ANALYSIS OF DETERMINAN FAKTORS OF EXCLUSIVE BREASTFEEDING IN INDONESIA: A CASE OF ULAKAN TAPAKIS OF DISTRICT

Marisa Lia Anggraini
Department of Midwifery Science, Syedza Saintika Institute of Health Science

* Corresponding Author: marisaliaanggraini@gmail.com

ABSTRACT

Exclusive breastfeeding for 6 months is one of the government's efforts to reduce infant mortality in Indonesia. The baby's nutritional needs for optimal growth and development up to 6 months are of can be supplied by breastfeeding alone because the breastfeeding contains all the nutrients and fluids needed for the baby. The purpose of this research is to know the factors related to implementation of exclusive breastfeeding. The type of research that will be used is analytical research with research design that is observational study with cross sectional study approach. The study population included all mothers having infants aged 0-24 months as many as 735 people in the work area Puskesmas Ulakan, Sub Districts of Ulakan Tapakis, Districts of Padang Pariaman. Data were analyzed by univariate, bivariate using chi square and multivariate test using logistic linear regression test. The result show that true is associated between knowledge (p = 0,025), attitude (p = 0,038), motivation (p = 0,044), job (p = 0,025), health resource availability (p = 0,028), health officer role (p = 0,013) family role (p = 0,038) with implementation of exclusive breastfeeding. The most dominant variable associated to implementation of exclusive breastfeeding is the role of health workers (p = 0,013, OR 8,772). In conclusion, there is a associated between knowledge, attitudes, motivation, occupation, availability of health resources, the role of health care workers, and the role of the family to implementation of exclusive breastfeeding. It is advisable to have a training and refresh program and to enact a Ten Step Breastfeeding policy in every health facility.

Keywords: Predisposing Factors, Enabling Factors, Reinforcing Factors, Obstacle Factors, Implementation of Exclusive Breastfeeding

INTRODUCTION

The standard of health in a country can be seen from the number of Infant Mortality Rate (IMR) and the life expectancy of its population (Ministry of Health of the Republic of Indonesia, 2016). The Infant Mortality Rate in the world is still fairly high. Globally, the World Health Organization (WHO) states that the number of infant deaths is about 1 million stillbirths and 2.7 million deaths in the first week of life. There was very slow decline in IMR from 36 per 1,000 live births in 1990 to 19 per 1,000 live births in 2015. More than 63 countries in the world, including in the Asian region, are in dire need of efforts to reduce the infant mortality in order to achieve the Suitable Development Goals (SDGs) target, namely 12 deaths per 1,000 live births in 2030.¹

Births is a potentially most dangerous moment for mother and baby. Every year worldwide, 303,000 women die during pregnancy and childbirth, 2.6 million stillbirth and 2.7 million babies die during the first 28 days of life.²

IMR in Indonesia is still high compared to neighboring countries such as Malaysia and Singapore, which are below 10 deaths per 1,000 live births, although the IMR Indonesia is slowly within 10 years. Over the past few years, Indonesia’s IMR rate has declined gradually. From the results of the Indonesia Demographic and Health Survey (IDHS) in 1991, the number of deaths dropped from 68
per 1,000 live births to 32 deaths per 1,000 live births in 2012.³

According to the results of the Intercensal Population Survey (SUPAS) in 2015, the IMR reaches 22.23 per 1,000 live births, which means that it has reached the Millennium Development Goals (MDGs) target, which was 23 per 1,000 live births (Ministry of Health of the Republic Indonesia, 2016). In West Sumatra Province year 2014, numerous cases of infant mortality was still found, reaching 392 cases.⁴

As stated in the Regulation of the Minister of Health of the Republic Indonesia number 39 of 2016 concerning Guidelines for the Implementation of Health Indonesia Program with Family Approach in subsection 2, it is stated that the Healthy Indonesia Program consist of 4 (four) priority areas, one of which is a reduction in maternal and infant mortality and reduction in short toddlers prevalence. And in subsection 3, it is also explained that in the order to implement the Health Indonesia Program With Family Approach, 12 (twelve) main indicators were the mother giving monitoring in toddlers.⁵

