

Empowerment of Health Cadres in Utilizing Local Foodstuffs through Modisco Corn Processing to Increase Breast Milk Production for Postpartum Mothers

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ABSTRACT

Nutrition status monitoring data in Indonesia in 2017 noted that the coverage of exclusive breastfeeding for babies up to the first 6 months only reached 35.7%. This is very low and still far from the coverage target set at 80%, which means that around 65% of babies do not get breast milk (ASI). In the Boja Health Center area, the coverage of exclusive breastfeeding is still low at 65%, while the target for the city of Semarang is 90%. From the description of the Puskesmas work area, the lowest breastfeeding coverage is in Meteseh Village. Exclusive breastfeeding coverage is still low at 45%. On average, postpartum mothers in Meteseh village don't think about additional nutritional intake to increase milk production, because they get little information or evidence on processing food ingredients that can be taken from local types of food. Health cadres don't know how to increase milk production for postpartum mothers, through providing additional food for making Modisco Corn. Modisco stands for Modified Dietetic Skim and Cotton Sheet Oil, which was discovered in 1973 by May White Head, according to White, the manufacture of Modisco is used to add nutrition to malnourished children, Modisco Corn is an additional modification given to facilitate breastfeeding and add nutrition to postpartum mothers. Processing Modisco Corn as a solution for postpartum mothers who breastfeed their babies, because corn fruit has the benefit of increasing milk production and is rich in nutrients. Modisco Corn is taught to Health Cadres, so that cadres have the ability to teach postpartum mothers at any time from generation to generation to increase the coverage of exclusive breastfeeding.

Keywords: Empowerment, Health Cadres, Corn Modisco, Exclusive Breastfeeding.

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INTRODUCTION

Nutrition status monitoring data in Indonesia in 2017 noted that the coverage of exclusive breastfeeding for babies up to the first 6 months only reached 35.7%. This is very low and still far from the coverage target set at 80%, which means that around 65% of babies do not get breast milk (ASI).

In the Boja Health Center area, the coverage of exclusive breastfeeding is still low at 65%, while the target for the city of Semarang is 90%. From the description of the Puskesmas work area, the lowest breastfeeding coverage is in Meteseh Village. Exclusive breastfeeding coverage is still low at 45%. The problem faced by mothers in the area is replacing breast milk with formula milk because breast milk is insufficient or the production is small, so that babies aged 3 months have started to be connected to formula milk. On average, postpartum mothers in Meteseh village don't think about additional nutritional intake to increase milk production, because they get little information or education on processing food ingredients that can be taken from local food types.

The problem of breast milk production determines the continuity of the mother to exclusively breastfeed. Breast milk production can be increased by fulfilling adequate nutrition through foods that can help expedite breast milk, including corn. Corn fruit is a local food that is easy to get and cheap, but its utilization is still very small. On average, corn is only given for fodder or as a mixture of animal feed in factories. The lack of milk production is caused by inadequate quality nutritional intake. Currently, the trend for postpartum mothers is to use ready-to-eat foods that have little nutritional value. Postpartum mothers have never used local food ingredients such as corn to make additional food innovations as additional nutritional needs. Processing Modisco Corn as a solution for postpartum mothers who breastfeed their babies, because corn fruit has the benefit of increasing milk production and is rich in nutrients. Modisco Corn will be taught to Health Cadres, so that cadres have the ability to teach postpartum mothers at any time from generation to generation to increase the coverage of exclusive breastfeeding

Corn is a local fruit that has many health benefits, including increasing milk production. Corn plants are easy to grow in tropical areas like Indonesia, so they are easy to get, but corn is less popular or less attractive to the public, including nursing mothers. In 100 grams of corn there are around 80-100 calories, as well as the content of various other nutrients such as; fiber, protein, complex carbohydrates, phosphorus, iron, zinc, magnesium, copper and folate and vitamins; B3, B5, B6 and Vitamin C. Corn also contains antioxidants such as; phenolic acids, zeaxanthin and lutein. Because of the protein and complex carbohydrate content, corn fruit can help increase milk production. Empirically it is said that corn has an effect in helping expedite milk production for mothers who are breastfeeding. The protein content in corn is needed by nursing mothers because nursing mothers need more protein, the benefits of protein itself can replace or prevent damaged cells. Existing protein also plays a role in maintaining the quality of breast milk, as well as a source of protein content in breast milk to meet the baby's protein needs.

One effective way to increase Indonesia's productivity is through women empowerment. Development and empowerment of women must starting in the

womb. The state needs to invest in women by guaranteeing women's health as a whole. Women empowerment no as well as immediately Becomes not quite enough answer government. Role Public very needed for support programs from various sector. Health women, can be done in synergy between the government and society.

