

THE RELATIONSHIP BETWEEN FAMILY ROLES AND MOTHERS' LEVEL OF KNOWLEDGE REGARDING STUNTING INCIDENCE

Sartika Widyanti¹, Laurensia Yunita², Onieqie Ayu Dhea Manto³

^{1,2} Undergraduate Midwifery Study Program, Faculty of Health, Sari Mulia University

³ Undergraduate Nursing Study Programs, Faculty of Health, Sari Mulia University

*E-mail: sarie.bbm01@gmail.com

ABSTRAK Hubungan Peran Keluarga dan Tingkat Pengetahuan Ibu Terhadap Kejadian Stunting

Latar Belakang : Stunting adalah masalah gizi yang terjadi sebagai akibat dari kekurangan gizi dalam kurun waktu yang cukup lama. Menurut WHO Child Growth Standard Stunting didasarkan pada indeks panjang badan dibanding umur (PB/U) atau tinggi badan dibanding umur (TB/U) dengan batas (z-score) kurang dari 2-SD. Keluarga berperan membina dan membimbing anggota-anggotanya untuk beradaptasi dengan lingkungan fisik maupun lingkungan budaya di mana ia berada. Pengetahuan seorang ibu akan mempengaruhi status pertumbuhan dan perkembangan anak dan sangat diperlukan untuk mendukung dalam proses pertumbuhan dan perkembangannya.

Tujuan : Mengetahui hubungan peran keluarga dan tingkat pengetahuan ibu terhadap kejadian stunting di Wilayah Kerja Kelurahan landasan Ulin Timur.

Desain : Jenis penelitian kuantitatif dengan pendekatan *cross sectional*. Jumlah sampel sebanyak 30 orang tua dan balita. Teknik pengambilan sampel menggunakan *systematic sampling*. Teknik pengumpulan data menggunakan kuesioner, serta dianalisis menggunakan uji *Chi-Square*.

Hasil : Hasil penelitian menunjukkan terdapat hubungan antara peran keluarga dan tingkat pengetahuan ibu terhadap kejadian stunting ($p=0,000$).

Simpulan : Ada hubungan peran keluarga dan tingkat pengetahuan ibu terhadap kejadian stunting. Bagi orang tua dan keluarga balita agar selalu memantau berat dan tinggi badan setiap bulan sehingga mengurangi resiko stunting.

Kata kunci : bayi/balita, peran keluarga, pengetahuan ibu, stunting.

ABSTRACT

Background : Stunting is a nutritional problem that occurs as a result of malnutrition over a long period of time. According to the WHO Child Growth Standard, Stunting is based on the length-for-age (PB/A) or height-for-age (H/A) index with a limit (z-score) of less than 2 SD. The family plays a role in fostering and guiding its members to adapt to the physical and cultural environment in which they live. A mother's knowledge will influence the growth and development status of a child and is essential to support the process of growth and development.

Objective : To determine the relationship between the role of the family and the level of maternal knowledge regarding the incidence of stunting in the Landing Ulin Timur Subdistrict Work Area.

Design : This type of research is quantitative with a *cross-sectional approach*. The sample size was 30 parents and toddlers. The sampling technique used *systematic sampling*. Data collection techniques used questionnaires, and were analyzed using the *Chi-Square test*.

Results : The results of the study showed that there was a relationship between the role of the family and the level of maternal knowledge regarding the incidence of stunting ($p=0.000$).

Conclusion : There is a relationship between family roles and maternal knowledge regarding stunting. Parents and families of toddlers should monitor their weight and height monthly to reduce the risk of stunting.

Keywords : infants/toddlers, family roles, maternal knowledge, stunting.

INTRODUCTION

Stunting is short or very short based on length / height for age that is less than -2 standard

deviations (SD) on the WHO growth curve that occurs due to irreversible conditions resulting from inadequate nutritional intake and / or repeated /

chronic infections that occur within 1000 HPK. Stunting can also be interpreted as a condition where the baby's body condition is chronically malnourished which has an impact on the child's body being short / tall not according to his age. There are several factors that can cause stunting, namely genetic factors, economic status, history of LBW, anemia in the mother, environmental hygiene and sanitation, and nutritional deficiencies (WHO, 2020).

