% of all births ⁽²⁾. WHO states that the country with the highest caesarean section incidence is in the country of Brazil 51%? Whereas in Indonesian, based on the Basic Health Research in 2013 stated that births with caesarean section were 9,8% of the total 49.603 births, with the highest cases in DKI Jakarta (19,9%) and the lowest in Sulawesi Tenggara (3,3%). Based on a pre-survey conducted on March 18,2019, the data on caesarean section incidence in RSUD Sorong Regency in 2018 there were 478 cases. And on January 01 – March 31, 2019 there were 92 cases

Caesrean sectioned mothers will feel pain in the abdomen and uterine wall, resulting in limited maternal mobilization, disrupted Activity of Daily Livong (ADL), bonding attachments and Early Breastfeeding Initiation are not met due to increased pain intensity when the mother moves. This causes the mother's response to her baby is reduced, so the intake of nutrients in the form of breast milk cannot be given optimally to her baby ⁽³⁾

Management can be done reduce to reduce the pain pharmacologically and also non-pharmacologically. Non-pharmacological therapy can be done by means of

relaxation, breathing techniques, movement or changes in position, massage, acupressure, hot and cold compress therapy, hypnobirthing, music and TENS (Transcutaneous Electrical Nerve Stimulation). One relaxation technique that can be done is finger held relaxation, where this technique can manage emotions and develop emotional intelligence. Along our fingers there are energy channels or meridians connected to various organs and emotions. The points of reflection on the hand will provide spontaneous stimulation during the grip. The stimulus will flow a kind of shock wave or electricity to the brain. These waves are received by the brain and processed quickly forwarded to nerves in the body organs that are disturbed, so that they can cause blockages in the energy pathway becomes smoothly ^(4,5). In a relaxed state, naturally will trigger the release of the hormone endorphins which are natural analgesics from the body, so that it can reduce pain ^(6,7).

MATERIALS AND METHODS

This study used a pre-experimental research design with a One Group Pre-Post Test Design approach. Subjects in this study were all post section caesarean patients with a sample size of 30 people with purposive sampling technique. In this study, finger grip relaxation was given for 15 minutes and then saw whether there was any effect of the action taken to reduce pain intensity in post-section caesarean (SC) mothers. The instruments used in this study was the NRS observation sheet to assess post section caesarean (SC) pain and a watch to reference the length of time each step-in finger grip relaxation. The statistical test used in this study used the Wilcoxon test.

RESULTS

Table 1. Characteristics of Respondents.

No	Variable	Frequency	Percentage
1	Age		
	High Risk	25	83,3
	Low Risk	5	16,7
2	Education		
	Basic	12	40
	Medium	11	36,7
	High	7	23,3
3	Parity		
	Primiparous	6	20
	Multiparous	18	60
	Grande-Multi	6	20

Note: shows that most of the research subjects are included in the low-risk age as many as 25 people (83.3%), 12 people (40%) primary education level and 18 people (60%) in the multiparous category.

Table 2. Pain in post section cesarean patients before management of finger held relaxation

No	Pain	Frequency	Percentage
1	Mild Pain	4	13,3
2	Moderate Pain	26	86,7
3	Severe Pain	0	0
4	Extreme Pain	0	0

Note: most of the respondents experienced moderate pain as many as 26 people (86.7%) compared to 4 people (13.3%) who experienced mild pain levels.

Table 3. Pain in Post-Sectio Caesarea Patients in RSUD Sorong Regency after the management of finger held relaxation

No	Pain	Frequency	Percentage
1	Mild Pain	28	93,3
2	Moderate Pain	2	6,7
3	Severe Pain	0	0
4	Extreme Pain	0	0
	Total	30	100

Note: there were 28 respondents (93.3%) who experienced a decrease in pain intensity to become mild pain and 2 respondents (6.7%) experienced the same pain, namely moderate pain.

Table 4. Pain in post sectio caesarean patients before and after finger held relaxation management

No	Centering Value	Before	After
1	Mean	4,07	2,70
	P Value = 0,000, -		

Note: Based on the table above the mean value (4.07) before giving finger grip relaxation. While the average value after being given finger grip relaxation became 2.70. The results of statistical tests using the Wilcoxon test obtained a pvalue of $0.000 < \alpha 0.05$, which means that finger grip relaxation is effective in reducing pain intensity in post sectio caesarean mothers.

DISCUSSION

This research conducted by looking at the intensity of pain in the post section cesarean mother before and after being given finger grip relaxation. At the time of finger grasping relaxation to 30 respondents had assessed pain intensity and after being given stimulation from 30

respondents, 28 respondents experienced a decrease in mild pain intensity. There were 2 respondents aged less than 20 years and included in the category of primiparous mothers experiencing the same pain, namely moderate pain. This is by the theory expressed ^(8,9), namely mothers with age <20 years tend to be less

focused when giving stimulation because they are too young to make mothers psychologically unstable and easily feel anxious so that the pain they feel is really strong. This theory is reinforced, namely the development of organs at the age less than the reproductive age is not ready to carry out reproductive tasks and the development of psychological maturity causes the reaction to pain that arises to be more severe so that it is difficult for the mother to control pain. McCance's theory⁽¹⁰⁾ also supports the results of this study, namely that every woman has her own way of responding or managing stress experienced by individuals. than reproductive age are not ready to carry out reproductive tasks and the development of psychological maturity causes a reaction to the pain that arises will be more severe so that the mother is difficult to control pain. McCance theory also supports the results of this study that every woman has her own way of responding or managing stress experienced by individuals⁽¹⁰⁻¹³⁾.

