

## The Effect Of Giving Katuk Leaves To Post Partum Mothers To Improve Breast Milk At The Novi Lintas Timur Midwifery Clinic, Panyabungan District, Mandailing Natal Regency

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### ABSTRACT

Breast milk is the first, main and best food for babies, which is natural. Breast milk contains various nutrients needed for the growth and development of babies. One effort to increase breast milk production is by improving the quality of food that has a direct effect on milk production, namely katuk leaves. The aim of this research was to determine the effect of giving katuk leaf decoction to post partum mothers to facilitate breast milk. This research is a quantitative type with a pre-experiment design whose design uses the one group pretest-posttest design. The population in this study were 35 post partum mothers of patients at the Novi Lintas Timur Midwife Clinic. The sampling technique is Exhaustive Sampling (total sampling). Data analysis used the Wilcoxon test. The results of the study showed that the flow of breast milk in post partum mothers before and after giving katuk leaves experienced significant changes. The flow of breast milk in postpartum mothers before breastfeeding was 20 people who experienced insufficient breast milk and 15 people who had sufficient breast milk. Then after giving katuk, the smoothness of breast milk increased to 18 people and there were more than 10 people, while the smoothness of breast milk was less than 7 people. The results of statistical tests using the Wilcoxon rank test show that the p-value (0.000) <  $\alpha$  (0.05) means that  $H_0$  is rejected, so there is a significant effect of giving katuk leaves on increasing breast milk production in post partum mothers.

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## 1. INTRODUCTION

Children's growth and development need to be paid attention to from birth. Child growth is characterized by changes in body size or related to changes in body size or related to changes in size, number or dimensions at the cell to individual level. Meanwhile, child development is an increase in the ability of more complex body structures and functions which is characterized by the ability to speak, walk, run and others. Malnutrition in babies can result in stunted or disrupted growth and development (Fitri et al, 2021).

Breast milk is the first, main and best food for babies, which is natural. Breast milk contains various nutrients needed for the growth and development of babies. Related to this, there is something that is unfortunate, namely the low understanding of mothers, families and society regarding the importance of breast milk for babies. As a result, the exclusive breastfeeding program does not run optimally (Dwi Sunnar Prasetyo, 2019). Babies aged 0-6 months who receive exclusive breast milk is an indicator in the Ministry of Health's Strategy Plan for the 2020-2022 period, even in the previous Rensta period (2015-2019) this indicator has become an Activity Performance (IKK) indicator for the Directorate of Community Nutrition, because it is closely related to the program government priorities (Ministry of Health, 2020).

According to the World Health Organization(WHO) notes that the average rate of exclusive breastfeeding in the world is around 36%. Exclusive breastfeeding coverage is only 24%. Indonesia is ranked third out of 51 countries that took part in the policy and program status assessment conducted by the International Baby Food Action Network (IBFAN). Exclusive breastfeeding in developing

*The Effect Of Giving Katuk Leaves To Post Partum Mothers To Improve Breast Milk At The Novi Lintas Timur Midwifery Clinic, Panyabungan District, Mandailing Natal Regency. Dewi Srirahayu Tinendung et.al*

countries is only 39% (UNICEF, 2013). Exclusive breastfeeding coverage in ASEAN countries such as India has reached 46%, the Philippines 34%, Vietnam 27% and Myanmar 24% and Indonesia 33.6%. According to basic health research data (RISKESDAS) 2021, 52.5 percent - or only half of the 2.3 million babies aged less than six months who receive exclusive breast milk in Indonesia, or a decrease of 12 percent from the figure in 2021.

United Nations International Children's Emergency Fund (UNICEF) said that as many as 30,000 infant deaths in Indonesia and 10 million deaths of children under five in the world each year could be prevented by exclusive breastfeeding during the first six months of a baby's life. The impact of not giving exclusive breast milk to babies less than 6 months old is that there is an increase in susceptibility to disease in babies, there can be upper respiratory tract infections, diarrhea and severe intestinal disease in babies. The impact on the mother may be the risk of breast cancer. There are many benefits for babies. Breastfeeding has a very important role, especially for the growth, development and survival of the baby, rich in nutrients and antibodies. Meanwhile, for mothers, breastfeeding can reduce morbidity and mortality because the breastfeeding process will stimulate uterine contractions thereby reducing postpartum postnatal bleeding (IDAI, 2020).

