Original Research

The Effect of Supportive Educative Nursing Program on Mother’s Knowledge and Attitude of Feeding Practice among Stunting Children Aged 6-24 Months

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ABSTRACT

Introduction: Supportive educative nursing programs are interventions that can be used to increase family support. The purpose of this study was to analyze the effect of supportive educative nursing programs on the knowledge and attitudes of mothers in feeding stunting children aged 6-24 months.

Methods: The research design used was quasi-experimental. The sample used was 54 respondents and divided into two groups: 27 respondents in the treatment group and 27 respondents in the control group by random sampling. The independent variable was the supportive educative nursing program intervention. The dependent variables were knowledge and attitude. The instruments used were the knowledge and attitude of the mother in feeding the stunting toddlers questionnaire—research data obtained by doing pre-test and post-test.

Results: There was an effect of the supportive educative nursing program on increasing maternal knowledge in the treatment group (p = 0.000) based on the Wilcoxon test, and there was a significant difference between the treatment group and the control group (p = 0.000) based on the Mann-Whitney test. There was an effect of the supportive educative nursing program on improving maternal attitudes in the treatment group (p = 0.000) based on the Wilcoxon test, and there was a significant difference between the treatment group and the control group (p = 0.000) based on the Mann-Whitney test.

Conclusion: Intervention of supportive educative nursing programs has a significant influence on increasing the knowledge and attitudes of mothers in feeding stunting toddlers.

Cite this as:
1. INTRODUCTION

Stunting is a growth disorder in children due to malnutrition for a long time so that the child's height is below average by the aged standard (WHO, 2014). The occurrence of stunting is a health problem that is highlighted by the world so that it becomes a target of the Sustainable Development Goals (SGDs) and Global Nutrition Targets in 2025 which is to reduce 40% of the number of children with stunting under 5 years (WHO, 2018).

The results of Riskesdas (2010) reported that in Indonesia, there was an increase in the prevalence of stunting under five, namely in 2016, there was 27.5% to 30.8% in 2018. East Java Province is one of the priority areas for stunting events with a prevalence of 26.7%. Based on data from the Lamongan District Health Office (2019) shows that the Lamongan area is included in the criteria of regional groups that have high stunting less than five years of age, namely 23%. Kedungpring District is an area that has a high stunting coverage rate, namely 29%. Stunting management will be meaningful if done in the first 1000 days of life (WHO, 2018). If left untreated, stunting will cause impaired cognitive and psychomotor development, intellectual decline, increased risk of degenerative diseases, and decreased productivity in adulthood (Beal et al., 2018). One of the factors that directly influence stunting in infants is the low nutritional intake caused by mismatches in breastfeeding and MP-ASI (Demirchyan and Petrosyan, 2015). Low nutrient intake is influenced by parenting, one of which is improper feeding practice. Inappropriate feeding practice in children is influenced by the lack of knowledge of the mother so that the mother cannot take a stance in preventing stunting (Hendrayati, 2015). One effort to increase maternal knowledge is health education.

The government has made efforts to deal with stunting in 2011-2015 the 1000 FDL (First Day of Life) movement was followed by the issuance of Presidential Regulation No.42 of 2013 concerning the National Movement for the Acceleration of Nutrition Improvement and Presidential Regulation 83/2017 on the Strategic Policy for Food and Nutrition. In addition, in 2018, the government will also prioritize 100 districts affected by stunting and conduct health services and health education on improving nutrition (Secretariat of the Vice President of the Republic of Indonesia, 2017). But the fact is stunting is still high. The efforts of the existing program still need to be improved in its design, scope, quality, and objectives.

So that the stunting prevention acceleration program runs optimally, a change in health behaviors must be made, namely stunting prevention (Indonesian Ministry of Health, 2018). The Orem theory (1971) introduces the educational method of the supportive educative nursing program which consists of 3 techniques, that is support, guidance, and teaching which will contribute importantly in self-care agencies in increasing knowledge, self-efficacy, and feeding practice in doing independent maintenance (Orem Study Group, 2004). Therefore, efforts to improve stunting can be made by increasing the knowledge and attitudes of mothers so that mothers can prevent stunting in infants through health education using the supportive educative nursing program method. The study aimed to determine the effects of supportive educative nursing program on mother’s knowledge and attitude of feeding practice on stunting children age 6-24 months.

