

Pressure Effectiveness At The GB-21 Acupressure Point On ASI Production In Post Sectio Caesarea)

Putri Permata Sari^{a,1}, Irna Nursanti, Giri Widakdo

^a Akper Pelni Jakarta
¹ Putriabdipatta92@gmail.com

ARTICLE INFORMATION

Article History

Received November 20, 2020
Revised January 20, 2021
Approved to be published January 27, 2021

Keywords Breastmilk production,
Pressure at Acupressure Point Gb-21,
Sectio Caesarea

ABSTRACT

Breast milk production is influenced by the secretion of the hormones prolactin and oxytocin. Caesarean section delivery is at risk of delaying exclusive breastfeeding because post-caesarean section mothers still focus on pain and are influenced by drugs during surgery so as to overcome the problem, Pressure at Acupressure Points Gb-21 is applied. Quasi experimental research method with one group pre-post test design. The sample of this research was 17 women from Post Sectio Caesarea. Results Pressure at the acupressure point Gb-21 is more effective for increasing milk production in post-sectio caesarean mothers than the indicators of the mother, the result is p value = 0.000 and the baby indicator pressure at the acupressure point GB-21 is also effective for increasing milk production in post-sectio mothers. caesarea, with the resulting p value = 0.000. Pressure intervention at the Gb-21 acupressure point is effective in promoting milk production, relaxing and helping to improve breast blood circulation. Further research needs to be done to add new variables related to nonpharmacological pressure therapy at the acupressure point Gb-21

1. Introduction

The neonatal mortality rate (IMR) was found to be 15 per 1,000 live births, that 1 in 67 children died in the first month of life, and the infant mortality rate (IMR) was 24 deaths per 1,000 live births, meaning that 1 in 42 children died before their first birthday. At this mortality rate 1 in 67 children who die in their first month of life. 63% of infant deaths occur in the first month after birth (SDKI, 2017).

According to UNICEF, the infant mortality rate in Indonesia is 30,000 and the number of deaths among children under five every year in the world is 10 million. This can be minimized through exclusive breastfeeding (Haroon, 2013). The most common causes of infant mortality were diarrhea (31.4%) and pneumonia (23.8%) (Risksdas, 2018). The high rate of infant

mortality can be overcome by meeting adequate nutrition and nutrients through breastfeeding.

After giving birth, a mother will experience a period of transition and physical, psychological and sociocultural changes so that these changes require adaptation so that the mother gets maximum health and succeeds in achieving the role of being a mother (Machampang, 2018).

The new task of a mother after giving birth is breastfeeding. When pregnant, a mother experiences an increase in the hormones estrogen and progesterone which causes changes in the breasts and the growth of the mammary glands. Once the baby is born and the placenta is released, the hormones estrogen and progesterone decrease so that the levels of the hormones prolactin and oxytocin increase so that this



will later help breast milk production (Machampang, 2018).

During the period of growth and development of infants, nutrition is needed, the way to meet nutritional needs is by breastfeeding. Breast milk provides protection from infection and chronic disease and helps in cognitive and motor development. Hormonal factors, food intake, maternal psychological condition, breast care, frequency of breastfeeding and drug consumption can affect breast milk (Arumsari, 2018).

The cause of the baby not being able to not get breast milk properly there are several factors, namely the factor of maternal education which can influence the knowledge of post partum mothers, the pain experienced by the mother while breastfeeding, socio-cultural factors as well as family and environmental support in the breastfeeding process which can affect milk production (Jeongsung, 2012).

Breast milk production is influenced by the secretion of the hormones prolactin and oxytocin. The psychological condition of the mother greatly affects the secretion of hormones. When the mother experiences stress, it will inhibit the work function of the hypothalamus, so that the secretion of the hormones prolactin and oxytocin is inhibited (Arumsari, 2018). Massage can reduce levels of stress hormone (cortisol) so that it has a relaxing effect on tense muscles and improves blood flow (Machampang, 2014). The tactile stimulation you feel when you are given a massage will cause an increase in corticotropin secretion which can reduce levels of the hormone cortisol. To smooth breastfeeding, acupressure points for lactation techniques can be done, which is one way to help maximize the secretion of prolactin and oxytocin in the Acupressure points for lactation technique, especially in the Gb-21 jian jing, where this point is located between the neck and shoulder line which can calm the postpartum mother. Acupressure points for lactation can reduce discomfort (Rahayu, 2015).

