



AISCH 2022

The 3rd AI Insyirah International Scientific Conference on Health

PAPAYA FRUIT FEEDING WITH INCREASED BREAST MILK PRODUCTION IN BREASTFEEDING MOTHERS IN BPM IW KAMPAR REGENCY

¹Novi Yanti, ²Yessi Azwar

^{1,2}Sekolah Tinggi Ilmu Kesehatan Payung Negeri Pekanbaru
Email : novi_yanti7803@yahoo.com

ABSTRACT

Breast milk contains colostrum which is rich in antibodies because it contains protein for endurance and is useful for killing high amounts of germs so that exclusive breastfeeding can reduce the risk of death in babies. In breastfeeding mothers, there are often obstacles such as insufficient milk production, mothers do not understand the correct lactation management, mothers want to breastfeed again after the baby is given formula (lactation), the baby has already gotten, prelakteal feeding. Lactagogum is a drug that can increase or facilitate the production of milk. Papaya (*carica papaya L*) is one of the fruits that contains lactagogum and has a high nutritional content and is rich in health benefits. The research method used is an experimental method using a pre- and post-intervention design using one group, research design using one group before and after intervention design, or pre and post test design. In this design, the only experimental unit serves as an experimental group and at the same time a control group. The variables in this study consisted of free variables (papaya fruit consumption) and bound variables (increased breast milk production). The population in this study was all breastfeeding mothers aged < 6 months in BPM IW Kampar Regency which amounted to 25 people. The entire population in the study became a sample. Data analysis is carried out in stages, namely univariate analysis aims to obtain an overview of each variable, both dependent variables and independent variables. Meanwhile, bivariate analysis was carried out by testing the hypothesis between independent variables and dependent variables to see the difference between independent variables and dependent variables with statistical meaningfulness tests using the T test at a confidence level of 95%. Based on the results of breast milk production before the consumption of papaya fruit, the average frequency of breastfeeding was 5.4 times with a standard deviation of 0.79 and after consuming papaya fruit, the average frequency of breastfeeding increased to 9.67 times with a standard deviation of 0.68. The choloration between the two variables was 0.97 and the difference in the average value of the increase in breast milk production in mothers who did not consume and who consumed papaya fruit was 4.27 with a sig of 0.000. Because the sig < 0.05, it means that the average milk production before and after papaya fruit consumption is different. Thus it can be stated that the feeding of papaya fruit can affect the increase in breast milk production of nursing mothers.

Keywords : Papaya, Breast Milk Production, Breastfeeding Mothers

INTRODUCTION

In order to implement balanced nutrition efforts, each family must be able to recognize, prevent, and overcome the nutritional problems of each member of their family. This is in accordance with the Regulation of the Minister of Health Number 23 of 2014 concerning Efforts to Improve Nutrition. The efforts made to recognize, prevent, and overcome nutritional problems are by weighing weight regularly, giving breast milk only to babies from birth to 6 months of age. Breast milk contains colostrum which is rich in antibodies because it

contains protein for endurance and is useful for killing high amounts of germs so that exclusive breastfeeding can reduce the risk of death in babies. Yellowish colostrum produced on the first to the third day. The fourth to the tenth day of breast milk contains less immunoglobulin, protein, and lactose than colostrum but higher fat and calories with a whiter milk color. In addition to containing food substances, breast milk also contains certain enzymes that function as absorbent substances that will not interfere with other enzymes in the intestine. Formula milk does not contain these enzymes so that food absorption is completely dependent on enzymes found in the baby's intestines (Ministry of Health RI, 2020)

Regarding the understanding of the importance of breast milk for babies and breastfeeding mothers, it turns out that there are obstacles that are often faced in relation to breastfeeding either from mothers or babies. In breastfeeding mothers, there are often obstacles such as insufficient milk production, mothers do not understand the correct lactation management, mothers want to breastfeed again after the baby is given formula (lactation), babies have already received, *prelakteal feeding* (sugar water / dextrose administration, formula milk in the first days of birth) maternal abnormalities: mother's nipples are blistered, mother's nipples are injured, breast swelling and mothers work, while in babies there are often obstacles such as sick babies or baby abnormalities (Ningsih, 2020)

Lactagogum is a drug that can increase or facilitate the production of milk. Synthetic lactagogum is little known and relatively expensive. This led to the need to look for alternative lactagogum drugs. Efforts to increase breast milk production can be done by doing breast care early and regularly, improving breastfeeding techniques, or by consuming foods that can affect breast milk production. Papaya (*carica papaya L*) is one of the fruits that contains lactagogum and has a high nutritional content and is rich in health benefits. Lactagogum is a substance or drug that can increase or facilitate the production of breast milk. Lactagogum has an effect in stimulating the production of hormones oxytocin and prolactin such as alkaloids, polyphenols, steroids, flavonoids, which are effective in increasing the secretion and production of breast milk. Papaya is one of the fruits that contains lactagogum which can increase breast milk production (Murhatono, et al,2018).

