



Determinants of Failure to Grow on Toddlers (Stunting)

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ABSTRACT

The incidence of stunting in infants illustrates the problems felt in each country in 2017 of 22,2% (World Health Organization, 2018), the prevalence of stunting infants in Indonesia in 2017, the prevalence of stunting has differed to 29,6% (Ministry of Health RI, 2018), Lampung is located in the 10th place as a province with a very large type of stunting (40%) and Central Lampung district. Lampung is currently getting information on stunting babies which were found to be 40 babies (16,2%). The purpose of this study was to identify the Determinants of Developmental Failure (Edit) in Children in Tanjung Rejo Village, Central Lampung Regency in 2021. This type of quantitative research with a Case control approach, The size of the illustration can be determined by the Lemeshow formula, so that the sample size is 40 toddlers for the case group and 40 toddlers for the control group. The sampling technique is simple random sampling. Bivariate analysis uses the Chi Square test. and Multivariate Analysis with Logistic Regression Test. The results of the study obtained a p-value of 0.000 which means that it can be said that there is an influence between birth length and the incidence of stunting, a p-value of 0.117 with an OR of 1.922 (95% CI 0.118-1.991) means that it can be said that birth weight has no relationship with the incidence of stunting, p-value 0.000 means that it can be said that there is a relationship between exclusive breastfeeding and stunting, p-value 0.000 can be said that there is an effect between breastfeeding for up to 2 years and the incidence of stunting, p-value 0.001 means that it can be said that there is an effect between status and stunting incidence, p-value 0.001 means that it can be said that there is a relationship between the beginning and the incidence of stunting, p-value 0.000 means that it can be said that there is a relationship between the number of children and the incidence of stunting, p-value 0.000 means that there is a relationship between economic status and the incidence of stunting and The aspect with a very large risk of stunting is the economy (OR: 7,883). It should be paid attention to in terms of economic access and meeting the needs that are moderate or less for families who have babies which will affect the increase in food consumption for family members.

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Determinan Gagal Tumbuh Pada Anak (Stunting)

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ABSTRAK

Peristiwa stunting pada bayi menggambarkan permasalahan yang dirasakan nyaris di tiap negeri Tahun 2017 sebesar 22, 2% (World Health Organization, 2018), Prevalensi bayi stunting di Indonesia tahun 2017, prevalensi stunting sudah hadapi penyusutan jadi 29, 6% (Kemenkes RI, 2018), Lampung terletak pada urutan ke- 10 sebagai provinsi dengan jenis stunting sangat besar (40%) serta kabupaten Lampung Tengah Bersumber pada hasil survei pendahuluan yang penulis jalani di Desa Tanjung Rejo Kab. Lampung tengah diperoleh informasi bayi stunting berjumlah 40 bayi (16,2%), Tujuan riset merupakan buat mengenali Determinan Kandas

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Berkembang (Sunting) Pada Anak di Desa Tanjung Rejo Kabupaten Lampung Tengah Tahun 2021. Tipe riset kuantitatif dengan memakai pendekatan Case control, Besarnya ilustrasi bisa ditetapkan dengan rumus Lemeshow, hingga jumlah sampelnya 40 Balita untuk kelompok kasus serta 40 balita untuk kelompok kontrol, Teknik sampling secara sederhana random sampling, Analisa Bivariat memakai uji Chi Square. serta Analisis Multivariat dengan Uji Regresi Logistik, Hasil riset dikeperoleh hasil p-value 0,000 berarti dapat disimpulkan bahwa ada pengaruh antara panjang badan lahir dengan kejadian stunting didapatkan p-value 0,117 dengan OR 1,922 (95% CI 0.118- 1.991) berarti dapat disimpulkan bahwa berat badan lahir tidak ada hubungan dengan kejadian stunting. p-value 0,000 berarti dapat disimpulkan bahwa ada hubungan antara pemberian ASI eksklusif dengan kejadian stunting, p-value 0,000 berarti dapat disimpulkan bahwa ada pengaruh antara pemberian ASI sampai 2 tahun dengan kejadian stunting, p-value 0,001 berarti dapat disimpulkan bahwa ada pengaruh antara status imunisasi dengan kejadian stunting, p-value 0,001 berarti dapat disimpulkan bahwa ada hubungan antara jarak kelahiran dengan kejadian stunting, p-value 0,000 berarti dapat disimpulkan bahwa ada hubungan antara jumlah anak dengan kejadian stunting, p-value 0,000 berarti dapat disimpulkan bahwa ada hubungan antara status ekonomi dengan kejadian stunting serta Aspek dengan besar resiko sangat besar terhadap peristiwa stunting merupakan Ekonomi (OR: 7.883), Hendaknya jadi atensi dari segi akses ekonomi serta pemenuhan kebutuhan yang lumayan ataupun kurang untuk keluarga yang mempunyai bayi yang nantinya hendak mempengaruhi terhadap meningkatnya mutu mengkonsumsi pangan anggota keluarga.

