THE RISK FACTOR OF MOTHER'S NUTRITION KNOWLEDGE LEVEL RELATED TO STUNTING IN PUBLIC HEALTH CENTER REGION CEMPAKA, BANJARBARU CITY

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Abstract: Lack of nutrition for a long time in baduta (children under five) named stunting. Baduta with stunting will experience any long-term growth body/height according to age. There is a tendency prevalence stunting increased in line with the increasing age. One of the causes of stunting among children under five is the knowledge nutrition is low. The aim of the research was to evaluate a level of knowledge nutrition to this incident stunting in Region Cempaka Public Health Center, Banjarbaru City. Research design used cross-sectional with sample size 51 (children 6-23 months years old). This research done in 3 months in Cempaka, Banjarbaru. Level of nutrition knowledge considered their ability to understand all the information related to food that contains nutrients that are beneficial to baduta and impact in accordance with general guidelines balanced nutrition. Data analyzed with test chi square with confidance interval (CI) 95 percents. There was a significant (p<0.05) between level of nutrition knowledge with stunting in children age 6-23 months in Banjarbaru. Mother's with low risk level of nutrition knowledge had higher risk to get a child with stunting. Mother's nutrition knowledge had the role in stunting (children with age 6-23 months) in Cempaka, Banjarbaru.

Keywords: baduta, level of knowledge, stunting nutrition

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1. INTRODUCTION

One of the indicator MDGs Development Goals (MDG) in Indonesia, namely efforts to reduce proportion of citizens who suffer from hunger to half in the last 1990-2015, this was a particular attention that malnutrition among children under five, less than and including the case *stunting* . Targets that are to be achieved by 2015 the ≤ 32 percent[1]. Problem is that Indonesia is now faced by the nation is the low quality of human resources (HR)[2].This condition can start from the problem less protein-energy (concerning) as one of nutritional problems that occur in children baduta (children under two years).

One of the results children are malnourished in a long period of time is *stunting.* Children with *stunting* will experience any long-term growth or high body according to age. the problem happened in developing countries[3]. *Stunting* also associated with cognitive development that have lost in children and adults, in short the school, experienced productivity, and lack of height in adults[4].

The first two-year life is a very sensitive to environmental and this time has been in a very short can be repeated again and not, then the baduta called as "the golden age" or *window of opportunity* or the critical. One of the indicator the critical is when the children were born with BBLR (Lower Birth Weight). National prevalence of BBLR about 11.1 percent, but prevalence are lower than prevalence BBLR South Kalimantan Province of 16.6 percent and Banjarbaru of 14.7 percent [5,6].

The amount BBLR prevalence this can be caused by several risk factors. According to Soekirman and Unicef that nutritional status low secaea directly can be influenced by a stable nutrition intake low and infectious diseases, while factors that are not directly by household levels food availability that is not adequate. Food availability will be fulfilled, if purchasing power and knowledge of the community has the ability to buy and choose food that meet the balanced nutrition requirement. Socio-economic community merupakam factors that determine also played a role activity purchasing power family. One of the socio-economic parameters to determine family is level of education, among other levels of education a mother. Role of the mother is very much needed from buy to serving foods. If education and knowledge mother low as a result, he is not able to choose to food for the family meet the balanced nutrition requirement [7,8].

This was the same tone with the result or Leroy in Mexico that education is very important in connection with the knowledge the nourishment

nutrition and family especially children, because my mother with low education among others, will be difficult to absorb nutrition information so that children can become a risk, *stunting* [9,10].

National data shows that prevalence *stunting* in South Kalimantan of 39.4 percent and prevalence is higher than *stunting* national prevalence of 35.6 percent[5]. Relying on the same Banjarbaru, data *stunting* largest in Cempaka Putih sub-district of 23.69 percent and 17.7 percent less than a number. This condition is very concerning, considering Banjarbaru level of education in general have upper secondary education community[6]. Based on these issues, so we need to know the relation study level of knowledge nutrition to this incident *stunting* in children same *window of opportunity* Community Health Center in the region Cempaka Putih , Banjarbaru .

This research aims to describe the relationship of the nutrition knowledge level to the *stunting* incident of children in *window of opportunity* at Community Health Center the region Cempaka Putih , Banjarbaru.

2. METHODS

This research used cross sectional design . This research carried out in the Community Health Center Cempaka Banjarbaru with time or during the first three months in 2013. The Election area clinic based purposive since the incident stunting region is quite high. The population is mothers who have baduta in the Community Health Center. Samples is the couple mothers and children age 6-23 months and only in the Community Health Center. The criteria inclusion samples is the mother willing to sign informed consent, children healthy, and did not have a flawed congenital anomalies.