Health cadres serve as volunteers in assisting health workers to accompany pregnant, maternity and postpartum women. Knowledge of cadres needs to be increased in assisting postpartum mothers so they are able to provide good education. At present the achievement of exclusive breastfeeding in the Meteseh village area is still low with complaints that most breastfeeding mothers have inadequate milk production, little milk comes out or breast milk stops at the age of 3-4 months.

Based on this problem information, it is necessary to socialize and make pilot innovations in corn food processing with models that are easier and can be liked by breastfeeding mothers. Through this activity, the cadres will be able to educate and provide examples to breastfeeding mothers to teach Modisco Corn simple processing methods so that the cadres can educate breastfeeding mothers how to increase milk production.

METHOD

The method of this Community Service activity is with a partnership model by providing stimulation to Health Cadres about Processing Corn local ingredients with the Modisco technique. The partnership method is a strategy created to involve other people based on the principle of mutual benefit gains (Wong, Fearon and Philips 2007). So in another sense the partnership model is a model of collaboration between partners and organizations that carry out these service activities. The partnership that was carried out in this service, the organization provided training on how to make Modisco Corn to a number of 20 Health Cadres consisting of 10 hamlets/RW so that each of them sent 2 Health cadres to be trained. The training was carried out by providing an explanation of material on Exclusive Breastfeeding, Benefits of Sweet Corn and Modisco Corn Formulation and how to make it. This training model can provide solutions for solving problems faced by partners, namely being able to provide education to postpartum mothers in the Meteseh Village area, Boja District, Kendal Regency with the aim of increasing breast milk production for postpartum mothers so they can provide exclusive breastfeeding. In this partnership, the organization provides resource persons, tools, Modisco materials, and the partners provide a place for the health cadre participants. Implementation of the activity was carried out by demonstrating how to make Modisco Corn and question and answer between participants and resource persons. In this activity the partners were given a stimulation tool to conduct training on making Modisco Corn for postpartum mothers in their respective areas with the ingredients independently and monitoring was carried out in this activity. The monitoring model was carried out 2 times by identifying the implementation and identification of breastfeeding, milk production and weighing the baby.

Monitoring results on the implementation of the first activity in Krajan Hamlet, Meteseh Village, Boja District, Kendal Regency. The cadres gave a demonstration of making Modisco to 20 postpartum mothers.

Table 1. Identification Tale of Breastfeeding Monitoring in Krajan

No	Identification of breastfeeding	
		Amount
1	Exclusive Breastfeeding	70 %
2	Breast milk comes out smoothly	70 %
3	Little milk comes out	10%
4	Breast milk does not come out	20 %
5	Addition of Formula milk	30 %

Source: Written in 8 Palatino Linotype font

Monitoring results on the implementation of the second activity in Rowosari Hamlet, Meteseh Village, Boja District, Kendal Regency. The cadres gave a demonstration of making Modisco to 17 postpartum mothers

Table 2. Identification Tale of Breastfeeding Monitoring in Rowosari

No	Identification of breastfeeding	
		Amount
1	Exclusive Breastfeeding	58%
2	Breast milk comes out smoothly	47 %
3	Little milk comes out	12%
4	Breast milk does not come out	41 %
5	Addition of Formula milk	42 %

Source: Written in 8 Palatino Linotype font

RESULTS AND DISCUSSION

This service is carried out to increase the ability of cadres to educate postpartum mothers who breastfeed their babies aged 0-6 months, so that postpartum mothers can breastfeed exclusively. Breastfeeding problems occur due to many factors, including nutritional factors and the need for mothers to breastfeed their babies. Nutritional factors are related to the problem of insufficient milk production so that they are unable to breastfeed until the age of 6 months. Motivating factors can be influenced by information and knowledge problems that the mother has to intend to give her exclusive breastfeeding. The knowledge factor is related to the role of health cadres in their respective areas. In Meteseh Village there are 20 health cadres who have been trained by Modisco for postpartum mothers to improve the quality and quantity of breast milk. From each hamlet there were 2 cadres who attended the training. When the volunteers were monitoring, the Krajan hamlet cadres were able to provide education to postpartum mothers who had babies aged 1-6 months to increase the amount of breast milk and provide breast milk until the baby only breastfed for 6 months. This was done by gathering postpartum mothers at their homes and the cadres demonstrated how to make Modisco. In this demonstration activity, postpartum mothers paid full attention and were motivated to make their own Modisco for supplementary feeding (PMT) to increase the amount of breast milk. From the results of the evaluation there were still mothers who had less breast milk and did not exclusively breastfeed but instead replaced it with formula milk as much

