Education in Making Complementary Food at Posyandu Cempaka and Edelweis, Kahuripan, Tasikmalaya

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Abstract

At the age of six months to two years, infant need breast milk complementary food. Mothers’ ignorance about providing nutritious complementary foods can lead to low nutritional intake which ultimately results in stunted growth. This community service activity aims to increase mothers' knowledge about making breast milk complementary food through education. Participants in this activity were 70 mothers who had children under two years old in two posyandu (Cempaka and Edelweiss) at the Karuripan Community Health Center, Tasikmalaya City. The methods used in this activity include needs assessment, creating educational materials, implementing education (explaining and providing examples of how to make complementary food) and evaluation by administering pre-tests and post-tests. The results of this activity have a positive influence on increasing mothers’ knowledge about making MP ASI, so that similar activities need to be carried out regularly.

Keywords: complementary food, education, under two years old children

INTRODUCTION

Children under the age of two are a golden opportunity for life because the first 1000 days of life will influence the quality of human life in the future. (Likhar & Patil, 2022). Therefore, if nutritional problems occur during this period it will have an impact on the quality of human resources and ultimately impact on the nation's competitiveness (Scott, 2020). At the age of six months until two years, breast milk can no longer meet the baby's nutritional needs so the baby needs complementary food (Taha et al., 2020; Zhou & Xu, 2023). The nutritional content in complementary foods must be able to meet children's nutritional requirements so that growth faltering (failure to grow) or known as stunting does not occur (World Health Organization, 2018).

Based on data from the Kahuripan Community Health Center, as of March 2023 there were 52 children under five years old in Kahuripan District suffering from stunting, and 73% of them were children under two years old. Of the 52 children aged under five years who were stunted, 13 children (25%) have a HAZ score which was in the very short category. Stunting is a chronic nutritional problem caused by nutrient intake, especially energy and protein, which is less than the recommended Nutritional Adequacy Rate (RDA) (Maulidiana & Sutjiati, 2021).
It is very unfortunate that there is still stunting in children under two years old in the Kahuripan District area. This is because the Kahuripan area is in Tasikmalaya City which is rich in local food with good nutritional value. Local foods such as local vegetables and fruit as well as inland fish are abundant and easy to find in the city of Tasikmalaya. The city of Tasikmalaya has long been known as a production center for land fisheries in West Java, such as goldfish, gourami and tilapia fish (Sumarto et al., 2018).

Local foods such as tempeh and tilapia fish are foods that are rich in nutritional content (Hidayanti et al., 2023). Local food can be used as raw material for making complementary feeding for children under two years old (Osendarp et al., 2016). Mother’s knowledge about local food recipes, and mother’s knowledge about healthy complementary food preparation are barriers to practicing these good habits (Ainy et al., 2021). Education is one way to increase mothers’ knowledge in any field, including nutrition (Hidayanti et al., 2022)

One of the reasons for the low of nutritional intake in children under two years of age is the mother’s ignorance of providing nutritious complementary foods. Many mothers think that nutritious complementary foods has an expensive price, even though local food can be raw material for complementary foods which has nutritional value. Therefore, the aim of this program is to educate mothers in making nutritious complementary foods at two posyandu with high cases of stunting at the Kahuripan Community Health Center.

**METHOD**

Community service activities were carried out at two posyandu, namely Posyandu Cempaka and Posyandu Edelweis at the Kahuripan Health Center. Participants in this activity were mothers who have children under two years old. This activity included (Figure 1):

- Community need assessment
  This process was carried out to find out the cause of stunting in the two posyandu (Cempaka and Edelweiss)
- Preparation of activity materials
  The team prepared a pocketbook and presentation slides.
- Coordination with cadres
  Coordination with cadres was carried out to determine the activity schedule, location of activities, schedule of events and estimated number of participants.
- Implementation included providing education about making complementary foods.
  This activity includes an explanation of how to make complementary foods, and providing examples of how to make complementary foods
- Evaluation
  To assess the success of the activity, a test is given before the activity is carried out and after the activity is carried out. After that the results of the two tests are compared. If there is an increase in scores between the pre-test and post-test, then this activity has had an influence on increasing participants’ knowledge in making complementary food.
RESULTS AND DISCUSSION

Community services activities at Posyandu Edelweis was held on Saturday 22 July 2023, and community services activities at Posyandu Cempaka was held on Friday 18 August 2023 at 09.00 am. The media used in the activity is a pocket book with the title "Methods for Making Complementary Foods Using Local Food Raw Materials" and presentation slides. This activities began with an opening carried out by the cadre coordinator, then continued with educational activities on making complementary foods. Educational in making complementary foods included explaining of the meaning, requirements, types and guidelines for providing complementary foods. After the presentation, it was continued with an introduction to the types of complementary foods that use local food ingredients.

The number of participants in this activity was 70 mothers who had children under two years old. Of the 70 participants who took part in this community services activities, the average age was 31 years. Almost half of the participants education wwas junior high school. The percentage of gender of participant’s children was almost the same between girls and boys, with the average age of participants’s children was 15 months (Table 1).