Mother Data collected among other levels of education mother and work your mother, levels of education work of their warlord fathers, his father and mother and father was the body, the income families and knowledge, nutrition breast feeding and status. In addition,, data children who were collected between another long body, age, gender and status BBLR children. Children are categorized as nutritional status of the children stunting if it is very short (z score <-3.0 SD); and nutritional status debt (≥- 3 SD s. d <-2 SD) and do not experience stunting , if the child nutrition serves as a normal (≥-2, SD) by using raw material World Health Organization reference anthropometric 2006. Category education based on compulsory namely category low levels of education if junior high school students go down, and if they senior high schools over. Socio-economic family category Idr < low

when 1,126,000,- and was ≥ Rp 1,126,000,- (according to Regional Minimum/month regency/city Banjarbaru South Kalimantan Province.

Was the father/mother is a long-term referred as the body of those old based measurements than the body according to age who are categorized as to -2 SD (< 160 cm) and ≥ -2 SD (≥160 cm) in his father and -2 SD (< 150 cm) and ≥ -2 SD (≥ 150 cm) in the mother. Big family is many family members who are categorized as a great, if the number of family members ≥ 3 people and small if the number of family members < 3 people, the father/mother is a person's position or the position in the group society that can be seen from its activities are day-to-day and produce the revenue categorized to work, not doing their own work level of knowledge nutrition considered their ability to understand all the information related to food that contains nutrients that are beneficial to baduta and impact in accordance with general guidelines balanced nutrition, categorized knowledge nutrition than when the parents in answering the question as the score 76-100 and low scores ≤ 75. Status breast feeding judging from information that was delivered by a criteria respondents giving their milk exclusive if their generosity or during 0-6 months, and vice versa. While status according to information from BBLR known respondents and/or KMS, with the criteria, BBLR if baduta born < 2,500 grams and normal if ≥ 2,500 gram.

Instruments that are used to find out data such as mother's level of education mother and work, the education level mother's father and the father, was the mother and father, the socio-economic status breast feeding family, and the status exclusive BBLR and big family using form stuffing identity respondents. Knowledge nutrition is measured by using questionnaires that has been tested the validity and reliability. Data Collection anthropometric long body is measured by skilled use length board and was the father/mother measured using microtoise with precision 0.1 cm. Age and gender children known with an interview. Data analysis will be done through the analysis of 3 phases univariabel using table frequency distribution and the percentage, and analysis of bivariabel using tests chi square (X^2) on high significance 95 percent.

3. RESULTS AND DISCUSSION

Table 1 shows that the characteristics family baduta most have low education's father and mother each of 82.4 percent and 68.6 percent. Mothers who have level of knowledge of nutrition category low social strata 78.4 per cent economy most found in money Idr < 1,126,000,- of 88.2 percent with the status jobs father most work some 98.1 percent. Was the father in general

most category was ≥-2, SD (>160 cm) of 88.2 percent, was the mother category low <-2 SD (≤150 cm) some 66.7 percent with most respondents had a member of the family < 3 people of 98.1 percent.

Table 2 shows that most baduta, *stunting* found in his father and mother who has a low level of education each of 84.6 percent. With high school is low, the socio-economic this family many of which are accessible only able to achieve money Idr < 1,126,000,.is 92.3 percent in some baduta, *stunting* and of 84.0 percent in baduta that do not experience *stunting.* With the income families shows that most socio-economic families are still under regional minimum especially the region Banjarbaru. In addition, low levels of education mothers did not direct proportion to level of knowledge and the status *stunting nutrition* that is faced by baduta, this was known from the result of the research is that most parents who have level of knowledge nutrition low found in baduta *stunting,* that is equal to 92.3 percent.

His father who have height category ≥ -2 SD, certainly not have a child's body was the same category, it can be seen from this research that most baduta, *stunting* as his father's body was category was (≥ -2 SD) that is equal to 24 people (92.3 percent). While mothers who have height category -2 SD, most of them have baduta, *stunting* that some 19 people (73.1 percent).

Table 3 shows that most baduta that stunting 's father and was the category ≥-2, SD of 24 people (92.2 percent) and baduta stunting 's mother's body was category <-2 SD as many as 19 people (73.1 percent). Based on tests statistics, the p value was 0.419 (than the father) and p value was 0.488 (than the mother); this shows that there was a relationship that means a relationship between was the father and mother with genesis stunting among children under five same window of opportunity .

In addition, most toddlers, stunting 's mother's level of knowledge nutrition category low of 24 people (92.3 percent). Based on statistics, the p value is 0 ,018; this shows that there is a means of level of knowledge nutrition to this incident stunting among children under five same window of opportunity in the Region of Public Health Center Cempaka, Banjarbaru due to high knowledge nutrition (p value = 0.018). The value OR analysis result is 6.75, it means that mother who has a low level of knowledge nutrition has a chance to 6.75 times higher than have children age 6-23 months, stunting.

