



Analysis of Some Factors That Influence the Performance of the Cadre in Improving Exclusive Breastfeeding

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Abstract

One effort to realize a healthy Indonesian society is by empowering the community through cadres. Cadres are expected to be able to bridge health workers with the community and support the success of exclusive breastfeeding. Furthermore this study determine the factors that influence the performance of cadres in increasing the coverage of exclusive breastfeeding. This study was an observational analytic study with approach *cross sectional*. The study sample was a health cadre in the Blera Health Center area. The independent variables in this study are factors that influence cadre performance including the level of knowledge, attitude, motivation, breastfeeding training. The dependent variable in this study is the performance of cadres in improving the performance of exclusive breastfeeding. Through proportional random sampling, subjects were chosen from 18 villages in Public Health Services in Blera district. There is 180 respondents interviewed based on questioners. Design used is Cross sectional and analysed using SPSS system. Because data on categorical variables, then the bivariate analysis use chi square in CI 95% and multivariate analysis use *multiple logistic regression*. There was a positive and statistically significant influence between knowledge and cadre performance ($p < 0,000 < 0,05$; OR 12,227; CI 95% 4,902-30,499) and training with cadre performance ($p < 0,000 < 0,05$; OR = 22,788; CI 95% 5,831-89,050). There was no significant effect between attitudes ($p > 0,859 > 0,05$) and motivation ($p > 0,260 > 0,05$) on cadre performance.

Keywords: Factors; performance; cadres; exclusive breastfeeding.

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1. Introduction

Breastfeeding is one of the first steps for a human to get a healthy and prosperous life. However, in some developed and developing countries including Indonesia, many mothers do not exclusively breastfeed. Worldwide, fewer than 405 infants <6 months of age are exclusively breastfed [1]. Whereas in Indonesia, according to the Basic Health Research Data in 2010, the provision of breastfeeding in Indonesia is still a concern. The percentage of babies breastfed exclusively up to 6 months is only 15.3%. This is due to public awareness in encouraging an increase in breastfeeding is still relatively low [2]. The low coverage of exclusive breastfeeding is a threat to the growth and development of children which will affect the growth and development of the quality of Human Resources in general because 80% of the child's brain development starts in the womb until the age of 3, known as the golden period [3]. One of the areas in Blora Regency, Central Java Province, Indonesia with exclusive low ASI coverage, namely Blora District. Based on data from Blora Health Center, the coverage of exclusive breastfeeding in July 2018 was only 22% [4]. One effort to realize a healthy Indonesian society is to empower the community. One of the empowerment efforts is to include community members or cadres who are willing to voluntarily engage in health problems [5]. Based on research conducted by Tadele et al (2016), the majority of mothers have a positive attitude towards exclusive breastfeeding, but do not know the recommended time for exclusive breastfeeding for up to six months [6]. Health cadres who are directly faced with various social problems, including health problems faced by the community, have a big role to support the success of exclusive breastfeeding. In this case the health cadre has a role in efforts to increase exclusive breastfeeding in the community by inviting the community to apply it to achieve optimal health status. In addition, cadres can also play the role of the person who first finds out if there are health problems in their area and immediately report to local health workers. So cadres are a liaison between the community and health workers because cadres are always in the midst of society [7]. Cadres can help mobilize community resources, advocate for the community and build local capacity. Factors that affect the performance of cadres are very complex and vary from one region to another. In addition to internal factors such as age, length of dedication, experience, social status, economic conditions and family support also influenced by external factors such as the condition of the community and health institutions also affect cadre motivation and retention. Non-financial benefits are also very important for the success of a cadre program [8]. Analyzing factors that influence cadre performance in a region with a low coverage of exclusive breastfeeding can be an input for the local health office to develop strategies to increase the coverage of exclusive breastfeeding and evaluation to improve the role of cadres.

