The Use of Leaflet as a Health Education Media in Increasing the Knowledge of Complementary Feeding for Breastfeeding Mothers

Etty Nurkhayati\textsuperscript{1,2}; Nani Yunarsih\textsuperscript{1}; Febriana Sari\textsuperscript{2}; Mega Octamelia\textsuperscript{3}; Niken Bayu Argaheni\textsuperscript{4}

\textsuperscript{1,2}Undergraduate Study Program and Midwife Professional Education, Universitas Faletehan Banten, Serang
\textsuperscript{3}Midwifery Diploma III Study Program, Universitas Borneo Tarakan, North Kalimantan
\textsuperscript{4}Undergraduate Study Program and Midwifery Professional Education Universitas Sebelas Maret

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**ABSTRACT**

About a third of children around the world begin their untimely breastfeeding. Although several strategies have been implemented around the world to improve complementary feeding, progress has been slow. Improper feeding of complementary foods, remains a significant global public health problem. The purpose of this study aims to determine the use of leaflet as a health education media in increasing the knowledge of complementary food in breastfeeding mothers. The study is Quasi-Experimental. With Pretest-Posttest with Control Group. The Accidental Sampling sampling technique is breastfeeding mothers who have babies aged 7-24 months as many as 53 mothers as an experimental group and 53 mothers as a control group with the same criteria at the Posyandu of Belang Wetan Village. Primary data were collected with questionnaires containing objective questions. Secondary data with cohorts from village midwives. Hypothesis test is carried out after pre-test, to find out whether or not there is an influence between free and bound variables, then using a paired sample t-test or paired sample t-test. The results of the analysis obtained \( p \)-value \( < \alpha \) (0.000<0.05). It can be concluded that there is an influence of health education methods using leaflet media and without using leaflet media on increasing knowledge that has a significant comparison of effectiveness. There is an influence of health education with leaflet media on increasing the knowledge of breastfeeding mothers about complementary feeding of breast milk in infants aged 7-24 months.

**Kata kunci:**  
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\textsuperscript{1)} corresponding author  
Etty Nurkhayati

Undergraduate Study Program and Midwife Professional Education, Universitas Faletehan Banten, Serang  
Email: ettynurkhayati@gmail.com  
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Email: jurnal.aisyah@gmail.com
RESEARCH METHODS

This design is Quasi-Experimental. The design of this study used the Pretest-Posttest with Control Group design. Sampling in this study using accidental sampling technique. The samples in this study were breastfeeding mothers who had babies aged 7-24 months as many as 53 mothers as an experimental group and 53 mothers as a control group with the same criteria at the Posyandu of Belang Wetan Village. Primary data were collected with a questionnaire containing inscriptions and drawings, a list of problems that are printed about inadequate nutrition recommendations and counseling from health workers (B’egin & Aguayo, 2017; Arikpo et al., 2018). During this period, parents receive information about complementary foods from a variety of sources, including health workers, family, friends, and the media (Garcia et al., 2019; Loudon et al., 2016; Tully et al., 2019).

Health education is an activity or effort to convey health messages to the community, group or individual (Notoatmodjo Soekidjo, 2010). Ten of the eleven image-based health education studies involving adults over 18 with low health literacy showed improved understanding (Zuniga, 2016). In order for the health education program carried out to achieve its goals well, in providing health education, you can use various media, including leaflet media. Media leaflets are educational aids that can store information longer. Leaflets are folded papers in such a way, containing inscriptions and drawings, a list of problems that are printed specific to the target with a specific purpose (Notosiswoyo M, 2014). This study aims to determine the use of leaflet as a health education media in increasing the knowledge of complementary food for breastfeeding mothers.

RESEARCH RESULT

Level of Knowledge of Breastfeeding Mothers About Giving Complementary Food to Infants Aged 7-24 Months Before And After Health Education Without Using Leaflet Media.
Based on table 1 above, it can be seen that most of the knowledge of mothers before being given health education without using leaflets is sufficient as many as 24 respondents (45.2%), while most of the knowledge of mothers after being given health education using leaflets is sufficient as many as 23 respondents (43.4%).

