STUNTING INCIDENCE IN TODDLERS AGED 24-59 MONTHS IN KUBURAYA DISTRICT VIEWED FROM FEEDING PATTERNS

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ABSTRACT
Stunting is growth failure in toddlers due to chronic malnutrition and causes children to become short. Stunting is often known as stunting, a state of growth failure in toddlers as indicated by a height-for-age figure of less than -2 (z-score value). Stunting is caused by many aspects, including parenting and nutrition-related eating. The mother's parenting style will determine the toddler's nutritional status. The better the parenting style, the better the nutritional status. The prevalence of stunting in toddlers aged 24-59 years in Kuburaya District is 40.3%. This study aimed to determine the profile of stunting in toddlers aged 24-59 months from the perspective of parenting in Kuburaya District. This research is observational with a random case-control design. Data collection was taken in February-March 2023. The number of case samples was 62 mothers with stunted toddlers, and a control sample of 62 mothers with normal nutritional status toddlers. The data collection technique used a parenting eating pattern questionnaire with height and weight measurements. Data analysis techniques using descriptive statistics. The results revealed that stunting in poor parenting was 85.5% while stunting in good parenting was 14.5% in Kuburaya District. The conclusion from this research is that parenting is related to the incidence of stunting in toddlers, so it is necessary to pay attention to the role of the family, especially mothers, to provide good parenting patterns to prevent stunting.

Keywords: parenting eating patterns; stunting; toddler

INTRODUCTION
Stunting is a growing health problem that affects toddlers (Widiyanto et al., 2019). Stunting is related to the problem of acute health complications, which can cause increased child morbidity, premature death, and increased non-communicable diseases and obesity as adults (Voth-Gaeddert et al., 2018). Stunting in children will cause delays in the development of intelligence in the brain, metabolic disorders, and stunted physical growth (Wulandari et al., 2019). Meanwhile, what is expected is that children do not experience stunting so that the growth and development of children are at a normal standard (Armayanti & Putu Ayu Ratna Darmayanti, 2022). Based on the 2017 World Health Organization report, as many as 83.6 million stunted children or 55% of all stunted children worldwide live in Asia. South Asia has the highest percentage of stunted children (58.7%), while Central Asia has the lowest percentage (0.9%). More than a third (39%) or 59 million African children under the age of five are stunted, with three African regions having stunting rates above 30%: West Africa (31.4%), Central Africa (32.5%), and East Africa (36.7%), and 6 million in the Latin America and Caribbean region (WHO, 2018). In addition, based on JME data from the UNICEF Data Bank in 2020, Indonesia ranks stunting in 115 out of 151 countries, and according to WHO, it is a country with a high prevalence of stunting (Sudigyo et al., 2023). The data shows that the stunting rate in Indonesia is still high.

Based on data from the Indonesian Nutritional Status Study (SSGI) in 2021, the incidence of stunting in West Kalimantan province is 29.8% and the prevalence of stunting in Kuburaya District
is 40.3%, one of the newly created districts/cities selected by the Head of the National Development Planning Agency and Minister of National Development Planning, KEP. 10/M.PPN/HK/02/2021, as the focus of integrated stunting prevention interventions in 2022 is Kuburaya District, West Kalimantan Province (Kementrian Kesehatan RI, 2021). The results of a preliminary study by researchers in Kuburaya District in February 2022 found stunting data above 10%, namely the Sungai Ambawang Health Center 12.3%, Lingga Health Center 11.8%, Punggur Health Center 10.5%, and Sungai Durian Health Center 10.1% (Dinkes Kabupaten Kuburaya, 2021) The cause of the stunting problem as previously described is the lack of food and nutrition in the community and this problem often occurs in areas with low levels of sanitation (Mudadu Silva et al., 2023). Sadler et al. (2023) also revealed that the cause of stunting is a lack of nutrition in children. In addition, the cause of stunting is parenting or feeding patterns (Putri, 2020; Wibowo et al., 2023). This is because the mother's parenting style will impact the growth and development of children because malnutrition in children, especially toddlers, is irreversible (Widyaningsih & Anantanyu, 2018).