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INTRODUCTION

The problem of stunting (short children) is one of the nutritional problems undergo by the world, especially in poor countries and stunting is growing as a health problem because it is associated with the risk of developing illness and death, sub-optimal brain growth, resulting in delayed motor growth and retarded mental development. This matter is a serious threat to the existence of children as the next generation of a nation. Short children are a widely accepted predictor of poor quality of human energy sources, which in turn lowers the productive skills of a nation in the future (UNICEF, 2013).

Stunting is one of the nutritional problems that has an adverse effect on the quality of life of children in reaching the point of maximum development and development according to their genetic abilities. Stunting can limit the development process in babies. Childhood stunting or short stature in childhood is the result of chronic malnutrition or developmental failure in the past and is used as a long-term marker for malnutrition in children (Ministry of Health, 2015).

Stunting in infants is a problem that is felt in almost every country. The trend of stunting babies in the World in 2000 was 32.6%, on the contrary in 2017 it was 22.2% (World Health Organization, 2018). Mainland Asia sourced from information in 2017 in the Joint Child Malnutrition Estimates, which contributed 55% of the proportion of stunted infants in the world, on the other hand, the proportion of stunting infants of one third came from Mainland Africa, which was 38%. The proportion of infants of 55% originating from South Asia is 58.7% followed by Southeast Asia (14.9%) in the second position, on the other hand the lowest proportion of stunting infants is from

Central Asia at 0.9% (World Health Organization, 2018). Based on information from the World Health Organization, the highest prevalence of stunting in Southeast Asia is Timor Leste with an average prevalence of 50.2%, in second place is India at 38.4%. Indonesia is the third country with the highest prevalence of stunting infants at 36.4% in 2005 up to 2017, while Thailand has the lowest average prevalence of stunting infants, which is only 10.5% in Southeast Asia (World Health Organization, 2018).

The prevalence of stunting infants in Indonesia is still large. Based on the Basic Health Research, 2013, the prevalence of stunting in infants continues to increase from 36.8% in 2007 to 35.6% in 2010 and 37.2% in 2013 (Basic Health Research, 2013). The results of the Nutrition Status Monitoring in 2017, the prevalence of stunting has decreased to 29.6% (Ministry of Health Office in Republic Indonesia, 2018), but the figure is still quite large, so the government includes a program to reduce the prevalence of stunting infants as one of the national development priorities for the 2015 up to 2019 period. (Ministry of Health Office in Republic Indonesia, 2016).

Lampung is located in tenth place as a province with a very large type of stunting (40%) and Central Lampung district is a district with a very large stunting event in Lampung Province, which is 52.7% (Ministry of Health Office in Republic Indonesia, 2018, Health Profile of Lampung Province, 2015, Central Lampung Health Office, 2018).

Based on the results of a preliminary survey that the author conducted in Tanjung Rejo Village, in Central Lampung Regency, information on stunting of infant is 40 (16.2%), the results of the author's interview with 5 mothers infants, it turns out that the five infants are not exclusively breastfeeding, when the preliminary survey the author sees that there are infants who are less than 6 months old have

been given snacks such as candy and light snacks. The author observes that there are still areas near the work area of the public health center that do not have Wastewater Sewer. There are still infants who have a history of Low Birth Weight (LBW), which is known from information on the nutritional status of infants at the Central Lampung Health Center. Some people still think that the condition of children, especially infants who are short, is a generational aspect and is a common occurrence that occurs so that many mothers ignore the consumption of children's nutrition.

Aspects that affect a person's nutritional status can be from consuming the food obtained, learning and knowledge of a person override means to fulfill the body's nutritional consumption, the family's socioeconomics is also very functioning in fulfilling a person's nutritional consumption needs, the characteristics of a type of male gender are usually prioritized in fulfilling one's nutritional needs. In food consumption, the aspect of the area also gives a great position because an unfavorable area can stimulate inflammatory diseases that will affect a person's health (Fikawati & Syafiq, 2014).

The triggering aspect of stunting did not just happen at the same time, but stunting is a condition of malnutrition problems that occurred in the past, starting from the time of young people who had faced malnutrition, continued during pregnancy with less consumption, until when they gave birth to toddlers, they faced malnutrition. Malnutrition and continue to the next life cycle. Aspects related to stunting include income, occupation, family, history of exclusive breastfeeding and history of LBW (Nurjanah, 2018). Pardede (2017) said that the fulfillment of food consumption greatly influenced stunting events in infants in North Muara Tapanuli District, which resulted in 31.8% of infants facing stunting.

