Food Consumption and Safety Patterns of Stunted Children Aged 06-59 Months in the Working Area of Ophir and Sukamenanti Health Center of West Pasaman Regency in 2020

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ABSTRACT

Consumption patterns are not appropriate and food safety is a risk factor that is widely foundand has a significant effect on the incidence of stunting in toddlers. Balita in food insecure households has a 2.62 times greater risk of suffering from stunting compared to food-safe households. The purpose of this study is to find out the Picture of Food Consumption and SafetyPatterns in Stunted Toddlers Aged 06-59 Months in the Working Area of Ophir Health Center andSukamenanti West Pasaman Regency in 2020. Research with *cross-sectional study* design was conducted in the working area of Ophir Health Center and Sukamenanti Health Center of West Pasaman Regency. The sample was a stunted toddler aged 06-59 months as many as 35 people taken by *means of simple random sampling.* The data collected are anthropometric data, dietary data (types and frequencies of basic foodstuffs) and food safety data with the Food Frequency *Questionare* (FFQ) method, conducted by researchers and 2 team members. The data obtained is analyzed descriptively. The results of this study describe the consumption patterns of children under five for basic food types 62.8%, animal protein 54.3%, vegetable protein 65.7%, vegetables 57.1%, fruits 54.3% unsalized with a staple food frequency of 85.7% and animal protein 68.6% good, vegetable protein 54.3% vegetables 51.4%, and fruit 97.1% is still lacking. Food safety risks unsafe judging from the types of snacks that are most commonly consumed is *snacks* (91.4%) with the amount of consumption of ≥6 types and frequency of consumption of snack foods as a whole category often (100%). The results showed that the consumption patterns of stunted toddlers in the working area of Puskesmas Ophir and Sukamenanti were less diverse in all types of foodstuffs and the frequency of vegetable, vegetable, and fruit protein was still lacking. Respondents often consume snacks and the most commonly consumed type is snacks. Dexpect respondents and families of respondents can pay more attention and regulate consumption patterns and pay attention to food safety from snack food respondents.

Keywords: Stunting Child, konsumsi pattern,food safety

INTRODUCTION

One of the health indicators that are considered success in the MDGs is the nutritional status of children under five. The period of toddlers is a vulnerable group experiencing malnutrition one of which is stunting (Nasikhah and Margawati 2012, 56). Stunting is a chronic condition characterized by poor child condition or stunted growth of the child liner due to the accumulation of various factors that can be seen based on the z-score of height or length of the body according to age less than -2 standard deviation (SD) (WHO 2010).

Stunting in children usually develops during the first two years of a child's life and is largely caused by nutritional deficiencies and infectious diseases (Masrul 2019). Stunting that occurs to children can result in slowing or failure of the growth of children under five such as height that is not in accordance with their age, decreased productivity as

adults, and for girls can cause a decrease in birth weight for their offspring (Fahulpa 2019).

The prevalence of stunted toddlers in Indonesia according to Riskesdas 2013 amounted to 37.2%, with a percentage of 19.2% of short children and 18.0% very short. In 2018 the stunting rate decreased to 30.8% (Riskesdas 2018). The prevalence of stunting children in West Sumatra Province according to Riskesdas data in 2018 reached 30.6%. One of the cities / regencies with the highest prevalence of *stunting* toddlers in West Sumatra is West Pasaman, which is 32.1%. Stuntingrevalence is above 20%,accordingto WHO is a public health problem (WHO 2012). Data above makes West Pasaman Regency one of the districts that are a priority for handling *stunting*(TNP2K 2017).

Stunting is caused by a variety of interrelated factors including direct and indirect causalfactors. Direct causative factors are inadequate food intake characteristics of toddlers including age, gender, birth weight and birth length and the presence of recurrent infectious diseases. Indirect causal factors are food availability, parenting patterns and the reach and quality of public health services (Damayanti RA, 2016).

One of the factors that affect inadequate food intake is the parenting given by the mother (Fahulpa, 2019). Parenting is an interaction carried out by the mother to her child related to feeding practices that include the way the mother gives and provides her child's food (Istiani et al, 2013). Toddlers in their infancy are a group that is susceptible to changes in food consumption intake. Excess or less food intake than needed will affect its nutritional status (Permaesih et al. 2000).

The pattern of consumption of stunting children according to the type of food is still not diverse, can be known from the lack of variety of menu every day/meal. Mwillbe consumed still tend to eat staple foods, side dishes, and vegetables, while fruit and milk are still very less consumed (Siska Ristiana 2009). Research author Yuli Laraeni et al (2018) stated that children who have inappropriate consumption patterns, more(58.1%) are found in stunting children, while children whose consumption patterns are more commonly found in non-stunting children (64.5%). Freview of food consumption in stunted children averaged 3x / week while in the group of children non stunting the frequency of food consumption averaged 3-4x / week. This shows that the frequency of food consumption in non-stunting children is more than stunting children (Laraeni etal. 2018, 481).

