

Analysis Of Factors That Influence The Stunting Event In Toddlers In Public Health Center Gandusari Blitar District

Qurotul Aini, Byba Melda
Suhita Novita Ana Anggraini

Strada Indonesia Health Sciences
Institute, Kediri

Email:
qurrotul01aini@gmail.com

ABSTRACT

Nutritional problems, especially stunting in infants can inhibit a child's development, with negative impacts that will take place in the next life. The purpose of this study was to analyze the influence of parenting, breastfeeding, the role of health workers on the incidence of stunting in infants at the Gandusari Public Health Center in Blitar Regency. This research design is correlational analytic with cross sectional approach, with a population of 163 respondents and a sample of 115 respondents taken by the Simple Random Sampling technique. Data collection using a questionnaire, data analysis with logistic regression test at $\alpha = 0.05$. The results showed that there was an influence of parenting on the incidence of stunting in infants (p -value = 0,000), there was an effect of breastfeeding on the incidence of stunting in infants (p -value = 0.008), there was an influence on the role of health workers on the incidence of stunting in infants (p -value = 0.003). It can be concluded that the incidence of stunting in infants at the Gandusari Community Health Center is influenced by parenting, breastfeeding, and the role of the health worker at 33% while the remaining 67% is influenced by other factors. parenting, breastfeeding, the role of health workers are factors that influence the incidence of stunting. Lack of knowledge leads to the formation of negative attitudes towards stunting prevention efforts by mothers and cadres due to lack of information.

Keywords: breastfeeding, role of officers health, stunting

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INTRODUCTION

Stunting is a health problem that is commonly found in developing countries, including Indonesia. According to the United Nations Children's Fund (UNICEF), in 2016 there were 22.9%, or nearly one in four children under 5 years old (under five years old) who experienced stunting lived on the Asian Continent and more than one third lived on the African Continent. According to the 2017 National Team for Poverty Reduction (TNP2K) National Printing, stunting prevalence in Indonesia ranks fifth in the world. Toddler is a period that is very sensitive to the environment so more attention is needed especially the adequacy of nutrition (Kurniasih, 2015). Basic Health Research Data (Riskekdes) 2013 shows stunting prevalence in the National scope of 37.2%, consisting of short prevalence of 18.0% and very short at 19.2%, stunting is often considered a severe public health problem when stunting prevalence in the range of 30-39%. This shows that Indonesia is experiencing severe public health problems in the case of toddlers. Stunting is a form of a stunted child growth process. Until now, stunting is one of the nutritional problems that needs attention (Picauly and Toy, 2013). Malnutrition and stunting are two nutritional problems that cannot be solved. There are several government programs in solving the problem of malnutrition and stunting. Nutrition improvement and

a decrease in the stunting rate of children under 2 years (baduta) from 32.9% in 2013 to 28.0% in 2019 became one of the national development priorities as listed in the 2015 National Medium-Term Development Plan (RPJMN) -2019. The reduction in the incidence of stunting is also one of the priorities for health development in the 2015-2019 period.

Stunting is a chronic condition that describes stunted growth due to long-term malnutrition. Stunting according to WHO Child Growth Standard is based on body length index compared to age (PB / U) or height compared to age (TB / U) with a limit (z-score) of less than -2 elementary school. Based on the results of 2018 riskesdas shows that East Java Province has reached 32.81% with stunting toddlers. From these results, East Java Province is placed in a heavy category based on records from the World Health Organization (WHO). Gandunsari Health Center is one of the Health Centers located in the Blitar District Health Office working area. The number of stunting toddlers in the working area of the Puskesmas Gandunsari in September 2019 reached 211 of 2528 toddlers (secondary data: Public Health Center Gandunsari, 2019). Stunting that occurs in toddlers is the result of nutritional problems that have occurred since early life (UNICEF, 2017). Stunting is a chronic malnutrition problem that is caused by a lack of nutrition in a long time due to food that is not suitable for nutritional needs. Stunting occurs from the fetus in the womb and starts to appear when a child is two years old. Malnutrition at an early age increases infant and child mortality, causes sufferers to get sick easily and has a posture that is not optimal when they are adults (MCA Indonesia, 2014). direct causes and indirect causes. 1. There are two direct causes of malnutrition, namely poor nutrition and infectious diseases. 2, There are three indirect causes, namely insufficient food, inadequate parenting, and sanitation of clean water or inadequate basic health services.

