

**How to Cite:**

Sriyanah, N., Efendi, S., Fitriani, F., Sriyanti, F., Fatmawati, F., & Dewi, I. (2022). Stunting incidents in children in the working area of Puskesmas Moncongloe, Maros Regency. *International Journal of Health Sciences*, 6(S9), 684–697. <https://doi.org/10.53730/ijhs.v6nS9.12312>

# Stunting incidents in children in the working area of Puskesmas Moncongloe, Maros Regency

**Nour Sriyanah**

Sekolah Tinggi Ilmu Kesehatan Makassar, Indonesia  
Corresponding author email: [nsnoursriyanah@gmail.com](mailto:nsnoursriyanah@gmail.com)

**Suradi Efendi**

Sekolah Tinggi Ilmu Kesehatan Makassar, Indonesia

**Fitriani**

STIKES Panrita Husada Bulukumba, Indonesia

**Febri Sriyanti**

Institute Kesehatan dan Bisnis St. Fatimah Mamuju, Indonesia

**Fatmawati**

STIKES Panrita Husada Bulukumba, Indonesia

**Indra Dewi**

Sekolah Tinggi Ilmu Kesehatan Nani Hasanuddin Makassar, Indonesia

**Abstract**--Monitoring of Nutritional Status reveals that the incidence of stunting (short) in children is a major nutritional problem faced by Indonesia. The prevalence of stunting children has increased from 27.5% in 2016 to 29.6% in 2017. The purpose of this study was to describe the incidence of stunting in children in the working area of the PUSKESMAS Moncongloe, Maros Regency. The type of this research was descriptive observational with a population of 147 stunting children. The sampling method used accidental sampling with the number of sample was 108 respondents. The results of this study showed that from 108 children (100.0%) there were 16 children (14.8%) who had low birth weight and 92 children (85.2%) had normal birth weight, there were 62 children (57.4%) who were not exclusively breastfed and 46 children (42.6%) are exclusively breastfed, there were 51 children (47.2%) with incomplete immunization status and 57 children (52.8 %) with complete immunization status, there were 44 children (40.7%) with stunting in the very short category and 63 children (59.3%) in the short category. The conclusion of this study is the incidence of stunting in children is related to low birth weight, exclusive breastfeeding and immunization status. It is recommended

to pay more attention to maternal nutritional intake from pregnancy until the child is two years old and increase knowledge related to stunting.

**Keywords**---LBW, Exclusive Breastfeeding, Immunization Status, Stunting.

## Introduction

Child growth is the essential indicator for assessing the nutritional status of children under five and is also one of the six global nutrition targets set by the World Health Assembly in 2012 and becoming a leading indicator of the sustainable development goals (SDGs) by 2030 (Silva). Stunting is the result of a systemic condition of chronic nutritional deficiency. Stunting in children may develop during the first two years of life and is mostly caused by lack of nutrition, care, and illness. The long-term effects of stunting are decreased survival rates, impaired cognitive and motor development, low economic productivity, and a higher chance of living in poverty in adulthood (Victora *et al.*, 2008).

The children's growth is a reflection state of society, and stunting is one of the most sensitive indicators of overall social equity and well-being (Aguayo dan Menon, 2016). The benefits of the analysis will assist in identifying stunting reduction as the priority of national development and investment, encouraging political commitment, and increasing the effective allocation of resources to reduce stunting in children. Maternal and child nutrition demonstrates that appropriate complementary supported other strategies such as education groups and food provision is the most effective intervention to reduce stunting in children before 36 months of age (Rakotomanana, Gates, Hildebrand, dan Stoecker, 2017). As a result, there is still no appropriate intervention to cure stunting (Vonaesch *et al.*, 2018).

