

A Ton of Mothers with Knowledge of Infant and Child Feeding Stunting Events

Nina Riana

Puskesmas Mayamuk Papua Barat

*Email: ninariana@gmail.com

ABSTRACT

Short stature is a defining characteristic of stunting, a chronic nutritional condition. With the proper infant and child feeding (PMBA), one can reduce the risk of stunting. Every mother must fully comprehend this effort in order for this to happen. In light of the current situation, preliminary interviews with mothers of toddlers revealed that 90% of them were aware of the routine and guidelines for proper toddler feeding, despite the fact that the nutrition officer at the Health Center had previously informed them that the percentage of stunting in the Tirtoyudo District was still higher than 10%. The purpose of this study is to ascertain the association between the prevalence of stunting and mothers' knowledge of infant and child feeding (IPM). This study uses a cross-sectional, correlational strategy.

Keywords: feeding, incidence of stunting, knowledge

BACKGROUND

Short stature is a symptom of stunting, a chronic nutritional condition. Stunting are typically less intelligent than average, less productive, and more prone to illness. The provision of suitable and not too early baby and child nutrition is one of the initiatives made to prevent stunting. Every mother must fully comprehend this effort in order for this to happen. The current problem is that stunting is still frequently observed in conjunction with mothers' limited knowledge of PMBA (Ridua & Djurubassa, 2020).

One of the dietary issues that toddlers in the modern world face is stunting. In 2017, approximately 151 million children under the age of five around the world, or more than 22% of all children, were stunted. More than half of these children, or roughly 84 million, were from Asia, while more than a third (39%) lived in Africa. South Asia had the greatest rate of under-five stunting in Asia, at 58.7%, and Central Asia had the lowest rate, at 0.9% (Amazihono & Harefa, 2021).

In Indonesia, the frequency of stunting is still very high. The frequency of stunting in Indonesia ranks 108 out of 132 participating nations, according to the Global Nutrition Report 2018. According to information from the Ministry of Health's Performance Report (LKj) for 2020, the target for the prevalence of stunting in toddlers is 24.1% (5,543,000 toddlers), and the Community-Based Nutrition Recording and Reporting Application (ePPGBM SIGIZI) report from 34 provinces as of 20 January 2021 revealed that, of the 11,499,041 toddlers whose nutritional status was assessed based on height for age (TB/U), 1,325,298 toddlers had (Republic of Indonesia's Ministry of Health, 2021). In East Java, the rate of stunting is still extremely high. According to Riskesdas 2018, East Java's stunting prevalence is currently close to the national average of 26.9%. According to the 2018 Basic Health Research (Riskesdas) findings, the prevalence of stunting has decreased 6.4% nationally over the past five years, from 37.2% (2013) to 30.8% (2018). While this was happening, East Java saw a 0.2 percent

drop in the prevalence of stunting over a 5-year period, from 36.00% to 27.1% (2015) to 26.9% (2019) (East Java Provincial Government, 2020). Stunting prevalence in Malang Regency is still below predictions. Up till December 2019, Malang Regency had over 17 000 stunted children, or 12.6% of the total population.

The results of a preliminary study at the Tirtoyudo Health Center showed that as of February 2021, there were 27 toddlers experiencing stunting in the short and very short categories. The results of interviews with 10 mothers of children under five who experienced stunting found 10 mothers (100%) who said they did not know that giving food for their children twice a day with very small portions, with the menu most often only rice and crackers, which was wrong. There are two factors that cause stunting, namely direct causes including food intake, infectious diseases, low birth weight and genetics, as well as indirect causes such as low education levels of mothers under five, low socioeconomic levels of the family, socioeconomic, poor parenting, distribution of food and family size/number of family members. The low knowledge of mothers under five about PMBA causes mothers to tend to give food in inappropriate quantities and frequencies, not paying attention to nutritional quality, not providing complete food, and in an inappropriate way of feeding. This results in children not getting a good intake, resulting in acute and chronic malnutrition. In the long term, malnourished children will appear physically weak, stunted in growth, and become stunted (Paulina & Maryani, 2019).