This study aims to determine the factors that influence the occurrence of incidence stunting in toddlers. Factors that are indirectly the pattern of care, breastfeeding and the role of health workers. These are some of the indirect factors that cause stunting in children under five.

MATERIALS AND METHODS

In this research method using a correlational analytic design with cross sectional approach, began on 2020 in the working area of Gandusari Public Health Center in Blitar Regency. The population studied was mothers who have toddlers, using simple random sampling techniques obtained 115 respondents. Independent variables, namely parenting, breastfeeding, the role of health workers. The dependent variable is the incidence of stunting. Data collected using a questionnaire were analyzed using a logistic regression test with a significance level of $\alpha = 0.05$. This research has also been done through the Strada Indonesia Health Sciences Institute Kediri research ethics commission with Number : 1695/KEPK/I/2020.

RESULTS

Table 1. Distribution Frequency Characteristics of Respondents of incide of stunting in children unfer five in Blitar district, 2020.

No	Respondent Mother's Age	(f)	(%)
1	21-30 years	98	85,2
2	31-40 years	16	13,9
3	> 40 years	1	0,9
	Total	115	100.0
No	Respondents Education	(f)	(%)
1	Primary school	30	26,1
2	Junior high school	27	23,5
3	Senior High School	47	40,1
4	Bachelor	11	9,3
	Total	115	100.0
No	Respondents Profession	(f)	(%)
1	Housewife	40	34,8
2	Private Institution	46	40
3	Peasant	21	18,3
4	Teacher	8	6,9
	Total	115	100.0
No	Respondents Toddler Age	(f)	(%)
1	21-30 month	23	20

2	31-40 month	35	30,4
3	41-50 month	37	32,2
4	51-60 month	20	17,4
Total		115	100.0
No	Respondents Gender Toddler	(f)	(%)
1	Male	53	46,1
2	Gril	62	53,9
Total		115	100.0

Source : Primary Data (2020)

Based on the research data in table 1, it is known that out of 115 respondents, the characteristics of respondents, seen from the age of the mother, were mostly respondents with the age of 21-30 years with a number of 98 people (85,2%), the characteristics of respondents was senior high school as many as 47 people (40,1), the Private Institution as many 94 as people (81,7%), the toddler age was 41-50 month as many as 37 people (32,2%), and Gender Toddler was gril as many as 62 people (53,9%).

Table 2. Distribution Frequency Characteristics Variables of Respondents of stunting in children under five in Blitar district, 2020.

Categories	Stunting incident				Total	
	Stunting		No Stunting		n	%
	n	%	n	%		
Parenting						
Permisif	36	81,81	8	18,19	44	100
Otoriter	11	50	11	50	22	100
Demokratis	15	30,61	34	69,39	49	100
Total	53	46,08	62	53,92	115	100
Giving ASI						
Eksklusif	21	34,42	40	65,58	61	100
Not Eksklusif	32	59,26	22	40,74	54	100
Total	53	46,08	62	53,92	115	100
The Role of Health Officers						
Actif	25	35,71	45	64,29	70	100
Not Actif	26	62,22	17	37,78	45	100
Total	53	46,08	62	53,92	115	100

Source : Primary Data (2020)

Based on the data in table 2 above, it is known that most respondents were in the group who applied permisif and experience stunting, as many as 36 people (31.3%). In the giving ASI variable, it is known that most respondents are in the group that applies exclusively breastfeeding and experience stunting, as many as 40 people (34.78%). Meanwhile, in the role of health officers variable, it is known that most respondents have a group that rated the role of active health workers and experience stunting, as many as 45 people (39,13%).

Table 3. Results of the Statistical Analysis of Model Summary Test

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	112.665a	,330	,411

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than ,001

Based on the data of research results that have been done, then the significance of the model test is conducted (model summary) to determine the percentage of influence between the independent variables on the dependent variable. Seen from table 3. above, the results of the statistical model summary test above can be seen that the value of Cox & Snell R square of 0.330, which means that the variable incidence of stunting in infants at the Gandusari Health Center is influenced by parenting patterns, breastfeeding, and the role of officers health is equal to 33%, while the remaining 67% is influenced by other factors.

