

Factors associated with failure of exclusive breastfeeding practice

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ABSTRACT

Failure of exclusive breastfeeding has become a significant issue in Indonesia. There are several factors lead to such issue occurred. This cross-sectional analytical survey study aimed to investigate the relationship of mother's knowledge, mother's education and mother's job to unsuccessful exclusive breastfeeding. There were 31 mothers with infants aged 0-24 months participated in this study. Data were collected by employing closed-ended questionnaire and analysed by applying chi-square test. The results revealed that knowledge, maternal education and maternal job associated with unsuccessful breastfeeding ($p < 0.05$). The failure of exclusive breastfeeding were influenced by mothers' knowledge, mothers' education and mothers' occupation.

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1. Introduction

Nutrition is a very important factor for baby's growth and development. World Health Organization (WHO) and United Nations Children's Fund (UNICEF), and the Indonesian Government recommends exclusive breastfeeding (EBF) to be provided for infants aged 0-6 months, without additional fluids or other foods (WHO, 2007). However, the global coverage of EBF was only 39% in 2012. In some low middle income countries (LMIC's), the numbers of EBF coverage varied. In China, the coverage number of EBF was 28% and Cambodia was 74%. Whilst, in African countries such as Togo and Zambia the coverage was up to 60% (UNICEF, 2011). On the other hand, in Tunisia the EBF coverage was only 6.2% (Stuebe, 2009). In Indonesia, the EBF coverage was higher than global coverage (48.6%), but it was still extremely far from the WHO's target (80%).

Several advantages are identified in EBF for both mothers and children. Evidence reveals that EBF could contribute to adequate children's nutrition and also important support for children's growth, physical development and intelligence (Felice, 2014). Meanwhile, EBF is also beneficial for mothers as an effective method of birth control, reducing the risk of breast cancer and psychological mother-infant attachment (UNICEF, 2011). Based on scientific evidence several negative outcome such as malnutrition has significant association with poor breastfeeding practice and children who were not exclusively breastfeed have higher risk on chronic illness such as cancer, hypertension, diabetes after adulthood, malnutrition and obesity (Stuebe, 2009)

Failure of EBF could be caused by several factors such as lack of education resulted in low level of knowledge, employment, social culture, and lack of access to healthcare providers. This study focuses on three factors including level of education, level of knowledge and employment. Low level of education could contribute to poor EBF practice because mothers with low level of

education might have difficulties to understanding information regarding EBF practice. Meanwhile, well educated mother has associated with better understanding about the benefit of EBF practice. Consequently, it is believed that EBF brings difficulties when mothers has lack of adequate knowledge on managing EBF practice. Mothers often take a decision to stop EBF when they experience problems (Oche, Umar, & Ahmed, 2011). Moreover, employment could also contribute to failure of EBF when there was no specific breastfeeding support around full time working mothers. In Indonesia, working mothers are expected to work 7-9 hours per day and they have limited support to access day care around their working places. As a result, work time limits them to practice EBF (Murtagh & Moulton, 2011). Having understanding about issues explained in this introduction section, there is a need explore factors related to failure of EBF practice.

2. Method

This study employed an analytic survey by using cross-sectional time approach. Sample of this study were 31 mothers with children aged 0-24 months experienced failure of EBF. All respondents were recruited at a Primary Health Center in Yogyakarta. Data were collected by using closed-ended questionnaires from December 2014 until June 2015. Before the questionnaires employed, they were tested for validity and reliability. Data were analysed by using descriptive statistic and Chi-Square test. This study was approved by Institutional Review Board of Aisyiyah University of Yogyakarta.

3. Results

3.1. Characteristics of Respondents

3.1.1. Knowledge of mothers related to exclusive breastfeeding

Table 1 shows the distribution of the frequency characteristics of knowledge of mothers about exclusion of exclusive breastfeeding. The majority of mothers had moderate knowledge related to exclusive breastfeeding i.e. 20 respondents (64.5%) and there were 11 mothers (35%) had low knowledge related to breastfeeding.

