Study of Nutrition Food Access to Family With Stunting Toddlers in Stunting Countermeasures System in Lumajang Indonesia

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ABSTRACT

Background: The ability to access food according to needs is influenced by educational and knowledge factors, socio-cultural, geography, and economic factors. Overcoming stunting not only overcomes the problem of malnutrition but also must pay attention to the problem of affordability or access to nutritious food.

Objectives: To analyze access to nutritious food in the prevention system stunting in Lumajang Regency.

Methods: Qualitative research through a Case Study approach conducted in two villages in Lumajang Regency. The research informants consisted of key informants namely the Head of the Puskesmas, the main informants were mother with toddler Stunting and additional informants namely stakeholders related to stunting. Data processing and analysis using the Thematic Content Analysis method.

Results: Access to nutritious food that is less than optimal is caused by economic factors that are lacking, lack of knowledge of mothers of toddlers, malnutrition in toddlers, children's eating arrangements are not meeting nutritional adequacy, children's consumption in a day is lacking, families do not take action to overcome children's nutritional problems and poor sanitation and environmental health.

Conclusions: Stunting in Lumajang Regency is the cause of which is access to nutritious food that is less than optimal so that it requires attention and cooperation from all parties to overcome it. The provision of education in the form of counseling needs to be carried out with multimethods and multi-media as well as integrated countermeasurements from all existing resources will accelerate the reduction of stunting cases in Lumajang Regency.

LATAR BELAKANG

Kemampuan untuk mengakses pangan yang sesuai dengan kebutuhan dipengaruhi oleh faktor pendidikan dan pengetahuan, sosial budaya, geografi dan faktor ekonomi. Penanggulangan stunting bukan hanya mengatasi masalah kekurangan asupan gizi saja akan tetapi juga harus memperhatikan masalah keterjangkauan atau akses mendapatkan makanan bergizi.

Tujuan: Menganalisis akses makanan bergizi dalam penanggulangan stunting di Kabupaten Lumajang.

Metode: Penelitian kualitatif melalui pendekatan Case Study (studi kasus) yang dilakukan di dua desa yang ada di Kabupaten Lumajang. Informan penelitian terdiri dari Informan kunci yaitu Kepala Puskesmas, Informan utama adalah Ibu Balita Stunting dan Informan tambahan yaitu stakeholder terkait stunting. Pengolahan dan analisis data menggunakan metode Analisis Isi Tema.

Hasil: Akses makanan bergizi yang kurang optimal disebabkan karena faktor ekonomi yang kurang, kurangnya pengetahuan ibu balita, kurang gizi pada balita, pengaturan makan anak kurang memenuhi kecukupan gizi, konsumsi anak dalam sehari kurang, keluarga tidak melakukan tindakan untuk mengatasi masalah gizi anak serta sanitasi dan kesehatan lingkungan yang kurang.

Kesimpulan: Stunting di Kabupaten Lumajang yang menjadi penyebab diantaranya adalah akses makanan bergizi yang kurang optimal sehingga memerlukan perhatian dan kerja sama dari semua pihak untuk menanggulanginya. Pemberian edukasi dalam bentuk penyuluhan perlu dilakukan dengan multi metode dan multimedia serta penanganan yang terintegrasi dari semua sumberdaya yang ada akan mempercepat dalam penurunan kasus stunting di Kabupaten Lumajang.

Kata kunci: Stunting, Akses, Makanan bergizi, Sistem penanggulangan
INTRODUCTION

One of the countries that has a triple of nutritional problems consisting of stunting, wasting and overweight is Indonesia. Every country in the world has a nutritional-problems that are single burden, double burden and triple burden. Based on the data from The Global Nutrition Report 2018 it is known that the condition of children under five years old in the world is 22.2% (150.8 million) were stunted, 7.5% (50.5 million) were wasted, and 5.6% (38.3 million) were overweight. While in Indonesia the nutritional status of children under five years old 30.8% were stunted, 10.2% were wasted, and 8.0% were overweight. Indonesia belongs to five country with the highest number of stunting children.