The role of exclusive breastfeeding for the growth and development of babies is so great and important, but the achievement of exclusive breastfeeding based on data from the 2023 health profile of 186,460 babies aged <6 months was reported as only 75,820 babies received exclusive breastfeeding (40.66%). This achievement is still far from the target determined in the North Sumatra Provincial Health Service Strategic Plan for 2023, namely 53%. There are three regencies/cities with high exclusive breastfeeding coverage, namely North Nias (84.28%), Sibolga (72.12%), and Samosir (69.05%), while the three lowest regencies/cities are West Nias (11.96%), Serdang Bedagai (16.20%) and Nias (17.62%). So there are 10 regencies/cities that have achieved this target, namely North Nias, Sibolga, Samosir, North Tapanuli, South Tapanuli, Mandailing Natal, Tebing Tinggi, North Labuhan Batu, Diri and Humbang Hasundutan. In Indonesia, the percentage of exclusive breastfeeding for babies aged 0-5 months is 71.58% in 2022. This figure shows an improvement from the previous year which was 69.62%. In North Sumatra, it is 42.1%, the success of increasing this coverage cannot be separated from influencing factors such as the mother's education level, mother's profession, mother's age and parity (RI Health Profile, 2022).

North Sumatra Province with an achievement of >40% for districts, namely North Labuhan Batu at 97.90%, Samosir at 94.8%, Simalungun at 40.9% and for cities namely Gunung Sitoli at 84.5% and Sibolga at 46.7% (North Sumatrer Health Profile). Many things affect breast milk production. The production and release of breast milk is influenced by 2 hormones, namely prolactin and oxytocin. Prolactin affects the amount of breast milk produced. Meanwhile, oxytocin influences the process of producing breast milk. Prolactin is related to maternal nutrition, the better the nutritional intake, the greater the production of breast milk (Maryunani, 2019). Research in 42 developing countries shows that exclusive breastfeeding for six months is a public health intervention that has the greatest positive impact on reducing under-five mortality, which is around 13%. Proper complementary feeding with breast milk can reduce the infant mortality rate by 6%. Based on the results of this research, the behavior of giving exclusive breast milk to babies from birth to 6 months of age can reduce the death rate of 30,000 babies in Indonesia each year (Indonesian Lactation Center, 2020). In the 2019 World Health Assembly (WHA) Resolution it is stated that babies have the right to receive exclusive breast milk from birth until 6 months of age, after which they can be given complementary breast milk (MP-ASI).

Exclusive breastfeeding for up to 6 months continued until the first 2 years of life can prevent 13% of the 10 million deaths each year (Ballard, 2022). In 2020, of the number of babies less than 6 months old in Indonesia who were recalled, of the 3,196,303 recommendations for babies less than 6 months old, there were 2,113,564 babies less than 6 months old who received exclusive breast milk or around 66.1%. The achievement indicator for the percentage of babies aged less than 6 months who receive exclusive breastfeeding has met the 2020 target, namely 40% (Ministry of Health, 2020). The factor that hinders the achievement of exclusive breastfeeding is that at the beginning of 2020 the world was hit by the Covid-19 pandemic, including Indonesia (Ministry of Health, 2020). Apart from that, there is a lack of support from the environment, but success or failure in breastfeeding still depends on

the amount of breast milk produced, babies who are lazy to breastfeed cause the nipples to become sore, causing the mother to be reluctant to breastfeed so that breast milk production will decrease and have an impact on the baby who is lazy to breastfeed (Farida, 2021).

Based on the results of the 2017 Indonesian Health Demographic Survey (SDKI), only 3.7% of babies received breast milk on the first day, while breastfeeding for the first 2 months was 64%, which then decreased in the following period from 3 months to 45.5%. At the age of 4-5 months it was 13.9% and at the age of 6-7 months it was 7.8%. Meanwhile, there was an increase in the use of breast milk substitutes (MPASI), which can be called formula or formula milk, three times in 2015 from 10, 8% to 32.4% in 2017, this may be due to a lack of understanding, family and environmental support regarding exclusive breastfeeding (Tjipta, 2019).

