



Relationship Social Economic (Family Income) With Stunting

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ABSTRACT

The growth and development of children will experience a rapid increase at an early age, from 0 to 5 years as the phase. Golden age 3. Socio-economic (Family Income) is low causing poor nutrition so that it affects the growth and development of children. The purpose of this study was to determine the Socio-Economic Relationship (Family Income) with the occurrence of Stunting in Toddler Age Children in Leran Village, Manyar District - Gresik Regency. The method used is analytic with are search design cross sectional. Data were collected directly through observations of mothers who have children under five in Leran Village - Manyar District, Gresik Regency as many as 82 people with the sampling technique simple random. Data analysis used the statistical test of the contingency coefficient = 0.05. The results of the study obtained 46 respondents income < UMR (< Rp 4.3 million); 42 (91.3%) experienced stunting and 4 (8.7%) were not stunting while 36 respondents had income > UMR ; 2 (5.6%) were stunting and 34 (94.4%) were not stunting. The conclusion is that there is a relationship between socio-economic (family income) with the incidence of stunting in children aged under five, it is recommended to increase family income and pay attention to child nutrition.

Keywords: Socio-economic; family income; stunting; toddlers

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INTRODUCTION

Stunting is a nutritional problem that causes linear growth disorders in children under five, which is indicated by the z-score of height according to age which is below -2 SD. *Stunting* is a problem that appears in children at the age of 6-23 months⁶. Malnutrition at an early age will lead to increased morbidity, mortality, and stunted growth. Nutritional disorders are also often associated with these events.

Although there are many Health Counseling and Promotions about the importance of children's growth and development to be monitored through POSYANDU and nutrition, namely early nutrition of ASI (IMD) as a supporter of growth and development so that children's health is achieved optimally which is the next generation in the future. The incidence of developmental disorders in children, one of which is *stunting* in children under five, is still a health problem that needs attention or caution in Indonesia, as stated by the Minister of Health on November 12, 2019, coinciding with the 55 th National Health Day.

Data on the *prevalence* of children under five years of age *stunting for* collected by the *World Health Organization* (WHO) released in 2018 states that Indonesia is included in the list of countries with the third *prevalence* highest in the *South-East Asian Region* after Timor Leste (50.5%) and India (38.4%). % which is 36.4% (Ministry of Health Data and Information Center, 2018).rate *prevalence of Stunting* in Indonesia is still above 20%, which means that not reached the target of the World Health Organization (<20%).

Therate, *stunting* which is one of the under nourished people in the Manyar District, in 2013 was high with a *proportion* of 523 people.⁶ Theatre *stunting prevalence* in Gresik in early 2021 was the highest in Leran village, Manyar sub-district, where there were about 438 toddlers and around 96 toddlers (22.01%)¹⁹ who experienced *stunting* and *prevalence rate* this was still above the WHO target (<20%) .

Stunting is a condition caused by unbalanced nutritional intake during the golden period (0-5 years) which is not caused by growth hormone abnormalities or as a result of certain diseases. Many studies show that poverty, sanitation and environmental health are other factors that have consequences for *stunting* in children under five. In addition, the mother's low education and knowledge also has a major influence on the incidence of *stunting* in toddlers (Aridiyah, 2015). The socio-economic conditions of the community, the characteristics of the mother during pregnancy, parenting as well as the environment and geographical conditions (population density, climatic conditions and inadequate sanitation) are also influential factors⁸.

METHODS

This type of research is non-experimental with approach *cross sectional* and design *contingency coefficient*. The population is all toddlers in the village of Leran –Manyar – Gresik as many as 432 toddlers with a total sample of 82 respondents, sampling using *Simple Random Sampling*.

The independent variable is Socio-Economic (Family income) and the Dependent is *Stunting* in Toddlers. The tools and instruments use mentlyne for height measurement and KMS sheets or growth charts.⁹

This research was conducted in Leran Village, Manyar District – Gresik in October – December 2021. The data analysis in this study was to determine the relationship between the independent and dependent variables by using the statistical *test of the contingent coefficient* = 0.05. and $p < 0.005$; Ho is rejected, the *contingency coefficient* is used to calculate the relationship between variables if the data is in nominal form.