<table>
<thead>
<tr>
<th>No</th>
<th>Knowledge</th>
<th>Pretest</th>
<th>%</th>
<th>Posttest</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>11</td>
<td>20.8</td>
<td>22</td>
<td>41.5</td>
</tr>
<tr>
<td>2</td>
<td>Enough</td>
<td>24</td>
<td>45.2</td>
<td>23</td>
<td>43.4</td>
</tr>
<tr>
<td>3</td>
<td>Less</td>
<td>18</td>
<td>34</td>
<td>8</td>
<td>15.1</td>
</tr>
</tbody>
</table>

Table 1. Frequency Distribution of Nursing Mothers’ Level of Knowledge About Breastfeeding in Infants Aged 7-24 Months Before And After Health Education Without Using Leaflet Media (N=53)

Level of Knowledge of Breastfeeding Mothers About Giving Complementary Food to Infants Aged 7-24 Months Before And After Health Education Using Leaflet Media. Based on table 2 above, it can be seen that most of the knowledge of mothers before being given health education using leaflets was sufficient as many as 31 respondents (58.5%), while most of the knowledge of mothers after being given health education using leaflets was good as many as 37 respondents (69.8%).

<table>
<thead>
<tr>
<th>No</th>
<th>Pengetahuan</th>
<th>Pretest</th>
<th>%</th>
<th>Posttest</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>9</td>
<td>17</td>
<td>37</td>
<td>69.8</td>
</tr>
<tr>
<td>2</td>
<td>Enough</td>
<td>31</td>
<td>58.5</td>
<td>12</td>
<td>22.6</td>
</tr>
<tr>
<td>3</td>
<td>Less</td>
<td>13</td>
<td>24.5</td>
<td>4</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Table 2. Frequency Distribution of Nursing Mothers’ Level of Knowledge About Giving Complementary Food to Infants Aged 7-24 Months Before And After Health Education Using Leaflet Media (N=53)

Normality Test
The prerequisite test results that must be met before the analysis test are data normality tests. Test the normality of the data against the results of the pretest and posttest scores using One Sample Kolmogorov Smirnov with the help of SPSS 17. The result of the normality test is normal distribution, so the analysis test used is a paired sample t-test. The results of the normality test can be seen in the table 3.

<table>
<thead>
<tr>
<th>N</th>
<th>53</th>
<th>53</th>
<th>53</th>
<th>53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>10.77</td>
<td>11.75</td>
<td>10.91</td>
<td>13.40</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.908</td>
<td>1.989</td>
<td>1.853</td>
<td>2.282</td>
</tr>
<tr>
<td>Absolute</td>
<td>.193</td>
<td>.149</td>
<td>.157</td>
<td>.208</td>
</tr>
<tr>
<td>Positive</td>
<td>.163</td>
<td>.132</td>
<td>.108</td>
<td>.109</td>
</tr>
<tr>
<td>Negative</td>
<td>-1.93</td>
<td>-1.49</td>
<td>-1.57</td>
<td>-2.08</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.403</td>
<td>1.088</td>
<td>1.140</td>
<td>1.515</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.039</td>
<td>.187</td>
<td>.149</td>
<td>.020</td>
</tr>
</tbody>
</table>

Table 3. Uji One Sample Kolmogorov Smirnov Test

Based on table 3, the results of the pretest and posttest data of the experimental and control groups were normally distributed because the p-value of the > 0.05 so that the data analysis test used was paired sample t-test.

Table 4 Paired Sample T-Test Comparison of Knowledge Level of Breastfeeding Mothers About Giving Complementary Food to Infants Aged 7-24 Months After Obtaining Health Education Between Groups Using Leaflet Media and Groups Without Using Leaflet Media.

<table>
<thead>
<tr>
<th>Rerata</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Selisih Rerata</th>
<th>Uji t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Leaflet</td>
<td>10,77</td>
<td>11,75</td>
<td>-0.98</td>
<td>-10,744</td>
<td>0.000</td>
</tr>
<tr>
<td>With Leaflet</td>
<td>10.91</td>
<td>13,40</td>
<td>-2.49</td>
<td>-8,712</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Tabel 4 Paired Sample T-Test
Based on table 4, it shows that there was an increase in respondents’ knowledge after health education without using leaflets by 0.98 from the mean before health education without leaflets by 10.77 to 11.75 and an increase in respondents’ knowledge after health education using leaflets of 2.49 from the mean before health education was carried out with leaflets of 10.91 to 13.40. The results of the analysis obtained $\beta$-value $<\alpha$ (0.000<0.05). It can be concluded that there is an influence of health education methods using leaflet media and without using leaflet media on increasing the knowledge of breastfeeding mothers about complementary feeding of breast milk in infants aged 7-24 months.