Stunting cases are also motivated by poverty conditions, which cause families to experience limited ability to get access to food in quantity and quality. Food safety and quality are also closely related to the quality of human resources (Agustina, Destriatania, and Rahmiwati 2014). Household food safety is a significant risk factor for stunting in toddlers. Toddlers in food insecure households have a 2.62 times greater risk of stunting compared to baduta in food-safe households (Masrin, Paratmanitya, and Aprilia 2016). Households with food safe categories have family members who have access to food, both in number and quality and this will have an impact on thefulfillment of the nutritional needs of toddlers so as to achieve optimal nutritional status (UNICEF,2009). Toddlers who are in a food safe household condition have a good level of energy and protein adequacy. In contrast to toddlers from food insecure families who experience delayed growth dueto lack of access to food (Hayati AW, 2012).

This study aims to see "The Picture of Food Consumption and Safety Patterns in Stunted Toddlers Aged 06-59 Months in the Working Area of Ophir and Sukamenanti Health Centers of West Pasaman Regency in 2020".

METHODS

Research with *cross-sectional study* design was conducted in the working area of Ophir Health Center and Sukamenanti Health Center of West Pasaman Regency. The

sample was stunted toddlers aged 06-59 months as many as 35 people taken by simple random sampling. The data collected are anthropometric data, dietary data (types and frequencies of basic foodstuffs) and foodsafety data with the Food Frequency *Questionare* (FFQ) method, conducted by researchers and 2 team members. The data obtained is analyzed descriptively.

RESULT AND DISCUSSION

The characteristics of respondents in this study were 97.1% aged 12-47 months and 60% were female. The average respondent's paternal and maternal education was high school graduation, most (68.6%) of father jobs worked as farmers/fishermen/laborers and 80% of mom's jobs were housewives. A total of 77.1% of respondents had short nutritional status and 22.9% had very short nutritional status according to Height by Age. The characteristics of the respondents are fully visible in table 1.

Table 1. Distribution of Frequency characteristics of respondents in the Working Area ofOphir And Sukamenanti Pasaman Barat 2020

Characteristic	Region				Total	
	Ophir		Likes to replace			
	n	%	n	%	n	%
Age						
12 - 47 months	16	45.7	18	51.4	34	97.1
48 - 66 months	1	2.9	0	0.0	1	2.9
Gender						
Man	7	20	7	20	14	40
Woman	10	28.6	11	31.4	21	60
Father's Education						
End of SD	4	11.4	6	17.1	10	28.5
Finish junior high school	6	17.1	3	8.6	9	25.7
High school finish	6	17.1	7	20.0	13	37.1
End of PT	1	2.9	2	5.7	3	8.6
Mother's Education						
Never school	0	0.0	1	2.9	1	2.9
Not finished SD	1	2.9	1	2.9	2	5.7
End of SD	5	14.3	2	5.7	7	20
Finish junior high school	6	17.1	3	8.6	9	25.7
High school finish	3	8.6	8	2.9	11	31.4
End of PT	2	5.7	3	8.6	5	14.3
Father's job						
PNS/Polri/TNI	0	0	1	2.9	1	2.9
Farmer/fisherman/laborer	14	40	10	28.6	24	68.6
Private merchants/employees	3	8.6	7	20	10	28.6
Mother's job						
PNS/Polri/TNI	2	5.7	1	2.9	3	8.6
Private merchants/employees	1	2.9	3	8.6	4	11.4
RT's Mother	14	40	14	40	24	80
Total	**17**	**48.6**	**18**	**51.4**	**35**	**100**

Table 1 explains that respondents in this study as many as 97.1% aged 12- 47 months are female with a percentage of 60%. The average respondent's paternal and maternal education was high school with a father percentage of 37.1% and a mother of 31.4%. Most (68.6%) of respondents' father jobs were farmers/fishermen/laborers and 80% of respondents' mother jobs were housewives.

Nutritional Status

Based on the data analysis, the distribution of the frequency of nutritional status of respondents according to TB / U in the following table:

Table 2. Distribution of Nutritional Status Frequency of Respondents According to TB /U in the Working Area of Puskesmas Ophir and Sukamenanti 2020

Nutritional Status Category	Ophir		Likes to wait		Total	
	n	%	n	%	n	%
Very short	5	14.3	3	8.6	8	22.9
Short	12	34.3	15	42.9	27	77.1
Total	17	48.6	18	51.4	35	100

Table 2 explains that as many as 27 respondents with a percentage of 77.1% have short nutritional status and 8 respondents with a percentage of 22.9% have very short nutritional status according to TB / U.