2. METHOD

2.1 Design

The research used a supportive educative nursing program with a quantitative research design that uses quasi-experiment design methods with the type of pre-programmed post-test. The design uses the whereas treatment group. The control group is not being treated.

2.2 Population, Samples, and Sampling

Populations in this study were mothers who care for stunting toddlers aged 6-24 months in the working area of the Public Health Center of Regency in East Java Province. The sample used in this study were mothers of children under five in the working area of the Public Health Center of Regency in East Java Province who met the inclusion criteria as...
follows: Who care children with stunting aged 6-24 months and mothers who can communicate verbally and in written properly. The sampling technique used is simple random sampling. The number of samples in this study was 54 respondents consisting of 27 respondents in the treatment group and 27 respondents in the control group.

2.3 Variables

The independent variable in this study is the supportive educative nursing program. The dependent variable in this study is the knowledge and attitude of the mother in feeding practice the stunting toddlers.

2.4 Instruments

The instrument in this study was the questionnaire demographic characteristics, knowledge, and attitude of the mother in feeding the stunting toddlers adopted from (Nurwulansari, Sunjaya and Gurnida, 2018) whether the questionnaire has been tested for validity and reliability before, Counseling Event Unit and Booklet media.

2.5 Procedure

The researcher submitted the initial data collection by writing a permit application to the academic section of the Faculty of Nursing, Airlangga University, on February 27, 2019. After obtaining the initial data collection permit, the researcher conducted preliminary data to obtain high stunting area data in the Lamongan Health Office. Researchers compiled a list of respondents who had been obtained from the initial data collection at the Kedungpring Health Center, and then Kandangrejo Village, Kedungpring Village, Majenang Village, and Tlanak Village were selected. Then the researchers chose respondents according to the inclusion criteria that have been determined using simple random sampling to determine the sample size. Researchers collected data on the population of the mother with stunting children aged 6-24 months in the Kedungspring Health Center in Lamongan, and then randomly selected without regard to existing strata. The researcher introduces himself and conveys the purpose of the study and then provides an explanation of the process of taking research data if the respondent agrees, then is then given a request sheet to become the respondent in the study (informed consent). After that, respondents were asked to sign an informed consent. After getting respondents, the researchers divided the respondents into two groups: the treatment group was in Majenang Village and Tlanak Village into the treatment group and control group from Kandangrejo Village and Kedungpring Village.

In the treatment group on June 24, 2019, researchers found 14 respondents, namely in the Posyandu of Majenang Village at 08.00 am and 13 respondents in the Posyandu of Tlanak Village at 11.00 pm. A research assistant assists the researcher, the researcher introduces himself and conveys the purpose of the study and then provides an explanation of the process of taking research data. After that, respondents were asked to fill out a demographic data questionnaire. At the next meeting on June 26, 2019, the researcher gave a questionnaire pre-test knowledge and attitudes to respondents. After that, researchers distributed booklets to respondents. Researchers provide teaching or teaching with stunting material includes; definition, causes, effects, and principles of complementary feeding for toddlers for 25-30 minutes. After that, time is given for the question and answer session and review the material. The second meeting is guiding, which was on July 1, 2019, was held at Majenang village at 08.00 WIB and Tlanak village at 11.00 WIB. The researcher reviews the material that has been presented at the previous meeting. Then the researchers asked and discussed the difficulties experienced by respondents in feeding children in accordance with the material that was submitted. Each respondent expresses his experience then is corrected and guided by the researcher. Researchers also support that respondents always monitor child development in health services.

In the control group on June 25, 2019, researchers met 14 respondents at the Kandangrejo Village Posyandu at 08.00 West Indonesia Time and 13 respondents in the Kedungspring Village Posyandu at 11.00 West Indonesia Time. A research assistant assists the researcher, the researcher introduces
himself and conveys the purpose of the study and then provides an explanation of the process of taking research data. If the respondent agrees, then it is then given a request sheet to become the respondent in the study (informed consent). After that, respondents were asked to sign an informed consent and fill out a demographic data questionnaire. On June 27, 2019. Researchers conducted data collection in which respondents were asked to fill in a pre-test questionnaire of knowledge and attitudes. Respondents are explained how to fill in and facilitate if there is a possibility of confusion or error in filling out the questionnaire. After filling out the questionnaire, welcome to go home and will get a souvenir. On July 2, 2019, respondents were asked to fill out a post-test. After the post-test was collected, the researchers distributed booklets and provided information on stunting material and the principles of child feeding to respondents.

