



The Relationship Of Mother's Knowledge With The Incident Of Stunting In Toddler

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ABSTRACTS

Short Toddlers (Stunting) is a nutritional status based on the PB/U or TB/U index where in the anthropometric standard for assessing children's nutritional status, the measurement results are at the threshold (Z-Score) <-2 SD to -3 SD (short/ stunted) and <-3 SD (very short/ severely stunted). Stunting is a problem of chronic malnutrition caused by insufficient nutritional intake over a long period of time due to the provision of food that is not in accordance with nutritional needs. Stunting can occur when the fetus is still in the womb and only appears when the child is two years old. To find out the relationship between maternal knowledge and stunting incidents among toddlers in Alie Liem Village, Blang Mangat District, Lhokseumawe City in 2023. The design of this research is an analytical survey with a cross sectional approach, which means that all variables are observed at the same time as the research takes place and data and information collection is carried out at the same time. There is a significant relationship between maternal knowledge and the incidence of stunting among toddlers in Alue Liem Village, Blang Mangat District, Lhokseumawe City ($p = 0.006$, $OR = 8.325$).

Keywords: stunting incident, Knowledge

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PENDAHULUAN

According to the World Health Organization (WHO), in 2017 Indonesia was included in the third country with the highest prevalence in the Southeast Asia region (SEAR). The average prevalence of stunted toddlers in Indonesia in 2005-2017 was 36.4% (WHO, 2017). According to the WHO report quoted from Riskesdas in 2018, the Stunting target in Indonesia was 20%, but in 2013 the Stunting figure was 37.2%, but in 2018 there was a decrease to 30.8%. However, the stunting rate in Indonesia is still very high and far from that targeted by WHO. In 2010, the prevalence of stunted children under five was 35.6%, then increased to 37.2% in 2013 (Ministry of Health of the Republic of Indonesia, 2018a). The prevalence of short toddlers in Indonesia is also high compared to Vietnam (23%), Malaysia (17%), Thailand (16%), and Singapore (4%). Indonesia ranks 17th out of 117 countries with a prevalence of 30.8% (Indonesian Ministry of Health, 2018b). The incidence of stunting in toddlers is a major nutritional problem facing Indonesia. Based on Nutritional Status Monitoring (PSG) data for the last three years, shortness has the highest prevalence compared to other nutritional problems such as malnutrition, thinness and obesity. The prevalence of short toddlers has increased from 2016, namely 27.5% to 29.6% in 2017 (Ministry of Health of the Republic of Indonesia, 2020). The prevalence of stunting under five in Indonesia is also high compared to Vietnam (23%), Malaysia (17%), Thailand (16%), and Singapore (4%).

Indonesia ranks 17th out of 117 countries with a prevalence of 30.8% (Kementerian Kesehatan RI, 2018b)) (Ramdhani et al., 2020).

The problem of stunting starts from the womb and only becomes visible when the child reaches the age of two years. UNICEF defines stunting as the percentage of children aged 0 to 59 months, with a height below minus (moderate and severe stunting) and minus three (chronic stunting). This is measured using the child growth standards issued by WHO. Apart from experiencing stunted growth, stunting is also often associated with suboptimal brain development. (Novitasari & Rosita, 2022).

Stunting (stunt) is a condition where a toddler has less length or height compared to age. This condition is measured by a body length or height that is more than minus two standard deviations from the median of WHO child growth standards. Stunting in toddlers is not only a result of chronic malnutrition but is caused by many factors such as socio-economic conditions, maternal nutrition during pregnancy, pain in babies, and lack of nutritional intake in babies. (Simanullang & laia, 2022).

In health science, stunting is a condition of growth failure in children (body and brain growth) due to malnutrition for a long time. So the child is shorter than normal children his age and has delays in thinking. This symptom is also a problem that is often occurring in society. This stunting is caused by low access to nutritious food, low intake of vitamins and minerals, and poor food

diversity and sources of animal protein. Currently, stunting cases are of concern to many people, from the health service to the health minister. Stunting cases are also related to the current community economy, due to the ongoing pandemic, so that people's activities in earning a living are disrupted and this results in many couples with toddlers experiencing stunting. This is also because the food given does not contain 4 healthy 5 perfect (Andrianof, 2022).