2. Method

This study used *cross sectional* method. This research done in public health services in Blora. The goal of this study is to know the factors that influence the performance of cadres in increasing the coverage of exclusive breastfeeding. Proportional random sampling was used in this study. The sample in this study was active health cadres in public health services in Blora. One hundred and eighty samples were drawn from 18 villages in Public Health Services in Blora. This research was conducted on October 2018. Ethical clearance was gain from the ethic committee of Health Polytechnic of Semarang. Questionnaire which used to collect data was given to the respondents by enumerators. Twenty yes no questions about breastfeeding has 20 score, ten agree and

disagree questions about attitude has 10 score, seventeen yes no questions about motivations has 17 score, one questions about breastfeed training has 1 score, and 14 yes no questions about cadre’s performance. Then data was tabulated and processed using SPSS 17 version and analyzed data with chi square technique and logistic regression test.

3. Results

Respondents characteristic was identified to describe possible factors influencing cadre performance. It can be seen from table 1 that the respondent in this study was dominantly in >35 years old (78,89%). The number of respondents in the four levels of education is dominated by senior high school level (70,56%). Table 1 also shows that almost all respondents are housewives (82.7%). The long time to be cadre is dominated <10 years (53,33%) and 10-30 years (46,67%).

Table 1: Characteristic of respondents, level of breastfeeding knowledge, attitude, breastfeed training

| Variable | | Frekuensi (n) | Prosentase (%) |
|----------------------------------|--------------------|---------------|----------------|
| Age | <20 years old | 0 | 0 |
| | 20-35 years old | 38 | 21,11 |
| | >35 years old | 142 | 78,89 |
| Education | Elementary | 12 | 6,67 |
| | Junior High School | 38 | 21,11 |
| | Senior High School | 127 | 70,56 |
| | University | 3 | 1,66 |
| Occupation | Housewife | 144 | 80 |
| | Farmer | 7 | 3,89 |
| | Bussiness | 28 | 15,55 |
| | Gover | 1 | 0,56 |
| Long time to be cadre | < 10 years | 96 | 53,33 |
| | 10-30 years | 82 | 46,67 |
| | >30 years | 2 | 1,11 |
| Level of breastfeeding knowledge | Less | 88 | 48,89 |
| | Good | 92 | 51,11 |
| Attitude | Agree | 124 | 68,89 |
| | Disagree | 56 | 31,11 |
| Motivation | Less | 75 | 41,67 |
| | Good | 105 | 58,33 |
| Breastfeed training | No | 111 | 61,67 |
| | Yes | 69 | 38,33 |
| Cadre performance | Less | 75 | 41,67 |
| | Good | 105 | 58,33 |

Regarding of the independent variables, this research found that 51,1% respondents are in a good level of breastfeeding knowledge and 48,89 % a less level of breastfeeding knowledge. The level of knowledge is drawn from 20 yes no question, content of how important breast milk for the baby, benefit of breastfeed for the mother, psychological effect of breastfeeding, economical advantage of breastfeeding and breastfeeding for working mothers. Test the normality of knowledge data on 180 respondents using the Kolmogorov-Smirnov test with the results of Sig. 0,000 (<0,005) which means it does not have normal data distribution. Good level knowledge is defined when score \geq median ($\geq 70\%$ questions were well answered by respondents). Mothers are in less level of breastfeeding knowledge when they only give well answer in $< 70\%$. This category is also used to divide the level of attitude. Test the normality of attitude data on 180 respondents using the Kolmogorov-Smirnov test with the results of Sig. 0,000 (<0,005) which means it does not have normal data distribution. Supporting and not supportive attitude is defined when score \geq median (≥ 9) and score $<$ median (<9). The level of attitude is drawn from 10 agree and disagree questions, content of the cadre's response to exclusive breastfeeding consists of cadre estimates about exclusive breastfeeding, cadre responses on how to provide exclusive breastfeeding. This research found that 68,89% respondents are in a supporting of breastfeeding attitude and 31,11 % a not of supportive breastfeeding attitude. This research reveals that 58, 33% cadre's have good motivation and 41,67% have less motivation. The level of motivation is drawn from 17 yes no question, content of intrinsic motivation such as achievement, responsibility, the work it self and extrinsic motivation such as social relations, environment. Test the normality of motivation data on 180 respondents using the Kolmogorov-Smirnov test with the results of Sig. 0,000 (<0,005) which means it does not have normal data distribution. Good and less motivation is defined when score \geq median (≥ 59) and score $<$ median (<59). This research found that 61,67% cadre had never attended breastfeeding training and 38,33 % cadre had attended breastfeeding training. This category is also used to divide the level of cadre performance. Test the normality of attitude data on 180 respondents using the Kolmogorov-Smirnov test with the results of Sig. 0,000 (<0,005) which means it does not have normal data distribution. Good and less cadre performance is defined when score \geq median (≥ 57) and score $<$ median (<57). The level of cadre performance is drawn from 14 yes no questions, content of energy, funds, material, mind cadre about the success of exclusively of breastfeeding mothers. This research found that 41,67% respondents are in a less performance and 58,33 % a good performance of cadre. It can be seen from the table 2 that the more mother in a good level of breastfeeding knowledge the higher number in percentage of good cadre performance (82 good cadre performance from 92 cadre performance in good level of breastfeeding knowledge). Furthermore there is a significant relation between level of breastfeeding knowledge with cadre performance ($p=0.000$).

