The Role of Parenting in Improving Maternal Health Literature Against Stunting in District Pati

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Abstract. Health literacy for mothers is very important regarding nutrition and child health, given the stunting problem that befell children in Indonesia. The cause of elevating the problem of stunting, especially in Pati is the low maternal knowledge in terms of parenting (caring, educating, guiding). This study aims to: (1) determine the problems of parenting education activities in order to increase maternal knowledge related to nutritional status during pregnancy, and (2) determine the supporting and inhibiting factors in parenting education activities. This research used a mixed method with interview, documentation, observation, and test techniques that will be analyzed qualitatively and quantitatively. The results of data analysis showed that parenting education activities to question stunting were declared effective in t-test calculations so that they were considered significant among young mothers' knowledge before and after participating in parenting education.

Key words: stunting; young mothers; parenting education; health literacy.

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INTRODUCTION

Lately in Indonesia there are many problems related to stunting. Data in the field stated that Indonesia falls into the category of the number of toddlers who experience stunting with the third place at the Southeast Asia Regional / South-East Asia Regional (SEAR) data was obtained based on the World Health Organization (WHO) which explained in 2005-2017 recorded the prevalence of indonesian stunting toddlers as much as 36.4%. The stunting prevalence of infants under five years old (toddlers) in Indonesia in 2015 was 36.4%. This means that more than a third or about 8.8 million children under five have nutritional problems where their height is below the standard for their age. Stunting is above the WHO threshold of 20%. The prevalence of stunting for children under five in Indonesia is the second largest in Southeast Asia, after Laos, which reaches 43.8%. In addition, in the last three years according to nutrition status monitoring (PSG) short experienced a high prevalence when compared to other nutritional status problems such as malnutrition, thinness, and fat. The increase in short toddlers recorded in 2016 from 27.5 % increased to 29.6% in 2017. In particular, in Central Java Province, 10 babies are born every day with low weight and almost 36% of children under the age of five are prone to stunting (UNICEF, 2013).

In Pati District, In 2015, there were 240 undernourished toddlers (marasmus, kwashiorkor, skinny, stunting), which increased by 36 toddlers from 2014 (Pati District Health Office, 2015). Based on the latest data from interviews with medical personnel at 6 health centers in Pati Regency in June to August 2019, it was found that the number of cases of stunting toddlers in Juwana Health Center as many as 309 cases, in Trangkil Health Center as many as 113 cases, Wedarijaksa Health Center as many as 536 cases, Batangan Health Center as many as 79 cases, Jakenan Health Center as many as 260 cases, and Puskesmas Pucakwangi as many as 95 cases. The most dominant cause of stunting is low public awareness, especially mothers / pregnant women about the importance of nutrients m food and consider the food consumed is quite filling. In addition, babies given exclusive breast milk in Pati only amounted to 49.8% (Pati District Health Office, 2015).

Stunting is a chronic undernutrition status during growth and development which is represented by a z-score of height for age (TB/U) less than -2 standard deviations (SD) based on growth standards (World Health Organization, 2010). In terms of nutrition, especially stunting in children, more attention needs to be paid because it will affect development and cause negative impacts. According to theMinistry of Villages, Development of Disadvantaged Regions (2017) things that will be experienced by stunting children such as disturbances (brain, intelligence, physical growth, and body metabolism), decreased (cognitive ability, learning

achievement and immunity). There are several characteristics of children experiencing stunting, including: (1) The face looks younger than its age; (2) Delay in growth; (3) Slow tooth growth; (4) Not maximal level of attention and learning memory; (5) Have delayed puberty; and (6) Being quiet and not making much eye contact at the age of 8-10 years. The characteristics of children who experience stunting do not just happen, it has been shown through pre-conception signs of a teenager becoming an undernourished mother, such as when pregnant, lack of adequate nutritional intake, experiencing anemia and living in an environment with inadequate sanitation. Fetal health and development disorders caused by lack of nutritional intake (Fe, folic acid, hemoglobin) will cause babies to be born with low body weight (Rukmana, 2013).