The nutritional problem in toddlers that is still quite large and has not been resolved is stunting. Stunting is not only a national nutritional problem for children under five, but has also become a global problem. Stunting is a problem of chronic malnutrition and providing food intake that is not in accordance with nutritional needs (Hossain et al., 2017). Stunting is a nutritional status based on the Body Length according to Age (PB/U) index or Body Height according to Age (TB/U) where in the anthropometric standard for assessing children's nutritional status, the results of these measurements are at the threshold (Z-Score) < -2 SD to -3 SD (short/ stunted) and < -3 SD (very short/ severely stunted). (Lestari & Z.R, 2023).

Stunting will occur in children under five in the first 1,000 days of life (HPK) who experience growth failure due to chronic malnutrition (Ministry of National Development Planning/Bappenas, 2018). This causes various abnormalities in the growth and development of children because they are more susceptible or at risk of suffering from disease. It is not uncommon to

find children who are stunted experiencing problems in brain and body development. Children who are classified as stunted can be seen as having a length or height lower than the national standard which can be seen in the Maternal and Child Health Book (KIA). The long-term consequences, when you grow up, will affect productivity and the emergence of various chronic diseases (Hardiyanto et al., 2023).

Toddlers who experience stunting will have a suboptimal level of intelligence, making children more vulnerable to disease and in the future could be at risk of decreasing productivity levels (National Team for the Acceleration of Poverty Reduction, 2017). There are two factors that can cause stunting, namely direct and indirect factors. Direct factors of stunting can be caused by food intake and infectious diseases. Meanwhile, indirect factors can occur due to environmental sanitation (Sonia & Apsari, 2020).

The period of children under five years or what is often called toddlerhood is an important period in the growth and development of toddlers because the basic growth and development that takes place during toddlerhood will influence and determine every subsequent development. Toddlers are children who are over 1 year old or more commonly known as children under 5 years old. At the toddler age, children's growth is very rapid, so they require parental care. (Munir et al., 2021).

Stunting contributes to nutritional problems in Indonesia because of its influence on the

physical and functional structure of the body and increasing the possibility of children experiencing disease, even stunting is a particular concern for WHO in the handling process. (Junanda et al., 2022). United Nations International Children's Emergency Fund (UNICEF, 2021) revealed that the prevalence of stunting in 2015 was recorded at 163.4 million children under five who were stunted. Then in 2017, it was recorded that around 122.2% or 150.8 million toddlers in the world experienced stunting with Asian toddlers dominating with a percentage value of 55% experiencing stunting, followed by Africa with an incidence rate of 39%. The total number recorded is 83.6 million stunted children in Asia, South Asia dominates with a stunted child rate of 58.7%. (Maryati et al., 2023)

Stunted children are at risk of increased morbidity and mortality, delayed motor and mental development, decreased intellectual and productivity, increased risk of degenerative diseases, obesity and are more susceptible to infectious diseases. 6.7 Stunting in elementary school children is a manifestation of stunting in toddlers who experience failure to catch up growth, long-term nutritional deficiencies, and the presence of infectious diseases. (Edwin., dkk. 2017).

The number of toddlers experiencing stunting is still high. Data from 2017 shows that 22.2% of toddlers or around 150.8 million toddlers in the world experience stunting. (Olsa et al., 2018). 2019 data shows that more than half of children under five who

experience stunting in the world live in Asia (50.4%) and 40% live in Africa. The number of children under 5 years of age who experienced stunting in 2020 was 149.2 million. This figure decreased slightly from the stunting figure in the world in 2017. Meanwhile, children under five in Indonesia who experienced stunting based on RISKESDAS data in 2018 reached 30.8%. Indonesia is included in the category of regions with a high stunting problem because it has a stunting rate of more than 30-39%. (Awa et al., 2020).

The factors that cause stunting are divided into direct and indirect factors. Direct factors include mothers experiencing nutritional deficiencies, prenatal pregnancy, suboptimal feeding, not exclusive breastfeeding and infections. Meanwhile, indirect factors are health services, education, socio-culture and environmental sanitation (WHO, 2016). Factors that cause stunting in children. Factors that cause stunting can be caused by direct or indirect factors (Damayanti et al., 2017). The direct causes of stunting are nutritional intake and the presence of infectious diseases, while the indirect causes are education, family economic status, nutritional status of the mother during pregnancy, water and environmental sanitation, LBW, knowledge of the mother and family. (Awa et al., 2020).