An unbalanced diet, both in terms of quantity and quality, will result in a lack of energy and nutrients needed by the body to function. Several fundamental factors directly influence malnutrition, including a lack of food availability, inadequate childcare, and inadequate clean water sanitation and health services, all contributing to the occurrence of nutritional problems. Parenting patterns are the most influential factor, with mothers playing a crucial role in providing food choices and feeding patterns for children (Fikawati, 2018).

Stunting is very dangerous because it can affect brain and cognitive growth and have a negative impact on adulthood. Furthermore, stunting is also associated with an increased risk of heart disease, diabetes, and obesity in adulthood. Therefore, efforts to prevent stunting are necessary to ensure optimal child growth. Stunting prevention can be achieved through several methods, including improving a nutritious diet, providing exclusive breastfeeding, providing nutritional supplements, and avoiding infections. Furthermore, proper planning to avoid pregnancy at too young or too late an age is also crucial in preventing stunting (WHO, 2020).

South Kalimantan Province is one of the provinces in Indonesia that has a stunting prevalence rate higher than the national prevalence based on data from the 2007 Riskesdas, 2010 Riskesdas, 2013 Riskesdas and 2018 Riskesdas. The 2007 Riskesdas data stated that the prevalence of stunting in South Kalimantan Province was 41.8%, then decreased to 35.3% (2010), then increased again to 45% (2013), and decreased to 33.1% (2018), but still above the national figure. Based on the results of the 2018 Riskesdas, Banjarbaru City had the highest prevalence of stunting in toddlers in South Kalimantan reaching 39.73% while the prevalence of stunting in children aged 0-23 years reached 31.46%. In 2019 based on data from the Electronic Application Recording of Community-Based Nutrition Reporting in Banjarbaru City (Yuliani, 2021).

Based on the prevalence of stunting in Banjarbaru City, there was a decline from 2021 to

2022. In 2021, the prevalence of stunting in Banjarbaru City was 17%, then decreased to 13.62% in 2022. This decrease was 4%. However, when compared to the national stunting prevalence target of 14% in 2024, Banjarbaru City still has not met this target. The decline in the incidence of stunting in Banjarbaru City is the result of various efforts made by the local government, such as: Installing stunting information boards in health facilities and public places, Counseling about stunting to the community, Providing additional food to stunted children, Increasing access to clean water and sanitation, Improving the quality of education. The Banjarbaru City regional government targets the prevalence of stunting in this city to decrease to 12% in 2023 and 10% in 2024 (Satu Data banua, 2023).

The incidence of stunting in the Landasan Ulin Timur Community Health Center, Banjarbaru City, was 19.4% in 2023. This figure was calculated based on height measurements of children aged 0-23 months against WHO child growth standards (Wulandari, Dewi Retno, Hanafi, 2023).

Factors contributing to the incidence of stunting in the working area of the Landasan Ulin Timur Community Health Center include: Inadequate exclusive breastfeeding, provision of non-nutritious complementary foods (MPASI), infections, such as respiratory tract infections, diarrhea, and malaria, genetic disorders, poverty, low maternal education, poor maternal nutritional status, poor parenting, poor environmental sanitation, food affordability (Hanafi, 2023).

A mother's knowledge will influence a child's growth and development and is essential to support their growth and development. This lack of maternal knowledge, poor parenting practices, poor sanitation and hygiene, and inadequate healthcare services are contributing factors. Furthermore, the public is not yet aware that stunting is a problem, as stunted children are often seen as children with normal activity levels, unlike underweight children who require immediate attention (UNICEF, 2020).

RESEARCH METHODS

This study used a quantitative survey method with a cross-sectional approach. The sample in this study were 30 mothers with toddlers (aged 0-59 months). The study was conducted in the period of August to October 2023. The research was conducted in the Landasan Ulin Timur sub-district. Data analysis was conducted using univariate and bivariate methods.