Looking at the phenomenon of stunting in Central Lampung, the government and National Population and Family Planning Agency need attention in lowering the number of stunting events in Central Lampung by looking at the determinants of stunting in children so that by looking at this problem it becomes a benchmark and a plan to reduce stunting events in the area.

This research objectives was to determine the determinants of stunting on children in Central Lampung Regency, Central Lampung Regency was chosen as the research position with consideration because it is listed as the area with the highest stunting rate in Lampung Province.

METHOD

The type of research used is quantitative research, Case Control Approach, the research has been carried out from June up to August 2021 in Tanjung Rejo Village, Central Lampung Regency, The population in this research is all toddlers in Central Lampung, namely the number is 255 toddlers, Large The sample using the Lemeshow formula, the number of samples was 40 toddlers for the case group and 40 toddlers for the group The sampling technique in this research was simple random sampling. The independent variables of this research were birth length, birth weight, exclusive breastfeeding, breastfeeding up to the age of 2 years, immunization status, gestational distance, number of children, and family economic status that affect the Occurrence of stunting on toddlers. The dependent variable in this research is stunting on toddlers. The instrument used is a questionnaire, namely: Questionnaire on Determinants

of Failure to on toddlers and Atropometry Measuring Instruments, analysis data with Bivariate analysis used Chi Square test and multivariate test using logistic regression test.

RESULT AND DISCUSSION

Based on table 1, it is known that the average age of parents of toddlers aged (≥ 46 years) is 29 (36.1%), and most parents of toddlers with junior high school education are 28 (35.0%). Most of them work as private sector amounted to 45 (56.2%).

Table 1
Characteristics of Respondents

Characteristics	Frequency	%
Maternal Age Respondents		
Late Adolescence (17–25 year)	13	16,3
Early Adulthood (26–35 year)	19	23,8
Late Adulthood (36–45) year	19	23,8
Adult (≥ 46 year)	29	36,1
Education		
Elementary	15	18,8
Junior High School	28	35,0
Senior High School	21	26,2
Associate Degree	8	10,0
Undergraduate Degree	8	10,0
Occupation		
Farmer	20	25,0
Private	45	56,2
Civil Servants	9	11,2
Trader	6	7,5

In table 2, it is known that the characteristics of respondents with short birth length in the case group amounted to 90% and in the control group it was 22.5%, the non-LBW birth weight in the case group was 80% and the control group was 90%. exclusive in the case group by 60% and exclusive control in the control group by 85%, on breastfeeding for up to 2 years in the case group by 32.5% and the control group by 87.5%, on complete immunization status in the case group by 65.0% and the control group by 95%, at close birth spacing the case group is 62.5% and the control group is 25.5%, in the number of children the case group is 65% and the control group is 27.5%, and the high economic status the case group was 32.5% and the control group was 87.5%.

The results of the analysis of the correlation between birth length and the Occurrence of stunting found that toddlers were stunted and had a short birth length of 90%. Toddlers who are not stunted and have a short birth length are 22.5%. Statistical test results obtained p-value 0.000 means it can be concluded that there is correlation between birth length with the Occurrence of stunting. Stunting has a chance of 0.032 times (95% CI 0.009-0.15) in toddlers born with short body length compared to toddlers born with short body length.

The results of the analysis of the correlation between birth weight and the Occurrence of stunting found that toddlers were stunted and had low birth weight of 20%. Toddlers who are not stunted and have a low birth weight are 10%. Statistical test results obtained p-value 0.210 with OR 0.444 (95% CI 0.122-1.617) means it can be concluded

that birth weight has a correlation with the Occurrence of stunting. And the chance of stunting in toddlers born with low birth weight compared to toddlers born with no low birth weight.

The results of the analysis of the correlation between exclusive breastfeeding and the Occurrence of stunting found that toddlers were stunted and were not given exclusive breastfeeding, which was 40%. Toddlers who are

not stunted and are not given exclusive breastfeeding are 15%. Statistical test results obtained p-value 0.000 means that it can be concluded that there is a correlation between exclusive breastfeeding and stunting. Stunting has a chance of 8,500 times (95% CI 2,904-24,879) in infants who are exclusively breastfed compared to toddlers who are not exclusively breastfed.