Data results in Mandailing Natal Regency, coverage of exclusive breastfeeding using Katuk Leaf Boil at the Siabu Community Health Center in 2022 is 27.6% of 70 babies, and has not yet reached the target of 80%. And based on Tri Astuti's previous research at Aafa Royhan University in 2022, it was explained that among 10 mothers who had babies 6-12 months old and interviewed, there were 7 people who did not breastfeed exclusively. This is caused by family support which tends to provide additional food such as honey and starch water to the baby on the grounds that the baby will be hungry/fussy if only given breast milk.

Based on an initial survey conducted by researchers on January 17 2022 by asking for data about post partum mothers who consumed katuk leaves to facilitate breast milk at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency, researchers obtained data from 10 post partum mothers which includes consuming katuk leaves. From the description above, researchers are interested in conducting research on "the effect of giving katuk leaf decoction to post partum mothers to facilitate breast milk at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Regency, Christmas 2022".

## 2. METHOD

The type of research is quantitative, namely a research method based on the philosophy of positivism, as a scientific or scientific method because it meets scientific principles concretely or empirically, objectively, measurably, rationally and systematically (Sugiyono 2019), with a pre-experiment design whose design uses the one group pretest-posttest design, because this research aims to compare the results of the intervention group pretest and intervention posttest (Arikunto, 2019).

This research was conducted at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency. For the reason that the data obtained by researchers is sufficient, the location is close to the research site and research has never been conducted on the effect of giving katuk leaves to post partum mothers to facilitate breast milk. This research was carried out from March to May 2022. According to Notoadmojo (2019), the population is the entire object studied. The population in this study were 35 post partum mothers of patients at the Novi Lintas Timur Midwife Clinic from January to July 2022. The sample in this study was post partum mothers of patients at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency with the criteria of being willing to be research respondents. The sampling technique used in this research was Exhaustive Sampling theory (total sampling), namely 35 respondents (Sugiyono, 2017).

## 3. RESULTS

In this chapter, the research results and discussion of research regarding the effect of giving katuk leaves on increasing breast milk production in post partum mothers at the Midwife Novi Lintas Timur clinic, Panyabungan District, Mandailing Natal Regency are described. This research was conducted on 35 post partum mothers at the Novi Midwife Clinic in 2022.

### Univariate Analysis

#### Frequency Distribution of Respondents by Age at the Novi Midwife Clinic in 2022

No	Age	F	(%)
1	< 20 Years	3	8.6
2	20 – 35 Years	27	77.1

*The Effect Of Giving Katuk Leaves To Post Partum Mothers To Improve Breast Milk At The Novi Lintas Timur Midwifery Clinic, Panyabungan District, Mandailing Natal Regency. Dewi Srirahayu Tinendung et.al*

No	Age	F	(%)
3	>35 Years	5	14.3
	Total	35	100.0

Based on the table above, it can be seen that the most respondents were 20-35 years old, namely 27 people (77.1%) and the least respondents were < 20 years old, 3 people (8.6%).

#### **Distribution Frequency of Respondents based on Education at the Novi Midwife Clinic in 2022**

No	Education	F	(%)
1	elementary school	4	11.4
2	JUNIOR HIGH SCHOOL	12	34.3
3	SENIOR HIGH SCHOOL	16	45.7
4	PT	3	8.6
	Total	35	100.0

Based on the table above, it can be seen that the most respondents had a high school education, namely 16 people (45.7%) and the least number of respondents had a tertiary education, namely 3 people (8.6%).

#### **Frequency Distribution of Respondents by Occupation at the Novi Midwife Clinic in 2022**

No	Work	F	(%)
1	IRT	21	60.0
2	Farmer	3	8.6
3	Self-employed	8	22.9
4	Civil servants	3	8.6
	Total	35	100.0

Based on the table above, it can be seen that the most respondents worked as Housewives (IRT) as many as 21 people (60.0%) and the least number of respondents worked as farmers as many as 3 people (8.6%).

#### **Frequency Distribution of Respondents based on Information Sources at the Novi Midwife Clinic in 2022**

No	Resources	F	(%)
1	Print media	5	14.3
2	Electronic Media	19	54.3
3	Health workers	5	14.3
4	Family	6	17.1
	Total	35	100.0

Based on the table above, it can be seen that the most respondents sourced information from electronic media, namely 19 people (54.3%) and the least number of respondents sourced information from print media, namely 5 people (14.3%).

