The Relation between Pregnant Women Characteristics and Their Perceptions towards Early Breastfeed Initiation (EBI) in Mataram City

Wahdana Kusuma Sari1, Ardyan Pradana Putra1 and Melinda Restu Pertiwi2
1Magister of Forensic Science, Postgraduate School, Universitas Airlangga, Surabaya
2Magister of Nursing Science, Faculty of Nursing, Universitas Airlangga, Surabaya

Keyword: Infant Mortality Rate, pregnant women, perception, Early Breastfeed Initiation (EBI).

Abstract: Infant Mortality Rate is one of the indicators to determine the level of public health. The government launched the Early Breastfeeding Initiation (EBI) program to reduce infant mortality rate, yet, this program is not optimally implemented. Citing from Health Profile of NTB in 2010, Mataram city ranked the lowest in term of EBI program implementation with the percentage of 19.70%. This research aimed to determine the relation between the characteristics of pregnant women including age, education, occupation, parity, pregnancy age, birth history and their perceptions about EBI. The research design used analytical descriptive with cross sectional approach. The sample of this research were 92 pregnant women in 4 public health centers in Mataram city with accidental sampling technique. The research instrument was questionnaire, and for statistical analysis, Phi & Chamer’s V test (α = 0.05) was performed. The results showed that the relation between pregnant women characteristics and their perception about Early Breastfeed Initiation (EBI) are age (p = 0.009), education (p = 0.019), parity (p = 0.005), occupation (p = 0.344), pregnancy age (p = 0.637) and birth history (p = 0.013). Thus, reproductive age, education, parity and birth history affects the understanding and perception about EBI. Occupation and pregnancy age do not affect their perception to EBI.

1 INTRODUCTION

The success of health improvement has a significant role in improving human resources quality. This is in line with the Law concerning Health Number 36 Year 2009 Article 3 “Health improvement is purposed to improve awareness, willingness, and survivability for every person to achieve the highest public health degree, as an investment for socially and economically productive human resources development.” The Highest degree of public health can be achieved through the development of health for people living in the healthy environment justly and equitably throughout Indonesia.

One indicator of high quality health is the decrease of Infant Mortality Rate (IMR). According to the Health Profile of NTB in 2015, Infant Mortality Rate (IMR) is a number to indicate the rate of death of 0-year-old age infant per 1000 live births in a given year or the probability for the infants to die before reaching the age of one year (expressed as per one thousand births). Based on ASEAN's annual statistics book, Brunei Darussalam, Malaysia, Singapore, Vietnam and Thailand are ranked low at IMR with infant mortality under 20 per 1000 births, while IMR of Indonesia is 32 per 1000 births. It is ranked below the Philippines, whose IMR is 26 per 1000 births. Related to the Millennium Development Goals (MDGs) 2015, Indonesia targets to reduce infant mortality rate to 23 per 1000 births (Prasetyawaty, 2012).

One of the government programs to decrease IMR is Early Breastfeeding Initiation (EBI). Early BreastfeedingInitiation (EBI) is a program to promote breastfeeding immediately after the baby is born. The baby should be put on its mother's chest, and the baby itself with all its efforts to find the nipple for immediate breastfeeding (Yuliarti, 2010 in Wildfire, 2015). The benefit of EBI for the baby is the quality and quantity of breast milk produced is in accordance with the needs of the baby. Provide a baby with passive immune health immediately to the baby. Starting breastfeeding early will reduce 22% of infant mortality 0-28 days. EBI enhances...
exclusive breastfeeding and breastfeeding for up to two years, thereby reducing overall child mortality (Roesli, 2012). Early breastfeeding initiation and exclusive breastfeeding program in Mataram City, West Nusa Tenggara has been implemented since 2010. This program was initiated to response mothers’ unawareness to provide exclusive breastfeeding around 2010. With the percentage of 19.70%, Mataram city ranked the lowest percentage of all provinces in West Nusa Tenggara concerning infants which received EBI and exclusive breastfeeding. (Health Profile of NTB, 2010).