Table 2
Frequency Distribution of Subjects Based on Analysis of Independent Variables on the Occurrence of Stunting

Independent Variables	The Occurrence of Stunting				Total	
	Cases		Control		n	%
	n	%	n	%		
Birth Length						
Short	36	90,0%	9	22,5%	45	55,0%
Not Short	4	10,0%	31	77,5%	35	45,0%
Birth Weight						
Low Birth Weight Babies	8	20,0%	4	10,0%	12	15,0%
Not Low Birth Weight Babies	32	80,05	36	90,0%	68	85,0%
Exclusive Breastfeeding						
Exclusive	16	40,0%	34	85,0%	50	62,5%
Not Exclusive	24	60,0%	6	15,0%	30	38,5%
Exclusive breastfeeding for up two years						
Yes	13	32,5%	35	87,5%	48	60,0%
No	27	68,5%	5	22,5%	32	40,0%
Immunization status						
Complete	26	65,0%	38	95,0%	64	80,0%
Incomplete	14	35,0%	2	5,05	16	20,0%
Birth Spacing						
Near	25	62,5%	10	25,0%	35	43,75%
Far	15	37,5%	30	75,0%	45	56,25%
Number of Children						
Many	26	65,0%	11	27,5%	37	53,75%
Few	14	35,0%	29	72,5%	43	46,25%
Economic Status						
Low	37	92,5%	19	47,5%	24	30,0%
High	3	7,5%	21	52,5%	56	70,0%

The results of the analysis of the correlation between breastfeeding for up to two years and the Occurrence of stunting found that toddlers were stunted and were not

breastfed for up to two years, which was 68.5%. Toddlers who are not stunted and are not breastfed for up to two years are 22.5%.

Table 3
Results of Bivariate Analysis of Independent Variables on the Occurrence of Stunting

Independent Variables	The Occurrence of Stunting				P-value	OR	CI
	Cases		Control				
	n	%	n	%			
Birth Length							
Short	36	90,0%	9	22,5%	0,000	5.118	2.025-12.932
Not Short	4	10,0%	31	77,5%			
Birth Weight							
Low Birth Weight	8	20,0%	4	10,0%	0,117	1.922	0.118- 1.991
Not low birth weight	32	80,05	36	90,0%			
Exclusive Breastfeeding							
Exclusive	16	40,0%	34	85,0%	0,000	8.500	2.904-24.879
Not exclusive	24	60,0%	6	15,0%			
Exclusive breastfeeding for up two years							
Yes	13	32,5%	35	87,5%	0,000	14.538	4.617-45.478
No	27	68,5%	5	22,5%			
Immunization Status							
Complete	26	65,0%	38	95,0%	0,001	10.231	2.143-48.848
Not Complete	14	35,0%	2	5,0%			
Birth Spacing							
Near	25	62,5%	10	25,0%	0,001	5.000	1.914-13.061

Far	15	37,5%	30	75,0%			
Number of Children							
Many	26	65,0%	11	27,5%	0,001	19.786	3.037-22.603
Few	14	35,0%	29	72,5%			
Economic Status							
Low	37	92,5%	19	47,5%	0,000	13.632	3.605-51.552
High	3	7,5%	21	52,5%			

Statistical test results obtained p-value 0.000 means it can be concluded that there is an influence between birth length and stunting incidence, p-value 0.117 with OR 1.922 (95% CI 0.118-1991) means that it can be concluded that birth weight has no relationship with stunting. , p-value 0.000 means that it can be concluded that there is a relationship between exclusive breastfeeding and the incidence of stunting, the risk is 8,500 times (95% CI 2,904-24,879) in infants who are not given exclusive breastfeeding compared to infants who are exclusively breastfed, p-value 0.000 means that it can be concluded that there is an effect between breastfeeding for up to 2 years and the incidence of stunting, the risk is 14,538 times (95% CI 4.617-45,478) in infants who are not breastfed for up to 2 years compared to infants who are breastfed for up to 2 years, p-value 0.001 means that it can be concluded that there is an influence between immunization status and the incidence of stunting,

the risk is 10,231 times (95% CI 2,143-48,848) in toddlers with incomplete immunization status compared to toddlers with complete immunization status, p-value 0.001 means that it can be concluded that there is a relationship between birth spacing and stunting incidence, has a 5,000 times chance (95% CI 1.914-13.061) in toddlers whose birth spacing is close compared to toddlers with long birth distances, p-value 0.000 means that it can be concluded that there is a relationship between the number of children and the incidence of stunting, 19,786 times (95% CI 3,037-22,603) in toddlers with many children compared to toddlers with few children, p- a value of 0.000 means that it can be concluded that there is a relationship between economic status and the incidence of stunting, with a 13,632 chance (95% CI 3,605-51,552) in children with low economic status compared to children with high economic status.