Some of the factors that cause stunting are the mother's pregnancy history which includes the mother's body posture (short body), pregnancy is too close, too many births, the mother's age when pregnant is too young (under 20 years) is at risk of giving birth to a low birth weight baby, and poor nutritional intake during pregnancy. Other factors are not implementing Early Initiation of Breastfeeding, failure to provide exclusive breastfeeding and early weaning process. In addition to these factors, socioeconomic conditions and sanitation are associated with stunting as well (Sriyanah *et al.*, 2022). The impact of stunting is the less optimal development of cognitive-motor and verbal in children. Increased incidence of pain and death, non-optimal posture as an adult (shorter than usual), and less than optimal learning capacity and performance during school (Sriyanah *et al.*, 2022).

The determinant factors of stunting in infants are the body mass index (BMI) in mothers during pregnancy is not following the nutritional adequacy rate (RDA), educational background, economic status, low birth weight, infectious diseases, and the height of parents are also causes of stunting in children. (Black *et al.*, 2008).

According to the World Health Organization (WHO), 23% of children experienced stunting between 2005-2016, which were dominated by countries on the African continent. In areas on the Asian continent, the highest prevalence of stunting occurred in Timor Leste, reaching 50.2%. The lowest one is in Sri Lanka reached 14.7%. While in Indonesia, 36.4% of children experience stunting. Based on WHO, the regional average is 33.8%, meaning that the incidence of stunting in Indonesia is still above the average (WHO, 2017). Although malnutrition is decreasing globally, stunting is declining relatively slowly and threatens to achieve international commitments (WHO, 2018).

Monitoring of Nutritional Status reveals that the incidence of stunting (short) in children is a major nutritional problem faced by Indonesia. Based on Nutrition Status Monitoring data for the last three years, stunting has a higher prevalence than others, such as malnutrition, underweight, and obesity. It has increased from 27.5% in 2016 to 29.6% in 2017 (Kementerian Kesehatan RI, 2018).

South Sulawesi is known as a food barn but has a stunting rate higher than the national figure and tends to increase every period. The trend of prevalence of stunting in South Sulawesi Province has increased from 2007 (29.1%) to 2010 (36.8%) and is higher in 2013 to 40.9%. The results of the Nutrition Status Monitoring in South Sulawesi Province in 2015 showed the prevalence of stunting in children was 34.1%, and the condition increased in 2016 to 35.7% (Dinkes, 2018).

Maros Regency is one of the areas with a high prevalence of stunting in South Sulawesi, besides Jeneponto and Pangkep Regencies. Based on the results of monitoring nutritional status in 2015, the number of sufferers reached 42.3%. It means that for every ten children, four people are stunting (Risksedas, 2013).

Research conducted by Ibrahim, et al (2019) in the mountainous area of Bontongan Village, Baraka Subdistrict, Enrekang Regency with a sample of 80, showed that birth weight of LBW <2500 was 3 (3.75%) and normal birth weight  $\geq$  2500 was 77 (96.25), and the value of  $p < (\alpha = 0.05)$  which means that there is a relationship between birth weight and the incidence of stunting (Ibrahim et al., 2019).

Research conducted by Azriful, et al (2018) which was carried out in Ranges Village, Banggae District, Majene Regency, showed that among 183 children, there was a relationship between exclusive breastfeeding and stunting, namely those who received exclusive breastfeeding for stunting sufferers as many as 74 children (89.2% ) and those who are not exclusively breastfed for stunting sufferers are 57 children (57%) and those who are exclusively breastfed who are not stunted are 9 children (10.8%) and those who were not given exclusive breastfeeding who did not experience stunting were 43 children (43%) with a value ( $p$  value = 0.000) which means that there is a relationship between exclusive breastfeeding and the incidence of stunting (Azriful et al., 2018).

Research conducted by Dandara (2016) which was carried out in the Work Area of PUSKESMAS Kandai, Kendari City, showed the analysis related to the risk of basic immunization history on the incidence of stunting, obtained an OR of 6,044.

