

Relationships Between Family Role with Stunting Incidents in Rural

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Abstract – Stunting problems that occur in childhood impact morbidity, death, disorders of growth, disturbance of mental development, and cognitive and motor development. Disturbances that occur tend to nature irreversibly and influence development next thing you can increased the risk of disease degenerative moment maturity. Conjecture factors affecting the incidence of stunting in children are the internal support system family, habits, and behavior Mother in pattern maintenance during pregnancy and after birth as well as the role family in overcoming stunting. The study aims to know the connection role of the family with the stunting incident. Study observational with design case-control unmatched with a sample size of 100 respondents. Retrieval technique sample using simple random sampling for every location that has been determined. This data analysis used the chi-square statistical test and estimation test to assess the odds ratio using data analysis software. Research result report There is a significant relationship between role family with the incidence of stunting $p=0.000$ ($P<0.05$) with OR value = 16.4 (OR > 1, 95%CI: 2.4-13.94). Other related factors are the age mother ($p=0.01$), the income family ($p=0.00$), and the mother's education ($p=0.00$).

Keywords – Family, Role, Rural, Stunting.

I. INTRODUCTION

The problem of stunting is a problem that occurs in the world, especially in poor and developing countries. Stunting becomes a problem Because can't be optimal in the development brain which results in obstruction development of motor and mental growth and even can increase the risk of morbidity and death [1].

A total of 178 million children in the world are too short based on age compared with growth WHO standards. The majority are children aged not enough from five years (toddlers). Prevalence stunted toddlers throughout developing countries amounting to 31.2%. The prevalence of Stunted children on the Asian continent is 30.6% and in Southeast Asia, it is 29.4%, taller compared to East Asia at 14.4% and West Asia at 20.9%. Indonesia ranking occupies 5th from other countries in Southeast Asia, such as Myanmar (35%), Vietnam (23%), and Thailand (16%) [2].

Stunting in Indonesia is becoming a problem in public health in a way necessary for national attention in a way seriously. Its become, stunting in Indonesia category tall by WHO standards reaching 30-39%. The results of Riskesdas show that 34 provinces in Indonesia have a prevalence of different stunting incidents [3]. There are two provinces with several very high incidences exceeding 40% in appropriate WHO criteria: East Nusa Tenggara as much as 42.7% and West Sulawesi as much as 41.6% while 17 provinces as contributors number the incidence of stunting reaches 30-39% with category high [4]. The 2017 Nutritional Status Monitoring, shows the prevalence of stunted toddlers in Indonesia is still high, namely 29.6% (Ministry of

Health, 2018). Based on Riskesdas data 2018 the stunting rate in West Kalimantan Province reached 18.32%. Kubu Raya Regency is one of the districts in West Kalimantan Province with numbers the stunting below number province, that is amounting to 9.2%.

Stunting problems that occur in childhood impact morbidity, death, disorders growth, disturbance of mental development, and cognitive and affect on development. Disturbances that occur tend to be irreversibility and influence to development of what can be further improved risk disease degenerative moment maturity. Other impacts occur where the result of stunting a child's intelligence has less influence on achievement learning is not optimal and productivity decreases. If this continues so will hinder the development and productivity of the nation in the future [4]. Stunting is also related to performance school, even at the level of productivity in century adults [5].

Body shortness or stunting during infancy caused by lack is chronic nutrition or nutrition less of a result failure growth well is used as an indicator in a long period. By no direct besides power health, the family is also affected by the nutritional status of toddlers, especially the role of the Mother from before pregnancy until after giving birth. The study reports that the strongest influence on health is family because the family's role as a provider resource is economic, social, and psychological, and tensions can become a protector or threat to health members' families [6].

The incidence of stunting increases among children who remain together in a family with parents single compared to children living in nuclear families or families big with parents complete. Research results about the connection Structure family role with child stunting ages two to five years show that the incidence of stunting is 10% higher among remaining children with a family compared to a living child with a nuclear family with a ratio of 3:1. The stunting problem needs to be addressed study, especially from facet family, because the problem the can damage development and hurt health in periods like a long time prone to disease [7]. Counter measures nutritional status problems that have a role in important that is individual, family, and service health [8]. Research results report that area rural owns more proportion big for children short (40%) in comparison with area urban (33%) [9].