Table 1. Distribution of the frequency characteristics of knowledge of mothers about exclusion of exclusive breastfeeding

No.	Knowledge	n	%
1	High	0	0
2	Moderate	20	64.5
3	Low	11	35.5
	Total	31	100.0

Source: Primary Data 2015

3.1.2. Education of mothers

Table 2 shows the distribution of frequency characteristics of mother's education. The majority of mothers completed junior high school i.e. 19 respondents (61.3%), followed by mothers with experienced no formal education i.e. 12 respondents (38.7%).

Table 2. Distribution of frequency characteristics of mother's

No.	Education	N	%
1	No formal education-primary school	12	38.7
2	Junior- senior high school	19	61.3
3	College	0	0
	Total	31	100.0

Source: Primary Data 2015

3.1.3. Characteristics mother's occupation

Table 3 shows the distribution of frequency characteristic of maternal works with exclusive breastfeeding. The majority of working mothers were 19 respondents (61.3%) and 12 (38.7%) of mothers had no employment .

Table 3. Distribution of frequency characteristic of maternal works with exclusive breastfeeding

No.	Occupation	N	%
1	No employment	12	38.7
2	Work	19	61.3
	Total	31	100.0

Source: Primary Data 2015

3.2. Bivariate Analysis

3.2.1. The correlation between mother's knowledge and the failure of exclusive breastfeeding

Table 4 shows Cross-tabulation and chi-square test of knowledge factors and exclusion of exclusive breastfeeding. The result of chi square test was 6.039 with p-value equal to 0.014 ($p < 0.05$). This means that there was a relationship of mother's knowledge with failure of exclusive breastfeeding.

Table 4. Cross-tabulation and chi-square test of knowledge factors and exclusion of exclusive breastfeeding

Exclusive Breastfeeding Knowledge	Not Successful		Successful		Total		χ^2	p
	F	%	F	%	F	%		
1. High	0	0	0	0	0	0	6.093	0.014
2. Moderate	20	64.5	0	0	20	64.5		
3. Low	11	35.5	0	0	11	35.5		
Total	31	100	0	0	31	100		

Source: Primary Data 2015

3.2.2. The correlation between maternal education and the failure of exclusive breastfeeding

Table 5 shows the cross-tabulation and chi-square test of maternal education factors to failure of exclusive breastfeeding. The result of chi square test was 3.97 with significant p-value was 0.031 ($p < 0.05$). This means there is a relationship of mother's education with failure of exclusive breastfeeding.

Table 5. Cross-tabulation and chi-square test of maternal education factors to failure of exclusive breastfeeding

Exclusive Breastfeeding Education	Not Successful		Successful		Total		χ^2	p
	F	%	F	%	F	%		
1. College	0	0	0	0	0	0	3.97	0.031
2. Junior-senior high school	19	61.3	0	0	19	61.3		
3. No education primary school	12	38.7	0	0	12	38.7		
Total	31	100	0	0	31	100		

Source: Primary Data 2015

3.2.3. The correlation between mothers work with the failure of exclusive breastfeeding

Table 6 shows the cross-tabulation and chi-square test of occupational factors against exclusion of exclusive breastfeeding. The result of chi square test was 5.259 with significant p-value i.e. 0.022 ($p < 0.05$). This means that there was a relationship between occupation and failure of exclusive breastfeeding.

Table 6. Cross-tabulation and chi-square test of occupational factors against exclusion of exclusive breastfeeding

Exclusive Breastfeeding Occupation	Not Successful		Successful		Total		χ^2	<i>p</i>
	F	%	F	%	F	%		
Work	19	61.3	0	0	19	61.3	5.259	0.022
No employment	12	38.7	0	0	12	38.7		
Total	31	100	0	0	31	100		