Table 4. Results of the Statistical Analysis of Model Anova Test

Model	Sum Squares	of df	Mean Square	F	Sig.
Regression	9,719	3	3,240	19,073	0,000
Residual	18,855	111	0,170		

Total 28,574 114

- a. Predictors: (Constant), the role of health workers, parenting, breastfeeding
 b. Dependent Variabel: Incidence Stunting

Based on the research data, the F test (Anova) is then performed to determine simultaneously the effect of the entire independent variable on the dependent variable. Seen from table 4. above, it can be seen that the significant value obtained is 0,000, which means that simultaneously the three independent variables (parenting, breastfeeding, and the role of health workers) have a significant influence on the incidence of stunting in children under five in the work area Puskesmas Gandusari, Blitar Regency.

Table 5. Results of Multivariate Logistic Linear Regression Test

Independent Variable	Exp (B)	R Square	CI (95 %)		P Value
			Lower	Upper	
Parenting	4,487	0,200	2,450	8,217	0,000
Giving ASI	3,696	0,060	1,409	9,690	0,008
The role of the officer	4,760	0,066	1,714	13,222	0,003
N Observasi	115				

(Source: Primary Data, 2020)

After testing the significance of the model, the logistic regression test is then performed to determine the effect of each independent variable on the dependent variable. Seen from table 17. above the variable Parenting is known to have a value of $P = 0,000$ ($\alpha < 0.05$) which means that the variable Parenting has a statistically significant effect on the stunting event variable. Exp value (B) = 4.487 which shows that respondents with parenting patterns are democratically 4 times more likely to not stunting when compared with parenting permissive and authoritarian parenting.

In the ASI variable it is known that the value of $p = 0.008$ ($\alpha < 0.05$) which can be interpreted that the ASI variable has a statistically significant effect on the stunting event variable. Exp value (B) = 3.696 which shows that statistically toddlers who were exclusively breastfed gave a 3.6 times greater impact for stunting in infants compared to non-exclusive breastfeeding. The officer role variable is known to have a value of $p = 0.003$ ($\alpha > 0.05$) which means that the subjective norm variable has a statistically significant effect on the stunting event variable. Exp value (B) = 4,760. which means that statistically the role of active health workers gives an impact of 4.7 times greater for no stunting than the role of health workers who are not active.

DISCUSSION

Based on the data the results of the study indicate the characteristics of respondents based on parenting parents approved by transition parenting as many as 49 people (42.6%). While some others have permissive parenting 44 people (38.3%) and authoritarian parenting as many as 22 people (19.1). The results of previous studies explain different results from this study, which shows that there is no significant relationship between good and poor parenting with the incidence of stunting ($p = 0.533$). While the results of previous studies related to the study showed a significant relationship between parenting with PEM ($p < 0.001$) and OR 9.47, which means children with poor parenting risk 9.47 times greater protein deficiency. Other studies that oppose this research are psychological factors that concern mothers and child care. The results obtained show a significant relationship between parenting and maternal care with the incidence of stunting. The results of other studies found an association between early childhood and psychological factors. Poor parental care practices cause stunting in school-aged children. Based on other studies, a general discussion about poor parental care for children will have a 9 times greater risk of causing stunting in toddlers compared to mothers who have good toddler parenting practices. Biomedical physical needs (care) Basic health needs and care that are important for children here: immunization, breastfeeding, infant / child weighing and sick care, proper shelter / settlement, personal hygiene, good environmental sanitation, clothing and freshness physical. Mental stimulation is the forerunner of the learning process (education and training) in children. This mental stimulation develops psychosocial mental development, intelligence, skills, independence, creativity, religion, personality, moral morals, and productivity.

Based on the data of the research results showed that the characteristics of respondents based on breastfeeding most of the respondents with exclusive breastfeeding, as many as 61 people (53%). While some other respondents did not exclusively breastfeed, which was 54 people (47%). These results are in line with research by Arifin (2012) and Fikadu, et al. (2014) in Southern Ethiopia which showed that toddlers who were not given exclusive breastfeeding during the first 6 months had a greater risk of stunting. ASI has many benefits, for example increasing children's immunity against diseases, ear infections, reducing the frequency of diarrhea, chronic constipation and so on

