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Health Education on Knowledge of Breastfeeding Mothers about the Benefits of Katuk leaves affected the Improvement of Breast Milk Production



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Abstract

Katuk leaves play a role in the prolactin reflex and stimulate the alveoli to produce breast milk, because they contain polyphenyls and steroids. It also stimulates the hormone oxytocin so that it stimulates the release of breast milk. Katuk leaves also contain several aliphatic compounds. Katuk leaves which can increase milk production, are thought to originate from the hormonal effects of sterol chemical compounds that are estrogenic. The type of the research was quasy Experimental design with pre-test and post-test approach. The sample was breastfeeding mothers with babies less than 2 months old. The sample was 30 respondents which were taken by the total sampling technique. The research instrument used questionnaires and leaflets. The statistical test used the Shapiro Wilk test with the SPSS 16.0 program. 50% of respondents had sufficient knowledge and 93.3% of respondents had good knowledge regarding the benefits of katuk leaves in increasing milk production. There was an effect of health education on mother's knowledge about the benefits of katuk leaves to increase milk production.

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INTRODUCTION

Breastfeeding babies has many benefits. Breast milk contains antibodies that can help babies become resistant to disease and boost the baby's immune system. In addition, the hormone contained in breast milk has a feeling of drowsiness and a sense of comfort so that it can help calm the baby so that he falls asleep after feeding. In addition, the benefits for mothers who breastfeed are to help reduce the mother's weight after giving birth, help the uterus quickly return to its original size and prevent bleeding (Umboh et al., 2013).

Besides understanding the importance of breastfeeding for both mother and baby, there are various obstacles that are commonly encountered related to breastfeeding. For example, less milk production, correct lactation management, relactation, nipple abnormalities, swollen breast problems, blisters or abnormalities in the baby. Even though formula milk is made so that its nutritional components are similar to breast milk, breast milk is still the right choice for both mother and baby (Umboh et al., 2013).

Insufficient milk production is the most common inhibiting factor that causes mothers to stop breastfeeding. One of the efforts to increase milk production is by using katuk leaves (Sauropus androgynous). Katuk leaves contain important nutrients, namely protein, vitamin C, vitamin D, calcium, folic acid. Katuk leaves contain polyphenols and steroids, which play a role in the prolactin reflex and stimulate the alveoli to produce breast milk, also stimulate the hormone oxytocin to stimulate milk production, as well as contain several aliphatic compounds (Rosdianah & S, 2021). In the Riskesdas report, breastfeeding patterns are grouped into three categories, namely exclusive breastfeeding, predominant breastfeeding and breastfeeding according to the WHO definition. Factors that influence breast milk production are anatomical and physiological factors, anatomical factors including the shape of the nipple, psychological factors including baby sucking, rest, nutrition, medicines or ingredients from plants (Saraung et al., 2021).

The impact for breastfeeding mothers, if there is not enough breastfeeding for the baby, namely breast engorgement, mastitis and abscesses. Meanwhile, in infants the impact that occurs is susceptibility to infection, diarrhea, prone to allergies, and decreased immune system. The thing

that is done to help increase milk production in mothers is to recommend consuming katuk leaves by using it in a mixture of clear vegetables, boiled vegetables or mixed with steamed rice (Dolang et al., 2021).

Based on the description in the background above, the formulation of the research problem is "Is there any effect of health education on mother's knowledge about the benefits of katuk leaves to increase milk production?".

The general objective of this study was to determine the effect of health education on mother's knowledge about the benefits of katuk leaves in increasing milk production. Meanwhile, the specific objectives were (1) to identify mother's knowledge before giving health education on the benefits of katuk leaves, (2) to identify mother's knowledge after giving health education on the benefits of katuk leaves, (3) to analyze mother's knowledge before and after giving health education on the benefits of moringa leaves. The results of this study are expected to be a source of knowledge and a separate strategy for respondents in the knowledge gained from research on the effect of giving katuk leaves on increasing milk production.

METHODS

The design of the study was quasy experimental with One Group Pretest Posttest approach. This design contained a pre-test before treatment and a post-test after treatment. The sample was 30 breastfeeding mothers who had babies less than 2 months old. The sampling technique used total sampling, which was a population in the research area where the number of samples taken was the same as the population. The number of the samples was 30 respondents from the entire population. The independent variable in this study is health education on the benefits of katuk leaves. The dependent variable in this study was mother's knowledge about the benefits of katuk leaves for increasing milk production. The instrument is a tool used to collect research data based on concepts, constructs, and variables (masturah & anggita, 2018). This study used questionnaires and leaflets. The researcher gave a questionnaire before the education was carried out. Within 3 minutes the researcher asked the mother to collect the questionnaires. Then, the researchers distributed leaflets. The next step was the Researchers conducted health education to the

respondents about the benefits of katuk leaves to increase milk production. After that, Researchers redistributed the questionnaire after education. In

this study, the data analysis used to test the normality of the data was using the Shapiro-Wilk test.

