Journal Of Nursing And Midwifery Vol 2, No. 1 December 2019 e-ISSN 2656-0739

Influence Breast Care Massage Methods To Increase Production Oketani mother's milk (ASI) On Mother Post Partum In Puskesmas Gunungsitoli-Nias

Jernihati Krisniat Harefa,[1]Anita Deborah Anwar, [2]Tania Novi,[3] Hidayat Wijayanegara,[4]Leri Septiani,[5] Herry Garna [6]

[1] Magister Terapan Kebidanan, STIKes Dharma Husada Bandung/Akbid Harapan Keluarga-Nias,
[2]Universitas Padjajaran Bandung/RSUP Hasan Sadikin Bandung/RSIA Limijati Bandung/ RSIA Graha Bunda Kota Bandung,
[3] Magister Terapan Kebidanan, STIkes Dharma Husada Bandung,
[4] Fakultas Kedoteran, Universitas Islam Bandung/ Magister Terapan Kebidanan, STIKes Dharma Husada Bandung,
[5]Magister Terapan Kebidanan, STIKes Dharma Husada Bandung/ RSIA Graha Bunda Kota Bandung
[6] Fakultas Kedokteran, Universitas Islam Bandung/ Magister Terapan Kebidanan, STIKes Dharma Husada Bandung/ RSIA Graha Bunda Kota Bandung

Abstract*-Oketani massage method can stimulate the pectoral muscle strength mayoruntuk increase milk production and makes the breasts become soft and elastic, making it easier for the baby to suckle. Breast care massage method Oketani this method does not provide pain and discomfort to the mother's breast that is different from the conventional massage. This study aimed to analyze the effect of breast care massage Oketani method to increase milk production in postpartum mothers with indicators of infant weight gain. The method used is quasi-experimental with two group design approach pretest posttest control group design with a sample of 82 mothers postpartum primiparous spontaneous and have a baby. The experiment was conducted in Puskesmas Kota Gunung Sitoli-Nias May to July 2019. Sampling consecutive sampling to obtain each 41 respondents mothers and babies the treatment group and the control group. Variable Methods breast care and breast care massage Oketani conventionally measured by observation sheet, whereas to measure the milk production with the baby weighing indicator. Analysis of the characteristics of respondents were tested using the chi-square test, the mean differences with the Mann-Whitney test, and the difference between the intervention and control by Friedman test. The results showed an average weight infants in the intervention group showed an increase Oketani massage method of infant weight at day 14 as much as 3.35% of birth weight whereas the control group declined 1.3% of birth weight. The result of the difference between the two groups showed no significant difference between before and after the intervention, p = 0.000. In conclusion, there is the effect of breast care massage Oketani method to increase milk production (milk) in the mother post partum.*

Keywords: *ASI, Birth weight, Breast Care Massage Method Oketani, the Post Partum*

1. Introduction

The World Health Organization recommends infants from birth to get breast milk (ASI) exclusively for six months.[1] Target *A sustainable Development Goals*(SDGs)to be achieved 2015-2030 is lower death rate indicator anakdengan penurunanangka infant mortality (IMR) menjadi12 / 1,000 live births in 2030.[2]

Exclusive breastfeeding for the many obstacles faced by nursing mothers among them because of the need to return to work outside the home, health related problems, and lack of family support. Other surveys also show the main drag of exclusive breastfeeding: the perception that the baby is kept hungry after feeding so feel breastfeeding is not enough; maternal health issues; mother-in-law and the pressure from the surrounding environment to formula feed just from the baby crying; pain in the breast; and the need to re-bekerja.3

Various alternatives made to increase milk production in mothers who give birth normally. The efforts that have been made in order to increase breast milk production is conventional treatments are carried out routinely on all mother post partum, but the results of this intervention has not

shown satisfactory results. This has motivated some researchers to seek alternative treatments payudara.4,5 One treatment is to breast care massage method Oketani.6,7

Oketani massage method aims to stimulate the pectoralis muscle strength produce breast milk, and makes the breast more soft and elastic, making it easier for the baby suckling at the breast. Massage Oketani make mothers more relaxed, milk increases and solve problems on payudara.7[-9]

The purpose of this study was to analyze the effect of breast care massage Oketani method to increase milk production (milk) in women after childbirth.

