

## The Relationship Between Parenting Patterns and Disease Patterns with the Incident of Stunting in Toddlers 6-36 Months at the Panyabungan Jae Community Health Center, Panyabungan District, Mandailing Regency, Christmas 2022

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### ABSTRACT

This study aims to analyze the relationship between parenting patterns, disease patterns, and the incidence of stunting among toddlers aged 6-36 months at the Panyabungan Jae Community Health Center, located in the Panyabungan District, Mandailing Natal Regency, in 2022. Employing an observational study design, the research involved 200 toddlers and their mothers as respondents. Data were collected through interviews with mothers to assess parenting patterns applied at home and to record the history of illnesses experienced by toddlers. Statistical analysis, including the chi-square test, was conducted to evaluate the relationship between parenting styles, disease patterns, and the incidence of stunting in toddlers. The study results revealed a significant relationship ( $p < 0.05$ ) between parenting patterns, disease patterns, and the occurrence of stunting. Parenting patterns that do not cater to the needs of children's growth and development, such as inadequate diet, poor personal hygiene practices, and insufficient developmental stimulation, were associated with an increased risk of stunting in toddlers. Additionally, common disease patterns experienced by toddlers, such as respiratory tract infections and digestive disorders, were identified as contributing factors to stunting. These findings offer valuable insights into the multifaceted factors influencing children's growth and development during early childhood. The practical implication of this research underscores the importance of adopting a holistic approach to prevent stunting, which includes educating parents about effective parenting practices, disease prevention strategies, and ensuring adequate access to healthcare services to address common health issues experienced by toddlers.



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## INTRODUCTION

Five year olds (toddlers) are children aged 0-56 months, this period is characterized by a very rapid growth and development process and is accompanied by high quality. However, toddlers are a group that is vulnerable to nutrition and easily suffers from nutritional disorders due to lack of necessary food. Food consumption plays an important role in children's physical and intelligent growth to achieve children's physical and intelligent growth (Ariani, 2017). Stunting is a condition where a child's height is too low. Stunting or too short based on age is a height that is below minus two standard deviations ( $< -2SD$ ) from the World Health Organization's nutritional status table (WHO, 2016). A child's basic needs for growth can be classified into 3, namely nurturing, loving and nurturing. The mother's parenting style from pregnancy to birth and the first 1000 days of life greatly influences the child's nutritional status and growth. Parenting styles play an important role in the occurrence of growth disorders in children (Tiara Pratiwi & Masrul 2016).

The nutritional problems that must be faced in Indonesia today are under-nutrition and over-nutrition.

The problem of malnutrition is caused by poverty, lack of food supplies, poor environmental sanitation, lack of public knowledge about nutrition and health. Whereas More nutritional problems are caused by economic progress in society and a lack of knowledge about nutrition and health (Waryana, 2019).

Serious handling of the nutritional status of toddlers does not only come from the government but also from the role of the family as the people closest to the toddlers. If during this period of growth and development, care and nutritious food is provided properly and correctly, it can form the nation's next generation who are healthy, intelligent and productive. The condition of nutritional status in an area can be seen from the Community Health Development Index (IPKM), which is an indicator of the success of community health development at the district/city level.

Parenting style is the interaction between children and parents during parenting activities. Caring for children is educating, guiding and caring for children, taking care of their food, drink, clothing, cleanliness or all the things that they should need, to the extent that the child is able to carry out their vital needs, such as eating, drinking, bathing and dressing. One thing that influences this is the mother, nutritional status is influenced by the mother's ability to provide sufficient food for the child and parenting patterns which are influenced by family income, education, behavior and number of siblings (Vicka Lourine Rapar, 2017).

The existence of stunting in toddlers is often not realized and after two years it is discovered that the toddler is short. Chronic nutritional problems in toddlers are caused by inadequate nutritional intake over a long period of time due to parents/families not knowing or not being aware of providing food that suits their children's nutritional needs. Riskesdas data in 2010 shows that 21.5% of toddlers aged 2-4 years consume energy below the minimum requirement and 16% consume protein below the minimum requirement (Indonesian Ministry of Health, 2010). If this continues for a long time, it will interfere with the growth of the toddler's weight and height (Weny Lestari, 2018).