It means that respondents who have toddlers with a history of incomplete base immunization have a six times greater risk of experiencing stunting compared to a complete one. Because the range of values at the confidence level (CI) = 95% with the lower limit = 2.295 and the upper limit = 15.916 does not include one, then the risk is significant. (Swathma, Lestari, dan Teguh, 2016).

The initial survey conducted by researchers at PUSKESMAS Moncongloe was registered from March 2019 - May 2019, and the number of children under five was 2073 children then 489 children were measured, and showed 105 children with short categories and 42 children with very short categories. (Data Puskesmas, 2019).

## **Method**

The type of research used in this study is descriptive observational research, with the aim of describing the incidence of stunting in children.

### **A. Location and Time of Research**

The location of the research was carried out in the working area of PUSKESMAS Moncongloe, Maros Regency, on October 14<sup>th</sup> - November 14<sup>th</sup> 2019.

### **B. Population and Sample**

The population in this study were all stunting children in the working area of PUSKESMAS Moncongloe as many as 147 children. While the sample was 108 children with a sampling technique used was accidental sampling.

### **C. C. Data collection**

#### 1. Primary Data

The technique of collecting data from respondents is by using a questionnaire sheet and conducting direct observations as a tool to find out the description of stunting in children.

#### 2. Secondary Data

Data obtained from agencies and reports at PUSKESMAS Moncongloe.

## **Results**

This research was conducted in the Working Area of PUSKESMAS Moncongloe with a sample of 108 respondents. The data was obtained from the observation by filling out the questionnaire. The type of research used was Descriptive Observational Research. The research results are as follows:

## 1. Characteristics of Respondents

Table 1  
 Characteristics of Respondents Based on Mother's Age,  
 Mother's Height, Mother's Occupation and Mother's Education in the Working  
 Area of PUSKESMAS Moncongloe, Maros Regency in 2019

Characteristics	n	%
Mother's Age (Years)		
17 - 25	24	22,2
26 - 35	80	74,1
36 - 45	4	3,7
Height		
145 - 152	58	53,7
153 - 160	50	46,3
Occupation		
Housewife	91	84,3
Teacher	6	5,6
Entrepreneur	8	7,4
civil servant	3	2,8
Education		
Elementary School	30	27,8
Junior High School	41	38,0
Senior High School	28	25,9
Bachelor	9	8,3
Total	108	100,0

Source: Primary Data, 2019

Based on table 1, the highest age group is respondents aged between 26-35 years, as many as 80 respondents (74.1%) and the lowest is aged between 36-45 years, as many as 4 respondents (3.7 %). Based on height, the respondents in the highest height group were between 145 – 152, with as many as 58 respondents (53.7%) and the least height group was between 153 – 160, with as many as 50 respondents (46.3%). Based on occupation, the most respondents were housewives as many as 91 respondents (84.3%), and the fewest occupation were civil servants as many as 3 respondents (2.8%). Based on education, the most respondents were from junior high schools, as many as 41 respondents (38.0%) and the least were bachelor degrees, as many as 9 respondents (8.3%).

Table 2  
 Characteristics of Children by Age and Gender in the Working Area of  
 PUSKESMAS Moncongloe, Maros Regency in 2019

Characteristics	n	%
Child's Age (Months)		
0 - 23	3	2,8
24 - 47	77	71,3
48 - 72	28	25,9
Gender		

Male	57	52,8
Female	51	47,2
Total	108	100,0

Source: Primary Data, 2019

Based on table 2, the highest age group is between 24 - 47 years as many as 77 respondents (71.3%), the lowest age group is between 0 - 23 years as many as 3 respondents (2.8%). The highest gender is male as many as 57 respondents (52.8%) and the lowest is female as many as 51 respondents (47.2%).

## 2. Univariate Analysis

### a. Birth weight

Table 3

Distribution of Birth Weight of Respondents with Stunting Incidents in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency in 2019

Birth weight	n	%
Low birth weight	16	14,8
Normal Birth Weight	92	85,2
Total	108	100,0

Source: Primary Data, 2019

Based on table 3, there are 16 children (14.8%) have low birth weight and 92 children (85.2%) have normal birth weight.