Mothers who have experience will be better able to manage the pain they feel. Mother's knowledge about labor including labor pain and how to manage it will have an impact on the mother's response to pain. A study suggests⁽¹⁴⁾ that mothers who have a good understanding of the labor process feel less pain than mothers whose understanding is poor.

Statistical test results obtained it showed the effectiveness of finger held relaxation on changes in the intensity pain of post-sectio caesarea patients (p -Value $0,000 < \alpha 0,05$). The results of this study are in line with those conducted by researchers (Astuti P, et al;⁽¹⁵⁾ in 2017 that there is an effect after giving finger held relaxation to changes in the intensity pain of post-sectio caesarea patients with P Value $0,001 < \alpha 0,05$. Another similar study conducted by Sofiyah⁽¹⁶⁾ was that there were differences between pre and post treatment of finger held relaxation techniques for changes in the intensity pain of post-sectio caesarea patients with P Value $0,000$.

A person's pain is very much determined by his experience and emotional status. Pain perception is very personal and subjective. Therefore, the same stimulus can be felt differently by 2 different people, even the same stimulus can be felt differently by 1 person because of different emotional states. The results of this study were reinforced by the theory dinger held relaxation techniques proving that it has a great influence in reducing pain. The finger held relaxation treatment will produce impulses being sent through the nociceptive afferent nerve fibers. Nociceptive nerve fibers cause the gate to close so that pain stimulation is inhibited and reduced. It helps the patient to control and restore his emotions so that his body relaxes⁽¹⁷⁻¹⁹⁾.

Researchers assume that when given a finger held relaxation treatment by grasping the mother's fingers and then creating a comfortable atmosphere for the mother can divert the center of the mother from the pain experienced. The points of reflection on the hand will provide spontaneous stimulation during the grip. The stimulus will flow a kind of shock wave or electricity to the brain. These waves are received by the brain and processed quickly forwarded to nerves in the body organs that are disturbed, so that blockages in the energy pathway become smooth. Finger held relaxation also helps the mother to feel comfortable and reduce anxiety so that the pain is reduced In a relaxed state, naturally

will trigger the release of the hormone endorphins which are natural analgesics from the body, so that it can reduce pain⁽²⁰⁻²⁵⁾

CONCLUSION

Based on the results of research and discussion it can be concluded that of finger held relaxation effective against decreasing the intensity of pain in patient of post-sectio caesarea.

ACKNOWLEDGMENT

The authors would thank all of the elements who have helped in the completion of this research.

REFERENCES

1. Anita Lockhart RN.MSN, Dr. Lyndon Saputra., Asuhan Kebidanan - Masa Persalinan Fisiologi Dan Patologis. Binarupa Aksara; 2013,12 (2)
2. World Health Organization. (2015). World health statistics 2015. *World Health Organization*. <https://apps.who.int/iris/handle/10665/170250> ...
3. Gemy Nastity Handayani, Trimaya Cahya Mulat, Eka, Anwar Mallongi. Resistance Test of Some Bacterial Synthetic Calcular Cycinaris Invitro Amoxicillin and Ciprofloxacin Antibiotics in TK II Pelamonia Hospital Makassar, Indonesia. *Sys Rev Pharm* 2020;11(6):1181-1184
4. Pinandita, I, Purwanti, E, & Utoyo, B (2012).Pengaruh Teknik Relaksasi Genggam Jari Terhadap Penurunan Intensitas Nyeri Pada Pasien Post Operasi Laparatomi, Jurusan Keperawatan STIKes Muhammadiyah Gombong.("Jurnal Ilmiah Kesehatan Keperawatan, Volume 8, No. 1, Februari 2012," 2012) (17)
5. Agus Erwin Ashari , Irma Muslimin , Anwar Mallongi, The Strategy of Directly Observed Treatment Shortcourse (DOTS) Towards Compliance with Treatment of Tb Lung Patients in Tb Lung Mamuju District Hospital, Indonesia. *Sys Rev Pharm* 2020;11(1):1185-1187.
6. Widyawati, E, (2015), Pemberian teknik relaksasi genggam jari terhadap penurunan intensitas nyeri pada asuhan keperawatan An, A dengan post operasi appendicitis laparatomi diruang kantil 2 RSUD karanganyar.
7. Astuti P & et al. 2017. Effect of Finger Held Relaxation on Pain Reduction in Post-Sectio Caesarea Patients in in Delima Room in RSUD Kertosono,2017. *The Scientific Journal of Health*, Vol.6, No.2
8. Adam, J & Umboh, J. 2015. Hubungan Antara Umur, Paritas dan pendamping Persalinan dengan Intensitas Nyeri Persalinan Kala I Fase Aktif Deselerasi Di Ruang bersalin RSUD Prof. Dr. H. Aloei Saboe Kota Gorontalo. *Jurnal JIKMU*, Vol. 5 No. 2a April 2015.
9. Afroh F, Mohamad Judha, Sudarti. 2012. *Theory of Pain Measurement and Labor Pain*. Yogyakarta: Nuha Medika
10. Yanti, Panduan Pelayanan Kesehatan (2010). *Buku Ajar Kebidanan Persalinan*. Yogyakarta: Pustaka Rihama.
11. Barbara, Kunz K. 2012. *Healthy Reflexology Through Finger Massage*. Jakarta: PT. Favorite Style of Press
12. Birawida, A. B., M. Selomo, and U. W. Ismita. "Environmental health hazards against bacterial contamination of cutlery on the small island of

