Home Care for Improving Mother Breastfeeding Self Efficacy

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ABSTRACT

Objective: The purpose of this study was to examine the influence of home care on increasing self efficacy in breastfeeding mothers.

Method: This research was a quasi-experimental study non-equivalent control group design. The sample in this study were 30 breastfeeding mothers consisting of intervention and control groups taken by purposive sampling technique. The measuring instrument used in this study was breastfeeding self-efficacy short form (BSES-SF) scale consisting of 14 question items. The analysis used in this study is the dependent and independent T test.

Result: The study results showed that the majority of respondents were in the young group (20-35 years old), the majority had high school education and a bachelor degree (80%), and mostly of respondent as a housewife (73.3%). Less than half of respondents (33.3%) immediately performed early breastfeeding initiation after deliver birth and as many as 25 babies (83.3%) received exclusive breastfeeding before starting this study. There was a mean difference in self-efficacy score in experimental group score of 62.27 with a standard deviation of 7.42 and the control group was 50.87 with a standard deviation of 4.76 after home care was done. There was a significant influence of home care on increasing breastfeeding mother's self efficacy (p value <0.001).

Conclusion: Assistance for breastfeeding mothers are significantly important to be performed by health workers, especially community health nurses in the form of home care to increase mother BSE.

Keywords: breastfeeding, home care, self-efficacy.

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INTRODUCTION

Breastfeeding is known as the best nutrition for babies, especially in the first 6 months of a baby's life. World Health Organization (WHO) has recommended giving only breast milk without additional food to infants before 6 months and then followed by complementary foods after the age of 6 months to get optimal nutrition¹. Infants who are given only breast milk (exclusive breastfeeding) during this period will prevent infant morbidity and mortality caused various health problems². More over, provision of additional food before the age of 6 months has been shown to have a negative impact on the child's nutritional status³. Mothers breastfeeding as a survival intervention for early baby life.

Although breastfeeding is a natural process and provides many benefits, however many infants who do not get exclusive breastfeeding (EBF) since the first sixt month of the baby age for some reasons. The main reason is the perception of breastfeeding mothers who are less precise about their breast milk adequacy of breast milk. Previous studies have shown that mothers have provided a variety of additional foods such as formula milk and baby porridge because mothers feel only breast milk is not sufficient for their babies⁴. In other word that the mothers are not sure of their ability to provide breast milk only to their babies or perceived insufficient milk (PIM)⁵. Breastfeeding self efficacy (BSE) is a term often used to describe this situation. Self efficacy is useful for predicting both breastfeeding initiation and breastfeeding behavior over time and can be the strongest predictor of successful breastfeeding⁶.

Exclusive breastfeeding achievement rate in the world is still low¹ as well as in developing countries, including in Indonesia, which has not yet reached the target⁷. The percentage of breastfeeding in Riau and Pekanbaru is no more than the target⁸. A research shows that psychological factors have been reported to be highly predictive of exclusive breastfeeding outcomes. Research to date shows that psychosocial factors are not only importantly implicated in exclusive breastfeeding duration but they can also be changed through intervention and experiences⁹. Moreover, the previous studies result indicate that the self-efficacy of breastfeeding mothers in Pekanbaru is low and the percentage of exclusive breastfeeding also low. More over, there was a positive relationship between the support provided and the success of exclusive breastfeeding⁴, however the breastfeeding mothers support study in home care form for breastfeeding mothers' self efficacy study has been limited. Therefore the purpose of this study to examine the influence of home care to breastfeeding self-efficacy among Indonesia breastfeeding mothers.

MATERIAL AND METHODS

This study was a quasi-experimental study non-equivalent control group design performed on 30 breastfeeding mothers (as an intervention and control group) whose babies were 0-2 months of age as a sample. Samples were taken using a purposive technique in the one of public health center working area, Pekanbaru. The EBF number in this area is relatively low even though the city of Pekanbaru is the capital of Riau Province. The inclusion criteria for the study sample were healthy baby, normal delivery, and good baby's suction reflex. More over, mothers who are suffering from chronic infectious diseases and mothers who have birth by cesarean section (SC) were excluded from this study.

Data were collected using a questionnaire consisting of general data and breastfeeding self-efficacy data. The breastfeeding self-efficacy questionnaire were measured using a breastfeeding self-efficacy short form (BSES-SF) questionnaire consisting of 14 question items with a 1-5 Likert scale. The total score was in the range 14-70. High scores indicate high breastfeeding self-efficacy¹⁰. This questionnaire has been translated by Wardani and has been tested for validity and reliability with alpha Cronbach 0.94¹¹.