### b. Exclusive breastfeeding

Table 4

Distribution of Respondents of Exclusive Breastfeeding with Stunting Incidents in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency in 2019

Exclusive breastfeeding	n	%
NOT	62	57,4
YES	46	42,6
Total	108	100,0

Source: Primary Data, 2019

Based on table 4, there are 62 children (57.4%) who are not exclusively breastfed while 46 (42.6%) are exclusively breastfed.

## c. Immunization Status

Table 5

Distribution of Immunization Status of Respondents with Stunting Incidence in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency in 2019

Immunization Status	n	%
Incomplete	51	47,2
Complete	57	52,8
Total	108	100,0

Source: Primary Data, 2019

Based on table 5, there are 51 children (47.2%) with incomplete immunization status, and there are 57 children (52.8%) with complete immunization status.

## d. Stunting Incident

Table 6

Distribution of Stunting Category in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency in 2019

Stunting Category	n	%
Very short	44	40,7
Short	64	59,3
Total	108	100,0

Source: Primary Data, 2019

Based on table 6, there are 44 children (40.7%) with stunting in the very short category, and there are 63 children (59.3%) in the short category.

## 3. Crosstab analysis

## a. Overview of Birth Weight with Stunting Incidents

Table 7

Overview of Birth Weight with Stunting Incidents in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency in 2019

Birth Weight	Stunting Incident					
	Very Short		Short		Total	
	N	%	n	%	n	%
Low birth weight	8	50,0	8	50,0	16	100,0
Normal Birth Weight	36	39,1	56	60,9	92	100,0
Total	44	40,7	64	59,3	108	100,0

Source: Primary Data, 2019

Based on table 7, 16 children have low birth weight, with 8 children (50.0%) included in the very short category and 8 children (50.0) in the short category with stunting. Meanwhile, those with normal birth weight were 92 children,

with 36 children (39.1%) in the very short category and 56 children (60.9%) in the short category with stunting.

b. Overview of Exclusive Breastfeeding with Stunting Incidents

Table 8  
Overview of Exclusive Breastfeeding with Stunting Incidents  
in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency  
in 2019

Exclusive breastfeeding	Stunting Incident				Total	
	Very Short		Short		n	%
	N	%	n	%		
Not	31	50,0	31	50,0	62	100,0
Yes	13	28,3	33	71,7	46	100,0
Total	44	40,7	64	59,3	108	100,0

Source: Primary Data, 2019

Based on table 8, 62 children were not exclusively breastfed, with 31 children (50.0%) included in the very short category and 31 children (50.0%) short with stunting. Meanwhile, 46 children were exclusively breastfed, with 13 children (28.3%) in the very short category and 33 children (71.7%) in the short category with stunting.

c. Overview of Immunization Status with Stunting Incidents

d.

Table 9  
Overview of Immunization Status with Stunting Incidents  
in Children in the Working Area of PUSKESMAS Moncongloe, Maros Regency  
in 2019

Immunization Status	Stunting Incident				Total	
	Very Short		Very Short		n	%
	N	%	n	%		
Incomplete	24	47,1	27	30,2	51	100,0
Complete	20	35,1	37	64,9	57	100,0
Total	44	40,7	64	59,3	108	100,0

Source: Primary Data, 2019

Based on table 9, the immunization status was not complete as many as 51 children, with 24 children (47.1%) included in the very short category and 27 children (30.2%) in the short category with stunting. While the complete immunization status was 57 children, with 20 children (35.1%) in the very short category and 37 children (64.9%) in the short category with stunting.



