

## Family coping mechanisms in response to stunting events in toddlers in the working area of Pekanbaru Health Center

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### Abstract

**Background:** Stunting is still a public health problem in Indonesia, with an estimated 27.7% of children under the age of five being stunted. With various efforts to reduce this number. Family factors and poor nutrition are not the only causes, there are many interrelated factors. The role of parents and family is very important to fulfill the needs of children and provide them with good growth and development, so that children can live well despite health problems.

**Method:** The purpose of this study was to determine the relationship between family coping and the incidence of stunting in toddlers. The sampling technique in this study was a total population of 89 families with children under five and used three types of questionnaires, namely: respondent characteristics questionnaire, calculation of toddler body height and parent coping mechanism questionnaire using the F-COPES (Family Crisis Oriented Evaluation Scale) instrument.

**Results:** based on data using the F-COPES instrument, statistical test results using chi square were obtained with a value of  $p = 0.282$  ( $p > 0.05$ ).

**Conclusion:** There is no relationship between family coping mechanisms and the incidence of stunting. the way families bargain with push or weight, whether candidly, socially or financially, does not straightforwardly influence the event of child hindering and, whereas vital within the setting of enthusiastic and social soundness, may not be relevant or solid sufficient to affect on children's wholesome status.

**Keywords:** Coping; Family; F-COPES instrument; stunting; toddlers

### INTRODUCTION

Stunting is still a public health problem in many countries, especially in developing countries. In Indonesia, according to data from the 2018 Riskesdas (1), there are an estimated 27.7% of children under the age of five who are stunted. Indonesia and other developing countries have made various efforts to accelerate the reduction of stunting prevalence (2–6).

The causes of stunting consist of various interrelated factors and are not only due to poor nutritional intake, but family factors cannot be ignored. The role of parents is very important in providing the needs of children in order to achieve good growth and development (7). The role of parents and family is needed so that children can live optimally despite problems with their health conditions. Positive family coping strategies

are needed in solving a problem, including health problems in the family. Without the implementation of effective family coping mechanisms, family functions will also not be achieved adequately. The incidence of stunting in toddlers is also closely related to the continuity of the implementation of family functions. Family factors are important in preventing malnutrition in children. Family functioning is necessary for the welfare of family members, including in fulfilling children's nutrition (8–10). Optimal parental participation is needed so that children can achieve optimal health status. Therefore, the study of family coping strategies related to the incidence of stunting in toddlers requires a deeper study, so this study will analyze the relationship between family coping strategies and the incidence of stunting (5,11–14). The family is a place where children grow and

develop, which is an important factor and is a concern in this research.

**METHOD**

This study aims to determine the relationship between family coping and stunting toddlers in the working area of the Pekan Heran Health Center, Indragiri Hulu Regency. Based on data from the Inragiri Hulu Regency Health Office, it is determined that Sungai Jernih Village is a Stunting Locus Village for the West Rengat sub-district in 2024. The sampling technique uses a total population technique, meaning that all families who have children under five years old, totaling 89 people, are all used as respondents in this study. This study used three types of questionnaires, namely the respondent characteristics questionnaire, the calculation of toddler body height and the parent coping mechanism questionnaire using the F-COPES (Family Crisis Oriented Evaluation Scale) instrument (15–17). All research tools / tested conducted in this study have passed the ethical review (Ethical Approval) from the Ministry of Health with No: LB.02.03/EA/KEPK-PKR/22/2024. The research tools was used SPSS (Statistical Package for the Social Sciences) software version 26 in processing the data presented in this study.

**RESULTS**

This research was conducted on 89 respondents who have toddlers in Air Jernih Village, Pekan Heran Health Center working area which is the locus of stunting in 2023, sample selection using saturated sampling technique, namely taking the entire population into the sample, namely all families who have toddlers in Air Jernih Village in the Pekan Heran Health Center working area. This study used three types of questionnaires, namely the respondent characteristics questionnaire, the calculation of toddler body height and the parent coping mechanism questionnaire using the F-COPES (Family Crisis Oriented Evaluation Scale) instrument. F-COPES is an instrument to obtain coping mechanisms used by families consisting of 30 questions. The FCOPES questionnaire used

has been proven reliable and valid with a value of 0.941. So that all questionnaire questions can be used as research instruments.

The following are the characteristics of respondents, namely families who have children under five years of age totaling 89 people such as family form, family income, number of children, education and employment levels, then for children's nutritional status and coping mechanisms used by the family.