Knowledge nutrition has a relationship that means with genesis stunting (p<0.05) (see Table 3). these research results in line with the research in the Cirebon municipality Hizni that shows that mother who has a low risk

education have children stunted 2.22 times higher than that mother highly educated. Level of education, especially high education level of health mother affected. Levels of education mother will be able to define knowledge, attitudes, and skills in determining food family. Role of the mother is usually at the most influential toward the formation eating habits, because ibulah are preparing food began to set menu, shopping, cooking, prepare food, and distributing food[7].

In addition,, i bu that have education ≥ junior high school is likely to be more good in the pattern of caring children and is better in the election of food. This is because my mother and ≥ junior high school education have the bigger opportunity in access to information about the status child's health and nutrition that knowledge increased. Then, the information was practiced in the child care that will induce the child's health and nutrition status a better[11].

Nutrition knowledge will have an effect on to food production and spending money for food. Food Stuff will be affected by food production and spending money for food. Knowledge is the number information that a person remote sensing process as a result of a certain object to the way considering or know information that is the object, is part of behaviors that included in cognitive domain first level[12].

Nutrition is Scientific knowledge about the relationship between food consumption with health of the body. So knowledge nutrition is the knowledge regarding the relations between mother food consumption with health of the body. Mother with the knowledge nourished is expected to choose food intake nutritional value good and balanced for himself, the fetus and the family. Good nutrition knowledge can help a person to learn how to keep, processing and use food ingredients that qualified to be consumed knowledge that cause less nutritious food ingredients that are not consumed optimally. The Election eating pattern food ingredients and that one just play a role in the development of stunting[13].

Not by the difference between the significance that means was the father and mother in children who suffered stunting and not stunting . According to Unicef that causes directly lack of nutrients consumed food is a lack and infectious diseases that may experience by children. In addition, the household low food security pattern of caring, children who do not enough, the lack of environmental sanitation, and health services that is not adequate is a subject matter in malnourished children[8].

Different with the result or Dangour in Kazakhastan proved that there was a means of was the mother and children who had the age height 6 to 59 months[14]. According to her that was the parents associated with the growth physical children. My Mother's debt is one of the factors that related to this incident stunting[14,15]. Besides that, according to Masida Hanum that mothers who have height debt (TB<150 cm) will increase genesis stunting in children, 16 or is not examine these factors that influence was the mother and father, so that they could not be distinguished from what was the father and the mother's genetic factors influence the susceptibility or malnutrition[16].

Research done by a positive Arnelia find the relationship between levels of education with the knowledge mother's health and nutrition family[17]. This is supported by this research, that although it did not show the relationship between level of knowledge that means nutrition to this incident stunting , however, most of 24 people (92.3%) baduta that experienced stunting 's mother's level of knowledge nutrition is low.

According to Dahlia that knowledge nutrition plays a role in the determination growth and development which could be seen nutritional status of the children of 18 this knowledge, in addition, from formal education also can be obtained through non-formal such as electronic media, as well as print. Nutrition knowlegde education from will cause a person to draw up a menu that is to be consumed. More and more knowledge nutrition someone, then he will be more calculating type and amount of food that he got to be consumed[18,19].

4. CONCLUSIONS AND SUGGESTION

It can be concluded that there is a level of knowledge nutrition to this incident stunting . In addition, carries a relationship between was the father, height, status breast feeding mothers exclusive and status BBLR baduta with stunting in children age 6-23 months in , Banjarbaru. Short-sighted approach effort is need to solve the problem, so that parents have the knowledge nourished related to food menu balanced nutrition and health benefits both, so that children 6-23 months to catch up blossoms with good. while long-term p endekatan that can be done to break off a chain *stunting* is to increase formal education candidate mother, because education is practical ways so that parents more easily absorb health information.

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APPENDIX

Table 1.
Distribution-Frequencies of Family Charasteristics of Baduta

The characteristics family	n	Percent
Father (Level of Education)	42	82.4
low (junior high school students to below)	9	17.6
high (senior high school to top)		
Mother (Levels of Education)	35	68.6
low (junior high school students to below)	16	31.4
high (senior high school to top)		
Socio-Economic family (according to income)	45	88.2
<Rp 1,126,000,-	6	11.8
≥Rp 1,126,000,-		
Height of father	6	11.8
< - 2 SD (≤160 cm)	45	88.2
≥ -2 SD (>160 cm)		
Height of mother	34	66.7
<- 2 SD (≤150 cm)	17	33.3
≥-2 SD (>150 cm)		
Amount of Family member	1	1.9
Big (≥3 persons)	50	98.1
Small (<3 persons)		
Father's occupation status	1	1.9
Not work	50	98.1
Work		
Mother's occupation	48	5.9
Not work	3	94.1
Work		
Mother's level of nutrition knowledge	40	78.4
Low ≤ (75)	11	21.6
High (76-100)		