Source: Primary Data 2015

4. Discussion

4.1. The relationship of mother's knowledge and failure of exclusive breastfeeding

It is believed that knowledge could influence a person's mindset or actions. Mothers with sufficient knowledge about exclusive breastfeeding benefit would potentially exclusively breastfeed the baby. As a consequence of that, the baby would have more opportunity to get breastfeeding up to 6 months. Evidence show that breastfeeding is a beneficial for baby to develop a good immune system. According to Notoatmodjo (2007) knowledge is the result of people's sensing in a particular object or the result of people's understanding about object using their senses. In this study, knowledge is more likely lead to the mothers' experiences on how to exclusively breastfeed of their baby. It is more likely that mothers were motivated to breastfeed their baby voluntarily. This experience seems to provide knowledge, views and values that will give a positive attitude toward breastfeeding problems.

Failure on practicing exclusive breastfeeding could be caused due to lack of mothers' knowledge about exclusive breastfeeding. This might be resulted from lack of information provided by health workers about the benefits of breastfeeding for infants and mothers. It could also be caused by the lack of visit of health workers. Additionally, mothers turns into formula milk due to lack of knowledge or information about breastfeeding pregnancy or postpartum period (Fonseca-Machado, Haas, Stefanello, Nakano, & Gomes-Sponholz, 2012).

The result of chi square test was 6.039 and the p-value was <0.05 (Table 4). This means that there is a relationship between knowledge and the failure of exclusive breastfeeding in the Pakualaman Primary Health Care in Yogyakarta. It is inline with a previous study conducted shows that mothers who breastfeed exclusively have moderate knowledge about breast milk (Modupe Rebekah Akinyinka, Foluke Adenike Olatona, & Esther Oluwakemi Oluwole, 2016). Failure of exclusive breastfeeding mothers had high knowledge about breastfeeding were minority, whereas mothers who had low knowledge and nursing their children and non-exclusively breastfeed were majority. Furthermore, there is a significant relationship between mother's knowledge about breastfeeding and exclusive breastfeeding practice (Vijayalakshmi, Susheela, & Mythili, 2015).

4.2. The relationship of mothers' education and failure of exclusive breastfeeding

It is believed that education influences knowledge, whilst knowledge is associated to education. It is expected that people with a high education would potentially be more knowledgeable. However, a low educated person is more likely to have less knowledge than those higher education counterpart. It is needed to be highlighted that the level of knowledge is not always formed by a formal education, but it could be obtained through non-formal education (Notoatmodjo, 2007). However, formal education could affect level of people's knowledge because it could potentially provide more experiences including knowledge of exclusive breastfeeding (Murtagh & Moulton, 2011). Mothers who have a high education would probably exclusively breastfeed to the baby. Attitude and behaviour of women could be influenced by their experiences and education since childhood. A woman who raised in a family or social environment which support breastfeeding, will probably have a positive view of breastfeeding (Hunegnaw, Gezie, & Teferra, 2017).

Formal education is very important, because it could influence a person with better critical thinking. The low education and lack of information are factors that affect the failure of exclusive breastfeeding (Tewabe et al., 2017). The level of formal education forms the progressive values for a person, particularly in judging new knowledge. The level of formal education is a factor that helps

people to understand a particular knowledge or experience. The level of mothers' education could influence the attitude in managing various problems. A mother has an important role in the health and growth of children, in particular exclusive breastfeeding. This can be demonstrated by the fact that children from mothers with higher education backgrounds would have a better chance to live and receive a broader insight toward exclusive breastfeeding (Elyas, Mekasha, Admasie, & Assefa, 2017).

This study shows that level of education influence the failure of exclusive breastfeeding ($\chi^2 = 3.97$; $p < 0,05$). This means that there is a significant relationship between mothers' education and failure of exclusive breastfeeding.

4.3. The relationship of the mother's occupation and the failure of exclusive breastfeeding

The results showed that among 31 mothers experienced failure of exclusive breastfeeding, 12 (38.7%) had no employment and 19 (61.3%) were working mothers. The results provide an evidence that the mothers who work may have challenges to practice exclusive breastfeeding. This study shows that occupation has influenced on failure of exclusive breastfeeding practice ($\chi^2 = 5.25$; $p < 0,05$). This means that there is a relationship between working status and failure of exclusive. This result is inline with the opinions of Roesli (2008) and Weber et al. (2011) that the mother have to give supplementary food for their baby as their working place were far away, no child care, and has to return to work due to short maternity leave.

