

THE EFFECTIVENESS OF MORINGA LEAVES EXTRACT AND CUNCUNPOINT MASSAGE TOWARDS BREAST MILK VOLUME ON BREASTFEEDING MOTHERS

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Abstract: Insufficiency of fulfillment ASI as the main reason a mother to stop breastfeeding early, she felt ASI owned did not affect the growth of the baby's weight (Binns, 2002). So to help smooth expenditure done with the breast milk of Moringa leaf extract and acupressure on CanCung point (CV 17). The purpose of this study was to analyze the effectiveness of moringa leaf extract and cuncung point massage to increase breast milk volume in breastfeeding mothers. The design of this research is pretest and posttest group design. The population of this research is breastfeeding mother in Sanan Wetan area. The population is 20 people. The sample of this research is breastfeeding mother in Sanan Wetan area as many as 20 people. Sampling in this research use purposive sampling. The treatment in this study using Moringa leaf extract at a dose of 800 mg and a massage at the point cuncung. Treatment was done 2x in a day for 1 month. The results showed an increase in points between before and after is 375 points, and there is influence between the consumption of Moringa leaves and massaging at point cuncung to the increase in volume of breast milk with $p = 0.000$. The results showed that about 17 respondents had > 400ml breast milk. One way to increase the volume of breast milk is by giving the extract of moringa leaf and massage at the point of cuncung. Health workers, especially midwives in order to consider complementary therapies that Moringa leaf extract and massaging at point cuncung to increase the volume of milk so that achievement can be increased breastfeeding mothers.

Keywords: Moringa leaf extract, cuncung point, breast milk, breastfeeding mother

INTRODUCTION

Fulfilling the need for nutrition in infants aged 0-6 months must be provided by the mother. Onis and onyango revealed that efforts to improve nutritional needs in infants aged 0-6 months based on under-nutrition at age less than 2 years will have an impact on the decrease of physical growth, brain development, intelligence, and productivity of this impact is largely irreversible (irreversible) (Onis & Onyango, 2008). Inadequate fulfillment of breast milk as the main reason for a mother to stop breastfeeding early, I feel that breast milk does not affect the growth of baby's weight. Breast milk insufficiency can cause the mother to become stressed. Therefore, breast-feeding mothers to add milk formula instead of breast milk, whereas breast milk is needed by the baby's future growth and development process involving the hypothalamus,

pituitary and breast, which have begun at the time of the fetus until the time of labor. Breastfeeding exclusively for 6 months and continued until the age of 2 years in addition to the provision of complementary feeding adequately shown to be one effective intervention can decrease the Infant Mortality Rate (IMR).

Lactation is an integral part of the reproductive process that feeds the baby ideally and naturally and is the biological and psychological basis needed for growth. Breast milk is an ideal food for baby growth. Some components contained in breast milk as a source of nutrients for growth and the first protection against infection. Some components contained in breast milk as a source of nutrients for growth and the first protection against infection. The process of milk formation is a complex.

According to the Ministry of Health (2014). That the percentage of breastfeeding pattern of infant aged 0 months is 39,8%, breastfeeding predominant equal to 51%, and partial feeding equal to 55,1%. Exclusive breastfeeding 0-6 months of 2016 in East Java of 31.3%, this is very far from the government program on SDG's 2030 that is breastfeeding up to 2 years of 100%.

Decreased milk production in the first days after delivery can be caused by a lack of stimulation of prolactin and oxytocin hormones that play a role in the smooth production of breast milk. A study conducted by Blair (2003) showed that in 95 postpartum mothers who breastfed their babies found their milk production decreased if the baby's suction stimulation decreased or decreased. Similarly, research conducted by Pace (2001) shows that the decrease in infant suction also decreases the stimulation of prolactin and oxytocin hormones. So to help launch the expenditure of breast milk done by giving moringa leaf extract and acupressure at the point Can Cung (cv 17) Moringa leaf extract is a local food that has the potential to be developed in culinary breastfeeding mothers, because it contains phytosterol compounds that function to improve and facilitate the production of breast milk (lactagogum effect). Theoretically, the compounds that have the effect of lactagogum include sterol. Sterol is a steroid group compound (Nurmalasari, 2010). While acupressure at CanCung point (cv17) can stimulate cutaneus which is expected to increase patient comfort, stimulate oxytocin release, resulting in increased milk production.