2.6 Analysis

After the data is collected, the data were analyzed to determine the effect of the supportive educative nursing program method intervention on increasing knowledge and attitude of feeding practice. Measurements in this study were conducted twice, before treatment (pre-test) and after treatment (post-test). Data analyzed using statistical calculations with Wilcoxon signed-rank test and Mann Whitney U test. Wilcoxon signed-rank test was conducted to determine differences in results before and after the intervention in the control group and treatment group with significance $\alpha = 0.05$. Meanwhile, to find out the difference between the results of the treatment group and the control group, the Mann Whitney U test was performed with significance $\alpha = 0.05$. If the result is obtained value of $p < 0.05$, then H1 is accepted.

2.7 Ethical Clearance

This study received research ethics approval from the Health Research Ethics Committee of Faculty of Nursing, Airlangga University, Surabaya, East Java, Indonesia. Information about the objective of the study, procedures, potential risks, and benefits, was given to participants before enrolment in the study. Participation in this study was voluntary, and participants’ full right to refuse participation was explained. The ethical clearance number is 1499-KEPK.

3. RESULT

3.1 Mother Characteristics

Based on table 1 shows that from 27 respondents in the treatment group, the majority of mothers aged 26-35 years were 14 respondents (51.9%), junior high school graduates 12 respondents (44.4%), had one child as many as 15 respondents (55.6%), with a total family income of <2,400,000 per month of 24 respondents (88.9%). The majority of respondents' husband's work is farmers. Whereas in the control group it was found that the majority of the ages ranged from 26-35 years by 17 respondents (63%), educated at junior school 16 respondents (59.3%), had the number of one child as many as 17 respondents (63%) with total family income <2,400,000 per month, 25 respondents (92.6%).

3.2 Toddler Characteristics

Based on table 2 it is known that the characteristics of toddlers in the treatment group obtained the majority of female sex 14 toddlers (51.2%), aged 19-24 months by 15 toddlers (55.6%), normal weight as many as 19 toddlers (70.4%), with a $Z$-Score, $> -3$ SD or very short as many as 15 toddlers (44.4%), a normal birth history of 23 toddlers (85.2%), the first age getting MP-ASI at age <6 a month of 20 toddlers (74.1%). In the control group, it was found that the majority of males were 15 toddlers (55.6%), aged 19-24 months were ten toddlers (37.1%), normal-weight and thin body were 12 toddlers (44.4%), with $Z$-Score (-3SD to -2SD) or short as many as 17 toddlers (63%), normal birth history in 27 toddlers (100%), the first age of toddlers get MP-ASI at age <6 months as many as 12 toddlers (44.5%).

3.3 Mother's Knowledge in Feeding Stunting Toddlers Aged 6-24 Months

Based on table 3 obtained from 27 respondents in the treatment group, the value of knowledge during the pre-test was mostly in the sufficient category that is as
many as 17 respondents (63%), after the intervention and conducting a post-test the value of knowledge became a good category of 22 respondents (81.5%). Statistical tests using Wilcoxon Signed Rank Test done to see the difference in the value of knowledge pre-test and post-test. From these results obtained a value of p = 0.000 so that p <0.05 which means that there are significant differences in knowledge between values pre-test and post-test.

The 27 respondents in the control group found that the majority of the pre-test results were in the sufficient category of 20 respondents (74.1%), after conducting the post-test the majority of the results were in the sufficient category of 21 respondents (77.8%). The result of the Wilcoxon Signed Rank Test in the control group, the value of p = 0.496, was obtained so that p > 0.05, which means there was no significant difference in knowledge between pre-test and post-test scores.

Mann Whitney analysis results when the post-test in the treatment group with the control group is p = 0.000 so that p <0.05 means that there are significant differences in the knowledge variables between the treatment group and the control group after giving the intervention.