RESEARCH RESULTS

Based on the results of this study, the frequency distribution of respondent characteristics, namely age, education, occupation and the relationship between family roles and maternal knowledge levels regarding stunting in the Landasan Ulin Timur sub-district work area in 2024 was obtained as follows:

Based on Maternal Age

Table 1
Distribution of Maternal Age

Mother's Age	Amount	Percentage (%)
< 25 years	2	6.7
25 – 35 years old	17	56.7
> 35 years	11	36.7

Based on the research results, it was shown that the maternal age was <25 years as many as 2 people (6.7%), the maternal age was 25 – 25 years as many as 17 people (56.7%) and the maternal age was >35 years as many as 11 people (36.7%).

Based on Mother's Education

Table 2
Distribution of Mother's Education

Mother's Education	Amount	Percentage (%)
Elementary – Middle School	15	50
SENIOR HIGH SCHOOL	12	40
COLLEGE	3	10

Based on the research results, it was shown that the mothers' education level was elementary school - junior high school for 15 people (50%), high school for 12 people (40%) and university level for 3 people (10%).

Based on Mother's Occupation

Table 3
Distribution of Mother's Occupations

Mother's Job	Amount	Percentage (%)
housewife	14	47
SELF-EMPLOYED	10	33
HONORARY	2	7
TRADER	2	7
Civil Servants/Police	2	7

Based on the research results, it was shown that 14 people (47%) worked as housewives, 10

people (33%) as self-employed, 2 people (7%) as traders, 2 people (7%) as honorary workers, and 2 people (7%) as civil servants/police officers.

The Role of the Family in the Incidence of Stunting

Table 4
Distribution of Family Roles

The Role of the Family	Amount	Percentage (%)
Good	13	43.5
Enough	11	36.5
Not enough	6	20

Based on the research results, it shows that the family role with good values was 13 people (43.5%), the family role with sufficient values was 11 people (36.5%) and the family role with less value was 6 people (20%).

Mothers' Level of Knowledge Regarding Stunting Incidents

Table 5
Distribution of Mothers' Knowledge Level

Mother's Knowledge Level	Amount	Presentation (%)
Good	13	43.5
Enough	12	39.5
Not enough	5	17

Based on the research results, it was shown that the level of knowledge of mothers with a good value was 13 people (43.5%), with a sufficient value was 12 people (39.5%) and with a poor value was 5 people (17%).

Univariate Analysis

Toddlers with Stunting and Non-Stunting in the Working Area of Landasan Ulin Timur Village.

Table 6
Distribution of Stunting in Toddlers

Stunting	Amount	Percentage (%)
Stunting	15	50
No Stunting	15	50

15 toddlers experienced *stunting in the East Landak Ulin sub-district* and 15 toddlers did not experience *stunting*.

Bivariate Analysis

Table 8
Mothers' Knowledge of Stunting Incidents

Mother's Knowledge	Stunting Incident				P-value
	Stunting		No Stunting		
	N	%	N	%	
Good	0	0	13	43.5	0,000
Enough	10	33	2	6.5	
Not enough	5	17	0	0	

Based on the results of the study, it shows that the level of knowledge of mothers with stunting, with a good value of 0 people (0%), with a sufficient value of 10 people (33%) and the role of the family with a less value of 5 people (17%). Meanwhile, based on the results of the study, it shows that the level of knowledge of mothers without stunting with a good value of 13 people (43.5%), with a sufficient value of 2 people (6.5%) and the role of the family with a less value of 0 people (0%).

the Chi-Square test analysis provide a *p* - value of 0.000, if the probability value (*p*) < 0.05 then H₀ is rejected and H_a is accepted so that it can be concluded that there is a relationship between maternal knowledge and the incidence of stunting in toddlers that occurs.