METHODS

The design of this research is pretest and posttest group design. The population of this research is breastfeeding mother in Sanan Wetan area. The population is 20 people. The sample of this research is breastfeeding mother in Sanan Wetan area as many as 20 people. If at the time of the research the respondent was not there, then excluded from this research. Sampling in this research use purposive sampling. Dependent variables in this study were Moringa leaf extract and acupressure point cancung (cv17). The independent variable is the volume of breast milk. Moringa leaves are green dry extracted using 80% ethanol, maceration for 24 hours, rotavapor extract at a temperature of 500 C for 2x24 hours.

The result is freeze- dried for 2x24 hours. The extract was mixed with moringa flour with a ratio of 1: 4 then put into one moringa extract capsule weighing 800mg. Each Moringa extract capsule contains 0.10g protein, 0.15g fat, vitamin A 2.5ig, vitamin E 11.72mg, vitamin C 10.25mg, and iron 0.08mg; and moringa flour capsules contain 0.22g protein, 0.02g fat, vitamin A 0.13ig, vitamin E 0.90mg, vitamin C 0.14mg, and 0.28mg of iron. The researcher gave 2x acupressure treatment and 2 mg capsule extract per month, before treatment was given, the respondents observed their breast milk volume and after 2 treatment of acupressure and 2 capsules per day for 1 month visit in observation of breast milk volume. Different test of 2 result of measurement in same group, if normal distributed data used Paired t-test, if not normal distribution used *Wilcoxon test*.

RESULT

Table 1 Total volume of breast milk before and after massage at Can Cung point and Moringa leaf germination

Variable	Total production of breast milk (ml)		
	<200	200-400	>400
Before	8	7	5
After	0	3	17

Univariate Analysis

Based on the above table states that before the treatment there are 8 respondents have > 200ml volume of breast milk. And after treatment there are 17 respondents have > 400 ml milk.

Table 2 The numerical results of Paired sample t-test

	Mean	Std deviation	t	Sig, 2 Tailed
Before	290.000	108.458	15.463	0.000
After	665.000			

Bivariate Analysis

In the table above proves that there is a rise of points between before and after that is 375 points, and there is influence between the consumption of moringa leaf and massage at the point can cung to increase the volume of breast milk.

DISCUSSION

Before treatment Moringa leaf extract and massaging at point cancong

In the first days of a baby's birth, when sucking the nipple is adequate, it will be produced gradually 10-100 ml of milk. Breast milk production will be optimal after 10-14 days of infant age. A healthy baby will consume 700-800 ml / day. Breastfeeding production begins to decrease from 500 to 700 ml after the first 6 months, 400-600 in the second 6 months of infancy, and will be 300-500 ml in the second year of childhood. (Wiji, 2013).

The results showed that before treatment there were 8 respondents who had the volume of milk > 200 ml per 24 hours. Judging from the volume, the average is still quite a bit of it can happen due to the efforts of nursing mothers in overcoming problems in her breast milk and nursing mothers have not been optimally used as respondents claimed to have never done breast care or massage.

But in some mothers there may be difficulties in the expenditure of breast milk because more mothers are affected myths so that mothers are not sure to give milk to their babies. Uncertain mother's feelings of breastfeeding her baby will cause a decrease in the hormone oxytocin so that breast milk can not come out immediately after delivery and eventually the mother decides to give formula milk.

The volume of breast milk produced and released by the breast glands may differ based on the factors that affect it. Breastmilk production that mother will produce on her breast gland is not the same every time. It is said that the volume of milk will decrease over time. (Wiji, 2013).

After treatment kelor leaf extract and massage at cancong point.

The results showed that about 17 respondents had > 400ml breast milk. One way to increase the volume of breast milk is by giving the extract of moringa leaf and massage at the point of cancong.