## **Discussion**

### **Birth Weight**

The child's birth weight data were obtained from the respondents' answers to the questionnaire. This study showed that from 108 samples, 92 children (85.2%) had normal birth weight, and 16 children (14.8%) had low birth weight or LBW. The results of this study indicate that stunting children in the working area of PUSKESMAS Moncongloe, Maros Regency are more commonly found in children with normal birth weight than LBW children. This condition proves that it occurs due to poor child development after giving birth. Children born with normal weight but not accompanied by adequate food consumption (breastfeeding), inadequate health services, and frequent infections during the growth period will cause stunted growth. By exclusive breastfeeding, the immune system is optimally formed, and is protected from infectious diseases that can affect nutritional status. (Swathma et al., 2016).

The results of this research are not in line with (Nasution et al., 2014) which concluded that children with LBW had a 5.6 times greater risk of becoming stunted than the children born with normal weight. This condition occurs because babies with low birth weight, in the womb have experienced intrauterine growth retardation, which will continue until birth. They experience slower growth and development than babies born with normal weight and often fail to follow the growth rate at their age after birth.

Children born with normal weight can be said to be well nourished, and growth is not hampered, but if the intake received is insufficient, it will affect their development. The nutrition intake is related to the socioeconomic status of the family, such as the mother's occupation and education. The provision of nutrition to children must be with nutritious food, and it must be accompanied by good knowledge so that they can choose and serve nutritious food for children. (Rahayu et al., 2021).

### **Exclusive breastfeeding**

The results showed that 46 children (42.6%) were exclusively breastfed, while most of the children were not exclusively breastfed, as many as 62 children (57.4). It shows that children who exclusively breastfed for six months are less than children who are not exclusively breastfed, it is because children are given formula milk because the breast milk is low, meaning that stunting occurs more in children who are not exclusively breastfed.

The results of this research are in line with (Lestari et al., 2014) that the proportion of stunting is higher because children are not exclusively breastfed. Lestari said that children who are not exclusively breastfed have a greater risk of stunting 6.54 times than children who are exclusively breastfed because breast milk is an ideal and essential food source for children. For growth, a child needs adequate nutrition to ensure optimal growth and development.

The unique nutritional content leads breast milk have advantages that no other formula has, the cow's milk contains different types of protein so that babies find it difficult to digest. Formula-fed babies may be fatter because the formula contains more glucose and carbohydrates than breastfed babies, but it's not necessarily healthier. The gastrointestinal tract maturation process is stimulated by breast milk which contains more protein (Whey), so it is more easily absorbed by the child's intestines, several amino acids and nucleotides that play a role in the development of the brain tissue, nerves, intestinal maturity, intestinal absorption, and the immune system is in large numbers than formula milk because formula milk contains only a small amount of the composition in breast milk (IDAI, 2010).

Exclusive breastfeeding is essential for the growth of toddlers, when the complementary food for breast milk is not appropriate for their age, and breast milk is no longer given, it will affect their nutritional status. Similar to children who are exclusively breastfed but still experience stunting, this is related to the parenting pattern by the mother to the child, parenting related to the mother's education, occupation, knowledge and low income will affect the complementary feeding given to children, and it will affect the nutritional status of the child (AL Rahmad et al., 2013).

The greatest challenges to fulfilling the micronutrient needs of children who are breastfed usually occur during the 6 months. Babies should receive the most nutrient-rich foods at home, but those are not available. In low-income neighborhoods, they are usually fed porridge with less nutrition. The gap in nutritional intake at this age is generally in iron and zinc (Sekartaji et al., 2021). Other nutritional competition may be not fulfilled as well (such as calcium, certain B vitamins and vitamins) because it depends on the type of food consumed (Sekartaji et al., 2021). Even if a breastfed baby is fed adequate nutrition by the family at home, nutrient intake is a particular key that tends to be lower than recommended (Sari & Ernawati, 2018).

### **Immunization status**

The results showed that 57 children (52.8%) had complete immunization status, while those with incomplete immunization status were 51 children (47.2). The children with incomplete immunization status lead them to be more susceptible to disease and suffer from malnutrition. Immunization status can cause children to be malnourished.

