

THE EFFECT OF MORINGA LEAF TEA ON BREAST MILK PRODUCTION IN POSTPARTUM MOTHERS

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ABSTRACT

Background: Breast milk is a beneficial substance for baby's growth. Based on the Health Profile of North Sumatra Province in 2022, newborns aged less than 6 months obtained exclusive breastfeeding by (35.96%). During initial surveys at the Siti Kholijah Marelani Primary Clinic, 15 postpartum mothers provided breast milk to their babies, but the milk produced was insufficient. **Objective:** This study aimed to determine the intensity of smooth breast milk production in postpartum women before and after being consuming moringa tea at. **Methods:** This is a quasi-experiment with one group pretest and posttest with no control design. Purposive sampling was used to select 10 postpartum women from a population of 25 to consume moringa tea twice a day for 7 days. The color and questions in the ASI production were among the instruments used in the penalty. The production of breast milk in postpartum moms is the dependent variable in this study, whereas the independent variable is the administration of 2 grams of Moringa leaf tea twice daily for seven days, brewed with 150 milliliters of hot water. The data was analyzed using Paired Sample T-tests. **Results:** obtained the mean value of breast milk production before and after giving moringa tea (14.10-50.50), as well as the standard deviation of breast milk production before and after giving moringa tea (8.252-13.834). The results show that value of 0.001 < 0.05, indicating that moringa tea drinking affects the smooth production of breast milk in postpartum mothers.

Keywords: Breast Milk; Moringa Leaf; Postpartum Mother

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INTRODUCTION

From birth to six months of age, infants must be fed breast milk (ASI), a fluid released by the mother's mammary glands, without the addition or substitution of other foods or beverages. or often referred to as exclusive breastfeeding with a composition that suits the baby's needs and as a staple food for all the baby's growth needs (Sudargo et al., 2023)(Meilani et al., 2024).

In Indonesia, The proportion of infants aged 0–6 months who are exclusively breastfed is around (52.2%) and amounted to (52.1%) in 2021 and Early Breastfeeding Initiation is (58.1%) in 2022 and amounted to (47.4%) in 2021, the percentage of exclusive breastfeeding for babies aged 0–6 months is 71.58% in 2021, this figure shows an improvement from the previous year which was 69.62%. However, several provinces in Indonesia continue to have a lower exclusive

breastfeeding rate than the national norm., such as Gorontalo with a percentage of 52.75%, then Central Kalimantan with a percentage of 55.98% and followed by North Sumatra with a percentage of 57.83%.

Efforts to improve the nutrition of Babies ages 0–6 months are predicated on the idea that undernourished children would experience reduced physical growth, brain development, child intellect, and productivity; the majority of these effects occur before the age of two years. cannot be repaired. One of them is through efforts to provide exclusive breastfeeding, the provision of exclusive breastfeeding is influenced by various factors including breast milk not coming out after giving birth, insufficient breast milk production, difficulty for babies in sucking, and the condition of the mother's nipples not coming out (Sattu, 2023) (Mabsuthoh et al., 2022).

There are many types of plants that are believed to be able to facilitate breast milk, one of which is the Moringa Oleifera leaf, a type of lactagogum which has long been proven to help smooth breast milk because it contains phytosterol compounds (lactagogum effect) which function to increase and smooth breast milk production. Lactagogum has the potential to stimulate the hormones oxytocin and prolactin such as alkaloids, polyphenols, steroids, flavonoids which are most effective in increasing and facilitating breast milk production (Safarringga et al., 2021)(Ahlia et al., 2021). The aimed of this study to determine the effect of increasing breast milk production after drinking 2 grams of Moringa leaf tea per day for 7 days.

METHOD

This type of research uses a quasi-experiment with one group pre-test and post-test without control design, which is carried out pre-test first before giving intervention to respondents, then after the intervention is carried out post-test. The Independent Variable in this study is the provision of 2 grams of Moringa leaf tea given 2 times a day for 7 days by brewing with 150 ml of hot water, the dependent variable in this study is breast milk production in postpartum mothers (Juliansyah Noor, 2016).