In the physiological state of lactation, women's nutritional needs increase due to the need to produce milk. Rahayu research results stated that dietary factors significantly influence milk production in addition to psychological factors and the baby's sucking. Moringa oleifera (Moringa oleifera) is a local food that has the potential to be developed in culinary breastfeeding mothers, because it contains

phytosterol compounds that function to improve and facilitate the production of breast milk (lactagogum effect). Theoretically, the compounds that have the effect of lactagogum include sterol. Sterol is a steroid group compound (Nurmalasari, 2008).

Massage at the point of cancong is between the two breasts can provide a stimulus to increase milk production is the provision of stimulation of the mother's breast muscles, by sorting or massase is expected to provide stimulation to the mother's milk glands in order to produce milk (Wulandari, 2011). Becker did research at the neonatal unit, this study explained that the volume of water to produce more milk, breastfeeding mothers will have to be in a relaxed state psychologically. In addition, massage can also be done while emptying or pumping. By paying attention to these techniques, the feeding process becomes more effective.

Analysis of the effectiveness of Moringa leaf extract and cancong point to increased breastfeeding

Breast milk is a complex liquid that contains many important elements, namely carbohydrates, proteins, fats, water soluble vitamins, fat soluble vitamins, minerals, and epithelial cells. 18 Generally, high levels of breast milk nutrition at birth and will decrease during the lactation period. Iron content in mature milk is 0.2-0.9 mg / L, and according to Almatsier S the average iron content of breast milk is 0.3 mg / L.

The use of Moringa leaves as a nutritional supplement is increasingly widespread, as evidenced by the increasing number of reports of its use in various places both in animals try or humans. Moringa leaf extract contains micro-nutrient multiply, (content per 100g) such as: 6.8 mg beta carotene, 0.21 mg thiamin (B1), 0.05 mg riboflavin (B2), 0.8 mg niacin (B3), 440 mg of calcium, 7 mg of iron, 70 mg of phosphorus, 24 mg magnesium, 137 mg zinc, 220 mg vitamin C, so as to increase the volume of breast milk in breastfeeding mothers. Pearls concluded that Moringa leaves are food ingredients that can increase mother's milk production.

The results showed that there were significant differences before and after treatment with kelor leaf extract and massage at cancong point. reinforced with the results of a study from Pearl (2011), indicating that giving kelor leaf flour can significantly increase rat milk production

significantly. Administration of doses starting at 42 mg / kg BW can significantly increase the secretion of white mouse milk and increase the weight of the rats increases with increasing doses. Research from Zakaria et al (2016), there was an increase in the volume of breast milk before and after the intervention (giving kelor leaf extract) in both groups was significantly different ($p < 0.001$). The difference in the increase in breast milk volume between the higher intervention groups was significantly different ($p = 0.040$).

In addition to giving kelor leaf extract, to maximize the increase in the volume of breast milk then with a massage at the point Cancung. This massage provides a relaxing effect that can reduce complaints such as headaches, vertigo, migraine, increase concentration, regulate appetite and drink, blood circulation (Wong, 2011).

Massage at the point Cancung can stimulate the release of the hormone oxytocin in the mammary gland, this is because when the mother feels comfortable, mendapaat enough touch, enough temperature and no stress or mother in a relaxed condition. Becker (2015), conducted a study in the neonatal unit, the study explains that to produce more milk volume, breastfeeding mothers should be in a psychologically relaxed state. This is also supported by a study from Moberg, 1998 which says that oxytocin is excreted when the mother feels comfortable, achieves enough touch, enough temperature and no stress or the mother is in a relaxed state.

CONCLUSION AND SUGGESTION

Conclusion

Based on the result of research and discussion, it can be concluded that the effectiveness of kelor

leaf extract and massage at Cancung point can increase the significant milk volume in breastfeeding mothers.

Suggestion

Health workers, especially midwives to consider complementary therapies that are giving kelor leaf extract and massage at the point Cancung to increase the volume of breast milk so that the achievement of breastfeeding mothers can increase and the baby can avoid low weight because nutrition from breast milk has been met.

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