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## **Prevalence and Nutritional Status of Stunting Children Among 0-60 Months in Setono Pekalongan**

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**Abstract:** Stunting is delayed growth due to poor health conditions or chronic malnutrition starting early in life. There are around 148.1 million cases of stunted children in various parts of the world. None other than that, Setono Pekalongan Village has the sharpest prevalence of stunting cases in 2023, reaching 120 children under five. The aim of the research is to find out the prevalence and nutritional status in cases of stunting in children aged 0-60 months. This research was a non-reactive descriptive study with total sampling involving all 66 children with stunting toddlers in Setono Village. Secondary data regarding the number of stunting cases in 2024 comes from the Sokorejo Community Health Center including variables of gender, age, weight and height. Descriptive data analysis supported by various literature studies. The results showed that 57.6% of stunted children were male, 62.1% of stunted children were aged 26-60 months, 56.1% of stunted children had normal weight and 89.4% of stunted children met the criteria according to status. Height per age in nutrition status is a short height category. It is hoped that the people of Setono will better understand the risk of stunting in their area.

**Keywords:** age, children, nutritional status, prevalence, stunting

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### **1. Introduction**

Growth problems experienced by children are usually known as stunting. Stunting is still a problem that is often encountered in developing countries, including Indonesia. Data released by the through UNICEF found that one in every three children in the world faces conditions of malnutrition or stunted growth. This situation is even worse in rural areas, where around 40% of children living in these areas experience delays in the growth process. The effects of stunting can be felt in a short or even long time in children, such as increasing the risk of disease and death rates, less than optimal development which affects learning abilities, vulnerability to infections and chronic diseases when entering adulthood, and reduced levels of productivity (Cholique et al., 2020).

Based on Ministry of Health (2020), children with short stature are one of the characteristics of chronic nutritional problems which we usually call stunting. People with developmental delays are often susceptible to disease, have below normal intelligence, and are less productive. In the long term, the high incidence of stunting will have an impact on economic losses in Indonesia (Elmighrabi et al., 2024).

Based on data from WHO (2022), stunting cases often occur in children who have not reached the age of five. In 2022, 22.3% of children will be affected by stunting worldwide, namely 148.1 million cases. This means that there is no significant difference from the number of cases in

the previous year, namely 2020, with the number of cases in the world amounting to 22% or 149.2 million cases (Amusa et al., 2022; Permana et al., 2023).

Based on data from the Pekalongan City Health Service, the prevalence of stunting will decrease in 2022 by 1.01% (in 2021 it will be 7.81% and in 2022 it will be 6.80%). In 2023, the city of Pekalongan will have a prevalence of stunting cases of 7.43%, this means that there is an increase in the prevalence of the number of stunting cases from the previous year, namely 0.63%. Pekalongan city itself has a very significant comparison regarding the prevalence of stunting cases between existing sub-districts. Gamer, Soko Duwet and Bandengan subdistricts have the lowest prevalence of stunting cases, even Bandengan subdistrict has 0 stunting cases. Meanwhile, the highest prevalence in Pekalongan City in 2023 will be in Setono sub-district with a total of 120 stunting cases.

Setono Village is the district with the highest prevalence of stunting cases in Pekalongan City in 2023 with a total of 120 cases under five or 0.75%. The trend is increasing in 2022 in Setono Village, which has cases of 81 children under five. 2022 is the year when stunting cases in Setono fell from the previous year, namely 2021, but in fact in 2023 the prevalence of stunting cases soared again. Therefore, research was conducted regarding the prevalence of stunting cases in Setono Village, Pekalongan.

This study aims to determine the prevalence and nutritional status of cases of stunting in children aged 0-60 months in Setono Village, Pekalongan in 2024.

## **2. Materials and Methods**

The research includes non-reactive descriptive research by analyzing secondary data on stunting from the Sokorejo Community Health Center in Setono Pekalongan sub-district in 2024. The research object is secondary data about stunting cases in Setono Sub-district in 2024, the data comes from the Sokorejo Community Health Center which includes the variables Gender, Age, Height and Weight. Observations on secondary data regarding stunting cases in Setono Village. This data was obtained from the maternal and child health department at the Sokorejo Community Health Center. Data collection techniques are observation and literature study. The sampling technique is total sampling, where the number of samples used is the same as the total number of stunting cases in Setono Village, namely 66 cases.

The research period starts from February to May 2024. The research was conducted in Setono Village, Pekalongan. The reason this location was chosen was because Setono Village is the area with the highest stunting cases in Pekalongan City.

## **3. Results and Discussion**

Setono Village is a sub-district area in East Pekalongan. The area of Setono sub-district according to BPS data for Pekalongan City in 2020 is 191 km<sup>2</sup>. The number of Setono subdistricts in 2022 will be 11,500 people. The territorial boundaries of Setono sub-district are the northern part of Klego sub-district, the eastern part of Gamer sub-district, the southern part of Kalibaros sub-district and the western part of Poncol sub-district.

The gender characteristics in this study are that the majority of stunted children under five in Setono are 38 (57.6%) boys and 28 (42.4%) girls. Pay attention to the table below:

**Table 1.** Results of Gender Frequency Distribution

No	Gender	N	%
1.	Male	38	57,6
2.	Female	28	42,4
	Total	66	100

*Source: Secondary Data from Sokorejo Community Health Center, 2024*

Table 1 explains that stunting cases occur more predominantly in male children than female children. The results of this study are no different from research at the Meuraxa Community Health Center, Banda Aceh City, which stated that gender was related to stunting cases. Toddlers with male gender have a greater chance of experiencing stunting than females (Ardiansyah et al., 2023). Similar research also states that the majority of toddlers who experience stunting are male. This condition occurs because there are differences in providing a variety of food and nutrition between male and female toddlers. This means that male toddlers have a greater chance of experiencing stunting than female toddlers (Elmighrabi et al., 2024; Yuningsih & Perbawati, 2022).

