Application Of Complementary Therapy With Fenugreek Seed Tea (Klabet) To Increase Breast Milk Production In Langkapura District, Bandar Lampung City, 2023

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Abstract.

Background: Exclusive Breastfeeding Coverage In Indonesia In 2019-2020 Decreased From 67.74% To 56.9%. This Is Caused By Several Problems, Both Maternal And Baby Problems. Babies Who Are Not Exclusively Breastfed Are Very Susceptible To Diseases Such As Respiratory Tract Infections (Ari), Diarrhea, Severe Intestinal Problems In Premature Babies, Decreased Intelligence Quotient (Iq) (Wijayanti, 2015). Therefore The Author Is Interested In Conducting Research On "Therapeutic Application Complementary With Fenugreek Seed Tea (Klabet) To Increase Breast Milk Production In Langkapura Village, Bandar Lampung City In 2023." Research Objective: To Determine The Effectiveness Of Applying Complementary Therapy Of Fenugreek Seed Tea (Klabet) To Increase Breast Milk Production In Breastfeeding Mothers. Research Method: This Study Used An Independent T Test Research Design With A Population Of 30 Breastfeeding Mothers And The Sample For This Study Used The Total Population. Data Techniques Use Computer Program Statistical Calculations. Research Results: In The Experimental Group 93.3% Of Respondents Were Aged 21-35 Years, 66.7% Had A High School Education, 80.0% Were Unemployed And 53.3% Were Multiparous, While In The Control Group 100.0% Were Aged 21-35 Years Old, 60% Had A High School Education, 66.7% Did Not Work And 53.3% Were Primiparous. In The Experimental Group The Pre Test Average Was 4.47 And The Post Test Average Was 9.53. Meanwhile, In The Control Group, The Pre-Test Average Was 4.07 With The Post-Test Average Being 6.93. Conclusions And Recommendations: Based On The Results Of Research Using An Independent T Test, It Was Found That Ho Was Rejected, Which Means There Was An Effect Of Fenugreek Seed Tea On Breast Milk Production In Breastfeeding Mothers In Langkapura Village, Bandar Lampung City In 2023.

Keywords: *Giving Fenugreek Seed Tea Andbreast Milk Production.*

I. INTRODUCTION

Complementary therapy is a field of health science that studies ways to treat various diseases using traditional techniques. "Therapy" is an effort to restore health which includes treatment and treatment of disease. Meanwhile, "complementary" is an action that complements and perfects. Treatment in complementary therapy does not use commercial drugs, but uses various types of herbal medicines and therapies (Fitria, 2019).In the field of obstetrics, efforts to increase maternal breast milk production using complementary therapy methods usually use efforts such as consuming food or drinks that can stimulate breast milk production. For example soy milk, fenugreek, katuk leaves, moringa leaves, young papaya leaves. Fenugreek is a plant that can be used as a complementary therapy to increase breast milk production. Fenugreek is considered one of the galactogogue plants which has been commonly used as a complementary therapy since 1945 (Gabay, 2002).Breast milk (ASI) is an emulsion of fat in a solution of protein, lactose and inorganic salts secreted by the mother's mammary glands, and is useful as baby food (Maryunani, 2015). Breast milk (ASI) is the best living fluid that babies really need. Breast milk contains various substances that are important for the baby's growth and development and suit his needs. Not all mothers want to breastfeed their babies for various reasons. Usually breast milk does not want to come out or breast milk production is not smooth (Indonesian Midwifery Lecturer, 2018).During infancy aged 0-6 months, the baby's nutritional needs are very dependent on breast milk (ASI).