The results of research conducted by (Anisa, 2012), shows that immunization status has a relationship with stunting incidence, namely the nutritional status index. Anisa stated that immunization status is the underlying factor in the incidence of stunting in toddlers. Other studies also show that incomplete immunization status has a significant relationship with the incidence of stunting in children under five (Anisa, 2012).

Immunization in children has a particular purpose in reducing the risk of child morbidity (illness) and mortality (death) due to diseases that can be prevented by immunization. Immunization status in children is an indicator of contact with

health services because accessing the health services will improve new nutritional problems, so immunization status is expected to positively affect the long-term status. (Anisa, 2012).

### **Stunting Incident**

The results of this study indicate that the high incidence of stunting is included in the short category as many as 64 children (59.3) and those included in the very short category as many as 44 children (40.7%). From the results of the analysis, the characteristics of the mothers described above are the most maternal age group is 26-35 years, that age is classified as a productive age who can easily receive information and can understand it. The highest group of maternal heights ranges from 145 -152 cm.

The results also show that most of the respondents are housewives. With this job, mothers have enough time and attention to take care of their children, especially regarding the nutritional status of children. The majority of mothers' education status is equivalent to junior high school, this shows the mindset of mothers about stunting is still low, where mothers still lack awareness of the impact of stunting on their children. The characteristics of the age of the baby in this study were 0-72 months, while the gender of the baby showed 52.8% male. The data shows that from 108 respondents there are 63 respondents (58.3%) who are short with stunting, while 45 people (41.7%) are very short with stunting.

Program platforms in sectors such as health, education, agriculture, employment, microfinance and social protection can be used strategically to increase access to food and health services before and during pregnancy and breastfeeding, as well as to increase knowledge, skills and options for provide food and care for their children (Kemenkes, 2018). Direct or biological risk factors including gender (Chirande et al., 2015). Due to the intergenerational effect, stunting promotes the continuation of the cycle of poverty, stunted mothers are more likely to give birth to children who are stunted in their growth and development. (Prendergast & Humphrey, 2014).

There are several factors that influence the incidence of stunting, lack of nutritional intake received by the baby/fetus, poor nutrition, non-exclusive breastfeeding, incomplete immunization, lack of knowledge about health and nutrition, and a history of low birth weight.

### **Conclusion**

1. From 108 samples, it was found that the number of samples with a low birth weight with stunting was 16 children (14.8%).
2. From 108 samples, it was found that the number of samples who were exclusively breastfed with stunting incidence was 46 children (42.6%).
3. From the 108 samples, it was found that the number of samples with complete immunization status with stunting was 57 children (52.8%).

## Suggestion

- 1) It is recommended for health workers at Puskesmas to provide more information to the community so that the public knows more about the incidence of stunting.
- 2) For mothers to increase their knowledge by participating in counselling related to stunting which can later be more beneficial for the health of their babies. In addition, mothers pay attention to the nutritional intake of their children.
- 3) It is recommended that this thesis can be used as a reference to look at similar studies regarding the incidence of stunting in children.