Tabel. 1 Respondent Characteristics

Characteristics	Frekwensi	Persentase
Family:		
1. Nuclear Family	74	83.1
2. Extended Family	8	9.0
3. Single Parent	7	7.9
Family Income:		
1. Average UMR	50	56.2
2. Under UMR	21	23.6
3. Above UMR	18	20.2
Number of Children:		
1. > 2 people	25	28.1
2. ≤2 people	64	71.9
Education:		
1. Higher education	71	79.8
2. Low education	18	20.2
Jobs:		
1. Work	18	20.2
2. Not Working	71	79.8
Child Status:		
1. Stunting	10	11.2
2. Not Stunting	78	88.8
Coping Mechanism:		
1. Adaptive	68	76.4
2. Maladaptive	21	23.6

Tabel 2. The Relationship between Family Coping and the Incidence of Stunting in Toddlers in Air Jernih Village, Pekanheran Health Centre Working Area

Status	Family Coping				Total		P Value
	Adaptive		Maladaptive		n	%	
	n	%	n	%	n	%	
Stunting	9	90	1	10	10	100	0.282
Not Stunting	59	74.7	20	25.3	79	100	
<b>Total</b>	<b>68</b>		<b>11</b>		<b>89</b>	<b>100</b>	

## DISCUSSION

Based on table 1, it can be seen that the most common family form of respondents in Air Jernih Village is the Nuclear Family, which is a nuclear family with family members consisting of father, mother and children who live in one house, namely 83.1%. Furthermore, the average family income of respondents in Air Jernih Village is in accordance with the UMR in Indragiri Hulu Regency, namely 56.2%. For the number of children, more than half of the respondents have less than 2 children. Furthermore, for the education category of respondents, most of them have a high education, namely 79.8% and most of them do not work, namely 79.8%. Furthermore, the number of stunted children in Air Jernih Village was 11.2% and most families had adaptive coping, namely 76.4%.

Furthermore, bivariate analysis was carried out to determine the relationship between the independent variable (family coping) and the dependent variable (stunting incidence) which was indicated by a p-value <0.05 at 95% CI (confident interval). The relationship between the independent variable and the dependent variable based on the results of the chi square statistical test can be seen in the following table

Relationship between Family Coping (14,15,17–19) and the Incidence of Stunting in Toddlers (3–5,11,20) in Air Jernih Village, Pekanheran Health Center Working Area. The statistical test results showed a p value of 0.282. With a significance level of  $\alpha = 0.05$  (the general significance level used), since the p value (0.282) is greater than  $\alpha$ , we can conclude that there is no statistically significant relationship.

Based on the results of statistical tests conducted, it can be concluded that there is no significant relationship between family coping and the incidence of stunting in children (2,3,6,20,21). Coping mechanisms (17) are the way a person or family copes with stress or pressure, either emotionally, psychologically, or physically. In a family context, coping mechanisms are often used to manage pressures related to economic, social and child health. Families with adaptive

coping mechanisms are more likely to be able to find solutions to meet children's nutritional needs, despite being in a difficult economic situation. In contrast, families with maladaptive coping mechanisms may succumb to the situation and therefore be unable to provide nutritious food (4,7,21). Parents who are able to manage stress well (using positive coping mechanisms such as seeking social support) are more likely to pay attention to their child's health and development, including exclusive breastfeeding, immunizations and a balanced diet.

In this study, family coping mechanisms may not have a direct role in the incidence of stunting. This could be because stunting is more influenced by other more significant factors, such as parenting, nutritional intake, access to health services, and family economic status. Dominant Factors in the Incidence of Stunting according to research (12,22–24) which states that Stunting is generally influenced by:

1. Inadequate Nutrient Intake: Macro and micronutrient deficiencies from the womb to 2 years of age (1000 HPK period).
2. Sanitation and Environmental Hygiene: Poor sanitation can increase the risk of infections that stunt a child's growth.
3. Access to Health Services: Low access to immunizations, maternal and child health check-ups, and treatment of infections.
4. Economic conditions and mother's education: Low family income or mother's education affects the fulfillment of children's nutritional needs.

As these factors are more relevant, family coping mechanisms that serve to manage stress or pressure may not have a direct influence on children's nutritional status or growth. In some societies, eating habits or culture (for example, giving solid food prematurely or not providing exclusive breastfeeding) may play a greater role in the occurrence of stunting than family strategies to overcome the problem (25).

The factors of maternal health and nutritional conditions before, during pregnancy and after childbirth can affect fetal growth and the risk of stunting (6,21,24). Apart from the above factors, it is also known that other factors can cause a child to experience stunting, namely maternal mental health factors (8,9,26–28).

## CONCLUSIONS

There was no association between family coping mechanisms and the incidence of child stunting. This conclusion suggests that the way families deal with stress or pressure, whether emotionally, socially or economically, does not directly affect the occurrence of child stunting and, while important in the context of emotional and social stability, may not be relevant or strong enough to impact on children's nutritional status.

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