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THE EFFECT OF ACUPRESSURE MASSAGE ON BREAST MILK EXPLOSION IN BREASTFEEDING MOTHERS

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Abstract

The benefits of breast milk are numerous, but not all mothers are successful in breastfeeding their babies due to various factors, one of which is substandard breast milk production. Based on data from the Baiturrahman Health Center, Banda Aceh City in 2022, of the total number of children aged 0-6 months of 892 babies, it is known that 514 babies received exclusive breast milk (57.7%) and 378 babies (42.4%) did not receive exclusive breast milk. This study aims to determine the effect of acupressure massage on breastfeeding mothers in Neusu Village, Aceh, Baiturrahman District, Banda Aceh City. Quasi-experimental research with a one group pretest-posttest design. The sampling technique was purposive sampling with a sample size of 15 people. Data analysis used the Wilcoxon test. The results showed that after the acupressure massage, no mother experienced a decrease in breast milk flow (negative value, rank 0), there were 14 people who experienced an increase in breast milk flow after the acupressure massage (positive value, rank 14) and there was 1 person whose milk flow remained stable after the acupressure massage (fixed value 1) with a ρ value of 0.001. There is an effect of acupressure massage on the flow of breast milk in breastfeeding mothers. It is hoped that health workers will improve health services and provide information to the public, especially breastfeeding mothers, about how to increase the flow of breast milk and apply acupressure massage as a non-pharmacological effort to increase the flow of breast milk.

Keywords: *Breast milk, breastfeeding mothers, acupressure massage.*

1. INTRODUCTION

Newborn babies' nutritional needs are obtained through breastfeeding, especially exclusive breastfeeding because breast milk is the best first food for the start of a baby's life (1). Giving breast milk to babies will guarantee the optimal development of the baby's intelligence potential, because breast milk is an ideal nutrient with the right composition and is very suitable to the baby's needs (2). Breast milk can complete the nutritional needs of babies up to six months of age without complementary foods (3). Based on data from the World Health Organization (WHO) in 2021, the prevalence of exclusive breastfeeding in babies aged 0-6 months throughout the world is only 41% and as many as 3 out of 5 babies are not given exclusive breastfeeding. This is due to the lack of breast milk production and the habit of giving additional fluids or food such as tea, sweet water and juice to one month old babies, which is mostly done in several countries such as Nigeria, Zambia, Turkey, India, including Indonesia (4).

Children aged 0-6 months who are exclusive breastfeeding in Indonesia in 2021 are 66.1%. The highest percentage of exclusive breastfeeding is in West Nusa Tenggara Province

at 87.3% and the lowest is in West Papua Province at (34%) and Aceh is the 12th lowest province at (59.2%) (5). Data from the Aceh Province Health Service in 2021, the lowest coverage of exclusive breastfeeding was in Sabang at 26% followed by North Aceh and Bireuen regencies at 40% (6). Based on data from the Banda Aceh City Department in 2022, the number of babies aged 0-6 months was 3,947, the number of babies who received exclusive breast milk was 2,715 (69%) and those who didn't receive exclusive breast milk were 1,232 babies (31.2%). The lowest coverage of exclusive breastfeeding was at Baiturahman Health Center at 57.7% and Ulee Kareng Health Center at 59.9% (7).

The adequacy of breast milk for babies is influenced by the smoothness and frequency of breastfeeding, but there are still many mothers who lack information about the correct frequency and method of breastfeeding. Insufficient breast milk in babies will result in problems, namely insufficient breast milk which causes the baby to experience dissatisfaction after breastfeeding, such as the baby often crying or being fussy and the baby's stools being hard (8). Efforts that can be made to increase breast milk production can be done with non-pharmacological therapy, such as endorphin massage, hypno-breastfeeding, giving katuk leaves, moringa leaves, papaya leaves, oxytocin massage and acupressure (9). According to Liliana (2020), acupressure has an influence on breast milk production because pressing the ST 15 and ST 16 points can influence the release of the hormone prolactin which will then help increase the flow of breast milk. Acupressure can stimulate the nerves of the breast glands, the response to the stimulation is sent to the hypothalamus to release the prolactin releasing hormone and flows to the anterior pituitary to release the hormone prolactin to the breasts. Next, the hormone prolactin will stimulate alveoli cells to produce breast milk. This is what causes there to be a connection with the effect of acupressure on breast milk production (10).

