EFFECT OF KATUK LEAF DECOCTION ONADEQUACY OF BREAST MILK PRODUCTION IN BREASTFEEDING MOTHERS

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ABSTRAK : PENGARUH PEMBERIAN REBUSAN DAUN KATUK TERHADAP PRODUKSI ASI PADA IBU MENYUSUI

Latar Belakang: Menurut *World Health Organization (WHO*) tahun 2022 rata - rata angka pemberian ASI di dunia baru berkisar 38%. Hal ini jauh diatas target 50%. dI Indonesia, meskipun sejumlah besar perempuan (96%) sudah menyusui anaknya, tapi hanya 48,6% bayi yang mendapat ASI. (Kemenkes, 2022), Seorang ibu menyusui dalam praktik memberikan ASI, itu tidak semudah yang dibayangkan. Selain nutrisi, menyusui memerlukan keyakinan dan tekad ibu untuk memberikan asupan yang terbaik kepada anaknya, Adapun upaya yang dapat dilakukan yaitu dengan mengonsumsi makanan yang dapat dijadikan ASI booster yang akan memuat meningkatnya produksi ASI pada ibu, yaitu dengan cara mengonsumsi tanaman obat atau tradisional yang dipercayai bisa meningkakan produksi ASI. Terdapat berbagai jenis tanaman tradisional yang digunakan ibu yang menyusui sebagai upaya peningkatan produksi ASI, salah satu cara yang bisa dilakukan adalah dengan memanfaatkan daun katuk (Friska Armynia Subratha, 2020).

Tujuan: Mengetahui adanya pengaruh pemberian daun katuk pada ibu menyusui terhadap Peningkatan Produksi ASI di Wilayah Kerja Puskesmas Naras Kota Pariaman tahun 2025

Metodologi: Penelitian ini menggunakan metode kuantitatif menggunakan rancangan quasy]eksperiment dengan desain One Group Pretest Posttest. Di dalam desain ini observasi dilakukan sebanyak dua kali yaitu sebelum eksperimen dan sesudah eksperimen yang di pantau selama 7 hari umtuk mengukur adanya perbedaan antara sebelum eksperimen dan sesudah eksperimen. Data dianalisis menggunakan analisis univariat, bivariat, dan multivariat. Pengumpulan data menggunakan lembar observasi. Analisis univariati menggunakan distribusi tendensi sentral dan analis bivariatnya menggunakan uji t pasangan

Hasil penelitian menunjukan bahwa rata-rata kecukupan Air Susu Ibu pada ibu menyusui kelompok eksperimen sebelum pemberian daau katuk yakni 16 responden (66.7%), dan sesudah pemberian rebusan daun katuk di wilayah kerja Puskesmas naras hilir kota pariaman mayoritas produksi ASI nya banyak yakni 24 responden (100%). Kesimpulan dari penelitian ini adalah pemberian rebusan daun katuk terbukti efektif terhadap kecukupan Air Susu Ibu.

Kesimpulan : Ada pengaruh pemberian daun katuk pada peningkatan produksi ASI dengan penambahan berat badan bayi di Wilayah Kerja Puskesmas Naras Kota Pariaman tahun 2025

Saran: Untuk wilayah kerja Puskesmas Naras Kota Pariaman agar dapat memanfaatkan daun katuk sebaik mungkin agar untuk meningkatkan Produksi ASI khususnya di wilayah kerja Puskesmas Naras Kota Pariaman.

Kata Kunci : Daun katuk, Produksi ASI

ABSTRACT

Background: According to the World Health Organization (WHO) in 2022, the average breastfeeding rate in the world is only 38%. This is far above the target of 50%. In Indonesia, although a large number of women (96%) have breastfed their children, only 48.6% of infants are breastfed. (Ministry of Health, 2022) A breastfeeding mother's practice of breastfeeding is not as easy as one might think. In addition to nutrition, breastfeeding requires the mother's belief and determination to provide the best intake to her child. The efforts that can be made are by eating foods that can be used as breast milk boosters that will increase breast milk production in mothers, namely by consuming medicinal or traditional plants that are believed to increase breast milk production. There are various types of traditional plants used by breastfeeding mothers as an effort to increase breast milk production, one way that can be done is by utilizing katuk leaves (Friska Armynia Subratha, 2020).

