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THE EFFECT OF ACUPRESSURE ON BREAST MILK PRODUCTION IN POST-PARTUM MOTHERS

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ABSTRACT
The coverage of exclusive breastfeeding at Puskesmas (Community Health Center) Limbangan in 2020 has only reached 61.6% so there is a gap of 23.4% from the set target of 85%. In the field, it shows that low production and ejection of breast milk in the first few days after giving birth is an obstacle in early breastfeeding. One solution to overcome non-smooth milk production is through the technique of acupressure points for lactation.This study aimed to determine the effect of acupressure on breast milk production in post-partum mothers at Puskesmas Limbangan, Garut. This study is quasi-experimental using pre-test – post-test with a control group design. The population in this study was all post-partum mothers of their first child aged 3 days amounted to 42 people who were divided into two groups, namely 21 people in the experimental group and 21 people in the control group. The samples in this study were selected using the technique of total sampling. Data analysis in this study was carried out using Paired Samples Test. The average breast milk production in the experimental group before acupressure was 119.05, and after acupressure was 213.33. Meanwhile, the average breast milk production in the control group before the intervention was 129.52, and after the intervention was 168.57. The bivariate results showed a p-value of 0.000 <0.05.

Keywords: acupressure; breast milk production; post partum mother

INTRODUCTION
Breastfeeding is a physiological process to provide optimal nutrition to infants. Exclusive breastfeeding is giving only breast milk to infants from birth to six months of age, without adding or replacing them with other foods or (Arum et al., 2021). Based on data from the World Health Organization (WHO) in 2016, it is shown that the average rate of exclusive breastfeeding in the world is only around 38% (Putri, 2019). When compared with the WHO target of 50%, the figure is still far from the target (Jasa & Listiana, 2020). Exclusive breastfeeding for 6 months and continued until the age of 2 years old with the addition of adequate complementary feeding (MP ASI) has been proven to be one of the effective interventions to reduce the Infant Mortality Rate (IMR) (Damayanti, 2015). Acupressure comes from the words accus and pressure, which means needle and pressing. Acupressure is a term used to provide stimulation in acupuncture points using pressure techniques or mechanical techniques (Normalasari, 2017). Pressure is carried out as a substitute for needle sticking in acupuncture points with the aim of smoothing the flow of vital energy (qi) throughout the body (Apreliasari & Royhan, 2020). A study conducted by Wulandari (2019) showed the results of the Mann-Whitney test analysis with a p-value of 0.000 < α (0.05), which means there is an effect of acupressure on breast milk production. Furthermore, the Wilcoxon test in the experimental group showed a p-value of < α (0.05), and in the control group showed a p-value of > α (0.05), which means acupressure can increase breast milk production by 3.00 points (Wulandari et al., 2019).

This study is in line with a study conducted by Djanah and Muslihatun (2018) whose results showed that there is a significant effect of acupressure on breast milk production with a p-

value <0.05. Based on the data above, the researchers were interested to conduct a study entitled knowing the effect of acupressure on breast milk production in post-partum mothers at Puskesmas Limbangan, Garut in 2021" and find out more about the matter (Djanah & Muslihatun, 2018).

METHODS

This study is quasi-experimental using pre-test – post-test with a control group design. The population in this study was all post-partum mothers of their first child aged 3 days amounted to 42 people who were divided into two groups, namely 21 people in the experimental group and 21 people in the control group. The samples in this study were selected using the technique of total sampling. Data analysis in this study was carried out using Paired Samples Test.

RESULT

Table 1.
Frequency Distribution of Respondents based on Age

Maternal Age	Experimental Group		Control Group	
	f	%	f	%
< 20 years old	2	9.5	1	4.8
20-35 years old	18	85.7	19	90.4
> 35 years old	1	4.8	1	4.8

Table 2.
Frequency Distribution of Respondents based on Education

Education	Experimental Group		Control Group	
	f	%	f	%
S1 (Bachelor's Degree)	6	28.6	4	19.0
Senior High School	11	52.4	15	71.5
Junior High School	4	19.0	2	9.5

Table 3.
Frequency Distribution of Respondents based on Occupation

Occupation	Experimental Group		Control Group	
	f	%	f	%
Housewife	9	42.9	6	28.6
Private employee	7	33.3	13	61.9
Entrepreneur	5	23.8	2	9.5

Table 4.
Frequency Distribution of Respondents based on EIB

Early Initiation of Breastfeeding	Experimental Group		Control Group	
	f	%	f	%
EIB	21	100	21	100
No EIB	0	0.0	0	0.0

Table 5.
Average Breast Milk Production Quantity Before and After Acupressure

	Experimental Group					Control Group				
	N	Min	Max	mean	Difference	N	Min	Max	mean	Difference
Pre Test	21	90	150	119.05	94.28	21	100	160	129.52	39.05
Post-Test	21	180	250	213.33		21	130	200	168.57	