5. Conclusion

The failure of exclusive breastfeeding were influenced by mothers' knowledge, mothers' education and mothers' occupation.

References

- Chatterji, P. and Frick, K. D. 2005. Does Returning to Work After Childbirth Affect Breastfeeding Practices?. *Review of Economics of the Household* 3, 315-335.2005.
- Elyas, L., Mekasha, A., Admasie, A., & Assefa, E. (2017). Exclusive Breastfeeding Practice and Associated Factors among Mothers Attending Private Pediatric and Child Clinics, Addis Ababa, Ethiopia: A Cross-Sectional Study. *International Journal of Pediatrics*, 2017, 1–9. <https://doi.org/10.1155/2017/8546192>
- Felice, J. P. (2014). *NIH Public Access*, 60(1), 31–48. <https://doi.org/10.1016/j.pcl.2012.09.010>. Breastfeeding
- Fonseca-Machado, M. de O., Haas, V. J., Stefanello, J., Nakano, A. M. S., & Gomes-Sponholz, F. (2012). Breastfeeding: Knowledge and practice. *Revista Da Escola de Enfermagem*, 46(4), 809–815. <https://doi.org/10.1590/S0080-62342012000400004>
- Hunegnaw, M. T., Gezie, L. D., & Teferra, A. S. (2017). Exclusive breastfeeding and associated factors among mothers in Gozamin district, northwest Ethiopia: A community based cross-sectional study. *International Breastfeeding Journal*, 12(1), 1–8. <https://doi.org/10.1186/s13006-017-0121-1>
- Modupe Rebekah Akinyinka, M. M. F., Foluke Adenike Olatona, M. M. F., & Esther Oluwakemi Oluwole, M. M. F. (2016). Breastfeeding Knowledge and Practices among Mothers of Children under 2 Years of Age Living in a Military Barrack in Southwest Nigeria. *International Journal of MCH and AIDS (IJMA)*, 5(1), 1–13. <https://doi.org/10.21106/ijma.79>
- Murtagh, L., & Moulton, A. D. (2011). Working mothers, breastfeeding, and the law. *American Journal of Public Health*, 101(2), 217–223. <https://doi.org/10.2105/AJPH.2009.185280>
- Oche, M. O., Umar, A. S., & Ahmed, H. (2011). Knowledge and practice of exclusive breastfeeding in Kware, Nigeria. *African Health Sciences*, 11(3), 518–523. <https://doi.org/10.4314/tjmr.v15i2>.
- Stuebe, A. (2009). The risks of not breastfeeding for mothers and infants. *Reviews in Obstetrics & Gynecology*, 2(4), 222–231. <https://doi.org/10.3909/riog0093>

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- Tewabe, T., Mandesh, A., Gualu, T., Alem, G., Mekuria, G., & Zeleke, H. (2017). Exclusive breastfeeding practice and associated factors among mothers in Motta town, East Gojjam zone, Amhara Regional State, Ethiopia, 2015: A cross-sectional study. *International Breastfeeding Journal*, 12(1), 1–7. <https://doi.org/10.1186/s13006-017-0103-3>
- UNICEF. (2011). *Breastfeeding the best start for your baby*, 30.
- Vijayalakshmi, P., Susheela, T., & Mythili, D. (2015). Knowledge, attitudes, and breast feeding practices of postnatal mothers: A cross sectional survey. *International Journal of Health Sciences*, 9(4), 364–374. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4682591&tool=pmcentrez&rendertype=abstract>
- WHO. (2007). *Planning Guide for national implementation of the Global Strategy for Infant and Young Child Feeding*, 1–46. Retrieved from http://www.who.int/maternal_child_adolescent/documents/9789241595193/en/