



The Effect of Baby Massage on the Duration of Breastfeeding for Babies Aged 3-6 Months at Posyandu Kenanga 4, Lembah Sari Village, Cikalongkulon District, Cianjur Regency, Indonesia

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ABSTRACT

Breastfeeding is a physiological process to provide optimal nutrition to babies, baby massage is an effort to increase the duration of breastfeeding. This study aimed to determine the effect of baby massage on the duration of breastfeeding at Posyandu Kenanga 4, Lembah Sari Village, Cikalongkulon District, Cianjur Regency, Indonesia. This research involved two groups of subjects, one treated with baby massage and a control group. The research results of the 15 respondents in the experimental group, the largest were 9 people (60%) aged 21-35 years, and the smallest were 2 people aged more than 35 years (13.3%), the 15 respondents in the control group were mostly 9 people (60%) aged 21-35 years old, and the smallest who were over 35 years old were 2 people (13.3%). The majority of babies in the experimental group were 5-6 months old, 9 people (60%). 15 respondents from the experimental group, 13 (86.7%) respondents were healthy and 2 respondents (13.3%) were sick, 15 respondents from the experimental group, 14 (93.3%) had good breastfeeding duration and 1 person (6.7%) had poor breastfeeding duration, 15 respondents in the control group, 10 people (66.73%) had good breastfeeding duration and 5 people (33.3%) had poor breastfeeding duration, 15 respondents in the experimental group, 8 people (53.3%) had normal baby feeding time, 5 people (33.3%) had long baby breastfeeding time and 2 people (13.3%) had a short duration of breastfeeding, 15 respondents in the control group 8 people (53.3%) had a short duration of breastfeeding, 5 people (33.3%) had a normal duration of breastfeeding and 2 people (13.3%) had a long period of breastfeeding, on average The duration of breastfeeding in the experimental group was higher, namely 23.33 with a variation of 3.43 compared to the control group, namely an average of 20.66 with a variation of 2.89. The T-test results obtained a value of $p = 0.029$. There was a significant difference in the average of the experimental group (getting baby massage) and the control group (not getting baby massage treatment) regarding the duration of breastfeeding.

1. Introduction

Breastfeeding is a physiological process to provide optimal nutrition to babies. There is nothing more valuable in a child's life than getting quality nutrition from the start of life. Exclusive breastfeeding is giving breast milk to babies from birth for six months without adding and/or replacing it with other foods or drinks. The benefits of breastfeeding include nutrition, increased intelligence, and increased bonds of

affection. The benefits of breastfeeding will increase with the duration of exclusive breastfeeding for six months. The benefits of exclusive breastfeeding are numerous, but the level of exclusive breastfeeding in the first 6 months is still very low. The number of mothers who exclusively breastfeed their babies for 6 months only reaches 42 percent of the birth rate. The optimal breastfeeding frequency range is between 8-12 times per day. However, it is best to breastfeed your



baby without a schedule because the baby will determine his own needs. Mothers should breastfeed their babies if the baby is crying for no other reason or if the mother feels like breastfeeding her baby.¹⁻⁵

Other research results show that there is an effect of baby massage on the frequency of breastfeeding a baby. Tactile stimulation during baby massage will increase the release of the OCD enzyme (ornithine decarboxylase), an enzyme for growth and development in babies, and increase the activity of vagus nerves. Babies who are massaged experience an increase in vagus nerve tone, which will cause an increase in enzymes, gastrin, and insulin absorption, causing better food absorption, so the baby will quickly feel hungry. Babies who are often hungry will breastfeed more frequently. Baby massage can increase the mother's frequency of breastfeeding so that more breast milk will be produced. The problem with implementing baby massage currently is that there is still an opinion from parents or families that baby massage is not a form of therapy for babies, which can provide many benefits. Meanwhile, others think that baby massage is only done when the baby is sick, such as flu or a cold.⁶⁻⁹ This study aimed to determine the effect of baby massage on the duration of breastfeeding for babies aged 3-6 months at Posyandu Kenanga 4, Lembah Sari Village, Cikalongkulon District, Cianjur Regency, Indonesia.