In this study, home care was conducted in the respondent's home for both the intervention group and the control group. In the intervention group, researcher provide the breastfeeding education followed by lactation massage to stimulate breast milk expenditure. Families members including the husbands have advised to redemonstrations the lactation massage for 2 times a day in 5 minutes in 3 weeks. The dates juice also was given to effort the increasing energy for mothers. Mother BSE data was taken at the beginning before the intervention and after for both the intervention and control group. The study was conducted with research assistants (RA) who are final years nursing students and public health nurses. RA were trained in lactation management and data collection techniques. Respondents were explained how the study process. The respondents who agree are asked to sign the consent form in this study.

Analysis of the data used in this study is to use the t dependent and t independent test between 2 groups to see the effectiveness of home care performed on breastfeeding self-efficacy. Normality data has already checked to make sure the data distribution for normality.

RESULTS

Table 1 describes the characteristics of respondents, in which from 30 respondents studied, the age of majority were early adults (20-35 years), as many as 25 respondents (83.3%), mostly respondents (73.3%) from mothers in both the experimental and the control groups were found did not work (house wife), and majority of mothers' education was Bachelor degree and senior high school level with 12 respondentsd (40.0%) in each group. Furthermore, the distribution of respondents according to the number of children found that most were having 1 to 2 children (66.6%). The age of respondents' babies were mostly in the post neonatal period> 29 days (60.0%). Less than half of respondents (33.3%) provide the early breastfeeding initiation, as many as 25 babies (83.3%) received exclusive breastfeeding before collecting data and most respondents (60.0%) had no breastfeeding problems. Furthermore, although the majority (70.0%) of respondents did not get formula milk samples at the hospital, 6 respondents were still given formula milk samples by midwives.

Table 1: Distribution of Respondents Characteristic

Characteristic	Experiment Group (N=15)	Control Group (N=15)	Total
	N (%)	N (%)	N (%)
Mother Age		·	
Early Adulthood	13 (86.7)	12 (80)	25 (83.3)
Last Adulthood	2 (13.3	3 (20)	5 (16.7)
Baby Age ^a	·	•	
Early Neonatal	3 (20)	2 (13.3)	5 16.7
Last Neonatal	3 (20)	4 (26.7)	7 23.3
Pasca Neonatal	9 (60)	9 (60)	18 60.0
Mother's Job			
Work	5 (33.3)	3 20	8 26.7
No Work	10 (66.7)	12 80	22 73.3
Mother's Education	1	1	
Elementary	1 6.7	1 6.7	2 6.7
Junior High	2 13.3	2 13.3	4 13.3
Senior High	4 26.3	8 53.3	12 40.0
Undergraduate	8 53.3	4 26.7	12 40.0
Child Number	,	1	1
1 Child	7 46.7	3 20.0	10 33.3
2 Child	6 40.0	4 26.7	10 33.3
More than 2	2 13.4	8 53.3	10 33.3
Early Breastfeeding Initiation	,	1	
Directly after birth	6 40	4 26.7	10 33.3
1 hour	4 26.7	0 26.7	4 13.3
2 hours	1 6.7	4 13.3	5 16.7
3 hours	1 6.7	2 6.7	3 10.0
4 hours	0 0	1 0	1 3.3
6 hours	0 0	1 0	1 3.3
9 hours	1 6.7	1 6.7	2 6.7
≥2-3 days	2 13.4	2 13.4	4 13.3
Mothers Breastfeeding		1	<u>'</u>
Exclusive Breastfeeding	12 80	13 86.7	25 83.3
Complementary food	3 20	2 13.3	5 16.7
Breastfeeding Problems			
No	9 60	9 60.0	18 60.0
Yes	6 26.7	6 40.0	5 16.7
Formula milk sampling			
No	9 60	12 80	21 (70.0)

MidWife	4 26.7	2 13.3	6 20.0
Doctor	1 6.7	0 0	1 3.3
Hospital	0 0	1 6.7	1 3.3
Parents	1 6.7	0 0	1 3.3

^aEarly Neonatal (0-7 days)

Last Neonatal (8-28 days)

Pasca Neonatal (>29 days)

Table 2 explain the mean self-efficacy difference scores before giving intervention in the experimental group was 53.62 with a standard deviation (SD) of 10.60 and after being given an intervention was 62.27 with a standard deviation of 7.42. Moreover, the mean score of the self-efficacy for control group pre-test was 49.33 with 6.80 SD and 50.87 for post-test with 4.70 SD. There was a significant influence of home care before and after intervention to breastfeeding self-efficacy in intervention group (p value <0.01) while the control group had no significant effect (p value 0.208).