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Objective: To determine the effect of giving katuk leaves to breastfeeding mothers on increasing breast milk production in the Naras Health Center Work Area, Pariaman City in 2025.

Methodology: This study uses quantitative methods using quasy experimental design with One Group Pretest Posttest design. In this design, observations were made twice, namely before the experiment and after the experiment which was monitored for 7 days to measure the difference between before the experiment and after the experiment, the sample in this study was 24 people. Sample selection by setting subjects who meet the criteria, this research was conducted in March and April 2025. Data collection using observation sheets. Data analysis using univariate analysis using central tendency distribution and bivariate analysis using paired t test.

The results showed that the average adequacy of breast milk in breastfeeding mothers in the experimental group before giving katuk leaves was 16 respondents (66.7%), and after giving a decoction of katuk leaves in the working area of the Naras hilir health center in Pariaman city the majority of breast milk production was a lot, namely 24 respondents (100%). The conclusion of this study is that giving a decoction of katuk leaves is proven effective on the adequacy of breast milk.

Conclusion: There is an effect of giving katuk leaves on increasing breast milk production on infant weight gain in the Naras Health Center Working Area of Pariaman City in 2025

Suggestions: Providing information and knowledge to breastfeeding mothers to use katuk leaves which can be processed to help smooth the flow of breast milk.

Keywords: Catuk leaf, Breast milk production.

INTRODUCTION

Breast milk is the best source of nutrition for children because the nutrients in it are quickly processed and utilized by the body, so that it can meet the growth needs of children from the age of 6 months to 2 years (Dyah Lestari et al., 2024). Breastfeeding plays a crucial role in providing essential nutrients that support optimal growth, as well as maintaining healthy development and survival. In addition, empirical evidence shows that breastfeeding contributes significantly to improving the well-being of mothers and children, while reducing the risk of neonatal infections and transmission of pathogens that have the potential to cause serious diseases. (Selasih Putri Isnawati, 2021).

Breastfeeding is the process of giving milk to babies with breast milk from the mother's breast since the baby was born and at least 6 months to 2 years or more. Breast milk has many benefits because it contains proteins, lipids, and complex carbohydrates and antibody substances to protect babies from infection because it is easily digested and absorbed which is beneficial for optimal growth and development.

Breast milk has many benefits for babies, where the composition of breast milk greatly determines the process of growth and brain tissue of babies, and exclusive breastfeeding can protect babies from sudden infant death syndrome (SIDS) (Wijaya, 2023)

According to the World Health Organization (WHO) in 2022, the average breastfeeding rate in the world is only around 38%. This is far above the target of 50%. In Indonesia, although a large number of women (96%) have breastfed their children, only 48.6% of infants are breastfed. (Ministry of Health, 2022)

Based on data obtained in 2022, the coverage rate of breastfeeding for infants aged 0-6 months in Indonesia was only 48.6%. The highest percentage of breastfeeding is owned by West Nusa Tenggara at 69.84% while the lowest percentage of breastfeeding is owned by West Papua with a value of 20.57%. (Ministry of Health, 2022).

Exclusive breastfeeding coverage in Pariaman City still has not reached the target set by the government of 80%. Pariaman City experienced a decrease in exclusive breastfeeding from 80.1% in 2019 to 70.3% in 2020 (Pariaman city profile, 2020).

The lack of breastfeeding for infants due to the small amount of breast milk produced by mothers is influenced by many factors, one of which is hormone. There are two hormones that affect milk production and milk ejection, prolactin and oxytocin. Prolactin affects the amount of breastmilk production, while oxytocin affects the process of breastmilk ejection. Prolactin is related to the mother's nutrition, the more nutritional intake, the more breast milk production. Nutritious food consumed by the mother during breastfeeding will be metabolized by the digestive system. Nutrients will be absorbed by the body and flowed into breast milk so that more breast milk is produced (Maryunani, 2021)

Breastfeeding mothers should pay attention to several things that improve the quality and volume of breast milk they produce. There are some suggestions that need to be considered by mothers who are breastfeeding to keep breast milk flowing, namely consumption of vegetables, fruits that can increase the volume of breast milk. The impact of inadequate breastmilk makes mothers think that their babies will not get enough breastmilk, so mothers often take the step of stopping breastfeeding and breastfeeding. replacing it with formula

Early provision of food or drink other than breast milk, such as formula milk, will show the baby's nutritional status is lacking, it has an impact on the baby's health including digestive disorders such as diarrhea, difficulty defecating, vomiting, and the baby will experience breastfeeding disorders.