The benefits of papaya fruit can be used to add appetite, a source of vitamin A (a source of antioxidants), facilitate BAB, canker sores and green papaya fruit / raw fruit can increase the production of breast milk, vitamin B complex (helps the body's work), potassium (prevent heart disease). In 100 kg papaya contains vitamin A 950 UI, vitamin C 60.9 mg, potassium 182 mg and folic acid 31 µg (Puspaningtyas, 2018).

Papaya as one of the fruits that contains *lactagogum* is a tropical fruit know as *Caricapapaya*. Papaya fruit is also one type of fruit that has a high nutritional content and is rich in health benefits. Papaya planting requires low temperatures to support growth so it is suitable for planting in the tropics. Therefore, it is natural that the population of papaya trees is very large and easy to find in our country. People can get papaya fruit for daily consumption easily. From this background, researchers are interested in knowing the effect of papaya fruit giving on breastfeeding mothers on the smooth production of breast milk.

RESEARCH METHODS

The research method used is an experimental method using a design before and after intervention using one group, Research design using *one group before and after intervention design*, or *pre and post test design*. In this design, the only experimental unit serves as an experimental group and at the same time a control group. The variables in this study consisted of free variables (papaya fruit consumption) and bound variables (increased breast milk production). . The population in this study was all breastfeeding mothers of babies aged < 6 months in BPM IW Kampar Regency which amounted to 25 people. The entire population in the study became a sample. To determine whether or not the sample is suitable to represent the entire population, inclusion criteria are made, namely: willing to be a respondent, mothers who breastfeed babies aged < 6 months. The research was carried out at BPM IW Kampar Regency, the research time was in February 2022. Observations were made on breastfeeding mothers before the consumption of papaya fruit, it was seen the frequency of breastfeeding how many times the baby breastfeeds per day and the cranky / not fussy child observed for seven days. Furthermore, the consumption of papaya fruit is carried out, by consumption is consuming by steaming papaya fruit and steamed papaya was consumed by the mother for 3 times a day for fourteen days, The increase in breast milk production in breastfeeding mothers both before and after being given papaya fruit is seen from the frequency of breastfeeding, if the frequency of breastfeeding is more than 8x per day and the child is not fussy. The increase in breast milk production is not assessed by measuring the volume of breast milk. The data analysis carried out is to manage data in a form that is easier to read and interpret and can be tested statistically. Data analysis is carried out in stages, namely *univariate* analysis aims to obtain an overview of each variable, both dependent variables and independent variables. Meanwhile, *bivariate* analysis was carried out by testing the hypothesis between independent variables and dependent variables to see the difference between independent variables and dependent variables with statistical meaningfulness tests using the T test at a confidence level of 95%.

RESEARCH RESULTS

Table 1 Frequency Distribution of Breast Milk Production Before and After Consuming Papaya Fruit

Increased Breast milk production (n = 25)		
Before Consuming		%
Increase	0	0
Decrease	25	100%
After Consuming		%
Increase	25	100
Decrease	0	0

From Table 1, it can be seen that all breastfeeding mothers who have not consumed papaya fruit have not experienced an increase in breast milk production, while after consuming papaya fruit, all breastfeeding mothers experience an increase in breast milk production.

Table 2 Distribution of The Relationship between Papaya Fruit Consumption and Increased Breast Milk Production

Fruit Consumption Papaya	n	Mean	SD	Korelasi	Sog
Before Consumption	25	5,400	0,79	0,697	0,000
After Consumption	25	9,6700	0,68		

Based on Table 2, it can be seen that breast milk production before the consumption of papaya fruit, the average frequency of breastfeeding is 5.4 times with a standard deviation of 0.79 and after consuming papaya fruit, the average frequency of breastfeeding has increased to 9.67 times with a standard deviation of 0.68. The correlation between the two variables was 0.97 and the difference in the average value of the increase in breast milk production in mothers who did not consume and who consumed papaya fruit was 4.27 with a sig of 0.000. Because the sig < 0.05, it means that the average milk production before and after papaya fruit consumption is different. Thus it can be stated that the feeding of papaya fruit can affect the increase in breast milk production of nursing mothers