## References

- Aguayo, V. M., & Menon, P. (2016). Stop stunting: Improving child feeding, women's nutrition and household sanitation in South Asia. *Maternal and Child Nutrition*, 12, 3–11. <https://doi.org/10.1111/mcn.12283>
- AL Rahmad, A. H., Miko, A., & Hadi, A. (2013). Kajian stunting pada anak balita ditinjau dari pemberian ASI eksklusif, MP-ASI, status imunisasi dan karakteristik keluarga di Kota Banda Aceh. *Jurnal Kesehatan Ilmiah Nasuwakes Poltekkes Aceh*, 6(2), 169–184. <http://repository.digilib.poltekkesaceh.ac.id/repository/jurnal-pdf-8j3ofmBubGZcnDrd.pdf>
- Anisa, P. (2012). Faktor-Faktor yang Berhubungan dengan Kejadian Stunting pada Balita Usia 25-60 Bulan di Kelurahan Kalibaru Depok Tahun 2012. *Universitas Indonesia*, 1–125.
- Azriful, Bujawati, E., Habibi, Aeni, S., & Yusdarif. (2018). *Determinan Kejadian Stunting Pada Balita*. 192–203.
- Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., de Onis, M., Ezzati, M., Mathers, C., & Rivera, J. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. *The Lancet*, 371(9608), 243–260. [https://doi.org/10.1016/S0140-6736\(07\)61690-0](https://doi.org/10.1016/S0140-6736(07)61690-0)
- Chirande, L., Charwe, D., Mbwana, H., Victor, R., Kimboka, S., Issaka, A. I., Baines, S. K., Dibley, M. J., & Agho, K. E. (2015). Determinants of stunting and severe stunting among under-fives in Tanzania: Evidence from the 2010 cross-sectional household survey. *BMC Pediatrics*, 15(1), 1–14. <https://doi.org/10.1186/s12887-015-0482-9>
- Data Puskesmas. (2019). *Laporan Balita Stunting Puskesmas Moncongloe Bulan Maret Sampai Bulan Mei*.
- Dinkes. (2018). *Dinas Kesehatan (Dinkes) Provinsi Sulawesi Selatan tahun 2018*.
- Ibrahim, I. A., Bujawati, E., Syahrir, S., & Adha, A. S. (2019). *Analisis Determinan Kejadian Growth Failure ( Stunting ) Pada Anak Balita Usia 12-36 Bulan Di Wilayah Pegunungan Desa Bontongan Kecamatan Baraka Kabupaten Enrekang*. 11, 50–64.
- IDAI. (2010). Mengapa ASI Eksklusif Sangat Dianjurkan pada Usia di Bawah 6 Bulan. *Departemen Ilmu Kesehatan Anak*.
- Kadatua, M. H., Djannah, S. N., & Rosida, L. (2022). Exclusive breastfeeding in family with early marriage. *International Journal of Health & Medical Sciences*, 5(3), 240–252. <https://doi.org/10.21744/ijhms.v5n3.1931>
- Kemendes. (2018). Menjaga Kesehatan Ibu dan Anak. *WartaKESMAS*, 48.