Factors that affect the implementation of EBI is the knowledge of pregnant women about EBI. It leads to positive or negative perceptions about the EBI. According Notoatmodjo (2008), knowledge is a very important domain for the formation of perceptions, attitudes, and behavior of a person (over behavior). Someone who has a positive perception of something would also behave or show a more positive participation on the matter. Mothers with negative attitudes toward EBI have a greater chance of not giving EBI to their babies, bundled with positive attitude toward EBI (Yuwansyah, 2017). Perceptions, attitudes and behaviors based on awareness and knowledge result in a long-last or attached behavior of the individual. Based on the exposure, the researchers were interested to examine the relation between the characteristics of pregnant women with the perception of EBI in Mataram city.

2 METHODOLOGY

This is a descriptive analysis research which used cross section approach. The population in this study were all pregnant women who checked their pregnancy at 4 public health centers in Mataram city, i.e. Ampenan Public Health Center, Cakranegara Public Health Center, Karang Taliwang Public Health Center and Tanjung Karang Public Health Center. The sample in this study were 92 pregnant women who checked their pregnancy at 4 public health centers between December 16, 2013 and January 9, 2014. Sampling was conducted by using accidental sampling technique. The participants were pregnant women who routinely checked their pregnancy at Ampenan Public Health Center, Cakranegara Public Health Center, Karang Taliwang Public Health Center and Tanjung Karang Public Health Center.

The research instrument was a questionnaire which was adopted from the previous research and has passed the validity and reliability test to know the perception of pregnant woman about EBI (Puspitasari, 2011). Data collection was performed by giving letter of agreement to the respondents and explaining the purpose of the research. Furthermore, the researcher handed the questionnaire to the respondents and explained the questions and how to answer. The data obtained were in the form of pregnant women’s characteristics and their perception about EBI.

Data analysis was performed to know the relation between the independent variables and dependent variables. More than 2 variables with nominal data scale by using Phi & Cramer’s V coefficient test with significance level of 0.05. Data processing was computerized by using SPSS 15.0 for Windows Evaluation Version.

3 RESULT AND DISCUSSION

3.1 Result

Table 1: Frequency Distribution of Pregnant Women Characteristics in 4 Public Health Center of Mataram City

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>&lt; 20 years</td>
<td>9</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>20-35 years</td>
<td>74</td>
<td>80.4</td>
</tr>
<tr>
<td></td>
<td>&gt; 35 years</td>
<td>9</td>
<td>9.8</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary School</td>
<td>14</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>Junior High School</td>
<td>26</td>
<td>28.3</td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>41</td>
<td>44.6</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>11</td>
<td>12.0</td>
</tr>
<tr>
<td>Occupation</td>
<td>Civil servant</td>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>Private employee</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur</td>
<td>16</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td>Housewife</td>
<td>62</td>
<td>67.4</td>
</tr>
<tr>
<td>Parity</td>
<td>Primigravida</td>
<td>37</td>
<td>40.2</td>
</tr>
<tr>
<td></td>
<td>Primipara &amp; Multipara</td>
<td>55</td>
<td>59.8</td>
</tr>
<tr>
<td>Pregnancy Age</td>
<td>Trimester 1</td>
<td>18</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>Trimester 2</td>
<td>32</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>Trimester 3</td>
<td>42</td>
<td>45.7</td>
</tr>
<tr>
<td>Birth History</td>
<td>Never</td>
<td>37</td>
<td>40.2</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>51</td>
<td>55.4</td>
</tr>
<tr>
<td></td>
<td>Section Caesarea</td>
<td>4</td>
<td>4.3</td>
</tr>
</tbody>
</table>

From table 1 it can be seen that most respondents are at productive age, i.e. 20-35 years as many as 74 people, (80.4%) and as many as 18 people (19.6%) of respondents are in the high-risk range during pregnancy, i.e. < 20 years and > 35 year. The education level for most respondents is considered sufficient considering that the largest educational background is high school (41 people). The largest respondents occupation was housewife with total of
62 people and have primipara & multipara parity of 55 people. Most respondents’ age of pregnancy was 7-9 months (third trimester) with the total of 42 people (45.7%). While based on birth history, most respondents had normal delivery for the total of 51 people (55.4%).