RESULTS AND DISCUSSION

Table 1 Distribution of Respondent Data Based on Mother's Education Level in Leran Village, Manyar - Gresik District in October 2021

No	Education Level	n	%
1	SMP	23	28
2	SMA	50	61
3	PT	9	11
	Total	82	100

Based on table 1 shows that the highest education level of mothers is high school (SMA) as many as 50 people (61%) and a small proportion of mothers' education level is tertiary education 9 people (11%).

Table 2 Distribution of Respondent Data Based Occupation Mother's Leran Village, Manyar-Gresik District in October 2021

No	Occupation	n	%
1	IRT	69	84
2	Private	7	8.5
3	Self-employed	6	7.5
	Total	82	100

Based on table 2 shows that The majority of respondents whose occupations are housewives (IRT) are 69 (84%) and at least 6 are entrepreneurs (7.5%).

Table 3 Distribution of Respondent Data Based on Mother's Knowledge of Nutrition (ASI) in Leran Village, Manyar-Gresik District, October 2021

No	Knowledge	n	%
1	Good	29	35.4
2	Enough	51	62.2
3	Less	2	2.4
	Total	82	100

Based on table 3 of 82 respondents based on mother's knowledge of nutrition (ASI) most of them are sufficient as many as 51 people (62.2%) and 2 people who have less knowledge (2.4%).

Table 4 Distribution of Respondent Data Based on Toddler Age in Leran Village, Manyar - Gresik District, October 2021

No	Age (Months)	n	%
1	0 – 6	27	33
2	7 – 24	16	19.5
3	25 – 60	39	47.5
	Total	82	100

Based on table 4 shows that the highest number of children aged between 25-60 months is 39 children (47.5%) and the lowest is 16 (19.5%).

Table 5 Distribution of Respondent Data Based on Birth Weight of Toddlers in Leran Village, Manyar-Gresik District in October 2021 Weight

No	Berta Birth (Gram)	n	%
1	< 2500	5	6
2	> 2500 (Normal)	77	94
	Total	82	100

Based on table 5, it shows that almost all of the Birth Weight of Normal Toddlers as many as 77 Toddlers (94%) only 5 Toddlers (6%) are BBLR.

Table 6 Distribution of Respondent Data by Gender of Toddlers in Leran Village, Manyar - Gresik Subdistrict in October 2021

No	Gender	n	%
1	Male	40	49
2	Female	42	51
	Total	82	100

Based on table 6 shows that the female sex is slightly more than 42 Toddlers (51%) and the male sex is 40 Toddlers (49%).

Special Data

Table 7 Distribution of Respondents' Data on Family Income in Leran Village, Manyar – Gresik District, October 2021

No	Gender	n	%
1	< UMR	46	56.
2	>UMR	36	44
	Total	82	100.0

Based on table 7 shows that of the 82 respondents who received a family below UMR, 46 people (56%) and 36 people above UMR (44%).

Table 8 Distribution of Respondent Data Based on Toddler Height in Leran Village, Manyar - Gresik District in October 2021

No	Height	n	%
1	Stunting	44	54
2	Normal	38	46
	Total	82	100

Based on table 8, it shows that of the 82 respondents, most of them are *stunting*, 44 toddlers (54%), and normal toddlers 38 toddlers (46%).

Table 9 Distribution of Conformity between Socio-Economic (Family Income) and Stunting Incidences in Toddlers in Leran Village, Manyar Gresik District in October 2021

		Height		Total
		Stunting	No Stunting	
Income Family	Below UMR	Count 42	4	46
		% within income 91.3%	8.7%	100.0%
Income Family	Above UMR	Count 2	34	36
		% within Income 5.6%	94.4%	100.0%
Total		Count 44	38	82
		% within Income 53.7%	46.3%	100.0%

Based on the table above, family income < UMR as many as 46 respondents 42 people (91.3%) their children were *stunted* and 4 children (8.7%) did not experience *stunting*, while family income > UMR were 36 respondents where 2 people (5.6%) of their children were *stunted* and 34 children (94.4%) were not *stunted*.