Access to nutritious food for children under five years old is one of the factors that makes children become insufficient for their nutritional needs. Currently access to nutritious food is an interesting issue because based on several studies it is found that the cause of stunting is due to lack of access to nutritious food. Many factors can influence the occurrence of nutritional problems, one of which is the problem of adequate nutrition for children. Current conditions that still occur in Indonesia are where Indonesian food consumption for meat, fruit and vegetable food is still low while for grain food is still very high with a distribution of 25% of grains, 21.74% of fruits and vegetables, 15.49% of meat and 9.81% of beans. Based on Riskesdas data 2018 also showed that 95.5% of Indonesia’s population lacks consumption of fruit and vegetables.

The ability to access food according to needs is influenced by factors of education and knowledge, socioculture, geography and economic factors so that it cannot afford food that is in accordance with needs, besides that it also does not know nutritious food that can be affordable with its capabilities. These four factors are very supportive of the ease of getting access to nutritious food.

Prevention Stunting not only addresses the problem of nutrient deficiency, but also must pay attention to the problem of affordability or access to nutritious food, so that Indonesia has a national strategy in accelerating the prevention of stunting by establishing several policies and programs such as a national movement to accelerate nutrition improvement within the framework of 1000 HPK (Day First Life) and established through presidential regulation number 42 of 2013, prevention of stunting with integrated interventions that include specific interventions and sensitive interventions and also decides the five pillars of prevention stunting consisting of commitment and vision of leadership, national campaigns and communication of behavior change, convergence, coordination and central, regional and village program consolidation, nutrition and food security and monitoring and evaluation.

Stunting has now become national priority contained in the Sustainable Development Goals (TPB) document and also the national planning document, with strategies being implemented to improve nutrition surveillance, increase access and quality of health and nutrition services, increase promotion of community behavior about nutrition, increase the role the community in improving nutrition and strengthening the role of cross sectors in the implementation of sensitive interventions.

This is very relevant for the problem of affordability in the fulfillment or purchase of nutritious food that cannot be solved by the health element alone but requires the role of elements outside health and also requires policies and regulations related to implementation in the sensitive interventions referred to above. The purpose of this research is to analyze access to nutritious food in the prevention system stunting in Lumajang Regency.

METHODS

This study was a qualitative method with a case study approach (Case Study) which aims to analyze more deeply about access to nutritious food in the prevention system stunting in Lumajang Regency. The data collection technique was carried out through the in-depth interview. The key informants were the head of the pksesmas and the main informant were the mother of toddlers stunting and FGD (Focus Group Discussion) on additional informants were stakeholders related to stunting. The informants in this study consisted of 2 key informants, 4 main informants and 29 additional informants. Additional informants in this study consisted of the Village Head, Lurah, Chairperson of the TP-PK Village, PKH Assistance, Posyandu Cadre, Village Midwife, Village Nurse, Aisyiyah Chair, Muslimat Chair, Babinsa, Chief of People’s Welfare, Nutritionist, Village Apparatus and Modin. Data collection was carried out using in-depth interview techniques using interview guidelines and the results were recorded with a voice recorder which was then copied in the interview transcript.

This study will be presented in an exploratory analysis by observation and in-depth interviews (Indepth Interview), document review and FGD (Focus Group Discussion) to explore deeper into the access nutritious food as the cause of stunting in tackling the problem of stunting in Lumajang. Data processing and analysis in this study uses the Thematic Content Analysis (content analysis) method, which is data collection, data reduction, data verification and is presented in the form of explorative analysis. Triangulation used in this study is to use source triangulation which consists of key informants, key informants and additional informants and technical triangulation through Indepth Interview and Focus Group Discussion. Research ethics using Informed Consent, Anonymity and Ethical Clearance from the Faculty of Dentistry, University of Jember No. 533 / UN25.8 / KEPK / DL / 2019.

RESULTS AND DISCUSSION

Results of the analysis of access to nutritious food in this study obtained results, among others:

A Lack of Economy Factors

This lack of economic factors causes a lack of access to nutritious food for toddlers. Economic factors that are lacking will make access to nutritious food difficult to obtain, with the ability to possess ultimately provide food according to ability, this causes the child to
experience nutritional problems, in addition to the inability of the mother or family to buy enough nutritious food but also the inability of the family in buying food preparations at home that can be accessed at any time for the fulfillment of children's nutrition. As stated by the informant in the interview excerpt below.