Table 2: Frequency Distribution of Pregnant Mother Perception on EBI in 4 Public Health Center of Mataram City

<table>
<thead>
<tr>
<th>Perception about EBI</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>75</td>
<td>81.5</td>
</tr>
<tr>
<td>Negative</td>
<td>17</td>
<td>18.5</td>
</tr>
</tbody>
</table>

The table shows respondents’ attitude with positive perceptions about EBI is greater than the negative perception of EBI. From the total of 92, 75 respondents showed positive attitude towards EBI, which constitutes 81.5%.

Table 3: Distribution of Relation between Characteristics of Pregnant Women and Perception of EBI in 4 Public Health Center of Mataram City

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>Perception of EBI</th>
<th>p Value</th>
<th>Cramer’s V Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>&lt; 20 years</td>
<td>4</td>
<td>3</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>20-35 years</td>
<td>64</td>
<td>10</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>&gt; 35 years</td>
<td>7</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary School</td>
<td>9</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Junior High School</td>
<td>18</td>
<td>8</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>Senior High School</td>
<td>37</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Occupation</td>
<td>Civil servant</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Private employees</td>
<td>4</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Entrepreneur</td>
<td>14</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Housewife</td>
<td>49</td>
<td>13</td>
<td>14.1</td>
</tr>
<tr>
<td>Parity</td>
<td>Primigravida</td>
<td>25</td>
<td>12</td>
<td>13.0</td>
</tr>
<tr>
<td></td>
<td>Primipara &amp; Multipara</td>
<td>50</td>
<td>5</td>
<td>5.4</td>
</tr>
<tr>
<td>Pregnancy Age</td>
<td>Trimester 1</td>
<td>14</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Trimester 2</td>
<td>25</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Trimester 3</td>
<td>36</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>Birth History</td>
<td>Never</td>
<td>25</td>
<td>12</td>
<td>13.0</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>47</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Section Caesarea</td>
<td>3</td>
<td>1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Table 3 shows all the characteristics of pregnant women, i.e. age, education, occupation, number of children, gestational age and birth history have greater positive perceptions than negative perceptions towards EBI. Maternal age influenced perceptions about EBI (p value = 0.009) and contributed 32.1% based on Cramer's V test. The biggest positive perception was respondents with productive age (20-35 years) of 69.6%.

With the value of p = 0.019 and contribution of 32.9% from Cramer's test score, education level affects the respondents’ perceptions towards EBI. Greater positive perceptions of the EBI program indicate adequate levels of education, i.e. Senior High School (40.2%) and college (12%).

Parity and birth history have also been associated with perceptions of the EBI program (p = 0.005 and p = 0.013) in which parity contributed 29.5% and the birth history contributed 30.8%. While employment and gestational age have no relation with perceptions about the EBI program with a p value of 0.344 and 0.637. Contribution from both criteria is also quite low, i.e. 19% and 9.9%.

3.2 Discussion

Age, education, parity and birth history affect the respondents’ perceptions towards EBI. It is important to convey information about early breastfeeding initiation to pregnant women so that they can process the information obtained and be able to understand the benefits of EBI for the health of their babies as well as having a positive perception towards EBI. This has been explained by
Hardy and Reyes in Sobur (2011), information coming from sensory organs, and it needs to be first organized and interpreted before being understood; and this process is called perception. In addition, along with the information given by health personnel, it will be able to improve the knowledge of the mother about initiation of early breastfeeding that they are expected to initiate breastfeeding early.