Data Analysis

Based on the test results *koefisien contingency* in SPSS coefficient *contingency* of 0.649 value is far above the χ^2_{table} is $0.649 > 0.273$. In addition, it is also obtained significant calculation results (α_{count}) of 0.001. where $p < 0.05$ then H_0 is rejected, H_1 is accepted, meaning that there is a relationship between socio economic (family income) and stunting in children under five.

Socio-Economic (Family Income)

Table 7 shows that most of the 82 respondents have family income < UMR as many as 46 people (56%) while those with family income > UMR are 36 people (44%). This shows that the income of the population in Leran village is still much below the minimum wage or the standard wage in the Gresik area⁴ To determine the UMR for an area, one of them includes: the necessities of life in an area, the current labor market conditions and the level of development of the country's economy and the country's per capita income.

Christopher (cit. Sumardi, 2004) states that the income earned by a person can be influenced by the level of education that has been achieved. Someone with a higher education tends to be able to get wider opportunities to get a better job with a bigger income.

The results of this study can be seen in table 1 regarding the education level of mothers where many have lower secondary education (89%) and only 9 college education levels (11%), so it can be seen in table 2 about the work of mothers under five who also have a lot of do not work or become IRT with a total of 84%. As family income is not only obtained from the results of the head of the family (husband) but income generated from the wife. Mothers who work outside the home can cause children not to be cared for, because toddlers are very dependent on their caregivers or other family members, but on the other hand working mothers can help with family income, because work is an important factor in determining the quality and quantity of food (Mugianti & et al, 2018).

Stunting in Toddlers

Based on table 8 shows that of the 82 respondents most of the *stunting* are 44 Toddlers (54%), and 38 Toddlers are normal (46%). This shows that in Leran Village, Manyar District, Gresik Regency, the incidence (prevalence) of *stunting* is very high which is in accordance with the Gresik Health Office that the stunting prevalence area in Gresik is 22.01% above the standard set by WHO <20%.

Stout factors that influence stunting in Toddlers according to WHO (2013) divides the causes of *stunting* in children into four broad categories: factors of family and household, food supplementary / complementary inadequate, breastfeeding and infection of these factors one of which is the family and household.¹¹ Family and household refers to the level of education, knowledge, socioeconomic and others. This is very complex where a person's education level is low, so a person's knowledge and experience to provide nutrition to his child may not be in accordance with the growth and development needs of the child, thus allowing growth disorders, one of which is height that is not appropriate for his age (*stunting*).

In table 4 about the characteristics of the age distribution in toddlers, it shows that the most children are between 25-60 months of age, namely 39 children (47.5%) and the lowest age between 7-24 months is 16 (19.5%).). As we know the occurrence of *stunting* in toddlers aged more than 2 years.¹¹ This is in accordance with table 5.4 where the distribution of the age of toddlers is mostly in the age range of 25-60 months.

Socio-Economic Relationship (Family Income) with Stunting Incidence in Toddlers

Based on the statistical *test of the contingency coefficient* with a significance level of 0.05 with a total of 82 respondents, it was found that there was a socio-economic relationship (Family Income) with Stunting Incidence in Toddler Age in Leran Village, Manyar District, Gresik Regency. Based on table

.9, it is known that most respondents have income $>$ UMR as many as 46 people where toddlers who are *stunted* 42 (91.3%) are not stunted only 4 (8.7%). Education, occupation, and income are three measures of socioeconomic status which have been found to be the most significant measures in determining a person's placement in a stratification system.

The proportion of children who are *stunted* is more common in households with low family incomes according to research by Siti Wahdah (2015) with $p < 0.001$ OR 24.42 (9.068 – 65.807).

Christopher (cit. Sumardi, 2004) states that the income earned by a person can be influenced by the level of education that has been achieved. Someone with a higher education tends to be able to get wider opportunities to get a better job with a bigger income. Low maternal education is the highest risk factor for *stunting* compared to other risk factors (Yusdarif, 2017).

In this case, WHO recommends short nutrition status or stunting as a measure of low socio-economic levels and as an indicator to monitor equity in health (Zere & McIntyre, 2003). Adequate family income will support the growth and development of children. Because parents can provide all the needs of children both primary and secondary³.