Efforts to facilitate breast milk production usually use pharmacological or non-pharmacological treatment. Pharmacological treatment of breast milk production must be in accordance with the doctor's recommendations and prescriptions because of the side effects, including diarrhea, fatigue, fatigue, drowsiness, dry mouth and headache. Non-pharmacological treatment consists of oxytocin massage, breast care, and one of the things that can be done to facilitate breast milk production in breastfeeding mothers is by consuming decoction and extract of katuk leaves. Research conducted by Hayati that one of the benefits of katuk leaves is to facilitate breast milk (Hayati, 2016).

A breastfeeding mother's practice of breastfeeding is not as easy as one might think. In addition to nutrition, breastfeeding requires a mother's belief and determination to provide the best nutritional intake to her child. (Friska Armynia Subratha, 2020)

The efforts that can be made are by consuming foods that can be used as breast milk boosters that will increase breast milk production in mothers, namely by consuming medicinal or traditional plants that are believed to increase breast milk production. There are various types of traditional plants used by breastfeeding mothers as an effort to increase breast milk production, one way that can be done is by utilizing katuk leaves (Sauropus Androgynus), (Rahmanisa, 2016).

Sutomo, (2016), revealed that giving katuk leaves up to 170 grams / day can increase milk production by 45%. Situmorang, (2019), revealed that there is an effect of consumption of boiled water of katuk leaves on breast milk production in postpartum women where giving a decoction of katuk leaves to nursing mothers as much as 3x1 with 150 cc can increase breast milk production.

The results of research by Rosdianah and Irmawati (2021) state that there is an effect of giving katuk leaf extract on the smoothness of breast milk in mothers who have babies aged 0-6 months. So that katuk leaf extract can be recommended for mothers who have problems in breastfeeding. Catuk leaf extract can facilitate and increase milk production in breastfeeding mothers coupled with consuming adequate nutrition, the frequency of breastfeeding according to the baby's wishes (Rosdianah & Irmawati, 2021)

The results of previous research using paired tests showed that the administration of katuk leaf extract had a significant effect on the adequacy of breast milk production, thus contributing to an increase in exclusive breastfeeding coverage (Rizka Salsabila et al., 2024). Research conducted by (Irmawati et al., 2021)

This type of plant or vegetable known as Katuk leaf is included in the Euphorbiaceae family and one of the benefits of katuk leaves which is quite popular is its benefit as facilitating and also producing breast milk (Suyanti & Anggraeni, 2020).

Katuk is a vegetable plant widely found in Southeast Asia. This plant is known in several languages as mani cai (Chinese), cekur manis (Malay), in Indonesia the Minangkabau people call katuk by the name simani. In addition to calling katuk, Javanese people also call it katukan or babing. Meanwhile, Madurese people call it kerakur and Balinese people know it better as cinnamon. Katuk plants have actually been known by our ancestors since the 16th century (Santoso, 2014).

Katuk is a clumping shrub type plant with a height of 1-5 m. The stems grow upright and woody. The stem grows upright and woody. If the tip of the stem is trimmed, new shoots will grow that form branching. The leaves are small and look like moringa leaves, green in color. Katuk is a flowering plant. The flowers are small, dark red to yellowish in color, with red spots. The flower will produce a white fruit in which there are black seeds (Santoso, 2014).

The advantages of consuming katuk leaves by boiling are more accessible among the public. Boiled katuk leaves can be used immediately without going through a complicated purification process, making it more readily available and practical for daily consumption. This method is also more natural as it only involves simple boiling, without the addition of chemicals or excessive processing, thus maintaining the purity and integrity of the original katuk leaf nutrients

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The utilization of extract or decoction of katuk leaves can increase the mother's breast milk production by 50.47% without decreasing the level of breast milk and the advantages of consuming katuk leaves by boiling are more accessible among the public. Boiled katuk leaves can be directly used without going through a complicated purification process, making it more readily available and practical for daily consumption. This method is also more natural as it only involves simple boiling, without the addition of chemicals or excessive processing, thus maintaining the purity and integrity of the original katuk leaf nutrients. (Suwanti, 2020).