Table 2: Cross tab of breastfeeding knowledge level with cadre performance

| Knowledge | Cadre performance | | | | Total | |
|-----------|-------------------|------|------|------|-------|------|
| | Less | | Good | | n | % |
| | n | % | n | % | | |
| Less | 65 | 73,9 | 23 | 10,9 | 88 | 41,7 |
| Good | 10 | 26,1 | 82 | 89,1 | 92 | 58,3 |
| Total | 75 | 100 | 105 | 100 | 180 | 100 |

$X^2 = 23.174$ P = 0.000

Supporting and not supportive attitude also contributes to the cadre performance. This research shows that 79 good cadre performance from 124 cadre performance in good level of supportive attitude. Table 3 shows that there is a significant relation between attitude with cadre performance (p=0.029).

Table 3: Cross tab of attitude with cadre performance

| Attitude | Cadre performance | | | | Total | |
|----------|-------------------|------|------|------|-------|------|
| | Less | | Good | | n | % |
| | n | % | n | % | | |
| Disagree | 30 | 53,6 | 26 | 36,3 | 56 | 41,7 |
| Agree | 45 | 46,4 | 79 | 63,7 | 124 | 58,3 |
| Total | 75 | 100 | 105 | 100 | 180 | 100 |

$X^2 = 2.026$ P = 0.029

This research shows that 69 good cadre performance from 105 cadre performance in good motivation. Table 4 shows that there is a significant relation between motivation with cadre performance (p=0.017).

Table 4: Cross tab of motivation with cadre performance

| Motivation | Cadre performance | | | | Total | |
|------------|-------------------|-----|------|------|-------|------|
| | Less | | Good | | n | % |
| | n | % | n | % | | |
| Less | 39 | 52 | 36 | 34,3 | 75 | 41,7 |
| Good | 36 | 48 | 69 | 65,7 | 105 | 58,3 |
| Total | 75 | 100 | 105 | 100 | 180 | 100 |

$X^2 = 2.076$ P = 0.017

This research shows that 72 less cadre performance from 111 cadre performance in cadre had never attended breastfeeding training. Table 5 shows that there is a significant relation between breastfeeding training with cadre performance (p=0.000).