Adequacy of nutrition in pregnant women is influenced by the level of knowledge of mothers about the importance of paying attention to nutrition during pregnancy (Nurhidayati & Ernawati, 2016). According to Silas, Rantetampang, Tingginehe, & Mallongi (2018) knowledge and the role of parents are significant factors, and knowledge becomes dominant with the incidence of stunting in children under 5 years of age. If a mother has good nutrition and health knowledge, then the mother will have the right healthy behavior in choosing the consumption of balanced nutritional foods for herself and her fetus. This is in line with the research of Primivita Dirgahayu (2015) explaining that there is a relationship between the level of knowledge possessed and live clean and healthy.

Based on an initial survey of 6 puskesmas In Pati Regency, the puskesmas so far have provided counseling and assistance related to stunting prevention and management. However, the program has not been comprehensive and consistent, and the content of the counseling has not touched the important role of parents. In addition, the community lacks the ability and skills to obtain Information, understand how to analyze, and evaluate the usefulness of the information that has been obtained. In fact, if parents can use information from books or magazines, then other sources come from school staff, friends, television, and the internet (Radey & Randolph, 2009).

Regarding the importance of health for the community, a solution or formula is needed for the community to be able to access and process health information correctly and appropriately, so that it can assist in problem solving and decision making. Iriantara & Soenendar (2010) explained that the understanding of literacy this time is not just the ability to read or write, because writing texts has expanded its scope in the form of visuals, audiovisuals and sophistication of computerized dimensions, so that in understanding texts there are cognitive, affective and Intuitive elements. The literacy itself is divided into 9 namely literacy (health, finance, data, digital, critical, visual, statistical, technology and information).

Health literacy can help improve the quality of health, well-being, and minimize health risks and inequalities (World Health Organization, 2010). Part of a person's ability to obtain, process and understand health information and service needs in order to make the right decisions in health (Zoellner et al., 2011). Health literacy is divided into several levels in its role as empowerment, including: 1) basic level in the form of basic ability to read and understand care instructions; 2) the middle level, that is, someone has the ability to relate prior knowledge to information in the environment; 3) high level, namely a person's ability to assess an information received and then informed back to others as a form of developing information in the health sector.

If mothers, as a small part of society, have health literacy, it will be a solution to many problems regarding children's health and nutrition. This problem is related to nutritional status which is one of the indicators in Sustainable Development Goals (SDGs). This is very crucial and must receive special attention in order to increase healthy human resources in the future. According to Almatsier (2001) explained that nutritional status is a measure of body condition that can be observed from what is consumed and some use of nutrients in the body. According to Supariasa, 2012 in assessing nutritional status of individuals, namely directly through anthropometry, clinical, biophysical and biochemical, or indirectly through surveys of food consumption, vital statistics and ecological factors. One of the nutritional status of children is determined by the role of the mother, especially mothers who are pregnant or already pregnant. The nutritional status of pregnant women has an important influence on: (1) the ability to get pregnant, (2) the health of the baby being born, (3) the Incidence of premature and underweight babies, (4) the continued health of the baby, and (5) the health of the offspring. next (Albon & Mukherji, 2008). These reasons underlie why the nutritional status of pregnant women is important

to note. According to Almatsier (2001) nutritional status is divided into four categories, namely underweight, short (stunting), thin (wasting), and fat (obesity).

Stunting can be prevented as early as possible through efforts to improve the health literacy of young mothers on the importance of paying attention to nutritional status during the pre-pregnancy and postnatal period or during the First 1000 Days of Life (HPK). So far, efforts to prevent and deal with stunting have been carried out by the Puskesmas in Pati, Central Java, including: counseling but only limited to health information and the dangers of stunting. This is felt to be ineffective because it has not touched the realm of awareness in relation to (roles, duties and obligations) in parenting. The program that researchers feel is appropriate to be integrated with growing health literacy is the parenting education program.

