Stunting Prevention Strategy by Improving the Nutritional Status of Toddlers (N/D) at the Balowerti Health Center, Kediri City

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ABSTRACT
Stunting is a disorder of growth and development of children due to chronic malnutrition and recurrent infections, which is characterized by the length or height below the standard according to age, which is below –2 SD. The causes of stunting are nutritional and non-nutritional factors. The data used are secondary and primary data and USG, fishbone and SWOT methods in analyzing the problem. Several problems were found in the nutrition program, namely: low N/D achievement, low number of infants aged 6 (six) months who received exclusive breastfeeding, low number of newborns who received Early Initiation of Breastfeeding (IMD). Some of the problems in the nutrition program, namely: low achievement of N/D, low number of infants aged 6 (six) months who get exclusive breastfeeding, low number of newborns who receive Early Initiation of Breastfeeding (IMD), based on a study with the fishbone method, it was found that the root of the problem was the priority of the problem, namely the absence of a collaborative team for handling nutrition problems at the public health center (in an individual health effort team), the referral system from Integrated healthcare center to the public health center (for the 2T case), lack of social media for outreach (you can add Facebook), YouTube or Tik Tok other than the existing Instagram), there is no procedure standard (SOP) in following up the 2T case findings that must be referred to the health center, and the lack of educational innovations for cadres and the target/community.

Keywords: Nutrition, strategy, stunting

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INTRODUCTION
Data on the prevalence of stunting collected from the World Health Organization (WHO) for 2020 shows that 5.7% of children under five in the world experience excess nutrition, 6.7% experience malnutrition and malnutrition and 22.2% or 149.2 million suffer from stunting. The prevalence of stunting globally is high because it is between 20% - <30%. This increase occurred due to problems with access to food during the pandemic.
Basic Health Research Data (Riskesdas) shows the prevalence of toddlers with stunting status (short and very short) in Indonesia was 37.2% in 2013 and decreased to 30.8% in 2018. Meanwhile for toddlers, the prevalence of stunting in 2013 was 32.8% and decreased in 2018 to 29.9%. Until now, stunting data in Indonesia has not been able to separate stunting caused
by nutritional and non-nutritional factors (KMK 1928, 2022). Stunting is defined as impaired growth and development of children due to chronic malnutrition and recurrent infections, which are characterized by their length or height being below the standard set by the minister who administers government affairs in the health sector (PP 72, 2021).

Toddlers who are at risk for stunting are toddlers whose weight does not increase when weighing at the integrated health care center, which can be seen from the N/D results, namely children aged 0 months to 59 months who have a weight chart following the growth line or weight gain in this month compared to the previous month standard.

Unusual, innovative efforts are needed to accelerate the achievement of this goal. There are three dimensions of empowerment that affect N/D achievements, namely community participation, resource mobilization and management of program implementation (Bagus Qomaruddin M, 2016). The Public health center has sufficient resources to improve N/D outcomes with innovative efforts and needs management support.

The delivery of education on target will be more effective if it is carried out by utilizing technology, social media and contemporary methods that are easily accepted by the public. Education using audio-visual media is more effective than counseling in increasing knowledge and attitudes about balanced nutrition for toddlers (Mardhiah Ainun, 2019). For this study, the group worked with public health center employees to make educational videos played by Balowerti public health center employees to educate the target audience.

**METHOD**

Research done in the region work at the Balowerti Health Center on February 4, 2023, the research location was at the Kenanga Integrated health care center, Ngadirejo Village, Balowerti District. The population in this study were parents of toddlers with a risk of stunting who were in the working area of the Balowerti Health Center, Kediri City and the samples in the study were mothers of toddlers, totaling 30 people using the technique Accidental Sampling. Instrument in this study using a questionnaire taken from previous research, so that ethical tests have been carried out. Data analysis using statistical tests *Paired Sample T-Test*.

**RESULT**

**Based on the characteristics of the respondent’s age**

![Figure 1 Characteristics of Respondents by Age](image)

Based on figure 1 on show that there were 8 respondents aged between 20-25 years, respondents aged between 26-30 years as many as 7 people, respondents aged more than 31-35 years were 9 people, and respondents aged > 35 years were 6 people. Based on the characteristics of the age of the respondents, the majority of respondents aged between 31-35 years amounted to 9 people with percentage 30%, according to the BKKBN guide book regarding risk Pregnancy stunting at the age of >35 years and <21 years is classified as a high-risk pregnancy.
Based on the characteristics of the respondents Education

![Figure 2: Characteristics of Respondents Based on Education](image)

Based on figure 2 above, show that the respondent who 8 people have elementary education, junior high school as many as 5 people, respondents with high school education were 7 people, and respondents with D4/S1 education were 10 people, so it can be said that the education level of most mothers of toddlers is already good.

Based on Characteristics of Respondents by Occupation

![Figure 3: Characteristics of Respondents by Occupation](image)

Based on Figure 3 above, it shows that around 13 respondents (43.3%) have a steady income, while 17 respondents (56.6%) have no income. Mothers who don't earn their own income because they have toddlers so they have to care for their children and don't have time to work.