Feeding care is a parenting activity mothers or caregivers use related to a child's eating habits and situations (Rusilanti, 2015). Feeding parenting patterns are indicated by the type or variety of food consumed, the frequency and behavior of giving food so that it becomes a child's eating habits (Fikawati, 2017). Stunting is related to the way parents feed, and this feeding determines eating behavior and weight gain in children (Gustina et al., 2020). From the parenting perspective, this research is important to determine the incidence of stunting in toddlers aged 24-59 months. Good parenting patterns reduce stunting due to nutritional factors in feeding children who are increasingly optimal and good will affect the growth and development of children who are getting better (Hidayat, 2023). In addition, other studies have also revealed that the diet adopted by parents can influence food/energy intake, affecting children's growth (Abebe et al., 2017). Furthermore, providing food nutrition to children is also related to the economic condition of the child's parents (Krisnana et al., 2020).

Previous research on similar topics included the prevalence and risk factors for stunting in toddlers 24-59 months in Indonesia (Aditianti et al., 2020). The results of this study revealed that the prevalence of stunting in children aged 24-59 months was 29.1%. Risk factors associated with stunting in toddlers aged 24-59 months are the father's and mother's education, the mother's height, the father's BMI and the place of delivery. Second, research on household, food and health factors in child stunting in Ethiopia (Ayelign & Zerfu, 2021). The results of the study said that twin births, basic household materials, and the type of cooking fuel were significantly related to stunting. Third, research on the relationship between parenting style and the incidence of stunting for toddlers from poor families (Bella et al., 2019). The study's results said there was a relationship between parenting style and the incidence of toddler stunting. However, this research differs from previous research because this study will analyze the incidence of stunting in terms of parenting and eating patterns. In addition, the location of the research conducted is interesting because there has never been a study on stunting from the perspective of parenting. This study aimed to determine the profile of stunting in toddlers aged 24-59 months from the perspective of parenting in the Kuburaya District.

**METHOD**

The research method used in this study is descriptive quantitative with an observational approach with a case-control design. Case control is an analytic study that analyzes causal relationships using
reverse logic, determining the disease (outcome) first and then identifying the cause (Amirah & Ahmaruddin, 2022). The subjects of this study were mothers who had toddlers aged 24-59 months in the Kuburaya area, West Kalimantan, totaling 124 toddlers. Data collection techniques used in this study were questionnaires, interviews, and documentation. The stunting indicator is known from the condition of the child's height not according to age (PB/U) or (TB/U) based on data obtained from the puskesmas. Meanwhile, the parenting pattern is known from the mother's habits to her child in fulfilling the child's food needs with indicators of type, food frequency, meal portions, feeding habits, and schedule. This data validity technique uses the Pearson Product Moment correlation. The test results show that the r value for all indicators is greater than 0.312, so each item is valid. Cronbach's Alpha value is 0.825 (reliable) on the parenting pattern indicator. Analysis of the research data using descriptive statistics. The procedure for this research is that the researcher prepares the research by observing the problems, looking for research subjects, and preparing research instruments. The implementation of the research was carried out by collecting data at the research site. After that, analyze the data and conclude the research results.

RESULTS AND DISCUSSION
Selection of sources of evidence
Based on the research that has been done, the following data is obtained:

Table 1.
Nutritional Status of Toddlers 24-59 Months (n=124)

<table>
<thead>
<tr>
<th>Count</th>
<th>Nutritional Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stunted</td>
</tr>
<tr>
<td>Nutritional Status</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
</tbody>
</table>

Table 1 shows 62 toddlers aged 24-59 months with normal nutritional status with 28 male and 34 female. Furthermore, 62 children under five experience stunting with 28 male and 34 female. Then, the results of the study which revealed the incidence of stunting based on parenting and eating patterns are presented in Table 2 below:
Table 2. Toddler Stunting Results Based on Parenting patterns for Toddlers Eating 24-59 Months