Table 4
Independent Analysis of the Occurrence of Stunting

Variables	Sig.	OR	95% C.I.for EXP(B)	
			Lower	Upper
Birth Length	0.001	1.042	0.006	1.276
Exclusive Breastfeeding	0.189	4.573	0.473	44.241
Exclusive Breastfeeding For up two years	0.121	5.966	0.626	56.865
Immunization status	0.296	4.002	0.296	54.023
Birth Spacing	0.174	3.742	0.559	25.035
Number of Children	0.059	1.161	0.024	2.071
Economic Status	0.045	7.883	1.046	59.410

Based on table 4, it turns out that the variables that are significantly related to the incidence of stunting have p-value <0.05, namely the variable length of birth body and economic status with P-values of 0.001 and 0.045) while the variable of economic status (OR: 7.883) So the most dominant variable related to stunting is economic status.

Birth Body Length Against Stunting

The results of the analysis of the relationship between birth length and the incidence of stunting found that stunting under-fives had a short birth length of 90%. Toddlers who are not stunted have a short birth length, which is 22.5%. Statistical test results obtained p-value 0.000 means that it can be concluded that there is an influence between birth length and the incidence of stunting, 5,118 times (95% CI 2,025-12,932) chance in toddlers born with short body length compared to toddlers born with short body length. short.

In line with research conducted by Luh Sri Suciari (2015) there is a significant relationship between birth length and birth weight with the incidence of stunting with p-values of 0.001 (OR: 6.08) and 0.006 (OR: 1 respectively), 14). In Fitrah's research (2013), of 202 toddlers born with a normal body length (≥ 48 cm), and 41 toddlers, among others, face developmental barriers (short) when children are 12 months

old and 161 toddlers (79%) develop normally. After that, there were 57 children born with short body length (≤ 48), it was found that 36 children were always short when children were 12 months old and 19 toddlers (33%) developed normally. The results of the statistical test using the log rank procedure showed that there was a significant comparison between the group of children born above 48 cm and at the base of 48 cm (p-value = 0.000).

The length of a toddler's body at birth can describe the linear development of toddlers throughout the content period. According to Riskesdas in 2013, the types of birth length are grouped into 3, namely 48 cm, 48-52 cm, and 52 cm short birth length are toddlers born with a body length of ; 48 cm (Kemenkes R. I, 2013).

Short birth length is influenced by the fulfillment of the toddler's nutrition while still in the womb. Inadequate consumption of maternal nutrition before pregnancy causes developmental constraints on the fetus so that it can cause toddlers to be born with short birth lengths. Toddlers who are born have a normal birth body length if the body length of the toddler's birth lies in the length of 48-52 cm (Kemenkes R. I, 2010). Body length at birth is one of the risk factors for stunting in children (Anugraheni and Kartasurya, 2012; Meilyasari and Isnawati, 2014).

The opinion of the researchers in this research, that the length of the birth body is an aspect of the risk of child

stunting. Toddlers born with short birth lengths display less maternal nutritional consumption throughout pregnancy, so that the development of the fetus in the contents is not optimal. Consumption of good nutrition means to support the development of children born with short birth length in order to obtain a reasonable body length with increasing age.

Birth Weight Against Stunting Incidents

The results of the analysis of the relationship between birth weight and the incidence of stunting found that children under five and having a LBW birth weight were 20%. toddlers who are not stunted and have a birth weight of LBW that is 10%. Statistical test results obtained p-value 0.117 with OR 1.922 (95% CI 0.118-1991) meaning that it can be concluded that birth weight has no relationship with stunting.

In contrast to the research results of Loida et al. (2017), there is a relationship between birth weight and the incidence of stunting at the age of 0-59 months in the Central Mozambique area.

Low birth weight babies can also occur due to birth before the perfect gestational age, which is 37 weeks. Toddlers are at greater risk for developmental delays, inflammatory diseases, slow growth and death during infancy and childhood (World Health Organization, 2011). The health condition of the mother's nutritional status during pregnancy can affect the development and growth of the fetus. Mothers who face chronic lack of energy or anemia during pregnancy are about to give birth to toddlers with low birth weight (LBW) [Keefe, et al., 2008].

Low birth weight babies, which are birth weights less than 2,500 grams, are more at risk of facing health problems and developmental delays. Low Birth Weight (LBW) affects the development of children in the future and perceived health problems can cause complications that end in death (Infodatin, 2017). Birth weight is closely related to the long-term development and growth of children, in research conducted by Anisa (2012), it was concluded that there is a significant relationship between birth weight and stunting in children in Kalibaru Village. Toddlers born with low birth weight (LBW) will face obstacles in their development and development and there may be a decline in intellectual function. In addition, toddlers are more prone to inflammation and hypothermia (Directorate of Nutrition and MCH, 2012).