The government issued a policy of Presidential Regulation No. 72 of 2021 concerning the strategy to accelerate the reduction of stunting by 14%, where the government targets the prevalence of stunting

to be 2.7 per year to reach the desired figure in 2024. (Perpres, 2021). The problem of stunting in Indonesia has received full attention from the President, with efforts to create a national strategy to accelerate the reduction of stunting involving various sectors, starting from the private sector, academics, philanthropic communities and the mass media under the coordination of the Vice President. (Djauhari, 2017), All parties are encouraged to work together in an effort to reduce stunting rates to 14% by 2024.(Rahmadani & Lubis, 2023).

Improving the quality of human resources (HR) is a central role in development in the health sector (Ministry of Health of the Republic of Indonesia 2021). The improvement of superior HR must be supported by balanced nutritional intake since in the womb, this is in order to reduce stunting rates and create quality HR. Stunting is a growth disorder in the form of a short body size that is not appropriate for age (WHO 2014). Stunting is at risk of causing death and other health problems (Anwar et al., 2022).

Stunting conditions are difficult to handle when the child has entered the age of two years. Therefore, to prevent stunting in children, mothers need to consume proper nutritional intake, especially during pregnancy until the child is born and 18 months old. Basically, the survival and health of children cannot be separated from the health of the mother. Low nutrient intake is influenced by parenting patterns, one of which is inappropriate feeding behavior.

Research states that there is a real relationship between parenting patterns and stunting. Toddler feeding behavior is influenced by the mother's nutritional knowledge. The mother's nutritional knowledge is one of the factors that has a significant influence on the incidence of stunting. Therefore, efforts to improve stunting can be done by increasing knowledge so that it can improve feeding behavior in children. One effort to increase knowledge to change feeding behavior in children is through nutritional counseling (Margawati & Astuti, 2018).

In Indonesia, one of the parameters to determine the nutritional status of pregnant women is the anthropometric indicator of the Upper Arm Circumference (LILA) in mothers, where insufficient energy and protein intake in pregnant women can cause Chronic Energy Deficiency (CED). Pregnant women are at risk of CED if they have an Upper Arm Circumference (LILA)(Alfarisi et al., 2019)

A developed nation will be achieved with the existence of quality human resources. Quality human resources cannot be separated from health efforts. Maternal and child health is the first priority in health development. This is based on the consideration that healthy children will produce quality human resources. However, efforts to improve health problems to improve the quality of human resources are considered too late if they are started when children enter school. Therefore, children's health is important to pay attention to early on, namely when children are still in

the so-called golden period of child growth which lasts from when the child is still in the womb until the child is two years old. This is also mentioned in the slogan "1000 days can shape a child's future" Ema (2015). (Widyaningsih et al., 2021)

Based on data on the prevalence of stunted toddlers collected by WHO, in 2020 as many as 22% or around 149.2 million toddlers in the world experienced stunting (World Health Organization, 2021). According to the Indonesian Toddler Nutrition Status Survey (SSGBI) in 2019, the stunting rate in Indonesia decreased to 27.7%. In 2021 to 2022, Indonesia experienced a reduction in stunting rates of 2.8%. This achievement is in line with the target set by the Ministry of Health, namely around 2.7% annually (SSGI, 2022). In the same year, the stunting rate in Aceh also decreased to 31.2% (RI Ministry of Health, 2022). Meanwhile in the city of Lhokseumawe, the stunting rate has increased from 27.4% in 2021 to 28.1% in 2022 (SSGI, 2022). In Blang Mangat District, especially Alue Lim Village, there are also several children under five who are stunted as of July 2023, namely 6 children.

From the background and preliminary studies, the researcher is interested in examining the Relationship between Mother's Knowledge and the Incidence of Stunting in Toddlers in Alue Lim Village, Blang Mangat District, Lhokseumawe City in 2023.

METHOD

Research design is a research plan that is prepared so that it can guide researchers to

obtain answers to research questions. This research design is an analytical survey with a cross-sectional approach, which means that all variables are observed at the same time when the research is taking place and data and information collection is carried out at the same time. This research was carried out in Alue Liem Village, Blang Mangat District, Lhokseumawe City. The population in this study was 39 mothers with babies who lived in Alue Liem Village, Blang Mangat District, Lhokseumawe City. The sample in this study were all mothers who had babies in Alue Liem Village, Blang Mangat District, Lhokseumawe City.