Table 6.
Normality Test Results

Results	Experimental Group		Control Group	
	N	p-value	N	p-value
Pre-Test	21	0.200	21	0.076
Post-Test	21	0.065	21	0.178

Table 7.
The Effect of Acupressure on Breast Milk Production in Post-partum Mothers in the Working Area of Puskesmas Limbangan, Garut in 2021

Group	*Pre-Test*	*Post-Test*	p-value	N
	Std. Dev	Std. Dev		
Experimental	18,683	21.055	0.000	21
Control	19,615	19,821	0.000	21

DISCUSSION

The results of this study are in line with a study conducted by Wijayanti and Nuryanti (2017) whose results show that the majority of post-partum mother respondents are in the age range of 20-35 years old, with a percentage of 84.3%. This is supported by Cuningham (2016) that the healthy and fertile reproductive age in women is between 20-35 years old (Fartaeni et al., 2018). Based on the results of this study, it is shown that of the 21 respondents (100%) in the experimental group, 6 respondents (28.6%) have bachelor's degrees, 11 respondents (52.4%) have senior high school degrees, and 4 respondents (19, 0%) have junior high school degrees. Whereas in the control group, of the 21 respondents (100%), 4 respondents (19.0%) have bachelor's degrees, 15 respondents (71.5%) have senior high school degrees, and 2 respondents (9.5%) have junior high school degrees. From these results, it is shown that the latest education of most respondents is senior high school education, both in the experimental group and in the control group (Rahayu, 2020).

Latest education (education background) has not been able to become the main guideline for respondents. The family economic factor is one of the reasons related to getting higher educational status. A person's level of education cannot be used as a reference for the success of the lactation process, but how much and correct information obtained by mothers regarding the breastfeeding process is—because even mothers with low education can obtain much and correct information about the breastfeeding process (Mardiyaningsih, 2018). In this study, all respondents, both in the experimental group and in the control group, did IMD after giving birth. Milk production is a very complex interaction between mechanical stimuli, nerves, and various hormones. Mechanical stimulation occurs when the infant suckles.

Respondents who carry out Early Initiation of Breastfeeding (EIB) will get stimulation to their nipples when their infants suckle. The sooner the stimulation from sucking on the mother's nipple, the faster the process of expulsion of breast milk will be. This is because in the

implementation of EIB there is the touch of the infant's head on the mother's chest, the touch of the infant's hand on the nipple and its surroundings, and the movement of the infant's lips when they squeeze their mother's nipple between their tongue and roof of the mouth that will stimulate the release of the hormone oxytocin (Azizah, 2018, n.d.). According to Puspitasari (2016), one of the benefits of EIB is to stimulate the release of hormones that stimulate successful breastfeeding (Delima et al., 2016).

Based on the results of this study, it is obtained a p-value of 0.000 <0.05. So, it can be concluded that there is an effect of acupressure on breast milk production in post-partum mothers in the Working Area of Puskesmas Limbangan, Garut in 2021. In the control group before the intervention, an average score (mean) of 129.52 was obtained, and after the intervention, an average score (mean) of 168.57 was obtained. Based on the results of the statistical test using the Paired Samples Test, a p-value of 0.000 <0.05 was obtained. Based on the results of this study, acupressure has an effect on breast milk production of mothers in the experimental group when compared to mothers in the control group, because the pressure exerted can affect the release of the hormone prolactin which in turn will help increase milk production. This is in line with the explanation of (Cholifah et al., 2014), that acupressure can provide stimulation to the nerves of the breast gland; the response of the stimulus is sent to the hypothalamus to produce the hormone prolactin and flowed to the anterior pituitary to secrete the hormone prolactin to the breast. Furthermore, the hormone prolactin will stimulate the alveoli cells to form breast milk. This is why there is an effect of acupressure on the production of breast milk (ASI).

This is also in line with the results of research by Susilawati and Halim (2018) that there is a difference in breast milk production before and after the acupressure intervention which increased to 46.8% (Sajidah, 2021). According to Rahayu, Santoso and Yunitasari (2015) acupressure or suppression is one of the non-pharmacological interventions or management to stimulate the release of the hormone prolactin (Zainiyah, 2021). Acupressure is an action that functions to stimulate the hormone prolactin to stimulate the human body with an emphasis on meridian points (Usnawati et al., 2022). According to the researchers' assumptions, the effect of acupressure on breast milk production in post-partum mothers is because acupressure will relieve tension and cause muscle relaxation in the body, so mothers who experience psychological problems will feel relaxed and this will eventually bring positive emotions. The state of relaxation felt by the mother will increase the comfort of the mother, thereby increasing the let-down reflex and increasing the levels of the hormones prolactin and oxytocin. Acupressure points for lactation can also stimulate the production of the hormone prolactin from the brain, which in turn can affect the breast milk quantity produced.