2. Method

This research is an experimental research, the experiment with the design quasy two pretest posttest control group design group.10[-13]The research was conducted in Puskesmas Kota Gunung Sitoli-Nias, North Sumatra in May to July 2019. The subjects were mothers after giving birth and their babies spontaneously primiparas met inclusion criteria and are willing to become a research subject after being given an explanation and signed a consent form (informed consent). Sampling techniques in this study using nonprobability sampling: Consecutive sampling with 82 mothers and infants were divided into two groups, namely the treatment and kontrol.14 instrument used to collect data were questionnaires, observation sheets weighing the baby, as well as the implementation of the method of breast care massage Oketani for the intervention group and conventional breast care for the control group. Bivariate statistical analysis, Data were not normally distributed using the Mann-Whitney test; different test from both groups using Friedman.15 test Mann Whitney test results showed that the baby's weight on various days do not have a significant difference between the two treatment groups (p values> 0.05). However, the calculation of the change or delta showed significant differences between treatment and control groups (p = 0.000). Based on Friedman test group Oketani massage method has significant difference between before and after the intervention (p = 0.000). the calculation of the change or delta showed significant differences between treatment and control groups (p = 0.000). Based on Friedman test group Oketani massage method has significant difference between before and after the intervention (p = 0.000). the calculation of the change or delta showed significant differences between treatment and control groups (p = 0.000). Based on Friedman test group Oketani massage method has significant difference between before and after the intervention (p = 0.000).

3. Result

Table 1 Characteristics of Research Subjects

characteristics	Group		* The value p
	Intervention (n = 41)	Controls (n = 41)	
Age (years)			
<25	17 (41%)	18 (44%)	
25-35	24 (59%)	23 (56%)	0.823
Education			
basic education	1 (2%)	2 (5%)	
Middle education	14 (34%)	14 (34%)	
higher education	26 (64%)	25 (61%)	0.828
Work			
Does not work	23 (56%)	24 (59%)	
Work	18 (44%)	17 (41%)	0.823
stress			
Light	25 (61%)	23 (54%)	
moderate	16 (39%)	19 (46%)	
Weight	0 (0%)	0 (0%)	0,656
Breastfeeding frequency (times / day)			
8-12	33 (80%)	36 (88%)	
> 12	8 (20%)	5 (12%)	0.547

Ket.: *Chi-square test

Characteristics of respondents between the intervention and control groups there was no significant difference so worthy to be compared (all p values ≥0,05).

table 2 Production Comparison of breast milk (ASI), based on Improved Weight Infants between Before and After Test Group and Control Group Intervention

	treatment group				The p-value *
	Intervention	Ket.	Control	Ket.	
Early BB					
X (SD)	3,011 ± 353.6		3,059 ± 389.7		0.606 *
range	2,500-3,900		2,500-4,000		
BB Day 3					
X (SD)	2,920 ± 343.0	↓ **3.02%**	2846.5 ± 363.8	↓ **6.94%**	0.208 *
range	2425-3783		2,325-3,720		
BB Day 7					
X (SD)	3065.2 ± 359.1	↑ **1.79%**	2958.7 ± 375.9	↓ **3.27%**	0.192 *
range	2546.3-3972.2		2418 to 3868.8		
BB Day 14					
X (SD)	3111.6 ± 318.5	↑ **3.35%**	3,019 ± 386	↓ **1.30%**	0.180 *
range	2,650-3925.0		2,466-3946		
Change (delta)					
X (SD)	100.6 ± 93.6		-40 ± 7.0		**0,000 ** **
range	0.0-500.0		(-54)-(-10)		

Note: *) Mann Whitney, **) Test Friedman) Increased,) Descending

Based on the results of the study showed the average weight infants in the intervention group Day 1 of 3,011 grams, the 3rd day decreased to 2,920 grams, the 7th day rose to 3065.2 grams, and the 14th day rise again menjad 3111, 6 grams with a total change of approximately 100.6 grams. Meanwhile, in the control group the average weight of the baby day 1 of 3,059 grams, on the 3rd day decreased to 2846.5 grams, on the 7th day rose to 2958.7 grams, and on the 14th day rise again into 3019.0 grams of a decline of about 40.2 grams of initial body weight (not back to birth weight). Mann Whitney Test The test results showed that the baby's weight on various days do not have a significant difference between the two treatment groups (p values> 0.05). However, the calculation of the change or delta showed significant differences between treatment and control groups (p = 0.000). In the intervention group breast care massage method Oketani showed increased infant weight at day 14 as much as 3.35% of birth weight whereas the control group declined 1.3% of birth weight. Friedman test results between the two groups showed no significant difference between before and after the intervention, p = 0.000.

4. Discussion

On day 14, all infants in the treatment group experienced weight gain was significantly different than the control group. In the control group there are babies who are still losing weight so that the overall weight of the baby is still below birth weight. The intervention group who diberikanBreast care massage method Oketani increase milk production assessed from gaining weight infants up to the 14th day amounted to 3.35% of birth weight, whereas in the control group dropped 1.30%.