### Table 1. Characteristics of Respondents

<table>
<thead>
<tr>
<th>Characteristics of Mother</th>
<th>Treatment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-25 years old</td>
<td>8</td>
<td>29.6</td>
</tr>
<tr>
<td>26-35 years old</td>
<td>14</td>
<td>51.9</td>
</tr>
<tr>
<td>36-45 years old</td>
<td>5</td>
<td>18.5</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary school</td>
<td>6</td>
<td>22.2</td>
</tr>
<tr>
<td>Middle school</td>
<td>12</td>
<td>44.4</td>
</tr>
<tr>
<td>High school</td>
<td>9</td>
<td>33.3</td>
</tr>
<tr>
<td>Number of children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One child</td>
<td>15</td>
<td>55.6</td>
</tr>
<tr>
<td>Two children</td>
<td>7</td>
<td>25.9</td>
</tr>
<tr>
<td>Three children</td>
<td>3</td>
<td>11.1</td>
</tr>
<tr>
<td>Four children</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>Family Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;2,400,000</td>
<td>24</td>
<td>88.9</td>
</tr>
<tr>
<td>≥ 2,400,000</td>
<td>3</td>
<td>11.1</td>
</tr>
</tbody>
</table>

### Table 2. Characteristics of stunting toddlers aged 6-24 months

<table>
<thead>
<tr>
<th>Toddler Characteristics</th>
<th>Treatment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>13</td>
<td>48.1</td>
</tr>
<tr>
<td>Girl</td>
<td>14</td>
<td>51.2</td>
</tr>
<tr>
<td>Toddler age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-9 months</td>
<td>6</td>
<td>22.2</td>
</tr>
<tr>
<td>10-12 months</td>
<td>1</td>
<td>3.7</td>
</tr>
<tr>
<td>13-18 months</td>
<td>5</td>
<td>18.5</td>
</tr>
<tr>
<td>19-24 months</td>
<td>15</td>
<td>55.6</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thin</td>
<td>5</td>
<td>18.4</td>
</tr>
<tr>
<td>Normal</td>
<td>19</td>
<td>70.4</td>
</tr>
<tr>
<td>Fat</td>
<td>3</td>
<td>11.2</td>
</tr>
<tr>
<td>Z-Score (Height / Age)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short</td>
<td>12</td>
<td>55.6</td>
</tr>
<tr>
<td>Very short</td>
<td>15</td>
<td>44.4</td>
</tr>
<tr>
<td>Birth history</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>23</td>
<td>85.2</td>
</tr>
<tr>
<td>Premature</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>The first age get complementary foods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>4</td>
<td>14.8</td>
</tr>
<tr>
<td>&lt;6 months</td>
<td>20</td>
<td>74.1</td>
</tr>
<tr>
<td>&gt;6 months</td>
<td>3</td>
<td>11.1</td>
</tr>
</tbody>
</table>
3.4 The Attitude of The Mother in Giving Feeding to Stunting Toddlers Aged 6-24 Months

Based on table 4 obtained from 27 respondents in the treatment group, most of the pre-test was in the negative category as many as 17 respondents (63%), after the intervention and post-test the value was positive as many as 16 respondents (59.3%). Wilcoxon Signed-Rank Test analysis results in the treatment group obtained \( p = 0.000 \) so that \( p < 0.05 \), which means there are significant differences in attitude between pre-test and post-test scores.

In 27 respondents in the control group, the majority of the pre-test results were in the negative category of 15 respondents (55.6%), after conducting the post-test the results were mostly fixed in the negative category of 16 respondents (55.6%). The results Wilcoxon Signed Rank Test in the control group the value of \( p = 0.496 \) was obtained so that \( p > 0.05 \), which means there was no significant difference in attitude between the pre-test and post-test scores.

Mann Whitney analysis results when the post-test in the treatment group with the control group is \( p = 0.000 \) so that \( p < 0.05 \) means that there are significant differences in attitude between the treatment group and the control group after giving the intervention.

4. DISCUSSION

4.1 Effect of Supportive Educative Nursing Program on the Knowledge of Mothers in Feeding Practice among Stunting Toddlers

There is an effect of supportive educative nursing programs on knowledge. This can be seen from the pre-test results of 27 respondents in the treatment group that is in the sufficient category that is as many as 17 respondents, after the intervention of the supportive educative nursing program in the treatment group as many as 20 respondents experienced an increase in the knowledge category. This is due to the provision of booklets so that respondents have more opportunities to learn material about the principle of feeding children, considering the booklets are distributed to each respondent (Gelli et al., 2018). This is in line with the research of Liestyawati (2018) that counseling with a media booklet on infant and child feeding can increase maternal knowledge.