Based on the characteristics of respondents income per month

![Figure 4: Characteristics of Respondents Based on Monthly Income](image)

Based on Figure 4 above, it shows that the characteristics of respondents with a monthly income of <Rp. 500,000 are 10 people with percentage 33.3%, respondents with a monthly income of IDR 1,000,000 were 14 people with percentage 46.6%, respondents with a monthly income of Rp. > IDR 1,500,000 for 6 people with percentage 20%. 
**Plan of Action (POA) Socialization of Stunting**

Table 1 Plan Of Action (POA) Socialization of Stunting

<table>
<thead>
<tr>
<th>No.</th>
<th>Description of activities</th>
<th>The executing</th>
<th>Objective</th>
<th>Success Indicator</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction of the implementin g force with the respondent</td>
<td></td>
<td>1. Increase the knowledge and understanding of mothers/families of toddlers regarding the meaning of stunting.</td>
<td>1. Mothers/families of toddlers understand the term stunting.</td>
<td>Submission of information using flipcharts about stunting.</td>
</tr>
<tr>
<td>2.</td>
<td>Respondent s filled out the consent form to become respondents</td>
<td></td>
<td>2. Increase knowledge of the causes of stunting.</td>
<td>2. Mothers/families of toddlers understand stunting prevention.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Respondent s filled out a questionnaire pretest</td>
<td>Members of the group</td>
<td>3. Increase the knowledge of mothers / families of toddlers regarding stunting prevention.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Socialization of Stunting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Respondent s filled out a questionnaire post test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Performing anthropometric measurements on toddlers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Respondent s filled out a questionnaire regarding stunting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results Pre and Post**

![Graph showing results pre and post]

Based on Figure 5 above, it can be concluded that before being given socialization, 33.3% had
enough knowledge, while 66.6% had less knowledge and 0% had good knowledge.

Based on Figure 6 above, it can be concluded that after being given socialization, respondents who had good knowledge were 93.3% of 100%, but there were still 6.3% of respondents who had sufficient knowledge about stunting. Here it can be concluded that most of the respondents have been able to accept and understand the socialization material regarding stunting provided by researchers at integrated health care center Kenanga 1, Ngadirejo Village, Kediri City.

After getting the results pre and post researchers conducted normality tests and obtained the results of the data are normally distributed. Test used using Paired Sample T Test.

Table 1  
**Paired Sample Test**

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>Df</th>
<th>Say. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Error Mean</td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>Pair 1 Pre Test - Post</td>
<td>23.00333</td>
<td>12.80036</td>
<td>2.33702</td>
<td>-27.78307</td>
</tr>
</tbody>
</table>

Based on the results of the T-Test test SPSS 18.0 that has been done, it can be concluded that getting a value of 0.000 < 0.005 then H0 is rejected and H1 accepted this means that there is a difference from the respondents' values of Integrated health care center Kenanga 1, Ngadirejo Village, Kediri City before being given socialization and after socialized.

**DISCUSSION**

Students carry out a residency at the Balowerti Health Center, Kediri City, which lasts for 4 weeks. Data collection was obtained from primary data and secondary data. In the first stage identification of public health problems was carried out in which 3 health-related nutritional problems were found. Then carried out further analysis and surveys related to these problems through interviews and questionnaires. After that, prioritization of problems was carried out using the USG method. It was agreed that the priority was the problem of toddlers who weighed and did not gain weight.

From the results of the agreement, a priority health problem will be determined for intervention. Using the fishbone method, it was found that the root problem of the priority problem was that there was no collaborative team for handling nutrition problems at the Community Health Center (in the Individual Health Efforts team), the lack of progress system referral from Integrated health care center to Public health center (for case 2T), lack of social media for socialization (you can add Facebook, YouTube or Tik Tok in addition to the existing
Instagram), no procedures standard (SOP) in following up on 2T case findings that must be referred to the Public health center, and the lack of educational innovations for cadres and the target/community.

The group made an intervention plan that would be carried out at the Balowerti Health Center, Kediri City. The intervention plan was designed based on priority alternative solutions, of which two were obtained alternative the priority solution for solving the stunting problem is holding socialization activities related to editing and making stunting educational videos.

Obtained data characteristics respondents based on the age of the respondents most of the respondents aged between 31 - 35 years amounted to 9 people with percentage 30%. Furthermore, based on the educational characteristics of the respondents, most of them were D4/S1 graduates with a percentage of 33.3%, as many as 10 people, based on the work of the respondents, most of them were housewives, namely 17 people with percentage 56.5% and based on respondents with a monthly income of IDR 1,000,000 as many as 14 people with percentage 46.6%.

The results obtained from the pre-posttest carried out using the SPSS formula were that there were differences in the respondents' scores at Integrated health care center Kenanga 1, Ngadirejo Village, Kediri City before being given socialization and after being given socialization. This is evidenced by the respondents in understanding the socialization conveyed by students. Therefore it is necessary for the residents of Ngadirejo Village, Kediri City to receive socialization related to stunting, because stunting that occurs in the early stages of life or at an early age causes detrimental effects for children, both in the short term and in the long term. Especially if the growth disturbance starts at 1000 HPK (first day of life calculated from conception) up to 2 years of age. Basically, stunting in toddlers cannot be cured, but it can done efforts to improve nutrition in order to improve the quality of life.

**CONCLUSION**

1. Field Study Practice or Residency is carried out at the Balowerti Health Center, Kediri City for 4 weeks.
2. Barriers that occur are some working mothers so that the one who escorts and accompanies the toddler is the father or the toddler's family.
3. This activity is in the form of making an educational video, but because the video is still in the editing process, material on stunting is provided using stunting flipcharts.
4. The obstacles in carrying out this activity are disturbed concentration because the concentration of the mother or toddler's family is divided by caring for the child.
5. The indicators of success have been achieved in full, that is, out of 30 respondents with toddlers who were given socialization, more than 80% were able to understand and understand stunting.
6. The purpose of this outreach activity is to provide insight into the impact of the dangers of stunting.
7. The enthusiasm of mothers or families of toddlers when given socialization is very good, as evidenced by active mothers asking questions and sharing about growth and development.

**REFERENCE**

Nomor HK. 01.07/MENKES/1928/2022.