**DISCUSSION**

Based on the results of the univariate analysis, it can be seen that most of the knowledge of mothers before being given health education was sufficient as many as 31 respondents (58.5%). This is in line with previous research conducted by Masthura, R. et al.2019), regarding the effectiveness of return sheets and leaflets on pregnant women’s knowledge about breastfeeding, the results of the study were obtained, namely pregnant women before counseling interventions using leaflets were in the sufficient category of 8 respondents (53.3%).

According to Soekanto (2004), education is used as one of the parameters to determine the level of knowledge, although knowledge is not fully obtained from formal education alone but also from non-formal education, for example through reading, interacting with other people counseling and so on. But at least in terms of affective and cognitive education has an influence on the level of knowledge.

Based on table 2 above, it can be seen that most of the knowledge of mothers after being given health education using leaflets is good as many as 37 respondents (69.8%).

It can be concluded that health education with leaflet media can increase mothers’ knowledge about complementary foods. This is in accordance with what was revealed by Ariko D. et al.2018) found evidence that education can improve the practice of complementary breastfeeding. The same thing was also conveyed by Lassi ZS et al.2013) namely providing education about complementary foods has the potential to improve the nutritional status of children in developing countries. Meanwhile, a study coming from the country of Japan on effect of educational leaflets on knowledge and attitude to tuberculosis among homeless persons in tokyo, japan menemukan bahwa tuberculosis leaflets were effective in improving certain aspects of tuberculosis knowledge (Kawatsu L, 2015).

In accordance with what was revealed by Notaotmodjo (2007) that a person’s knowledge, one of which can be influenced by mass media or information that comes from various sources, for example: electronic media, instruction manuals, health workers, poster media, leaflet, close relatives and so on. The results of the study are supported by a statement expressed by Cohen, M (1991) in Bensley and Fisher (2003) which states that the audience can accept and remember a material as much as 10% of the reading media. Meanwhile, the ability to read itself is a remarkable human achievement because he can witness the creation of history, can produce new knowledge, and is able to reach people who are separated by distance and time (Watkins, 2018).

Counseling is one of conveying information to someone, where with counseling a person becomes aware of what they do not know. Counseling can use various media both audio, visual and audio-visual, such as research conducted by Kusumawardani in 2012.

Based on table 3, it shows that there was an increase in respondents’ knowledge after health education was carried out using leaflets of 2.49 from the average difference before health education was carried out with leaflets of 10.91 to 13.40. The results of the analysis obtained $\beta$-value $<\alpha$ (0.000<0.05). It can be concluded that there is an influence of health education with leaflet media on increasing the knowledge of breastfeeding mothers about giving complementary food to babies aged 7-24 months. It can be concluded that the existence of health education through leaflets can increase the level of maternal knowledge about complementary food and breast milk.

Knowledge is the result of human sensing, or the result of knowing a person towards an object through the senses he has (eyes, nose, ears, and so on) (Notaotmodjo, 2007). Leaflet itself is a form of conveying information or health messages through folded sheets, information in the form of sentences or pictures or a combination of both (Machfoeds & Suryani, 2007). In connection with this, this research is also supported by previous research in the health sector by using leaflets as an educational medium, it is concluded that leaflets are an effective tool in increasing oral health knowledge and the clinical index of hygiene and oral care. Leaflets can be used in dental and oral health education for a positive result. Al Bardaweel S. & Dashash M., 2018). In addition, there is also a study conducted by Azevedo MS et al.2015) found that leaflets are a cost-effective way to spread awareness about the prevention of dental caries. This research is also in line with the research of Masthura, R. et al.2019), which uses leaflets as a counseling medium with the results that there is a difference between the value of the pre-test and post-test knowledge of pregnant women about complementary foods.

The data above proves that the purpose of using leaflets can be achieved, including that leaflets are used as a medium in the implementation of health promotion, including being able to facilitate the delivery of information, can avoid misperceptions and facilitate communication so that it can increase knowledge optimally (Notaotmodjo, 2007).

**CONCLUSION**

Based on the results of the study, it can be concluded that there is an influence of health education methods using leaflet media on increasing the knowledge of breastfeeding mothers about complementary feeding of breast milk in infants aged 7-24 months.

Respondents are expected to be more active in seeking and applying the information that has been obtained, increasing knowledge and providing complementary breast milk by seeking information from health workers, especially midwives, reading a lot of newspaper media, books or information media such as television. For health cadres / posyandu, it is hoped that they can increase further information for knowledge about complementary feeding of breast milk by seeking information from health workers, especially midwives, reading a lot of newspaper media, books or information media such as television.
REFERENCES