DISCUSSION

Age factor is one of the factors that determine the results of the study, general data of respondents include age, education, and occupation. In respondents of mothers of stunted and non-stunted toddlers, the majority of mothers of stunted toddlers are 20-30 years old, the proportion of stunted mothers is higher in young mothers (<20 years old) compared to mothers with older ages. While mothers of non-stunted toddlers The distribution of maternal age is more even, with a higher proportion at the age of 25-35 years. This age is stated to be mature for the level of knowledge on stunting events including having awareness and motivation, at this age, women are generally married and have children. This increases their awareness of the importance of children's health and nutrition, including stunting prevention, women at this age are also more motivated to learn and apply knowledge about stunting because they want to provide the best for their children, have access to information, Women aged 25-35 years generally have better access to information compared to older age groups. This is because they use the internet, social media more often, and participate in educational activities related to child

health, having good access to information allows them to gain more complete and accurate knowledge about stunting, its causes, and prevention, having cognitive abilities, at the age of 25-35 years, women generally have optimal cognitive abilities to understand and process complex information. It is important to learn and understand the multi-factorial concept of stunting, having practical experience, women at this age generally already have experience in caring for children, including providing nutritious food. This experience helps them to better understand children's nutritional needs and apply them in their daily lives, having social support, women aged 25-35 years generally have a wider social network compared to older age groups. Support from family, friends, and communities can help them apply knowledge about stunting and improve children's health. The maturity of knowledge about stunting is not solely influenced by age. Other factors such as education, employment, and access to information can also play a significant role. Continuous education and interventions are needed for all age groups, including adolescents and women of childbearing age, to increase knowledge and awareness about stunting (Subandi, 2018).

Education: The majority of mothers of stunted toddlers have a low level of education (elementary school, junior high school, or no education). This low level of maternal education is associated with limited knowledge of nutrition and health, which puts their toddlers at a higher risk of stunting. Meanwhile, among mothers of non-stunted toddlers, the proportion of mothers with higher education (high school, vocational school, or university) is higher than among mothers with stunting. Higher education increases mothers' knowledge and awareness of the importance of nutrition and health, enabling them to provide optimal parenting for their toddlers.

The majority of mothers of stunted toddlers are unemployed or work in the informal sector with low incomes. Lack of access to income sources limits mothers' ability to provide nutritious food for their toddlers. While mothers of non-stunted toddlers have a higher proportion of mothers working in the formal sector with stable incomes than mothers of stunted toddlers. A stable income allows mothers to better provide for their toddlers' nutritional and health needs. Furthermore, other factors can influence stunting in toddlers, including maternal nutritional status, parenting patterns, environmental sanitation, access to health services, and so on.

The importance of appropriate and targeted interventions to address stunting is necessary, with a focus on increasing mothers' knowledge and awareness of nutrition and health, providing access to quality health and nutrition services, and improving families' standard of living through economic empowerment. With appropriate interventions, it is hoped that the prevalence of stunting in toddlers will decrease and the nation's next generation can grow and develop optimally.

Families play a crucial role in preventing and managing stunting. The study found that 43% of families had a good score, 36% had a fair score, and 20% had a poor score. Some positive family roles in stunting include: exclusive breastfeeding for the first 6 months of a baby's life, providing nutritious and balanced complementary foods (MPASI) after 6 months, maintaining a clean home and living environment, cultivating a healthy lifestyle, regularly accessing health services, and providing adequate love and stimulation to children.

Some examples of good family roles in daily life: mothers exclusively breastfeed their babies for the first 6 months, fathers help mothers prepare nutritious and balanced complementary foods for their children, families clean the house regularly and dispose of trash properly, families eat nutritious food and exercise regularly, mothers take their children to the integrated health post (posyandu) to get immunizations and monitor their growth and development, families play with their children and provide age-appropriate stimulation. With the active role of the family, stunting can be prevented and managed.