Table 5: Cross tab of breastfeeding training with cadre performance

| Breastfeeding training | Cadre performance | | | | Total | |
|------------------------|-------------------|------|------|------|-------|------|
| | Less | | Good | | n | % |
| | n | % | n | % | | |
| No | 72 | 64,9 | 39 | 4,3 | 111 | 41,7 |
| Yes | 3 | 35,1 | 66 | 95,7 | 69 | 58,3 |
| Total | 75 | 100 | 105 | 100 | 180 | 100 |

$$X^2 = 40,615 \quad P = 0.000$$

Based on the table 6 we know that the p-value of knowledge is 0,000 (< 0.05) which means that knowledge has an influence on the performance of cadres. The value p-value of attitude is 0.859 (< 0.05) which means that the attitude has no influence on the performance of the cadres. The p-value of breastfeeding training is 0,000 (< 0.05) which means training has an influence on the performance of cadres. The value of p-value motivation is 0.260 (< 0.05) which means that motivation has no effect on cadre performance. Based on Nagelkerke R² value of 61.8% which means that knowledge and training affect the performance of cadres by 61.8%, while other factors that affect by 38.2%. Knowledge value OR is 12,227. This means that someone who has good knowledge will have a good performance of 12,227 times compared to those who have less knowledge. Because the value of B is positive, knowledge has a positive relationship with the performance of cadres. The OR value training is 22,788. This means that someone who participates in the training will have a good performance of 22,788 times compared to those who have never attended training. Because the value of B is positive, the training has a positive relationship with the performance of cadres.

Table 6: Logistic regression test

| Variable | B | p | OR | 95.0 % CI for Exp(B) | |
|------------------------|--------|-------|--------|----------------------|--------|
| | | | | Lower | Upper |
| Knowledge | 2.504 | 0.000 | 12.227 | 4.902 | 30.499 |
| Attitude | 0.082 | 0.859 | 1.086 | 0.439 | 2.687 |
| Breastfeeding training | 3.126 | 0.000 | 22.788 | 5.831 | 89.050 |
| Motivation | -0.528 | 0.260 | 0.590 | 0.235 | 1.477 |
| N observation | 180 | | | | |

$$-2\log\text{likelihood} = 133.831 \quad \text{Nagelkerke } R^2 = 61,8\%$$

4. Discussion

4.1. Knowledge factors on cadre performance

Based on the results of data analysis it is known that knowledge has a significant effect on cadre performance (p 0,000 <0,05). Based on the results of data analysis the OR value of knowledge is 12,227. This means that someone who has good knowledge will have a good performance of 12,227 times compared to those who have less knowledge. Because the value of B is positive, knowledge has a positive relationship with the performance of cadres. The results of this study are in line with the results of another research, which states that health cadres with high knowledge are 18 times more likely to be active than low knowledge. Knowledge is the result of knowing and this happens after people do sensing a certain object. Sensing occurs through the five human senses. Most human knowledge is obtained through the eyes and ears [9]. Knowledge or cognitive is a domain that is very important for the formation of one's actions. Therefore, from experience and research, behavior that is based on knowledge will be more lasting than behavior that is not based on knowledge. The factors that influence a person's behavior one of them is the knowledge of that person. The level of knowledge of cadres will

influence the success of the implementation of posyandu activities. With the knowledge possessed, cadres can carry out their duties and responsibilities properly. Cadres who have sufficient knowledge of the elderly posyandu will continue to play a good role in the elderly posyandu activities [10]. Knowledge about breastfeeding is very important for cadres to carry out their roles to be able to help breastfeeding mothers exclusively. Maternal support groups were very useful for the success of exclusive breastfeeding (the practice of breastfeeding [11]).

4.2. Attitude factors towards cadre performance

In this study, attitudes did not have an effect on the performance of cadres in increasing the coverage of exclusive breastfeeding with attitude p-value 0.859 (> 0.05). The results of this study are different from researcher in [12] said that the better the cadre's attitude, the cadres have a positive perception of their expectations so that cadres can implement them well. This condition will certainly improve the performance of cadres. Broadly speaking, the attitude consists of cognitive components (ideas learned), components of behavior (influence on appropriate or inappropriate responses), and emotional components (giving rise to consistent responses). Attitude is a reaction or response that is still closed from someone to a stimulus or object. The manifestation of that attitude cannot be directly seen, but can only be interpreted in advance from closed behavior. Attitude is not yet an action or activity, but it is a predisposition to the behavior of a behavior.