In the opinion of researchers, this situation needs to be addressed early on considering that low birth weight is a public health problem that occurs in many poor countries and is growing and is closely related to mortality and morbidity for the fetus, child or the next generation. Prevention of malnutrition is very important for the early 2 year age group because children's vulnerability to disease and the risk of death is still high at that age, so many health and nutrition interventions are focused on them

Exclusive Breastfeeding Against Stunting Incidents

The results of the analysis of the relationship between exclusive breastfeeding and the incidence of stunting found that stunting toddlers whose breastfeeding was not exclusive was 60%. Toddlers who are not stunted whose breast milk is not exclusive is 15%. Statistical test results obtained p-value 0.000 means that it can be concluded that there is a relationship between exclusive breastfeeding and the incidence of stunting, the risk is 8,500 times (95% CI 2,904-24,879) in toddlers who are not given exclusive

breastfeeding compared to toddlers who are exclusively breastfed.

The results of this study are different from Aridiyah's (2015) research that stunting events in children both located in rural and urban areas are influenced by the variable of exclusive breastfeeding. The low level of exclusive breastfeeding is one of the factors for the formation of stunting in children caused by past events and will have an impact on the future of children, on the contrary, good breastfeeding by mothers will help protect the nutritional balance of children so that normal child development is achieved.

Consumption of food that is suitable for toddlers and early childhood (0-24 months) is Exclusive Mother's Milk (ASI). Exclusive breastfeeding based on Government Regulation No. 33 of 2012 is breast milk that is given to toddlers since birth for 6 months, without increasing and/or changing it with other foods or drinks (except drugs, vitamins, and minerals). After the age of 6 months, not only breast milk, but toddlers are also given complementary feeding (MP-ASI).

The opinion of the researcher when viewed from the time of starting to breastfeed the respondent's child, there were some respondents who started breastfeeding their child within 24 hours or more, there were also respondents who breastfed their child for less than 24 hours and there were some respondents who started breastfeeding their child in less than an hour. On the other hand, 66 respondents who started breastfeeding their children within 24 hours or more had time to distribute food or drinks not only breast milk, so they were not categorized in the type of children who had found exclusive breastfeeding. The small amount and the length of time the respondent's breast milk was produced prevented their children from getting exclusive breastfeeding because they had been given non-only breast milk, such as formula milk.

Breastfeeding Up to 2 Years Against Stunting

The results of the analysis of the relationship between children who were breastfed for up to 2 years and the incidence of stunting found that toddlers were stunted and were not breastfed for up to 2 years, which was 68.5%. Toddlers who are not stunted and are not breastfed for up to 2 years are 22.5%. Statistical test results obtained p-value 0.000 means that it can be concluded that there is an effect between breastfeeding for up to 2 years and the incidence of stunting, the risk is 14,538 times (95% CI 4,617-45,478) in infants who are not breastfed for up to 2 years compared to toddlers who are breastfed. up to 2 years.

In line with the results of Susilowati's research (2009), showing that there is a relationship between the duration of breastfeeding and the nutritional status of children, it is significant for the PB/U and BB/PB indexes, indicating a fairly large incidence of stunting (shortness) and wasting (thinness). The average duration of breastfeeding does not meet global recommendations. cross tabulation analysis confirmed the existence of a positive relationship between the duration of breastfeeding and exclusive breastfeeding with linear development in children. This research confirms the recommendation for anthropometric measurements of growth using the PB/U and BB/PB indices so that nutritional status problems can be studied more deeply because they are more sensitive to stunting and wasting problems.

According to the theory put forward by Jack Newman, Meter. D., FRCPC, author of the novel Doctor. Jack Newmans Guide to Breastfeeding, The Ultimate Breastfeeding Book of

Answers in the United States says some immunological aspects of breast milk are even more numerous in the second year than in the early years. His observations on some day care states that children who still find breast milk are less often sick than children who do not find breast milk. This means that mothers who always distribute breast milk actually run out of less time to work than other mothers who have to go back and forth to take their children to the doctor and take care of them because they get sick more often (Agung, 2006).

The opinion of researchers on exclusive breastfeeding in Indonesia stipulates that exclusive breastfeeding in Indonesia is for 6 months and it is recommended that it be continued until children aged 2 years or more are given appropriate bonus meals. In this research, most incidents of stunting (and wasting outside of hunger) occur in the early 2 years of life, children have a large nutritional demand and there are limitations in the quality and quantity of their food, especially after the period of exclusive breastfeeding.

Immunization Status Against Stunting

The results of the analysis of the relationship between immunization status and the incidence of stunting found that toddlers were stunted and their immunization status was incomplete, which was 35%. Toddlers who are not stunted and have incomplete immunization status, which is 5%. Statistical test results obtained p-value 0.001 means it can be concluded that there is an influence between immunization status and the incidence of stunting, the risk is 10,231 times (95% CI 2.143-48,848) in infants with incomplete immunization status compared to toddlers with complete immunization status.