The number of samples used in this study was 10 postpartum mothers who experienced irregular breast milk flow and were willing to be respondents. In this study, the instrument is an intervention that includes a silent lesson and the distribution of ASI products to the kuesioner. The amount of teh daun kelor, which is roughly 2 grams and administered twice daily for seven days using 150 milliliters of panas air, is the study's independent variable; the ASI product that is administered to the persalinan ibu is the dependent variable. The statistical using the Saphiro Wilk statistical analysis (Iman Muhammad, 2017)

RESULTS

Table 1. Characteristics of Postpartum Mothers at the Siti Kholijah Hsb Primary Clinic in 2024

Characteristics of responden	n	%
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Age		
<20 years	0	0
20-30 years	7	70
>35 yearsl	3	30
Total	10	100
Parity		
Primipara	2	5,7
Multipara	17	48,6
Tall	16	45,7
Total	10	100

Based on the characteristics of postpartum mothers, such as maternal age and maternal parity, the study's findings indicated that in 2024, seven respondents (70%) and three respondents (30%) were between the ages of 20 and 35 at the HSB Siti Kholijah Primary Clinic. Regarding maternal parity features, six respondents (60%) had multiparous parity and four respondents (40%) had primiparous parity.

Table 2. Effects before and after giving moringa leaf tea to postpartum mothers

Group	Saphiro – Wilk		
	Statistik	F	Sig
Breast milk production of postpartum mothers before being given Moringa Leaf Tea (Pre-test)	0.879	10	0.126
Breast milk production of postpartum mothers after being given Moringa Leaf Tea (Post-test)	0.915	10	0.320

Based on the research results, it is known that df (degrees of freedom) of pre-test and post-test breast milk production is 10, meaning less than 50, so the normality test technique used is Shapiro-Wilk. Based on the normality test using Shapiro-Wilk, the pre-test sig value is $0.126 > 0.05$ and the post-test sig is $0.320 > 0.05$, which means that the data is normally distributed.

Table 3. Paired T-Test Results

Group	F	Min	Max	Mean	SD
Pre test	10	5	30	13.50	7.835
Post test	10	20	70	50.50	13.834

Based on table 3 using the Paired T Test, it shows that there is a significant difference between before

and after being given moringa leaf tea for the smooth production of breast milk in postpartum mothers, with a significance of 0.001 & It; 0.05, which means that the hypothesis states that there is an impact of consuming tea made from moringa leaves on the uninterrupted production of breast milk in postpartum mothers at the Siti Kholijah Hsb Marelan Primary Clinic in 2024.

DISCUSSION

The results indicated that postpartum mothers' breast milk production increased before consuming moringa leaf tea at the Siti Kholijah Hsb Marelan Primary Clinic in 2024, with an average of 13.50 and a standard deviation of 7.835; after consuming moringa leaf tea, the average was 50.50 and the standard deviation was 13.834.(Yustina et al., 2023) .

Numerous minerals, including calcium, iron, protein, vitamin A, vitamin B, and vitamin C, are found in moringa leaves, according to study, and are crucial for producing smooth breast milk. Compared to wet moringa leaves, dry moringa leaves have a higher content (Nurrofah et al., 2022; Sinaga et al., 2022; Anuhgera et al., 2022).

Asnita Sinaga and Kamelia Sinaga (2021) proved the effect of giving boiled moringa leaves on smooth breast milk production in postpartum mothers. The results of the study showed that the average smoothness of breast milk production before being given boiled moringa leaves was 4.00 with a standard deviation of 1.622, while the average smoothness of breast milk production after being given boiled moringa leaves was 6.15 with a standard deviation of 1.137 (Rismawati et al., 2024) (Mertasari et al., 2023).

According to Amilya Safarringga and Ratna Dewi Putri entitled "The Effect of Giving Moringa Leaf Extract on Breast Milk Production in Postpartum Mothers at BPS Eliana Putriani, Jati Agung District, South Lampung Regency" the results of the study showed that the average breast milk production in breastfeeding mothers before being given moringa leaf extract was 68.33 ml and after the intervention in the form of giving moringa leaf extract was 105.00 ml. This study shows that giving moringa leaf extract has been proven to be

effective or has an effect on breast milk production in breastfeeding mothers (Safarringga et al., 2021).

Moringa leaf tea can increase the smoothness of breast milk production because the saponin and alkaloid content in moringa leaves has a function that works directly on all smooth muscles. When smooth muscles contract, there will be breast milk release and an increase in the number and diameter of the average alveoli is proportional to the increase in breast milk produced. So it can be concluded that there is an effect of giving moringa leaf tea on the smooth production of breast milk after being consumed by postpartum mothers at the Siti Kholijah Hsb Marelan Primary Clinic in 2024 (Jannati, 2020).

The implications of this study can be useful for breastfeeding mothers, especially for mothers who are in the postpartum period so that during this period breast milk production can increase and babies get good nutritional adequacy. The limitations of this study are that researchers still have difficulty in obtaining respondents and there are still respondents who are not willing to be studied.

CONCLUSION

There was a significant increase in breast milk production in mothers after giving birth who drank 2 grams of moringa leaf tea for 7 days.

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