RESULTS

From the research that has been done, the following data is obtained:

1. General data

a. Characteristics by age

Table 4.1 Age distribution with a total of 30 respondents.

No	Age	Frequency	Percentage
1	≤ 20 years	2	7%
2	20-35 years	23	76,6%
3	≥35 years	5	16,4%
Total		30	100%

Source: Secondary Data (2022)

Based on table 4.1 it shows that most of the respondents (76.6%) are aged between 20-35 years.

b. Characteristics of respondents based on education

Table 4.2 Distribution of education with a total of 30 respondents.

No	Education	Frequency	Percentage
1	Elementary school graduate	4	13%
2	Middle school graduate	3	10%
3	High school graduate	18	60%
4	Academic/ college	5	17%
Total		30	100%

Source: Secondary Data (2022)

Based on table 4.2 shows that most of the respondents (60%) have high school education.

c. Characteristics of respondents based on work

Table 4.3: Distribution of work with a total of 30 respondents.

No	Occupation	Frequency	Percentage
1	Housewife	20	67%
2	Farmer	1	3%
3	Laborer	-	-
4	Self employed	7	23%
5	Government employees	2	7%
Total		30	100%

Source: Secondary Data (2022)

Based on table 4.3 it shows that most of the respondents (67%) have housewife jobs.

2. Special data

a. Health education pretest results on mother's knowledge

Table 4.1 pretest

No	The influence of health education about the benefits of katuk leaves	Frequency	Percentage
1	Not enough	14	46,6%
2	Enough	15	50%
3	Good	1	3,4%
Total		30	100%

Based on table 4.1 it shows that half of the respondents have sufficient knowledge (50%) regarding the benefits of katuk leaves.

b. Health education post test results on mother's knowledge**Table 4.2 post test**

No	The influence of health education about the benefits of katuk leaves	Frequency	Percentage
1	Not enough	0	0%
2	Enough	2	6,66%
3	Good	28	93,3%
Total		30	100%

Based on table 4.2 it shows that almost all respondents have good knowledge (93.3%) regarding the benefits of katuk leaves.

c. The effect of health education about the benefits of katuk leaves on increasing milk production**Table 4.3 Comparison of respondents' knowledge about the benefits of katuk leaves on increasing milk production before and after being given health education in Jatinom Hamlet, Kanigoro District.**

No	The influence of health education about the benefits of katuk leaves	Prior to health education	After health education
1	Not enough	46,6%	0%
	Enough	50%	6,66%
3	Good	3,4%	93,3%
Total		100%	100%

Shapiro wilk p value: 0.000

Based on table 4.3, it shows that there was an increase in the percentage of the influence of health education, the increase was due to the large number of respondents, most of whom (60%) had high school education, and were given health education about the benefits of katuk leaves before being given health education, respondents with good knowledge were only 3.4 % and rose to 93.3% after being given health education. And the results of the respondent's knowledge research are categorized as good.

Based on the Shapiro Wilk statistical test, it was found that p value = 0.000, so that p value = 0.000 < α = 0.05, which means that it shows the influence of health education about the benefits of katuk leaves on increasing milk production.

DISCUSSION**1. Knowledge of respondents before being given health education on the benefits of katuk leaves to respondents.**

Based on research conducted in Jatinom Hamlet before being given health education about the benefits of katuk leaves to increase the weight of children aged 1-3 years, it was found that 46.6% had knowledge related to the benefits of Moringa leaves in the less category. The current condition of the community is very lack of knowledge about the benefits of katuk leaves. Katuk leaves themselves have a content that is good enough to increase milk production. In this modern era, there are many types of food that can be obtained by the community, so the popularity of katuk leaves among the public is not known.

Based on the questionnaires distributed, the majority (67%) of the respondents had jobs as IRT.

It is possible that the respondent has less knowledge due to the activities of the mother who is only at home, so that the mother does not get information that the respondent can get through colleagues / where the mother works. Based on research conducted by Juliastuti states that work is a factor that influences knowledge (Juliastuti, 2019). Judging from the type of work that often interacts with other people, they have more knowledge when compared to people who do not interact with other people. Learning experiences at work that are developed to provide professional knowledge and skills as well as learning experiences at work will be able to develop the ability to make decisions which are the integration of scientific and ethical reasoning. atuk plants that grow a lot around their homes tend to be ignored by some people because they are considered old food and less modern. It is this view that makes katuk plants begin to be

abandoned by the community and tend to be considered old-fashioned plants that are ancient and not modern.