Consumption Patterns

Consumption pattern is a food arrangement that includes the type and frequency of average foodstuffs per person per day, which are commonly consumed / eaten by the population within a certain period of time. The variables of consumption patterns measured in this study include the type and frequency of food consumption as outlined below:

Table 3. Distribution of Frequency of Respondents Based on Food Types in Ophir health center and Sukamenanti Pasaman Barat in 2020

Food Type Category	Ophir				Likes to wait				Total	
	Diverse		Not diverse		Diverse		Not diverse			
	n	%		%	n			%	n	%
Staple Food	7	41.2	10	58.8	7	38.9	11	61.1	35	
Animal Protein	8	47.1	9	52.9	8	44.4	10	55.6	35	
Vegetable Protein	4	23.5	13	76.5	8	44.4	10	55.6	35	
Vegetable	8	47.1	9	52.9	7	38.9	11	61.1	35	
Fruit	8	47.1	9	52.9	8	44.4	10	55.6	35	

The results of this study showed most types of food consumed by stunted toddlers were less than average and most stunted toddler respondents consumed types of staple foods, animal proteins, vegetable proteins, vegetables, and fruits that were not diverse. The average stunted toddler consumes 5 types of staple foods (rice, bread, noodles, corn, potatoes). Animal protein as many as 5 types (chicken meat, chicken eggs, sea fish, pond fish, dried fish). Vegetable protein as many as 3 types (tofu, tempeh, peanuts). Vegetables as many as 7 types (spinach, kale, carrots, bean sprouts, tomatoes, long beans, mustard green). Fruits as many as 6 types (banana ambon, papaya, sweet orange, watermelon, rambutan, salak). The principle of feeding to infants by the mothers of respondents did not

prioritize the nutritional needs of infants and nutritional content that is important for the growth and development of toddlers. The habit of society in general in the principle of feeding is that children are fed to be full and not fussy.

Feeding to babies is also adapted to what adults eat. Infants and children in general are not a feeding priority. In infancy, i.e. in the golden period, optimal nutritional fulfillment is needed. Parenting eating like this if it lasts a long time will cause *stunting* so that the solution of nutritional problems cannot be eliminated(Loya and Nuryanto 2017). The type of food consumption determines the nutritional status of a child, good quality food if the daily menu provides a nutritious, balanced, and varied menu composition according to his needs (Welasasih, 2012). The pattern of consumption of *stunting* children according to the type of food is still not diverse, it can be known from the lack of variety of menu at every meal. As for the frequency of eating still tends to eat staple foods, side dishes, and vegetables, while fruit is still very less consumed. Data *from* the 2014 Individual Food Consumption Survey (SKMI) also showed the intake of children >6 months tended to be less diverse in consuming food, most consuming only 95% of the cereal group (carbohydrates), very less than the protein, fruit, and vegetable group (Siska Ristiani, 2009).

REFERENCES

Anugraheni, Hana Sofia, and Martha Irene Kartasurya. (2012). "Risk Factors for Stunting Events in Children Aged 12-36 Months in Pati District, Pati Regency" *Journal of Nutrition College* 1 (1): 30–37. https://doi.org/10.14710/jnc.v1i1.725.

Ardiansyah, Ardiansyah. (2016). "Know Well the Benefits of Food Additives" In *Food Indonesia dreamed*,edited by Santoso Umar, Winiati P. Rahayu, Rindit Pambayun, Giyatmi Giyatmi, Ardiansyah Ardiansyah, and Harmayani Harmayani. Indonesian Association of Food Technologists. http://repository.bakrie.ac.id/776/.

Baliwati, Yayuk Firda, Ali Khomsan, and C. MetiDwiriani. (2019). "Introduction to Food And Nutrition."

Damayanti, RA. (2016). "Differences in Nutritional Adequacy Levels and Exclusive BreastfeedingHistory In Stunting And Non-Stunting Toddlers." *Indonesian Nutrition Media*. https://e- journal.unair.ac.id/MGI/article/view/4393.

Hanum, Farida, Ali Khomsan, and Yayat Heryatno. (2014). "Relationship of Nutritional Intake andMaternal Height With Nutritional Status of Toddler Children." *Journal of Nutrition and Food* 9 (1). https://doi.org/10.25182/jgp.2014.9

Lestari, Wanda, Ani Margawati, and Zen Rahfiludin. (2014). "Risk Factors for Stunting in ChildrenAged 6-24 Months in Subulussalam City Dating District of Aceh Province." *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)* 3 (1): 37–45. https://doi.org/10.14710/jgi.3.1.126-134.

Nuryani, Nuryani, and Rahmawati Rahmawati. (2018). "Snack Habits Related to The Nutritional Status of School Children In Gorontalo Regency." *Indonesian Journal of Nutrition 6* (2): 114–22.https://doi.org/10.14710/jgi.6.2.114-122.

Rahmayana. (2014). "Mother's Parenting Relationship With Stunting Incident of Children Aged 24- 59 Months In Posyandu Asoka II Coastal Area of Barombong Village Tamalate District of Makassar City in 2014 | Rahmayana | Al-Sihah: The Public Health Science Journal." 2014, http://journal.uin-alauddin.ac.id/index.php/Al-Sihah/article/view/1965.

Syarifah NP. (2016). "The Influence of Knowledge, Attitudes and Family Support on Hypertensive Diet in Upstream Village of Pancur Batu District in 2016." *Journal of Health.* http://journal.uin- alauddin.ac.id/index.php/kesehatan/article/view/5107.