DISCUSSION

Based on the results of the study, the results were obtained that all breastfeeding mothers who had not consumed papaya fruit did not experience an increase in breast milk production, while after consuming papaya fruit, all breastfeeding mothers experienced an increase in breast milk production. Breast milk production before papaya fruit consumption the average frequency of breastfeeding is 5.4 times with a standard deviation of 0.79 and after consuming papaya fruit the average frequency of breastfeeding has increased to 9.67 times with a standard deviation of 0.68. The correlation between the two variables was 0.97 and the difference in the average value of the increase in breast milk production in mothers who did not consume and who consumed papaya fruit was 4.27 with a sig of 0.000. Because the sig < 0.05, it means that the average milk production before and after papaya fruit consumption is different. Thus it can be stated that the feeding of papaya fruit can affect the increase in breast milk production of nursing mothers.

Papaya (*Carica papaya L*) is one of the fruits that contains lactagogum and has a high nutritional content and is rich in health benefits. Lactagogum is a substance or drug that can increase or facilitate the production of breast milk. Lactagogum has an effect in stimulating the production of hormones oxytocin and prolactin such as alkaloids, polyphenols, steroids, flavonoids, which are effective in increasing the secretion and production of breast milk (Murhatono, et al,2018).

The use of young papaya fruit in the community has been widely found, such as good for eye health, good for digestion, used to make vegetables because of the content of protein and vitamins, and eaten to facilitate and increase breast milk production. The processing of young papaya fruit in the community is usually done by boiling, decomposing, steaming and dries. Papaya fruit is a food ingredient that has many benefits and is easily obtained by the community because it can be easily grown in the yard of the house. With the use of

papaya fruit which can increase breast milk production, it can help the success of the government program (Ministry of Health) in an effort to provide exclusive breastfeeding, namely breastfeeding only up to the age of 6 months of the baby and still being given breast milk until the age of 2 years old which is supplemented by complementary foods (MPASI).

CONCLUSIONS AND SUGGESTIONS

The frequency of breastfeeding mothers before consuming papaya fruit is an average of 5.4 times and experiences an increase in breast milk production after consuming papaya fruit, which is the average breastfeeding to 9.67 times.

Papaya fruit is a type of food that contains *Lactogogum*, which is a nutrient that can increase and facilitate breast milk production, especially in mothers who experience problems in breast milk production.

It is hoped that the clinic will provide health education to breastfeeding mothers about giving papaya to increase breast milk production.

REFERENCES

- Astutik, Yuli Reni. 2015. *Asuhan Kebidanan Masa Nifas Dan Menyusui*. Jakarta. Trans Info Media.
- Istiqumah, Sri Banum Titi dkk. 2015. Pengaruh Buah Pepaya Terhadap Kelancaran Produksi Asi Pada Ibu Menyusui di Desa Winokerto Wilayah Puskesmas Peterongan Jombang, *Jurnal Edu Health Vol 5, No 2, September 2015*
- Mulyani, siti Nina. 2019. *Asi dan Panduan Ibu Menyusui*. Yogyakarta. NusaMedika Nataria
- Desti & Oktariani Sherly. 2018. Peningkatan Produksi ASI Dengan Konsumsi Buah Pepaya, *Jurnal Kesehatan Prima Nusantara Bukittinngi Vol 9, No 1, Januari 2018*
- Ningsih, Wirda. 2020. Pengaruh Pemberian Buah Pepaya Terhadap Kelancaran ASI Pada Ibu Menyusui di Praktek Mandiri Bidan Wilayah Kerja Puskesmas Muara Badak
- Notoatmodjo, Soekidjo, 2018. *Metodologi Penelitian Kesehatan*, Jakarta. RinekaCipta
- Puspaningtyas, 2018. *The miracle of fruits*. Jakarta. Agro Media Pustaka
- Putri,Utama Uut. 2016. *Untung Besar Dari Berkebun Pepaya*. Jawa Barat. Palapa.
- Proverawati, Atikah. 2019. *Kapita Selektasi ASI dan Menyusui*. Yokyakarta. Nuha Medika.
- Prasetyono, Sunar Dewi. 2019. *ASI eksklusif Pengenalan, Praktek, dan Kemanfaatan-kemanfaatan*
- Widuri, Hesti. 2018. *Cara Mengelola ASI eksklusif Bagi Ibu Bekerja*. Yokyakarta. Pustaka Baru.