Giving breast milk as the first food for babies under 6 months of age is something that is very important to pay attention to because babies should only be given breast milk. This is very dependent on the mother's breast milk production during the breastfeeding period (Aliyanto & Rosmadewi, 2019). Failure in the breastfeeding process is often caused by the emergence of several problems, both problems for the mother and the baby. Problems from mothers that arise during breastfeeding, mothers often complain that their babies cry that their breast milk is not enough, often causing the decision to stop breastfeeding (Sutanto,

2018). The main factor inhibiting breast milk is due to insufficient milk production so that the mother stops breastfeeding her baby. Nutrition and nutrition play an important role in supporting maximum breast milk production because breast milk production is influenced by the hormone prolactin which is related to maternal nutrition. Apart from the need for lactation counseling during the postpartum period, the use of herbal plants to increase breast milk production can be provided as complementary care that can be given during postpartum visits (Pratiwi, 2018).he impact that occurs if breast milk does not come out smoothly is that the breast milk duct is blocked (obstructed duct). If milk is rarely expressed, the milk will curdle, blocking the lumen of the ducts (Turlina and Wijayanti, 2015).

Babies who are not exclusively breastfed are very susceptible to diseases such as respiratory tract infections (ARI), diarrhea, severe intestinal problems in premature babies, decreased intelligence quotient (IQ), and children who are not exclusively breastfed are very susceptible to disease. chronic diseases, such as cancer, heart disease, hypertension and diabetes in adulthood. Not only that, children can also suffer from malnutrition and become obese.Based on 2019 Indonesian Health Profile data, exclusive breastfeeding in Indonesia is around 67.74%. This figure has exceeded the 2019 Strategic Plan target of 50%. (Indonesian Health Profile, 2019). Meanwhile, according to data from the Indonesian Health Profile for 2021, exclusive breastfeeding in Indonesia is 56.9%. This figure has exceeded the 2021 program target of 40%. However, this achievement decreased from the previous year (Indonesian Health Profile, 2021). Coverage of exclusive breastfeeding in Lampung Province has increased in recent years. In 2017 it was 65.26%, in 2018 it was stable at 65.26%, in 2019 it increased to 69.33%, in 2020 it became 70.1% and in 2021 it became 73.6% (Provincial Health Profile Lampung).Various reasons why mothers have inadequate breast milk production are inadequate breast stimulation, infrequent breastfeeding, heavy activity, stress, diet (Maryunani, 2012). Based on the background above, the author is interested in researching "The Application of Complementary Therapy with Fenugreek Seed Tea (Klabet) to Increase Breast Milk Production in Langkapura Subdistrict, Bandar Lampung City" in November 2023. The author's hope is that by compiling this thesis, he will be able to provide assistance to mothers. in increasing breast milk production.

II. METHODS

This type of research is Quasi Experiment research using a pre-experimental, pre-test and post-test one group design. The population in this study was all 30 breastfeeding mothers in Langkapura Village in November 2023. Samples were taken as a whole who met the sample criteria, namely 30 people using total sampling. The data collected in this research is in the form of secondary data and primary data. Data analysis uses univariate and bivariate analysis

III. RESULTS AND DISCUSSION

1. Univariate Analysis

Table 1. Average Breast Milk Production Pre and Post Giving Complementary Fenugreek Seed Tea Therapy in the Experimental Group in Langkapura Village

Group	N	Mean	Min	Max	Standar Deviasi
Pre test	15	4,47	3	6	1,060
Post test	15	9,53	6	12	1,885

Based on table 1, it shows that in the experimental group (given complementary therapy with fenugreek seed tea) when the pre-test was carried out the average breast milk production was 4.47 with a minimum of 3 and a maximum of 6 and a standard deviation of 1.060. Meanwhile, when the post test was carried out, the average breast milk production was 9.53 with a minimum of 6 and a maximum of 12 and a standard deviation of 1.885.

Table 2. Average Breast Milk Production Pre and Post Complementary Fenugreek Seed Tea Therapy in the Control Group in Langkapura Subdistrict, Bandar Lampung City

Group	N	Mean	Min	Max	Standar Deviasi
Pre test	15	4,07	3	6	1,100
Post test	15	6,93	5	10	1,534

Based on table 2, it can be seen that in the control group (not given complementary therapy with fenugreek seed tea) when the pre-test was carried out, the average breast milk production was 4.07 with a minimum of 3 and a maximum of 6 and a standard deviation of 1.100. Meanwhile, when the post test was carried out, the average breast milk production was 6.93 with a minimum of 5 and a maximum of 10 and a standard deviation of 1.534.