<table>
<thead>
<tr>
<th>Participant characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother's Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>22</td>
<td>31.4</td>
</tr>
<tr>
<td>Junior high school</td>
<td>28</td>
<td>40.0</td>
</tr>
<tr>
<td>Senior high school</td>
<td>20</td>
<td>28.6</td>
</tr>
<tr>
<td>Children's gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>40</td>
<td>57.1</td>
</tr>
<tr>
<td>Boys</td>
<td>30</td>
<td>42.9</td>
</tr>
<tr>
<td><strong>mean</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The age of participants (years)</td>
<td>31.1</td>
<td>4.9</td>
</tr>
<tr>
<td>The age of children (months)</td>
<td>15.6</td>
<td>5.9</td>
</tr>
</tbody>
</table>
The evaluation results through pre-test and post-test questionnaires showed that the percentage of correct answers to all questions given to the participants had increased. The largest percentage increase was in question number four regarding "things that need to be considered when giving complementary foods". The increase was 68.7%. Meanwhile, the smallest percentage increase was in question number six regarding "how much complementary foods is given to six month old babies". The increase was 27.1% (Table 2).

Table 2. Results Participants Answers to Pre and Post questionnaires

<table>
<thead>
<tr>
<th>Questions</th>
<th>Pre test n</th>
<th>Pre test %</th>
<th>Post test n</th>
<th>Post test %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why should babies over 6 months be given complementary foods</td>
<td>30</td>
<td>42.9</td>
<td>63</td>
<td>90.0</td>
</tr>
<tr>
<td>When should complementary foods be given to babies?</td>
<td>12</td>
<td>17.1</td>
<td>60</td>
<td>85.7</td>
</tr>
<tr>
<td>Conditions for providing complementary foods</td>
<td>24</td>
<td>34.3</td>
<td>63</td>
<td>90.0</td>
</tr>
<tr>
<td>Things that must be considered when giving complementary foods</td>
<td>18</td>
<td>25.7</td>
<td>66</td>
<td>94.3</td>
</tr>
<tr>
<td>How to introduce complementary foods to babies</td>
<td>16</td>
<td>22.9</td>
<td>63</td>
<td>90.0</td>
</tr>
<tr>
<td>How much complementary foods to give to a 6 month old baby</td>
<td>42</td>
<td>60.0</td>
<td>61</td>
<td>87.1</td>
</tr>
<tr>
<td>Suitable age babies are introduced to finely chopped or coarsely filtered foods</td>
<td>18</td>
<td>25.7</td>
<td>60</td>
<td>85.7</td>
</tr>
<tr>
<td>Foods that are not suitable as complementary foods</td>
<td>33</td>
<td>47.1</td>
<td>69</td>
<td>98.6</td>
</tr>
<tr>
<td>Drinks that should be given when giving complementary foods</td>
<td>31</td>
<td>44.3</td>
<td>69</td>
<td>98.6</td>
</tr>
<tr>
<td>the length of time it takes to finish complementary foods</td>
<td>31</td>
<td>44.3</td>
<td>47</td>
<td>67.1</td>
</tr>
</tbody>
</table>

To determine the success of providing education about making complementary foods, it was carried out using the Wilcoxon test on the average total score of the pre-test and post-test results. The Wilcoxon test was carried out because the average pre-test and post-test score data were not normally distributed. Wilcoxon test results show that providing education has an influence on increasing target knowledge regarding giving complementary foods to children aged 6-24 months. The results of the Wilcoxon test showed that the p value = 0.001, which means that community services activities in the form of providing education can increase mothers' knowledge in making complementary foods for children under two years of age.

The results of the activity are in line with the results of activities carried out by Nurhayati et al., (2020) (Nurhayati et al., 2020), Munir and Audya (2022)(Munir & Audyna, 2022), and Yunitasari et al., (2020), who stated that providing Nutrition education has a significant impact on increasing maternal knowledge. The results of educational activities about complementary...
food carried out in Majene (Yuliani, n.d.), Bangli (Aryana et al., n.d.) and Depok City (Aprillia et al., 2020) also show an increase in mothers' knowledge. The other activity in Jambi showed that there is an effect of training in increasing the knowledge of cadres in preventing stunting in toddlers (Heryani et al., 2023). Increasing maternal knowledge through outreach activities and education can improve practice (Dowson, 2019; Littlejohn & Hood, 2017). Therefore, health education is expected to not only increase the participants' knowledge, but also practice (Mamuroh & Nurhakim, 2022).

![Graph showing pre-test and post-test scores with p=0.001](image)

**Figure 2.** participants’s scores before and after education

### CONCLUSION AND RECOMMENDATIONS

The participants for this community service activity were mothers with under two years old children. Community services activities were carried out at two posyandu (Posyandu Cempaka and Posyandu Edelweis) at Kahuripan Community Health Center with 70 participants. Community services activities consist of providing education about making complementary foods for children aged 6-24 months. Providing education about making complementary foods has an effect on increasing of participants’s knowledge. Based on the results, our recommendation was It is necessary to carry out regular educational activities to ensure that mothers' knowledge about making complementary foods for children aged 6-24 months is maintained.

### REFERENCES


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