Katuk leaves contain almost 7% protein and 19% crude fiber, vitamin K, pro-vitamin A (beta carotin Vitmin B and C. Minerals contained are Calcium (2.8%) iron, potassium, phosphorus and magnesium. The protein content in katuk leaves is effective for stimulating the production of breast milk. While the content of steroids and polyphenols in it can function to increase prolactin levels, thus breast milk production can increase (Santoso, 2015).

RESEARCH METHODS

This type of research is quantitative research using a quasy-experiment design with a One Group Pretest Posttest design. In this design, observations are made twice, namely before the experiment and after the experiment, the difference between before the experiment and after the experiment is assumed to be the effect of treatment or experimentation.

The population in this study were all breastfeeding mothers who had babies aged 0-6 months totaling 24 people, the sample in this study was taken by total sampling technique, namely by sampling where the entire population was taken as a sample. which has inclusion and exclusion criteria, samples that meet the inclusion criteria include: breastfeeding mothers who experience low milk production, breastfeeding mothers who are breastfeeding babies aged 0-6 months and breastfeeding mothers who are willing to be respondents, while the exclusion criteria include breastfeeding mothers who are breastfeeding babies older than 1 year, breastfeeding mothers who are not present during data collection

The population in this study were all breastfeeding mothers who had babies aged 0-6 months totaling 24 people, the location of the study was carried out in the working area of the Naras downstream health center in North Pariaman City 2025 in March to April 2025. Data collection using observation sheets. data analysis using univariate analysis with central tendency distribution and bivariate analysis using paired t test.

The administration of katuk leaves given to breastfeeding mothers from day 1 to day 7. By the way before the water was boiled, it showed that only about 30 milliliters of breast milk was produced. In addition, the amount of breast milk produced increased from only 30 ml to 60-80 ml after being given a decoction of katuk leaves while the assessment of breast milk production is seen from the weight gain of breastfeeding mothers before and after receiving a decoction of katuk leaves and monitoring the average increase in baby's body weight along with BAK expenditure on the first day to day seven by using the katuk leaf plant which can be processed to help facilitate the release of breast milk production.

RESEARCH RESULTS

Univariate analysis

Table 1
Characteristics of Respondents Based on the Age of Breastfeeding Mothers in the Working Area of Naras Downstream Community Health Center, Pariaman City 2025

Respondent characteristics (Age)	Frequency (n=24)	Percentage (%)
< 20 years	7	29,1
20-35 years	13	54,2
35 years	4	16,7

Based on the results of table 1 above, it can be seen that of the 24 respondents who have Respondent Characteristics Based on Age of Breastfeeding Mothers in the Work Area of Naras Health Center, Pariaman City 2025, demographic data was obtained with the majority age being 20-35 years as many as 13 respondents (54.2%)

Tabel 2
Characteristics of Respondents Based on Education of Breastfeeding Mothers in the Working Area of Naras Hilir Health Center, Pariaman City 2025

Respondent characteristics (Education)	Frequency (n=24)	Percentage (%)
Elementary School	3	12,5
Junior High School	4	16,7
High School	11	45,8
College	6	25

Based on the results of table 2 above, it can be seen that of the 24 respondents who have Respondent Characteristics Based on Education of Breastfeeding Mothers in the Work Area of Naras Hilir Health Center, Pariaman City 2025, the demographic data obtained with the majority of education is high school / equivalent as many as 11 respondents (45.8%)

Table 3
Characteristics of Respondents Based on Breastfeeding Work in the Work Area Naras Hilir Health Center, Pariaman City 2025

Respondent characteristics (Occupation)	Frequency (n=24)	Percentage (%)
PNS	3	12,5
P.SWASTA	6	25
IRT	15	62,5

Based on the results of table 3 above, it can be seen that of the 24 respondents who have Respondent Characteristics Based on the Occupation of Breastfeeding Mothers in the Work Area of the Naras Hilir Health Center, Pariaman City 2025, demographic data was obtained with the majority of occupations being housewives as many as 15 respondents (62.5%).