Riskesdas (2018), stated that stunting cases in boys (38.1%) were superior to stunting cases in girls (36.2%). This happens because many people believe that boys have a quicker time consuming breast milk so that the time for giving MPASI to boys is faster than the target for giving it. Therefore, children will easily feel hungry, with this problem children tend to consume more MPASI than breast milk which should be given for 2 years. Giving less breast milk can make children more susceptible to disease (Atamou et al., 2023; Laily & Indarjo, 2023).

The age characteristics of stunted toddlers in this study were 25 children at a vulnerable age of 1-25 months with a percentage of 37.9% and the majority were at a vulnerable age of 26-60 months, totaling 41 children with a percentage of 62.1%. Pay attention to the table below:

**Table 2.** Results of Age Frequency Distribution

No.	Age Group (Month)	N	%
1.	1-25	25	37,9
2.	26-60	41	62,1
	Total	66	100

*Source: Secondary Data from Sokorejo Community Health Center, 2024*

Table 2 explains that stunting cases occur more frequently in the toddler age group 26-60 months than in the 1-25 month age group. This research is not much different from research in the Kalikajar 1 Community Health Center Working Area, Wonosobo Regency, which explained that toddlers aged more than 25 months had a greater chance of experiencing stunting. This can be caused by the nutritional status of the mother and the provision of complementary breast milk foods that are less hygienic and exposed to the child (Kusuma et al., 2023; Purnamasari et al., 2022). Other research on stunting in Kotamobagu City shows that most cases of stunting occur in toddlers aged 48 months (Hamzah, 2023).

One factor in fulfilling an individual's needs is age, the more mature the individual, the more activities they will undertake. Therefore, individuals require greater energy. Apart from that, toddlers in the 6-24 month age group very easily experience changes in nutrition because they are

passive consumers where the food they consume still depends on what their parents provide (Amusa et al., 2022; Sari et al., 2023).

Meanwhile, active consumers occur at the age of 24-59 months. Children can choose their own food even though they don't pay attention to the type of food and the hygiene of the food. At this vulnerable age, toddlers do not pay attention to personal and environmental hygiene, so toddlers get sick more easily. When toddlers are sick, they tend to experience a decrease in appetite, this causes the toddler to lack nutrition and triggers disruption to the child's growth and development (Susanti, Tanur & Ria, 2023).

Characteristics of Nutritional Status according to weight per age for stunted toddlers in the very low weight category totaling 6 children with a percentage of 9.1%. In the underweight category there were 23 children with a percentage of 34.8%. In the normal weight category there were 37 children with a percentage of 56.1%. Pay attention to the table below:

**Table 3.** Frequency Distribution Results of Nutritional Status According to Weight per Age

<b>Weight</b>	<b>N</b>	<b>%</b>
Very less	6	9,1
Not enough	23	34,8
Normal	37	56,1
Total	66	100

*Source: Secondary Data from Sokorejo Community Health Center, 2024*

Table 3 explains that the characteristics of stunting cases based on Nutritional Status according to the weight per age indicator at the Sokorejo Community Health Center, Setono Village, using univariate analysis, obtained more normal weight results for 37 toddlers (56.1%). This research is similar to research at the Citeras Community Health Center, Garut Regency, showing that the nutritional status of toddlers on the weight per age indicator is higher than normal weight for 105 toddlers with a percentage of (93.8%). This occurs due to weight gain and there is a difference between body weight before and after supplementary feeding (PMT) (Fajar et al., 2022). The nutritional status of toddlers based on weight per age is no less than 20 toddlers who have normal weight with a percentage of 95.2% (Nirmalasari et al., 2020; Setyorini et al., 2023).

Characteristics of nutritional status according to height per age in stunted toddlers in the very short category totaling 7 children with a percentage of 10.6%. In the short category there were 59 children with a percentage of 89.4%. In the normal category there are 0 children with a percentage of 0%. Pay attention to the table below:

**Table 4.** Frequency Distribution Results of Nutritional Status According to Height per Age

<b>Height</b>	<b>N</b>	<b>%</b>
Very short	7	10,6
Short	59	89,4
Normal	0	0
Total	66	100

*Source: Secondary Data from Sokorejo Community Health Center, 2024*

Table 4 explains that stunting cases based on nutritional status according to the height per age indicator at the Sokorejo Community Health Center, Setono Village, using univariate analysis, obtained a higher number of short height results for 59 toddlers with a percentage of (89.4%). This research is no different from research at the Babirik Community Health Center, showing the results that more toddlers have short height, 23 with a percentage of (76.6%). This occurs due to inappropriate feeding patterns for children so that children are at low risk and this problem can have an impact on their development and growth (Muti'ah et al., 2023). Apart from that, the results of research at the Tilago Community Health Center also stated that of the 43 respondents there were 38 children with height per age nutritional status, namely in the short category with a percentage of (88.4%) (Mantu et al., 2023; Puta & Sutomo, 2021).

#### 4. Conclusion

Stunting cases in Setono Pekalongan in 2024 are more dominant in male children than in female children. Based on age characteristics, stunting occurs more frequently in the age range of 26-60 months. The results of this study state that more than half of children with stunting have normal body weight. Furthermore, there were many stunted children with criteria according to the nutritional status of weight per age, namely the short height category.

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#### Conflict of Interest

There is no conflict of interest concerning the issue of this article.

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