#### **Frequency Distribution of Respondents based on Parity at the Novi Midwife Clinic in 2022**

No	Parity	F	(%)
1	Primipara	17	48.6
2	Scundipara	13	37.1
3	Multiparous	3	8.6
4	Grande multiparous	2	5.7
	Total	35	100.0

Based on table 4.7 above, it can be seen that the most respondents were primipara parity, namely 17 people (48.6%) and the fewest respondents had grande multipara parity, namely 2 people (5.7%).

#### **Data on the Frequency of Breast Milk Production in Post Partum Mothers Before Giving Katuk Leaf Decoction**

Breast milk production	F	(%)
Lack of breast milk	20	57.1

<b>Breast milk production F (%)</b>	
Enough breast milk	15 42.9
More breast milk	0 0.0
Total	35 100

Based on table 4.8, it shows that the majority of post-partum mothers' breast milk production before giving katuk leaf decoction had less breast milk production, namely 20 respondents (57.1%).

#### **Data on the Frequency of Breast Milk Production in Post Partum Mothers After Giving Katuk Leaf Decoction**

<b>Breast milk production F %</b>	
Lack of breast milk	7 20.0
Enough breast milk	18 51.4
More breast milk	10 28.6
Total	35 100.0

Based on the table above, it shows that the majority of post-partum mothers' breast milk production after giving katuk leaf decoction had sufficient breast milk production, namely 18 respondents (51.4%).

#### **Bivariate Analysis**

**There is an effect of decoction of katuk leaves on increasing breast milk production in post partum mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency**

<b>Breast milk production</b>	<b>Increased Breast Milk Production Before and after Giving Katuk Leaves</b>				<b>Z-count</b>	<b>pValue</b>
	<b>Before</b>		<b>After</b>			
	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>		
Lack of breast milk	20	57.1	7	20.0	-4,600	0,000*
Enough breast milk	15	42.9	18	51.4		
More breast milk	0	0.0	10	28.6		

Based on the table above, it shows that breast milk production in post partum mothers at the Midwife Novi clinic before and after giving katuk leaves experienced a significant increase. Breast milk production in post partum mothers before giving katuk leaves was 10 people who experienced insufficient breast milk and 15 people who had sufficient breast milk. Then after giving katuk leaves, breast milk production increased to 18 people, while 7 people had less breast milk production and 10 people had more breast milk production.

The results of statistical tests using the Wilcoxon rank test show that the p-value (0.000) <  $\alpha$  (0.05) means that  $H_0$  is rejected, so there is a significant effect of katuk leaf decoction on increasing breast milk production in post partum mothers at the Midwife Novi Lintas clinic. Timur, Panyabungan District, Mandailing Natal Regency in 2022. These results prove that giving katuk leaves has a positive influence on increasing breast milk production in post partum mothers at the Novi Midwife Clinic.

#### **Discussion**

##### **Breast Milk Production in Post-partum Mothers Before Giving Katuk Leaves at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency**

Based on the results of research before giving katuk leaves to post-partum mothers, it shows that breast milk production in post-partum mothers before giving katuk leaves at the Midwife Novi Lintas Timur clinic, Panyabungan District, Mandailing Natal Regency, the majority had less breast milk production, namely 20 respondents (57.1%).

The characteristics of the respondents in this study were postpartum mothers with an age range of 20 to 35 years. The mother's age determines maternal health and is related to the conditions of pregnancy, childbirth and postpartum as well as how to care for and breastfeed the baby. Mothers aged 20-35 years, referred to as "adulthood" and also known as the reproductive period, can face problems emotionally calmly, especially in dealing with pregnancy, childbirth, postpartum and caring for their baby later. In mothers aged 35 years and over, hormone production is relatively reduced, resulting in a

*The Effect Of Giving Katuk Leaves To Post Partum Mothers To Improve Breast Milk At The Novi Lintas Timur Midwifery Clinic, Panyabungan District, Mandailing Natal Regency. Dewi Srirahayu Tinendung et.al*

decreased lactation process, while in adolescents aged 12-19 years they must also be studied carefully because their physical, psychological and social development is not yet ready, which can disrupt psychological balance and can affect their health. breast milk production (Nurbayanti, 2016).

Some of the respondents' education was secondary (high school) and tertiary education. Someone who has a high level of education will significantly have good knowledge. According to theory, people who have higher education will respond rationally to the information that comes and will think about the benefits they will get. Someone who has a higher education will more easily accept new things so that information is easier to accept, especially about exclusive breastfeeding (Mabud et al., 2019).