"... if you work with my sister ... digging up the grave, swollen with low income, you have to pay a lot of money. I work it ... digging the grave, if the income is uncertain because there is no salary ... if you eat it sometimes you are still confused, still lending and borrowing with neighbors. rice and vegetables if there is more money to buy tempeh or eggs for your child " (IU4, 67 years).

These economic problems make the family helpless to respond to the advice of officers or cadres when counseling, it is not because they do not want to but because the family not being able to fulfill it. The study by Setiawan et al also supports on factors economics a cause stunting the research results suggest that the level of family income had a significant association with the incidence of stunting 5. In addition, the family also do not have land that can be used to meet family's nutritional needs, for example, to grow vegetables such as spinach, beans, mustard greens etc. As stated informed by the informant in the following interview excerpt.

"...No, we don't have a yard. Yes, only this house is occupied by all, we are here all seven people ... he he a lot huh. yes, this house only has no yard for planting or raising livestock. So yes ... you have to buy everything, even if you don't buy vegetableselse... what... " (IU3, 32 years)

This study is in line with previous research by Yulestari known that the results of statistical tests show that there is a significant relationship between economic status with events stunting 6. Income is one indicator that determines the economic status, the household wealth index is a risk factor stunting 7. Meanwhile, based on data from the Joint Child Malnutrition Estimates in 2018, countries with middle to upper income can reduce stunting up to 64%, while in lower middle countries only reduce around 24% from 2000 to 2017 8.

Poor Toddler’s Mother Knowledge

Knowledge is an indirect cause of cases stunting, referring to the framework that causes problems stunting in Indonesia 9. Factors that influence knowledge are age, education, and experience. The more age, the level of maturity and strength of a person will be more mature in thinking, learning, and working so that knowledge will increase. As stated by the informant in the following interview excerpt:

"...... The problem of access to nutrition is because of economic factors so that the family cannot afford to buy food to meet the nutritional adequacy of their children, well besides economic factors are knowledge factors, with this minimal knowledge families are unable to choose to buy food that is high nutritional content but cheap and easy to get. So the knowledge factor is very important so that mothers are able to choose food ingredients for their children that suit their needs ...... " (IK1, 55 Years).

Nutrition knowledge is often influenced by the level of education that has an impact on the role in the preparation of family meals, as well as child care and care. In this research, knowledge factor is caused by the lack of education (elementary school education) so that with less education it will be difficult to receive information properly. There was a statistically significant relationship between the level of mother’s knowledge about toddler nutrition and the nutritional status of toddlers 9.

This study also showed that lack of knowledge would have an impact on parents feeding their children not according to their needs, as stated by the informants in the following interview excerpt.

"...If you eat it just once a day, the child doesn’t want to eat it (mother shows the food), this is what mom eat 1 time, 2 tablespoons, yes, rice and vegetables sometimes with tempe. But what is often the same as vegetables ... “ (IU1, 25 years)

Counseling must be given to parents of toddlers to be able to increase parental knowledge about child nutrition, counseling in the sense of general social science studies the systems and processes of change in individuals and society so that changes can be realized better as expected. The results of this research the same with the research by Azrimaialda et al (2021) that showed parenting, especially eating patterns and stunting status were related to the development of children aged 12-36 months with stunting 10.

Lack of Nutritional Content in Toddler Food

Nutrient intake in infants is very important in supporting growth in accordance with the growth chart so that does not occur growth faltering which can cause stunting. This was stated by the informant in the following FGD.

"... stunting is a condition of failure to thrive in children under five due to chronic malnutrition in particular in the first 1000 days of life ... the cause is due to malnutrition for quite a long time, starting from the mother who is malnourished until the child is born eat less nutrients “ (IT21, 43 years).