The parenting education program is a form of activity in the form of support provided for parents to have the ability to carry out their social functions in terms of nurturing, caring for, protecting, and educating their children. From this program, it is hoped that future children can optimally grow and develop according to the stages of their developmental age and obtain good health and nutrition standards. The benefits that can be obtained from the parenting education program are finding solutions through good interactive communication about child development, and what rights parents must fulfill in the survival of their children. The objective of the parenting education program in health and nutrition will be pursued through the development of materials which, according to the Directorate of Early Childhood Education Development in 2012 include 6 (six) topics, namely: (1) nutrition improvement, (2) health care, (3) care, (4) care, (5) education, and (6) protection. The six materials above will be used as basic points in parenting education activities.

Reading the explanation above, problems related to health literacy in the community, to be able to know clearly an assessment is needed. This assessment of health literacy is integrated through a parenting education program. So the purpose of this study is more focused on the curiosity of researchers on: l) the effectiveness of parenting education programs to improve health literacy as illustrated by the knowledge of young mothers regarding the nutritional status of 1000 HPK, and 2) supporting and inhibiting factors during parenting education activities to mothers youth as a preventive effort in the problem of stunting.

METHODS

This research model belongs to the category of mixed research (mixed method) with an embedded experimental model. Researchers use various data collection tools so that the data or facts obtained are more comprehensive and comprehensive. The mixed method model is used to answer the two research problem formulations, both quantitatively and qualitatively. Respondents involved in this study were 111 young mothers who were selected through purposive random sampling technique.

Answering the first problem formulation, the experimental model phase in this study is a one group pretest-posttest design. In this design, all subjects were treated once (Nahartyo, 2013). The results of the study will be more accurate because they are compared to the results before and after treatment (Sugiyono, 2001).

O1	X	O2

Figure 1. Experimental design (one group pretest-posttest).

Information
O1 : Condition before treatment
X : Treatment
O2 : Condition after treatment.

The dependent variable in this study is young mother's health literacy about stunting prevention. The independent variable is the implementation of parenting education programs for young mothers. To answer the second problem formulation, qualitative methods are used, namely a study that focuses on describing the object of research based on the facts obtained as they are in the field (Mukhtar, 2013).

The measurement of the dependent variable, young mother's health literacy, is with tests that have been validated by experts, in this case health experts and evaluation experts. The instrument is used to measure the knowledge of young mothers about stunting starting from the understanding, causes, impacts and prevention of stunting. The test consists of 30 items using the Guttman scale with four alternative answers. With a total score of 100. In collecting data using observations and interviews. The type of participant observation is used by researchers to obtain information directly by being directly involved in activities with all

participants in parenting education activities, while the type of interview is unstructured, where questions are asked spontaneously based on what the researcher wants to ask which questions remain according to the research topic. Interviews were conducted directly with participants in parenting activities as well as representatives from the health office, each sub-district has 2 to 3 representatives.

In analyzing the data, the researcher used normality test and hypothesis test using SPSS. 21. Normality test is used to determine the distribution of data and determine statistical techniques to be used in the next stage. The researcher used the One Kolmogorov-Smirnov Test with a significance level (α) of 5% or 0.05. Hypothesis testing was carried out using Paired T-test which aims to see the difference in knowledge of young mothers before and after participating in parenting activities.

Qualitative data analysis by going through a process starting from (l) data reduction, namely selecting and sorting the data to be analyzed in the form of words, sentences, or expressions according to the method; (2) data display, namely displaying data that has been selected and sorted and analyzing the type of method; (3) verification, namely concluding the results of the analysis on the use of the method (Mukhtar, 2013).

RESULTS AND DISCUSSION

Young Mother's Health Literacy

This study assesses the health literacy of young mothers obtained from the cognitive aspect through the responses of the test. The test was given twice, before and after young mothers participated in parenting activities. The results of the pretest and posttest are presented in Table 1.

Table 1. Normality Test Results One-Sample Kolmogorov-Snurnov Test

		Before	After
N		112	112
Normal Parameters[a.b]	Mean	60.17857	81.19048
	Std. Deviation	17.374399	10.520557
Most ExtremeDifferences	Absolute	.106	.125
	Positive	.056	.058
	Negative	-.106	-.125
Kolmogorov-Smirnov Z		1.119	1.326
Asymp. Sig. (2-tailed)		.163	.059

Test distribution is Normal.