<table>
<thead>
<tr>
<th>Category Parenting Patterns</th>
<th>Nutritional Status</th>
<th>Count</th>
<th>Stunted</th>
<th>Normal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorly</td>
<td></td>
<td></td>
<td>53</td>
<td>21</td>
<td>74</td>
</tr>
<tr>
<td>Expected Count</td>
<td></td>
<td></td>
<td>37.0</td>
<td>37.0</td>
<td>74.0</td>
</tr>
<tr>
<td>% within Nutritional Status</td>
<td></td>
<td></td>
<td>85.5</td>
<td>33.9</td>
<td>59.7</td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
<td>9</td>
<td>41</td>
<td>50</td>
</tr>
<tr>
<td>Expected Count</td>
<td></td>
<td></td>
<td>25.0</td>
<td>25.0</td>
<td>50.0</td>
</tr>
<tr>
<td>% within Nutritional Status</td>
<td></td>
<td></td>
<td>14.5</td>
<td>66.1</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>62</td>
<td>62</td>
<td>124</td>
</tr>
<tr>
<td>Expected Count</td>
<td></td>
<td></td>
<td>62.0</td>
<td>62.0</td>
<td>124.0</td>
</tr>
<tr>
<td>% within Nutritional Status</td>
<td></td>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2, based on poor parenting patterns, the incidence of stunting in toddlers aged 24-59 months with poor parenting patterns is 53 children or 85.5%. Meanwhile, the incidence of stunting in children under five with good parenting patterns was 9 children or 14.5%. Furthermore, toddlers with normal nutritional status with poor parenting patterns are 21 children or 33.9% and toddlers with good eating patterns are 41 children with a percentage of 66.1%.

**Characteristics of sources of evidence**

Based on the research results obtained above, most stunting in children aged 24-59 months occurs due to poor parenting by the parents of these children. This can be seen from the percentage of children stunted with poor parenting patterns, which is 85.5%, while those with good parenting patterns are only 14.5%.

**Synthesis of results**

Therefore, it can be concluded that the incidence of stunting in poor parenting is 85.5%, while the incidence of stunting in good parenting is 14.5% in Kuburaya District.

**Summary of evidence**

The results of this study follow previous studies which revealed that wrong or poor parenting styles could potentially cause stunting in children (Loya & Nuryanto, 2017). This is because the feeding pattern in children does not pay attention to the nutritional needs of toddlers, the frequency of proper and correct feeding, and the type of food that is good for the growth and development of toddlers. Inappropriate parenting patterns are due to the mother's low knowledge about the components of balanced nutrition. This was reinforced by interviews with mothers in Kuburaya District who revealed that their educational background was still at the primary and secondary levels. Previous research also revealed that the mother's knowledge level significantly affected the incidence of child stunting (Husnaniyah et al., 2020).
The results of the study which revealed that inadequate parenting led to the incidence of stunting in children under five are also in line with previous research which said that children's eating behavior with low levels of toddlers has a 4.89 times higher probability of experiencing stunting compared to those with high eating behavior (Elni & Julianti, 2021). This is supported by the results of interviews with mothers whose children are stunted. The results of the interview said that mothers giving food to children under five pay less attention to balanced nutrition due to a lack of economic factors. For example, in feeding children under five only food that is vegetables not balanced with foods that contain protein and other vitamins that come from vegetables or fruits. The results of other studies also revealed that the risk of children experiencing stunting was higher in children with diets that contained less protein (Tanaka et al., 2019). In addition, the frequency of feeding children who are not regular is also often carried out by mothers whose children are stunted. This study also revealed that parenting to eat in children under five is related to the incidence of stunting. This follows previous research which revealed that diet is associated with the incidence of stunting in children under five aged 0-59 months (Hidayati & Citra Dewi Pratiwi, 2022).

**Strengths and limitations**

This research contributes to preventing stunting in children under five aged 24-59 months by advocating good parenting for these children by paying attention to the type of balanced nutrition, food frequency, meal portions, proper and regular feeding habits and schedules. This can be seen because poor parenting patterns can cause more stunting in children. The limitation of this research is that the scope of this research only covers the area of Kuburaya District, West Kalimantan Province.

**CONCLUSION**

Based on the results of the research and discussion, it can be concluded that the incidence of stunting in poor parenting is 85.5%. In comparison, the incidence of stunting in good parenting is 14.5% in Kuburaya District. The research contributes to preventing stunting because it describes parenting patterns related to the incidence of stunting in toddlers, so it is necessary to pay attention to the role of the family, especially mothers, to provide good parenting patterns for stunting prevention.

**REFERENCES**