Of the 41 respondents there were 17 infants (41%) infants regain birth weight and 24 (58.6%) did not reach the other baby birth weight, but the weight loss baby day 14 did not exceed 5% of birth weight , This can be caused by factors other than the production of milk as babies are not effective

to breastfeed, mothers breastfeeding technique is less precise unreachable researchers overall in the control group.

Baby's growth is particularly relevant to the production of milk. The signs of successful breastfeeding will be reinforced by the increase in weight newborns after weeks pertama.16[-18]

Birth weight infants are jangaka within 2 weeks of birth. Amounting to 91.57% of the infants back to birth weight at day 14 and 88.8% of infants had gone back to birth weight by an average of 10 days. After the 3rd day of the baby's weight increased 13-18 g / hari.16

The most important factors that influence weight gain after birth is breastfeeding (breast milk). Breastfeeding can be accompanied by several difficulties, such as breast congestion, mastitis, breast abscesses, and cracked nipples (nipple trauma). They can occur immediately after delivery or anytime during lactation which consequently lead to insufficient lactation and breastfeeding strike by early neonatal life mereka.19[-22]

Currently, there are various methods of pharmaceutical and non-pharmaceutical for reducing breast engorgement during lactation. Because of the side effects of chemical drugs, medical science researchers are now looking for the most convenient therapy, most complicated, and most effective. Therefore, they use complementary or alternative techniques such as therapeutic pijat.20[-24]

Sotomi Oketani in Japan suggest the type of massage without pain (breast massage Oketani) to reduce breast pain, prevent swelling and cracked nipples, and improve the quantity and quality of breast milk. He also found Oketani breast massage can help restore normal breast function. During this massage, the space between the connective tissue of the breast and the pectoralis major muscle is separated to increase the depth of the breast and improve a stretch of the breast, yielding softness and elasticity of the organ ini.6,7,25

In addition, this massage does not have pain or discomfort to an individual, to prevent injury to the nipples and mastitis, breast disorders improve, increase lactation, and gives a comfortable feeling at the tersebut.6,7 In this case, Cho dkk.25 test shows the relationship between clinical breast massage Oketani and breast pain reduction resulting in increased pH of the milk and the speed of sucking in the neonate.

In another study conducted by Foda dkk.26pada nursing mothers, revealed that breast massage therapy can actually improve the quality of breast milk and breast massage Oketani. The results showed an increase in the average weight of newborns in the intervention group and a small portion in the control group. In this case, neonatal weight gain on breast massage Oketani group was significantly higher than the control group.

Breast massage therapy Oketani release the space between the connective tissue of the breast and pectoralis major muscle that can increase the depth of the breast and improve a stretch of the breast. This technique causes the softness and elasticity of the breast and nipple to improve the locking thus increase lactation and reduce kemacetan.6,7 addition, the pressure on the areola can reduce the resistance increased during congestion and also soften with moderate fluid between networks. This increases the mother's nipple placement in the mouth of a newborn who can lead a satisfactory exploitation by infants in payudara.27

Milk production could be improved by treatment of breast (breast care) Oketani Massage Method according to several studies that have been done.

5. Conclusion

The intervention group was given Breast Care Massage method Oketani increase milk production assessed on the weight of the baby until the 14th day amounted to 3.35% of birth weight whereas the control group fell 1.30%. On day 14, all infants in the treatment group experienced weight gain was significantly different than the control group. In the control group there were 17 (41.4%) infants regain birth weight and 24 (58.6%) did not reach the other baby birth weight. But the baby's weight loss day 14 did not exceed 5% of the weight of lahir.Breast care Oketani massage method does not cause pain, can improve the quantity and quality of breast milk so as to help speed up the baby's weight gain.

Thank-you notethe Master of Applied STIKES Dharma husada Bandung, Midwifery Academy of Family Hope-Nias, Gunung Sitoli City Health Department and Community Health Center Gunungsitoli as well as all those who contributed to this study.