Calculated from data

Based on the pretest condition, the mean value was 60,17857 with a standard deviation of 17.374399. Posttest results with a mean of 81.19048 with a standard deviation of 10.520557. Based on the data in table 1, it shows that there is a change in the average health literacy score of young mothers before and after participating in parenting activities. Based on the table, the value of sig. (2-tailed) were 0.163 (for the pretest) and 0.059 (for the posttest). By using a significance level (α) of 5% or 0.05, the distribution of data for the normality test, both pretest and posttest, is declared normal. This is because the value of sig. (2-tailed) > value, which is 0.163>0.05 for pretest and 0.059>0.05 for posttest.

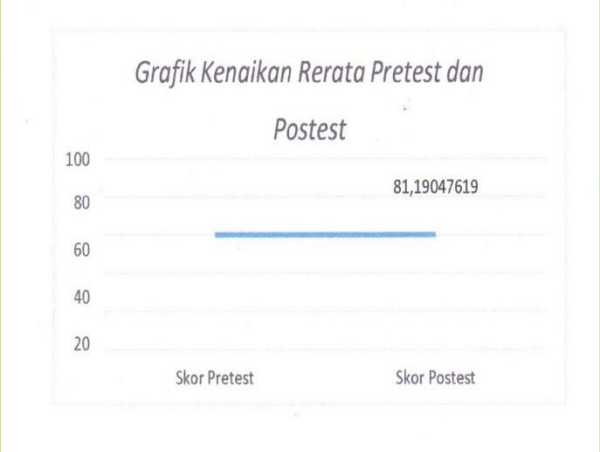

Figure 2. Graph of the increase in the mean of pretest and posttest

Table 3. Results of the t-test of the health literacy of young mothers before and after participating in parenting activities

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std Deviation	Std. Error Mean	Confidence Interval of the Difference Lower	Upper			
Pair 1	After - Before	21 .011905	14.281871	1.349510	18.3377û1	23.686049	15.570	111	.ooo

Table 3 shows the results of the t-test analysis using the Paired Sample t-Test, both pretest and posttest. The value of t obtamed is 15,570. The t table value of 1.98 is obtained from dk = (n-1) = (111-1) 110. Based on the value of t count > t table and p value <0.05, so Ho is rejected. Therefore, the pretest scores differed significantly from the posttest scores.

Based on the t-test calculation above, the p value 0.000 is obtained so that the p value <0.05 and Ha is accepted. Because the value of p< α, it can be concluded that there is a significant difference in the knowledge of the subjects before and after participating in the parenting education program. The change in the mean of pretest and posttest was significant with a difference of 21.011905. This means that the health literacy of young mothers in preventing stunting in children has increased after participating in parenting education activities. The increase in score is seen significantly. This means that parenting education activities can improve the health literacy of young mothers in preventing stunting.

The increase in knowledge of young mothers about stunting prevention after participating in the parenting program is in line with research conducted by the Child Welfare Information Gateway (2013) that through parenting education programs, caregivers and parents will increase their knowledge, sources of knowledge, and support in the ability to provide a positive environment so that children optimal physical growth and language and emotional development. Barlow & Coren (2018) in their research also mentions that parenting programs can increase parents' psychosocial support for the welfare of children. The dimensions of child welfare include all of them: physical health, development, security, emotional and social development, and cognitive development (Moore, 2013).

If the knowledge of young mothers increases, it will be easier for mothers to carry out their responsibilities (Lopez, Tjokrosonto, & Paramastri, 2004). When associated with Bloom's taxonomy, knowledge enters the cognitive domain, where the domain has several levels, ranging from knowing, understanding, applying, synthesizing, and evaluating (Hamzah & Koni, 2014). At the level of knowledge, a person can mention, remember, understand, and repeat information.