4.3. Motivation Factors Against Cadre Performance

In this study, motivation has no effect on cadre performance in increasing the coverage of exclusive breastfeeding with a p-value of 0.260 (> 0.05). The results of this study are different from researcher in [12] said that increasing cadre motivation can be done through the provision of training and cadre rotation. One factor that influences the formation of *abilities* is experience. This condition causes the respondents to have good experience in carrying out their performance in implementing the posyandu. This sufficient experience will form a strong motivation from respondents to provide services at Posyandu maximally. This is reflected in the results of the study which showed a strong relationship between motivation and the performance of posyandu cadres. Motivational factors influence the participation of cadres and the community in the posyandu. In active cadres, external motivation is more influential than internal motivation. Internal motivation includes appreciation, self-actualization, achievement, responsibility. External motivational factors include social, environmental and incentive relations. Motivation is an impulse that arises from within a person to do certain actions. Factors that affect the performance of cadres are very complex and vary from one region to another. Apart from internal factors such as age, length of dedication, experience, social status, economic conditions and family support; External factors such as the condition of the community and health institutions also influence cadres' motivation and retention [13].

4.4. Training Breastfeeding Factors Against Cadre Performance

Based on the results of data analysis it is known that training has an influence on the performance of cadres with a training p-value of 0,000 (<0.05). The training OR value is 22,788. This means that someone who participates

in the training will have a good performance of 22,788 times compared to those who have never attended training. Because the value of B is positive, the training has a positive relationship with the performance of cadres. A similar study was also conducted by [14] that there was a significant difference between before and after the training of Posyandu cadres. This can prove that the training is able to have an effect on increasing the knowledge and skills of posyandu cadres. Health education as well as training in the short term can produce changes and increase in individual knowledge. Increased knowledge is also due to the ability of individuals to receive information. This is one of them influenced by the age factor, the growing age the greater the capture of information and mindset, so that knowledge is getting better. One's memory is influenced by age. Increasing age can affect the increase in knowledge gained, but at certain ages or before old age the ability to receive or remember a knowledge will decrease. The establishment of appropriate and sustainable training and informal education can be an alternative in the management of empowerment of cadres [12]. Effective performance requires knowledge and helps make the possibility of acquisition of new knowledge, where this knowledge can be obtained through training. Based on research conducted by [15] it is known that the performance of Posyandu cadres can be improved by increasing incentives and increasing training for cadres. Cadres who actively support exclusive breastfeeding can help increase exclusive breastfeeding coverage. The health workers who are given motivation in training will be able to improve the quality of health services. Lack of skills and training are often effective barriers to CHWs performance. Training of community health cadres can provide opportunities to learn skills, receive education and interact with higher professional staff [16].

5. Conclusion

The level of knowledge has an influence on the performance of cadres with a value of $p = 0,000 < 0,05$; OR 12,227; 95% CI 4.902-30,499. Attitudes do not have an influence on the performance of cadres with a p-value of 0.859 (> 0.05). Breastfeeding training has an influence on the performance of cadres with a p-value of 0,000 $< 0,05$; OR = 22,788; 95% CI 5,831-89,050. Motivation has no influence on the performance of cadres with a value of p-value p-value 0.260 (> 0.05).

6. Limitation of Research

Many factors influence the performance of cadres. In this study only limited to the factors of knowledge, attitudes, motivation, training about breastfeeding. So that further research can be carried out on other factors that can affect the performance of cadres such as supervision, infrastructure support, and incentives, and others.

7. Recommendation

Recommendations based on the results of the research is to increase the cadre's knowledge and giving breastfeeding training to increase the performance of cadres. Other recommendation from result of this research is can form breastfeeding support groups with cadres to help support breastfeeding activities so that exclusive breastfeeding coverage can increase.

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