Table 2: Mean Scores Mothers Self Efficacy Pre-test and Post-test in Experiment and Control Group

Experiment Group				
Pre test	15	53.62	10.60	0.000
Post test	15	62.27	7.42	
Control Group				
Pre test	15	49.33	6.80	0.208
Post test	15	50.87	4.70	

Table 3 shows that there is a difference in the mean score of self-efficacy in the experimental group and the control group after home care is performed with a mean intervention score with 62.27 with 7.42 SD and 50.87 mean score of self-efficacy for the control group with 4.76 SD. Significant difference between 2 groups with p value < 0.001. Then, it can be concluded that home care is effective in increasing the self-efficacy of breastfeeding mothers .

Tabel 3: Mean Posttest Differences of Mothers Self-Efficacy in Experiment and Control Group after Home Care

Variables	Mean	SD	p value
Experiment Group	62.27	7.42	
Control Group	50.87	4.76	0.000

DISCUSSION

Mother's belief in giving breast milk is recognised as breastfeeding Self efficacy (BSE). BSE is an important aspect in determining the success of a mother breastfeeding. This is due to BSE can affect in individual responses in the form of mindset, emotional reactions, effort and persistence and decisions taken¹². Low self-efficacy of breastfeeding can cause perception and motivation in breastfeeding¹³. Conversely, if the self-efficacy of breastfeeding is high, it certainly will motivate the breastfeeding mother to provide exclusive breastfeeding to their baby. The study also shows that the determinant factor in breastfeeding is high self-efficacy¹⁴. In this study, the majority of mothers (83.3%) in both groups provide exclusive breastfeeding. However, after the intervention the number of babies given who were given exclusive breastfeeding increased in the intervention group to 14 respondents, while in the control group the number did not increase (steady). The mean of breastfeeding self-efficacy respondents in both groups experienced an increase, but in the intervention group the increase was much higher when compared to the control group. Breastfeeding self-efficacy experienced a significant increase in the group in which home care was provided compared to the group that did not do home care.

Increaseing breastfeeding self-efficacy in this study shows that home care is highly effective for breastfeeding mothers. Home care is a visiting process of family by health workers in order to provide guidance to families who have health problems to solve various the health problem in family, in this case the post-natal family. Previous studies show the influence of home care on increasing family independence in solving family health problems¹⁵ and throughout home care in this study, mothers acquire knowledge and guidance on proper breastfeeding through health workers. More over, the mother breastfeeding skill was increased by simulation breastfeeding education based on the last study¹⁶. The increasing mother breastfeeding skill certainly affect to mothers breastfeeding confidence. Self-efficacy of breastfeeding mothers is associated with the belief of mothers that the production of breast milk is sufficient with the needs of the baby, the efforts to support the breastfeeding process and the efforts made when experiencing obstacles and difficulties during breastfeeding.

Furthermore, self-efficacy in the intervention group in this study after home care was significantly higher than breastfeeding self-efficacy in the control group. There was a significant effect of home care to breastfeeding self-efficacy. With home care, mothers get adequate support with home care from both health workers and families to improve the knowledge and skills about breastfeeding. Previous research results show a relationship between husband support with breastfeeding and the influence of guidance given in breastfeeding classes with self-efficacy of nursing mothers. Father support is very important for increasing mother confidence¹⁷. There is a significant relationship between BSE and breastfeeding activities¹⁸. The higher the confidence of breastfeeding mothers is the more correct activities or ways to breastfeed they have. Breastfeeding mothers who have good knowledge about correct

breastfeeding techniques will make mothers feel more confident in giving breast milk, which in the end their self efficacy can increase their milk production. In other words, breastfeeding mothers' who believe that they only have a small amount of milk production will result in a decrease in their breast milk production and enentually the production of breast milk stops¹⁹.

The higher the confidence of nursing mothers is the possibility of breast milk production will increase. Some studies show that BSE is an important factor related to the initiation, duration, and exclusive breastfeeding. In this study, it was seen that the percentage of immediate breastfeeding initiation at birth and the first hour of birth was less than 50%^{20,21}. This shows that the confidence of mothers to breastfeed early in labor is still low and certainly has an affects on the desire of mothers to breastfeed exclusively. Mothers who have high confidence will try to regulate and strive to breastfeed according to the needs of infants and decide to be able to provide exclusive breastfeeding to their babies²². In the early weeks of birth, there will be a psychological change in breastfeeding mothers which certainly affects the motivation and confidence of the mother to breastfeed. Mothers who have high self efficacy can overcome obstacles that occur at the beginning of post partum compared to mothers who have low self efficacy²³.

CONCLUSION

To sum up of this study is that trough home care is effective to improve self-efficacy. The increase significantly for breastfeeding self care occurred quite among home care mothers compared to mothers who did not receive home care. Increased breastfeeding self efficacy will encourage mothers to give exclusive breastfeeding.