The level of maternal knowledge has several values including: good, sufficient and poor. In the study, the results obtained that the level of maternal knowledge with a good value of 43%, the level of maternal knowledge was sufficient at 39% and the level of maternal knowledge was poor at 17%. Knowledge Level Mothers are said to have good knowledge if: can correctly explain the meaning of stunting, its causes, and impacts, know and are able to implement stunting prevention practices, such as exclusive breastfeeding, nutritious complementary foods, and environmental cleanliness, are aware of the signs and symptoms of stunting in children and the steps to handle them, actively seek information and access health services related to stunting. Mothers are said to have sufficient knowledge if: have a basic understanding of stunting but may lack detail in certain aspects, are able to implement some stunting prevention practices but may not be consistent, have awareness of stunting but need

additional information to act appropriately, and mothers are said to have poor knowledge if: lack understanding of stunting, its causes, and impacts, have difficulty implementing stunting prevention practices consistently, are not aware of the signs and symptoms of stunting in children or are late in seeking treatment, have no interest or access to obtain information and health services related to stunting. Maternal knowledge levels do not always correlate directly with the incidence of stunting in children. Other influencing factors, such as access to nutritious food, health services, and socioeconomic conditions, also play a role. Efforts to improve maternal knowledge about stunting remain crucial through education, outreach, and strengthening community-based health services (WHO, Ministry of Health of the Republic of Indonesia, 2023).

Based on a study conducted to determine the relationship between family roles and maternal knowledge levels on stunting in the Landasan Ulin Timur sub-district working area in 2024, 30 toddlers (aged 24-59 months) were found, including 15 toddlers with stunting and 15 toddlers without stunting. Stunting in toddlers is caused by various factors that can occur from in the womb and after birth. This must be ascertained because different treatments are needed. Causes from within the womb are often associated with indirect factors, namely the health condition and nutritional status of pregnant women, while after birth it is more caused by direct factors, namely nutritional intake, infectious diseases and infant/child care patterns, as well as indirect factors and fundamental factors that influence the child's care patterns (Achadi, 2020).

Stunting remains a public health problem in Indonesia, including in the Landasan Ulin Timur Community Health Center (Puskesmas). Families play a crucial role in preventing stunting, particularly mothers. Mothers with good knowledge of nutrition and toddler health can provide optimal nutrition and maintain their children's health. Stunting in children is caused by several interrelated factors, including nutrition. The quality and quantity of nutritional intake in children under 3 years of age require attention from mothers, as they are often low in nutrients needed to support growth. This suggests that supporting good nutritional intake for children requires careful feeding practices. This is because children's eating patterns play a crucial role in their growth (Anggryni et al., 2021).

Parenting patterns are the ability of parents and families to provide time, attention, and support in feeding their children. Priority health development

programs for the 2015–2019 period focused on reducing maternal mortality (MMR) and infant mortality (IMR), controlling infectious and non-communicable diseases, and reducing the prevalence of stunting in toddlers (Kurniawati, 2019).

A common activity for mothers is feeding their children. A toddler's diet plays a crucial role in their growth, as food contains a wealth of nutrients. Nutrition is closely linked to health and intelligence. Eating patterns are the behaviors of an individual or group of people regarding their nutritional needs, encompassing attitudes, beliefs, and food choices (Helmyati, 2022).

CONCLUSION

There is a relationship between the role of the family and the level of knowledge of mothers regarding the incidence of stunting.

SUGGESTION

For parents and families of toddlers, always monitor their weight and height every month to reduce the risk of stunting.