2. Methods

This study is experimental research with a pre-post-test approach with a control group and uses

primary data, namely measuring the duration of breastfeeding for babies aged 3-6 months. A total of 30 research subjects participated in this study, where the research subjects met the inclusion criteria. The inclusion criteria for this study were babies aged 3-6 months who were born normally at Posyandu Kenangan 4, Lembah Sari Village, Cikalongkulon District, Cianjur Regency, Indonesia. Research subjects were then grouped into intervention and control groups. Assessment of the duration of a baby's breastfeeding is done by measuring the length of time the baby breastfeeds in minutes. Duration of breastfeeding grouped be short duration < 20 minutes, normal duration 20-30 minutes, and long duration 30-45 minutes. Data analysis was carried out using SPSS version 25 software. Univariate and bivariate analyses were carried out in this study. Univariate analysis was carried out to present the frequency distribution of each test variable, and bivariate analysis was carried out to determine the relationship between the test variables, with a p-value <0.05.

3. Results and Discussion

Table 1 presents a comparison of the frequency of breastfeeding duration for babies aged 3-6 months between groups. In the intervention group, it was found that the majority of babies breastfed for 20-45 minutes, which is considered a normal and long duration. Meanwhile, in group control, the majority have a duration of less than 20 minutes, which is classified as a short breastfeeding duration.

Table 1. Comparison of frequency distribution of duration of breastfeeding between groups.

Variable	Intervention group	Control group
	frequency	frequency
Short < 20 minutes	2	8
Normal 20-30 minutes	8	5
Long 30-45 minutes	5	2
Total	15	15



A strong relationship between parents and babies is very important for the baby's emotional and psychological development. When parents do baby massage, they are giving their baby a gentle touch and affection. This can help the baby feel loved and appreciated, which in turn strengthens the emotional bond. Baby massage is time spent together between parents and baby without external interference. This provides an opportunity for parents to be truly physically and emotionally present with their baby. During baby massage, non-verbal communication such as eye contact, smiling, and soft speaking often occurs. All this helps in building a strong relationship between parents and babies. When babies feel comfortable during massage, they feel safe and calm. This creates an environment that supports strong emotional bonds because babies feel that they can trust their parents to provide feelings of security. Baby massage can stimulate the baby's senses, such as touch and smell, in a positive way. This helps babies identify their parents as a source of happiness, comfort, and support. During gentle touch and physical contact with a baby, parents often experience the release of love hormones such as oxytocin, which strengthens the bond between parent and baby.¹⁰⁻¹²

Baby massage can help reduce tension in the baby's muscles that may arise due to stress or discomfort. Relaxed muscles can make babies feel more comfortable when breastfeeding, so they can suck milk more easily and for longer. Light baby massage can improve blood circulation throughout the body, including the mouth and throat area. This increased circulation can help the baby feel more ready to breastfeed. When babies feel stressed or uncomfortable, they may be less motivated to breastfeed. Baby massage can help relieve any discomfort they may be feeling, such as bloating or tension, which can make them more ready to eat. Gentle massage and affection during a baby massage session can stimulate the release of love hormones,

such as oxytocin, both in babies and parents. This can create feelings of affection, security, and intimacy, which helps the baby feel more positive and relaxed during the breastfeeding process. Apart from physical stress, babies can also feel emotional stress. Gentle baby massage can help reduce emotional stress by creating a positive relationship between the baby and the parents.¹³

Gentle baby massage in the area around the jaw can help relax muscles that may be tense. More relaxed jaw muscles will make the sucking process easier and more comfortable for the baby. Newborn babies may experience muscle tension in their necks. Gently massaging the baby's neck can help reduce this tension, which can allow the baby to move more freely and find a comfortable position while feeding. When babies feel comfortable, and their muscles are more relaxed, they tend to be better at breastfeeding. This can help the baby to get into a better breastfeeding position, which allows them to suck milk more efficiently and effectively. Some babies may experience tension or stress while breastfeeding, especially if they have had a bad breastfeeding experience before. Baby massage can help reduce this tension and create a positive experience during breastfeeding.^{14,15}

4. Conclusion

There is an influence of baby massage on the duration of breastfeeding for babies aged 3-6 months at Posyandu Kenanga 4, Lembah Sari Village, Cikalongkulon District, Cianjur Regency, Indonesia.

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