Table 4
Characteristics of Respondents Based on Breastfeeding Parity in the Working Area Naras Hilir Health Center, Pariaman City 2025

Respondent characteristics (Parity)	Frequency (n=24)	Percentage (%)
Primipara	12	50
Multipara	5	20,8
Grandemultipara	7	29,2

Based on the results of table 4 above, it can be seen that of the 24 respondents who have Respondent Characteristics Based on Parity of Breastfeeding Mothers in the Working Area of the Naras Hilir Health Center, Pariaman City 2025, the demographic data obtained with the majority parity being Primipara as many as 12 respondents (50%).

Bivariate Analysis
Before giving boiled katuk leaves (Pretest)

Table 5
Characteristics of Respondents Based on Breastfeeding Work in the Work Area Naras Hilir Health Center, Pariaman City 2025

Respondent characteristics (Occupation)	Frequency (n=24)	Percentage (%)
Lack of breast milk	16	66,7
Enough breast milk	8	33,3
Many breast milk	-	-

Based on the results of table 5 above, it can be seen that breast milk production in breastfeeding mothers before giving boiled katuk leaves in the working area of the Naras Hilir Health Center, Pariaman City in 2025, the most respondents had low breast milk production, namely 16 respondents (66.7%).

After giving boiled katuk leaves (Posttest)

Table 6
Characteristics of Respondents Based on Breastfeeding Work in the Naras Hilir Health Center Work Area, Pariaman City 2025

Respondent characteristics (Occupation)	Frequency (n=24)	Percentage (%)
Lack of breast milk	-	-
Enough breast milk	-	-
Many breast milk	24	100

Based on the results of table 6 above, it can be seen that breast milk production in breastfeeding mothers after giving boiled katuk leaves in the work area of the Naras Hilir Health Center, North Pariaman City in 2025, the most breast milk production was 24 respondents (100%). Bivariate analysis was conducted to analyze the effect of giving boiled katuk leaves on breast milk production in breastfeeding mothers in the work area of the Naras Hilir Health Center using the paired sample t-test.

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Paired Samples Statiscs

Table 7
Paired Sample T-Test Results of Breast Milk Production in Breastfeeding Mothers in the Working Area of Naras Hilir Health Center, Pariaman City 2025, (n=24).

Mean	N	Std. Deviation Std. Error Mean
Pair 1		
Pretest	24	
Postest	24	

Based on Table 7, it can be explained that the results of administering katuk leaves before treatment was given to the intervention group obtained an average pretest value of 1.66 to an average posttest value of administering katuk leaves on breast milk production of 4.00 after giving boiled katuk leaves to 24 respondents.

Paired Samples Correlations

Katuk leaf decoction on breast milk production with sig. (2-tailed) 0.000<0.05, it can be concluded that there is an effect of giving katuk leaf decoction on breast milk production in breastfeeding in the work area of Naras Hilir Health Center, Pariaman City in 2025.

Table 8

		N	Correlation	Sig.
Pair 1	Pretest & Postest	24	0.000	,000

Paired Samples Test

Table9

Paired Differences 95% Confidence Interval of the Difference										
		Mean	Std Deviation	Std Mean	Error	Lower	Upper	t	df	Sign (2-tailed)
Pair 1	Pretest - Postest	-1,677	0,483	0,105		-1,887	-1,447	-15,811	20	,000

Table 10

		N	Correlation	Sig.
Pair 1	Pretest & Postest	24	0.000	,000

It is known that the Sig. (2-tailed) value is 0.000 <0.05, so there is a significant difference between the pretest and posttest on breast milk production in breastfeeding mothers in the work area of the Naras Hilir Health Center, Pariaman City 2025. The results of the paired sample t-test show a value of p = 0.000 <α = 0.05, this means that Ho is rejected Ha is accepted, meaning that there is an effect of giving boiled katuk leaves on breast milk production in breastfeeding mothers in the work area of the Naras Hilir Health Center, Pariaman City. The results of the paired sample t-test for the relationship between BB before and after being given boiled katuk leaves to breastfeeding mothers show a value of p = 0.000 <α = 0.05, this means that Ho is rejected Ha is accepted, meaning that there is an effect of increasing baby BB on giving boiled katuk leaves on breast milk production in breastfeeding mothers in the work area of the Naras Hilir Health Center, Pariaman City.