Some respondents work. 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. Great knowledge about breastfeeding and how to express breast milk properly, equipment for expressing breast milk, and a supportive work environment, a working mother can breastfeed exclusively. Meanwhile, mothers who do not work have a 0.396 times greater chance of giving exclusive breast milk than not giving exclusive breast milk because for female workers who give birth, giving exclusive breast milk is a dilemma, because the leave period is too short compared to the breastfeeding period, so they will give milk formula as a substitute for exclusive breastfeeding (Bahriyah et al., 2017).

Apart from consuming healthy and balanced foods such as green vegetables, consuming boiled katuk leaves for 14 days can facilitate breast milk in mothers due to the content of katuk leaves which contain quite high levels of protein, vitamin C, phosphorus, calcium and iron, then with compliance mothers to give breast milk to their babies on demand so that the baby's sucking can stimulate the hormones oxytocin and prolactin to produce breast milk (Rosdianah and Irmawati, 2021).

According to the researchers' assumption that there are still mothers whose breast milk supply is less than the normal limit, health workers need to provide counseling or education to postpartum mothers about the need to consume nutritious foods that can increase breast milk, one of which is katuk leaves. Postpartum mothers who experience problems with breastfeeding need to look for information about katuk leaves and how to consume them to overcome the problem.

### **Breast Milk Production in Post-partum Mothers After Giving Katuk Leaves at the Midwife Novi Lintas Timur Clinic, Panyabungan District, Mandailing Natal Regency**

The results of the study showed that the majority of post-partum mothers' breast milk production after giving katuk leaves had sufficient breast milk production, namely 18 respondents (51.4%). This shows that there is an increase in the amount of breast milk production after giving katuk leaves. Katuk leaves are a green vegetable that is highly recommended for consumption by pregnant and breastfeeding women because they contain beneficial nutrients.

Katuk contains polyphenyls and steroids which play a role in the prolactin reflex or stimulate the alveoli to produce breast milk, as well as stimulate the hormone oxytocin to stimulate the release and flow of breast milk. Katuk leaves also contain several aliphatic compounds. The efficacy of katuk leaves as an increase in breast milk production is thought to come from the hormonal effects of sterol chemical compounds which are estrogenic. Katuk leaf extract can facilitate and increase breast milk production in breastfeeding mothers with adequate nutrition, breastfeeding frequency according to the baby's wishes, peace of mind and soul (Rosdianah & Irmawati, 2021).

This is in line with research by Juliastuti (2019) which stated that there was a significant comparison of the increase in baby weight in breastfeeding mothers after being given katuk leaf decoction and katuk leaf extract with a p value of 0.000. From several previous studies, it is also known that katuk leaves contain galactagogues which have an important role. The galactagogue content is believed to be able to trigger increased breast milk production (Juliastuti, 2019). Katuk leaves also contain steroids and polyphenols which can increase prolactin levels. Prolactin is a hormone that influences breast milk production. With high levels of prolactin it will automatically increase breast milk production.

According to the researchers' assumptions, the research results show that there is an effect of giving katuk leaves on increasing breast milk production in post partum mothers. The benefits of katuk leaves are very useful for women who are breastfeeding. Giving katuk leaves has proven to be effective in ensuring breast milk adequacy, this is because katuk leaves are one of the plants that can stimulate

the release of breast milk, so that mothers who consume katuk leaves every morning and evening for a week will have better or increased breast milk adequacy.

### **The Effect of Giving Katuk Leaves on Increasing Breast Milk Production in Post Partum Mothers at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency**

Based on bivariate analysis, it shows that the flow of breast milk in post partum mothers at the Midwife Novi Lintas Timur clinic, Panyabungan District, Mandailing Natal Regency before and after giving katuk leaves experienced significant changes. The flow of breast milk in postpartum mothers before breastfeeding was 20 people who experienced insufficient breast milk and 15 people who had sufficient breast milk. Then after giving katuk, the smoothness of breast milk increased to 18 people and there were more than 10 people, while the smoothness of breast milk was less than 7 people.

The results of statistical tests using the Wilcoxon rank test show that the p-value  $(0.000) < \alpha (0.05)$  means that  $H_0$  is rejected, so there is a significant effect of giving katuk leaves on increasing breast milk production in post partum mothers at the Novi Lintas Midwife clinic. Timur, Panyabungan District, Mandailing Natal Regency in 2022. These results prove that giving katuk leaves has a positive influence on increasing breast milk production in post partum mothers.