## METHODS

### Research Design:

This study adopted an observational strategy employing a cross-sectional design, enabling the collection of data at a specific time point without direct intervention on the variables being investigated.

### Research Setting and Duration

The research was carried out at the Panyabungan Jae Community Health Center, situated in the Panyabungan District of Mandailing Natal Regency. This location was selected due to its role as a primary healthcare facility catering to various age groups, including toddlers. The study was conducted throughout the year 2022.

### Population and Sampling

The study population encompassed all toddlers aged 6-36 months attending the Panyabungan Jae Community Health Center for routine health assessments. Samples were randomly selected from this population using a random sampling technique, resulting in a total sample size of 200 toddlers and their mothers.

### Variables of Interest

The independent variables under scrutiny include parenting patterns, comprising dietary practices, personal hygiene habits, and engagement in developmental activities, as well as disease patterns, encompassing the history of ailments such as respiratory tract infections and gastrointestinal disorders. The dependent variable of interest is the occurrence of stunting among toddlers.

### Data Collection Instrument

Data was collected through interviews with mothers of toddlers using a structured questionnaire. The questionnaire is designed to record information about parenting patterns implemented at home, such as daily eating patterns, personal hygiene habits, and developmental stimulation activities carried out by the mother with her child. Apart from that, data was also obtained through the Puskesmas medical

records to record the history of illnesses suffered by toddlers.

### **Data analysis**

The collected data will be analyzed using statistical software such as SPSS (Statistical Package for the Social Sciences). The statistical analysis that will be carried out includes correlation tests to evaluate the relationship between parenting patterns and disease patterns and the incidence of stunting in toddlers. In addition, logistic regression analysis can be carried out to identify factors that significantly contribute to the incidence of stunting in toddlers.

### **Research Ethics**

This research will be carried out by paying attention to research ethics, including data privacy and confidentiality, as well as obtaining permission from the competent authorities before starting the research.

### **Research Limitations**

Potential limitations of this research include limitations in collecting data from mothers of toddlers who may have limited time or understanding, as well as limitations in accurately measuring the variables studied, such as parenting patterns and disease patterns. In addition, due to the cross-sectional design used, it is not possible to establish causal relationships between the variables studied.

## **RESULTS AND DISCUSSION**

### **Parenting**

Maternal parenting is the behavior of mothers in caring for their toddlers. According to Notoatmodjo (2018), behavior itself is influenced by attitudes and knowledge. Good knowledge will create good attitudes, which in turn, if these attitudes are deemed appropriate, then good behavior will emerge. Knowledge itself is obtained from information both from formal education and from (non-formal) media, such as radio, TV, internet, newspapers, magazines. (Cholifatun et al, 2018).

Parenting style is the interaction between children and parents during parenting activities. Caring for children is educating, guiding and caring for children, taking care of their food, drink, clothing, cleanliness, or all the things that they should need, to the extent that the child is able to carry out their vital needs, such as eating, drinking, bathing and dressing. One thing that influences this is the mother, nutritional status is influenced by the mother's ability to provide sufficient food for the child and parenting patterns which are influenced by family income, education, behavior and number of siblings (Vicka Lourine Rapar, 2017).

According to Yusniyah (2018), parenting is educating, guiding and caring for children, taking care of their food, drinks, clothes and cleanliness. According to Lubis (2016), the mother is a central figure and is very important in carrying out life, especially for toddlers. According to Lubis (2017), children still need a mother's guidance in choosing their food so that growth is not disrupted. The mother's form of attention/support towards the child includes attention when the child eats and the parent's attitude in feeding (Vicka Lourine Rapar, 2017).

