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Description of Toddler Mother's Knowledge of Stunting in Forestry Hamlet, Secanggang Village, Langkat District

Nurhayati[1], Munanda Andin[2], Dwi Syahputri Purba[3], Diani Sari Panggabean[4]

[1,2,3,4)] Public Health study program, Universitas Islam Negeri Sumatera Utara, Deli Serdang Regency, Indonesia

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Correspondence:
munandaandin@gmail.com

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Abstract

Background: Lack of nutritional intake is a significant factor causing stunting in children, affecting their growth and development. The role of maternal knowledge and parenting practices is crucial in preventing stunting.

Objective: This study aims to determine the relationship between maternal knowledge and toddler stunting in Forestry Hamlet, Secanggang Village, Langkat Regency.

Methods: A descriptive quantitative research design was employed. Data were collected using questionnaires from a sample of 30 mothers of toddlers. The study analyzed the knowledge levels of these mothers regarding stunting.

Results: The analysis revealed that 70% of mothers had good knowledge, 26.7% had sufficient knowledge, and 3.3% had poor knowledge about stunting. The findings suggest that higher education levels among mothers are associated with a better understanding of preventing stunting.

Conclusion: There is a significant relationship between maternal knowledge and the incidence of stunting in toddlers. Enhancing health education and promoting a better understanding of toddler nutrition among mothers can reduce stunting rates. Health services and authorities should focus on disseminating information through various media to improve maternal knowledge and practices related to child nutrition.

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INTRODUCTION

A child's growth and development determine their health status in the future. One of the nutritional problems that many children experience when they enter the critical period is body length or height that is less than usual, which is called stunting[1]. Stunting is a chronic nutritional issue arising from a lack of nutritional intake. It disrupts children's growth and development, where their height is lower (stunted) than their age standards. Stunting is also the main focus in observing human quality, with additional concerns regarding the nation's compete-tiveness[2]. Stunting is the cause not only of stunted growth but also brain development, which results in a suboptimal level of intelligence, making children more vulnerable to disease in the future and potentially reducing their level of productivity and creativity in the household to become unproductive[3]. Stunting will be able to hamper economic growth and reduce inequality significantly. The significance of paying particular attention to stun-ting in toddlers lies in its impact, which can inhibit physical growth, reduce mental deve-lopment, and affect children's health[5].

The factors causing stunting are complex and multifactorial, involving interactions between various elements, including the mother's health condition during pregnancy, nutritional intake, feeding practices for babies and toddlers, sanitation conditions, and access to clean water[6]. Stunting is caused by insufficient food intake, recurrent infectious diseases, and an environment that does not support health and hygiene. Mothers' good knowledge about stunting is essential to prevent this condition from occurring in their children. This study's results align with the findings of Palupi et al., who state that a mother's knowledge greatly influences parenting and feeding patterns for children[7].

The World Health Organization states that stunting is a sign of childhood inequality since children who suffer from it- frequently come from low-income homes with little access to excellent medical care[8].

WHO stated that from 2005-2017, the prevalence of stunted toddlers in Indonesia was an average of 36.4% and ranked third in Southeast Asia with the highest prevalence [5]. Toddlers with stunting will be more susceptible to diseases, which could risk reducing children's productivity levels, and their intelligence levels will not be optimal, so the effects can have an impact on hampered economic growth, increasing poverty and inequality[9].

Stunting is also related to behavior, especially in parenting patterns that are not optimal in providing food to babies and toddlers. Therefore, reproductive health and nutrition education is needed for teenagers as prospective families. This condition is intended so that prospective mothers know the importance of adequate nutritional intake during pregnancy, providing stimulation to the fetus, undergoing obstetric examinations at least four times, giving birth in health facilities, implementing Early Breastfeeding Initiation (IMD), providing exclusive breastfeeding, providing additional breast milk feeding, providing breast milk and up to 2 years, monitoring posyandu growth and development with complete vaccination[10]. In Indonesia, efforts to prevent and handle stunting are implemented through the 2015-2019 Stunting

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Prevention Program[11]. The main objective is to reduce the occurrence of stunting and enable Indonesian children to grow, develop, and acquire optimal emotional, social, and physical skills that will prepare them to learn and compete. The main priority of this program includes improving the quality of nutrition provided to pregnant women and young children. 0-2 years [12].