The standard nutritional needs of children are in accordance with Permenkes number 75 concerning the Recommended Nutrition Adequacy Rates for the Indonesian people, where the recommended nutrients are macro nutrients and micro nutrients. Macro nutrients are chemicals that are indispensable in growth and development, and to carry out normal bodily functions. Macronutrients, or macro nutrients, play a large role in shaping the body's energy and throughout the metabolic process. While micronutrients are also useful for maintaining bodily functions and growth, in addition they tend to play a role in preventing disease 11. There is a
significant relationship between energy intake and nutritional status (TB / U) 12. Besides that it also shows that consumption of macro nutrients such as protein, fat, and carbohydrate is related to nutritional status (TB / U), the less consumption of protein the 1.6 times greater risk for stunting 13.

Macro and micro nutritional needs are equally important for growth and development and carry out normal bodily functions. There needs to be education about the nutritional needs of children according to their age stages intensively so that parents are able to choose good food ingredients for their children.

**Children’s Eating Arrangements Do Not Meet The Nutritional Adequacy Of Toddlers**

In a day the child needs to eat 3 times a day, 1-2 times a snacks and ASI or milk 2-3 times. Do not make it a habit of children *snacking* because this will cause children not to feel hungry when meal time arrives. Meeting the nutritional needs of children every day must pay attention to the type, amount and schedule of eating which is often known as 3 J. Eating schedule must be arranged in such a way so that the child's nutritional needs are fulfilled and divided in the right time so as not to make the child’s stomach empty too long.

In this study it was found that children’s food did not meet the needs, this was stated by the informant in the interview excerpt below.

"... *If you eat it just once a day, the child doesn’t want to eat it (mother shows the food)*, this is mom eat 1 time, 2 tablespoons, yes, rice and vegetables sometimes with tempe. But often just the same vegetables. yes, sometimes rice tok [only] ..."(IU1, 25 years)

This research is supported by research from Nadimin which shows that the average nutrient intake of children under five *stunting* does not meet the RDA. This study also shows that based on observations on toddlers' families *stunting*, it is found that the consumption of children in a day is lacking, among other things the food consumed daily does not meet nutritional adequacy, provides children with inappropriate amounts and feeds children with frequency 1-2 times a day and not interspersed with healthy snacks between meals. There needs to be counselling to toddler and families about eating arrangements for children according to their age 14.

**Consumption Of Children In A Day Less**

Children under five years old in a day consume food with less nutritional content then if done every day and for a long time will cause the child to experience nutrient deficiencies. As stated by the informant in the following interview excerpt.

"... *gnawing sekul, sometimes ulame gnawing eggs hehe ... the main wonten do not gnaw do not kelor niku*. *Mboten anu, mboten soroh nedhe*. [Yes, rice, sometimes the side dish is an egg hehe ... basically there is a vegetable, yes, the moringa vegetable. No, it’s not hard to eat] ..."(IU4, 67 yr).

The results of research on the consumption of children in a day less are also supported by Mayangsari *et al* with the analysis shows that there is a significant difference between protein intake in *stunting* and non-*stunting children* 15. Consumption of children in a day must meet the nutritional adequacy of the main is protein, because children are still in fast growth. Protein functions to build, maintain and repair body tissues, besides that protein also has an important role in growth. The results of this study are in line with research conducted by Vaozia and Nuryanto with the results of the study showing that protein intake is a risk factor for *stunting* in children aged 1-3 years 16. Less consumption of children in one day in this study is due to lack of knowledge of mothers and also economic factors that are lacking, so in sensitive interventions it is important to do that is in the form of giving PMT, cash food assistance to meet the protein needs of toddlers, vegetable seed assistance to be planted in the yard for consumption by families as designed by TNP2K on the Role of Regions in the Convergence of Prevention of Stunting.

**The Family Does Not Take Action To Overcome The Child’s Nutritional Problems**

Next that makes access to food can not be obtained is the family does not take action to address child nutrition problems. The role of the family is very important in meeting the nutritional needs of toddlers. When children experience problems in fulfilling nutrition, especially nutritional problems, the family must also make an effort so that the fulfillment of nutrition for toddlers can be met and nutritional problems faced can be resolved. Families who do not make efforts to overcome the nutritional problem or the problem of meeting the nutritional needs of children, it will make the child can not be fulfilled his nutritional needs and the child will experience nutritional problems that are lack of nutrition, poor nutrition and *stunting*. As stated by the informants in the following interview.