In all children aged 0-23 months are breastfed optimally, more than 800,000 children can be saved every year. WHO and the United Nations Children’s Fund (UNICEF) lead global breastfeeding advocacy initiatives to ensure that exclusive breastfeeding rates increase by at least 50% by 2025. In Vietnam, the awareness programs have reached more than 2.3 million mothers, which increases exclusive breastfeeding rate in the targeted regions by 62%.⁶

WHO and UNICEF in Infant and Young Child Feeding, recommend the gold standard for feeding infants and children are (1) early breastfeeding initiation at 1 hour of birth, (2) Exclusive breastfeeding in the first 6 month, and (3) introduction to complementary solid food with adequate and safe nutrition at 6 months together with continuing breastfeeding for up to 2 years or more.⁷

World Breastfeeding Week Guide in 2016 states that exclusive breastfeeding has a large contribution to growth and endurance. Children who are given exclusive breastfeeding will have optimal growth and development and are not easily get ill. This is in accordance with several global studies and facts. The “The Lancet Breastfeeding Series, 2016” study has proved 1) Exclusive Breastfeeding reduces mortality due to infection 88% in infants under 3 months, 2) As much as 31.36% (82%) of 37.94% of children are sick, because they did not receive Exclusive Breastfeeding. Investiation in the prevention of LBW, stunting and improving the early breastfeeding initiation and exclusive breastfeeding contribute to reducing the risk of obesity and chronic disease.⁸

West Sumatera Province in 2011 to 2015 experienced a very slow increase in the coverage of exclusive breastfeeding, namely in 2011 amounting to 60.0% from the target of 67.0%, in 2012 amounting to 61.2% from the target 70.0%, in 2013 amounted to 67.4% from target of 75%, in 2014 amounted to 72.5% from in the target of 80.0%, and in 2015 amounted to 75.1% from the target of 83.0%.⁹ In Padang Pariaman Regency the number of babies given exclusive breastfeeding experience a very slow increase from 56% in 2014 to 57.4% in 2015. Data from the Padang Pariaman District Office, seen from 25 existing Health Center, Ulakan Health Center had a number of infants with the lowest exclusive breastfeeding rate at 29.8%, which have declined from 2014 at 39%.¹⁰

Based on data from the Ulakan Health Center, Ulakan Tapakis District in 2016, not all mothers gave birth at the Hospital or in the Independent Practice Midwife with the help from midwife or doctor. In reality there are still those who give birth at home with the help of a traditional birth attendant. In the working area of Ulakan Health Center there are 10 attendants (1 person is no longer active because he has passed away and has inherited his “dukun” shills to his child) and 11 people are independent practice midwife. The closest hospital that is often visited by mothers for
childbirth is the Regional General Hospital Pariaman City.

Encouraged by the high infant mortality rate and the low number of babies given exclusive breastfeeding, as well as the presence of birth attendants which are not considered health workers, so researchers are interested in researching factors related to exclusives breastfeeding in the working area of the Ulakan Health Center, Ulakan Tapakis district, Padang Pariaman Regency, West Sumatra.

MATERIAL AND METHODS

The type of research that would be used was analytic research with observational study design, using cross sectional study approach. This research had been carried out in the Working Area of Ulakan Health Center, Ulakan Tapakis District, Padang Pariaman Regency since July 31, 2017 until August 6 2017. The study was conducted on 88 mothers who had 6-12 months old infants who met the inclusion and exclusion criteria of the study.

RESULTS

The results showed that there were as many as 21.6 respondents who carried out exclusive breastfeeding, there were 56.8% of respondents with low knowledge, 50.0% of respondents who had negative attitudes, 54.5% respondents had poor motivation, there were 75.0% of respondents who did not work, there were 65.9% of respondents who did not have health resources, 62.5% of health workers had roles, and 50.0% of families had roles.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Implementation of exclusive breastfeeding</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exclusive</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Not Exclusive</td>
<td>69</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Low knowledge</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>High Knowledge</td>
<td>38</td>
</tr>
<tr>
<td>Attitude</td>
<td>Negative Attitude</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Positive Attitude</td>
<td>44</td>
</tr>
<tr>
<td>Motivation</td>
<td>Not good</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Well</td>
<td>40</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>Low</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>39</td>
</tr>
<tr>
<td>Profession</td>
<td>Does not work</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>22</td>
</tr>
<tr>
<td>Availability of Health Resources</td>
<td>Not available</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Available</td>
<td>30</td>
</tr>
</tbody>
</table>
### Affordability of Health Resources