2. Bivariate Analysis

Bivariate analysis was carried out to determine the effect of providing complementary therapy with fenugreek seed tea on breast milk production in Langkapura Village, Bandar Lampung City. To determine whether there was an effect of applying fenugreek seed tea on breast milk production between the experimental group (which was given complementary therapy with fenugreek seed tea) and the control group (not given complementary therapy with fenugreek seed tea), the Independent Sample T-test was used. Based on the results of the data normality test using the Shapiro-Wilk test (because the sample size was <50 respondents), a sig value > 0.05 was obtained so that the data was normally distributed, thus fulfilling the requirements for the Independent Samples T-Test, as shown in the following table:

Table 3. Effect of Giving Complementary Fenugreek Seed Tea Therapy to Breastfeeding Mothers on Breast Milk Production in Langkapura Village, Bandar Lampung City.

Group	N	Mean	Min	Max		Standard Deviation	
Experiment	15	9,53	6	12	2,60	1,100	0,000
Control	15	6,93	5	10		1,534	

Based on table 3, the results of the analysis using the Independent Sample T-test show that the mean difference between the experimental and control groups is 2.60, which means that the average breast milk production in the experimental group is much greater than the average breast milk production in the group. control. And a value of 0.000 ($\rho<0.05$) was obtained, which means that the experimental group had the potential to produce 0.000 times more breast milk compared to the control group. These results show that Ha is accepted and H0 is rejected, meaning that the hypothesis states that there is a difference in breast milk production between the groups given complementary fenugreek seed tea therapy and those not given complementary fenugreek seed tea therapy.

D. Discussion

The research results showed that almost all respondents in the experimental group (93.3%) and the control group (100%) were respondents aged ≥ 20-35 years, respondents in the experimental group had a high school education (66.7%) and did not work (80.0%) while most of the control group respondents had a high school education (60.0%) and did not work (66.7%). Most of the respondents in the experimental group (53.3%) and control group (46.7%) were multigravida. In groups The average pre test experiment was 4.47 and the post test average was 9.53. Meanwhile, in the control group, the pre-test average was 4.07 with the post-test average being 6.93.The ideal age range for reproduction, including producing breast milk, is 20-35 years old, however, 20-25 years old is a young age where psychological maturity is still lacking, so many mothers show a fearful, confused and nervous response when the baby cries. The mother's unsettled psychological response can affect breast milk production. At the age of over 25 years, emotional maturity has been reached and mothers usually have various experiences in providing breast milk, both from themselves and others. Mothers who have given birth more than once (multigravida) have higher breast milk production after giving birth than mothers who have given birth for the first time (primigravida). This is because the first time giving birth is a very difficult time for every mother, so it will have an impact on a mother's breastfeeding (postpartum) period. The respondent's low education also has an impact on the job they have. Respondents spend a lot of time at home without being tied to work outside the home, so they have a lot of opportunities to care for and provide breast milk (ASI) to their babies. These factors influence breast milk production (Susanti, 2015).

Based on research, it is stated that there is an influence between food factors and breast milk production. The food consumed must contain balanced nutrition and nutrition and is needed by the body, because the breast milk producing glands (alveoli) cannot work perfectly without sufficient food, inadequate nutrition and nutrition cannot meet the mother's daily needs, causing breast milk production to not run

smoothly because In the breast milk production process, good nutritional content of food is needed to be able to get the amount of breast milk needed by the baby (Rahayu and Maharani, 2012).One way to speed up breast milk production is by providing complementary therapy with fenugreek seed tea, because it is a galactogogan which contains trigonelline, choline, prolamin, sapogenin, alkaloids and mucous fiber. Sapogenins from fenugreek such as diosgenin and yamogenin have estrogenic properties. Fenugreek seeds increase milk production through increasing the production of sweat glands. Because fenugreek seeds contain diosgenin, they have phytoestrogen properties. Phytoestrogens have a chemical structure similar to estrogen and can attach to α and β receptors and may have estrogenic properties that are effective in increasing breast milk production (Gabay, 2002).In research conducted, tea containing fenugreek seeds can help mothers meet the signs of breast milk adequacy, including baby growth parameters such as weight and height. The research shows an increase in the signs of breast milk adequacy in the fenugreek group. However, the baby's height growth is not affected (Vida Ghasem et al, 2015).