2. Knowledge of respondents after health education on the benefits of katuk leaves before health education was carried out on respondents

Based on research conducted in Jatinom Hamlet before being given health education about the benefits of katuk leaves for increasing breast milk production, it was found that 93.3% had high knowledge after being given education. This result increased from before being given health education, namely from 3.4%. Whereas for mothers who had less knowledge, which was originally 46.6%, there were no respondents who had less knowledge. Providing health education to respondents using leaflets is a fairly effective way to increase knowledge of respondents. In addition, the availability of katuk leaves which are easy to find around the respondents makes respondents more interested in utilizing them, the health education provided to respondents and the leaflets provided make respondents have sufficient knowledge to utilize katuk leaves.

This is due to the fact that most of the respondents, 76.6%, are aged 20-35 years so that with a mature age, the respondents can receive health education that has been given well received. According to Juliastuti states that age affects the comprehension and mindset of a person as they get older they will develop more, their comprehension and mindset so that the knowledge obtained is getting better.(Juliastuti, 2019). In line with research conducted by Soka dkk that according to researchers, health education media in the form of leaflets can affect the level of knowledge (Soka et al., 2010) This is because there is information that supports the utilization of katuk leaves. this is supported by theory what Notoadmodjo conveyed is that knowledge can be obtained from other information such as counseling, radio, tv, internet etc. This information can be used as a provision for mothers to care for their toddlers in everyday life. Can be interpreted as a person's point of view after gaining knowledge either directly or indirectly. Providing formal and informal information can increase knowledge (Notoadmodjo, 2011). Providing leaflet media is one of the provision of non-formal information that is often used in health education. Leaflet media can be obtained easily and effectively used as information media. As

information media, images or photos must be selected or used in accordance with the stated purpose, (Purimahua et al., 2020) based on this research, leaflet media is effective for increasing knowledge.

3. The effect of health education about the benefits of katuk leaves on increasing milk production.

Shapiro Wilk's results show a p value = 0.000 so that a p value = 0.000 < a = 0.05 which means that H1 is accepted, that is, there is an effect of health education on respondents' knowledge of the benefits of katuk leaves on increasing milk production. Evidenced by the difference between before being given health education and after being given education, before being given health education the value of knowledge was in the less category of 46.6% then given health education it decreased to 0%, the value of knowledge in the sufficient category was 50% then given health education decreased to 6.66% and the value of knowledge in the good category was 3.4% then given health education increased then given health education changed to 100% after being given education.

The provision of health education related to the benefits of katuk leaves has a significant influence given has a sufficient role to add insight to the respondent. So that respondents can take advantage of food ingredients that are easy to obtain and have a high nutritional content. Some of the nutritional content of katuk leaves include being rich in vitamins A, B1 and C. Besides being rich in protein, fat, vitamins and minerals, they also contain tannins, saponins, and papaverine alkaloids. The content of calories, protein and carbohydrates in katuk leaves is almost equivalent to cassava leaves, but the iron content is superior to papaya leaves and cassava leaves. mixed rice team (Nurkhasanah et al., 2017). Referring to the midwives, namely as counselors in this study, the researchers implemented their duties by providing health education on the benefits of katuk leaves to increase milk production. From the results of the study showed a significant effect between the mother's knowledge before being given health education and the increase in mother's knowledge after being given education. In line with research conducted by Soka dkk states that providing health education in the right way and at the right time can increase mother's knowledge about the use of katuk

leaves for daily food, specifically aiming to increase milk production (Soka et al., 2010). Because the availability of cheap local food ingredients such as katuk leaves can be a solution to the problem of breastfeeding which starts with the family environment, especially the mother's knowledge of the benefits and processing of katuk leaves.

CONCLUSION

1. Respondents' knowledge of health education on the benefits of katuk leaves on increasing milk production before health education, namely the majority of 3.4% of respondents in the good knowledge category.
2. Respondents' knowledge of health education on the benefits of katuk leaves on increasing milk production after health education, namely the majority of 93.3% of respondents in the good knowledge category.
3. Based on the results of the study with the Shapiro Wilk test, the results obtained were p value = 0.000 so that the p value = 0.000 < α = 0.05, which means that H1 is accepted, that is, there is the influence of health education on respondents' knowledge about the benefits of katuk leaves on increasing breast milk production.

SUGGESTION

For the Health Agency (Polindes Jatinom), it is hoped that the results of this study can be used as input information and can be used as a means of providing health services to breastfeeding mothers. For respondents, it is hoped that the results of this study will provide additional knowledge for respondents so that they can utilize local katuk leaf food ingredients in their daily lives, especially for increasing breast milk production.

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CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest.

AUTHOR CONTRIBUTIONS

This research was done by one author herself from the beginning until the end.

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