The stunting rate in Kubu Raya Regency 2019 continues to experience a decline, in 2019 it was 23.60%, in 2020 it fell to 13.40 %, again in 2021 down figure is 7.9 % and in 2022 it will be 7.9%. Public health center Punggur is one of Puskesmas located in Sungai Kakap sub-district, with The stunting rate in 2023 will be 6.6 %. This figure is below the number of Kubu Raya Regency in 2022 will be 7.9%. Interview results with officers' health conjecture factor affecting the incidence of stunting in children are the internal support system family besides education carried out by staff health. Habits and behaviors mother in pattern maintenance during pregnancy and after birth as well role of the family in overcoming stunting are very important in handling stunting. Until this no study or related research on role relationships family in stunting incidents at the Community Health Center Punggur. That researcher is interested in doing research, which is expected to obtain several possible recommendations to help lower return the stunting rate become zero stunting.

II. METHOD

Design of research observational with design *case-control was unmatched* with comparison respondents 1:1. The sample size is 100 respondents. The on-site research area is rural in one sub-district in Kubu Raya district. Retrieval technique sample using cluster sampling, and simple random sampling for every location that has been determined. The researcher used the chi-square statistical test and estimation test to assess the odds ratio using data analysis software. The researcher already obtained *ethical clearance* from committee ITEKES Muhammadiyah west Kalimantan ethics.

III. RESULTS AND DISCUSSION

3.1 Results

Punggur Kecil Village is one of the 3 villages included in the work area of Public Health Center Punggur. The village area is 101.28 km² with amount resident as many as 14230 people with details man as many as 7060 people and women as many as 7170 people and 4122 families. Amount There are 6 hamlets in Punggur Kecil Village with 19 RWs and 68 RTs. Amount The network in Punggur Kecil Village consists of 2 Poskesdes and 1 Pustu, a total Integrated Healthcare Center There are 10 Posyandu children under five in Punggur Kecil Village spread across 6 hamlets.

Characteristics of research respondents

Univariate analysis is used to explain as well as describe the characteristics of every variable study. In research. This researcher used analysis univariate for know the characteristics of respondents including the aged mother, the income family, the level of education mother, the role of the family, and the incidence of stunting. Characteristics respondent's study can seen in Table 1 below.

Table 1. Characteristics Respondent Study

Variable	n	
	f	%
Mother's Age		
1. ≥21	84	84
2. <21	16	16
Income		
1. ≥2 million	70	70
2. < 2 million	30	30
Mother's Education		
1. No school	8	8
2. Finished elementary school	34	34
3. Finished middle school	28	28
4. Finished high school	27	27
5. Higher Education	3	3
Family role		
1. Good	58	58
2. Not good	42	42
Stunting Status		
1. Yes	50	50
2. No	50	50

Source: *primary data 2024*

Research results find that on research the majority of mothers aged ≥ 21 years as many as 84 respondents (84%), meanwhile mothers aged < 21 years as many as 16 people (16%). In the income variable family, some big own income ≥ 2 million per month, that is as many as 70 respondents (70%), while family yang own income < 2 million as many as 30 respondents (30%). Study this is also a find for mother's education, mother's education with category no school as many as 8 respondents (8%), category 34 respondents (34 %) completed elementary school, category 28 respondents (28%) had completed junior high school, category 27 respondents (27 %) graduated from high school and categories college tall as many as 3 respondents (3%). On variables role family, results study this find that, role family with the category 'good' as many as 58 respondents (58%) and roles family 'not good' as many as 42 respondents (42%).

Bivariate Analysis

Bivariate analysis was carried out on two variables that are variable independent (including the age of the mother, the income of the family, the level of education of the mother, and the role of the family) with variable dependent (stunting incidents).

As for the results analysis, the bivariate can seen in Table 2 below.