In line with the research conducted by Neldawati (2006), it shows that immunization status has a significant relationship with the TB/U. Milman et al. nutritional status index. (2005) stated that immunization status is the underlying factor in stunting in children under five. The research results of Picauly, et al. (2013) show that children who do not have a history of immunization have a greater chance of facing stunting than children who have a history of immunization. Children who do not have a history of immunization have a chance of being stunted by 1,983 times. Other research also says that completeness of immunization has a significant effect on stunting.

Immunization is an effort to actively raise or increase a person's immunity to a disease, so that if something is exposed to the disease, it will not get sick or only face mild illness (Permenkes, 2013). Immunization is generally in the form of a vaccine. Vaccines trigger the body to build an immune system that is used to fight inflammation or disease. When our bodies are given vaccines or immunizations, the body will be exposed to viruses or germs that have been weakened or killed in small and comfortable quantities (Immunizations, 2010).

As one of the groups targeted by the immunization program, each toddler must receive a complete basic immunization consisting of 1 dose of BCG, 3 doses of DPT-HB and/or DPT-HB-Hib, 4 doses of polio, and 1 dose of measles. Of the complete basic immunizations required, measles is the immunization that has received more attention, this is in line with Indonesia's global commitment to maintain measles immunization coverage of 90% on a large and comprehensive basis. This is related to the reality that measles is one of the main causes of death in children. Thus the prevention of measles has a significant position in reducing child mortality (Kemenkes RI, 2016).

Birth Spacing to the Occurrence of Stunting

The results of the analysis of the relationship between birth spacing and the incidence of stunting found that toddlers were stunted and birth spacing was close, which was 62.5%. Toddlers who are not stunted and the status of close birth spacing is 25%. The results of the statistical test obtained a p-value of 0.001 which means that it can be concluded that there is a relationship between birth spacing and the incidence of stunting, 5,000 times (95% CI 1.914-13.061) chance for children with close birth distances compared to toddlers with long birth distances.

In line with Mutia Ayuningtias' research (2016) there are 48 children (76.2%) who have a long birth distance from 48 children, there are 40 children who do not face stunting. This is because based on interviews, it is known that mothers use contraception after giving birth to protect their child's birth spacing because they think that a long birth distance will make it easier for mothers to take care of their children, especially eating parenting. It is known from interviews that mothers whose children have birth spacing are much easier to practice eating applications because older children have been able to be independent so that mothers or carers are easier to control the eating patterns of children, especially younger children.

Birth spacing affects stunting indirectly with food consumption as an intermediate variable, children with a birth spacing of less than 2 years tend to have poor eating patterns (Prasetyo, 2008 in Mutia 2016). Regarding uniforms, Santrock, 2002 in Mutia 2016, stated that birth spacing affects parenting patterns in feeding children. The birth spacing is quite enough for the mother to be able to recover perfectly from the situation after giving birth. When the mother feels safe with her condition so that the mother can produce a good parenting pattern in taking care of and raising her child so that she pays close attention to child feeding. Candra (2013) also said that the close birth spacing makes parents tend to be in trouble so that they are not optimal in taking care of their children.

Number of Children Against Stunting Incidents

The results of the analysis of the relationship between the number of children and the incidence of stunting found that toddlers were stunted and the number of children was 65%. Toddlers who are not stunted and the number of children is large is 27.5%. Statistical test results obtained p-value 0.000 means that it can be concluded that there is a relationship between the number of children and the incidence of stunting, 19,786 times (95% CI 3,037-22,603) in toddlers with many children compared to toddlers with few children.

In line with the research conducted in Ghana by Darteh, et al (2014) reported that the number of children in the household was significantly associated with stunting. Households with 5-8 children are 1.3 times more likely to be short than households with 1-4 children (p<0.05). This is due to the level of consumption of large energy sources in the household. The findings of this study confirm previous research that has observed that children with more relatives are more likely to suffer from malnutrition.

Supported by the results of research that was tried by Aryu Candra (2013) with the results of research that the number of children is an aspect of stunting risk in children 1-2 years old, it is proven from the results of multivariate analysis which shows a p value = 0.002. The availability of family food is influenced by the number of children in the

family. family. The opportunity for children to face malnutrition is greater in families with low economic status who have many children. Mothers who work to help family finances cause children's nutrition to be neglected. Children need attention and food that fits their needs, but family conditions whose economy is lacking and have many children will find it difficult to meet these needs (Karundeng et Navy (AL), 2015).