The parenting education program is part of the solution activity, where the research subjects are mothers who are categorized as adults. Parenting education is a form of educational activity for adults. According to Sudjana (2010), it is an activity for adults in a community environment, in order to develop abilities, knowledge and skills so that they have new ways to change or respond to an attitude and behavior. In addition, the parenting education program in this study has a vision, one of which is to provide understanding as well as equalization of information about carrying out its social functions, especially in nurturing, caring for, protecting and educating children so that they can be optimal in their bodies and development. And a benefit can be achieved for the survival of children's lives in health and obtaining balanced nutrition in the body's processes and developments through six materials that have been presented by the Directorate of Early Childhood Education Development in 2012. The success of a program lies in the effect of the recipient of the program, none other than the parents. Here parents who are focused on mothers should have knowledge about nutrition and health for their children, as an effort to prevent stunting. This is a must because according to research by Syahrul et al., (2016) and Rachmi, Li, & Alison Baur (2017) which states that mothers with low knowledge and low levels of education are factors in the occurrence of stunting in children. If the mother has sufficient knowledge about health, then at the basic level, the child will be fulfilled with care, protection, so that in particular the ideal weight (National Research Council, 2015).

The results also show that there are several things that are often asked during activities by mothers in relation to 1) proper parenting; 2) how

to provide additional nutrition according to the local diet and, 3) how to avoid poor nutritional status. First, the explanation of appropriate parenting begins with questions related to the mistakes of old parenting patterns that are still applied today, and when given the right information makes them aware that this method is not appropriate to be used in parenting. This provides special awareness for mothers to self-evaluate what has been done and has an impact on child development. Second, how to choose the right food that can be used as an additional nutritional supplement according to economic capacity and ease of finding or being around the place of residence (easy to get to). This is important because most of the stunting cases come from poor household food security (Fadzila & Tertiyus, 2019). The trick is to simply apply what has been previously informed by the midwife, for example with regard to the fulfillment of nutrition and nutrition (carbohydrates, vitamins, protein, calcium and iron) or what is needed during the prenatal period (pregnancy) and the postnatal period (growth and development). The initial stage can be done by categorizing foods and drinks that are good and not good for health during the prenatal and postnatal periods that are easily accessible, besides ensuring that health and nutrition are met in the First 1000 Days of Life (HPK) so that children can grow and develop optimally. In other words, nutritional status during pregnancy is a strong predictor of growth and development in the first 1000 days of gestation and also affects disease susceptibility in adulthood (Wrottesley, Lamper, & Pisa, 2016). Third, the way to avoid nutritional status in this case stunting is the right parenting pattern (educating, caring for, guiding); diet (feeding according to the dose, frequency and variety); and clean water and sanitation. This, when linked to research by Alkon & Cole (2012), enters into early childhood health and safety which includes clean living and sanitation, food preparation and provision, and children's sleep patterns.

The parenting education program should be carried out routinely and consistently or can be a monthly program at the puskesmas, with the hope of reducing the phenomenon of nutritional status problems in the Pati area. Moreover, parents are a resource to be appreciated and built based on the considerations of program designers, both government and stakeholders (Tomlinson & Andina, 2015). For program developers, attention should also be paid to recognizing and encouraging parental traditions and values.

The inhibiting factors encountered during parenting education activities for young mothers as a preventive effort in stunting problems during the activity were: unavailability of facilities and infrastructure (chairs and boards), time and duration of program implementation, and mother's educational status. The factors that support the success of the parenting education program include: material interest, and stakeholder collaboration. Cooperation from stakeholders, namely puskesmas employees, is the main factor. The form of involvement can be shown through the moral support of activities from the beginning to the end of implementation. And this activity can be carried out by stakeholders regularly and maximally as an effort to prevent the stunting phenomenon. This is in line with what was expressed by Bergström et al., (2015) which explained the important role of cooperation between parties in implementing the program to produce a suitable project.

CONCLUSION

Based on the results of the research above, it can be concluded that parenting education activities are declared effective in increasing maternal health literacy in preventing stunting. Thanks to stakeholder support and interesting materials, young mothers have a better understanding of how to prevent stunting in children. Several recommendations for further research include: (1) a standard category of stunting case levels is needed in terms of the total number of cases in Pati; (2) it is necessary to have an instrument that measures the response of young mothers (users) to the activities that have been carried out by the puskesmas; (3) it is necessary to involve family members, especially parents (father and mother); (4) it is necessary to have an active role from the puskesmas to assist the process of implementing activities; and (5) each implementation is given a time duration to make it more structured.

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