Ethical Clearance: Permission for this study has taken from government of Pekanbaru

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Conflict Of Interest: Nil

REFERENCES

- 1. World Health Organization. Global breastfeeding scorecard: tracking progress for breastfeeding policies and programmes. 2017.
- Lamberti, L. M., Walker F, Christa L. Noiman, A, Victora, C, Black, Robert E. Breastfeeding and the risk for diarrhoea morbidity and mortality. 2011: BMC Public Health Vol 11. (supl 3).
- 3. Agrina, Omote, Kimura R, Tsuda A, Saito R, Syahrul S "A study of underweight determinant factors among toddlers in Riau, Indonesia". 2017: Journal of Wellness and Health Care. Vol.41 No.1
- 4. Agrina, Kimura R and Tsuda A. Mother' S Exclusive Breastfeeding Behaviour: A Cross Sectional Study in Pekanbaru, Indonesia. 2015: International Journal of Research in Medical sciences 3(1):109–18.
- 5. D. E. McCarter-Spaulding and M. H. Kearney. Parenting self- efficacy and perception of insufficient breast milk. 2001: Journal of Obstetric, Gynecologic, & Neonatal Nursing. Vol. 30, no. 5, pp. 515–522.
- Tuthill, E. L., McGrath, J. M., Graber, M., Cusson, R. M., & Young, S. L. Breastfeeding self-efficacy: a critical review of available instruments. 2016: Journal of Human Lactation, 32(1), 35-45.
- 7. Indonesia Health Ministry Health Basic Reasearch. Jakarta. 2018.
- 8. Health Department in Pekanbaru city. Health profile in Pekanbaru. Pekanbaru. 2018.
- 9. Emily de Jager. Psychosocial correlates of exclusive breastfeeding: A systematic review. 2013: Midwifery 29 506-518
- 10. Dennis, C. L. The breastfeeding self-efficacy scale: Psychometric assessment of the short form. 2003: Journal of Obstetric, Gynaecologic, & Neonatal Nursing, 32(6), 734-744.
- 11. Wardani, MA. Breastfeeding self-efficacy in primigravida mother. 2012: Thesis.

- 12. Meedya, S., Fahy, K., & Kable, A. Factors that positively influence breastfeeding duration to 6 months: a literature review. 2010: Women and birth, 23(4), 135-145.
- 13. Dennis, CL, Karen M. The relationship between infant feeding outcome and post partum depression: a qualitative systemic review. 2009: Pediatrics;123; e 736.
- 14. Kurniawan, B. Succesfull of exclusive breastfeeding determinant. 2013: Jurnal kedokteran Brawijaya, 27(4), 236-240.
- 15. Agrina, and Zulfitri R. The effectiveness of family Nursing Care to Family Independence for Solving Family Health Problem. 2012: Sorot Journal. Vol 7 (p. 81-89).
- 16. Agrina, Sabrian, F., Zulfitri, R., Arneliwati, Herlina & Dewi, A. P. The effectiveness of simulation health education to mother breastfeeding skill between two groups in rural area of Riau, Indonesia. 2019: Enfermeria clinica, 29, 9-12.
- 17. Brown and Davies. Fathers' experiences of supporting breastfeeding: challenges for breastfeeding promotion and education. 2014: Maternal and Child Nutrition, 10, pp. 510–526.
- 18. Isyti'aroh, & Rofiqoh, S. Breastfeeding self-efficacy dan hubungannya dengan perilaku ibu menyusui. 2017: Jurnal Kesehatan Pena Medika, 7(2).
- 19. Kent JC, Anna RH, Diana BLPeter EH. Impact of measuring milk production by test weighing on breastfeeding confidence in mother of term infants. 2015: Breastfeeding medicine clinical research. Vol 10 (6).
- 20. McQueen K., Dennis C., Stremler., R., & Norman C. A pilot randomized controlled trial of a breastfeeding self-efficacy intervention with primiparous mothers. 2011: Journal of Obstetric, Gynecologic and Neonatal Nursing 40(1,) 35-46.
- 21. Vincent,A. The effect of breastfeeding self- efficacy on breastfeeding initiation, Exclusivity,and duration. 2015: Walden Dissertations and Doctoral Studies
- 22. Deborah MS, Rebecca G. Breastfeeding Self Efficacy in women of African Descent. 2009: JOGNN (38): 230-243
- 23. Brockway M, Karen MB, Eloise C, Khalid A.Breastfeeding self-efficacy and breastmilk feeding for moderate and late preterm infants in the family integrated care trial: a mixed methods protocol. 2018: International breastfeeding journal vol. 13 (29).