The results of statistical tests show that there is a difference in breast milk production between breastfeeding mothers who were given complementary therapy with fenugreek seed tea and breastfeeding mothers who were not given complementary therapy with fenugreek seed tea. This is shown by the difference in average breast milk production in the experimental group and the control group. The breastfeeding mothers who were given complementary therapy with fenugreek seed tea showed an average breast milk production of 9.53, while the group of mothers who were not given complementary therapy with fenugreek seed tea showed an average breast milk production of 6.93. The results of the analysis in table 5.4 show that p value = 0.000 ρ 8 times a day so that breast milk production cannot be said to be maximal. Various factors that can influence breast milk production include psychological conditions such as anxiety which trigger stress. When a breastfeeding mother experiences stress, the hormone cortisol will increase. This increase in the hormone cortisol will damage all body organ functions, including inhibiting the production of oxytocin (a hormone that functions to produce breast milk). Inhibition of oxytocin production is what causes reduced breast milk production. After being given complementary therapy with fenugreek seed tea for 7 days at a dose of once a day, the results showed that the difference in average breast milk production in the experimental and control groups was 2.60. There was an increase in breast milk production in breastfeeding mothers who were given complementary therapy with fenugreek seed tea (klabet) with the result of a mean difference between the experimental group and the control group of 2.60, so it can be concluded that in this study Ha was accepted and H0 was rejected.

The results of this study show that the application of complementary therapy of Fenugreek seed tea (Klabet) has proven effective in increasing breast milk production in breastfeeding mothers.In the study of El Sakka et al. In 2014, 75 mothers and their babies were classified into three groups: herbal tea with fenugreek, dates and a control group. They concluded that in their study the volume of breast milk on the third day postpartum was greater in the fenugreek group compared to the control group. Therefore, fenugreek herbal tea appears to be useful for increasing breast milk production during the early postpartum period. In the study of Turkyilmaz et al. In 2011, 66 mothers and their babies were classified into three groups: the intervention group, receiving three cups of fenugreek every day, an apple and the control group. They concluded that fenugreek tea increased breast milk volume (73.2 ± 53.5) compared with the control group (31.1 ± 12.9) (P = 0.004). Swafford's 2014 study of ten women at the end of the second week after giving birth showed significant differences in breast milk production. Milk production in the first week is considered the basic amount. In the second week the mother drank three cups of fenugreek every day. The results showed that breast milk production increased from 207 mL/day in the first week to 464 mL/day in the second week.The results of research that researchers have conducted support the results of many studies examining fenugreek. This data is in accordance with the results of previous research by researchers regarding the application of fenugreek seed tea compared to the control group improving signs of breast milk adequacy in breastfeeding mothers.

IV. CONCLUSION

Based on the results of research on the application of complementary therapy with fenugreek seed tea to increase breast milk production in Langkapura Village, Bandar Lampung City with a sample size of 30 people, there were differences between the intervention group and the control group. In the experimental group, the average breast milk production of breastfeeding mothers who were given complementary therapy with fenugreek seed tea was 9.53. In the control group, the average mother's breast milk production breastfeeding who were not given complementary therapy with fenugreek seed tea was 6.93. There is a difference in breast milk production between breastfeeding mothers who were given complementary therapy with fenugreek seed tea and breastfeeding mothers who did not receive complementary therapy with fenugreek seed tea, namely 2.60, meaning that Ho was rejected, which means there is an effect of complementary therapy from seed tea. fenugreek (club) on breast milk production in breastfeeding mothers in Langkapura Village, Bandar Lampung City.

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