From the results of research at the General Hospital of Central Sulawesi Province, it was found that the total number of caesarean section deliveries was always increasing from year to year in the last 3 years. This could involve the risk of delays when giving early initiation of breastfeeding (IMD) or even delaying exclusive breastfeeding because post-caesarean section mothers are still focused on pain and are affected by medications during surgery. From the information, the hospital has also never received socialization and training on Pressure at the Acupressure Point Gb-21 so that to overcome problems in breastfeeding, breast care breast massage techniques are still used (Regional Hospital of Central Sulawesi Province, 2020).

Based on the description above, the researcher is interested in conducting research by formulating in the title: "The Effectiveness of Pressure at the Acupressure Point Gb-21 on Breast Milk Production in Post Sectio Caesarea Women at the Regional Hospital of Central Sulawesi Province in 2020"

2. Method

This research is a quasi experimental study with one group pre-post test design. In this study, to determine the causal relationship by involving a group of subjects who were observed before intervention, then observed again after the intervention (Nursalam, 2016).

The population in this study were Post Sectio Caesarea mothers in the Regional Hospital of Central Sulawesi Province. The sample in this study were 17 women with Post Sectio Caesarea at the Regional Hospital of Central Sulawesi Province. The sampling technique in this study using purposive sampling. Purposive sampling is a data collection technique with certain considerations (Sugiyono, 2012). Researchers applied inclusion and exclusion criteria. The inclusion criteria in this study were Mother Post Sectio Caesarea, Willing to participate in the study, Babies were not given formula milk during data collection, healthy babies and inpatient care while the exclusion criteria in this study were during the intervention period

the client did not obey the process of giving the intervention.

This research was conducted by paying attention to ethics in conducting research including ethical principles and informed consent. In this study, respondents were willing to be asked to sign a statement / inform consent and a research objective education sheet after being given an explanation of the objectives and research process. To maintain the confidentiality of the respondent, the researcher did not include the respondent's identity in the observation sheet, the researcher gave the respondent the opportunity to reveal if there was a feeling of discomfort and the intention not to follow the pressure intervention at the acupressure point Gb-21 so that the respondent had the right not to continue the intervention of this study. Researchers do not discriminate when choosing research respondents and act fairly in intervening. The instrument used in this study was the breast milk production observation sheet which had been tested for validity and reliability by the previous researcher, namely Tri Budiati (2009).

3. Result and Discussion

Result

Univariate Analysis

1. Characteristics of Respondents

The characteristics examined by this researcher included age, education, religion, occupation and ethnicity. The data were taken from the pressure group at the acupressure point Gb-21.

Variable	Frequency (n)	Percentage (%)
Age		
1. ≤ 20 years and > 35 years	0	0
2. 21-35 Years	17	100,0

Education		
1. Low	2	11,8
2. Height	15	88,2
Religion		
1. Islam	13	76,5
2. Non Islam	4	23,5
Profession		
1. Not Working	11	64,7
2. Work	6	35,3
Tnbe		
1. Bugis	2	11,8
2. Sundanese	1	5,9
3. Java	3	17,6
4. Saluan	7	41,2
5. Balantak	1	5,9
6. Others	3	17,6

Source: Primary Data 2020

Table 1. Distribution of Respondents Based on Characteristics of Respondents at Home Provincial Regional Pain Sulawesi Middle (n = 14)

Based on the table above, it is known that the majority of respondents are 21-35 years old, namely 17 people with a percentage of 100%. The majority of respondents' education is higher education, namely 15 people with a percentage of 88.2%. The majority of respondents' religions are Islam as many as 13 people with a percentage of 76.5%. The majority of respondents' jobs are not working, as many as 11 people with a percentage of 64.7%. The majority of respondents' ethnicity is saluan, namely as many as 7 people with a percentage of 41.2%.