In addition to providing Supplementary Food (PMT) at Posyandu, meeting the nutritional needs of expectant mothers, and promoting exclusive breastfeeding for six months before continuing with MPASI, efforts to prevent stunting can also be made by empowering the community by involving all stakeholders, health cadres, and healthleaders. In addition, parents are expected to provide their children with access to clean water, upgrade sanitary infrastructure, and preserve environmental cleanliness (Isni & Dinni, 2020).

METHODS

This research was correlational design with approach cross sectional, with the research variable being mother's knowledge about Infant and Child Feeding (IPM) with the incidence of stunting. Data collection was carried out in Tamansatriyan Village, Tirtoyudo Health Center, Malang Regency, on 1-31 August 2021. The population of all mothers under five in Tamansatriyan Village, Tirtoyudo Health Center Work Area, Malang Regency, was 359 people. The sample of mothers under five in Tamansatriyan Village, Tirtoyudo Public Health Center, Malang Regency who met the research criteria, was 190 people. Sampling technique consecutive sampling. Inclusion criteria for mothers of children under five in Tamansatriyan Village, Tirtoyudo Health Center, Malang Regency, were present during research activities and were willing and allowed their toddlers to be research subjects. The exclusion criteria refused to be a respondent and were not cooperative. The sample determined using the formula Slovin, a total of 190 people. The research instruments were questionnaires and observation sheets. PMBA Questionnaire contains 20 questions with answer choices "True" and "False". Observation sheet in the form of a table which consists of a column of height and age of the child which is filled in after the researcher has measured the height and age of the child. Data analysis using test Spearman.

RESULTS

Table 1. Distribution of Respondents

Characteristics	n	%
Education:		
College	5	2.63
SMA	14	7.37
Junior High School	139	73.2

Elementary School	32	16.8
Age:		
> 35 years	12	6.32
20-35 years	150	78.9
< 20 years	28	14.7
Sources of information for PMBA:		
Health workers	121	63.7
Mass media	62	32.6
People other than health workers	7	3.68
Total	190	100

(Source: Primary data questionnaire and research observation sheet August 2021)

Table 1 describes the characteristics of the respondents. Most (73.2%) have junior high school education, most (78.9%) are aged 20-35 years and most (63.7%) sources of information are health workers.

Table 2. Distribution of PMBA Knowledge and Incidence of Stunting

Variable	n	%
Knowledge:		
High	30	15.8
Enough	126	66.3
Low	33	17.4
Very low	1	0.5
incidence Stunting:		
High	20	10.5
Normal	132	69,5
Short	34	17.9
Very short	4	2.1
Total	190	100

(Source: Primary data questionnaire and research observation sheet August 2021)

Table 2 describes the distribution of knowledge about IDD and incidence stunting. Most (66.3%) knowledge about PMBA was sufficient and most (69.5%) events were stunting normal.

Table 3. Cross Tabulation

Variables:		High		Normal		Short		Very short		Total	
		n	%	n	%	n	%	n	%	n	%
Knowledge	High	19	10	10	5.3	0	0	1	0.5	30	15.8
	Enough	1	0.5	122	64.2	3	1.6	0	0	126	66.3
	Low	0	0	0	0	31	16.3	2	1.1	33	17.4
	Very low	0	0	0	0	0	0	1	0.5	1	0.5
Total		20	10.5	132	69,5	34	17,9	4	2.1	190	100

(Source: Primary data of research questionnaire August 2021)

Table 3 explains the cross tabulation of knowledge about PMBA with the incidence of stunting. Most (64.2%) mothers who have sufficient knowledge have children under five with stunting in the normal category.

Table 4. Spearman Test

Spearman's rho	Knowledge of PMBA	Correlation Coefficient Sig, (2-tailed)	Knowledge of PMBA	incidence Stunting
			1,000	0.856
			-	0.000

	N	190	190
incidence Stunting	Correlation Coefficient	0.856	1,000
	Sig, (2-tailed)	0.000	-
	N	190	190

Table 4 describes the results of the analysis using the test of the Spearman relationship between nutritional knowledge and the incidence of stunting. The results of the analysis show p value = 0.000, the hypothesis is accepted, there is a relationship between knowledge about PMBA and the incidence of stunting.