The results of the paired sample t-test for the relationship between the frequency of infant urination before and after being given boiled katuk leaves to breastfeeding mothers showed a p value = 0.005 <α = 0.05, this means that Ho is rejected. Ha is accepted, meaning that there is an effect of the frequency of infant urination on the provision of boiled katuk leaves on breast milk production in breastfeeding mothers in the work area of the Naras Hilir Health Center, Pariaman City in 2025.

Table 11

	BB bayi sebelum diberi daun katuk - BB bayi naik	
Pair 1	selama 1 minggu setelah diberi daun katuk	,000
Pair 2	Frekuensi BAK bayi (pre) - Frekuensi BAK bayi (post)	,005
Pair 3	Frekuensi BAB (pre) - Frekuensi BAB (post)	,008

The results of the paired sample t-test for the relationship between the frequency of infant defecation before and after being given boiled katuk leaves to breastfeeding mothers showed a p value = 0.008 <α = 0.05, this means that Ho is rejected, Ha is accepted, meaning that there is an effect of the frequency of infant defecation on the provision of boiled katuk leaves on breast milk production in breastfeeding mothers in the Naras Hilir Health Center work area, Pariaman City.

Table 12
Results of the Paired Sample T-Test on Breast Milk Production in Breastfeeding Mothers in the Working Area of the Naras Hilir Health Center, Pariaman City 2025

Kel	N	BB				BAK				BAB			
		BB 1		BB 7		BAK 1		BAK 7		BAB 1		BAB 7	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Kontrol	24	0,14	0,359	1,00	0,00	0,48	0,512	0,81	0,402	0,24	0,436	0,62	098

Based on the table above, it can be seen in the control group that the average difference in infant weight gain on day 1 to day 7 is 0.86, infant urination from day 1 to day 7 is 0.33 and the increase in the frequency of infant defecation (BAB) on day 1 to day 7 is 0.38. Research on the Effect of Giving Katuk Leaf Decoction on Breast Milk Production in Breastfeeding Mothers in the Naras Hilir Health Center Work Area, Pariaman City, was conducted from March to April 2025. Respondents in this study were breastfeeding mothers in the Naras Hilir Health Center work area, Pariaman City, as many as 24 respondents with a pre-experimental design whose design was a quasi-experimental design with a One Group PretestPosttestdesign

DISCUSSION

Based on the results of the study, it is known that breast milk production in breastfeeding mothers before giving a decoction of katuk leaves in the working area of the Naras Downstream Health Center in Pariaman City, most of the breast milk production is less, namely 16 respondents (66.7%). According to the researcher, the number of respondents who had less breast milk was due to breastfeeding mothers not immediately giving their breast milk after the baby was born because the mother's condition did not allow for direct breastfeeding due to fatigue so that it affected further milk production and the mother's ignorance of the importance of the first breast milk / colostrum.

Some respondents were multiparity. Proverawati (2010) stated that the number of childbirths experienced by mothers provides experience in breastfeeding and knowing how to increase breast milk production so that there are no problems for mothers in providing breast milk. First-time mothers and mothers who have given birth more than twice often find problems in breastfeeding. Problems that often arise are nipple blisters due to lack of experience or not ready to breastfeed physiologically and changes in the shape and condition of the nipples (Proverawati & Rahmawati, 2010).

Breastfeeding mothers have several factors that inhibit breast milk production, such as stress and lack of nutritional intake in the mother. During breastfeeding, the mother's nutritional needs must also be considered because the mother is responsible for producing breast milk for the baby in addition to her own needs. Steroids and polyphenols affect the prolactin reflex that causes the alveoli to produce breast milk, and also trigger the hormone oxytocin which causes the flow and release of breast milk, as well as lactogogum, an ingredient that can accelerate or facilitate the release of breast milk (Ramayulis, 2015).

Based on the results of this study, the most dominant respondents were high school /

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equivalent as many as 11 respondents (45.8%). Someone who has a high level of education will have good knowledge. According to the theory states that people who have higher education will respond rationally to the information that comes and will think about the extent of the benefits they will get. Someone who has higher education will be more receptive to new things so that information is more easily accepted, especially about exclusive breastfeeding (Mabud et al., 2014).