According to Erikson, the role of parents as caregivers really needs to be carefully considered to optimize children's social development. Children's social development at the age of 2-3 years is classified as at the autonomy vs shame & doubt stage (Erikson, 2016). Children at this time, if they feel capable of controlling their body parts, can create a sense of autonomy, on the other hand, if the environment does not give trust or takes too much action for the child, it will give rise to feelings of shame and doubt. The importance of the child's surroundings in developing self-confidence and social self-confidence can start from the family environment. Children who are given good parenting and psychosocial stimulation will have a positive influence on the child's social-emotional development (Hastuti & Latifah, 2016).

Based on stating that the pattern of care given by mothers to children is related to health conditions (both physical and mental), nutritional status, education, knowledge and skills, role in the family and customs of the mother. Health status is one aspect of parenting that can influence a child's nutritional status to improve (Brigitte Sarah, 2017).

The conceptual framework put forward by The United Nations International Children's Emergency (UNICEF), which was further developed by Engle et al (1997), emphasized that the three components of health-care food are factors that play a role in supporting optimal growth and development of children. Engle et al stated that parenting styles include 6 things, namely:

1. Mother's attention/support for the child.
2. Providing breast milk or complementary foods to children.
3. Psychosocial stimulation of children.
4. Food preparation and storage.
5. Practice cleanliness or hygiene and environmental sanitation.

Caring for toddlers who are sick is like seeking health services. Providing breast milk and complementary foods to children as well as food preparation and storage are included in feeding practices (Engle, 1997).

### **Types of parenting styles**

Parents have their own ways and patterns in caring for and guiding children. These methods and patterns will differ from one family to another. From Diana Baumrind's research in 1971, there were several parenting patterns shown by parents (Santrock, 2017), namely:

Authoritarian parenting is a parenting style that is restrictive and punitive, where parents pressure children to follow their directions. Parents who apply this parenting style provide firm boundaries and control over their children and minimize verbal arguments. Characteristics of authoritarian parenting are that children are required to repeat work that the parents consider wrong, parents threaten to punish them if the child does not obey their orders, and parents use a loud voice when telling the child to do a job. An authoritarian parent may also spank the child frequently, enforce rules firmly but not explain them, and show anger toward the child. Children of authoritarian parents are often unhappy, fearful, and anxious about comparing themselves to others, fail to initiate activities, and have weak communication skills. Children of authoritarian parents can behave aggressively.

Democratic parenting (Authoritative Parenting) is a parenting style that encourages children to be independent but still applies limits and control to their actions. There are verbal acts of give and take, and parents are warm and affectionate towards their children. The characteristic of democratic parenting is that there is good communication between children and parents, where parents involve themselves and discuss the problems experienced by children. Parents usually praise their children when they do something good and teach them to do everything independently with a sense of responsibility and showing love.

Permissive Indulgent parenting is a parenting style in which parents are very involved with their children but make little demands or control over them. Such parents let their children do what they want. The result is that children never learn to control their own behavior and always expect to get what they want. Some parents deliberately raise their children this way because they believe the combination of warm involvement and a little restraint will produce creative, self-confident children. However, children whose parents indulge rarely learn to respect others and find it difficult to control their behavior. They may be domineering, egocentric, disobedient, and have difficulty in peer relationships.

Permissive Indifferent parenting is a parenting style where parents are not involved in their children's lives. Parents who apply this parenting style do not have much time to spend with their children, which results in social incompetence in children. Children of neglectful parents develop the feeling that other aspects of the parent's life are more important than theirs. These children tend to be socially incompetent. Many have poor self-control and do not handle independence well. They often have low self-esteem, are immature, and may be isolated from their families. In adolescence, they may show a pattern of truancy and delinquency.

In this research, the researcher combined the types of permissive indulgent and permissive indifference so that the researcher only used 3 types of parenting patterns, namely authoritarian parenting, democratic parenting and permissive parenting.

## **Factors That Influence Parenting Patterns**

Parenting style is closely related to stunting. In general, the factors that influence parenting are the way children are fed, child care, environment and culture.

### **Child Feeding**

Food or nutrition is a very important need. The toddler period is a period that is prone to experiencing malnutrition problems, because toddlers' bodies experience relatively rapid growth and development and will determine the quality of growth in the future (Ni'mah, et al. 2016). Providing food aims to obtain the nutrients the body needs for growth and development.