(Henningham and McGregor, 2009). Lack of breastfeeding and breastfeeding that is too early can increase the risk of stunting especially early in life (Adair and Guilkey, 1997). The magnitude of the effect of exclusive breastfeeding on children's nutritional status makes WHO recommend implementing interventions to increase breastfeeding during the first 6 months as one step to achieving the WHO Global Nutrition Targets 2025 regarding reducing the number of stunting in children under five years (WHO, 2014). The results of this study (Wanda Lestari et al.) Show that the proportion of stunting is more common because children are not exclusively breastfed. Children who are not exclusively breastfed have a risk of being stunted 6.54 times compared to children who are exclusively breastfed. Other studies suggest that children who do not get exclusive breastfeeding will suffer 3.2 times malnutrition 26 while the risk of a child becoming stunted is 6.9 times if they do not get exclusive breastfeeding. The results of this analysis contradict the study conducted by Astria et al in 2015 which showed that there was a significant relationship between exclusive breastfeeding and the incidence of stunting with a p value of 0.0001 with a prevalence ratio of 1.19. According to research conducted by Damayanti in 2016 also showed a significant relationship between exclusive breastfeeding with stunting toddlers with a value of $p = 0.001$. Toddlers with a history of not getting exclusive breastfeeding have a risk of stunting 16.5 times greater than toddlers with a history of getting exclusive breastfeeding. The difference in results in this study is due to exclusive breastfeeding is not the only cause of stunting, but can also be caused by other factors such as food intake outside breast milk due to high nutritional requirements, especially after a period of exclusive breastfeeding and infectious diseases. ASI (Breast Milk) is the best food for babies, even if the mother is sick, pregnant, menstruating or malnourished. Breast milk contains all the nutrients a baby needs in 6 months of life so it is recommended that during this time be given ASI. According to the baby's needs.

Based on the research data, it is shown that the characteristics of respondents based on the role of health workers (cadres) are dominated by active health workers, as many as 70 people (60.9%). While some 45 inactive health workers (39.1%). This study differs from previous studies which explained that the use of polindes or midwife services with the TB / U z-score indicator ($p = 0.020$). This shows that there is a relationship between access to health services and the nutritional status of TB / U. The distance of the nearest health care facility has a positive correlation with the BB / TB indicator z-score ($p = 0.010$), which also explains that there is a significant relationship between the distance of the health service facility with the incidence of stunting. Previous studies also showed results that were different from previous studies, which explained that the proportion of malnutrition among children under five years was more found in access to poor health services compared to access to good health services and had a meaningful relationship with poor health services at risk of 10 , 2 times more likely to cause malnutrition. Iswarawanti (2010) stated that technically, the duty of health cadres / posyandu cadres in its relation to nutrition is cadres doing weighing and measuring PB PB or TB funds, then recording the results in the book / Card Towards Health (KMS) of each toddler. providing additional food, providing vitamin A, conducting discussions and counseling related to nutrition as well as making visits to the homes of mothers who have toddlers. Cadres are also expected to be able to play an active role and be able to be a source of information and support and become a motivator for the community (Adistie, et al, 2017). Health promotion is an activity or effort to convey health information to the public so that it can increase knowledge about better health. Therefore, providing information about stunting prevention for posyandu cadres is very important, because that way cadres have the provision to carry out their role in providing counseling to mothers at posyandu, so hopefully the incidence of stunting can be reduced. Posyandu is related to knowledge and stunting events.

Based on the results of the study, it was found that the results of the statistical model summary test revealed that the value of Cox & Snell R square was 0.330, which means that the variable stunting was influenced by parenting, breastfeeding, and the role of the health worker at 33%, while the remaining 67% was influenced by other factors.

CONCLUSION

In the Logistic Regression test results $\alpha = 0.05$, it was found that parenting variables on the incidence of stunting in infants (p -value = 0,000), there was an effect of breastfeeding on the incidence of stunting in infants (p -value = 0.008), there was an influence of the role of the officer health of the incidence of stunting in infants (p -value = 0.003). It can be concluded that the incidence of stunting in infants at the Gandusari Community Health Center is influenced by parenting, breastfeeding, and the role of the health worker at 33% while the remaining 67% is

influenced by other factors. Parenting, breastfeeding, the role of health workers are factors that influence the incidence of stunting. Lack of knowledge leads to the formation of negative attitudes towards stunting prevention efforts by mothers and cadres due to lack of information.

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CONFLICTS OF INTEREST:

This study did not have any conflict of interest

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