Table 2. Bivariate analysis

Variable	n=100				X	OR	95%CI	p
	Control		Case					
	n=50	n=50	n=50	n=50				
	f	%	f	%				
Mother's age								
1. ≥21	45	90	39	78	2.67	2.53	0.81-7.94	0.01*
2. <21	5	10	11	22		1		
Income								
1. ≥2 million	47	96	23	46	27.42	18.39	5.05-67.00	0.00**
2. < 2 million	3	6	27	54		1		
Mother's Education								
1. No school	8	16	0	0	23.7	-	-	0.00**
2. Elementary school	17	45	11	22				
3. Middle school	13	26	15	30				
4. High school	6	12	21	42				
5. Higher Education	0	0	3	6				
Family role								
1. Good	39	78	19	38	16.4	5.75	2.4-13.94	0.00**
2. Not good	11	22	31	62		1		

Source: primary data 2024 * significant at p<0.05 ** significant at p<0.01

Based on the results of data analysis as shown in Table 2, the results of this study found that there was a significant relationship between maternal age and the incidence of stunting with a value of p=0.01 (p<0.05). The estimation test results obtained a value of OR=2.67 (OR >1, 95% CI: 0.81-7.94), meaning that mothers with a birth age of ≥ 21 years have a chance of having children who are not stunted by 2.67 times compared to mothers with an age < 21 years. Regarding the family income variable, the results of this study found that there was a significant relationship between family income and the incidence of stunting with a value of p=0.00 (p<0.05). The estimation test results found an OR value of 27.42 (OR > 1, 95% CI: 5.05-67.00), meaning that families with an income of ≥ 2 million have a chance of having children who are not stunted by 27.42 times compared to families with an income < 2 million. The results of this study also found that there was a significant relationship between maternal education and the incidence of stunting with a value of p = 0.00 (p, 0.05). This research also found that there was a significant relationship between family role and the incidence of stunting with p=0.00 (p<0.05). The estimation test results found that the OR value = 16.4 (OR > 1, 95% CI: 2.4-13.94), meaning that families who have a role in the good category have a chance of having children who are not stunted by 16.4 times compared to families who have a role in the good category. not good.

3.2 Discussion

Research result this is in line with a study previously reported that knowledge of a mother's lack of education low mother a well as income low family is a factor risk of the occurrence of stunting in toddlers aged 24-59 months [10]. A mother who lives in the countryside own trend own low education and so on the mother house ladder. Apart from that, knowledge of stunted toddlers in rural areas is also one of the impacts of low education undertaken by the mother, where in the research this mother

stunted toddlers living in rural areas [2].

Studies also reported that influencing factors in the incidence of stunting are the education mother, the level of income of the family, and well pattern of a foster family. Prevention of stunting problems can be achieved with such interventions giving sufficient energy through food programs addition, providing intake substance nutrition and Fe tablets in mothers pregnant for the development of optimal fetus and birth with normal body weight. Increase knowledge of mothers about nutrition and health and open field work so that can fulfill the needs of nutrition family, give counseling about pattern nurture provide counseling about food variety, and training the utilization of yard as garden vegetables [11]. Increasing the income family can done with efforts to include members family already enough age for work with balanced with targeted and efficient use of money. Another way that can be taken is empowerment through enhancement skills and entrepreneurship. If a family experiences difficulty provisioning food consumption automatically will decrease. This matter if happens to Keep going continuously can trigger toddlers to experience a lack of nutrition chronic consequences toddler becomes short. In overcoming a problem, the family must be aware of nutrition in determining the food menu and increase knowledge about the importance his nutrition nutrition-balanced fulfillment every day to avoid from risk of stunting.

Other studies say that exists several factors that have a connection with stunting incidents such as the pattern of fostering parents to children [12]. Family role in behavior expected by the family with status or position individual as system supporter main to the problems that occur in the family. The family has tasks and maintains the health of its members and each other looks after the health family as well as the fulfillment of adequate nutrition. Stunting or Not his child later day, depending on how knowledgeable mom and dad are regarding the child's interests. Although still there is still a factor to access family to intake nutrition, especially for families from circles not enough capable [13].

Giving nutrition to children No regardless of role family especially nurturing family children, especially from facet giving pattern the meal, which includes type, quantity, and schedule eat each age varies [14]. Influencing factors incidence of stunting in children age early childhood in Indonesia include the food given no varies with frequency and texture not by age [15]. Poor parenting style is good, especially in behavior and practice of giving eat to children. The family's role as a nanny is key to success in fulfillment main nutrition lies in the pattern of the foster mother. Habit eat well for children depends on knowledge and skills Mother method compiles eligible food nutrition. Mothers with a pattern of good parenting will tend to own children with good nutritional status as well, and vice versa mothers with a pattern of fostering a lack of nutrition tend to own children with poor nutritional status [16].

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