- Unreachable
  - 47
  - 53,4

- Affordable
  - 41
  - 46,6

### Health Officer Skills

- Unskilled
  - 47
  - 53,4

- Skilled
  - 41
  - 46,6

### Role of Health Workers

- Don't play a role
  - 33
  - 37,5

- Have a role
  - 55
  - 62,5

### Role of Non Health Workers

- Don't play a role
  - 71
  - 80,7

- Have a role
  - 17
  - 19,3

### Family Role

- No role
  - 44
  - 50,0

- Have a role
  - 44
  - 50,0

### Myth

- Believes
  - 51
  - 58,0

- Not Believing
  - 37
  - 42,0

### Promotion of Formula Milk

- Interested
  - 35
  - 39,8

- Not interested
  - 53
  - 60,2

### Health problems

- No Health Problems
  - 83
  - 94,3

- There are Health Problems
  - 5
  - 5,7

---

**Table 2.**

Variable Relationship with the Implementation of Exclusive Breastfeeding

<table>
<thead>
<tr>
<th>Variable</th>
<th>The Implementation Of Exclusive Breastfeeding</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Implementation Of Exclusive Breastfeeding (n=19)</td>
<td>Not Exclusive (n=69)</td>
</tr>
<tr>
<td>Knowledge</td>
<td>High</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>6</td>
</tr>
<tr>
<td>Attitude</td>
<td>Positive</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>5</td>
</tr>
<tr>
<td>Motivation</td>
<td>Well</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Not good</td>
<td>6</td>
</tr>
<tr>
<td>Education</td>
<td>High</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>8</td>
</tr>
<tr>
<td>Profession</td>
<td>Does not work</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Work</td>
<td>9</td>
</tr>
<tr>
<td>Availability of Health</td>
<td>Available</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Not available</td>
<td>8</td>
</tr>
<tr>
<td>Resources of Health</td>
<td>Affordability</td>
<td>Available</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Health Officer Skills</td>
<td>Skilled</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Not skilled</td>
<td>10</td>
</tr>
<tr>
<td>Role of Health Workers</td>
<td>Have a role</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Doesn't play a role</td>
<td>2</td>
</tr>
<tr>
<td>Role of Non-Health Workers</td>
<td>Have a role</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Doesn't play a role</td>
<td>16</td>
</tr>
<tr>
<td>Family Role</td>
<td>Have a role</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Doesn't play a role</td>
<td>5</td>
</tr>
<tr>
<td>Myth</td>
<td>Don't believe</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Believes</td>
<td>13</td>
</tr>
<tr>
<td>Promotion of Formula Milk</td>
<td>Not interested</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Interested</td>
<td>10</td>
</tr>
<tr>
<td>Health problems</td>
<td>No health problems</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>There are health problems</td>
<td>1</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Based on the results of the study, it is found that only a small proportion (21.6%) of respondents who carried out exclusive breastfeeding on their babies. This result is very far from the achievement target of exclusive breastfeeding which is supposed to be 83.0%. This is probably caused by many factors, such as lack of information obtained by breastfeeding mothers in the Ulakan Health Center work area, or even lack of time in lactation counseling. The exclusive breastfeeding data collection at the Health Center is usually done twice a year, in February and August, which can allow the data collection from the mother who only breastfeed her baby for one month. But it does not rule out the possibility that the same mother no longer breastfeed her baby in the second, third, and/or the following month, at first 6 month.

According to research conducted by Rhoklima, a mother, family, and community have little understanding about exclusive breastfeeding. Not a few mothers who still throw colostrum away because it is considered dirty. In addition, the habit of giving food and drinks early to baby in community also cause unsuccessful breastfeeding. Some mothers also lack of confidence to be able to breastfeed their babies. This encourages mothers to easily stop breastfeeding and replace it with formula milk.