Bivariate Analysis

Bivariate analysis was conducted to determine whether there was a difference in the average milk production before and after intervention in the pressure group at the Gb-21 acupressure point at the Regional Hospital of Central Sulawesi Province.

The Difference in Average Milk Production in Post-Caesarean Women in Pressure Group at Acupressure Point Figure 21 from Mother Indicator.

Variable	Group	Breastmilk production			
		Mean	SD	N	P Value
Breastmilk production	Pressure Groups at Acupressure Points GB-21				
	Sebelum	4,12	0,993	17	0,000
	Setelah	5,71	1,105	17	

Table 2. The Difference in Average Breast Milk Production in Post-Caesarean Women at Pressure at Acupressure Point GB-21 of Mother's Indicator (n = 17)

Based on table 2 above, it also shows that in the group of post-caesarean women who were given pressure intervention at the acupressure point Gb-21 there was an increase in milk production from the indicators of the mother before and after the intervention was given. The difference between before and after the intervention was 1.59. The statistical test results obtained p value = 0.000 (<0.05), this means that there is a difference between breast milk production from maternal indicators before and after pressure intervention is given at the acupressure point Gb-21.

The Difference in Average Milk Production in Post-Caesarean Women in the Pressure Group at the Acupressure Point Figure 21 from the Infant Indicator.

Variable	Group	Breastmilk production			
		Mean	SD	N	Mean
Breastmilk production	Pressure Groups at Acupressure Points GB-21				
	Sebelum	3,06	0,966	17	0,000
	Setelah	4,53	1,179	17	

Table 3 Differences in Average Breast Milk Production in Post-Caesarean Women in the Pressure Group at Acupressure Point GB 21 from Infant Indicators (n = 17)

Based on table 3 above, it also shows that in the group of post-caesarean women who were given pressure intervention at the acupressure point of Gb-21 there was an increase in milk production from the infant indicator before and after the intervention was given. The difference between before and after the intervention was 1.47. The statistical test results obtained p value = 0.000 (<0.05),

this means that there is a difference between the milk production of the infant indicator before and after being given pressure intervention at the acupressure point Gb-21.

Discussion

The results showed that the average value of breast milk production in Post-Caesarean women based on indicators of mothers and babies before being given pressure intervention at the acupressure point of Gb-12 was in low milk production and after being given the intervention, the average value of respondents was in sufficient milk production.

The results of the dependent t test showed that there was a difference in milk production before and after being given pressure at the acupressure point Gb-12 (p value = 0.000).

Acupressure is an emphasis technique using the stimulation method at acupuncture points which can increase oxytocin which can stimulate breast milk production (Sukanta, 2014). Acupressure is an art and science based on the theory of Yin and Yang balance. Yin and Yang are two aspects of mutual influence, they are not absolute and they are mutually contradictory but help in forming a harmonious and dynamic balance. Acupressure points are electrical, which when stimulated can change the levels of the body's chemical neurotransmitters. Acupressure can help reduce taste Observations made on the infant indicator were the frequency of the baby urinating, where the baby had enough milk production, then for 24 hours the baby would BAK 6 times every day, the color of the urine was clear yellow, if the milk was enough after feeding, the baby would sleep / calm down for 2- 3 hours (Soetjningsih, 2012). Another indicator to see that breastmilk production is sufficient for the baby is the characteristic of the baby's bowel movements, in the first 24 hours the baby has a thick green, thick and sticky defecation, which is called meconium. 2009). Pattern The elimination of babies depends on the intake the baby gets, babies who drink breast milk, generally have a pattern of defecating about 2-5 times a day a night, the resulting bowel movements are golden yellow, not too watery and not too concentrated, while babies who get formula

milk generally have only bowel movements. Once a day, defecate is pale white (Rosita, 2008).

4. Conclusion

The majority of respondents were aged 21-35, higher education, Islamic religion, non-work, and saluan ethnicity. Pressure at the acupressure point Gb-21 is more effective for increasing milk production in post-sectio caesarean mothers than the maternal indicator, as evidenced by the results of the p value = 0,000 and the infant indicator pressure at the acupressure point Gb-21 is more effective in increasing milk production in post-mothers. sectio caesarea, evidenced by the results of the p value = 0.000. Suggestions for health care institutions can help facilitate nurses to develop themselves in order to increase knowledge about the benefits of non-pharmacological pressure therapy at the Gb-21 acupressure point in post sectio caesarean mothers. Then it is necessary to do further research by adding new variables related to nonpharmacological pressure therapy at the acupressure point Gb-21 to increase milk production, especially in post sectio caesarean mothers.