as 30%, while those who had difficulty expressing milk were not running smoothly so that the frequency of breastfeeding was less than 6 times a day as much as 20%. In the next monitoring in Rowosari Hamlet, Meteseh Village, Boja District, Kendal Regency, monitoring was carried out at the Posyandu which was attended by 17 postpartum mothers who had babies 1-6 months. Servants lack cadres in educating postpartum mothers in making Corn Modisco as additional food for postpartum mothers (PMT), some mothers have not been informed about the manufacture of Corn Modisco, so they carry out information on making Corn Modisco again and provide PMT to 17 postpartum mothers. . From the evaluation of the results, there were still postpartum mothers who had a small amount of breast milk and did not exclusively breastfeed as much as 48% and mothers who had a small amount of breast milk so that the frequency of breastfeeding was less than 41%. This is when compared to the Krajan hamlet, there are still higher cases of mothers who are not exclusive breastfeeding and the amount of non-performing breast milk is greater, so that the Rowosari hamlet must receive more attention from health workers so that Cadres are more active in educating postpartum mothers about Corn Modisco.

Geacle Doroty, Kathryn Kezia Pamela and Martinus Aderya (January 14, 2022) wrote in their article that a lack of breast milk can result in a baby's future growth at around the age of 0-3 years experiencing cognitive development which can affect his level of intelligence. This can happen because of the inhibition of brain growth so that children can become less intelligent, except for that there are also problems with obstructed physical disorders that lead to stunting and weak immune systems so they easily get sick and many more such as the risk of allergies, obesity, digestive disorders and teeth growth disorders. Judging from the benefits of breast milk for the growth of the baby at a later stage, it is very important for postpartum mothers to be able to breastfeed exclusively. On the other hand, activities to support exclusive breastfeeding need support or motivators from health cadres so that postpartum mothers are motivated to increase the amount of breast milk to continue breastfeeding for up to 6 months.

Motivators in this case cadres can become *role models* for postpartum mothers so that they can provide motivation for postpartum mothers to continue breastfeeding their babies without having to provide additional food. The role of cadres greatly contributed to this success, because cadres are the closest people in the community and are always close to the community, to be able to help postpartum mothers support breastfeeding until the baby is at least 6 months old (Mardiana, et al. Semarang State University). This service activity is an activity in the process of empowering cadres, in this case cadres as service partners in solving health problems in Meteseh Village, Boja District, Kendal Regency, so that cadres become more independent as motivators for the local community. The obstacle faced by the servant in this case is that the understanding of empowerment is still lacking, partners hope that the stimulation activities will continue to be carried out by the organization, while the partners become not independent due to dependence caused by the lack of transportation funds provided to residents who take part in the activity. The habit of the community members is that if there is an educational activity, they will get money. If they don't get money, the community is not willing to attend and has to do it with a

home visit. For further activities, health cadres make home visits to every postpartum mother to ensure PMT can be made in each family of postpartum mothers.



Figure 1. Demonstration of Corn Modisco Processing at the Meteseh Village Hall

The presentation of the material was carried out by 3 resource persons namely: 1. Mudy Oktingrum, S,Si.T.,M.Keb, 2. Apt.Fransiska Glori,M.Farm, 3. Agnes Isti Harjanti,S.Si.T.,M.Kes.. The resource person was assisted by students of the S1 Midwifery Study Program, STIKES Telogorejo Semarang.

CONCLUSION

The Empowerment of Health Cadres in utilizing local food with the Corn Modisco Model was held on October 11, 2022 at the Meteseh Village Hall, Boja District, Kendal Regency, attended by 20 cadre participants.

This activity was monitored 2 times in Krajan hamlet and Rowosari hamlet to see the implementation of education on making Modisco Corn by Health Cadres to a number of postpartum mothers, 20 mothers in Krajan hamlet and 17 postpartum mothers in Rowosari hamlet.

Identification results from the activities in the Krajan Empowerment hamlet showed that the cadres had carried out these activities independently and identified 20 infants who were present between the ages of 1-6 months. The average baby weight is 3,210 grams, the lowest is 2,500 grams and the heaviest is 4,200 grams. The youngest is 1 month old, the oldest is 6 months old. For exclusive breastfeeding habits, the average is 70% and 30% for those who are not exclusive. The average frequency of breastfeeding is a lot/often 70%, the frequency is enough 5%, the frequency is less 20%

and the frequency is very less 5%. And the results of the identification of activities in Rowosari hamlet were attended by 17 babies who were present between the ages of 1-6 months. The average weight of a baby is 3,550 grams, the lowest is 2,300 grams and the highest is 5,200 grams. The youngest is 1 month old, the oldest is 6 months old. For the habit of breastfeeding, the average exclusive breastfeeding is 58% and 42% for those who are not exclusive. The most/frequent breastfeeding frequency was 47%, sufficient frequency was 12%, less frequency was 41%.

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