REFERENCES

- Achadi, E. L. (2020). Pencegahan Stunting Pentingnya Peran 1000 Hari Pertama Kehidupan.
- Andri Priyatna, S.Sos., Uray B. Ansol, SKM., MM. 1000 Hari Pertama Kehidupan 2016
- Anggryni, M., Mardiah, W., Hermayanti, Y., Rakhmawati, W., Ramdhanie, G. G., & Mediani, H. S. (2021). Faktor Pemberian Nutrisi Masa Golden Age dengan Kejadian Stunting pada Balita di Negara Berkembang. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(2), 1764–1776. <https://doi.org/10.31004/obsesi.v5i2.967>
- Angraini, W., Pratiwi, B.A., Amin, M., Yunuarti, R., Febriawati, H., Shaleh, M.I. (2020). Edukasi Kesehatan Stunting Di Kabupaten Bengkulu Utara. *Poltekita: Jurnal Ilmu Kesehatan*, 14 (1): 30–36.
- Atikah Rahayu, SKM, MPH; Fahrini Yulidasari, SKM, MPH; Andini Octaviana Putri, SKM, M.Kes; dan Lia Anggraini, SKM. 2018. *Study Guide Stunting dan Upaya Pencegahannya*. CV Mine Yogyakarta.
- Farras Hanin Lubna Widanti, Ratih Dwilestari Puji Utami, A. P. N. (2019). Faktor-Faktor Yang Berhubungan Dengan Kejadian Stunting Pada Anak Usia 1-5 Tahun Di Desa Grogol Kecamatan Sawoo Kabupaten Ponorogo Provinsi Jawa Timur. <https://eprints.uniska-bjm.ac.id/17584/>
- Kurniawati, F. D. (2019). The Effect of Exclusive Breastfeeding, Nutrition Status, Smoking Habits and Workplace Distance Towards Frequency of Acute Respiratory Tract Infection in Toddlers.
- Mardiana S, Yunafri A. Hubungan Tingkat Pendidikan dan Pengetahuan Tentang Status Gizi dengan Angka Kejadian Stunting di Desa Secanggung Kabupaten Langkat. *Jurnal Ilmiah Maksitek*. 2021;6(2):24–8.
- Muhtiyaturrohmah. Analisis Dukungan Ayah Berdasarkan Persepsi Ibu Dengan Kejadian Stunting Pada Anak Batita Di Wilayah Kerja Puskesmas Tambak Wedi. Universitas Airlangga; 2020.
- Oktaviani N. Faktor-Faktor yang Berhubungan dengan Perilaku Ibu dalam Pencegahan Stunting pada Balita di Wilayah Kerja Puskesmas II Sumbang. Universitas Jenderal Soedirman; 2018.
- [Pengesahan laporan Stunting \(kemendagri.go.id\)](https://kemendagri.go.id)
- Pusat Data dan Informasi, Kementerian Kesehatan RI. 2018. *Situasi Balita Pendek (Stunting) di Indonesia*. Buletin Jendela. ISSN 2088 - 270 X
- Puskesmas Landasan Ulin Timur ; Laporan tahunan 2020
- Ramadhani, F. N. (2019). Pola Asuh dan Pola makan sebagai faktor risiko stunting balita usia 6 -24 bulan Suku Papua dan Non Papua.
- Riyanto A, Budiman. Kapita Selekta Kuisisioner Pengetahuan dan Sikap Dalam
- Siringoringo, E.T., Syauqy, A., Panunggal, B., Purwanti, R., Widyastuti, N. (2020). Karakteristik Keluarga Dan Tingkat Kecukupan Asupan Zat Gizi Sebagai Faktor Risiko Kejadian Stunting Pada Baduta. *Journal of Nutrition College*, 9 (1): 154–62. <https://doi.org/10.14710/jnc.v9i1.26693>
- Siti Helmyati. (2022). *Stunting Permasalahan dan Penangannya*.
- Unicef Indonesia. (2012). *Ringkasan kajian gizi Ibu dan Anak*
- Widyaningsih, N.N., Kusnandar, K., Anantanyu, S. (2018). Keragaman pangan, pola asuh makan dan kejadian stunting pada balita usia 24-59 bulan. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 7 (1):22–29. <https://doi.org/10.14710/jgi.7.1.22-29>
- World Health Organization (WHO). www.who.in
- World Health Organization. (2020). *Levels and Trends in Child Malnutrition: UNICEF/ WHO/ World Bank Group Joint Child Malnutrition Estimates Key findings of the 2020 edition*.

Wulandari HW, Kusumastuti I. Pengaruh Peran Bidan, Peran Kader, Dukungan Keluarga dan Motivasi Ibu terhadap Perilaku Ibu

dalam Pencegahan Stunting pada Balitanya. J Ilm Kesehat. 2020;19(02):73–80