Acknowledgements

Acknowledgments are given to Akper Pelni Jakarta for providing support and resources and research so that this research can run smoothly. Thanks are also given to Dr. Irna Nursanti, M.Kep., Sp.Mat., As the mentor who patiently guides researchers who are willing to spend time in the midst of busyness and provide input in the research process.

References

- Arumsari D R, Indrawan I W A, Wahyuni E S. (2018). *The Combination of Acupressure and Affirmation Relaxation as an Alternative Method to Increase Breast Milk Production and Breastfeeding Self-efficacy*. Research Journal of Life Science April-2018 Volume 5 NO. 1 (66-76). journal homepage: www.rjls.ub.ac.id
- Budiati, T. (2010). Efektifitas pemberian paket "Sukses ASI" terhadap produksi ASI Ibu menyusui dengan seksio sesarea di

wilayah Depok Jawa Barat. Thesis: Magister Universitas Indonesia. Fakultas Ilmu Keperawatan.

- Cholifah, S. (2014). Akupresur pada Ibu Menyusui Meningkatkan Kecukupan Asupan ASI Bayi di Kecamatan Mungkid Tahun 2014.
- Haroon S, Das J K, Salam R A, Imdad A, Bhutta Z A. (2013). *BreastFeeding Promotion Interventions And BreastFeeding Practices: A Systematic Review*. BMC Public Health 2013, 13(Suppl 3):S20 <http://www.biomedcentral.com/1471-2458/13/S3/S20>
- Hockenberry, & Marilyn, J. (2009). *Essential pediatric nursing*. 8th ed. St Louis Missouri.
- Jeongsug C, Young A H ,Sukhee A , Soo L M, Hur, Haeng H M. (2012). *Effects of Oketani Breast Massage on Breast Pain, the Breast Milk pH of Mothers, and the Sucking Speed of Neonates*. Korean J Women Health Nurs Vol. 18 No. 2, 149-158, June, 2012. <http://dx.doi.org/10.4069/kjwhn.2012.18.2.149>.
- Radyanto IWH. (2012). Akupresur untuk Berbagai Penyakit. Andi Offset. Yogyakarta.
- RISKESDAS. (2018). Kementerian Kesehatan Republik Indonesia. Badan Penelitian dan Pengembangan Masyarakat.
- Rosita, S. (2008). ASI untuk Kecerdasan Bayi. Yogyakarta: Ayyana.
- Rumah Sakit Daerah Provinsi Sulawesi Tengah. (2020). Data Ruang Perawatan Kebidanan tahun 2017-2019.
- SDKI. (2017). Badan Kependudukan dan Keluarga Berencana Nasional Jakarta, Indonesia.
- Soetjiningsih. (2012). ASI Petunjuk untuk Tenaga Kesehatan. Jakarta; EGC.

Sugiyono. (2012). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.

Sukanta, Putu Oka. (2014). *Pijat Akupresur untuk Kesehatan*. Jakarta: Promplus.

Machmudah, Khayati N, Widodo S, Hapsari E D, Haryanti F. (2018). Increasing Oxytocin Hormone Levels in Postpartum Mothers Receiving Oketani Massage and Pressure in The GB-21 Acupressure Point. Original Article. International Journal of Advancement in Life Sciences Research. doi: 10.31632/ijalsr.2018v02i01.004. journal homepage <http://ijalsr.org>

Machmudah, Khayati N. (2014). *Breastmilk Production of Mother with Post Caesarean Section Given Oketani and Oxitocyn Massage*. Jurnal Ners Vol. 9 No. 1 April 2014: 104–110.

Mitra Savabi Esfahani, Shohreh Berenji-Sooghe, and Soheile Ehsanpour. (2015). *Effect Of Acupressure On Milk Volume Of Breastfeeding Mothers Referring To Selected Health Care Centers In Tehran*.