6. Reference

[1] Utami R. Inisiasi menyusu dini plus ASI eksklusif. Jakarta: Pustaka Bunda; 2010.
[2] Barredo L, Agyepong I, Liu G. Ensure healthy lives and promote wellbeing for all at all ages. UN Chron. 2015;51(4):9–10.
[3] Ms K, Kakuma R. Optimal duration of exclusive breastfeeding (review). Cochrane Database System Rev. 2012;(8):1–12.
[4] Prabasiwi A, Fikawati S, Syafiq A, Harapan P, Tegal B, Kajian P, dkk. ASI eksklusif dan persepsi ketidakcukupan ASI (exclusive breastfeeding and perception of insufficient milk supply).J Kes Mas Nasional. 2015 Februari;3(9):282–7.
[5] Yuliati ND, Hadi, Rahayu S, Pramono N, Kristanto D, Mulyantoro. The impact of combination of rolling and oketani massage on prolactin level and breast milk production in post-cesarean section mothers. Belitung Nursing J. 2017;3(4):329–36.
[6] Machmudah, Khayati N. Produksi asi ibu post seksio sesarea dengan pijat oketani dan oksitosin (breastmilk production of mother with post caesarean section given oketani and oxitocyn massage) J Ners. 2014 April;9(1):104–10.
[7] Kabir N, Tasnim S. Oketani lactation management : a new method to augment breast milk. J Bangladesh Coll Phys Surg. 2011;27(3):155–9.
[8] Nurbaeti I, Lestari KB. The effectiveness of a comprehensive breastfeeding education on successful breastfeeding at postpartum periods.J Keperawatan. 2013 Agustus;1(2):188–98.
[9] Lumbiganon P, Martis R, Laopaiboon M, Jj H, Hakimi M. Antenatal breastfeeding education for increasing breastfeeding duration (review). Cochrane Database System Rev. 2016;1(12):1–29.
[10] Satari MH, Wirakusumah F. Konsistensi penelitian dalam bidang kesehatan. Bandung: Refika Aditama; 2011.
[11] Sastroasmoro S, Ismael S. Dasar-dasar metodologi penelitian klinis. Edisi ke-4. Jakarta: Sagung Seto; 2011.
[12] Sugiyono. Cara mudah menyusun skripsi, tesis, dan disertasi. Bandung: Alfabeta; 2016.
[13] Nazir. Metode penelitian. Bogor: Ghalia Indonesia; 2017.
[14] Dahlan MS. Besar sampel dalam penelitian kedokteran dan kesehatan. Edisi ke-4. Jakarta: Epidemiologi Indonesia; 2016.
[15] Dahlan MS. Statistik untuk kedokteran dan kesehatan: deskriptif, bivariat dan multivariat, dilengkapi aplikasi dengan menggunakan SPPS. Edisi ke-6 Jakarta: Epidemiologi Indonesia; 2014.
[16] Turner C, Carrara V, Aye N, Thien M, Moo N, Paw K, dkk. Changes in the body weight of term infants, born in the tropics, during the first seven days of life. BMC Pediatr. 2013;1(3):93–6.
[17] Kent JC, Gardner H, Geddes DT. Breastmilk production in the first 4 weeks after birth of term infants.J Nutr. 2016;8(12):9–14.
[18] Putu N, Putri A. The effect of exclusive breast milk counseling on the increase of infant weight at Karang Pule.J Ked Yarsi. 2018;26(1):34– 44.
[19] Boskabadi H, Ramazanzadeh M, Zakerihamidi M, Omran FR. Risk factors of breast problems in mothers and its effects on newborns. Iran Red Crescent Med J. 2014;16(6):1–7.
[20] Qomar UL. Efektifitas pijat oketani terhadap pencegahan bendungan asi pada ibu postpartum. J Kesmas. 2018;27(1):1–7.
[21] Fikawati S, Syafiq A. Status gizi ibu dan persepsi ketidakcukupan air susu ibu. J Kes Mas Nasional. 2012;6(6):1–12.
[22] Fahriani R, Rohsiswatmo R, Hendarto A. Faktor yang memengaruhi pemberian ASI eksklusif pada bayi cukup bulan yang dilakukan IMD. Sari Pediatri. 2014;15(6):394–402. 23.
[23] Chiu JY, Gau ML, Kuo SY, Chang YH, Kuo SC, Tu HC. Effects of GuaSha therapy on breast engorgement: a randomized controlled trial. J Nurs Res. 2010;18 (1):1–10.
[24] De Sousa L, Haddad ML, Nakano AM, Gomes FA. A nonpharmacologic treatment to relieve breast engorgement during lactation: an integrative literature review. Rev Esc Enferm USP. 2012;46(2):472–9.
[25] Cho J, Ahn HY, Ahn S, Lee MS, Hur MH. Effects of oketani breast massage on breast pain, the breast milk pH of mothers, and the sucking speed of neonatus. Korean J Women Health Nurs. 2012;18(2):149–58.
[26] Foda MI, Kawashima T, Nakamura S, Kobayashi M, Oku T. Composition of milk obtained from unmassaged versus massaged breasts of lactating mothers. J Pediatr Gastroenterol Nutr. 2014;38(5):484–7.
[27] Dehghani M, Babazadeh R, Khadivzadeh T, Pourhoseini AS, Esmaeili H. Effect of breast Oketani-massage on neonatal weight gain: a randomized controlled clinical trial. J Evidence Based Care. 2018;8(3):57–63.