CONCLUSION

The majority of the respondents in the experimental group are in the age range of 20-35 years old, with a percentage of 85%. Of the 21 respondents in the experimental group, 52.4% have senior high school degrees, 42.9% are housewives, and 100% carry out EIB. While in the control group, 90.4% are in the age range of 20-35 years old, 71.5% have senior high school degrees, 61.9% are private employees, and 100% carry out EIB.

REFERENCES

Apreliasari, H., & Royhan, U. A. (2020). *Pengaruh Pijat Oksitosin terhadap Peningkatan Produksi ASI*. 5

Arum, S., Erlinawati, Fauzia, Apriyanti, F., Afrianty, I., Hastuty, M., Martini, Rahayu, S. F., Mariati, N., Anggeriyane, E., Mirawati, Widiyanti, S., & Syahda, S. (2021). *Kehamilan Sehat Mewujudkan Generasi Berkualitas Di Masa New Normal*. Penerbit Insania.*Azizah, 2018*. (N.D.)

Cholifah, S., Er, H. S., & Mareta, R. (2014). *Akupresur Pada Ibu Menyusui Meningkatkan Kecukupan Asupan Asi Bayi Di Kecamatan Mungkid Tahun 2014*. *3*(2), 7

Delima, M., Arni, G., & Rosya, E. (2016). Pengaruh Pijat Oksitosin Terhadap Peningkatan Produksi Asi Ibu Menyusui Di Puskesmas Plus Mandiangin. *Jurnal Ipteks Terapan*, *9*(4). Https://Doi.Org/10.22216/Jit.2015.V9i4.1238

Djanah, N., & Muslihatun, W. N. (2018). Akupresur Terhadap Produksi Asi Pada Ibu Post Partum. *Photon: Jurnal Sain Dan Kesehatan*, *8*(01), 73–77. Https://Doi.Org/10.37859/Jp.V8i01.533\

Fartaeni, F., Pertiwi, F. D., & Avianty, I. (2018). Hubungan Pengetahuan, Sikap, Dan Dukungan Suami Terhadap Pemberian Asi Eksklusif Di Desa Pabuaran Kecamatan Gunung Sindur. *Hearty*, *6*(1). Https://Doi.Org/10.32832/Hearty.V6i1.125

Jasa, N. E., & Listiana, A. (2020). Hubungan Pekerjaan Dan Pendidikan Terhadap Keberhasilan Asi Eksklusif. *Jurnal Sains Kebidanan*, *2*(2), Article 2. Https://Doi.Org/10.31983/Jsk.V2i2.6465

Normalasari, E. (2017). *Evaluasi Program Konseling Menyusui Di Puskesmas Klikiran Kabupaten Brebes*. 7

Putri, M. Y. (2019). *Hubungan Karakteristik Ibu Dengan Pemberian Asi Eksklusif Di Klinik Pratama Paseban Rumah Sakit Sint Carolus* [Undergraduate, Stik Sint Carolus]. Http://Repository.Stik-Sintcarolus.Ac.Id/597

Rahayu, N. S. (2020). *Manajemen Laktasi Ibu Yang Menyusui Asi Eksklusif Di Negara Berkembang*. 14.

Sajidah, R. (2021). *Literature Review Pengaruh Akupresur Pada Ibu Menyusui Terhadap Peningkatan Kecukupan Asupan Asi Bayi*. *Jurnal Ilmu Kesehatan Insan Sehat*. Https://Www.Jurnalstikesintanmartapura.Com/Index.Php/Jikis/Article/View/33

Usnawati, N. U., Sst, Septianti Putri, T. S. P., S. Sit, & Astin Nur Hanifah, Sst. (2022). *Monograf Percepatan Produksi Asi Dan Kecukupan Asi Bagi Bayi Dengan Teknik Breast Care Dan Accupressure Point For Lactation (Breac)*. Media Sains Indonesia.

Wulandari, A. S., Hasanah, O., & Sabrian, F. (2019). Pengaruh Akupresur Terhadap Produksi Air Susu Ibu (Asi). *Jurnal Ners Indonesia*, *9*(2), 51. Https://Doi.Org/10.31258/Jni.10.1.51-60

Zainiyah. (2021). *Perbedaan Produksi Asi Pada Ibu Post Partum Yang Dilakukan Tehnik Acupressure Points For Lactation Dan Tehnik Breast Care (Di Bpm Sri Wahyuni, S.St*

Surabaya) | *Nursing Update: Jurnal Ilmiah Ilmu Keperawatan P-Issn : 2085-5931 E-Issn : 2623-2871*. *9*. Https://Stikes-Nhm.E-Journal.Id/Nu/Article/View/56