The opinion of researchers on stunting events will be felt by children who were born recently, because the burden borne by parents continues to be large as the number of children they have continues to increase. Early children will be more fulfilled their needs because the burden of parents is still light so they can give more attention and meet all the needs of children. The age of parents when they have one child is also relatively young so that their stamina is still excellent, on the other hand, for the 3rd child and so on, the age of the parents is relatively young and their stamina continues to decrease. The age and physical energy of parents will also affect the parenting style of their children.

Family Economic Status Against Stunting Incidents

The results of the analysis of the relationship between economic status and the incidence of stunting found that toddlers were stunted and had low economic status, which was 92.5%. Toddlers who are not stunted and have low economic status are 47.5%. Statistical test results obtained p-value 0.000, meaning that it can be concluded that there is a relationship between economic status and the incidence of stunting, 13,632 times (95% CI 3,605-51,552) in children with low economic status compared to those with high economic status.

In line with Aridiyah's research (2015) found that there is a significant relationship between family income and stunting in children, both in rural and urban areas. When viewed from the characteristics of family income, the root of the problem is due to the development of toddlers and various other nutritional problems, one of which is caused and stems from the economic crisis. Most of the children who face developmental constraints have low economic status.

Supported by research conducted by Zilda Oktarina (2013), children from families with low economic status are more likely to face stunting than children from families with large economic status. statistically, the research results show that there is a bond between family economic status and stunting in children with a p value = 0.03. Children from families with low economic status are 1.29 times at risk of facing stunting compared to children from families with large economic status.

Economic status and area factors influence children's development more than genetic and ethnic aspects (Habicht, 1974 in Paramitha, 2012). The economic status of the household is considered to have a significant effect on the probability of a child being short and thin. In this regard, the World Health Organization recommends stunting or stunting as a measure of low socioeconomic status and as a marker for monitoring equity in health (Zere & McIntyre, 2003 in Paramitha, 2012).

The researcher's opinion is that economic status factors that affect nutritional status start from the level of learning that affects the type of work. After that the type of work will affect the income. Low income is an obstacle for families to be able to meet nutritional needs, both in terms of quality and quantity for all family members. Low income causes spending money to buy limited food ingredients. This

condition causes people to be unable to buy food in the required quantities.

Dominant Factors of Stunting Incident

Based on multivariate analysis, it is known that the dominant variable is significantly related to stunting, namely the economic variable p-value 0.045 with an OR value of economic status variable (OR: 7.883) so that the most dominant variable associated with stunting is economic status.

In line with the opinion of Bappenas (2011), some of the aspects that trigger nutritional problems are poverty. Poverty is considered to have a significant position which is reciprocal as a source of nutritional cases, namely poverty causes malnutrition, on the other hand, people who are malnourished want to slow down economic development and push the poverty process.

This research is in line with Tiwari's research (2014) where economic status significantly affects stunting in children aged 0-59 months, children with families with low economic status tend to have less nutritional consumption.

Another research attempted by Haile (2017) proves that children's health depends on the socioeconomic status of the household. The socioeconomic level of the family can be seen from the income in one family. This is the basic capital towards a prosperous family, so that the whole family hopes to get optimal income to support their daily needs. Therefore, various family efforts are willing to carry out various types of businesses in order to obtain adequate income. Manurung (2009) states that family income is the amount of money generated and the amount of money that will be spent to finance household needs for one month. Adequate family income will support the attitude of family members to obtain more adequate family health services.

Fikawati and Shafiq (2010), in their research are also in line with this study where socioeconomic level is related to family purchasing energy. The family's ability to buy food ingredients, among others, depends on the size of the family's income, the price of the food itself, and the level of management of land and yard energy sources. Families with limited income may not be able to meet their food needs, especially to meet the nutritional needs of the child's body.

The opinion of the researcher on the results of the study shows that the number of low family incomes is more common in stunting children compared to large incomes who have children who are not stunted. This shows that low family income has a risk of children facing stunting. Judging from the limitations of family income, it helps ensure the quality of food that is managed every day to meet food needs which can lead to insufficient nutrition for child development.

CONCLUSION AND RECOMMENDATION

The dominant factor influencing the incidence of stunting based on the results of multivariate economic analysis has the most risk factor for stunting in Tanjung Rejo Village, Central Lampung Regency in 2021.

Special attention should be paid in terms of economic access and meeting sufficient or insufficient needs for families who have children under five which will later affect the quality of food consumption of family members which is an illustration of good nutritional behavior, namely by increasing the provision of information and socialization to

the public regarding stunting, and maternal and child health focused interventions are needed to reduce the risk of babies with stunting.

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Conflict of Interest statement

The authors have no conflicts of interest with the material presented in this manuscript. The authors declare that no ethical issues may arise after the publication of this manuscript.

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