DISCUSSION

Knowledge of PMBA

Based on the results of research on 190 mothers of toddlers in Tamansatriyan Village, Tirtoyudo Community Health Center, Malang Regency, it is known that, most of the knowledge of mothers under five about PMBA is sufficient. These results are in line with the research of Fitri & Esem (2020), which revealed that the knowledge of mothers under two in the Kupang City area was mostly sufficient. This phenomenon is supported by the fact that most mothers of children under five receive information about PMBA from health workers.

According to Notoatmodjo, knowledge is the result of knowing and this occurs after people have sensed a certain object. Sensing occurs through the human senses, namely the senses of sight, hearing, smell, taste and touch. A person's knowledge is influenced by internal factors and external factors. Internal factors include age, intelligence and senses. External factors include: education, experience, environment, work, and information. Information affects a person's knowledge if he often gets information about a lesson, it will increase his knowledge and insight. In general, the easier it is to obtain information, the faster a person acquires new knowledge. This happens because of knowledge(knowledge)itself is a collection of any information that is owned by someone after seeing (watch, experience), to know and understand through the eyes and ears (Kristin et al.,2021).

Most of the mothers in the village Tamansatriyan have knowledge enough about PMBA. The researcher argues that this is because most mothers of children under five have received information about PMBA from health workers. Information about PMBA delivered by the right person, namely health workers, increasing maternal knowledge, is an implication of Notoatmodjo's theory in everyday life, that information is one of the factors that influence knowledge. Mother's knowledge about PMBA should be high in order to apply a good diet for toddlers and their families. The researcher recommends the Village Midwife to improve health promotion regarding PMBA. With high knowledge about PMBA, it is hoped that mothers can provide optimal nutritious food for children, so that it is expected to reduce the incidence of stunting.

Incidence Stunting

Based on the results of research on 190 children under five in Tamansatriyan Village, Tirtoyudo Public Health Center, Malang Regency, it is known that most of the events were stunting normal or did not experience stunting. These results are in line with Fitri's research (2018), which revealed that most of the toddlers at the Lima Puluh Pekanbaru Health Center did not experience stunting. Nevertheless, the incidence of stunting in Tamansatriyan Village still needs attention because the incidence of stunting in the short category is still 17.9% and very short is 2.1%.

Stunting is a short or very short body condition based on the index of Body Length for Age (PB/U) or Height for Age (TB/U) with a threshold (z-score) between -3 SD to < -2 SD . Combination of morbidity, infectious disease, environmental problems and consumption of low-quality diet in the long term has the potential to trigger stunting (Olsa et al., 2018). According to UNICEF in Mugianti et al., (2018), basically the nutritional status of children can

be influenced by direct and indirect factors, direct factors related to stunting, namely the characteristics of children in the form of male sex, low birth weight, food consumption in the form of low energy intake and low protein intake. The other direct factor is the health status of ARI infection and diarrhea. Parenting patterns without exclusive breastfeeding, health services in the form of incomplete immunization status, and family characteristics in the form of parents' occupations, parents' education and family economic status are indirect factors that affect stunting. The level of education, especially the education level of the mother affects the health status. This is related to the most important role in the formation of children's eating habits, because it is the mother who prepares the food, starting to set the menu, shopping, cooking, preparing food, and distributing food. The tendency of stunting in children under five is more common in mothers with low education. Mothers who are well educated will make decisions that will improve the nutrition and health of their children and tend to have good nutritional knowledge as well (Atmaja et al., 2020).

Most of the toddlers in Tamansatriyan Village were in the category of stunting normal or did not experience stunting. This happens because stunting itself is a short or very short body condition that is triggered by infectious diseases, environmental problems and environmental problems consumption of a low-quality diet in the long term. So it is natural that not all toddlers experience stunting. However, the phenomenon of stunting in Indonesia The short category Tamansatriyan Village which reaches 20% needs serious attention. The incidence of stunting in toddlers should not exist because the impact does not only affect the physical but also mental and emotional, especially on the development of intelligence in thinking. In addition, the long-term impact of a child with stunting is increasing the risk of degenerative diseases such as hypertension, diabetes mellitus, stroke, heart disease, become sick easily, and productivity decreases. Community midwives play a role in providing information and education related to risk factors for stunting, nutrition during pregnancy and after delivery. Good nutrition education for infants and children (PMBA) will increase mother's knowledge, so that they can apply good nutrition to children.