Some respondents were employed. Working is not a reason to stop exclusive breastfeeding for at least 4 months and if possible up to 6 months, even if maternity leave is only 3 months. With great knowledge about breastfeeding and how to express breast milk correctly, breast milk pumping equipment, and support from the work environment, a working mother can provide exclusive breastfeeding. Meanwhile, non-working mothers have a 0.396 times greater chance of providing exclusive breastfeeding than not providing exclusive breastfeeding because for female workers who give birth, providing exclusive breastfeeding is a dilemma, because the leave period is too short compared to the breastfeeding period, so they will give formula milk as a substitute for exclusive breastfeeding (Bahriyah et al., 2017).

This is in accordance with Soetjiningsih (2017), where success in breastfeeding is as follows: breastfeeding within one hour after birth breastfeeding exclusively, giving only breast milk. This means no other food or drink, not even water. Breastfeed whenever the baby asks (on-demand), as often as the baby wants, day and night. On both the right and left breast. Do not schedule. Milk production follows the law of demand, the more the baby sucks, the more milk is produced. Pump the breast after breastfeeding. Empty breasts will speed up milk production. Express milk by pumping or expressing by hand, when not with the child. If the baby still seems unsatisfied, pump the milk and put it in a bottle to give to the baby. But actually the use of pacifiers is not recommended at least until the age of 6 months because it can interfere with the development of the nervous system and bone structure of the head.

Don't move too quickly from the left breast to the right, and vice versa. The milk that comes out after the first 15 minutes contains a lot of fat that can fill the baby. Do not do the breastfeeding position lying down until you fall asleep if the mother has a habit of sleeping, because the baby can be crushed and cannot breathe. Eat nutritious food and drink plenty of fluids. This can be water, fruit juice, low-fat milk or soup. Eat plenty of green vegetables and seafood. Fresh katuk leaves produce faster than supplements such as Pro ASI or Current ASI. Don't think about dieting just yet. Slimming down can be done anytime while breastfeeding is only a short time, the good benefit for the baby is for his intelligence and endurance.

Control your emotions and keep your mind calm. Mothers should get enough rest and avoid stress. Stress makes breast milk suddenly dry. The most important thing is confidence that we are able to provide the best for our babies, namely breast milk. Based on the results of the study, it is known that breast milk production in breastfeeding mothers after giving a decoction of katuk leaves in the working area of the Naras hilir health center in Pariaman city, where the milk production is a lot, namely 24 respondents (100%). The number of respondents had a lot of breast milk after giving a decoction of katuk leaves because katuk leaves contain almost 7% protein and 19% crude fiber, vitamin K, pro-vitamin A (beta carotin Vitmin B and C.). Minerals contained are Calcium (2.8%) iron, potassium, phosphorus and magnesium. The protein content in katuk leaves is effective for stimulating the production of breast milk. While the content of steroids and polyphenols in it can function to increase prolactin levels, thus breast milk production can increase (Santoso, 2015).

Previous research using paired tests showed that the administration of katuk leaf extract had a significant effect on the adequacy of breast milk production, thus contributing to an increase in exclusive breastfeeding coverage (Rizka Salsabila et al., 2024). Research conducted by (Irmawati et al., 2021)

According to Wijono S, (2016), that katuk plants (Sauropus Androgynus (L.) Merr.) have long been used by the people of Indonesia and several neighboring countries, both as traditional medicine, as vegetables or dyes. It is reported that this plant is often used for the treatment of fever, ulcers, ulcers, frambusia, as a diuretic, facilitating breast milk and external medicine. But it is also mentioned that excessive consumption of katuk leaves can cause dizziness, drowsiness and constipation.