About knowledge variable, based on the results or the study, it can be concluded that there was a significant relationship between the knowledge of respondents with the implementation of Exclusive breastfeeding.
Although the results of the study told that the better maternal knowledge, the number of mothers who carried out exclusive ASI were also higher, but the 34.2% rate was said to be very low in the achievement target of exclusive breastfeeding. The results of the study may be caused by several factors, such as the lack of information obtained by breastfeeding mothers in the Ulakan Health Center work area, lack of time in lactation counseling with health workers, and the lack of mother’s curiosity in seeking their own information both in newspaper and magazines. Or it could also be caused by other factors such as environmental factors.

Research conducted by Kusumaningrum\textsuperscript{12} states that the poor knowledge is thought to be due to lack of information, lack of clarity of information, and lack of ability to understand the information received. The research conducted by Kusumaningrum\textsuperscript{13} states that poor knowledge in Exclusive breastfeeding can be caused by other factors that influence knowledge, including non-supporting environmental factors that can prevent a person from having poor knowledge. Because the environment is a place of interaction of a person in terms of communication and socializing in society, if communication and interaction in society are impaired, it is very possible that knowledge will decline and people will experience setbacks in their lives.

About attitude variable, based on the results of the study it can be concluded that there was a significant relationship between the attitudes of respondents with the implementation of Exclusive breastfeeding. The mothers who acted positively were more likely to carry out exclusive breastfeeding compared to mothers who acted negatively, which 31.8% numbers are still far from the achievement target of exclusive breastfeeding. This may be due to several factors, such as poor maternal knowledge about exclusive breastfeeding, poor mother’s curiosity to seek information, and lack of getting counseling about exclusive breastfeeding. Breastfeeding mothers and positively when given an explanation about the research questionnaire. This was evident when the research asked the mother to fill in the questionnaire, the mother seemed reluctant (lazy) to read all the questionnaire questions. It was explained again, the answers that you gave honestly were the most needed and the most correct answers.

This is in accordance with Haryati\textsuperscript{14} opinion, that a mother who has never received advice or experience, breastfeeding counseling and the ins and outs of others, as well as from reading books, the mother will have less knowledge and influencing her attitude to knowledge, experience can also influence the attitude of nursing mothers. Childhood experience, knowledge about Exclusive breastfeeding, advice, counseling, reading, views and values that apply in the community will shape a positive attitude towards exclusive breastfeeding.

About motivation variable, based on the results of the study it can be concluded that there was a significant relationship between motivation and the implementation of Exclusive breastfeeding. Although mothers who have good motivation are greater in number than less motivation in the implementation of Exclusive breastfeeding, which is 32.5%, this number is still far from the achievement target of Exclusive breastfeeding. This is probably caused by several factors, such as mother’s experience and mother’s social support. Mother’s experience during childbirth and obstacles when giving the first breastfeeding, makes the mother think that it was considered a failure. Whereas social support such as the presence of a friend or someone who acted as a role model in feeding of children, who provide food and drinks other than ASI before the child is 6 months and older, and his child grows health and does not get sick, lowers mother’s motivation in the implementation of Exclusive breastfeeding.

Sopiyani’s study\textsuperscript{15} in Klaten District found a very significant positive relationship
between social support and motivation to provide exclusive breastfeeding. That is, the higher (stronger) the social support, the higher the motivation for giving exclusive breastfeeding.

About education variables, based on the results of the study it can be concluded that there was no significant relationship between the education of respondents with the implementation of Exclusive breastfeeding. Although the results of the study told that mothers with higher education carried out more exclusive breastfeeding than mothers with lower education, the number of 28.2% was still very far from the achievement target of exclusive breastfeeding. The results of this study can be influenced by several factors such as knowledge, motivation, work, environment, and others. Less knowledge about exclusive breastfeeding, from how to express breastfeeding, how to store breastfeeding, how long breastfeed is stored, and how to give it, were influenced by maternal education. Even though the mother has a higher education, she still does not provide exclusive breastfeeding, because it is possible that during formal education, the mother does not get knowledge about exclusive breastfeeding, so it does not guarantee that even highly educated mothers will provide exclusive breastfeeding. Less motivation in mothers, who found their failure immediately when giving first breastfeeding, felt that this was a failure, so they immediately switched to giving formula milk or even prelactal food. Correspondingly, respondents also said that the demands of maternal work could make mothers unable to provide exclusive breastfeeding. Mothers felt breastfeed could be replaced with formula milk because the nutritional value in formula milk was almost similar to be breastfed. As for other factors such as the environment, that children are given food other than breastfeed before the age of six months such as biscuits, instant porridge, bananas, etc., which are given by another person such as their grandmother, who considers children can become stronger if given additional food compared to only given breastfeed.