The relationship between knowledge about PMBA and the incidence of stunting

Statistical analysis shows the fact that there is a relationship between knowledge about PMBA and the incidence of stunting in mothers of children under five in Tamansatriyan Village, and it is known that most mothers who have sufficient knowledge have toddlers with stunting in the normal category or do not experience stunting. . These results are in line with the results of the research by Septamarini et al (2019), which concluded that there is a relationship between maternal nutritional knowledge and the incidence of stunting in toddlers aged 6-24 months in the Bandarharjo Health Center work area, Semarang.

Knowledge is an indirect factor that affects the nutritional status of children and has an important role. Knowledge is a very important domain for the formation of one's actions. A person's knowledge about health is sufficient to be able to know various kinds of health problems that may arise so that solutions can be sought. Soetjningsih in Septamarini et al (2019), argues that nutritional disorders occur due to lack of knowledge about the need for additional nutritious food so that they are less able to provide nutritious food, which can result in a decrease in children's food consumption. Knowledge about nutrition is the initial process in changing behavior to improve nutritional status, so knowledge is an internal factor that influences behavior change. Mother's knowledge about nutrition will determine the mother's attitude and behavior in providing food for her child and can provide the right type and amount of food so that the child can grow and develop optimally. On the other hand, stunting is a problem of chronic malnutrition or growth disorders that occur for a long time, most at risk of occurring in the first two years of a child's age. The high knowledge of mothers about nutrition causes mothers to be better able to serve nutritious food for children, thereby reducing the risk of stunting (Ruaida, 2018).

There is a significant relationship between knowledge about PMBA and the incidence of stunting in Tamansatriyan Village, Sumbermanjing Wetan District, Malang Regency. The researcher argues that this happens because knowledge of maternal nutrition is an indirect factor in the incidence of stunting. Mothers who have sufficient knowledge of nutrition will better understand the risks if children are not given adequate nutrition and understand the benefits of providing nutrients for child growth, and are better able to serve nutritious food for children, so that they have the opportunity to prevent nutritional deficiencies. Malnutrition is one of the risk factors for stunting. This phenomenon is an implication of Soetjningsih's theory which states that children's nutritional disorders, one of which occurs because the mother's lack of knowledge about nutrition is one of the risk factors for stunting. Overall, the risk factors for stunting were not being given exclusive breastfeeding, family socioeconomic status, low birth weight, birth length, low maternal education and infectious diseases. Researchers recommend to Village Midwives, in an effort to reduce the incidence of stunting in toddlers, one of which can be done by increasing maternal nutrition knowledge. These efforts can be carried out through health education using the lecture method, Focus Group Discussion, counseling on the portion of my plate, skills practice and local product food presentation competitions to improve nutrition for pregnant women and toddlers, outreach activities targeting groups of pregnant women, breastfeeding mothers and under-five mothers as well as with follow-up meetings involving cross-sectoral stakeholders.

CONCLUSION

Based on the results of research on 190 mothers of children under five in Tamansatriyan Village, Tirtoyudo Health Center, Malang Regency, it was concluded that most of the knowledge about PMBA (66.3%) was sufficient, the incidence of stunting was mostly (69.5%) normal, and there was a relationship between knowledge of PMBA with the incidence of stunting with p value = 0.000. It is recommended for pregnant women to increase their knowledge about PMBA and always be supportive of the provision of good nutrition for toddlers, by regularly participating in health education activities about toddler nutrition. It is recommended for Puskesmas to regularly hold health promotion activities regarding the importance of providing nutritious food for infants and children, with the aim of increasing awareness, willingness and ability of both mothers and families to provide good nutrition for toddlers. For Midwives to continuously strive to improve maternal nutrition knowledge and maintain the attitude of mothers to continue to support the provision of good nutrition for toddlers through education and health promotion regarding the benefits of good nutrition for toddlers, as part of efforts to reduce the incidence of stunting. For further researchers to conduct research with the theme of stunting, as well as its relationship with other risk factors such as not giving exclusive breastfeeding, family socioeconomic status, low birth weight, birth length, low maternal education and infectious diseases in infants and children.

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