Previous research by Dhefiena stated that 22% of toddlers suffer from stunting. There is a correlation between the level of knowledge and implementation of clean and healthy living and stunting (p-value=0.030 and 0.017)[13]. Studies show that stunting long-term impacts children's learning abilities, health, and future economic potential. Children who experience stunting have a higher risk of suffering from chronic diseases such as diabetes and heart disease later in life[14]. In addition, stunting is also associated with lower cognitive abilities and academic achievement, which can affect productivity and overall quality of life.

Stunting in toddlers is caused by complex factors, such as poor eating habits, including the mother's lack of understanding of nutritional practices and eating patterns before, during, and after pregnancy. Apart from that, six factors cause stunting in toddlers: maternal knowledge and education, selective breastfeeding, family income level, calcium and zinc adequacy, history of infectious diseases, and hereditary factors[15].

The critical role of increasing mothers' understanding regarding toddler nutrition is providing the needs of optimal nutritional intake to babies and toddlers to overcome stunting[16]. Mothers must have adequate knowledge and skills to apply nutritional information in selecting and processing food. However, there is still a lack of maternal knowledge about the impact of stunting on children's cognitive development. This condi-tion shows the need to improve educational materials that are more comprehensive and practical so that mothers not only know the definition and causes of stunting but also understand its long-term impacts. In this way, it is hoped that children's food intake can be appropriately met, help improve children's nutritional status, and support the achievement of optimal growth[17].

METHODS

In this research, the analysis technique used is a descriptive quantitative method. This method was chosen to describe the knowledge of mothers of toddlers regarding stunting in Forestry Hamlet, Secanggang Village, Langkat Regency. Data was collected through a questionnaire and distributed directly to respondents, namely mothers of toddlers at the research location. Sampling was conducted using a purposive sampling technique, with the inclusion criteria being mothers of toddlers in Forestry Hamlet, totaling 30 people on November 4, 2023.

This research has received ethical approval from the Health Research Ethics Committee of the University of North Sumatra with registration number 23/KEPK-USU/2023. All research participants have provided written consent after receiving a complete explanation of the research objectives and procedures. This research was conducted in compliance with the principles of research ethics, including maintaining the confiden-

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tiality of respondents' personal data and ensuring their participation was voluntary.

RESULTS

In Table 1. The frequency group of maternal characteristics shows that the respondents in this study were mothers aged ≤25 years (13.3%), 26-30 years (23.3%), 31-35 years (16.7%), and >35 years (46.7%). Most respondents came from mothers aged >35 years. Respondents were then based on educational level. The final educational group of respondents was high school (43.3%), and the others were elementary school (20%), middle school (33.3%), and bachelor's degree (0.4%). Furthermore, the characteristics of respondents who work are only (10%). In contrast, those who do not work are more dominant, namely (90%)—in the frequency group of mothers of toddlers' knowledge regarding stunting in Forestry Hamlet, Secanggang Village, Langkat Regency, the majority of respondents had good knowledge (70%), moderate knowledge (26.7%), and those with poor knowledge (3.3%).

Table 1. Characteristics of respondent based on age, education, and occupation of mothers of toddlers

Maternal characteristics	Frequency	%
Age (years)		
≤25	4	13.3%
26-30	7	23.3%
31-35	5	16.7%
>35	14	46.7%
Education		
Elementary School	6	20%
Junior high school	10	33.3%
Senior high school	13	43.3%
Bachelor	1	3.4%
Work		
Work	3	10%
Doesn't work	27	90%
Knowledge		
Good	21	70%
Enough	8	26.7%
Not enough	1	3.3%

Source: Primary Data, 2023

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DISCUSSION

Based on data obtained from 30 respondents, it can be seen that the majority of mothers of toddlers have good knowledge about stunting (70%), have sufficient knowledge (26.7%), and have poor knowledge (3.3%). Everyone's level of understanding is different. Knowledge results from human intelligence or an individual's experience of an object through their senses. This condition can be seen from the large number of people who receive information, so their level of knowledge is increasing. Individual knowledge can be obtained through knowledge that may come from several sources, such as mass media, electronic media, posters, health service products, or interactions. The knowledge gained can be used to create positive beliefs[18].