DISCUSSION AND SUGGESTION

From the results of the study and the research data management process with 82 respondents and 82 toddlers, it was concluded that most of the family income was $<$ UMR, most of the children under five experienced stunting and there was a socio-economic relationship (family income) with the incidence of stunting in children aged under five.

Mothers who have children under five should always monitor their development and growth through Posyandu even though their immunizations are complete. Cadre and health workers should not stop to provide counseling about the importance of growth and development of Toddlers.

REFERENCES

- 1 Notoatmodjo, Soekidjo. 2005. *Metodologi Penelitian Kesehatan*. Jakarta : PT Rineka Cipta.
- 2 Nursalam, Siti Pariyani 2003. *Konsep Penerapan Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika.
- 3 Soetjningsih.2004. *Tumbuh Kembang Anak*. Jakarta EGC
- 4 Pemda, 2021. *UMR Kabupaten Gresik*.
- 5 Enggar Kartika Dewi, Triska Susila Nindya 2017 *Hubungan Tingkat Kecukupan Zat Besi Dan Seng Dengan Kejadian Stunting Pada Balita 6-23 Bulan di Desa Suci – Manyar – Gresik Tahun 2017* RESEARCH STUDY Open Access
- 6 Dewi dan Nindya. Amerta Nutr (2017) 361-368 362 Skripsi

- 7 Lutfiana Oktadila Nurjanah 2018 *Faktor-Faktor Yang Berhubungan Dengan Kejadian Stunting Di Wilayah Kerja Upt Puskesmas Klecorejo Kabupaten Madiun Tahun 2018* Skripsi
- 8 Ngaisyah, Dewi RR. 2015. *Hubungan Sosial Ekonomi dengan Kejadian Stunting pada Balita di Desa Kanigoro, Saptosari, Gunung Kidul. Jurnal Medika Respati* 10 (4): 1907 – 388 (skripsi)
- 9 Artikel Amelia Puteri disunting oleh Intan Aprilia 2020 *Ketahui Cara Membaca Grafik Tumbuh Kembang Anak dari Kemenkes*
- 10 Paramitha Anisa 2012 *Faktor - Faktor Yang Berhubungan Dengan Kejadian Stunting Pada Balita Usia 25 – 60 Bulan Di Kelurahan Kalibaru Depok Tahun 2012* (Skripsi)
- 11 Ngainis Sholihatin Nisa' 2019 *Faktor-Faktor Yang Berhubungan Dengan Kejadian Stunting Pada Balita Usia 24-59 Bulan (Studi Kasus Di Wilayah Kerja Puskesmas Kedungtuban, Kecamatan Kedungtuban, Kabupaten Blora)* Skripsi.
- 12 Dr. Suparyanto, M.Kes 2010 *Konsep Dasar Status Ekonomi*
- 13 Suradi, Sonhaji, M. Bambang Suryoningprang 2016 *Faktor-faktor yang Mempengaruhi Besaran Upah Minimum di Jawa Tengah melalui suatu Analisis Komparasi (Studi Kasus Kota Semarang dan Kabupaten Demak)*
- 14 Kemenkes RI. 2010. Keputusan Menteri Kesehatan Republik Indonesia Nomor : 1995/Menkes/Skxii/2010 *Tentang Standart Antropometri Penilaian Status Gizi Anak.*
- 15 Anisa, P. (2012). *Faktor-faktor yang Berhubungan dengan Kejadian Stunting pada Balita Usia 25-60 Bulan di Kelurahan Kalibaru, Depok.* Jakarta: Universitas Indonesia.
- 16 Kementerian Kesehatan RI. (2016). *Buku Kesehatan Ibu dan Anak.* Jakarta: Kemenkes dan JICA.
- 17 Kemenkes RI. (2016). *Situasi Balita Pendek.* Jakarta: Kemenkes RI.
- 18 *Pengaruh antara kondisi sosial ekonomi keluarga terhadap prestasi belajar siswa secara langsung maupun melalui motivasi belajar* pdf diakses pada 27 Desember 2021
- 19 Dinkes 2021 , Angka Prevalensi (Puskesmas Manyar), Gresik