The results of this research are in line with the results of research conducted by Suyanti, (2020) on breastfeeding mothers at BPM Hj Solihah Majalengka showing that boiled katuk leaves are effective in providing adequate breast milk. This research is also in line with Suyanti and Anggraeni (2020) who stated that giving katuk leaves has proven to be effective in the adequacy of breast milk (ASI) in breastfeeding mothers, this is because katuk contains alkaloids and sterols which can increase the flow of breast milk. Apart from that, katuk leaves contain vitamins A, B1, C, tannins, saponin alkaloid papaverine.

The results of this research are also in line with research by Yolanda, et al (2022) that there is an effect of giving katuk leaf extract on the adequacy of breast milk production in postpartum mothers. Postpartum mothers who were given katuk extract experienced a significant increase in baby weight. Because by consuming healthy and balanced foods such as katuk leaf vegetables, it can facilitate breast milk in mothers due to the content of katuk leaves which contain quite high levels of protein, vitamin C, phosphorus, calcium and iron, then with the mother's compliance in giving breast milk to her baby regularly. on demand so that the baby's sucking can stimulate the hormones oxytocin and prolactin to produce breast milk (Rosdianah and Irmawati, 2021).

The success of a breastfeeding mother is largely determined by diet, both during pregnancy and after giving birth. So that the quality and quantity of a mother's breast milk is guaranteed, highly nutritious and balanced food needs to be consumed every day. This means that mothers must increase their consumption of carbohydrates, fats, vitamins, minerals and water in amounts appropriate to the body's needs during breastfeeding. If this need is not met, apart from disrupting the quality of breast milk and the mother's health, it will also affect the period of time the mother produces breast milk (Fikawati et al, 2015).

Katuk leaves are a low-calorie vegetable, contain no cholesterol and are very low in sodium. It is also a good source of vitamin B6, calcium, magnesium and zinc, and an excellent source of fiber, protein, vitamin A, vitamin C, vitamin E, vitamin K, thiamin, riboflavin, routine, niacin, folic acid, iron, phosphorus, potassium, copper, manganese and selenium. The amino acid asparagine comes from katuk, the katuk plant is rich in this ingredient (Restu, 2013).

According to the researchers' assumption, giving decoction of katuk leaves has a positive influence on breast milk production in post-partum mothers at the Midwife Novi Lintas Timur clinic, Panyabungan District, Mandailing Natal Regency and can be used as an action of choice in overcoming the problem of breast milk production in postpartum mothers. This increase in breast milk production is due to giving katuk which is high in fiber, and also contains various other nutrients which can trigger the production of hormones to help the formation of breast milk in nursing mothers and to improve the quality of breast milk.

#### 4. CONCLUSION

There is a significant effect of giving katuk leaves to post-partum mothers to facilitate breastfeeding at the Novi Lintas Timur Midwife Clinic, Panyabungan District, Mandailing Natal Regency in 2022. These results prove that giving katuk leaves has a positive effect on the smoothness of breast milk in post-partum mothers. Before giving katuk leaves, breast milk was inadequate by 57.1% and sufficient breast milk was 42.9%. After giving katuk leaves, it turned out that there were 3 theories that breast milk was less than 20%, sufficient breast milk was 51.4%, breast milk was more than 28.6%. The conclusion in this study was that breastfeeding was smooth, including breast milk increasing less by  $51.4-20=37\%$ . Breast milk decreased quite a bit,  $51.4-42=9\%$ . There was an excess of breast milk of 28.6%. It is hoped that it can provide material and data about breast milk production in post-partum mothers so that it can provide appropriate information in using the katuk leaf plant as a plant that is processed into herbs to increase breast milk production for post-partum mothers so that mothers give exclusive breast milk to babies. You can actively participate in utilizing katuk vegetables, bearing in mind that giving katuk leaf vegetables greatly influences the smooth flow of exclusive breastfeeding and the patient's family is expected to always provide support and motivation to the mother to consume nutritious food so that it can help in the process of expressing breast milk and producing breast milk. It is hoped that the results of this research can be used as a reference in further research, especially in giving katuk to increase breast milk production in post partum mothers and can be used as a community service activity for students.

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