- Makassar." *E&ES* 235.1 (2019): 012023.
13. Endah Yani, R.W., Mallongi, A., Andarini, S., Prijatmoko, D., Dewanti, I.R. The effect of zinc saliva on the toddlers' nutritional status. *Journal of International Dental and Medical Research*, 2016, Volume 9, Issue 1, Pages 29-32
 14. Ye et al. (2010). Factors Affecting TheUtilization Of Antenatal Care Services AmongWoman In Kham District,XiengkhouangProvince, Lao Pdr. *Nagoya J. Med.Sci*, 72, 23-33.
 15. Astuti. 2018. *Buku Ajar Asuhan Kebidanan Ibu I Kehamilan*.Yogyakarta: Rohima Press.
 16. Sofiyah,Linatu., Ma'rifah, R.A., &Susanti, H.I. (2016). Pengaruh Teknik Relaksasi Genggam Jari Terhadap Perubahan Skala Nyeri Pada Pasien Post Operasi Sectio Caesarea Di RSUD Prof. DR. Margono Soekardjo Purwokerto. *Jurnal Terpadu Ilmu Keperawatan STIKES Harapan Bangsa Purwokerto*.
 17. Syamsir, Birawida, A. B., and A. Faisal. "Development of Water Quality Index of Island Wells in Makassar City." In *Journal of Physics: Conference Series*, vol. 1155, no. 1, p. 012106. IOP Publishing, 2019.
 18. Kayame, R., Mallongi, A. Relationships between smoking habits and the hypertension occurrence among the adults of communities in paniai regency, Papua Indonesia. *Indian Journal of Public Health Research and Development* 2018; Volume 9, Issue 1, Pages 332-336
 19. Masni, Sirajuddin, S., Syaharuddin, Syam, A. Influence of a red palm oil emulsion on the level of retinol in the plasma of primary school children in the coastal area of Makassar city., *Pakistan Journal of Nutrition* Volume 15, Issue 5, 2016, Pages 465-473
 20. Jafar, N., Indriasari, R., Syam, A., Kurniati, Y. Exploration on adolescent knowledge related metabolic syndrome (METS) *Indian Journal of Public Health Research and Development* Volume 9, Issue 6, June 2018, Pages 263-266
 21. Rosmala Nur, Siti Ika Fitriyah, Anwar Mallongi, Women's Reactions and Health Disorders Caused by Abuse During the Pregnancy-Postpartum Period. *Medico-legal Update*, January-March 2020, Vol.20, No. 1
 22. Syam, A., Palutturi, S., Djafar, N., Budu, Astuti, N., Thaha, A.R. Micronutrients, academic performance and concentration of study: A literature review. *International Journal of Applied Business and Economic Research*, 2016; Volume 14, Issue 5, 2016, Pages 2831-2843
 23. Eka sulistyawaty, Syafar, M., Daud, A., Arsunan Arsin, A., Mallongi, A., Werdyaningsih, E. Change of behavior of ODF through STBM Program in Cempaka Putih Village North Gorontalo Regency, *Enfermeria Clinica*Volume 30, June 2020, Pages 396-398
 24. Muhith A, Winarti E, Perdana SSI, Haryuni S, Rahayu KIN, Mallongi A. Internal Locus of Control as a Driving Factor of Early Detaction Behavior of Servical Cancer by Inspection Visual of Acetic Acid Method. *Open Access Maced J Med Sci*. 2020Apr 20; 8(E):113-116. <https://doi.org/10.3889/oamjms.2020.4341>
 25. Mallongi, A., Parkpian, P., Pataranawat, P., Chinwetkitvanich, S ., Mercury distribution and its potential environmental and health risks in aquatic habitat at artisanal buladu gold mine in Gorontalo Province, Indonesia, *Pakistan Journal of Nutrition* Volume 14, Issue 12, 2015, Pages 1010-1025