- [https://kesmas.kemkes.go.id/assets/upload/dir\\_519d41d8cd98f00/files/Warta-kesmas-edisi-3-2018\\_1219.pdf](https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Warta-kesmas-edisi-3-2018_1219.pdf)
- Fayzullaeva, H. D. (2020). Educational environment influence on the pre-school children's social cognition development. *International Journal of Social Sciences and Humanities*, 4(2), 13–20. <https://doi.org/10.29332/ijssh.v4n2.401>
- Kementerian Kesehatan RI. (2018). Situasi Balita Pendek (Stunting) Di Indonesia. In *Kementerian Kesehatan RI* (Vol. 1).
- Lestari, W., Margawati, A., & Rahfiludin, Z. (2014). Faktor risiko stunting pada anak umur 6-24 bulan di kecamatan Penanggalan kota Subulussalam provinsi Aceh. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 3(1), 37–45. <https://doi.org/10.14710/jgi.3.1.126-134>
- Nasution, D., Nurdiati, D. S., & Huriyati, E. (2014). Berat Badan Lahir Rendah (BBLR) dengan Kejadian Stunting pada Anak Usia 6-24 Bulan. *Jurnal Gizi Klinik Indonesia*, 11(1), 31–37. <https://jurnal.ugm.ac.id/jgki/article/view/18881/12191>
- Organization, W. H. (2018). *World Health Organization. Reducing stunting in children: equity considerations for achieving the global nutrition targets 2025*.
- Prendergast, A. J., & Humphrey, J. H. (2014). The stunting syndrome in developing countries. *Paediatrics and International Child Health*, 34(4), 250–265. <https://doi.org/10.1179/2046905514Y.0000000158>
- Rahayu, D. P., Lieung, K. W., & Purwanty, R. (2021). Efektivitas Whatsapp pada Pembelajaran Daring di Sekolah Dasar. *Jurnal Basicedu*, 5(6), 6073–6078. <https://doi.org/10.31004/basicedu.v5i6.1847>
- Rakotomanana, H., Gates, G. E., Hildebrand, D., & Stoecker, B. J. (2017). Determinants of stunting in children under 5 years in Madagascar. *Maternal and Child Nutrition*, 13(4). <https://doi.org/10.1111/mcn.12409>
- Riskesdas. (2013). Riset Kesehatan Dasar (RISKESDAS) 2013. *Laporan Nasional 2013*.
- S, V. N. (2022). *Jurnal Keperawatan Description Of Stunting Incident Factors In Children Based On*. 14, 333–340.
- Sari, F., & Ernawati, E. (2018). Hubungan Sikap Ibu Tentang Pemberian Makanan Bayi Dan Anak (PMBA) Dengan Status Gizi Bayi Bawah Dua Tahun (Baduta). *Journal of Health*, 5(2), 77–80. <https://doi.org/10.30590/vol5-no2-p77-80>
- Sekartaji, R., Suza, D. E., Fauziningtyas, R., Almutairi, W. M., Susanti, I. A., Astutik, E., & Efendi, F. (2021). Dietary diversity and associated factors among children aged 6–23 months in Indonesia. *Journal of Pediatric Nursing*, 56, 30–34. <https://doi.org/10.1016/j.pedn.2020.10.006>
- Sriyanah, N., Syam, I., Efendi, S., Hasriani, & Dardi, S. (2022). *Description Of Stunting Incident Factors In Children Based On Transcultural Nursing In The Work Area Of Health Center*. 14, 333–340.
- Suryasa, I. W., Rodríguez-Gámez, M., & Koldoris, T. (2021). Get vaccinated when it is your turn and follow the local guidelines. *International Journal of Health Sciences*, 5(3), x–xv. <https://doi.org/10.53730/ijhs.v5n3.2938>
- Swathma, D., Lestari, H., & Teguh, R. (2016). Riwayat Imunisasi Dasar Terhadap Kejadian Stunting Pada Balita Usia 12-36 Bulan Di Wilayah Kerja Puskesmas Kandai Kota Kendari Risk Factors Analysis of Low Birth Weight , Body Length At Birth and Basic Immunization History Toward Stunting of Children Aged. *Stunting Is a Major Nutritional Problem Which Will Have an Impact in Social and Economic Life of Community. There Is Clear Evidence That the Individuals Who*

- Stunting Has a Higher Death Rate of Various of Causes and an Increase in Disease. Many Factors As* , 1–10.
- Victora, C. G., Adair, L., Fall, C., Hallal, P. C., Martorell, R., Richter, L., & Sachdev, H. S. (2008). Maternal and child undernutrition: consequences for adult health and human capital. *The Lancet*, 371(9609), 340–357. [https://doi.org/10.1016/S0140-6736\(07\)61692-4](https://doi.org/10.1016/S0140-6736(07)61692-4)
- Vonaesch, P., Rendremanana, R., Gody, J. C., Collard, J. M., Giles-Vernick, T., Doria, M., Vigan-Womas, I., Rubbo, P. A., Etienne, A., Andriatahirintsoa, E. J., Kapel, N., Brown, E., Huus, K. E., Duffy, D., Finlay, B. B., Hasan, M., Hunald, F. A., Robinson, A., Manirakiza, A., ... Gouandjika-Vassilache, I. (2018). Identifying the etiology and pathophysiology underlying stunting and environmental enteropathy: Study protocol of the AFRIBIOTA project. *BMC Pediatrics*, 18(1), 1–18. <https://doi.org/10.1186/s12887-018-1189-5>
- WHO. (2017). *Malnutrition Estimates For The Indicators Stunting, Wasting, Overweight And Underweight Describe The Magnitude And Patterns Of Under-And Overnutrition.*