"... *yes, there isn’t, anyway, he likes to hang around, playing [yes no, he just likes to eat, eating] all this time, he's never been checked, right, usually, a little kid doesn’t want to eat, sometimes he also wants to eat. But I used to give honey, ma’am, said honey is good for children so they can be healthy ..."(IU2, 29 years).

Parental knowledge about nutrition and child nutrition problems and the impact caused by these conditions have an important role in the efforts of parents to overcome the problems faced by their children. Economic factors also have an influence on family efforts in overcoming their children’s problems, due to the lack of economic ability of families to meet education about nutrition. Children with *stunting* need adequate stimulation and nutrition so that their motor development is optimal. One form is the baby must get the opportunity to interact with specific figures and are constantly on a regular basis, and be able to meet the needs of children quickly and accurately 17.

This is corroborated by research conducted by Hati and Pratiwi showing that there is an effect of providing education on the provision of stimulation of...
child growth and development of children with stunting. Parental knowledge has an influence on the efforts made in overcoming the child’s nutritional problems. There is a need for education to improve family knowledge, interventions from all sectors need to be supported in support of efforts to be made by families and the need for cadres to support stunting 18.

Inadequate Sanitation and Environmental Health

As with other malnutrition problems, that direct stunting is caused by a lack of adequate nutrition and the threat of recurrent infectious diseases and these two things affect each other. Environmental sanitation can be a supporting factor for the development of infectious diseases. Poor sanitation and environmental health have a negative impact on people living in the environment, including children. Because, they can experience environmental enteropathy (EE), so it is difficult to absorb nutrients. The results of observations that are still lacking in this case are more on the adequacy of ventilation, lack of lighting and also environmental cleanliness, wherein the observation found 75% of houses are dirty, cramped, no incoming sunlight and residents of many people and PHBS habits are lacking. As stated by the following informant.

"... if there has been a lot of mention about the causes of stunting, there is something that has not been mentioned, namely sanitation, as we know that in this darungan village for latrines there are still those who do not have ODF, yet people here if they defecate in the river. I have been reminded often but still, and one more thing about stunting is due to lack of environmental cleanliness, environmental cleanliness is very important because dirty environment makes children often sick ... "[IT20, 48 Years].

The results of this study indicate that children under five families stunting have poor sanitation and environmental health. Environmental sanitation and hygiene factors have a great influence on the health of pregnant women and child development, because children under two years are susceptible to various infections and diseases. Frequent and continuous exposure to human and animal feces can cause chronic bacterial infections. There is a statistically significant relationship between families with protected water sources, protected drinking water sources, and distance to pollution sources with events stunting at Baduta and there is a significant relationship between defecation facilities, and the type of latrine used by family with stunting on under two years old children 19. The results of this study are also supported by Hafid, et al which states that the average height of the SBABS group is higher than the non SBABS group 20.

The logistic framework of integrated intervention by the Ministry of PPN / Bappenas states that the possible cause of cases stunting is health and environmental health services so sensitive interventions that must be carried out are STBM (Community Based Total Sanitation) issues so that environmental health problems can be overcome and diseases caused by a bad environment can be avoided, especially diarrhea because the condition is often sick will make more energy used for the process of fighting the disease so that children easily experience nutritional disorders and if in a long time will become stunted 2. The achievement of environmental pillars could encourage increased achievement of social and economic pillars so it might directly and indirectly decrease the prevalence of undernutrition with a total of 5.09% 21.

CONCLUSION

Access to nutritious food is less than optimal, this is due to a lack of economic factors, lack of knowledge of children under five, lack of nutrition in infants (macro and micro malnutrition), eating arrangements of children not meeting their needs, consumption of children in a day less, the family did not take actions to address child nutrition problems as well as poor sanitation and environmental health. In the context of education and promotion, it is necessary to provide multi-method counseling such as lectures, local arts, learning classes, and multi-media such as factor cards, snakes and ladders and ladders demo emo. Need help and assistance to families with toddlers stunting. Integrated Prevention of all available resources will accelerate the decrease in cases of stunting in Lumajang.

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CONFLICT OF INTEREST

There is no conflict of interest of this research.

REFERENCES