RESULTS AND DISCUSSION

RESULTS

This research was conducted from October 1 to November 15, 2023 in Alue Lim Village, Blang Mangat District, Lhokseumawe City in 2023.

The Relationship Between Mother's Knowledge and the Incidence of Stunting in Toddlers in Alue Liem Village, Blang Mangat District, Lhokseumawe City in 2023

The results of the study on the relationship between maternal knowledge and the incidence of stunting in toddlers in Alue Liem Village, Blang Mangat District, Lhokseumawe City in 2023 can be seen in the table below:

Table 1. Relationship between maternal knowledge and stunting incidence in toddlers

No	Knowledge	Stunting Incident				Total		p Value	OR (IK)
		YES		NO		N	%		
		N	%	N	%				
1	Good	29	50,8	28	49,1	57	100	0,006	8,325 (1.638–42,315)
2	Not enough	10	90,9	1	9,09	11	100		
Amount		39	57,4	29	42,6	68	100		

The results of the analysis of the relationship between maternal knowledge and the incidence of stunting are good knowledge 29 respondents (50.8%) who are not stunted, while those with poor knowledge 10 respondents (90.9%) are stunted. Based on the results of statistical tests using the Chi-Square test, the results of the Pvalue 0.006 ($p < 0.05$) are obtained, so there is a relationship between knowledge and the incidence of stunting, the OR value is 8.325 and IK and 1.638 - 42.315 meaning that mothers with good knowledge 8.325 do not experience stunting compared to

mothers with poor knowledge with a confidence value of 1.638 - 42.315.

The results of this study are in line with research (Purnama Al et al., 2021) "The Relationship between Mother's Knowledge and the Incidence of Stunting in Toddlers Aged 12-59 Months" obtained the results of the study using the chi-square test and the value obtained was $p = 0.02$. This means that the p value is smaller than α (0.05).

DISCUSSION

Based on the results of the analysis of the relationship between maternal knowledge and the incidence of stunting, good knowledge was 29 respondents (50.8%) who were not stunted, while those with poor knowledge were 10 respondents (90.9%) stunted. Based on the results of statistical tests using the Chi-Square test, the results of the Pvalue were 0.006 ($p < 0.05$) so there is a relationship between

knowledge and the incidence of stunting, the OR value is 8.325 and IK and 1.638 - 42.315 meaning that mothers with good knowledge 8.325 do not experience stunting compared to mothers with poor knowledge with a confidence value of 1.638 - 42.315. From the above, the researcher assumes that mother's knowledge influences the incidence of stunting in toddlers. Parental knowledge can help improve nutritional status in

children to achieve growth maturity. Inadequate knowledge, lack of understanding of good eating habits, and lack of understanding of stunting determine the mother's attitude and behavior in providing food for her child, including the right type and amount so that the child can grow and develop optimally.

So it can be concluded that the results of this study indicate that the incidence of stunting in toddlers in Alu Liem Village, Blang Mangat District, Lhokseumawe City, both short and very short, occurs more often in mothers with less knowledge. The higher the mother's knowledge about stunting and health, the better the assessment of food, while in families with low knowledge, children often eat without meeting nutritional needs.

CONCLUSION

Good Based on the results of research and data analysis that has been carried out regarding the relationship between maternal knowledge and the incidence of stunting among toddlers in Alu Liem village, Blang Mangat subdistrict, Lhokseumawe City in 2023, the results were obtained:

Mothers who had good knowledge were 57 respondents (83.8%), and the incidence of stunting was 39 respondents (57.4%).

As for the relationship between maternal knowledge and the incidence of stunting, a p value of 0.006 ($p < 0.05$) was obtained, and mothers with good knowledge, namely 8.325 times, gave exclusive breast milk to their babies compared to mothers with less knowledge and a trust value of 1.638 – 42,315.

SUGGESTION

1. It is expected that the government, especially the Lhokseumawe City Health Service, will facilitate supporting facilities and infrastructure for length/height examinations (Length Board and Microtoise), socialization, education and provision of leaflets regarding parenting patterns for mothers/families, especially in the first 1000 days of a child's life.
2. Developing Posyandu cadres to provide education or counseling regarding nutritional knowledge, maternal care patterns including cleanliness, health, and psychosocial stimulation to mothers and families.
3. Carry out regular height measurements during monthly integrated health post activities to monitor the nutritional status of children's height/age regularly.

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