Katuk can be used because katuk is a plant that is easily found in Indonesia, katuk can usually be found in the garden and this can make it easier for anyone, especially nursing mothers who want to consume katuk. In its consumption, katuk can be consumed in various forms. Starting from being used as clear vegetables, pills, extracts. That's where the benefits of katuk leaves are used by the Indonesian people, especially for breastfeeding mothers. The content of compounds possessed by

katuk has the potential to increase oxytocin and prolactin hormones such as polyphenols, steroids, flavonoids, and alkonoids which can increase breast milk production (Erlanda et al., 2021). Katuk can increase breast milk production for mothers who consume it. Giving katuk both in the form of katuk extract and katuk decoction will increase breast milk production compared to breastfeeding mothers who are not given katuk leaf extract (Juliastuti, 2019)

The results of the paired sample t-test test showed a p value = 0.000 < α = 0.05, this means that Ho is rejected Ha is accepted, meaning that there is an effect of giving a decoction of katuk leaves on breast milk production in breastfeeding mothers in the working area of the Naras Downstream Health Center, Pariaman City in 2025

According to the researcher's assumption that the content contained in the decoction of katuk leaves can facilitate milk production by drinking a decoction of katuk leaves in 1 week. In addition, the factors of the appropriate mother's diet, the frequency of breastfeeding according to the baby's wishes, peace of mind and mind and the use of contraceptives that do not contain hormones. There is an effect of giving a decoction of katuk leaves on breast milk production.

Lusiana Darsono's (2014) research on the effect of a combination of katuk leaf extract and domperidone on the development of alveoli in lactating mice showed a significant difference between the intervention group and the control group (p=0.000<0.05) with a sample size of 30 mice that had given birth. Giving boiled katuk leaves to the group of mothers who had given birth and breastfed their babies for 15 days from the second to the third day after giving birth can increase breast milk production by 50.7% more compared to mothers who had given birth and breastfed their babies who were not given boiled katuk leaves, which can reduce the number of subjects with insufficient breast milk by 12.5%.

The results of this study will show that there is a significant effect of giving boiled katuk leaves on breast milk production. According to Saraswati's research, (2024), on the effectiveness of katuk leaf extract in breast milk production for successful breastfeeding, there is no difference between the intervention group and the control group given katuk leaf extract. This study did not measure the volume of breast milk but the success of breastfeeding was seen from the provision of exclusive breastfeeding during the study period without any additional drinks such as formula milk or rice water. There are several breastfeeding mothers who experience disruption to breast milk production. The content of alkaloids and sterols contained in katuk leaves can increase breast milk production. So that the need for breast milk that will be given to babies during the breastfeeding period can be met

According to Pawesti (2022), katuk leaves are widely used as fortification ingredients in food products intended for breastfeeding mothers. Consumption of katuk vegetables by breastfeeding mothers can significantly prolong the baby's breastfeeding time and for male babies it only increases the frequency and duration of breastfeeding. The content of katuk leaves for breastfeeding mothers is amino acids, saponins, and tannins and other compounds that can stimulate breast milk production.

According to the assumption of researchers, health problems are one of the important aspects that must be considered, one of which is providing exclusive breastfeeding to babies. By providing exclusive breastfeeding to babies, it can provide a strong body defense compared to those who do not get breast milk, in addition, breast milk also forms brain tissue because it contains omega 3 for the maturation of brain cells.

Factors that affect breast milk production are the mother's food. Food The food eaten by a breastfeeding mother does not directly affect the quality or quantity of breast milk produced. The nutritional elements in 1 liter of breast milk are equivalent to the nutritional elements contained in 2 plates of rice plus 1 egg. So, the same energy is needed as the amount of energy provided by 1 plate of rice to make 1 liter. If a mother who is breastfeeding her baby does not get additional food, there will be a decline in breast milk production (Utami, 2021).

CONCLUSION

The results of the study showed that the average adequacy of breast milk in nursing mothers in the experimental group before giving katuk leaves was 16 respondents (66.7%), and after giving boiled katuk leaves in the working area of the Naras Hilir Health Center, North Pariaman District, the majority of breast milk production was high, namely 24 respondents (100%). The conclusion of this study is that giving boiled katuk leaves has been proven effective in increasing breast milk adequacy.

SUGGESTIONS

Provide information and knowledge to breastfeeding mothers to use katuk leaf plants that

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can be processed to help smooth the flow of breast milk. For health workers, especially midwives in providing midwifery services in Pariaman City, to be active in socializing the benefits contained in katuk leaves so that the community can be used as a benchmark in making promotive efforts to increase baby weight and good breast milk production.

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