Several internal and external factors can cause knowledge. Internal factors are education, employment, and age, while external factors are environment and culture[19]. Education is seen as an internal influence on knowledge. The availability of information increases with higher levels of education, making it possible for mothers to prevent stunting in their children better. Previously, it was believed that those with higher education had more opportunities to acquire knowledge than those without higher education. This information can be used by mothers to manage the health of their young children in everyday life and prevent stunting[20].

Maternal education has an essential role in a child's growth and development. This condition is related to parenting patterns, consumption patterns, and healthy and clean living behavior from parents, especially mothers[21]. Research by Masdalena et al. (2020) shows that nutritional status and factors associated with stunting in rural areas are strongly influenced by maternal knowledge about nutrition, sanitation, and feeding practices[22]. Surartri et al. also found that socioeconomic factors such as maternal education, family income, and access to health services play an essential role in stunting among children in Indonesia[23].

Mothers' knowledge regarding the long-term impact of stunting, especially on children's cognitive development, is still lacking. Studies show that stunting affects a child's height, brain development, and mental abilities, reducing a child's future learning ability and academic performance. Nahar et al. stated that stunting is associated with disturbances in neurocognitive development, which impacts children's ability to reach their full potential[24].

In this study, age influenced the understanding of mothers of toddlers regarding stunting. Based on Table 1, it is known that some respondents were >35 years old. Age can affect the ability to understand and think when obtaining information. This result aligns with research by Rahma, which states that as you age, you can develop a better mindset to clarify the information you have obtained[25].

Based on this research, the influencing factor of knowledge is the level of education among mothers of toddlers who understand stunting, which is the highest among mothers with high school education (43.3%). Education can influence a person's level of knowledge. The more information media available, the better the understanding. However, people with low education do not necessarily have little knowledge. Knowledge is obtained through

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formal and non-formal education through experience, social environment, and health education[26].

Through health education in the form of counseling about stunting, mothers can understand, be receptive, and carry out what is recommended so that they can care for and care for children who are stunted. Apart from that, for parents who have breastfed their stunted children, this phenomenon can be prevented and not happen again in the future[27]. The public must understand the specific factors that can be used to reduce the incidence of stunting. Apart from that, the level of knowledge of babies regarding stunting also needs to be increased[28].

Maternal education is essential. The mother's level of education is closely related to her knowledge about health services, pregnancy, and the postpartum period, as well as her awareness of the family's health and nutritional intake[29]. Apart from that, education influences socio-economics in the form of income, employment, lifestyle, nutrition, housing, and accommodation. According to research by Sutriana, the level of education also determines how easy it is to understand knowledge about children's nutritional intake[30].

Based on the occupation of respondents in this study, the majority who did not work were 27 people (90%) and three people who worked (10%). A person's type of work is closely related to their social and economic status because those with a solid financial status can better meet their family's needs. Suryati's research results state that 57% of children suffering from stunting consist mainly of mothers of toddlers who do not work[31].

In addition, analysis based on demographic characteristics shows that mothers with higher education (high school or above) have a better knowledge level than mothers with only primary education. Working mothers also tend to have a better understanding of stunting than homemakers. Mothers who have strong abilities and awareness will increase their knowledge to overcome the problem of stunting[32]. This result is related to Rahmawati's research, which found that those who previously knew or received information about stunting understood, recognized, and could apply efforts to deal with stunting through the knowledge they had gained[33].

Thus, it can be concluded that the level of knowledge of mothers of toddlers regarding stunting can be seen in this research, including age, education, and employment. This result follows research according to Sharah (2020) regarding the knowledge of mothers of toddlers, which is caused by several factors, including age, education, and employment[34]. This result shows that educational programs about stunting must be further improved, especially in rural areas[35].

CONCLUSION

More than half of the respondents, or 21 people (70%), had good knowledge, eight people (26.7%) had sufficient knowledge, and one person (3.3%) had poor knowledge. The results of the analysis show that there is a relationship between education, employment, and age and environmental and socio-cultural characteristics. Higher education can increase mothers' knowledge about how to prevent stunting in their children. The mother's age and occupation also influence the level of

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knowledge. There is a need to improve health authorities and health services with health promotion related to stunting. Apart from that, it is hoped that Puskesmas nurses can provide information through mass media, such as brochures, posters, and social media, to increase mothers' knowledge about stunting.

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