According to Notoadmojo (2008) the factors that influence knowledge are age. Age affects the capability and mindset of a person. The older the ability to process information and mindset are more developed. Based on the above description, we assume that pregnant women < 20 years old (high risk age during pregnancy) have not been able to capture and understand information about early breastfeeding initiation because it is their first pregnancy. This is the reason why age relates with the perceptions about EBI.

A person’s education level would greatly affect the person’s response to something that comes from outside (Rusnita, 2008). Knowledge is closely related to education. It is expected that someone with higher education to be more knowledgeable. Several studies have found that early breast-feeding frequency is higher among educated people (Setegn, et al., 2011). The 13 respondents with junior and elementary school education level had negative perceptions about the EBI. This is due to lack of knowledge and ability in perceiving the information obtained about early breastfeeding initiation. In addition, there were some pregnant women who claimed they have never received information about EBI. In accordance with the opinion of Sunaryo (2004), a person who has never obtained information about an object, would have worse perception than the individual who has obtained previous information.

Parity also affects the perceptions of EBI. Pregnant women with primiparous & multiparous parity have a greater positive perception. This is due to the experience of pregnant women with previous deliveries. It is in line with Rakhat’s (2007) opinion that experience will affect one’s perception, Leathers in Sobur (2011) also proves that experience would help a person improve perceptual ability. Experience is not always obtained through formal learning process, and experience increases through sequence of events ever encountered. Mothers who already have children can have a better perception of early breastfeeding initiation than mothers who have no children. This is related to the experience of mothers who had given birth and breastfeeding the baby before.

A significant positive perception was obtained from respondents with a history of normal delivery, in which Roelsi (2012) stated that early breastfeeding should be performed in all deliveries. Especially in normal delivery and assisted by trained health personnel. It is because in normal delivery, a maternal mother does not have physical or psychological problems so as not to deny the baby is placed on her chest. The baby condition must be healthy so as to be able to find the mother’s nipple actively and independently.

Meanwhile, initiation of early breastfeeding is not given because to mothers with section caesarean delivery considering that the baby will be handed to the pediatrician for further treatment. Thus, the baby will lose skin contact with its mother in a rather long time until the examination conducted by the medical personnel is complete. Once finished, the baby also needs to wait the process of sewing surgical wound completed. The cold operating room temperature causes no early initiation of breastfeeding. To anticipate, the baby is immediately blanketed and taken to the nursery. This is supported by the results of research Lebang, MT, 2009 in Priscilla, 2011 that babies are born with drugs and postponed skin contact with his mother.

The pregnancy age determines how often pregnant women should visit a health center to check up. According to the health department of Indonesia, the examination of pregnancy is conducted 4 times during 3 trimester of pregnancy for normal pregnancy. Frequency of pregnancy check-up can increase in trimester 2 and 3 trimester to have early detection shall there are abnormalities in the pregnancy. The increasing frequency of pregnancy examination is expected that pregnant women increasingly have positive perception to EBI because more and more get information from health officer. However, based on statistical calculations performed in the study, gestational age does not relate with the perception of pregnant women about EBI.

Occupation is a factor that affects knowledge. Assessed from the type of occupation which requires extensive human interaction, it is found that they are more knowledgeable compared to one whose occupation does not require extensive human interaction. The learning experience provides professional knowledge and skills as well as the decision making in accordance with scientific and ethical reasoning (Sirajuddin, et al., 2013). Yet, the calculation showed that the occupation of pregnant women does not relate with the perception towards EBI.
4 CONCLUSION

Based on the results of this study it can be concluded that there is a relation between several characteristics of pregnant women to the perception of EBI. Some of the characteristics associated are the age, education, parity and birth history. There were also two characteristics which have no relation with the perception towards EBI which are occupation and pregnancy age.

Each Public Health Center should provide more extensive information about Early Breastfeeding Initiation so that pregnant women are well-informed, resulting in a positive perception towards EBI. Counselling about EBI should also be given to husbands and families of the pregnant women so that in the implementation of EBI will tone support from husband as well as the family. Thus, it is expected that the implementation of EBI can increase and well-implemented.

REFERENCES