

## ARTICLE

# Exclusive breastfeeding village program increased the role of health cadres

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## Abstract

**Background:** Exclusive Breastfeeding Village Program was launched by Government in 2016 to increase public awareness on the need to feed babies exclusively with breast milk. The purpose of this study was to determine the effect of the exclusive breastfeeding village program in increasing the role of health cadres to promote breastfeeding practices.

**Design and Methods:** The design of this study was pre experimental with one group pre-post design with 102 cadres chosen by simple random sampling techniques. A Wilcoxon signed rank test with a significance level  $\alpha=0.05$  was used to measure the effectiveness of the program.

**Results:** The results showed that the value of  $P<0.05$ , it means that exclusive breastfeeding village program increased the role of health cadres and this is expected to be reflected in the improvement of the health of mothers and babies. The program has a strategic role to increase the knowledge and skills of support groups, make mothers understand the benefits of proper breastfeeding, and encourage eating good foods in order to maintain adequate nutrition.

**Conclusions:** The breastfeeding village program has the ability to improve the knowledge and skills of health cadres.

## Introduction

Breast milk is the best food for babies because it contains the most complete nutritional composition required for optimal growth, physical and mental development, and intelligence.<sup>1-3</sup> However, successful implementation of a breastfeeding program requires the complete commitment of mothers through early initiation, maintaining correct positions, feeding the baby on demand, and providing exclusive feeding by giving infants breast milk up to 6 months without any other food except drugs and vitamins.<sup>4-6</sup>

Breastfeeding is important to the City Government, East Java and this led to the launching of a program called the Breastfeeding Village in 2016 with the goal of increasing public awareness, especially among mothers, ensuring exclusive breastfeeding, and providing adequate knowledge to support groups and health cadres.<sup>7-9</sup> However, the program is experiencing problems in some

part of the city such as the non-optimal implementation in certain sub-district observed from the beginning of 2019, due to the confusion of local health cadres on how to coach and teach, as well as the incomplete home addresses of the target residents – breastfeeding mothers and pregnant women. Other obstacles include the absence of the mothers during meetings and difficulties encountered during home visits.<sup>10-12</sup>

Breastfeeding infants is closely related to the condition of undernutrition and overweight in children. Breast milk is the most important source of energy and nutrition for children aged 6-24 months. It fulfills more than half of the energy needs of children aged 6-12 months and one third of the energy needs of children aged 12-24 months.<sup>13,14</sup> Breast milk is also an important source of nutrition when a child is sick.<sup>15</sup> Breastfeeding can reduce the potential of infectious diseases, e.g. diarrhea, pneumonia, ear infections, haemophilus influenza, meningitis, and urinary tract infections. Infants who are not breastfed will be more vulnerable to infectious diseases.<sup>16</sup> The incidence of infants and toddlers suffering from recurrent infectious diseases will result in the occurrence of toddlers with poor nutrition and thinness.<sup>17,18</sup> Therefore, this study aimed to determine the effect of exclusive breastfeeding village program in increasing the role of health cadres to promote breastfeeding practices.

## Design and methods

The design of this study was pre experimental with one group pre-post design with 102 cadres chosen by simple random sampling techniques. A Wilcoxon signed rank test with a significance level  $\alpha=0.05$  was used to measure the effectiveness of the program. This study was approved by ethics committee of Universitas Nahdlatul Ulama, Surabaya, Indonesia.

## Results and Discussion

Table 1 shows that almost all health cadres are more than 35 years old (94.1%). All of them do not have any other work and this is expected to make them more focused and devoted to the welfare of society, especially the health of mothers and babies. Most of

### Significance for public health

*Successful implementation of a breastfeeding program requires the complete commitment of mothers through early initiation, maintaining correct positions, feeding the baby on demand, and practicing exclusive feeding by giving infant breast milk up to 6 months without any other food except drugs and vitamins. This paper describes the effect of exclusive breastfeeding village program in increasing the role of health cadres to promote breastfeeding practices.*

them (73.5%) were recorded to have high school education level and are very enthusiastic to take part in public health awareness and 75% were discovered to have been cadre for 1-5 years, which means they already have enough experience, while some others have spent more than 10 years in the role. Furthermore, 65.7% were found to have attended training on lactation management and exclusive breastfeeding, while those that have never attended any were found to be lacking the basic understanding of their roles as support groups.

The average cadre role increased by 22.82% compared to the period before the program was implemented and almost all of them (99%) became better. This means the program is effective in improving the knowledge and skills of the cadres in developing community welfare through maternal and child health such as exclusive breastfeeding. The results showed that before the exclusive breastfeeding village program, almost half the respondents (47%) had a good role with an average role of 70.28 and after the exclusive breastfeeding village program, almost all respondents (99%) has a good role with an average role of 93.1 (Table 2).

Furthermore, the P-value is 0.000, which means that exclusive breastfeeding village program increased the role of health cadres and this is expected to be reflected in the improvement of the health of mothers and babies. The program plays a strategic role in increasing the knowledge and skills of support groups, make mothers better understand the benefits of proper breastfeeding, and encourage eating good foods in order to maintain adequate nutrition for mother and baby. Health cadres directly dealing with several social and health problems have a big role to play in the successful application of exclusive breastfeeding to achieve optimal health status for the community.<sup>19</sup> They are also expected to be the first to discover emerging health problems in the area and immedi-

**Table 1. Characteristics of respondents.**

Characteristics	Number	Percentage (%)
Age (years)		
<20	0	0
21-35	6	5.9
>35	96	94.1
Working status		
Working	0	0
Not working	102	100
Education Level		
Junior High School	0	0
High School	75	73.5
University	21	20.7
Period of being health cadre		
<1 year	0	0
1-5 year	75	73.5
>5 year	21	20.7
Training on breastfeeding		
Yes	67	34.3
Not yet	35	65.7

**Table 2. The effect of exclusive breastfeeding village program on the roles of cadres**

Variable	Mean	Median	Z	Sig
Pre	70.28	72.00	-4.708	0.000
Post	93.10	90.00		

ately report to local health workers, meaning they serve as the liaison between the community and health workers.<sup>21,22</sup>

The cadres are expected to obtain the data of all pregnant women, breastfeeding mothers, and newborns in their working area, counsel pregnant and lactating women at community health center on the importance of exclusive breastfeeding, make home visits to post-partum mothers and encourage routine baby health checks.<sup>23-25</sup> The breastfeeding village program plays a strategic role in developing the knowledge and skills of support groups and providing mothers with adequate information on how to ensure proper breastfeeding and encouraging them to consume nutritious foods.<sup>26,27</sup>

## Conclusions

The breastfeeding village program has the ability to improve the knowledge and skills of health cadres.

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