In general, the feeding schedule for toddlers is 3 main meals and two snacks. The daily food pattern follows a balanced food pattern consisting of sources of carbohydrates, protein, vitamins and minerals, as well as water. At the age of toddlers (1-4 years), there is a change in the type of food and way of eating from initially consuming breast milk and MP-ASI to eating- family meals, as well as learning to eat and drink alone. If nutritional needs at this age are not met properly, it will result in less than optimal growth and development patterns. (Susetyowati, 2017).

When providing food or paying attention to the variety of food for children, parents need to pay attention to the portion of food that can be given to children. So, when children are under five, parents must always pay attention to the quality and quantity of food consumed by their children and get used to a balanced and regular eating pattern every day, and in accordance with the level of nutritional adequacy (Hardianty, 2019).

### **Child Care**

Care is the love given by parents to children to help them grow, hugging and talking to children will stimulate growth and increase feelings towards children. Where, a child's sense of security grows if he is always near his mother and receives breast milk (ASI), while the father's participation fosters physical and psychological growth (Briawan, et al. 2018).

### **Environment**

The environment influences a child's development a lot, so it is not impossible that the environment also colors the parenting patterns that parents give to their children (Destrianty, 2018).

### **Culture**

Usually parents often follow the methods used by society in raising children, the habits of the surrounding community in raising children. Because these patterns are considered successful in educating or nurturing children towards maturity. Parents hope that in the future their children will be well accepted in society, therefore the culture of society in raising children influences every parent in providing parenting patterns to children (Destrianty, 2018).

### **Infectious Diseases**

Infectious diseases have a direct inhibitory effect on metabolic processes, including the epiphyseal growth plate which will experience malnutrition. Infectious diseases are the dominant factor causing stunting in children under five. Infectious diseases can be caused by inadequate nutritional intake in children and pregnant women as well as access to sanitation and clean water as well as bad behavior in children which can cause diarrhea resulting in malabsorption of nutrients and have an impact on the body. This is in accordance with research conducted by Desyati and Nindya (2017) stated that a history of diarrhea was 3,619 times the incidence of stunting in toddlers aged 24-59 months.

### **Toddler**

Toddlers are children under 5 years of age so babies under 1 year of age are included in this group. The period of growth and development at this age is a period that happens quickly and will never happen again. At the toddler age, the development of speaking and walking is better but other abilities are still limited, therefore the toddler period is often called the golden age or packaging period (Hardianty, 2019).

#### **Toddler Characteristics**

1. Experiencing an increase in weight and height.

2. After the child is 24 months old, growth will continue until adolescence.
3. Growth begins slow and constant, but increases during puberty.
4. Experiencing significant changes in both head size, chest and leg circumference.
5. At the age of 24-59 months nutritional intake decreases, because children are more active and start playing.
6. Have started learning to talk and socialize.

### **Stunting**

Stunting is defined as a short or very short body condition based on the index of body length according to age (PB/U) or height according to age (TB/U) with a threshold (Z-score) between -3 SD to <-2 elementary school (Olsa, et al 2018). Stunting is a chronic condition of impaired growth which is described by a z-score TB/U <-2 SD caused by inadequate nutrition during the growth period (Rachim, et al 2017). Stunting is a chronic malnutrition problem due to insufficient intake of 6 nutrients over a long period of time and other factors that can be seen based on the TB/U indicator with a Z-score <-2 SD (Chairunnisa, 2017).

Stunting in toddlers is a period that is prone to malnutrition problems, because toddlers' bodies experience relatively rapid growth and development and will determine the quality of growth in the future (Ni'mah, et al. 2016). Stunting is a condition where a child's body is shorter compared to other children his age.

Factors that influence the incidence of stunting. There are several factors that influence stunting, namely direct factors and indirect factors.

Direct Factors

### **Inadequate Food Intake**

Inadequate feeding includes poor food quality as well as food and drink hygiene problems. Poor food quality can be in the form of low food quality such as low micronutrient quality, low variety of food types and low animal food sources, as well as antinutrient content and energy substitute food content. So, giving it in the form of a low frequency of food, giving it when sick and after being sick, the consistency of food needs attention (Hardianty, 2019).