Orem (2001) said that when there is a deficit of self-care in children, the mother as dependent care must be able to meet the children’s self-care demand. The role of nurses as a nursing agency can help mothers in maximizing the implementation of care for children through nursing care actions in the form of a supportive educative nursing
The supportive educative nursing program is an educational method that consists of 3 techniques, namely teaching, guidance, and support. This research is in line with Orem Study Group, (2004), which explains that supportive educative nursing programs can increase knowledge. Teaching causes respondents who originally did not know to know, for aspects of guidance with the discussion of problem-solving together to increase respondents’ confidence and increase knowledge (Yulanda, 2017). The increase in knowledge is caused by the acquisition of information from booklets and researchers. This is in line with research by Mubarak and Nurul (2009), which says that a person's knowledge is influenced by several factors including age, education, work, interests, experience, culture, and information.

The effectiveness of intervention supportive educative nursing programs on knowledge there are differences in the level of knowledge of the treatment group at the pre-test and post-test through the Wilcoxon Sign Rank Test, the significant value was obtained. The results of the Mann Whitney U Test analysis during the post-test found significant differences in knowledge between the treatment and control groups after the treatment was given. This shows the influence of supportive educative nursing programs on the knowledge of mothers in feeding children. This relationship shows that the intervention given by researchers is effective in increasing the knowledge of mothers in feeding stunting children aged 6-24 months in the Lamongan District.

4.2 The Effect of Supportive Educatice Nursing Program on Mother’s Attitudes in Feeding Practice among Stunting Toddlers

There is an influence of the supportive educative nursing program on the attitudes of mothers in the feeding practice of stunting toddlers. This can be seen in the results of the pre-test 27 respondents in the treatment group, 17 respondents had a negative attitude. After being given a supportive educative nursing program intervention, there was a significant increase in maternal attitudes in the treatment group, so there were 11 respondents who had negative attitudes. Education with the provision of booklets can attract the attention of mothers to learn to understand feeding to their children. This is in line with Amalia, F.et al., (2018), which states that providing educational stimulus is one step in the formation of attitude. The existence of new information about a matter provides a new cognitive basis for the formation of attitudes towards it (Azwar, 2009)

There are three techniques for supportive educative nursing programs: teaching, guiding, and support. An increase in knowledge due to teaching can cause mothers to make efforts to handle stunting to their children by providing food according to the needs of children (Kaur et al., 2009). Good knowledge will create a good attitude. Then if the attitude is considered appropriate, then good behaviors will emerge. Attitudes are learned tendencies to act consistently about certain objects or situations (Notoatmodjo, 2010). Attitude is an activity or action that has not been done. During the guiding session or the guidance of the respondents, they were seen actively asking for difficulties in feeding children. Respondents are welcome to respond to problems or difficulties that exist to be solved together. For conclusions, researchers provide explanations and align the ideas of respondents who are not quite right. This technique makes the mother's knowledge of feeding increase and makes the respondent more positive in the face of obstacles when going to feed the child. According to Notoatmodjo (2012), Attitude is a person’s reaction in the form of trust, evaluation, and tendency towards something. Attitudes can be formed if someone is attracted to an object or stimulus (Kang et al., 2018). This technique makes the mother's knowledge of feeding increase and makes the respondent more positive in the face of obstacles when going to feed the child.

The effectiveness of intervention supportive educative nursing programs on knowledge there are differences in the level of knowledge of the treatment group at the pre-test and post-test through the Wilcoxon Sign Rank Test, the significant value was obtained. The results of the Mann Whitney U Test analysis during the post-test found significant differences in knowledge between the treatment and control groups after the treatment was given. This shows the
influence of supportive educative nursing programs on the attitude of mothers in feeding children. This relationship shows that the intervention given by researchers is effective in improving attitudes in feeding stunting children aged 6-24 months in Kedungpring Lamongan District.

5. CONCLUSION
The intervention of supportive educative nursing programs has a significant influence on increasing the knowledge and attitudes of mothers in feeding practice on stunting toddlers.

6. ACKNOWLEDGEMENT
I would also like to thank all the respondents who took the time to participate in this research as well as to the Kedungpring community health center who has given permission and facilities to collect data research.

7. CONFLICT OF INTEREST
The authors declare that there is no conflict of interest.

8. REFERENCES


Liestyawati, L. (2018) 'Pengaruh penyuluhan dengan Booklet terhadap pengetahuan dan sikap Ibu Baduta'.