Based on data from the Baiturrahman Community Health Center in 2022, the number of babies aged 0-6 months was 892. It is known that 514 babies received exclusive breast milk (57.7%) and 378 babies (42.4%) did'nt receive exclusive breast milk. The number of breastfeeding mothers from January to June 2023 was 299 people. The number of breastfeeding mothers who experienced mastitis was 2 people, 5 people had swollen breasts and 21 people had injured nipples. The results of a preliminary study in Neusu Village, Baiturrahman District, were obtained from 10 mothers who had babies aged 0-6 months and did not provide exclusive breast milk. The results of the interview revealed that 80% said there was not enough breast milk, as many as 10% of mothers were busy working and 10% because they did not have family support or the family recommended giving complementary foods to breast milk for their babies by giving formula milk and mashed bananas because the family was afraid that breast milk would not meet the baby's needs. Apart from that, the mother was also known to have never had an acupressure massage to facilitate breast milk production because the mother said she did not know about acupressure massage.

2. METHODOLOGY

Quasi-experimental research with a one group pretest-posttest design. The population in this study were all breastfeeding mothers who had babies aged 6-44 days in Neusu Village, Aceh, Baiturrahman District, Banda Aceh City, starting from January to June 2023, there are 98 people. The sampling technique was purposive sampling with a sample size of 15 people. Data analysis used the Wilcoxon test.

3. RESULTS

3.1 Frequency distribution of breast milk production

Table 1: *Breast milk production before and after acupressure massage*

Breast milk production	f	%
Before		
Fluent	0	0
Not fluent	15	100
After		
Fluent	12	80
Not fluent	3	20
Total	15	100

Based on table 1., it is known that of the 15 respondents before the acupressure massage, the majority of the breast milk was not fluent 15 respondents (100%) and after the acupressure massage the majority of the breast milk was fluent 12 respondents (80%).

3.2 Wilcoxon test results

Table 2: *The effect of acupressure massage on breast milk explosion in breastfeeding mothers*

Acupressure massage	Breast milk production		Ties	p value
	Negative Ranks	Positive Rank		
Before-After	0	14	1	0,001

Based on table 2., it is known that after the acupressure massage, no mother experienced a decrease in breast milk flow (negative value, rank 0), there were 14 people who experienced an increase in breast milk flow after the acupressure massage (positive value, rank 14) and there was 1 person whose milk flow remained stable after the acupressure massage (fixed value 1) with a ρ value of 0.001. According to the researchers' assumptions, respondents who underwent acupressure massage increased the flow of breast milk more frequently, this is because acupressure is more practical and the action is more trustworthy to mothers because the procedure is carried out directly on the mother's breast. There was one respondent who had acupressure done, but the flow of breast milk persisted, meaning there was no increase in the flow of breast milk, this was because there were other factors that influenced it, namely food intake and stress and rest patterns.

The results of the interviews that the researchers obtained revealed that the mother had food restrictions from the family, namely that she was not recommended to eat foods such as fish, meat and eggs because of the mother's family's traditional belief that these foods can slow down healing during the postpartum period and also that the mother should not eat too much, which can cause body fat. Apart from that, postpartum mothers also said that they had not had enough rest because they had to care for their babies at night. The rest factor also affected the flow of breast milk. Based on research by Liliana (2020), it was found that acupressure has an influence on breast milk production because pressing the ST 15 and ST 16 points can influence the release of

the hormone prolactin which will then help increase the flow of breast milk. Acupressure can stimulate the nerves of the breast glands, the response to the stimulation is sent to the hypothalamus to release the prolactin releasing hormone and flows to the anterior pituitary to release the hormone prolactin to the breasts. Next, the hormone prolactin will stimulate alveoli cells to produce breast milk. This is what causes there to be a connection with the effect of acupressure on breast milk production (10).

In accordance with Julizar (2022), research on the effect of acupressure on the adequacy of breast milk in postpartum mothers at the Panembahan Senopati Hospital, Bantul, the results of the study show that there is an effect of acupressure on the smooth flow of breast milk with a p value of 0.006 (11). This is also supported by research by Nurhasanah et.al (2019), regarding the effect of acupressure therapy on increasing breast milk production in postpartum mothers at the Jombang District Hospital, the results of the research show that there is an effect of acupressure on the smooth flow of breast milk with a p value of 0.001 (12). In line with Alfitrilia and Anugrah research (2023), regarding the effect of acupressure therapy on increasing breast milk production in postpartum mothers at the Molingkapoto Community Health Center, North Gorontalo, the results of the study show that there is an influence of acupressure on the smooth flow of breast milk with a p value of 0.003 (13).

4. CONCLUSIONS

Before the acupressure massage, the majority of breast milk was substandard, as many as 15 respondents (100%), and after the acupressure massage the majority of the breast milk was fluent 12 respondents (80%). The results of the Wilcoxon test obtained a ρ value of 0.001, meaning that there is an effect of acupressure massage on the smooth flow of breast milk in breastfeeding mothers. It is hoped that health workers will improve health services and provide information to the public, especially breastfeeding mothers, about how to increase the flow of breast milk and apply acupressure massage as a non-pharmacological effort to increase the flow of breast milk.

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