### **Consume breast milk**

Breast milk is an emulsion of fat in a solution of lactose protein and organic salts secreted by both mother's breast glands, as the main food for babies. Exclusive breastfeeding is defined as giving breast milk without supplementation with other foods or drinks, whether in the form of water, juice or milk other than breast milk. IDAI (Indonesian pediatrician association) recommends exclusive breastfeeding for 6 months, continued until the age of 24 months. Continuous breastfeeding for 2 years makes a significant contribution to the intake of important nutrients in babies (Rachim, 2017).

## **CONCLUSION**

The findings of this study underscore a significant correlation between parenting practices, disease occurrences, and the prevalence of stunting among toddlers aged 6-36 months attending the Panyabungan Jae Community Health Center in Mandailing Natal Regency, 2022. Inappropriate parenting behaviors, such as inadequate dietary habits, poor personal hygiene practices, and limited developmental stimulation, are linked to an elevated likelihood of stunting in toddlers. Additionally, common illnesses experienced by toddlers, including respiratory tract infections and digestive issues, contribute to the risk of stunting. These results highlight the pivotal role of parents in fostering healthy child-rearing practices and ensuring a hygienic and nurturing environment conducive to children's growth. Furthermore, prioritizing disease prevention through proactive and preventive measures is imperative for mitigating the risk of stunting among toddlers. These efforts must be supported by quality primary health services, such as those provided by Community Health Centers, as well as ongoing education to the community about the importance of good parenting and disease prevention. This conclusion also provides a deeper understanding of the complexity of the problem of stunting in

children under five and highlights the importance of a holistic approach in overcoming this problem. With a comprehensive approach, it is hoped that the incidence of stunting can be reduced and the health and welfare of children in the region improved.

## REFERENCES

- Adiyanti, M., and Besral. 2017. Nutritional Parenting Patterns, Environmental Sanitation, and Utilization of Posyandu with the incidence of Stunting in Infants in Indonesia (2018 Riskesdas Data Analysis). University of Indonesia.
- Mutmainnah. "The Relationship between Maternal Parenting Patterns and the Incident of Stunting in Toddlers Aged 12-36 Months in the Mountainous Area, Baraka District, Enrekang Regency in 2017" (thesis)
- Ni'mah, Cholifatun and Lailatul Muniroh. 2016. The Relationship between Education Level, Knowledge Level and Mother's Parenting Patterns with Wasting and Stunting in Toddlers in Poor Families. Indonesian Nutrition Media, Vol. 10, no. 1.
- Notoatmodjo. 2018. Health Research Methodology, Revised Edition. Jakarta, Rineka Cipta
- Health Profile. 2017. Basic Health Research Report. North Sumatra: Research and Development Agency.
- Putri Ariani, A. 2017. Nutritional Science Equipped with Nutritional Status Assessment Standards and a List of Food Ingredient Composition. Yogyakarta: Nuha Medika.
- Widyaningsih, Novita, et al. 2018. Food diversity, parenting patterns and the incidence of stunting in toddlers aged 24-59 months. Indonesian Journal of Nutrition, Vol. 7, no.
- Yuli Dwi Setyowati, Diah Krisnatuti, Dwi Hastuti. "The Influence of Readiness to Become Parents and Psychosocial Parenting Patterns on Development Child Social". Kel Science Journal. & Cons. Vol. 10. 2017.
- Fera Novitry, Rizka Agustin. 2017. "Determinants of Healthy Toilet Ownership in Sukomulyo Martapura Village, Palembang". Aisyah Journal: Journal of Health Sciences, 2(2), 107-116.
- Susetyowati. 2017. Nutritional Science Theory and Applications. Jakarta : EGC.
- Uliyanti, u, DGTamtomo ., and S. Anantanyu. Factors associated with the incidence of stunting in children aged 24-59 months. Health Vocational Journal 3(2): 67-77.
- Waryan. 2019. Health Communication. Yogyakarta: Nuha Medika.