The results of this study are not in line with Atabik\textsuperscript{16} in his research, which states that there is a significant relationship between the level of maternal education and the implementation of exclusive breastfeeding in the Pamotan village of Rembang Regency. Mothers who have higher education generally also have better nutrition knowledge and have greater attention to the nutritional needs of children. Likewise, in understanding the benefits of breastfeeding for children, it is generally stated that mothers who have better education, have a higher level of understanding.

About job variable, based on the results of the study it can be concluded that there was a significant relationship between the job of respondents with the implementation of Exclusive breastfeeding. In the results of the study it was found that more mothers who were working were carrying out exclusive breastfeeding compared to mothers who did not work. This can be caused by several factors such as the surrounding environment that does not support and lack of motivation in breastfeeding, even though the mother is not working. The surrounding environment can be the closest family or neighbors who give negative feedback or suggestions about baby feeding. There is myth that develops in the community that consuming certain leaves can increase breastfeed, but what makes breastfeed comes out is suction from baby, the more often the baby sucks, more breastfeed product. Coupled with the mother’s lack of knowledge about exclusive breastfeeding, the average respondent knows what exclusive breastfeeding is, namely breastfeeding until the age of 6 months, but they do not know the next meaning, namely without the provision of other foods and drinks. In the end, they continue to provide food and other drinks to children even though they have not reached 6 months of age.

Satino’s research\textsuperscript{17} in Surakarta City, explained that environmental factors support
exclusive breastfeeding and the environment did not support exclusive breastfeeding. This shows that environmental factors have a positive effect on exclusive breastfeeding. Environment is a condition that exists around humans and influence the development and behavior of people or groups.

About the variable of availability of health resources, based on the results of the study concluded that there was a significant relationship between the availability of health resources with the implementation of exclusive breastfeeding. Although the results of the study found that mothers who had available health resources carried out more exclusive breastfeeding than mothers whose health resources were not available, the number of 36.7% was still low compared to the achievement target of exclusive breastfeeding. Many respondents stated that they never received information about exclusive breastfeeding from birth attendants at the place where the mother gave birth. And there is also possibility due to the lack of mothers looking for information on how to feed the baby, either looking for themselves with the mass media or with electronic media, even seeking information to health facilities and workers, personally. If you want the mother to be able to breastfeed her baby exclusively, health workers are ready to foster and manage breastfeeding mothers based on the knowledge gained during education and work, if there are skilled and trained personnel in each health agency regarding the clinical application of the ins and outs of the breastfeeding process. And supported by the lactation program, it can be expected that the combination of these two components is the key to the success of the lactation process.18

CONCLUSION

Based on the results of the research and discussion that refers to the research objectives, it can be concluded that 1) Predisposing Factors related to the implementation of Exclusive breastfeeding are knowledge, attitudes, motivation, and work, 2) Enabling Factors related with the implementation of exclusive breastfeeding is the availability of health resources, 3) reinforcing factors related to the implementation of exclusive breastfeeding are role of health workers and the role of the family, 4) there is no relationship between inhibiting factors and exclusive breastfeeding, 5) the most dominant variables in the implementation of exclusive breastfeeding is the motivation and role of health workers.

REFERENCES


West Sumatra Provincial Health Office. Health Profile of West Sumatra Province 2014. Padang: West Sumatra Provincial Health Office. 2015


West Sumatra Provincial Health Office. Health Profile of West Sumatra Province 2014. Padang: West Sumatra Provincial Health Office. 2015


Haryati, S. Several factors related to exclusive breastfeeding for up to 4 months in Kandangmas Village, Dawe District, Kudus Regency. Semarang: FKM Undip. 2006

Sopiyan, L. Relationship between Social Support (Husband) and Motivation to Give Exclusive Breastfeeding to Mothers in Klaten Regency. pp. 1-13. 2014


Manuaba, C. A. I. Understanding Women's Reproductive Health (Issue 2). Jakarta: EGC. 2009


Khasanah, N. ASI or Formula Milk Yes ?. Jogjakarta: FlashBooks. 2011
